

EXHIBIT C

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK**

In re:

**BERNARD L. MADOFF INVESTMENT
SECURITIES LLC,**
Debtor,

**IRVING H. PICARD, Trustee for the Liquidation of
Bernard L. Madoff Investment Securities LLC,**

Plaintiff,

v.

SAUL B. KATZ, et al.,

Defendants.

Adv. Pro. No. 08-01789 (BRL)

SIPA LIQUIDATION

(Substantively Consolidated)

Adv. Pro. No. 10-5287 (BRL)

11-CV-03605 (JSR) (HBP)

**INITIAL EXPERT REPORT OF
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Bernard L. Madoff Investment Securities LLC and
Bernard L. Madoff*

TABLE OF CONTENTS

I. THE ASSIGNMENT	6
II. EXPERT BACKGROUND AND QUALIFICATIONS	6
III. Summary of ASSIGNMENT, scope and methodology.....	8
A. Information Sources	8
B. Conduct of Information Review and Analysis.....	9
IV. Summary of opinions.....	11
V. FACTUAL BACKGROUND.....	13
A. Bernard L. Madoff Investment Securities	13
B. House 17 Operations	14
C. Madoff Securities International Limited	15
D. Key Individuals	16
i. Bernard L. Madoff.....	16
ii. Frank DiPascali	16
iii. David Kugel	17
iv. Annette Bongiorno	17
v. Daniel Bonventre.....	18
vi. Eric Lipkin.....	18
vii. Joann “Jodi” Crupi	19
viii. Jerry O’Hara and George Perez—Computer Programmers	19
ix. Friehling and Horowitz	20
E. Computer Systems Overview.....	20
VI. EXPERT OPINIONS.....	24
A. OPINION NO. 1: HOUSE 17 WAS NOT A LEGITIMATE BUSINESS.	24
i. Fictitious Trading in House 17 - There is no evidence that the purported investment transactions for House 17 customers ever occurred at least as far back as the 1970s. In fact, the evidence shows the trading did not occur.	24
a. The Purported Convertible Arbitrage Strategy – the 1970s to the 1990s: There is no evidence that the purported convertible arbitrage strategy for House 17 customers actually occurred. In fact, the evidence proves that the purported trades did not occur.	24
(i) Convertible arbitrage strategy - House 17 Customers.....	25
(ii) Purported convertible security trades exceeded the entire reported market volume for certain days.....	27

(iii) Purported purchase prices of convertible securities on customer accounts did not represent true prices.....	30
(iv) Convertible securities continued to be purportedly traded by House 17 even after they were called for conversion.	31
(v) House 17 did not account for dividend payments or accrued interest on the convertible bonds thereby evidencing the fictitious nature of the underlying transactions.	32
(vi) There is no evidence that House 17 converted the convertible securities into common shares.....	33
(vii) Fictitious Convertible Arbitrage Trade Confirmations	37
b. Following the 1992 SEC investigation of A&B, BLMIS purportedly transitioned from convertible arbitrage to the split strike conversion investment strategy.	42
c. The Split Strike Conversion Strategy- the 1990s and later: There is no evidence that the transactions purporting to represent a split strike conversion strategy for House 17 customers ever occurred. In fact, the evidence shows that these transactions were fictitious.	47
(i) Purported equity and option trades exceeded the entire reported market volume for certain days.....	48
(ii) Hundreds of thousands of purported House 17 trades, affecting over 5,500 accounts, were priced outside the trading day’s price range evidencing that they could not have been executed.....	48
(iii) House 17 purportedly bought low 83% of the time and sold high 72% of the time (VWAP Trades) evidencing the fictitious nature of the trades.	50
(iv) Thousands of purported securities, affecting over 3,700 accounts, were recorded by House 17 as having settled on weekends or holidays when the exchanges are closed.	51
(v) Thousands of purported House 17 split strike conversion equity and option trades, affecting nearly 6,000 accounts, were recorded as having settled on days not within the standard settlement duration timeframe.	52
d. There are no legitimate records from the DTC (or other clearing houses or custodians) evidencing any trades occurring from House 17.....	53
(i) Reconciliation of House 5 holdings to House 17 holdings via DTC records.....	54
(ii) Fake DTC Screen Reports created by House 17	56
(iii) Reconciliation of House 5 options trades to OCC.....	64
e. Approximately \$4.3 billion of dividends reported on House 17 customer statements were fictitious and were never received by BLMIS on behalf of its customers.	65
f. House 17 was “Schtopping” certain customer returns.	68

g.	The computer system used by House 17 was basically a system used to facilitate the fictitious trading activity and to print trading documentation and customer statements to support such fictitious activities.	75
h.	The underlying computer code generated and utilized by House 17 was developed and modified over the years.	78
i.	Underlying computer code in House 17 produced a random order generator to support fictitious trades on customer statements.	81
ii.	Various reports that House 17 prepared were false.	87
a.	Customer statements contained fictitious trades that were backdated.	87
(i)	The financial and regulatory statements produced by BLMIS were false and misrepresented the firm's true financial state of affairs.	93
a.	Registration statement ADV filed with the SEC was false and was not timely.	93
b.	FOCUS reports and the audited financial statements were false and misrepresented the true state of BLMIS.	94
c.	F&H Audit Template Opinions Found at BLMIS.	97
d.	F&H were not independent auditors as required by the AICPA and other regulatory bodies	99
B.	OPINION NO. 2: HOUSE 17 WAS A PONZI SCHEME.	100
i.	Indicia of Ponzi.	100
a.	Definition of Ponzi scheme.	100
b.	Background on Ponzi schemes.	100
ii.	There was no legitimate trading or investment activity and, therefore, no profits from House 17.	101
a.	No trading occurred in House 17 and redemptions were made using Other People's Money.	102
b.	No other legitimate income-producing business activities were identified.	103
c.	Dividends that were purported to have been distributed to House 17 customers were paid with Other People's Money.	104
d.	Apart from the liquidity crisis, no financial support vis-à-vis any profits from House 5 was evidenced.	104
e.	The 703 Account dealt almost entirely with customer deposits and redemptions.	105
f.	House 17 was dependent on increasing cash inflows and promised large returns to customers.	107
iii.	Further evidence that House 17 was not a legitimate business and was a Ponzi scheme is that BLMIS was hopelessly insolvent.	109

a. Balance Sheet Test:	112
(i) Determination of Solvency of BLMIS	115
a. House 5 Financial Background	117
iv. Selected Valuation Approaches	118
a. Income Approach	119
b. Guideline Company Method	120
c. Comparable Transaction.....	121
v. The evidence shows that House 17 was a Ponzi scheme.	122
VII. BASES FOR THE OPINIONS IN MY REPORT.....	123
APPENDICES.....	124

I. THE ASSIGNMENT

1. In June 2011, I was retained by the law firm of Baker & Hostetler LLP (“Baker”) counsel for Irving H. Picard, Trustee (“Trustee”) for the Substantively Consolidated SIPA Liquidation of Bernard L. Madoff Investment Securities LLC (“BLMIS”) and Bernard L. Madoff (“Madoff”), to provide forensic accounting analysis and render certain expert opinions (“the Assignment”) related to:
 - Whether or not BLMIS’s Investment Advisory business (herein after referred to as “IA Business” or “House 17”) was, in fact, a legitimate business; and
 - Whether or not House 17 was a “Ponzi” scheme.

II. EXPERT BACKGROUND AND QUALIFICATIONS

2. I am a Managing Director at Duff and Phelps, LLC (“D&P”) and City Leader of D&P’s Washington, D.C. office and was retained by Baker to serve as an expert witness in connection with the Assignment. My practice at D&P places special emphasis on providing forensic accounting and dispute analysis services to law firms litigating commercial cases, as well as corporations, governmental agencies and law enforcement bodies in a variety of situations.
3. I earned a Bachelor’s of Science Degree in Accounting from the University of Maryland, College Park, MD and a Master’s in Taxation (“MST”) from Georgetown University, Washington, D.C. I am a Certified Public Accountant (“CPA”), Certified Fraud Examiner (“CFE”), Certified Valuation Analyst (“CVA”), Certified in Financial Forensics (“CFF”) and a Certified Forensic Financial Analyst (“CFFA”), all in good standing, and was formerly a Registered Investment Advisor Representative.
4. I have been qualified and testified as an expert in various federal and state courts as an expert witness in the areas of forensic accounting and fraud investigations; bankruptcy; solvency; commercial damages; business valuations; investment theory; federal and state income taxation; abusive tax shelters; accounting ethics and standards; accounting malpractice; investment advisory issues; and a variety of other financial and tax matters. Additionally, I have professional experience in the area of computer forensics and related computer

investigations and have undergone training as a part of the fraud and forensic training as both a Certified Fraud Examiner and a Certified Forensic Financial Analyst.

5. Some of the more notable fraud and forensic accounting investigations that I have conducted include:
 - International Brotherhood of Teamsters–Campaign compliance and related fraud investigations for the International Officer Elections pursuant to the Consent Decree – S.D.N.Y., 1997-present¹;
 - Lehman Brothers Bankruptcy²;
 - Washington Teachers Union fraud³; and
 - Firstpay payroll company fraud and Ponzi scheme.⁴
6. A current and accurate copy of my curriculum vitae and Federal Rules of Civil Procedure Rule 26 disclosures are attached hereto as Appendix “A.”
7. The materials reviewed and considered in forming opinions and conclusions made in this report include documents and other data referenced herein and listed attached hereto as Appendix “B.”⁵ The opinions expressed herein are based upon my understanding of the facts in this case, as well as information gained during the course of D&P’s performance of the Assignment. Further, I relied upon my education, training and over 28 years of professional experience, and my opinions and conclusions herein are stated to a reasonable degree of accounting certainty.
8. As litigation service engagements performed by Certified Public Accountants are deemed to be consulting services as defined by the American Institute of Certified Public Accountants (“AICPA”), my work on the Assignment was performed in accordance with the applicable standards as set forth in the Standards for Consulting Services established by the AICPA. Further, as a result of having other relevant professional certifications, as more fully described

¹ *United States v. Int’l Bhd. of Teamsters*, No. 88 Civ. 4486 (LAP) (S.D.N.Y. 1989).

² *In re Lehman Brothers Holdings, et al.*, No. 08-13555 (JMP) (Bankr. S.D.N.Y. 2008).

³ *United States v. Hemphill*, 514 F.3d 1350 (Ct. App. D.C. Feb 8, 2008); *United States v. Hemphill*, No. 03-CR-00516 (RJL) (D.D.C. 2003); *United States v. Bullock*, No. 03-CR-00345 (RJL) (D.D.C. 2003); *United States v. Holmes*, No. 03-CR-00032(RJL) (D. D.C. 2003).

⁴ *Wolff v. United States*, 372 B.R. 244 (Bankr. D.Md. Aug. 3, 2007); *Wolff v. United States*, No. 03 30102 (PM) (Bankr. D. Md. 2006).

⁵ See discussion *infra* regarding scope of documentation reviewed.

hereinafter, I adhered to the applicable standards of those governing organizations in the performance of my work in this matter and the rendering of these opinions.

9. Fact discovery in this case has not concluded as of the filing of this report, and related investigations are concurrently being conducted by various law enforcement agencies to determine the existence of possible criminal and/or civil violation acts of some of the individuals/entities described herein and others. Accordingly, this report is based upon the information available to me and reviewed to date, and I hereby reserve the right to supplement or amend this report in the event further additional information becomes available for my review.
10. In accordance with applicable professional standards of the Association of Certified Fraud Examiners, of which I am a member in good standing, this report contains no opinions on the guilt or innocence of any person(s) and/or party(s) named and/or discussed in the report.⁶
11. I am being compensated for my work in this matter at the rate of \$750.00 per hour, and my fees are not contingent upon any finding or result in this matter.

III. SUMMARY OF ASSIGNMENT, SCOPE AND METHODOLOGY

A. Information Sources

12. Baker provided access to information, including but not limited to the following:⁷
 - A database containing over 28 million documents representing, among other things: (1) customer statements; (2) bank account statements and other documents obtained through third-party subpoenas; (3) internal documents and correspondence from BLMIS; (4) and other documents, data, information and correspondence found on BLMIS's computer systems;

⁶ *Code of Ethics*, ACFE (last visited November 21, 2011), <http://www.acfe.com/code-of-ethics.aspx>. As there are parallel, ongoing criminal investigations and indictments pending in actions related to this matter, as well as a number of individuals who have pled guilty and are cooperating with the Federal authorities, independent interviews were not practicable or possible.

⁷ Our access to documentation that was collected by the Trustee and made available to us was not limited in any manner and allowed D&P to search for information and documentation that both supported the opinions contained herein as well as any countervailing evidence, if any. A complete listing of the documents considered is included in Appendix "B" of this report.

- A database containing customer statement information compiled from underlying supporting documentation and bank account information compiled from underlying supporting documentation such as bank statements and wire transfer documents;
 - Electronic media and records obtained from BLMIS's offices and storage facilities including nearly 19,000 backup tapes, hard drives, cell phones, Blackberry devices and other electronic information sources;
 - Hard copy documents housed in a BLMIS-rented warehouse in Queens, NY containing over 11,000 large banker boxes of documents and information;
 - Deposition transcripts for persons deposed by Baker as well as other transcripts in connection with the parallel liquidation proceeding in the United Kingdom;⁸ and
 - Visits to the BLMIS offices at 885 Third Avenue in Manhattan and to the BLMIS-rented Queens, NY document warehouse.
13. In addition to the information to which we were provided access, we obtained additional information where necessary to our investigation from publicly available sources. A complete listing is included in Appendix "B" of this report.

B. Conduct of Information Review and Analysis⁹

14. The work conducted by D&P in connection with the Assignment was planned, supervised and staffed in accordance with applicable professional standards. The work conducted by D&P included, but was not limited to:
- Review and analysis of documents, emails, etc;
 - Review and analysis of various bank accounts of BLMIS and Madoff;
 - Review and analysis of customer statements, trade confirmations and other related documentation for House 17's customers dating as far back as records were available – back to the 1970s;

⁸ *MSIL v. Raven, et. al.*, Claim No. 2010 Folio 1468.

⁹ Records, documents and other information for certain periods were no longer available because the time period in question spans nearly 50 years (1960-2008). Nonetheless, the opinions contained herein are supported by available documentation, which include over 28 million documents dating back to the 1970s and by alternative analysis where historical documentation was no longer available.

- Review and analysis of certain purported trading activity for House 17's customers dating as far back as records were available--back to the 1970s;
 - Review and analysis of certain trading activity for the market-making business ("House 5");
 - Restoration, reconstruction, review and analysis of major portions of the AS/400 computer system utilized by House 17;¹⁰
 - Review and analysis of certain third party information regarding BLMIS and/or House 17 purported trading activity;
 - Review and analysis of certain accounting records;
 - Review and analysis of certain vendor files and invoices for supporting documentation of expenses;
 - Computer forensic analysis of electronic media evidence; and
 - Review of deposition transcripts and other sworn testimony.
15. FTI Consulting, Inc. ("FTI"), hired directly by Baker, performed certain work and baseline analyses at the direction and supervision of Baker. Such was conducted largely before the retention of D&P. To the extent any such data was relied upon, or used to support analyses or the opinions herein, the accuracy of the data was tested by D&P to ensure reliability.¹¹
16. Given the sheer volume of transactional data and documents in this investigation, a vast amount of analyses were performed using electronic computer analytics and data mining algorithms. Further, advanced computer models were developed and utilized for certain quantitative conclusions. Such analytics and models were developed and utilized consistent with applicable professional standards.

¹⁰ See *infra* for description of computer systems.

¹¹ By way of example, statistical sampling was conducted on transactional data. Random samples of data were selected and underwent extensive testing, including "ticking and tying" of information to source documents (e.g., confirmation of information taken from historical microfilm customer statements or underlying bank statement transactional data).

IV. SUMMARY OF OPINIONS

17. This section is meant to provide only a brief summary of my expert opinions in this matter and to highlight the bases for such opinions which are fully discussed and supported hereinafter.
18. Based on my experience and the results of my investigation of BLMIS (described in detail throughout this report) I have concluded that: 1) the Investment Advisory business (i.e., House 17) was not a legitimate business; and 2) House 17 was a Ponzi scheme.
19. There is no evidence that the purported investment transactions for House 17 customers ever occurred at least as far back as the 1970s.¹² In fact, the evidence shows the trading did not occur. Reconciliations of: 1) House 17 equity positions to available BLMIS Depository Trust & Clearing (“DTC”) records and 2) option trades with the available Options Clearing Corporation (“OCC”) records indicate that no securities transactions were executed by House 17.
20. The so-called “convertible arbitrage trading strategy” purportedly implemented by BLMIS in the 1970s utilized fictitious trades that in many instances exceeded the entire reported market volume for the particular security on the day it was purportedly traded. On numerous trading days, trades were recorded at prices that did not represent true prices, as the prices reported for the purported trades were outside the range of market reported trading prices on a given day. Dividend payments and/or accrued interest were not reported by House 17 on many customer statements even though the real convertible securities paid such dividends and/or interest. Further, convertible securities were reported by House 17 as being traded on days after the actual date of conversion reported by the issuing corporation, thereby evidencing the fictitious nature of the purported trades. Lastly, there was no evidence that the purported convertible securities were ever actually converted, again supporting the fictitious nature of the purported trading activity.
21. The so-called “split-strike conversion strategy,” purportedly put into place by BLMIS in the 1990s, utilized fictitious trades that in many instances exceeded the entire reported market

¹² See discussion *infra* regarding David Kugel, who recently pled guilty to federal securities and related fraud charges on November 21, 2011 and stated that there was no legitimate trading in House 17 as far back as the 1970s. *United States v. Kugel* 10-CR-228, Transcript of Plea Allocution DKT entry 11-21-11 (S.D.N.Y.) Nov. 21, 2011.

volume for the particular security on numerous trading days. Many purported trades were recorded at prices that did not represent true prices as the prices reported were outside the range of reported trading prices on a given day. House 17 supposedly executed 83 percent of the buy transactions by share volume below the Volume Weighted Average Price (“VWAP”) and executed 72 percent of the sell transactions by share volume above the VWAP, statistics that evidence the fictitious nature of the trades.

22. Further, purported trades were recorded as being settled on weekends or holidays when the U.S. stock and option exchanges were closed and were also supposedly settled after the normal acceptable industry mandated time period of T+1 (for options) or T+3 (for equities), again supporting the opinion that these trades simply never occurred. In addition, billions of dollars of purported dividends earned that were reported on House 17 customer statements were fictitious and were never received by BLMIS, again showing the fictitious nature of the trades.
23. Additionally, House 17 created fake reports from the DTC trading clearinghouse which were designed, in part, by utilizing the IBM AS/400 computer system as well as PC-based systems. House 17 customer statements contained fictitious trades that were backdated using special software (STMTPro) modified in-house to reprint customer statements after the fact. Also, extensive in-house computer programs were created to conceal the fictitious investment transactions.
24. House 17 was “schtupping”¹³ certain House 17 customers’ purported investment returns utilizing a process to provide those customers with extra fictitious trades that were rigged to generate additional fictitious gains in order to reach pre-determined rates of return thresholds. The process involved a careful monitoring of certain accounts to ascertain levels of reported investment returns throughout the year and those that were falling short, were given additional fictitious trades, typically in December of that year, in order to bump the purported yearly returns to levels that House 17 had promised those customers.
25. Additionally, various regulatory reports were falsified to conceal the fictitious investment transactions utilizing false financial and other information.

¹³ See discussion *infra* on the context surrounding the so-called “schtupping” of House 17 customer returns.

26. House 17 was a Ponzi scheme, utilizing new customer monies to fund its operations as well as to fund the withdrawal of fictitious profits and principal for its older customers. The Ponzi scheme had been operating for many years as is evidenced by the fact that House 17 was not generating any legitimate profits since no trading activity was taking place. Additionally, House 17 was not receiving legitimate financial support from House 5 in amounts sufficient to satisfy the cash requirement needs of the House 17 customer withdrawals and House 17 was not receiving any legitimate outside financial support vis-à-vis loans or otherwise.
27. As further proof of the illegitimate nature of House 17 and to support the opinion that House 17 was a Ponzi scheme, the overall solvency of BLMIS was assessed. Businesses operating as a Ponzi scheme are hopelessly insolvent by their very nature. As further proof, a solvency analysis was conducted and it was determined that BLMIS was insolvent as of at least December 11, 2002 (a date selected by counsel for the six-year period prior to BLMIS's bankruptcy filing, "Valuation Date"). BLMIS's customer liabilities were approximately \$12 billion as of December 11, 2002, far exceeding the fair market value of its assets by \$10 billion dollars.

V. FACTUAL BACKGROUND¹⁴

A. Bernard L. Madoff Investment Securities

28. In 1960, Madoff founded BLMIS as a sole proprietorship. BLMIS, a market making business in Over-the-Counter stocks ("OTC"), was registered as a broker-dealer with the Securities and Exchange Commission ("SEC") as of January 19, 1960¹⁵ and operated three business units: (1) a market making business; (2) a proprietary trading business (together with the market making business known inside BLMIS as "House 5"); and (3) an investment advisory business (known as the IA Business or inside BLMIS as House 17).

¹⁴ My understanding of the factual background is based upon various sources of information including the pleadings in this case, deposition transcripts and/or testimonial transcripts in connection with the parallel liquidation proceeding in the United Kingdom, and documents where footnoted. This recitation of the factual background serves to provide only a background summary of the facts as I understand them. It is my understanding that the foundation for the facts set forth in this section of my report will be laid out at trial through evidentiary materials and will form the factual predicate for any opinions contained herein that are based upon such facts.

¹⁵ Form BD for Bernard L. Madoff, December 31, 1959. PUBLIC0003607-PUBLIC0003614

29. In 1987, BLMIS moved from its location at 110 Wall Street to the iconic “Lipstick Building” located at 885 Third Avenue in Manhattan, eventually leasing the 17th, 18th, and 19th floors.¹⁶ House 5 was located on the 18th and 19th floors.¹⁷ Eventually, House 17 moved from the 18th floor to the 17th floor.¹⁸
30. In 2001, BLMIS was reorganized as a single-member LLC with Madoff as the sole member.¹⁹
31. In August 2006, BLMIS registered as an investment adviser with the SEC claiming to have 23 accounts and \$11.7 billion in assets under management.²⁰
32. During 2008, House 17’s cash reserves dwindled to the point where customer redemption requests exceeded the cash balance available. At his plea hearing on March 12, 2009, Madoff confessed to federal authorities that the IA Business was a fraud.²¹

B. House 17 Operations

33. The House 17 customer accounts were administered in two groups: (1) the split-strike conversion accounts; and (2) the non-split-strike conversion accounts (which included the convertible arbitrage accounts).
34. A convertible arbitrage trading strategy aims to generate profits by taking advantage of the pricing mismatches that can occur between the equity and bond/preferred equity markets. This strategy is implemented when the bond market or preferred equity market is incorrectly valuing the option component of the security relative to the underlying common stock price. The investor is looking then to benefit from a change in the expectations for the stock or bond over a period of time (*see* discussion *infra* for additional details on convertible arbitrage).
35. The split-strike conversion accounts were overseen by Frank DiPascali (“DiPascali”).²² This group of accounts employed a strategy which purported to invest in a basket of common stocks within the S&P 100 Index which was hedged by call and put options to limit customer gains and losses. Madoff would purportedly decide when to unwind positions upon which the

¹⁶ Bernard L. Madoff Lease Summary 885 Third Avenue. CWIE-BR00002468

¹⁷ LAZAA0004351- LAZAA0004352

¹⁸ Bernard L. Madoff Lease Summary 885 Third Avenue. CWIE-BR00002468

¹⁹ BLMIS Articles of Incorporation for New York State. MADTSS01160346

²⁰ BLMIS ADV Form at 8, Aug. 25, 2006. PUBLIC0003729

²¹ *See United States v. Madoff*, No. 09-CR-213 (DC), Transcript of Plea Allocation of Bernard L. Madoff at 23, ECF No. 50 (S.D.N.Y. March 12, 2009).

²² *See generally, Frank DiPascali*, No. 09-CR-764 (RJS), Plea Allocation, Dkt. Entry 8/11/2009 (S.D.N.Y. 2011); *United States v. Frank DiPascali*, No. 09-CR-764(RJS), Information, ECF No. 7 (S.D.N.Y. 2011).

stocks were sold and the investments were moved into U.S. Treasuries and/or money market funds and cash reserves.

36. The non-split strike conversion accounts initially represented a significant portion of overall House 17 accounts, but became a small percentage of total House 17 accounts in the 1990s. Generally, the non-split-strike conversion accounts were titled in the name of BLMIS's oldest House 17 customers.
37. Although BLMIS was touted as one of the most technologically advanced brokerages in the country and was widely acknowledged as being "at the forefront of computerized trading,"²³ as is discussed hereinafter, House 17 neither provided its customers with electronic customer statements nor was there real-time access to their individual House 17 accounts at BLMIS.

C. Madoff Securities International Limited

38. In February 1983, BLMIS established its foreign operations with the registration of Madoff Holdings Limited in London.²⁴ In September 1988, Madoff Holdings Limited began operating as Madoff Securities International Limited ("MSIL").²⁵ MSIL operated under the Financial Services Authority (and its predecessors) in the U.K.²⁶ and became one of the first U.S. members of the London Stock Exchange.²⁷ As of December 31, 2007, MSIL employed approximately 25 people.²⁸

²³ BLMIS web archive Oct. 23, 2005, <http://web.archive.org/web/20051023123110/http://www.madoff.com/dis/display.asp?id=20> (last visited Aug. 1, 2011).

²⁴ Madoff Holdings Ltd. Incorporation documents. PUBLIC0006083

²⁵ "Special Resolution" indicating that Madoff Holdings Ltd. changed its name to Madoff Securities International Limited). PUBLIC0008959

²⁶ MSIL Financial Statement and Directors Report. PUBLIC0005755 at PUBLIC0005757

²⁷ BLMIS website, Oct. 23, 2005, <http://web.archive.org/web/20051023123110/http://www.madoff.com/dis/display.asp?id=20> (last visited Aug. 1, 2011).

²⁸ MSIL Financial Statement and Directors Report. PUBLIC0005785 at PUBLIC0005798

D. Key Individuals

i. Bernard L. Madoff

39. Madoff was the principal of BLMIS and oversaw both House 5 and House 17 businesses.²⁹
40. On December 11, 2008, Madoff was arrested for securities fraud and related charges.³⁰
41. On March 12, 2009, Madoff pled guilty to 11 counts of an indictment including federal securities fraud and related offenses.³¹
42. On June 29, 2009, Judge Dennis Chin sentenced Madoff to the maximum of 150 years in federal prison.³²

ii. Frank DiPascali

43. DiPascali started at BLMIS in 1975 right after he graduated from high school.³³ Over his years with BLMIS, he worked as a research analyst, options trader,³⁴ in addition to other roles.³⁵ DiPascali managed House 17 and was critical to the day-to-day activities of the IA Business, interfacing with clients and overseeing House 17 employees.³⁶
44. In 2009, DiPascali was charged with a ten count criminal information, and he subsequently entered into a plea agreement. In his plea allocution, DiPascali admitted to learning of the fraud in the late 1980s or early 1990s, and he stated that no purchases or sales of securities actually took place in the client accounts.³⁷ Instead, DiPascali created fraudulent account

²⁹ BLMIS ADV Form at 23, Aug. 25, 2006. PUBLIC0003729 Madoff served as Chairman of the Board of Directors of NASDAQ in 1990, 1991, and 1993, and was a member of the Board of Governors for NASD. BLMIS website, Oct. 23, 2005, <http://web.archive.org/web/20051023123110/http://www.madoff.com/dis/display.asp?id=20> (last visited Aug. 1, 2011).

³⁰ *United States v. Madoff*, 586 F.Supp.2d 240, 244 (S.D.N.Y. 2009).

³¹ *United States v. Madoff*, 09-CR-213, Plea Allocution at pp. 7-8, ECF No. 50 (S.D.N.Y. March 12, 2009).

³² *Id.* at 49. In his plea allocution, Madoff admitted to operating a Ponzi scheme “to the best of his recollection” from the early 1990s until December 2008. Additionally, he stated that no securities had ever been purchased on behalf of the House 17 customers. *Id.* at 24, 29. While I have considered information contained in Madoffs’ plea allocution, my opinions in no way are predicated or based upon information contained therein and as set forth herein my investigation contradicts the duration of fraud claimed by Madoff. Moreover, David Kugel recently pled guilty in this matter (*see* discussion *infra*) and has admitted that the fraud started in the early 1970s at House 17 and that no trading activity actually took place for House 17 customers, further supporting my opinions contained in this report. Information contained in the Madoff plea allocution was considered solely as part of the record in this matter.

³³ *United States v. DiPascali*, No. 9-CR-764, Plea Allocution at 45, Dkt. Entry 08/11/2009 (S.D.N.Y. Aug. 11, 2009).

³⁴ *Id.*

³⁵ *Id.* at 47.

³⁶ *Id.*

³⁷ *Id.* at 46.

statements using information gleaned from historical stock data to create the returns that Madoff had promised the clients.³⁸

45. On August 11, 2009, DiPascali pled guilty to federal securities fraud and related offenses. DiPascali is facing 125 years in prison, but has yet to be sentenced.

iii. David Kugel

46. David Kugel (“Kugel”) worked for BLMIS for more than 40 years, originally starting in 1970.³⁹ Prior to working for BLMIS, Kugel worked as a trader specializing in convertible securities.⁴⁰ For BLMIS, Kugel purportedly traded in convertible securities and applied an arbitrage strategy to these stocks, buying both the convertible security and then shorting the underlying stock.⁴¹ This arbitrage strategy is similar to the purported strategy that BLMIS claimed to employ in the House 17 accounts from at least the 1970s to the 1990s.⁴²
47. On November 21, 2011 (just one day before this report was issued), Kugel pled guilty to federal securities fraud and related offenses, admitting that the investment fraud at House 17 started in the 1970s.⁴³ Kugel is awaiting sentencing.⁴⁴

iv. Annette Bongiorno

48. Annette Bongiorno (“Bongiorno”) worked at BLMIS from July 1968 until December 11, 2008.⁴⁵ She managed hundreds of House 17 accounts and supervised House 17 employees including the key punch operators responsible for entering the purported trades.⁴⁶ Many of

³⁸ *Id.* at 47.

³⁹ *United States v. Kugel*, 10 Cr. 228 (LTS), Plea Allocution at 35-36 (S.D.N.Y. Nov. 21, 2011).

⁴⁰ *See generally*, Kugel Plea Allocution *supra*.

⁴¹ *See generally*, Kugel Plea Allocution *supra*.

⁴² *See infra* on convertible arbitrage strategy.

⁴³ “As to Counts One, Three, Four, and Five, I provided historical trade information to other BLMIS employees, which was used to create false, profitable trades in the Investment Advisory clients’ accounts at BLMIS. Specifically, beginning in the early ‘70s, until the collapse of BLMIS in December 2008, I helped create fake, backdated trades. I provided historical trade information – sorry - first to Annette Bongiorno, and late to Joanne Crupi, and others which enabled them to create fake trades that, when included on the account statements and trade confirmations of Investment Advisory clients, gave the appearance of profitable trading when in fact no trading had actually occurred. I helped Bongiorno, Crupi and others create these fake, backdated trades based on historical stock prices and were executed only on paper.” *United States v. Kugel*, 10 Cr. 228 (LTS), Plea Allocution at 32 (S.D.N.Y. Nov. 21, 2011).

⁴⁴ *See U.S v. Kugel*, No. 10-CR-228 (LTS), Information (S.D.N.Y. Nov. 21, 2011).

⁴⁵ *United States v. Bongiorno*, No. 10-CR-228, Superseding Indictment at pg. 5, ECF No. 36 (S.D.N.Y. Nov. 17, 2010).

⁴⁶ *Id.*

the accounts that Bongiorno managed were close friends and family of Madoff and BLMIS employees, and included some of the oldest Madoff clients.⁴⁷

49. Bongiorno was charged with federal securities fraud and related offenses on November 18, 2010.⁴⁸ She is awaiting trial.

v. Daniel Bonventre

50. As BLMIS's Director of Operations, Daniel Bonventre ("Bonventre") ran the back office at BLMIS and oversaw the firm's accounting and securities clearing functions for at least 30 years.⁴⁹ He was responsible for overseeing the accounting functions for both House 17 and House 5, including maintenance of the BLMIS general ledger.⁵⁰ Bonventre provided information used in the creation of the Financial and Operational Combined Uniform Single ("FOCUS") reports and the BLMIS financial statements.⁵¹
51. Bonventre was charged with federal securities fraud and related offenses.⁵² Bonventre is awaiting trial.

vi. Eric Lipkin

52. Eric Lipkin ("Lipkin") started at BLMIS in the mid-1980s and by 1992 was working in BLMIS's payroll and benefits department, processing the payroll and administering the BLMIS 401(k) plan.⁵³ In approximately 1996, Lipkin began working with Bongiorno, Bonventre, DiPascali, Jodi Crupi, Jerry O'Hara, and George Perez to maintain false customer accounts, with Lipkin creating letters to clients indicating the purported balances in their BLMIS accounts.⁵⁴
53. Lipkin admitted to manufacturing customer statements to reflect the false holdings of customer accounts, as well as, falsifying the books and records of BLMIS. Lipkin was

⁴⁷See generally, Bongiorno Indictment *supra* at 45.

⁴⁸Bongiorno, Indictment at pp. 70-96.

⁴⁹*United States v. Bonventre*, No. 10-CR-228 (LTS), Superseding Indictment at pp. 60-92, ECF No. 36-1 (S.D.N.Y. Nov. 17, 2010).

⁵⁰*Id.* at p. 4.

⁵¹*Id.* at 51.

⁵²*United States v. Bonventre*, No. 10-CR-228 (LTS), Superseding Indictment at pp. 60-92, ECF No. 36 (S.D.N.Y. Nov. 17, 2010).

⁵³Press Release, U.S. Attorney's Office, *Manhattan Attorney Announces Guilty Plea Of Another Employee Of Bernard L. Madoff Investment Securities LLC*, (June 6, 2011); *United States v. Lipkin*, No. 10-CR-228 (LTS), Information at pg. 5, ECF No. 138 (S.D.N.Y. June 6, 2011).

⁵⁴*Id.* at 5-6.

charged with federal securities fraud and related offenses.⁵⁵ Lipkin entered into a cooperation agreement and on June 6, 2011, pled guilty to all six counts.⁵⁶ Lipkin awaits sentencing.

vii. Joann “Jodi” Crupi

54. Joann “Jodi” Crupi (“Crupi”), who worked for BLMIS for approximately 25 years,⁵⁷ performed many tasks for BLMIS. Crupi tracked the daily activity in the primary checking account for the IA Business operations (the “703 Account”) to ensure there was enough money for pending redemptions, and she authorized wire transfers into and out of the account. Crupi created a Daily Report, delivered to Madoff every day, which reflected the 703 Account balance, customer deposits, and all pending customer redemptions.⁵⁸ Similar to Bongiorno, Crupi was also responsible for managing several House 17 customer accounts,⁵⁹ for which she manufactured statements in order to produce the promised rates of return.⁶⁰
55. Crupi was charged with federal securities fraud and related offenses on November 18, 2010.⁶¹

viii. Jerry O’Hara and George Perez—Computer Programmers

56. Jerry O’Hara (“O’Hara”) was hired in 1990 as a programmer in House 17 to create and maintain the systems and functions that falsified customer account statements. George Perez (“Perez”) was hired in 1991 to assist O’Hara. Perez and O’Hara’s programs and systems created fake trade blotters and reports.⁶² Additionally, they maintained the systems that falsified the trading data using historical stock prices to manufacture the customer statements and other reports sent to customers.⁶³
57. O’Hara and Perez were both charged with federal securities fraud and related offenses.⁶⁴ O’Hara and Perez await trial.

⁵⁵ *Id.* at 7.

⁵⁶ *United States v. Lipkin*, 10-CR-228 (LTS), Cooperation Agreement, ECF No. 138 (S.D.N.Y. June 6, 2011); *United States v. Lipkin*, 10-CR-228 (LTS), Minute Entry, Dkt. Entry 06/06/11 (S.D.N.Y. June 6, 2011).

⁵⁷ *United States v. Crupi*, No. 10-CR-228 (LTS), Superseding Indictment at pp. 5, ECF No. 36 (S.D.N.Y. Nov. 17, 2010).

⁵⁸ *Id.* at 5-6, 44-45.

⁵⁹ *Id.* at 14-15, 20-21, 25-26.

⁶⁰ *Id.* at 14-15, 20-21, 25-26, 33-37.

⁶¹ *Id.* at 60-92, 94-95.

⁶² *Id.* at 27-38.

⁶³ See MDPTTT00000001- MDPTTT00002748

⁶⁴ *United States v. Bonventre*, No. 10-CR-228 (LTS), Superseding Indictment, ECF No. 36 (S.D.N.Y. Nov. 18, 2010).

ix. Friehling and Horowitz

58. The BLMIS financial statements were purportedly audited by Friehling and Horowitz, C.P.A., P.C. (“F&H”), a three-person CPA firm.⁶⁵
59. Jerome Horowitz (“Horowitz”), a licensed CPA in the State of New York,⁶⁶ worked for Alpern & Avellino before establishing his own accounting firm. Saul Alpern was Madoff’s father-in-law and founder of the accounting firm. When Horowitz retired, his firm retained the Madoff account and continued to perform the tax and audit services for the Madoff brokerage firm. These duties were transitioned to David G. Friehling (“Friehling”) when Horowitz retired.
60. On November 3, 2009, in the United States District Court Southern District of New York, Friehling pled guilty to federal securities fraud and related offenses.⁶⁷
61. As a result of the plea, Friehling was forced to surrender his CPA license to the State of New York and is currently awaiting sentencing.

E. Computer Systems Overview

62. In operating either a market-making business or an investment advisory business such as BLMIS, a minimum amount of computer hardware, software and connections to information sources and regulatory systems is required. Often, firms engaged in market trading activities develop information technology systems that enable and facilitate certain key functions, such as customer management and provision of timely market information.
63. Customer management systems obtain information from clients regarding deposits, market orders and withdrawals, as well as verify the accuracy of the same. Market information systems facilitate timely communication of news and current market information instrumental to investing decisions. This information may come from third party vendors, such as Bloomberg, Dow Jones, and Thomson Reuters, as well as directly from the financial

⁶⁵ See Audit Report to the 2000 audited financial statements. MADTEE00046020

⁶⁶ Office of the Professions, New York State Education Department (Nov. 20, 2011), <http://www.nysed.gov/coms/op001/opsc2a?profcd=07&plicno=017210&namecheck=HOR>.

⁶⁷ *United States v. Friehling*, No. 09-CR-700, Plea Agreement, Dkt. Entry 1/3/09 (S.D.N.Y. Nov. 3, 2009).

exchanges, such as NASDAQ. Systems that integrate customer management and market information systems aid in the trading and investment divisions' interaction with trading markets by, among other things, identifying investment opportunities and generating optimal execution strategies.

64. The following table provides a summary of the key systems, both hardware and software, implemented in House 5 and House 17.

Table 1

Name	Description	House 5	House 17
ACES	Routed orders between order-entry firms and market makers that have established relationships with BLMIS.	✓	
Bloomberg	Provided nearly instant financial and economic data.	✓	✓
Connectivity Overview	Approximately 80 connections to handle order flow. These systems included extranet providers, private lines and VPN internet connections.	✓	Limited ⁶⁸
CTCI Circuit	Reported trades to tape and cleared trades through the NASDAQ/Trade Reporting Facility ("TRF") and received trade acknowledgements.	✓	
Custom Software	Software used to identify customer accounts, individual securities, trading activity, pricing, dividend and proxy information, checks and other information related to maintaining the accounts.		✓
Custom Software	Custom software printed customer statements and storing optical images.		✓
Data Warehouse	An Oracle database that received and processed data from various transactional databases and systems.	✓	
DTC System	Enabled securities movements for NSCC's (described <i>infra</i>) net settlements and settlement for institutional trades.	✓	

⁶⁸ House 17 had very limited connectivity capabilities that basically consisted of an internet connection and an FTP site. No connections to DTC or exchanges were identified and/or found.

Name	Description	House 5	House 17
Fix Engine	Facilitates electronic communication of trade-related messages between equity market participants by incorporating the free Financial Information eXchange ("FIX") protocol, JAVA, XML and TIBCO integration technologies.	✓	
FormsPrint	Created forms that overlaid files generated on the AS/400 in order to simplify printing.		✓
IBM Application System 400 ("AS/400")	A popular system for small and intermediate sized companies, that hosted its information systems.	✓	✓
M2	A proprietary order entry and management system that was integrated with the MISS system.	✓	
Maid	Provided to query and review executions and make corrections in a batch process rather than one at a time.	✓	
MIMIX	Provided backup and disaster recovery functionality.	✓	✓
MISS	A central order management system for most trading activities, including market making and proprietary activities. MISS handled, on average, 400,000 trades a day with a capacity of over 1.4 million executions.	✓	
Muller	Delivered bond and dividend announcement data.	✓	
NASDAQ QIX	Provided real-time market data and trading system.	✓	
Order Audit Trail System (OATS)	Tracked order events, including the origination, transmission and the cancellation or execution.	✓	
Report Program Generator ("RPG")	Custom software that facilitated the generation of customer statements through manual entry, as well as interaction with House 5 systems.	✓	✓
ROBO and Blackbox	Trading platforms that executed trades and managed Profit and Loss accounting.	✓	

Name	Description	House 5	House 17
Securities Industry Automation Corporation ("SIAC")	Provided real-time market data from SIAC's Consolidated Tape/Ticker System ("CTS") and Consolidated Tape Association ("CTA").	✓	
Settled Cash (SETCSH17)	Data file of customer account activity.		✓
STMTPro	Revise customer statements from previous months if necessary.		✓
StorQM	Off-the-shelf product that enabled viewing and managing legacy reports.		✓
Stratus VOS	Front-end processing system to maximize trading speed.	✓	
Superbook	A component of the M2 system that provided a consolidated view of all available market data for a particular security.	✓	
Thomson One	Provided trading functions.	✓	
Ticker Plant	An architecture system for data distribution.	✓	
Time and Sales	Used by clients to view their historical trade data.	✓	
Time Slicing Web Applications	Customer order portal that enabled registered clients to enter and track orders.	✓	

65. As discussed in greater detail later in this report, while House 5 had robust computer systems that one would expect to see in a broker-dealer trading environment, the dearth of such comparable systems in House 17 is in stark contrast and shows that trading in House 17 did not occur.

VI. EXPERT OPINIONS

A. OPINION NO. 1: HOUSE 17 WAS NOT A LEGITIMATE BUSINESS.⁶⁹

i. **Fictitious Trading in House 17 - There is no evidence that the purported investment transactions for House 17 customers ever occurred at least as far back as the 1970s. In fact, the evidence shows the trading did not occur.**⁷⁰

a. **The Purported Convertible Arbitrage Strategy – the 1970s to the 1990s: There is no evidence that the purported convertible arbitrage strategy for House 17 customers actually occurred. In fact, the evidence proves that the purported trades did not occur.**

66. Convertible securities are generally fixed income and preferred equity instruments that allow the purchaser to convert that security to shares of stock under pre-specified conditions set forth by the issuer. Although there can be a myriad of covenants for convertible securities, the most common conditions include a pre-determined strike price (i.e., price at which the securities can be converted) and a pre-determined timeframe necessary in order to convert the security into shares of common stock.⁷¹

67. Corporate convertible securities include the following:

- **Convertible Bonds:** Corporate bonds that can be converted to company equity at some predetermined ratio during a certain period of time.
- **Warrants:** Similar to call options in that they provide an investor with the right (but not the obligation) to purchase a security at a predetermined price during a certain period of time, but issued by the company usually as a benefit to bondholders.
- **Convertible Preferred Stock:** Preferred stock that can be converted to common equity at some predetermined ratio during a specified period of time.

68. A convertible arbitrage trading strategy aims to generate profits by taking advantage of the pricing mismatches that can occur between the equity and convertible instruments. This

⁶⁹ I am using the plain English meaning of the term “legitimate” to mean “*being exactly as purposed: neither spurious nor false.*” See Legitimate, Merriam Webster (Nov. 20, 2011), <http://www.merriam-webster.com/dictionary/legitimate>. Further, I am not opining on the trading activities or other business activities of House 5 beyond its relevance to my opinions related to House 17.

⁷⁰ All discussion and opinions related to trading activities or positions held in House 17 are assumed herein to be purported, including, but not limited to, all references to “trades,” “securities held” or “trading.” The opinion herein encompasses the convertible arbitrage and split strike conversion trading strategies for House 17 which were the trading strategies utilized for nearly all of its customers. A few self-directed trades for a single IA Business customer were identified as being purportedly executed through House 5. The *de-minimis* number of these transactions does not impact my opinions herein.

⁷¹ Frank J. Fabozzi, The Handbook of Fixed Income Securities, 1372 (7th ed. McGraw Hill 2000).

strategy is implemented when the convertible instrument is incorrectly valuing the option component of the security relative to the underlying common stock price. The investor is looking then to benefit from a change in the expectations for the stock or convertible security over a period of time.

69. Normally, this arbitrage is initiated by simultaneously purchasing convertible securities and selling short enough shares of the underlying common stock to create a delta neutral hedge. (“Delta neutral” implies that the investor is protected from price movement of the common stock.)⁷²
70. With this trading strategy, if the underlying stock loses value, the potential arbitrageur will benefit from the short sale of the stock, while still receiving constant interest payments to the extent the underlying instrument was a bond. Conversely, if the stock price improves in value, the loss on the short sale will be mitigated by the increase in the option value of the underlying security.

(i) Convertible arbitrage strategy - House 17 Customers

71. During the 1970s through the mid-1990s, Madoff purportedly utilized a convertible arbitrage investment strategy. House 17 customer statements suggest that this purported trading strategy occurred, in theory, as the statements showed long convertible positions, corresponding short positions, and positions converted and unwound (i.e., the short positions were purchased back and/or the convertible security was sold).
72. In order to investigate House 17’s purported convertible arbitrage strategy, customer transactions and statements were analyzed both in aggregate (i.e., across all customer accounts) and on an individual customer account basis. The months of October 1979, November 1979 and March 1981 were utilized and included all customer accounts that held funds with BLMIS at that time.⁷³ In addition to the three sample months, eight Avellino &

⁷² Arshanapalli, New Evidence on the Market Impact of Convertible Bond Issues in the U.S. 17-18 (2005).

⁷³ The customer ledger data for these three months were fully coded into a database by the Trustee’s consultants.

Bienes⁷⁴ (“A&B”) accounts were utilized and analyzed from November 1978 through to the date when the accounts transitioned to the purported split strike conversion strategy.⁷⁵

73. For the relevant time period, House 17 customer statements purportedly employing the convertible arbitrage strategy were tested against historical, independent market trading records for the applicable securities.⁷⁶ The daily price range, total daily volume and corporate actions (e.g., dividends) of each security in question were analyzed in comparison to those identified on the customer statements.
74. An example of how the purported transactions in House 17 were constructed can be seen in Table 2 below. Customer statements from House 17 depicted that the clients were long in convertible securities and short in the underlying common stock. In this instance, the statement purports the customer was long Macmillan Inc. convertible debentures and short the underlying common stock. However, as described in the following paragraphs, there are a number of reasons why this trade, as presented (as well as the majority of the House 17 convertible arbitrage transactions in general) could not have occurred.

Table 2

A&B 1A0045 Account – Macmillan Inc Sub Deb Conv 8.75 – Due 2/15/2008

	Statement	Transaction								
Bates	Date	Date	Long	Short	Security	Price	Debit	Credit		
A	MF00370649	1/31/1985	9-Jan	706,000	MACMILLAN INC SUB DEB CONV 8.750 2/15/2008	138	\$ 1,000,191.12			
B	MF00370649	1/31/1985	9-Jan	705,000	MACMILLAN INC SUB DEB CONV 8.750 2/15/2008	138	998,774.42			
C	MF00370649	1/31/1985	10-Jan		MACMILLAN INC	44 7/8		\$ 1,853,337.50		
D	MF00370649	1/31/1985	10-Jan		MACMILLAN INC	44 3/4		230,552.00		
E	MF00370649	1/31/1985	17-Jan		MACMILLAN INC FRACTIONAL SHARES	JRNL			30.20	
F	MF00371844	3/31/1985	14-Mar		MACMILLAN INC SUB DEB CONV 8.750 2/15/2008	DELV				
G	MF00371844	3/31/1985	14-Mar	41,300	MACMILLAN INC	RECD				
H	MF00371844	3/31/1985	14-Mar		MACMILLAN INC SUB DEB CONV 8.750 2/15/2008	DELV				
I	MF00371844	3/31/1985	14-Mar	5,152	MACMILLAN INC	RECD				
Total								\$ 1,998,965.54	\$ 2,083,919.70	

⁷⁴ A detailed overview of A&B is discussed *infra* in this report.

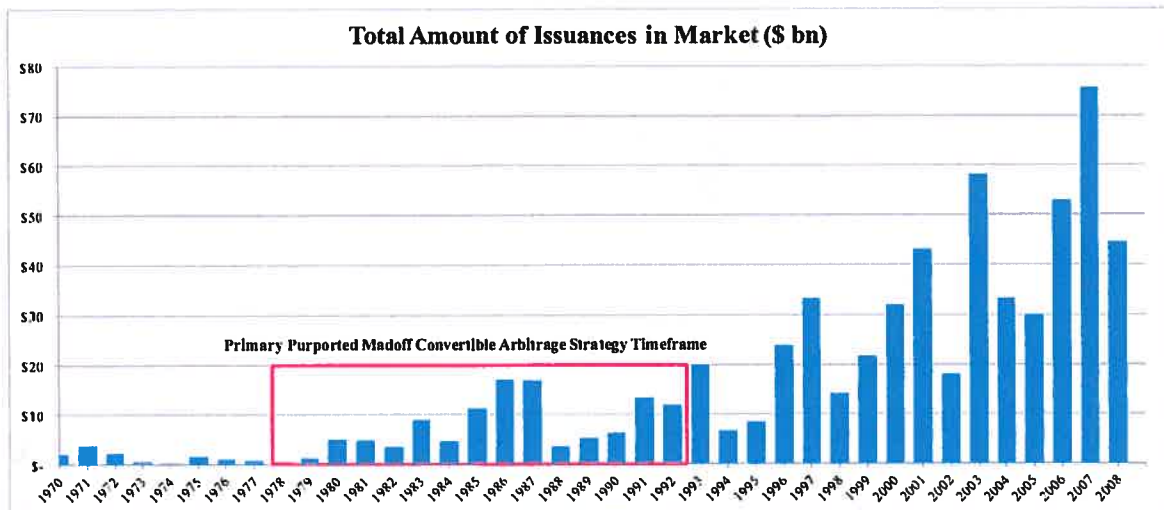
⁷⁵ These accounts include: 1A0045 through 1A0051 and 1B0018. As noted *supra* in this report, the underlying data used in these analyses were validated and tested. These eight accounts were utilized as the customer data associated with these accounts were fully coded by the Trustee’s consultants into a database.

⁷⁶ New York Stock Exchange Daily Stock Records, Over the Counter Exchange Daily Stock Records, American Stock Exchange Daily Stock Record, Wall Street Journal New York Exchange Bonds, and Moody’s Industrial Manuals.

(ii) **Purported convertible security trades exceeded the entire reported market volume for certain days.**

75. Given there were relatively few actual convertible securities issued during the timeframe House 17 purportedly utilized this strategy (i.e., 1970s through mid-1990s) (*see* Figure 1), it would have been highly unlikely to find adequate trading volume necessary to generate the dollar returns that appear on the customer statements in this timeframe.⁷⁷

Figure 1



76. To test if the purported trades could have been legitimate, the daily volume from the long convertible positions as indicated on the customer ledgers were compared to the historical market volume for those securities on the specific days the trades purportedly occurred. Customer ledgers from the three months, October 1979, November 1979 and March 1981 were analyzed to aggregate the relevant transactions to be tested. 117 unique convertible security transactions were compared to historical daily trading volume of these securities.⁷⁸ Of these securities, 110 of the 117 unique convertible securities that resulted in purported trades (95%) exceeded the daily market volume traded for that day by an average of over 150

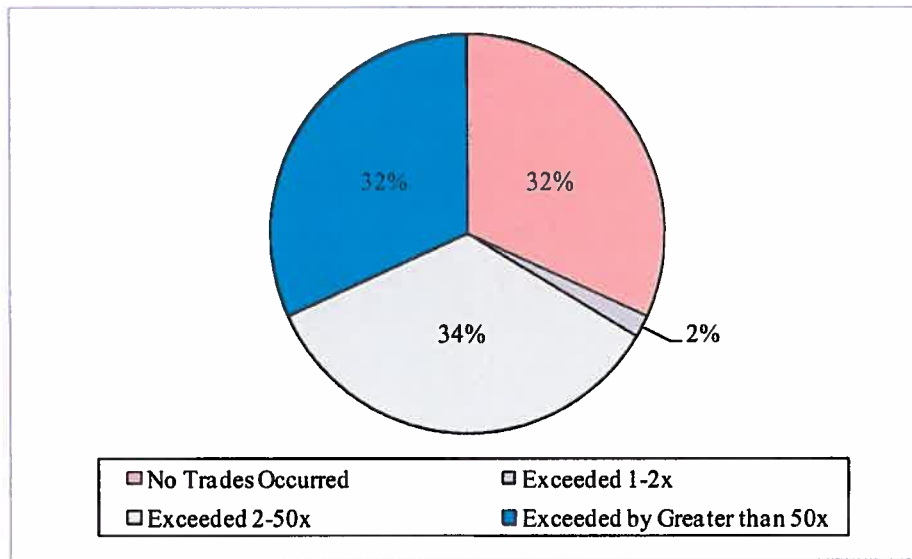
⁷⁷ SDC Database of Convertible Securities Issuances, includes only issuances greater than \$100 million. Frank Fabozzi, Jinlin Liu, & Lorne N. Switzer, *Market Efficiency and Returns from Convertible Bond Hedging and Arbitrage Strategies* (2009).

⁷⁸ There were 66 additional instances where publicly available market data could not be identified.

times the entire reported daily volume for all trades in the market.⁷⁹ In fact one security, UAL Inc. Preferred Security A, purportedly traded nearly 1,219 times the actual daily volume, a fact that shows the purported trades were fictitious.⁸⁰

Figure 2

Breakdown of Purported Securities Exceeding Daily Volume for Three Months



77. To further test the volume analysis, eight A&B accounts were tested to determine whether the transactions exceeded the actual daily market volume for the chosen convertible securities between 1978 and 1998 (“A&B Time Period”).⁸¹ The daily historical volume for the convertible securities was compared to the volume House 17 purportedly traded per the customer account records, and results were similar to that of the three months analysis

⁷⁹ A volume analysis was also performed for all the common equity that was shorted for the transactions executed during these three months. Data was collected from the Daily Stock Price Record-New York Stock Exchange and the Daily Stock Price Record-American Stock Exchange, which provide the end-of-month short positions. The purported House 17 month-end short positions for these three months were then compared to the publicly available data. The investigation concluded that of the 166 short positions for which data was publicly available, 57% of the House 17 purported short common shares positions exceeded the daily historical volume for the common shares. In fact, one position exceeded the daily volume by approximately 270 times the actual reported total market short position.

⁸⁰ Two of the largest European exchanges (London Stock Exchange and the Frankfurt Stock Exchange) were analyzed to assess whether or not these securities were traded in those markets. The investigation shows that none of the convertible securities were traded on those exchanges and could not have made up for the potential excess volume that was not traded on the U.S. exchanges.

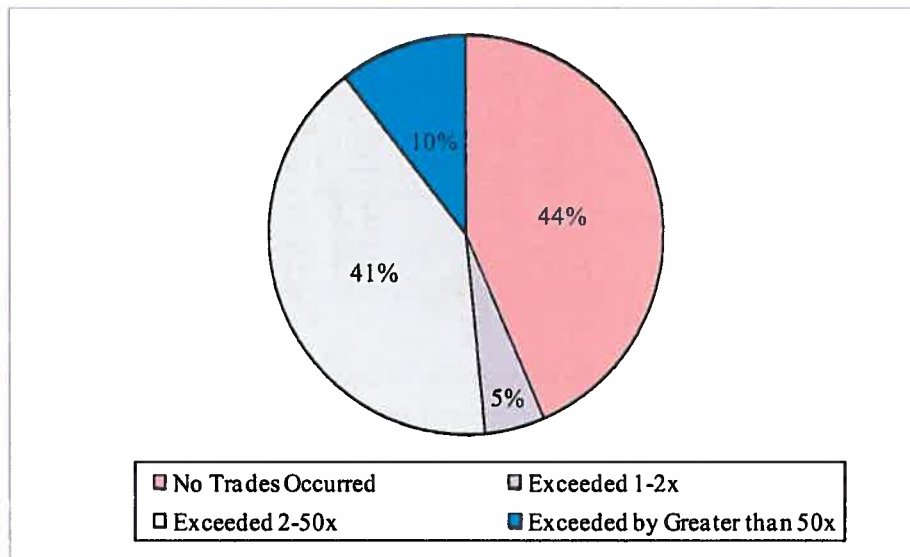
⁸¹ This is the time period for which convertible arbitrage information was available for these accounts.

described above. 1,079 of the convertible securities in these eight accounts (over 90% of the total) exceeded the daily volume on the transaction day by an average of nearly 30 times the actual daily volume. Nearly forty percent of the trades occurred where there was no reported volume at all in that particular security for that particular day. In one instance, the volume reported by House 17 was over 500 times the total volume reported in the entire market.

78. Accordingly, the purported securities trades underlying the convertible arbitrage strategy for House 17 customers could not have been legitimate trades as they exceeded the reported volume of the entire market on the securities House 17 purportedly executed.

Figure 3

Breakdown of Purported Securities Exceeding Daily Volume for 8 A&B Accounts

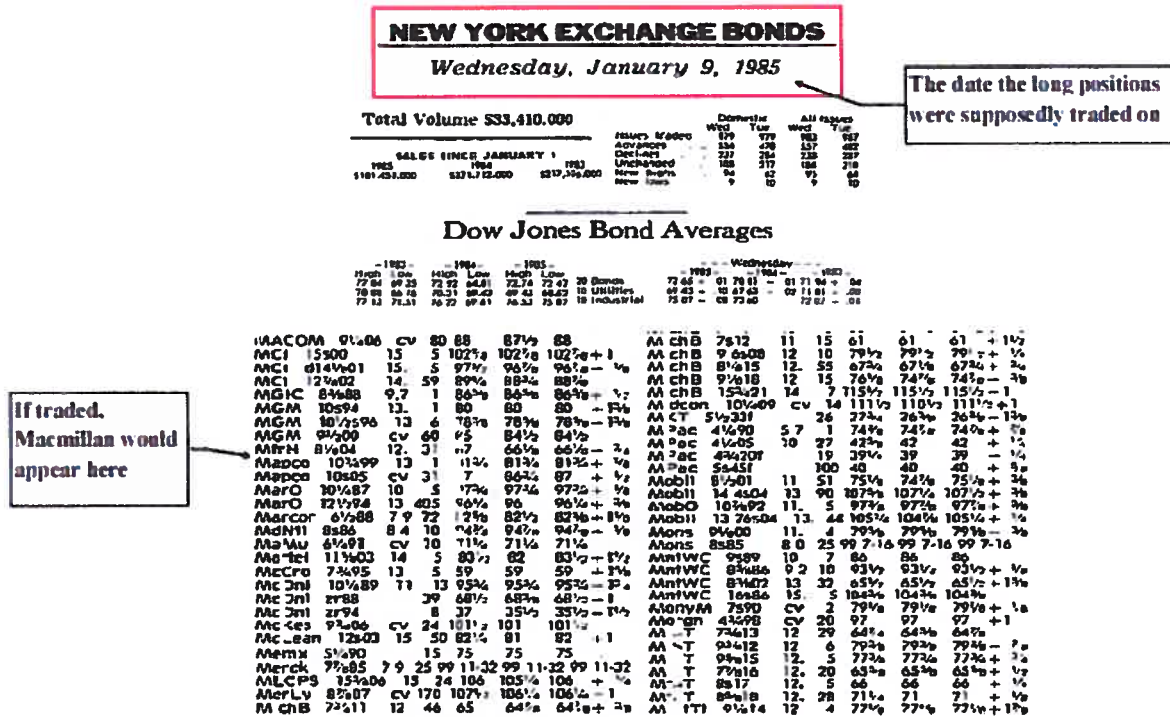


79. These volume discrepancies are further illustrated with an individual transaction on a single customer ledger. Referring to Table 2, on January 9, 1985, the A&B customer statement states that \$1,411,000 par amount of Macmillan, Inc. subordinate debt was traded (Row A and Row B). However, on that day, this security did not change hands in the open market (see Figure 4 below for listing of traded securities for January 9, 1985).⁸² Accordingly,

⁸² *New York Exchange Bonds Daily Records*, Wall St.J., Jan. 9, 1985.

House 17 simply could not have legitimately traded Macmillan, Inc. subordinate debt on that day.⁸³

Figure 4



(iii) Purported purchase prices of convertible securities on customer accounts did not represent true prices.

80. The purchase prices for the convertible securities as stated on the House 17 customer ledgers were tested against the historical market prices to determine if the purported House 17 trades fell within the actual daily market trading range. As House 17 often purportedly executed the same security several times per day for the accounts, each unique trade price was tested against the historical trading range for that day. For the months, October 1979, November

⁸³ The Macmillan Inc. subordinated debt could not have traded on the OTC market either. While the New York Exchange Bonds listing does not reflect OTC trading, the S&P Bond Guide captures the month-end high and low traded prices for the exchanges and the OTC market. A review of the February 1985 S&P Bond Guide as of month-end January 1985 for the exchanges and the OTC market indicates that the high traded price for the MacMillan subordinated debt in January 1985 was \$154 and the low was \$141.5. Given that the House 17 customer statements indicate a traded price of \$138 as of January 9, 1985, this price is outside the possible traded range in both the exchanges and OTC market and could not have been traded in either market. S&P Bond Guide, February 1985, p. 10.

1979 and March 1981, 166 unique trade prices were tested.⁸⁴ Of the 166 unique trade prices, 126, or 76 percent, were outside the actual daily market trading price range showing that the prices listed on the customer statements were fictitious.⁸⁵

81. The pricing discrepancies were further tested during the A&B Time Period for the eight A&B accounts to determine if the same anomalies described above occurred throughout the timeframe during which House 17 was purportedly implementing a convertible arbitrage strategy for these accounts. Of the 1,127 securities with unique prices that were tested, 857, or 76 percent, were outside the actual reported daily market price range.
82. This pricing issue is further illustrated earlier in Table 2 with the Macmillan, Inc. sub-debt long position. The statement shows that \$1,411,000 par value of the Macmillan convertible bond was traded on January 9, 1985 at a price of \$138 (Row A and Row B). However, given that there was no trading of the bond on this date; House 17 could not have purchased the Macmillan, Inc. sub-debt for \$138.⁸⁶

(iv) Convertible securities continued to be purportedly traded by House 17 even after they were called for conversion.

83. Many convertible securities have the option for the company to call the security at a predetermined date or at the company's discretion. That is, the company has the right to convert the convertible securities into common shares. In instances where the bond or preferred equity is called, the shares are converted on the record date at a determined amount. Once the security is converted by the company it can no longer be held by an investor. However, there are several instances where customer statements show that a convertible

⁸⁴ In some instances historical data was unavailable. In the case of the Over-the-Counter ("OTC") transactions, the only publicly available information was the bid-ask and close prices. Therefore, no conclusive range could be determined.

⁸⁵ In those cases where the purported House 17 trades were higher or lower than the actual recorded daily market traded prices, the House 17 prices themselves would have been the daily high or low. In the event that the out of range prices on the House 17 customer statements were the result of an inadvertent typing error (sometimes referred to as "fat fingering"), House 17 would have had to issue corrected trade confirmations and customer statements with actual market prices. There is no evidence of any corrections or reissuance to account for these corrections.

⁸⁶ *New York Exchange Bonds Daily Records*, Wall St. J., Jan. 9, 1985.

arbitrage transaction was purportedly still being held by a House 17 customer despite the fact that the security had already been called.

84. In the case of Macmillan, Inc., Table 2 the subordinated debentures were converted into 1,645,071 shares of common stock in January 1985, however House 17 purportedly closed out its position on March 14, 1985 (Row H).⁸⁷ This transaction simply could not have been legitimately completed as depicted on the customer statement given that the debentures were retired by MacMillian, Inc. well before the March 14, 1985 date that House 17 purports to convert the convertible security and buy back the common shares.

(v) House 17 did not account for dividend payments or accrued interest on the convertible bonds thereby evidencing the fictitious nature of the underlying transactions.

85. One major component of a convertible arbitrage transaction is that the underlying convertible security pays a regular coupon or dividend. This additional income impacts how the transaction is executed as the coupon or dividend is considered in the valuation of the underlying security, which is used to determine whether an arbitrage situation exists. In many instances, however, House 17 did not account for the coupon or dividend payment during the purported convertible arbitrage transactions.
86. An analysis was performed to identify actual dividend or coupon payments for those convertible securities in which House 17 customers were purportedly invested as of the ex-dividend date. The dates and amounts were then reconciled to the customer ledgers to confirm whether or not House 17 accurately recorded these payments. In many instances, the coupon or dividend payments were not recorded as being paid to the customer.
87. For example, Textron Inc. Preferred Convertible security paid a dividend of \$0.52/share to record holders as of June 15, 1982 (see Figure 5).⁸⁸ A&B account A10045 was an account holder as of this record date and should have received a dividend payment worth \$6,592.56 (12,678 shares times \$0.52/share). However, this payment does not appear on the A&B account 1A0045 ledger.

⁸⁷ MacMillan, Inc. at 4079, *Moody's Industrial Manual*, (1985).

⁸⁸ Textron Inc. at 3553, *Moody's Industrial Manual* (1985).

Figure 5

at \$1.00 plus accrued interest.

CAPITAL STOCK
1. Texttron Inc. \$2.00 cumulative convertible preferred stock, series A; no par.

ALLOCATION—All series, 13,000,000 shares outstanding, ser. A Dec. 28, 1983, 1,861,000 shares; in treasury, 69,000 shares; no par.

PREEMPTIVE RIGHTS—None.

DIVIDEND RESTRICTIONS—See Long Term Debt, above.

OFFERED—(4,000,000 shs.) at \$47.25 a sh. on Sept. 23, 1985 thru Morgan Stanley & Co., Inc.; Kidder, Peabody & Co., Inc.; Salomon and associates.

AGENT and REGISTRAR—Prudential Trust Co. of New York, N.Y.

NYSE (Symbol: TXT); also on the New York, Philadelphia, and Cincinnati Stock Exchanges.

with non-cumulative voting for directors except if divs. are in arrears for 6 quarterly payments then pfd., voting as a class, may elect 2 additional directors.

Consent of 66 2/3% of pfd. needed to issue prior stock or change terms adversely.

Consent of majority of authorized and unissued shares on a parity with common shares.

Dividend Record Date: June 15
Payment Date: July 1

DIVIDEND RECORD—Annual dividend of \$2.00 per share.

DIVIDEND RIGHTS—Entitled to cumulative dividends at rate of \$2.00 per share annually payable quarterly Jan. 1, etc., to stock of record about Dec. 15, etc.

CONVERTIBLE—Into common at any time at rate of 1.1 common shares for each preferred share.

TRANSFER AGENT AND REGISTRAR—Prudential Trust Co. of New York, New York, N.Y.

953	1954	0.10	1955	0.60
956	1957	1.13	1958	1.00

Conversion factor = 1.1 common shares

88. Based upon the foregoing discussion regarding dividend discrepancies, this investigation and analysis shows that trading in House 17 did not occur.

(vi) There is no evidence that House 17 converted the convertible securities into common shares.

89. Companies that have publicly traded securities typically use third-party institutions known as transfer agents to keep track of the individuals and entities that own their stocks and bonds. Most transfer agents are banks or trust companies, but sometimes a company acts as its own transfer agent.⁸⁹ Companies that issue preferred convertible stock and convertible subordinated debt must do so through these transfer or conversion agents.

90. The transfer agent maintains records of pertinent shareholder information, such as names, addresses and number of shares owned. The transfer agent also administers dividend payments for companies, including dividends to be paid to each shareholder and making dividend distributions by mailing out dividend checks or through other means.⁹⁰

91. Given these agents stand directly between the issuing company and the security holder, operations with these agents would have been essential to carrying out House 17's purported convertible arbitrage strategy. The Securities and Exchange Act of 1934 requires that transfer agents be registered with the SEC, or if the transfer agent is a bank, with a bank regulatory agency.⁹¹ As a result, the SEC has strict rules and regulations in place for all registered

⁸⁹ See Transfer Agents, U.S. Securities and Exchange Commission (11/20/11), <http://www.sec.gov/answers/transferagent.htm>.

⁹⁰ *Id.*

⁹¹ The Securities Exchange Act § 17A(c), 15 U.S.C. §78 (2010).

transfer agents that include minimum performance standards regarding the issuance of new certificates and related recordkeeping.

92. In order to convert shares of preferred convertible stock or convertible subordinated debt into common stock, shareholders must contact the company's transfer agent and complete the following:
- Complete and sign a conversion notice provided by a conversion agent, and deliver such notice to the conversion agent;
 - Deliver a certificate or certificates representing the shares of convertible preferred stock/subordinated debt to be converted to the conversion agent; and
 - If required, furnish appropriate endorsements and transfer documents.⁹²
93. In order to have converted preferred convertible stock and convertible debt into common stock, House 17 would have needed documentation from any entity that could convert the shares and successfully execute the purported convertible arbitrage strategy. To test whether proper documentation existed, ten purportedly converted securities were tested for proper documentation as shown in Table 3.⁹³

⁹² Such documentation usually contains most, if not all, of the following information: conversion date, conversion factor (shares or price), total principal amount, total number of shares, name(s) and address(es) of person(s) in whose name(s) the shares required to be delivered on conversion of the shares are to be registered.

⁹³ Data obtained from *Moody's Industrial Manual* for each of the respective years indicated in the table. The transfer agent for each company is listed by year; data was reviewed for the year in which conversion occurred. Aetna Life at 4303, *Moody's Bank & Finance Manual* (1980); Reliance Group Inc. at 2478, *Moody's Bank & Finance Manual* (1980); Eaton Corp. at 296, *Moody's Industrial Manual* (1984); GATX Corp. at 1156, *Moody's Industrial Manual* (1980); Lear Siegler at 384, *Moody's Industrial Manual* (1978); Liberty National Corp. at 1493, *Moody's Bank & Finance Manual* (1981); TenneCo Corp. at 3143, *Moody's Industrial Manual* (1979); Texas Gas Transmission Corp., *Moody's Public Utility Manual* (1979); Trane Co. at 6053, *Moody's Industrial Manual* (1982); TRW Inc. at 4518, *Moody's Industrial Manual* (1982).

Table 3

Transfer Agents as of Conversion Date

Security	Date of Purported Conversion	Transfer Agents for Date of Purported Transaction
AETNA LIFE & CAS CO PDF CONV \$2	8/22/1980	Hartford National Bank & Trust Morgan Guaranty Trust
RELIANCE GROUP INC PFD SER B CONV \$2.20	7/25/1979	First Jersey National Bank Jersey City
EATON CORP PFD SER B CONV \$10	3/13/1984	AmeriTrust Co., Cleveland
GATX CORP PFD CONV \$2.50	6/3/1980	Manufacturers Hanover Trust
LEAR SIEGER INC PFD CONV \$2.25	1/10/1979	Irving Trust Co. United California Bank
LIBERTY NATL CORP PFD CONV \$2.125	7/13/1981	Liberty National Bank & Trust
TENNECO CORP PFD \$1.60	10/24/1979	Chemical Bank
TEXAS GAS TRANSMISSION CORP PFD CONV \$1.50	12/12/1979	Chemical Bank
TRANE CO SUB DEB CONV 4.000 9/15/1992	9/23/1982	Morgan Guaranty Trust
TRW INC PFD SER I CONV \$4.40	12/11/1981	Morgan Guaranty Trust

94. No relevant documentation related to transfer agents or the conversion of any of the underlying convertible securities was identified. Absent this documentation and communication with the transfer agents, House 17 could not have converted the underlying shares into common stock for any of the thousands of transactions in its convertible arbitrage strategy.
95. Further, House 17 did not consistently report on the customer statements that it had converted the convertible securities into the required number of common shares based on the correct conversion factor. For example, Coopers Industry Inc. Preferred Security B was purportedly traded by House 17 on May 19, 1980. The adjusted conversion factor at this time was 7.2 common shares per convertible security; the adjustment was effective as of April 1980 due to a 2-for-1 stock split (i.e., prior to April 1980, the conversion factor was 3.6). House 17,

however, did not account for the stock split and continued to use the unadjusted conversion factor of 3.6 shares. As a result, House 17 customers who owned Coopers Industry Inc. Preferred Security B during this time period received half the common shares they were purportedly owed when the convertible security was converted to common shares in July 1980. As shown below, the House 17 customers received 12,938 common shares when they should have received 25,876 shares based on the adjusted conversion factor.

Figure 6

Date	Number	Description
7/15 7/21 1981	31	CONCO INC
7/21 7/21	3594	COOPER INDUS INC
7/21 7/21 12938		COOPER IND INC
7/21 7/21	11623	PETROLEUM & RESOURCES PFD

Figure 7

CAPITAL STOCK

1. Cooper Industries, Inc. \$2.50 cumulative convertible preferred, series B; no par:

NOTE.—All series, 1,811,240 shs.; this series, 470,490 shs.; outstanding, Dec. 31, 1979, 42,469 shares; no par.

PREFERENCES—Has preference as to assets and divs.

DIV. RIGHTS—Entitled to cum. cash divs. of \$2.50 annually, payable quarterly Mar. 31, etc.

DIVIDEND RECORD—Initial dividend of \$0.4166 paid Dec. 31, 1972; regular dividends thereafter.

LIQUIDATION RIGHTS—In liquidation, entitled to \$55 a sh. plus divs. if involuntary; if voluntary, redemption price.

VOTING RIGHTS—Same as series A pfd.

CALLABLE—During each 12 month period beginning Oct. 31, as follows:

1980	.....	56.00	1981	.....	55.50	1982	.....	55.00
1983	.....	54.50	1984	.....	54.00	1985	.....	53.50
1986	.....	53.00						

1987 and thereafter, \$2.50

CONVERTIBLE—Into 7.2 com. shs. (adj. for 2-for-1 split Apr., 1980) at any time (if called, on or before redemption date); cash or scrip paid in lieu of fractional shs. Conversion privilege protected against dilution.

PREFERRED VOTE RIGHTS—None.

periods shall have been declared and paid or funds therefor set apart and all accrued sinking fund obligations applicable thereto have been complied with. The affirmative vote of at least a separate class of the pfd. stock, or its subseries, or its other class, resulting from such consolidation or merger will have after such consolidation or merger no class of shs. either authorized or outstg. ranking prior to or on a parity with the pfd. stock; or (ii) the authorization of any shs. ranking on a parity with the pfd. stock or an increase in authorized number of shs. of pfd. stock.

When the pfd. stock, which has the right to elect two members of the board of directors of the Co. who will be in addition to the regular members of the board of directors elected by the holders of com. stock and directors elected by holders of any other class of shs.

CALLABLE—As a whole or in part at any time on at least 30 but not more than 60 days' notice beginning Oct. 1, 1984 to each Sept. 30

Dividend Payment
Date: June 30

Conversion Factor =
7.2 common shares

96. Additionally, when the convertible security is converted into common stock, a fractional share often remains, as the number of shares-to-par value is not cleanly divisible by the conversion factor/price. For example, if the conversion factor on 100 convertible securities is 0.3 common shares, upon conversion the owner would receive 33 1/3 common shares. When

this occurs, the company will pay out the fractional share in cash on the date of the conversion. The payment value is the fraction of a share multiplied by the trading price for the common stock on the date converted.

97. In instances where fractional shares appear on the House 17 customer ledgers, they were not paid out at the price on the conversion date, which is required. For example, House 17 recorded a journal entry of \$18.90 on May 7, 1982 for fractional shares of Textron Inc. (Row D in Table 4). This equates to a common share price of \$23.63, multiplied by the fraction of a share left after converting 12,678 shares of Textron Preferred at the conversion factor of 1.1 shares of common/share of preferred. \$23.63 was not the price of the common stock as of the conversion date. The value of the fractional share would not be known until the conversion date, which in this case was June 30, 1982 (Row E). On June 30, 1982, the common share price for Textron was \$18.88, which, after converting at the conversion factor of 1.1 shares, would result in a fractional share payment of \$15.10 not the \$18.90 that House 17 recorded on May 7th (i.e., a difference of 25%).

Table 4

Bates	Statement Date	Transaction			Security	Price	Debit	Credit
		Date	Long	Short				
A	MF00147263	5/28/1982	29-Apr	7,065	TEXTRON INC	23 3/4		\$ 167,793.75
B	MF00147263	5/28/1982	29-Apr	6,880	TEXTRON INC	23 7/8		164,260.00
C	MF00147263	5/28/1982	30-Apr	12,678	TEXTRON INC PFD CONV \$2.08	25 1/8	\$ 318,334.79	
D	MF00147263	5/28/1982	7-May		TEXTRON INC FRACTIONAL SHARES	JRNL		18.90
E	MF00147806	6/30/1982	30-Jun		12,678B TEXTRON INC PFD CONV \$2.08	DELV		
F	MF00147806	6/30/1982	30-Jun	13,945	TEXTRON INC	RECD		
Total							\$ 318,334.79	\$ 332,072.65

98. Based upon the foregoing discussion regarding House 17's incorrect conversion processes, this investigation and analysis show that trading in House 17 did not occur.

(vii) Fictitious Convertible Arbitrage Trade Confirmations

99. Upon close examination, trade confirmations fabricated by House 17 to support the convertible arbitrage trades were actually prepared backwards. A good exemplar of this was

a purported convertible trade executed for the account referenced in the customer statement Figure 8.⁹⁴

100. The purported convertible trade was as follows:

- A purchase of 761 shares of Aetna Life & Casualty \$2 Pfd on 6/23/80, settlement on 6/30/80 at \$83 $\frac{7}{8}$ per share. The shares had a conversion factor of 2.25.
- Two sales of Aetna Life & Casualty common stock; one for 1052 shares at \$39 $\frac{1}{8}$ and one for 660 shares at \$39 $\frac{1}{4}$.
- The purported trade was to be an eight week trade that was pre-calculated to generate \$3,191 in total profits with a close out date of 9/1/80.⁹⁵

⁹⁴ The customer name has been redacted.

⁹⁵ See Adding Machine Tape calculating projected profit on the purported trade. MADTS00401002. See also, MADTSS00400966 at MADTSS00400966 and MADTSS00401003 for handwritten notes detailing specifics of purported trade.

101. The year-end 12/31/80 customer statement for account holder Madoff-X1 shows the purported transaction as follows in Figure 8 below:

Figure 8

MADOFF		Bernard L. Madoff INVESTMENT SECURITIES Established 1960 110 Wall Street, New York, NY 10005		TELEPHONE (212) 825-3910 P & S DEPT. (212) 825-3916 TELETYPE (710) 581-3082 WATS (800) 221-2242			
REDACTED		PERIOD ENDING 12/31/80		YOUR ACCOUNT NUMBER			
YOUR TAX PAYER IDENTIFICATION NUMBER							
DATE	BOUGHT (RECEIVED OR LONG)	SOLO (REMOVED OR SHORT)	TRN	DESCRIPTION	PRICE OR SYMBOL	AMOUNT DEBITED TO YOUR ACCOUNT	AMOUNT CREDITED TO YOUR ACCOUNT
				BALANCE FORWARDED			56,180.81
122		653		RESERVE OIL & GAS COM	46 1/2	56,172.00	
330		714		INA CORP	29 7/8		21,528.59
330		1,330		INA CORP	30		36,734.96
505	2225			HEINE \$1.70 PFD	27 1/2	58,260.25	
507		973		HEINE \$1.70 PFD	38 1/4	61,187.50	
630	761			AETNA LIFE (2 PFD)	83 7/8	63,828.88	
702		1052		AETNA LIFE COM.	39 1/8		41,126.52
903		521		AMAX INC.	51 1/4		26,682.97
903		950		AMAX INC.	51 3/8		43,642.19
1020		1016		ROCKWELL INTL	34 1/8	87,000.00	
1020		350		ROCKWELL INTL	34 1/2		61,934.50
123				CHECK		10,000.00	
				CHECK			5,000.00
				BALANCE			68,941.35

102. The customer statement shows the purported purchase of the Aetna Life Pfd and short sale of the Aetna Life common stock. However, the purported trade confirmations fabricated by House 17 show the opposite of what the purported trades were supposed to be. Shown below in Figure 9, Figure 10 and Figure 11, the trade confirmations show that the Aetna Life Pfd was sold rather than bought on 6/30 and that the Aetna common stock was bought on 7/2/80, clearly the direct opposite of what the customer statement was showing for the purported

trades.⁹⁶ The fictitious trade confirmations fabricated by House 17 for this example simply got it wrong.

Figure 9

Bernard L. Madoff
INVESTMENT SECURITIES
Established 1960
110 Wall Street, New York, NY 10005

TELEPHONE (212) 825-3910
P & S DEPT. (212) 825-3918
TELETYPE (710) 581-3082
TELEX 235130
WATS (800) 221-2242

ORIGINATOR NO.	ORIGINATOR	ACCOUNT NUMBER	C/P	TRANS. NO.	TR	CFP	SETT	TRADE DATE	SETTLEMENT DATE
0646								5/23/80	6/30/80

IDENTIFICATION # [REDACTED] CONTRA PARTY [REDACTED] C.N. NUMBER [REDACTED] SPECIAL DELIVERY INSTRUCTIONS [REDACTED]

"SLD" "761"

SE	QUANTITY	CUSIP NUMBER	SECURITY DESCRIPTION	NET AMOUNT
BUY	75	021000	AETNA PFD & CASUALTY 2400 LGN PFD	2452.82

PRICE	PRINCIPAL	COMMISSION	STATE TAX	INTEREST	SEP FEE	MISC
32.776	2452.82					

MEMBERS
NASD NSCC SIAC DTC SIPC

MADTSS00400995

COMPARISON DUPLICATE

Figure 10

Bernard L. Madoff
INVESTMENT SECURITIES
Established 1960
110 Wall Street, New York, NY 10005

TELEPHONE (212) 825-3910
P & S DEPT. (212) 825-3918
TELETYPE (710) 581-3082
TELEX 235130
WATS (800) 221-2242

ORIGINATOR NO.	ORIGINATOR	ACCOUNT NUMBER	C/P	TRANS. NO.	TR	CFP	SETT	TRADE DATE	SETTLEMENT DATE
0646								5/23/80	7/2/80

IDENTIFICATION # [REDACTED] CONTRA PARTY [REDACTED] C.N. NUMBER [REDACTED] SPECIAL DELIVERY INSTRUCTIONS [REDACTED]

"BOT" "1032"

SE	QUANTITY	CUSIP NUMBER	SECURITY DESCRIPTION	NET AMOUNT
BUY	1032	021000	AETNA PFD & CASUALTY	2655.82

PRICE	PRINCIPAL	COMMISSION	STATE TAX	INTEREST	SEP FEE	MISC
25.776	2655.82					

MEMBERS
NASD NSCC SIAC DTC SIPC

MADTSS00400997

COMPARISON DUPLICATE

⁹⁶ The customer statements showed only the settlement dates and not the trade dates. June 30, 1980 was the purported settlement date for the purported June 23, 1980 trade for Aetna Pfd.

Figure 11

MADFI Bernard L. Madoff INVESTMENT SECURITIES
ESTABLISHED 1960
110 Wall Street, New York, NY 10005

TELEPHONE (212) 825-3910
P & S DEPT. (212) 825-3918
TELETYPE (710) 581-3082
TELEX 235130
WATS (800) 221-2242

ORIGINATOR	ORIGINATOR	ACCOUNT NUMBER	DIP	TRANS NO	TR	EXP	DATE	TRADE DATE	SETTLEMENT DATE
0846								6/23/80	7/2/80
IDENTIFICATION	CONTRA PARTY	C.N. NUMBER	SPECIAL DELIVERY INSTRUCTIONS						
	REDACTED	"BOT" "660"							
SP	QUANTITY	SPIN NUMBER	SECURITY DESCRIPTION						NET AMOUNT
327	100		AETNA LIFE \$2 PFD						1000.00
PRICE	PRINCIPAL	COMMISSION	STATE TAX	INTEREST	SEC FEE	MISC			
327.00	32700.00	327.00							

MEMBERS
NASD NSCC SIAC DTC SIPC

MADTSS00400999

COMPARISON DUPLICATE

103. The Aetna convertible arbitrage purported trade example discussed above suffers from other similar deficiencies for the convertible arbitrage examples discussed *supra* in this section. This investigation and analysis similarly support that convertible arbitrage trading in House 17 did not occur.
104. Most importantly, as shown on the trade confirmation (Figure 9), Madoff purportedly purchased 761 shares of Aetna Life \$2 Pfd for \$83.875 on June 23, 1980. However, according to the Daily Stock Price Record (Figure 12 below), this security did not change hands in the open market that day. Therefore, it would not have been possible for House 17 to legitimately trade Aetna Life \$2 Pfd on that day.

Figure 12

Aetna Life & Cas Co Preferred Convertible \$2

AETNA LIFE & CAS CO PFD CONV \$2				AHMANSON H F & CO COM				AILEEN INC COM				AIR PRODS & CHEMS INTL COM				AIRBORNE FIGHT CORP COM				
TICKER	SYMBOL	THOUS SH	OUTSTANDING	TICKER	SYMBOL	THOUS SH	OUTSTANDING	TICKER	SYMBOL	THOUS SH	OUTSTANDING	TICKER	SYMBOL	THOUS SH	OUTSTANDING	TICKER	SYMBOL	THOUS SH	OUTSTANDING	
AET *			2256	AHM			2256	AIE			5061	AIR			2832	ABF			329	
VOL	HIGH	LOW	CLOSE	VOL	HIGH	LOW	CLOSE	VOL	HIGH	LOW	CLOSE	VOL	HIGH	LOW	CLOSE	VOL	HIGH	LOW	CLOSE	
71	80	85		8	23-6	23-6	23-6	107	3-1	3	3-1	308	39-2	39-2	38-5	37	17-5	17-5	17-5	23
24	84	86		31	23-7	23-6	23-7	56	3-1	3	3-1	619	38-0	38-1	38-4	110	17-7	17-5	17-5	25
25	85	90		20	24-2	23-7	24-2	84	3-1	3	3-1	378	39-7	39-2	37-4	21	17-4	17-2	17-2	25
26	86	89		3	24-2	24-2	24-2	30	3-1	3	3-1	300	38-7	38-7	38-5	46	17-3	17-1	17-3	26
27	92	88		8	24	23-7	24	57	3-1	2-7	3-1	233	40-6	39-5	40-2	22	17-7	17-2	17-1	27
	88.57	78.6		1	2.74	20-1	20-1	0.1*	0.33	2-5	1898	38-5	38-5	38-5	137	1.00	20-3			

2ND QTR 1980

No volume traded on June 23, 1980

b. Following the 1992 SEC investigation of A&B, BLMIS purportedly transitioned from convertible arbitrage to the split strike conversion investment strategy.

105. A&B was an accounting firm at its origin, but developed exclusively into a “private investing” firm in the mid-1980s given the investing business had increased in relative importance to the extent that it was “financially wise” to end the accounting practice.⁹⁷ A&B, however, was never registered as a broker dealer, an investment company, or an investment adviser.⁹⁸ As of 1992, A&B had three partners: Frank Avellino (“Avellino”) was a 50% partner, Michael Bienes (“Bienes”) and Dianne Bienes were each 25% partners.⁹⁹
106. A&B first began investing with House 17 in the 1960s through its predecessor, Alpern & Avellino.¹⁰⁰ Saul Alpern was Madoff’s father-in-law and founder of the accounting firm. A&B attracted investor funds by promising guaranteed rates of return (typically 13%-18%)

⁹⁷ Avellino and Bienes Dep. Ex. 02901-02902, July 7, 1992.

⁹⁸ Avellino and Bienes Dep. July 7, 1992. MADOFF_EXHIBITS-03014

⁹⁹ Avellino & Bienes Agreement of General Partnership (executed Aug. 12, 1988). MBISAA0003076, 3079

¹⁰⁰ SEC v. Avellino & Bienes, et al, No. 92-CV-08314 (JES), Complaint for Preliminary and Permanent Injunctive and Other Equitable Relief, ECF No. 4 (S.D.N.Y. Nov, 25, 1992).; Linda Sandler & Allan Dodds Frank, *Madoff's Tactics Date to 1960s When Father-In-Law Was Recruiter*, available at <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=at1ierlaVQyg> (last visited Nov. 17, 2011).

on money collected from individuals and entities¹⁰¹ and labeling the transactions with investors as "loans."¹⁰² A&B issued letters to investors that specified the rate of return on these loans.¹⁰³ A&B in turn invested customer funds with BLMIS and retained the difference between the returns BLMIS promised to A&B and the returns A&B promised to its underlying investors.¹⁰⁴ At the time of the SEC's investigation in 1992, A&B was one of House 17's largest sources of investor monies, funneling hundreds of millions of dollars into House 17's investments through A&B.¹⁰⁵

107. On November 17, 1992, the SEC filed a complaint against A&B and Avellino and Bienes individually, seeking, among other things, a permanent injunction for having unlawfully operated as an unregistered investment company.¹⁰⁶ Avellino and Bienes entered into a consent decree in which they agreed not to sell securities without a registration statement or acting as an investment company. In addition, they agreed pay fines to the SEC totaling \$350,000.¹⁰⁷
108. Prior to approximately June 23, 1992, A&B maintained IA accounts with House 17 with the following account numbers: 1A0045, 1A0046,¹⁰⁸ 1A0047, 1A0048, 1A0049 and 1A0050 (the "Existing A&B IA Accounts").¹⁰⁹ During that time, A&B used these House 17 accounts to invest money pooled from investors.¹¹⁰ Prior to its creation as described below on or around June 23, 1992, A&B IA account number 1A0053 did not exist. Documents provided in

¹⁰¹ A&B Loans Detail by Investor. SECSKD0000325- SECSKD0000834; *SEC v. Avellino & Bienes, et al*, No. 92-CV-08314 (JES), Complaint for Preliminary and Permanent Injunctive and Other Equitable Relief, ECF No. 4 (S.D.N.Y. Nov, 25, 1992).

¹⁰² *See, e.g.*, Avellino and Bienes Dep. Ex. 02913;02925-02934, July 7, 1992.

¹⁰³ *Avellino & Bienes, et al*, No. 92-CV-08314 (JES), Complaint for Preliminary and Permanent Injunctive and Other Equitable Relief, ECF No. 4 (S.D.N.Y. Nov, 25, 1992).

¹⁰⁴ Frontline Transcript of Interview of Michael Bienes, available at <http://www.pbs.org/wgbh/pages/frontline/madoff/interviews/bienes.html> (last visited Nov. 17, 2011); *SEC v. Avellino & Bienes, et al*, Complaint for Preliminary and Permanent Injunctive and Other Equitable Relief. MADOFF_EXHIBITS-03058

¹⁰⁵ BLMIS customer statements for A&B accounts through June 1992.

¹⁰⁶ *Avellino & Bienes, et al*, No. 92-CV-08314 (JES), Complaint for Preliminary and Permanent Injunctive and Other Equitable Relief, ECF No. 4 (S.D.N.Y. Nov, 25, 1992).

¹⁰⁷ *SEC v. Avellino & Bienes, et al*, No. 92-CV-08314 (JES), Final Judgment of Permanent Injunction and Other Equitable Relief and Consent Against Avellino & Bienes, Frank J. Avellino and Michael S. Bienes, ECF No. 3 (S.D.N.Y. Nov, 25, 1992).

¹⁰⁸ Account number 1A0046 was in the name of the A&B Pension Plan & Trust. *See* Account Maintenance File for 1A0046. AMF00309438-9450

¹⁰⁹ *See* Arbitrage Portfolio Transaction Reports (MF00545002-MF00545003); Portfolio Management Reports as of June 30, 1992. MF00011542-51; *See also* Avellino and Bienes Dep. Ex. 03223, Nov. 20, 1992.

¹¹⁰ BLMIS customer statements for A&B accounts through June 1992; Avellino and Bienes Dep., Nov. 20, 1992.

connection with the SEC investigation of A&B indicated that as of June 18, 1992 A&B owed its investors almost \$399,819,455 despite the fact that the purported aggregate equity balance of the Existing A&B IA Accounts only totaled approximately \$364 million.¹¹¹ Thus, the aggregate total amount reflected in the Existing A&B IA Accounts was approximately \$35.8 million less than A&B had represented to the SEC it owed to underlying investors. Avellino and Bienes had testified to the SEC that A&B utilized an account or accounts at Chemical Bank to handle investor funds and that the balance maintained in these account(s) was typically \$2 million to \$3 million but never higher than \$6 million.¹¹² Assuming that the Chemical Bank Account held all \$6 million, this meant that A&B had a funding shortfall of at least approximately \$29.8 million (\$399.8 million owed to investors less \$364.0 million purported aggregate equity balance of the A&B accounts and less a maximum of \$6 million that could be purportedly held at Chemical Bank at any time) in its House 17 accounts.¹¹³

109. The existence of this funding shortfall significantly contradicted sworn testimony by Avellino and Bienes provided to the SEC in which they claimed that A&B had a significant "cushion" between what it owed on "loans" from investors and what it held in capital in its accounts at BLMIS, which would protect customers from potential losses.¹¹⁴ The shortfall explained above demonstrates that a cushion did not exist in June 1992. Therefore, around June 1992, House 17 created an additional account for A&B (the "1A0053 Account") and manufactured fictitious trading in this account in order to conceal the shortfall.¹¹⁵ Backdated transactions manufactured in the 1A0053 Account were designed to show realized and unrealized gains from securities and options transactions totaling approximately \$65.9 million, which satisfied the shortfall and provided some of the purported cushion.¹¹⁶ However, there is no evidence

¹¹¹ A&B Loans Detail by Investor. SECSKD0000325; Arbitrage Portfolio Transaction Reports. MF00545002-MF00545003; Portfolio Management Reports as of June 30, 1992. MF00011542-51

¹¹² Avellino and Bienes Dep. Ex. 02917-02918, July 7, 1992.

¹¹³ A&B Loans Detail by Investor. SECSKD0000325; Arbitrage Portfolio Transaction Reports. MF00545002-MF00545003; Portfolio Management Reports as of June 30, 1992. MF00011542-51); Avellino and Bienes Dep. Ex. 02917-02918, July 7, 1992.

¹¹⁴ Avellino and Bienes Dep. Ex. 02944-02951, July 7, 1992.

¹¹⁵ 1A0053 Account June 30, 1992 statements. MADTBB02391076-02391078 and MADTBB02391007-02391017

¹¹⁶ 1A0053 Account Nov. 1989 to Dec. 1992 statements. MADTBB02397292; MADTBB02397300; MADTBB02397304; MADTBB02391086; MADTBB02390998-2391007; MADTBB02391009; MADTBB02391011; MADTBB02391013; MADTBB02391015; MADTBB02391017; MADTBB02391076; MADTBB02391078; MADTBB003346469; SECSKD0010189; MADTBB03347804; MADTBB03346114;

that this balance was the result of deposits and investments of funds received by either A&B or by A&B clients.¹¹⁷ Instead, House 17 created fictitious backdated transactions to make it appear that the account had equity sufficient to make up the shortfall.¹¹⁸

110. In addition, generally House 17 created new account numbers sequentially, based on the date on which they were opened (e.g., 1A0045, 1A0046, 1A0047, etc.). For example, account 1A0052 (opened for a different BLMIS customer), was created in May 1992 and the first transaction posted to the account was the purported purchase of S&P 100 options on May 1, 1992.¹¹⁹ Account 1A0054 (opened for a different BLMIS customer) was created in September 1992, with the first transaction posted on September 22 for the purported purchase of McKesson Corp. convertible subordinated debt.¹²⁰ Chronologically, the 1A0053 Account would have been created after 1A0052 (May 1992) and before 1A0054 (September 1992), and the 1A0053 Account therefore should not have reflected any transactions as occurring in 1989, 1990, 1991 or at any time prior to its creation in June 1992. However, the account statements generated for the 1A0053 Account reflected backdated transactions as early as November 1989.¹²¹ The out of order sequencing of the account creation dates, as well as the backdated trades on the June 1992 customer statement, support that the 1A0053 account was fabricated by House 17 specifically in response to the SEC investigation (see Figure 13).¹²²

MADTBB03345819-5823; MADTBB02391071; MADTBB03345824; MADTBB03345825-5830;
MADTBB03345817-5818; SECS DK0000035; MADTBB03345466-5467; SECS DK0000141, 143-149;
MADTBB03345474-5475; MADTBB03345492; MADTBB03345476-5484; MADTBB03347613-7614;
MADTBB03345495-5496; MADTBB03345485-5487; MADTBB03345497-5503; MADTBB03347604-7605;
MADTBB03345504; MADTBB03114024; MADTBB03114026

¹¹⁷ 1A0053 Account June 30, 1992 statements. MADTBB02391076—02391078 and MADTBB02391007-02391017

¹¹⁸ 1A0053 Account June 30, 1992 statements. MADTBB02391076—02391078 and MADTBB02391007-02391017

¹¹⁹ See 1A0052 account May 31, 1992 statement. MF00462572

¹²⁰ See 1A0054 account September 30, 1992. MF00454666

¹²¹ 1A0053 Account Nov. 1989 statement. MADTBB03346469

¹²² It is worth noting that the Transaction IDs ("TRN" column) for the various transactions on this customer statement are out of sequence with the reported dates of the transactions. See MADTBB02391013

Figure 13

IN ACCOUNT WITH

BERNARD L. MADOFF
Investment Securities
New York • London

885 Third Avenue
New York, NY 10022
(212) 230-2400
(800) 221-2242
TELEX 235 130
FAX (212) 486-8178

MAID

AVELLINO & BIENES 05
C/O FRANK AVELLINO

4750 NE 23RD AVENUE
FT LAUDERDALE FL 33308

June 30, 1992 customer statement

PERIOD ENDING
6/30/92

1-00156-3-0

1-40053-3-0

50-1664935

DATE	AMOUNT DEBITED TO YOUR ACCOUNT	SOLD DATE	TRN	DESCRIPTION	PRICE OR SYMBOL	AMOUNT CREDITED TO YOUR ACCOUNT	AMOUNT CREDITED TO YOUR ACCOUNT
6/23		VC		FORD MOTOR CO DEL DIV 5/01/92 6/01/92	OIV		40,000.00
6/23				GENERAL MOTORS CORP DIV 2/13/92 3/10/92	OIV		80,000.00
12/12	125,000		16	INTEL CORP	41 1/4	5,156,250.00	
12/13	150,000		8	FORD MOTOR CO DEL	23 3/4	3,562,500.00	
12/13	75,000		17	INTEL CORP	40 7/8	3,065,625.00	
12/16	25,000		9	FORD MOTOR CO DEL	23 7/8	596,875.00	
12/19	100,000		20	AMR CORP	61 1/4	6,125,000.00	
12/19	80,000		21	INTERNATIONAL BUSINESS MACHS	89	7,120,000.00	

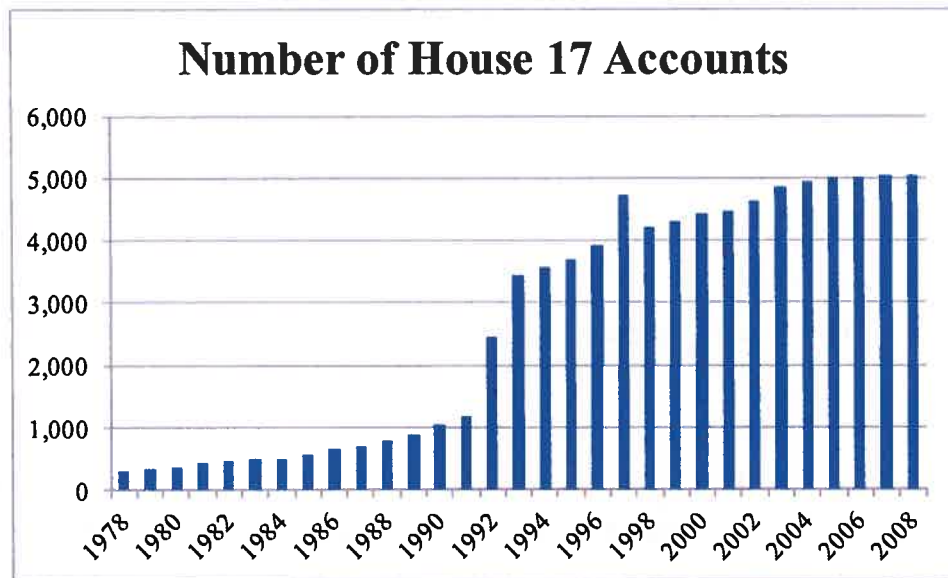
CONTINUED ON PAGE 5

December transactions on June 30, 1992 customer account statement

111. After the liquidation of A&B, many of its former investors reinvested their returned funds directly with BLMIS, leading to a great influx of new BLMIS accounts.¹²³ (See Figure 14 below which highlights the dramatic increase in House 17 customer accounts after the liquidation of A&B in 1992). With the advent of these new accounts, House 17 implemented a new investment strategy.

¹²³ Portfolio Netcap Totals by Group-A&B dated March 31, 1993. MADTBB03079814-9910

Figure 14



c. The Split Strike Conversion Strategy- the 1990s and later: There is no evidence that the transactions purporting to represent a split strike conversion strategy for House 17 customers ever occurred. In fact, the evidence shows that these transactions were fictitious.

112. In the early 1990s, House 17 changed its primary purported investment strategy from convertible arbitrage to a split strike conversion strategy, stating that “the opportunity within the marketplace to trade convertible arbitrage has decreased.”¹²⁴ A Split Strike Conversion (“SSC”) investment strategy typically involves the buying of a basket of stocks closely correlated to an index, while concurrently selling call options on the index and buying put options on the index. House 17 purportedly used a SSC strategy that was purchasing a basket of stocks and options based on the S&P 100 equity index, which included the 100 largest U.S. stocks as determined by the S&P Index Committee.¹²⁵
113. The SSC strategy, in proper use, reduces a portfolio’s volatility (and risk) by limiting the investor’s gains and losses that are possible. This is commonly referred to as a “collar

¹²⁴ Bernard Madoff, “Letter to Client.” March 16, 1999. AMF00139075; *See also*, Trading Authorization Guidelines July 3, 1991. AMF00139560

¹²⁵ Michael Ocrant, *Madoff Tops Charts; Skeptics Ask How* at 1, 89 MAR/Hedge, May 2001. *See also*, <http://www.standardandpoors.com/indices/sp-100/en/us/?indexId=spusa-100-usdof--p-us-l-->

strategy,” where the investor purchases a put option to provide protection on the downside (i.e., limiting losses the investor would incur if the market value of the equity portfolio drops); this protection is partially paid for by selling a call option that limits the upside gain.

114. While the collar strategy of SSC will limit volatility, it will not eliminate volatility entirely. In fact, a properly designed and executed SSC strategy would trade with the same volatility as the S&P 100 index when the market value of the equity portfolio fell between the exercise prices of the options.

(i) Purported equity and option trades exceeded the entire reported market volume for certain days.

115. Over the period January 2000 through November 2008 (the “Analyzed Time Period”), there were 105 days when House 17 transacted in equities above the market volume in the exchanges as reported by Bloomberg. In total, over those days, there were 912 instances when House 17 purported stock transactions exceeded the overall market volume for the day.¹²⁶

116. For the Analyzed Time Period, House 17 traded 378 unique call options in 1,385 unique transactions. Of these purported call transactions, 64.4 percent of the contracts traded above the daily market volume, including 56.4 percent of transactions with purported volume occurring at 10 times above the daily market volume.

(ii) Hundreds of thousands of purported House 17 trades, affecting over 5,500 accounts, were priced outside the trading day’s price range evidencing that they could not have been executed.

117. During the Analyzed Time Period, 99,972 equity transactions were purportedly traded outside of the daily market traded price range, across 5,328 House 17 customer accounts.¹²⁷ These purported transactions were derived from 496 unique transactions, 321 of which, based on what was recorded on House 17 customer statements, traded above the daily high price and 175 of which traded below the daily low price. The purported prices for these transactions exceeded the daily high by as much as \$8.96 and were below the daily low by as much as

¹²⁶ An analysis was also performed on the Frankfurt and London Stock Exchanges for these securities. The analysis confirms that for those securities that were traded on these exchanges, the House 17 purported volume exceeded the aggregate historical daily volume for the U.S., London Stock Exchange and Frankfurt Stock Exchange.

¹²⁷ This time period was chosen based on the available trade data in the Settled Cash database (see description *supra*).

- \$105.04. On average, the purported transactions exceeded the daily high by \$1.00 and were below the daily low by \$2.39.
118. Equity trades, such as the purported transactions recorded by BLMIS on House 17 customer records, that would have been reported as having been executed outside the daily price range of the entire U.S. equities market could not have occurred. The data used in this analysis was obtained from Bloomberg, which receives its data directly from the exchanges and the over-the-counter markets. In the event that the out of range prices on the House 17 customer statements were the result of an inadvertent typing error (sometimes referred to as “fat fingering”), House 17 would have had to issue corrections with the appropriate prices.¹²⁸ There is no evidence of any corrections or reissuance. And more importantly, for the period during which DTC records are available, there are no DTC records evidencing these purported trades.
119. In addition to the equity transactions discussed above, thousands of purported option trades were examined and these also traded outside of the daily price range. During the Analyzed Time Period, 34,501 options transactions traded outside of the daily price range, across 5,271 customer accounts. Of the 49 unique options traded, 25 were traded above the daily high price and 24 were traded below the daily low price.
120. Options traded above the high price by as much as \$15.25 higher and at an average of \$2.17 above the high. Options traded below the daily low by as much as \$6.05 lower and at an average of \$1.48 below the low.
121. Similar to the equity trades discussed above, the purported options transactions recorded by BLMIS on House 17 customer records would have been reported as having been executed outside the daily price range of the entire U.S. options market and could not have occurred.

¹²⁸ National Securities Clearing Corporation- Rules and Procedures, page 51, October 11, 2011. As the BLMIS Training Manual itself states, “An investor can sell a security from a long position at any price as long as a buyer can be found;” as there would have been no buyer on the other side of these trades, these transactions could not have been executed. BLMIS Trading Manual. MMAD-BR00021287.

The data used in this analysis was obtained from the Chicago Board of Options Exchange (“CBOE”).¹²⁹

122. Based upon the foregoing discussion regarding pricing discrepancies, this investigation and analysis show that the SSC trading in House 17 did not occur.

(iii) **House 17 purportedly bought low 83% of the time and sold high 72% of the time (VWAP Trades) evidencing the fictitious nature of the trades.**

123. VWAP, or Volume-Weighted Average Price, is exactly what it sounds like: the average price weighted by total volume. VWAP equals the dollar value of all trading periods divided by the total trading volume for the current day. The formula is as follows:

$$P_{vwap} = \frac{\sum_j P_j * Q_j}{\sum_j Q_j}$$

P_{vwap} = Volume Weighted Average Price

P_j = price of trade j

Q_j = quantity of trade j

j = each individual trade that takes place over the defined period of time, excluding cross trades and basket cross trades

124. Calculation starts when trading opens and ends when trading closes. This is a common way to summarize the price of a stock on a given day. For example, some brokers will accept an order where the client gets a price based on the VWAP. Also, some institutions grade their traders by comparing the trader’s performance to the VWAP. The VWAP has become more important recently because of its use in algorithmic trading. The theory is that if the price of a buy trade is lower than the VWAP, it is a good trade. The opposite is true if the price is higher than the VWAP.

¹²⁹ The S&P 100 Index options (OEX), which were purportedly traded by House 17, were traded exclusively on the CBOE. *OEX & XEO S&P 100 Index Options, A Discussion on the Benefits and Uses of the First Listed Index Option* at http://www.cboe.com/LearnCenter/pdf/OEX_12-05-01.pdf. (last visited November 18, 2011)

125. Another trading anomaly stemming from the purported SSC strategy in House 17 was how frequently House 17 reported that they purchased or sold equity at extremely favorable prices. A comparison of trading records for House 17 accounts against the market derived VWAP for the respective stocks over the Analyzed Time Period indicates that approximately 83 percent of the buy transactions by share volume were executed below the VWAP while 72 percent of the sell transactions by share volume were executed above the VWAP.
126. Given that House 17 was consistently outperforming VWAP, two observations can be made. First, assuming the purported trades had actually been placed, the ability to consistently obtain significant positive variance to VWAP on both the buy side and sell side of the trades would be indicia of potential front-running by House 17.
127. Alternatively, if House 17 was not front-running (which it was not), then the statistics of the purported House 17 trades showing that they were consistently beating VWAP by a wide margin is further evidence of the fictitious nature of the trades. A comparison of the purchase and sale of the same stock being actually traded by House 5 on the same day makes this clear.¹³⁰ The VWAP on those trades was consistently at or near VWAP, a finding that one would expect to see if algorithmic trading was actually being utilized.
- (iv) **Thousands of purported securities, affecting over 3,700 accounts, were recorded by House 17 as having settled on weekends or holidays when the exchanges are closed.**
128. During the Analyzed Time Period, 7,736 trades were recorded as having settled on weekend days in 3,743 House 17 accounts. Given that the markets were closed on each of the 27 dates identified as weekend days on the customer statements, these settlements were not possible. On Saturday, January 8, 2000 alone, 3,732 of the approximately 4,215 House 17 accounts showed 7,464 trade settlements. These trades could not have settled on a Saturday, further evidencing that the trades in House 17 did not occur.
129. During the Analyzed Time Period, House 17 customer statements show 37 trades settled on recognized market holidays. Specifically, seven trades settled on September 4, 2000 and September 1, 2008, both of which fell on Labor Day in their respective years. On February

¹³⁰ For the Analyzed Time Period, approximately 51% of buy transactions executed out of House 5 were below the VWAP versus 82% in House 17; approximately 48% of sell transactions executed out of House 5 were above the VWAP versus 75% for House 17.

17, 2003, Washington's Birthday, one trade settled. On Memorial Day, May, 31, 2004, two trades settled. 27 trades settled on June 11, 2004, the Presidential funeral of Ronald Reagan, when the market was closed, once again evidencing that the trades in House 17 did not occur.¹³¹

(v) Thousands of purported House 17 split strike conversion equity and option trades, affecting nearly 6,000 accounts, were recorded as having settled on days not within the standard settlement duration timeframe.

130. For equity transactions, the industry requirement for settlement is three days after the trade date ("T+3").¹³² Firms found to be in violation of the settlement timing requirements are subject to discipline by the DTC and NSCC, including expulsion, suspension or other limitations of trading, as well as potential fines, interest expense or other penalties.¹³³ The customer statements generated by House 17 show equity transactions clearing outside the T+3 industry standard for a number of customer accounts. 340,774 trades were recorded as having settled outside the industry required timeframes of the T+3 industry norm. Of these trades, 338,431, or 99.3 percent, settled four days after the trade date ("T+4"), which not only does not comply with standard trading practices, but would have resulted in the disciplinary actions described above by DTC and NSCC. For a number of accounts nearly 100 percent of trades in these accounts were settled outside the T+3 standard.
131. Similarly, with regard to purported option trades, a high percentage of option transactions were recorded as having settled in a timeframe outside the industry norms, which for options is trade date plus one day ("T+1").¹³⁴ House 17 statements regularly showed option transactions clearing outside the T+1 industry norm for a number accounts. During the Analyzed Time Period, House 17 customer statements show 546,999 option trades settling outside the T+1 industry norm. Of these trades, 539,449 or 98.6 percent, settled two days

¹³¹ *New York Stock Exchange Special Closings*, New York Stock Exchange (last visited 11/14/11), http://www.nyse.com/pdfs/presidents_closings.pdf (last visited 11/14/11).

¹³² FINRA Notice 95-26, *Conversion To T+3 Settlement, Reg. T, And SEC Rule 15c3-3(m), And Ex-Dividend Schedule* (April 1995).

¹³³ *Rules, By-Laws, and Organization Certificate of the Depository Trust Company* at 61-62 (June 2011); *National Securities Clearing Corporation, Rules and Procedures* at 62 (Effective October 21, 2011).

¹³⁴ *See Index Options Product Specifications*, The Options Clearing Corporations (last visited Nov. 18, 2011), <http://www.optionsclearing.com/clearing/clearing-services/specifications-index-options.jsp>.

after the trade date (T+1), which does not comply with standard trading practices. These non-standard trade settlements further confirm that trading in House 17 did not occur.

d. There are no legitimate records from the DTC (or other clearing houses or custodians) evidencing any trades occurring from House 17.
135

132. The Depository Trust & Clearing Corporation (“DTCC”) was formed in 1999 by combining the DTC and the National Securities Clearing Corporation (“NSCC”).¹³⁶ The DTCC, through its subsidiaries, provides clearance and settlement for almost all equity, bond, government securities, mortgage-backed securities, money market instruments and over-the-counter derivative transactions in the U.S. market.¹³⁷ Therefore, for any of these types of trades to occur in the U.S., the individual securities transaction must be routed through the DTCC before it can be finalized.
133. Transfers of securities between licensed brokers are conducted by the DTC through automated book-entry changes to the broker’s accounts. Instead of trading paper stock certificates, as was the case in the early years of the trading markets, brokers make trades on a computer and the DTC keeps an electronic record of these transactions. A broker’s account at the DTC shows the number of each security owned by that broker and a history of trades.¹³⁸
134. The NSCC, originally created in 1976 before it merged into the DTCC in 1999, provides clearance and settlement services of equity, bond, exchange traded funds and unit investment trust transactions.¹³⁹ The NSCC acts as an intermediary between an exchange market (such as

¹³⁵ Our search through over 28 million electronic records as well as over 11,000 boxes of hard copy documents did not reveal any evidence that the equity trades purportedly executed on behalf of House 17’s customers ever occurred. See discussion *infra* regarding other analysis dating back to the 1970s which supports this finding.

¹³⁶ *About DTCC: History* (The Depository Trust & Clearing Corporation) at 17 (Aug. 17, 2011). See also, *Responding to Wall Street’s Paperwork Crisis*, The Depository Trust & Clearing Corporation (last visited Nov. 20, 2011), <http://www.dtcc.com/about/history/>.

¹³⁷ *An Introduction to DTCC Services and Capabilities* (The Depository Trust & Clearing Corporation) at 2 (Aug. 16, 2011). See also, *An Overview*, The Depository Trust & Clearing Corporation (last visited Nov. 20, 2011), http://www.dtcc.com/downloads/about/Introduction_to_DTCC.

¹³⁸ *Following a Trade: A Guide to DTCC’s Pivotal Roles in How Securities Change Hands* (The Depository Trust & Clearing Corporation) at (Aug. 16, 2011). See also, *Products & Services Equities Clearance*, The Depository Trust & Clearing Corporation (last visited Nov. 20, 2011), http://www.dtcc.com/downloads/about/Broker_to_Broker_Trade.

¹³⁹ *About DTCC: National Securities Clearing Corporation* (The Depository Trust & Clearing Corporation) (Aug. 17, 2011). See also, *About DTCC: National Securities Clearing Corporation (NSCC)*, The Depository Trust & Clearing Corporation *(last visited Nov. 20, 2011), <http://www.dtcc.com/about/subs/nscc.php>.

the NYSE) and the DTC. The NSCC takes all the trade information from an exchange and acts as a central counterparty guaranteeing the trade. A summary of the net securities positions and net money to be settled as a result of that day's transactions is transmitted to the broker.¹⁴⁰

135. Founded in 1973 and operating under the jurisdiction of the SEC and the Commodity Futures Trading Commission ("CFTC"), the OCC is the largest equity derivatives clearing organization. The OCC clears U.S. listed options and futures on numerous underlying financial assets including common stocks, currencies and stock indexes.
136. The OCC clears transactions for put and call options on common stocks and other equity issues, stock indexes, foreign currencies, interest rate composites and single-stock futures.
137. As a registered Derivatives Clearing Organization ("DCO") under the CFTC's jurisdiction, the OCC offers clearing and settlement services for transactions in futures and options on futures. Additionally, the OCC provides central counterparty clearing and settlement services for securities lending transactions.¹⁴¹

(i) Reconciliation of House 5 holdings to House 17 holdings via DTC records.

138. BLMIS maintained an account with the DTC (the "0646" account) for which trades would be cleared and/or custodied.¹⁴² However, based on our investigation and analysis of available DTC documentation during the time period of October 2002 through October 2008, only securities positions for House 5 clients (including those out of MSIL) as recorded on House 5 trading records were held at DTC.¹⁴³ Accordingly, there is no evidence that the security holdings purportedly held on behalf of House 17's customers were held at DTC for the time period examined.

¹⁴⁰ *Following a Trade* (The Depository Trust & Clearing Corporation), Aug. 16, 2011 at 6. *See also*, Products & Services Equities, *supra*..

¹⁴¹ *See What is the OCC?*, The Options Clearing Corporation (last visited Nov. 20, 2011), <http://www.theocc.com/about/corporate-information/what-is-occ.jsp>.

¹⁴² BLMIS had a DTC account from at least 1977. *See* The Depository Trust Participant Agreement, June 1977. SNOW0000658-SNOW0000733 *See also* the February 13, 2007 email from BLMIS to a customer stating, "We clear through DTC." IBLCAA0000350

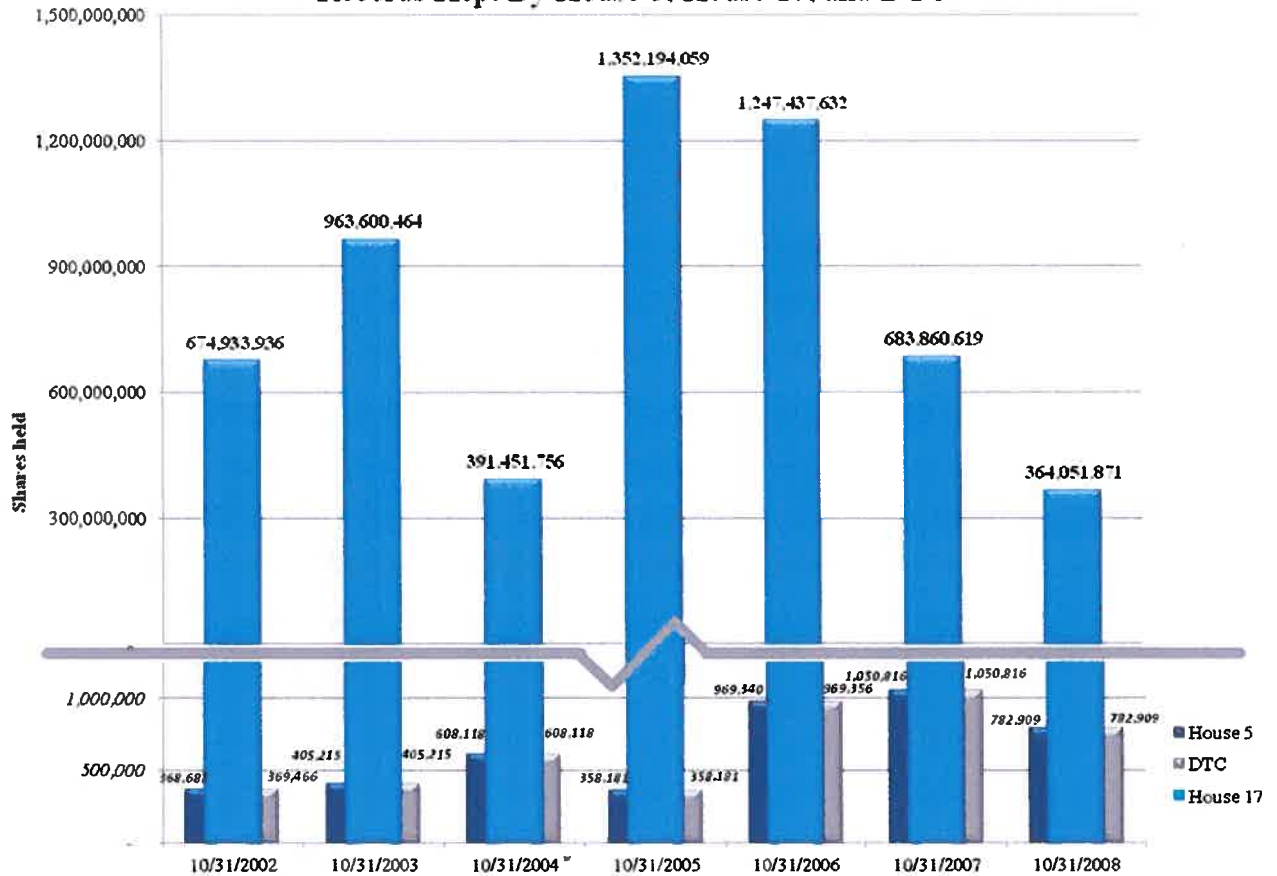
¹⁴³ Records for the DTC were only available back to January, 2002. A trade reconciliation process from House 17 to MSIL was performed, which concluded that, based on execution and volume data, trades from House 17 were not executed by MSIL.

139. For the years 2002-2008, the following analysis was performed:
- Identified all unique securities positions purportedly held by House 17 on October 31st of each year as this was the fiscal year-end for BLMIS (“Step 1”);¹⁴⁴
 - Identified unique securities held by House 5 that corresponded to those identified in Step 1 on October 31st of each year (“Step 2”);
 - DTC BLMIS position records were identified for the securities in Step 2.
140. For the seven year period analyzed, all of the securities identified in Step 2, which were held on behalf of House 5 customers as reported in House 5 trading records, were reconciled to the DTC thus, confirming that the House 5 securities positions in fact existed.
141. The remaining securities purportedly held on behalf of House 17 customers as recorded in the House 17 trading record, were not shown on DTC records and were not held at DTC; therefore, they could not have been legitimately executed as reported by BLMIS to its House 17 customers.
142. Further, Figure 15 below compares the purported House 17 securities positions with the House 5 securities positions in common as of October 31 from 2002-2008. As shown in Figure 15, the extreme volume of purported equity positions from House 17 on each October 31 dwarfs the numbers of the actual positions from House 5 that were reconciled with the DTC.

¹⁴⁴ October 31 was the fiscal year-end for BLMIS and was the date for which DTC records were available for the 2002-2008 time period.

Figure 15

Total Equity Shares Held by BLMIS According to Records Kept By House 5, House 17, and DTC



* October 31, 2004 occurred on a Sunday. Friday, October 29, 2004 is the last trading day of the month and data on this date represents month-end DTC holdings.

(ii) Fake DTC Screen Reports created by House 17

143. Over 160 documents purportedly containing screen print-outs representing DTC inquiry look-ups were found in the records of BLMIS.¹⁴⁵ However, upon closer forensic examination, the documents contain typed-in text that appears to replicate certain DTC system screens. The metadata contained within these documents show that the documents were created after the supposed date of the screen look-up inquiry as depicted in the text within the document.

¹⁴⁵ ELIP-BR00004715-4876

144. For example, ELIP-BR00004720 contained the following text which was typed into the document:

Figure 16

```

  _ ACTD _ ART _ PEND _ RMCI _ SETP _ _ _ Help
KMXR/POS /POS0          THE DEPOSITORY TRUST COMPANY      Date: 11/30/2006
00000646-03             Security Position Inquiry:Other POS  Time: 16:13:35
=====
Part: 0646 MADOFF LLC CUSIP: 00206R102 AT & T INC      <   Date: 11 / 30 / 2006
Last Actv Date: 11/30/2006 Status: FAST WT SDFS
CUSIP Chills:
OTHER POSITION
TOTALS Amount of TOTAL which is:
- Pledged--->                                0      IPO:          N/A
- Segregation----->:                      8,545,639
- Investment ID----->:                      0
- Reorganization MA/NA----->:              0
- Call With Interest----->:                0
- Call With OUT Interest----->:            0
- Withdrawal By Transfer----->:            0
-----
TOTAL OTHER Position----->:                8,545,639
TOTAL RESERVED Pos(PDA + PTA)->:              0
TOTAL FREE Position----->:                  4,378
-----
TOTAL PARTICIPANT Position---->:              8,550,017
=====
1/13:FREE Position 3/15:MISC Holdings 4/16:Prev-Day 5/17:
===== PAGE 2
ELIP-BR00004720
```

145. A forensic examination of the metadata embedded in this document shows the following:¹⁴⁶

```

File Name: ELIP-BR00004720.doc
Title: _ ACTD _ ART _ PEND _ RMCI _ SETP _ _ _ Help
Author: Eric Lipkin
App Name: Microsoft Office Word
Version: 11.8107
Date Created (OLE): 12/19/2006 11:16:00 AM
Date Last Printed: 1/2/2007 2:35:00 PM
Date Last Saved: 1/19/2007 1:56:00 PM
Total Edit Time: 105
Template: Normal.dot
Shared: False
Company: Bernard L. Madoff Investments LLC
Last Saved By: Eric Lipkin
Word Count: 290
Page Count: 1
Paragraph Count: 3
```

¹⁴⁶ Metadata was examined utilizing Pinpoint Laboratories Metaview program.

- 146. While the text in the document indicates that the information was obtained from DTC on November 30, 2006 at 16:13:35 hrs, the metadata shows that this document was actually created on December 19, 2006 11:16:00 AM, twenty days after the date which appears in the text of the document.
- 147. More importantly, the fake DTC screen print shows that BLMIS is holding 8,550,017 shares of AT&T common stock as of November 30, 2006. Yet according to DTC reports, BLMIS only held 4,378 shares of AT&T on November 30, 2006.
- 148. Further, the following two documents (Figure 17 and Figure 18 respectively) contain information pertaining to two different United States Treasury bills yet show the exact same date and time stamp when they were supposedly retrieved from the DTC system.

Figure 17

_ ACTD	_ ART	_ PEND	_ RNCI	_ SETP	_ Help
KMXR/POS /POS0		THE DEPOSITORY TRUST COMPANY			Date: 01/05/2007
00000646-03		Security Position Inquiry: Other POS			Time: 16:37:27

Part: 0646 MADOFF LLC		CUSIP: 912795YX3 00.0008ILL070315BE#		Date: 01 / 04 / 2007	
Last Acty Date: 12/29/2006 Status: SDFS					
CUSIP Chills: DEP, COD, W/T,					
OTHER POSITION		TOTALS		Amount of TOTAL which is:	
- Pledged-->		0		IPO: N/A	
- Segregation----->:		891,400,000			
- Investment ID----->:		0			
- Reorganization NA/NA----->:		0			
- Call With Interest----->:		0			
- Call With OUT Interest----->:		0			
- Withdrawal By Transfer----->:		0			
-----		-----			
TOTAL OTHER Position----->:		891,400,000			
TOTAL RESERVED Pos(PDA + PTA)->:		0			
TOTAL FREE Position----->:		0			
-----		-----			
TOTAL PARTICIPANT Position----->:		891,400,000			

1/13:FREE Position 3/15:MISC Holdings 4/16:Prev-Day 5/17:N					
===== PAGE 2					
ELIP-BR00004761					

Figure 18

```

  _ ACTD _ ART _ PEND _ RNCI _ SETP _ _ _ Help
KHXR/POS /POS0 THE DEPOSITORY TRUST COMPANY Date: 01/05/2007
00000646-03 Security Position Inquiry:Other POS Time: 16:37:27
-----
Part: 0646 MADOFF LLC CUSIP: 912795YY1 00.000BILL0703228E# Date: 01 / 04 / 2007
Last Acty Date: 12/29/2006 Status: SDFS
CUSIP Chills: DEP, COD, W/T,
OTHER POSITION TOTALS Amount of TOTAL which is:
- Pledged---> 0 IPO: N/A
- Segregation----->: 891,400,000
- Investment ID----->: 0
- Reorganization MA/NA----->: 0
- Call With Interest----->: 0
- Call With OUT Interest----->: 0
- Withdrawal By Transfer----->: 0
-----
TOTAL OTHER Position----->: 891,400,000
TOTAL RESERVED Pos(PDA + PTA)->: 0
TOTAL FREE Position----->: 0
-----
TOTAL PARTICIPANT Position---->: 891,400,000
-----
1/13:FREE Position 3/15:MISC Holdings 4/16:Prev-Day 5/17:
PAGE 2
ELIP-BR00004767

```

149. The fictitious nature of these documents is clearly evident since there would be no way to print these DTC screen inquiry reports for account 0646-Madoff from DTC at the exact same minute and second as depicted on both documents. In fact, embedded metadata for these two documents show that the first document, ELIP-BR00004761, was created on January 5, 2007 at 11:48 a.m. some four hours before the date depicted in the document. The second document, ELIP-BR00004767, was also created on January 5, 2007 at 11:48 a.m. four hours before the date depicted in the document. Creation of these fictitious DTC screens serves no legitimate business purpose other than to document purported trading activity that did not actually occur.
150. In addition to the fake DTC documents described above, additional investigation revealed that House 17 custom-developed software was created to print a replica of a report called the Customer Position Statement from DTC. The imitation report was populated with the fictitious securities holdings to make it appear that House 17 actually had custody of the purported securities recorded on its customer statements. Three components of computer programs were located on the AS/400 system in House 17 and were utilized in combination to create the fake DTC participant position report:

- A data file named DTCABAL containing fictitious security positions.
- A Report Program Generator (RPG) II program named DTC021 that formats the data from DTCABAL, adding headers and formatting to the data to replicate the look and feel of a real DTC report.
- A form definition file named DTCS that instructs the FormsPrint software (published by Integrated Custom Software, Inc.) to apply additional formatting to the report to further approximate the look-and-feel of a real DTC report.

151. As part of the investigation, a copy of an actual DTC report from House 5 as of July 18, 1996 was found that was apparently utilized by BLMIS as the source for designing the imitation DTC report. A portion of that report appears in Figure 19.¹⁴⁷

Figure 19

PARTICIPANT	0646	THE DEPOSITORY TRUST COMPANY	PAGE	1
MAOFF, BREHARD, I		PARTICIPANT POSITION STATEMENT -- 07/18/96	SOPS & NDPS - COMPLETED	
054662 10 7 LORAL SPACE & COMM < LAST ACTIVE 07/18/96		001765 10 4 AMR CORP. < LAST ACTIVE 07/18/96		
ACCOUNT SUMMARY - SDPS EQUITY - CLOSING BALANCES		ACCOUNT SUMMARY - SDPS EQUITY - CLOSING BALANCES		
(010) **TOTAL** 67		10103 134		
		10143 2,955		
		PLEDGE 956 10/29/86 2,955		3,889
		TOTAL		
087971 15 5 SUN INT'L HOTEL ORC < LAST ACTIVE 03/01/96		001907 10 4 AST RESEARCH < LAST ACTIVE 07/18/96		
ACCOUNT SUMMARY - SDPS EQUITY - CLOSING BALANCES		ACCOUNT SUMMARY - SDPS EQUITY - CLOSING BALANCES		
(010) **TOTAL** 54		(010) **TOTAL** 301		
		001957 10 9 AT&T CORP < LAST ACTIVE 07/18/96		
		ACCOUNT SUMMARY - SDPS EQUITY - CLOSING BALANCES		
		(010) 6,719		
		(010) 804,888		
		PLEDGE 849 09/07/79 107,661		
		PLEDGE 930 08/26/86 134,403		
		PLEDGE 936 10/29/86 126,666		
		PLEDGE 841 09/18/87 101,682		
		PLEDGE 810 11/16/88 87,421		
		PLEDGE 081 03/16/95 75,237		
		PLEDGE 042 08/09/95 175,738		
		TOTAL 811,527		
000915 30 6 AOT LIMITED COMMON < LAST ACTIVE 07/18/96				
ACCOUNT SUMMARY - SDPS EQUITY - CLOSING BALANCES				
(010) **TOTAL** 119				

152. Through detailed computer analysis, the fake DTC report was re-created using the DTCABAL file, the DTC021 RPG program, and the FormsPrint software located on a system

¹⁴⁷ This document contained numerous handwritten notes (see pages MADTSS00329120- MADTSS00329124) where the writer commented on the difficulty of changing the point size of the text without rendering the size of the entire page too big, thus showing the steps undertaken to try to create an exact replica of the official DTC report. MADTSS00329114-127

backup tape from the BLMIS location (see below for screen shots of the data files). The fake report appears below in Figure 20:

Figure 20

CASE 711/91

PARTICIPANT	THE DEPOSITORY	PARTICIPANT POSITION	TRUST
0646 MADOFF, BERNARD, I			STAT
056462 10 7 LORAL SPACE & COMM < LAST ACTIVE 07/18/96			
ACCOUNT SUMMARY - SOFS EQUITY - CLOSING BALANCES			
(010)	**TOTAL**	67	
P87971 10 5 SUN INT'L HOTEL ORD< LAST ACTIVE 03/01/96			
ACCOUNT SUMMARY - SOFS EQUITY - CLOSING BALANCES			
(010)	**TOTAL**	54	
Y17750 10 7 CREATIVE TECH F < LAST ACTIVE 07/18/96			
ACCOUNT SUMMARY - SOFS EQUITY - CLOSING BALANCES			
(010)	**TOTAL**	83	
000912 10 5 ACM QVNMNT INC FUND< LAST ACTIVE 07/18/96			
ACCOUNT SUMMARY - SOFS EQUITY - CLOSING BALANCES			
(010)	**TOTAL**	119	
000015 10 6 AD LAST ACTIVE 07			
ACCOUNT SUMMARY - SOFS EQUITY - CLOSING BALANCES			
(010)	**TOTAL**	996	
001055 10 7 AFLAC INC < LAST ACTIVE 07/18/96			
ACCOUNT SUMMARY - SOFS EQUITY - CLOSING BALANCES			
(010)	**TOTAL**	38	
001084 10 2 ASCO CORP < LAST ACTIVE 07/18/96			
ACCOUNT SUMMARY - SOFS EQUITY - CLOSING BALANCES			
(010)	**TOTAL**	9	
0646 MADOFF, BERNARD, I			
001957 10 3 AT&T CORP < LAST ACTIVE 11/10/94			
ACCOUNT SUMMARY - SOFS EQUITY - CLOSING BALANCES			
GENERAL FRIE (010)		1,226	
GENERAL PLIDGF (014)			
PLEUGLL 334 4/22/32	185,378		
PLEDGE 810 11/16/58	77,652		
PLLDGEE 941 9/23/97	126,149		
PLLDGLC 849 3/07/79	93,745		
PLEDGL 930 6/26/86	173,247		
PLDGLF 956 10/29/86	144,259		
SEGREGATION (022)		1,442,510	
ACC'T 00001			
TOTAL		2,244,165	
002824 10 0 ABBOTT LABORATORIES< LAST ACTIVE 11/18/34			
ALCUNT SUMMARY - SOFS EQUITY - CLOSING BALANCES			
GENERAL FREE		6,703	
SEGREGATION		740,900	
ACC 1 00001			
		747,603	
003397 10 7 ABEX INC CLASS A < LAST ACTIVE 11/04/94			
ACCOUNT SUMMARY - SOFS EQUITY - CLOSING BALANCES			
GENERAL FREE (010)		5,000	
TOTAL		5,000	
004898 10 2 ACRO ENERGY CORP < CHILLS - COD W/1 LAST ACTIVE 4/25/34			
ACCOUNT SUMMARY - SOFS EQUITY - CLOSING BALANCES			
GENERAL FREE (010)		20,289	

ORIGINAL DTC REPORT

FAKE DTC REPORT

153. There is no legitimate business reason to generate a fake DTC report, as a legitimate trading or investment advisory business would be directly connected to the DTC to process trades and would have the ability to generate original participant position statement reports directly from the DTC. This further supports the opinion that the House 17 trading did not occur.

Figure 21

Excerpt from DTCABAL data file

```

Browse : JCP/DTCABAL2(DTCABAL)
Record : 1 of 12 by 10 Column : 1 200 by 131
Control :
.....1.....2.....3.....4.....5.....6.....7.....8.....9.....0.....1.....
*****Beginning of data*****
001957109010 00000000848101110940000000001226AT&T CORP <0000000AT&T CORP <
001957109014334042292 00000000848101110940000000185378AT&T CORP <0000000AT&T CORP <
001957109014810111098 00000000848101110940000000077852AT&T CORP <0000000AT&T CORP <
001957109014841092887 00000000848101110940000000128149AT&T CORP <0000000AT&T CORP <
001957109014848090779 00000000848101110940000000093749AT&T CORP <0000000AT&T CORP <
001957109014930082686 00000000848101110940000000173247AT&T CORP <0000000AT&T CORP <
001957109014958102986 00000000848101110940000000144259AT&T CORP <0000000AT&T CORP <
001957109022 00000000848101028110000001442510AT&T CORP <0000000AT&T CORP <
002824100010 0000000084810111094000000006703890TT LABORATORIES<0000000890TT LABORATORIES<
002824100022 0000000084810102811000000748900890TT LABORATORIES<0000000890TT LABORATORIES<
003387107010 00000000848101104840000000050008BEX INC CLASS A *00000008BEX INC CLASS A *
004898102010 0000000084810042594000000020289ACRO ENERGY CORP *0000110ACRO ENERGY CORP *
*****End of Data*****

```

Figure 22

PORTION OF DTC021 RPG Code

```

0001 H 16 1 DTC021
0002 F*****BTS002
0003 F* PROCEDURE DTCPPST1 *BTS002
0004 F* DTC021. PRINT DTC PARTICIPANT POSITION STATEMENT REPORT. *BTS002
0005 F* NO LONGER DOWN LOAD IC [REDACTED] ITED ON AS/400 *BTS002
0005 F* LASER USING FORMSPRINT. *BTS002
0005 F* CREATED 11-08-95 [REDACTED] *BTS002
0003 F* *BTS002
0006 F*****BTS002
0017 FDTCAPIBAIPE F2000 200 DISK
0012 FPRINT O F 198 198 PRINTER BTS002
0012 F* BTS002
0010 E CHIL 42.1 CHILLS ARRAY BKCS3J
0017 E* DTC005
0018 DTCAPIBANS_01 DTC004
0022 I 1.12 CUSTYPL1 DTC004
0022 I 1 9 CUSP L2 DTC004
0022 I 10.12 ACTTYP DTC004
0023 I 13.15CPLBANK DTC004
0023 I 15.210LOANDT DTC004
0023 I 22.28SERIAL DTC004
0023 I 29.29 REORCD DTC004
0022 I 30.32 RAMSCD BKTR64
0023 I 33.34GRAMSEQ BKTR64
0024 I 35.40OTRADDI BKTR64
0024 I 41.45CPART# BKTR64

```


(iii) **Reconciliation of House 5 options trades to OCC.**

154. BLMIS maintained an account with the OCC for clearing equity option trades, such as those purportedly made in accordance with the split strike conversion strategy (explained in more detail herein). However, based on the investigation and analysis of the OCC documentation available for October 2002 through October 2008, only option trades executed for House 5 clients (as well as those from MSIL) as reported on House 5 trading records, were cleared through OCC. Accordingly, there is no evidence that any options purportedly executed on behalf of House 17's customers ever cleared through the OCC for the time period examined.
155. A similar analysis as described *supra* for House 17's equity trades was performed with respect to options transactions. For the years 2002-2008:
- Identified all unique options traded in House 17 as of October 31st of each year as this was the fiscal year-end for BLMIS ("Step 1");¹⁴⁸
 - Identified options traded out of House 5 that matched those identified in Step 1 as of October 31st of each year ("Step 2");
 - OCC clearing records were identified for the options in Step 2.
156. For the seven year period analyzed, all of the options identified in Step 2, which were traded on behalf of House 5 customers as reported in House 5 trading records, were reconciled to the OCC thus confirming that the House 5 options in fact occurred and cleared.
157. The remaining options purportedly traded on behalf of House 17 customers as recorded in the House 17 trading records, were not shown on OCC records and were not cleared through OCC; therefore they could not have been legitimately executed as reported by BLMIS to its House 17 customers.
158. For example, on October 31, 2005, records from House 5 and the OCC indicate that 20 options described as "S&P 100 INDEX NOVEMBER 590 CALL" were purchased and held by BLMIS. The aggregate number of "S&P 100 INDEX NOVEMBER 590 CALL" options as reported on the House 17 customer statements for the same date number 658,342.

¹⁴⁸ October 31 was the fiscal year end for BLMIS and was the date for which OCC records were available for the 2002-2008 time period.

Therefore, options purportedly traded and held for House 17 could not have been executed through House 5 nor were they cleared through the OCC account associated with BLMIS.

e. Approximately \$4.3 billion of dividends reported on House 17 customer statements were fictitious and were never received by BLMIS on behalf of its customers.

159. For shares held in brokerage accounts, the default choice for receiving dividend payments is for the distributing company (i.e. the company actually declaring and paying the dividend) to credit to the brokerage firm (in this case, BLMIS) for the entirety of the dividends to be delivered to the brokerage firm's customers. On payment dates, the brokerage firm will credit the applicable apportioned dividend amount to accounts of customers who are shareholders of record of the companies that have declared and paid the dividends.¹⁴⁹
160. Although BLMIS was regularly recording dividend payments on House 17 customer statements, the evidence is that such dividend payments were never received by BLMIS.
161. House 17 customer account statements reflect dividend payments from the securities purportedly held in their respective customer accounts. To test whether House 17 actually received the dividend payments which were being reflected in the customer account statements, account number 1-B0039-3-0 was randomly selected in order to identify securities for which dividends were paid.
162. Figure 25 below shows the January 31, 2007 customer account statement for account 1-B0039-3-0 and identifies the dividend payments that were purportedly received during that month:

¹⁴⁹ See SEC Transfer Agents, *supra*, *Holding Your Securities – Get the Facts*, U.S. SEC (last visited Nov. 20, 2011), <http://www.sec.gov/investor/pubs/holdsec.htm>; *Transfer Agent*, United Technologies, (last visited Nov. 20, 2011), <http://utc.com/Investor+Relations/Transfer+Agent>.

Figure 25

REDACTED		1/31/07		1		REDACTED	
		BALANCE FORWARD					1.55
1/02		MERCK & CO	DIV				1,046,52
		DIV 12/08/06 1/02/07					
1/02		PEPSICO INC	DIV				612,00
		DIV 12/09/06 1/02/07					
1/02		WAL-MART STORES INC	DIV				512,55
		DIV 12/15/06 1/02/07					
1/03		HEWLETT PACKARD CO	DIV				373,44
		DIV 12/13/06 1/03/07					
1/04		UNITED PARCEL SVC INC	DIV				503,88
		CLASS B					
		DIV 11/27/06 1/04/07					
1/05		SCHLUMBERGER LTD	DIV				178,50
		DIV 12/06/06 1/05/07					
1/31		FIDELITY SPARTAN	DIV				344,26
		U S TREASURY MONEY MARKET					
		DIV 01/31/07					
1/31	14,219	17509 FIDELITY SPARTAN	1				34,219.00
		U S TREASURY MONEY MARKET					
1/31	25,000	22239 U S TREASURY BILL	99,030	24,755.00			
		DUE 4/12/2007					
		1/12/2007					
1/31	12,739	24190 FIDELITY SPARTAN	1				12,739.00
		U S TREASURY MONEY MARKET					
CONTINUED ON PAGE 2							
MDPTPP00131984							

163. Based on this customer statement, all dividends purportedly received by all House 17 customers for these same securities for all of January 2007 were then aggregated and analyzed. These amounts are summarized below:¹⁵⁰

Table 5

Payment Date	Company	Dividends
January 2, 2007	Merck & Co	\$ 6,404,388
January 2, 2007	Pepsico Inc	3,876,222
January 2, 2007	Walmart Stores Inc	3,255,099
January 3, 2007	Hewlett Packard Co	3,166,718
January 4, 2007	United Parcel Services Inc	3,155,807
January 5, 2007	Schlumberger Ltd	1,152,440
January 31, 2007	Fidelity Spartan	467,950
Total		\$ 21,478,624

¹⁵⁰ The Fidelity Spartan U.S. Treasury Money Market Fund continued to be referenced by House 17 as such even though its name changed to the Fidelity U.S. Treasury Money Market Fund effective August 15, 2005. *Prospectus*, Fidelity Spartan U.S. Treasury Money Market Fund, U.S. Government Money Market Fund, & Money Market Fund (June 29, 2005).

164. As previously discussed, these purported dividend payments, if actually received by BLMIS, would have been delivered to BLMIS by the distributing companies' respective transfer agents. At the time of the January 2007 dividend payments, the transfer agents for the above selected companies were:¹⁵¹

Table 6

Company	Transfer Agent
Merck & Co	Wells Fargo Bank
Pepsico Inc	The Bank of New York
Walmart Stores Inc	Computershare Trust Company
Hewlett Packard Co	Computershare Trust Company
United Parcel Services Inc	Mellon Investor Services
Schlumberger Ltd	Computershare Trust Company
Fidelity Spartan	Fidelity Service Company

165. An analysis was then conducted of all House 17 bank account statements for the months of December 2006 and January 2007 to determine whether or not there were additions to the BLMIS bank accounts in the amounts reflecting the purported total dividend payments to the House 17 customers.¹⁵² No transactions from the above transfer agents or for the amounts indicated for the purpose of dividend payments were identified. Without these distributions directly from the corporations, these dividend payments to BLMIS (and its customers) could not have actually occurred.
166. Additional analyses were performed on dividends purportedly received by all House 17 customers between the years 1998 through 2008.¹⁵³ During this time period, there were over 8,300 dividend transactions (on an aggregate basis for approximately 6,500 customer accounts) totaling approximately \$4.3 billion of dividend payments reflected on customer account statements.¹⁵⁴ A breakdown by year of these dividend payments is shown below:

¹⁵¹ Transfer agents were identified by reviewing 2006 and 2007 year-end SEC filings (e.g., proxy statements and/or annual reports). In all cases the transfer agents identified by these reports were the same in both years, confirming the transfer agents identified in the table.

¹⁵² A search for additions in the amounts listed as well as amounts approximating these amounts was conducted to ensure that all possibilities were considered. No such matches or approximate matches were found. In fact, no transactions from any of the transfer agents representing any amount of dividend payments were noted.

¹⁵³ House 17 bank account statements were available from December 1998 through December 2008.

¹⁵⁴ A complete database of dividend payments from customer statements was available from December 1995 through December 2008. Total purported dividend distributions for this period totaled \$4,594,442,711.77. While BLMIS bank statements prior to 1998 are no longer available from the bank and were not found in the BLMIS records,

Table 7

Year	Dividends
1998	\$ 137,316,449
1999	134,029,662
2000	139,026,901
2001	181,808,199
2002	228,056,457
2003	388,056,582
2004	701,081,346
2005	482,627,455
2006	839,021,313
2007	615,471,114
2008	493,162,860
Total	\$ 4,339,658,338

167. The dividend transactions reported on the House 17 customer account statements were compared to the House 17 bank statements (i.e., the 703 Account). Of the more than 8,300 dividend transactions traced, not one purported dividend payment matched to a cash addition on the BLMIS bank statements.
168. The foregoing analysis regarding dividend payments further shows that trading in House 17 did not occur.

f. House 17 was “Schtopping” certain customer returns.

169. Documents and computer programs uncovered in the course of the investigation revealed that House 17 was falsifying customers’ purported investment returns through the use of fictitious trades implemented through a special basket trading program. The name of the special basket trading program was called “B.SCHUPT [*sic*]”. The word “schtop” is a Yiddish word meaning to “push” connoting the act of giving an extra effort in order to meet expectations.¹⁵⁵ While the special basket trading file was named B.SCHUPT [*sic*] it is logical to conclude that this was simply a spelling error on the part of the House 17 employee(s) who devised the name.

nevertheless, there was no legitimate documentary evidence that any prior dividend payments were ever received by BLMIS on behalf of its House 17 customers.

¹⁵⁵ See *Schtop*, Yiddish Dictionary Online (last visited Nov. 20, 2011), <http://www.yiddishdictionaryonline.com>.

170. The investigation revealed that the use of the B.SCHUPT [*sic*] program was to allow for the truing up of customer accounts whose fictitious trades throughout the year had not yielded the rates of return that had been targeted by House 17. In fact, certain House 17 customer accounts were analyzed and it was determined that these accounts achieved over a 250% return in less than a 30-day period as a result of additional fictitious option trades implemented through the B.SCHUPT [*sic*] trades.
171. For example, in December 2003, a four-page packet of instructions (two pages of which were handwritten instructions signed by DiPascali) contained explicit instructions and details surrounding a B.SCHUPT [*sic*] special trading basket that was to be run for that period.¹⁵⁶ The instructions included 29 accounts that were to receive the benefits of the special B.SCHUPT [*sic*] option trades.

¹⁵⁶ See MADTSS01124263-68

Figure 26

PG 1 of 4

Good Morning
ALEXANDER,

PLZ PUT "F" ON

1E0156
1E0116
1E0133
1E0155
1E0159

THEN, PUNCH B.SCHUPT
RUN TRADING

THEN, RUN 2 BATCH TICKETS

THEN RUN 12/31 C+S

SEE YA
IN A BIT
Frank

MAOTSS01124263

172. To investigate the effect of the B.SCHUPT [sic] option trades, one test account was initially selected for detailed analysis. Account 1B0227 was selected from the listing. This account was to receive 1.5 units of the special basket trade.

Figure 27

ACCT #	QUANT
12R211	1.5
1C1277	2.0
1B0136	1.5
1B0227	1.5
1B0480	0.5

JOANN CRUPI

MADTSS01124265

173. The options associated with the B.SCHUPT [sic] file are shown below:

Figure 28

DATE: 1/01/04

BASKET TRADE LIST FOR FILE B.SCHUPT

DISTRIBUTION: FRANK

PAGE: 1

UPDATE/DELETE	B/S	SYMBOL	QTY	PRICE	T/D	S/D	BHC	COMH
	B	OEBAJ	10	1 80 1	11/28/03	12/01/03	481	Y
	B	OEBAK	20	1 10 1	12/17/03	12/18/03	481	Y

TOTAL BASKET VALUE = 4,030.00

MADTSS01124272

174. Using the information above, 1B0227, and the “Quant” value of 1.5, the account will record purchasing 15 contracts (1.5 times the QTY figure in the option table above) of the S&P Index OEBAJ option on December 1, 2003, and 30 contracts (1.5 times the QTY) of S&P Index OEBAK option on December 18, 2003. These amounts were traced into the customer trading records from House 17 and shows a purported total investment of \$6,045 in these options:

Table 8

Account No	Purchase Date	Symbol	Price	Value
1-B0227-4-0	12/1/2003	OEBAJ	\$1.80	\$2,715.00
1-B0227-4-0	12/18/2003	OEBAK	\$1.10	\$3,330.00

175. The final two pages of the instructions shown below detail the sale dates and sale prices of the options to be traded:

Figure 29

HOUSE #17			HOUSE #17		
BUY/SELL	<u>S</u>	CXL	_____	CXL TRD #	_____
ACCT GROUP	_____	A \ \ F	<u>F</u>	DELETE	_____
SYMBOL	<u>OEBAJ</u>	ACCT TYPE	<u>4</u>	ODD \ EVEN	_____
DOLLAR PRICE	<u>6</u>	FRACT \ CENTS	<u>50</u>	PRICE CODE	<u>1</u>
T \ D	<u>12 / 30</u>	S \ D	<u>12 / 31</u>		
BLOTTER	<u>4</u>	MARKET	<u>B</u>	TRANS	<u>1</u>
COMM	<u>YES</u>				
ACCT # 2	<u>8000030 40-40</u>				
SHORT	_____	INSTR	_____		
			MADTSS01124267		
HOUSE #17			HOUSE #17		
BUY/SELL	<u>S</u>	CXL	_____	CXL TRD #	_____
ACCT GROUP	_____	A \ \ F	<u>F</u>	DELETE	_____
SYMBOL	<u>OEBAK</u>	ACCT TYPE	<u>40</u>	ODD \ EVEN	_____
DOLLAR PRICE	<u>3</u>	FRACT \ CENTS	<u>80</u>	PRICE CODE	<u>1</u>
T \ D	<u>12 / 30</u>	S \ D	<u>12 / 31</u>		
BLOTTER	<u>4</u>	MARKET	<u>B</u>	TRANS	<u>1</u>
COMM	<u>YES</u>				
ACCT # 2	<u>8000030 40-40</u>				
SHORT	_____	INSTR	_____		
			MADTSS01124268		

176. The OEBAJ options purportedly bought on December 1, 2003 for \$1.80 per option were purportedly sold on December 31, 2003 for \$6.50, realizing a return of 261% in 30 days. The OEBAK options purportedly bought on December 18, 2003 for \$1.10 were purportedly sold on December 31, 2003 for \$3.80, realizing a return of 245% in 13 days.
177. For the Account 1B0227 discussed above, these purported option sales yield \$21,105 of sales proceeds on December 31, 2003, with a purchase price of \$6,045. This is a total return of 250% over the period of the investment.
178. In total, the B.SCHUPT [*sic*] program in December 2003 highlighted 29 accounts needing additional investment returns with an initial purported investment of \$2,099,227 in the two options. The resulting \$5,229,836 from the purported sale of the options yielded a 149% return over an average of 21.5 days held.
179. Examining the portfolio management reports (“PMR”) for account 1-B0227 for 2003 reveals telling facts. In November 2003, the PMR shows a 9.63% annualized return for the current year which is dramatically lower than the 18% “Benchmark” rate of return shown on the PMR.

Figure 30

ACCOUNT # 1-B0227-3		REPORT FOR THE PERIOD FROM 1/01/03 TO 11/30/03
INITIAL INVESTMENT		152,084.17CR
PROFITS IN EXCESS OF BENCHMARK RETURN FOR PREVIOUS YEAR		20,874.08-
ADJUSTMENTS		
CAPITAL ADDITIONS		
CAPITAL WITHDRAWALS		
NET WORKING CAPITAL		152,084.17CR
BENCHMARK RATE OF RETURN	18.00 %	
BENCHMARK RETURN FOR 365 DAYS		20,050.14CR
CAPITAL GAINS AND LOSSES		13,771.79CR
DIVIDENDS AND INTEREST		1,475.61CR
REALIZED P/L		15,249.40CR
UNREALIZED P/L		6.00CR
PROFITS WITHDRAWN		
OVER/UNDER BENCHMARK RETURN FOR CURRENT YEAR		9,794.74-
CURRENT CASH BALANCE		.15CR
NET MARKET VALUE OF OPEN SECURITIES POSITIONS		188,213.50
TOTAL EQUITY		188,213.65CR
PREVIOUS YEAR END EQUITY		177,658.35CR
ANNUALIZED RETURN FOR CURRENT YEAR	9.63 %	
PROJECTED ANNUALIZED RATE OF RETURN	8.76 %	
BUYING POWER	188	OVER/UNDER 11

MDPTQ00039636

180. Examining the December 2003 PMR for account 1-B0227 in just one month later, the annualized return for the current year went from just 9.63% to 17.73%, an increase of over 84%.

Figure 31

ACCOUNT # 1-B0227-3		REPORT FOR THE PERIOD FROM 1/01/03 TO 11/31/03
INITIAL INVESTMENT		152,084.17CR
PROFITS IN EXCESS OF BENCHMARK RETURN FOR PREVIOUS YEAR		20,874.08-
ADJUSTMENTS		
CAPITAL ADDITIONS		
CAPITAL WITHDRAWALS		
NET WORKING CAPITAL		152,084.17CR
BENCHMARK RATE OF RETURN	18.00 %	
BENCHMARK RETURN FOR 365 DAYS		27,375.15CP
CAPITAL GAINS AND LOSSES		28,987.79CR
DIVIDENDS AND INTEREST		1,681.72CR
REALIZED P/L		31,669.51CR
UNREALIZED P/L		
PROFITS WITHDRAWN		
OVER/UNDER BENCHMARK RETURN FOR CURRENT YEAR		3,264.36
CURRENT CASH BALANCE		.76CP
NET MARKET VALUE OF OPEN SECURITIES POSITIONS		203,627.00
TOTAL EQUITY		203,627.76CR
PREVIOUS YEAR END EQUITY		172,958.25CR
ANNUALIZED RETURN FOR CURRENT YEAR	17.73 %	
PROJECTED ANNUALIZED RATE OF RETURN	17.63 %	
BUYING POWER	203	OVER/UNDER 24

MDPTQ00039636

181. This enormous change in the annualized return for account 1-B0227 is a direct result of the fictitious trades implemented through the B.SCHUPT [sic] basket trading program. The fictitious option trades were recorded as shown below:

Figure 32

Date	Trade Type	Quantity	Instrument	Price	Value
12/01	BUY	15	8416 S & P 100 INDEX	1,800	2,715.00
12/18	SELL	30	8045 S & P 100 INDEX	1,100	3,330.00
12/31	SELL	15	8074 S & P 100 INDEX	6,500	9,735.00
12/31	SELL	30	103 S & P 100 INDEX	3,800	11,370.00
12/31			JANUARY 550 CALL		208.00
12/31			JANUARY 555 CALL		
12/31			TRANS TO 30 ACCT		
			NEW BALANCE		11,370.00

Return: 250% in avg. 20 days

182. The 29 accounts listed on the December 2003 special B.SCHUPT [sic] basket trading were closely analyzed to determine if the same or similar effect was present. The average annualized return for the Current Year as recorded on their respective November 2003 PMRs was 9%. After the B.SCHUPT [sic] program was run for the month of December 2003, the average annualized return for the Current Year on the December PMRs for the respective accounts was 21%. Accordingly, the running of the B.SCHUPT [sic] program increased purported annualized investment returns for the 29 accounts by an average of 141% from November 2003 to December 2003. This process was nothing more than a total fabrication of fictitious trades in an attempt to “push” the investment returns close to the 18% Benchmark Rate of Return as originally recorded on the PMRs for these accounts. Hence the name of the file B.SCHUPT [sic] or the true Yiddish word “Schtup.”

183. Additional examples of the “schupt” account listings and instructions were also located for the years 2004, 2005, 2006, and 2007.¹⁵⁷ Similar to the instructions discussed above, the additional “schupt” listings also listed specific units of each fictitious trade to make for specific accounts. Account numbers and holders varied by year.
184. In those additional years, the fictitious trades allocated pursuant to the Schupt instructions yielded a range of returns to each account over December of each year between 140% in 2002 and 268% in 2004. Similar to the discussion above regarding the changes in the PMRs subsequent to the fictitious trades being allocated, the account PMRs for those accounts in 2002, 2004, 2006, and 2007 showed similar patterns.

g. The computer system used by House 17 was basically a system used to facilitate the fictitious trading activity and to print trading documentation and customer statements to support such fictitious activities.

185. House 5 and House 17 computer systems capabilities were vastly different. House 5 systems contained many of the components one would expect to find in a broker-dealer environment where actual trades were being executed. Simply put, House 17 did not.
186. A summary description of House 5 trading systems in place as of December 2008 that was prepared by Lazard, Ltd. (“Lazard”), is depicted below in Figure 33¹⁵⁸:

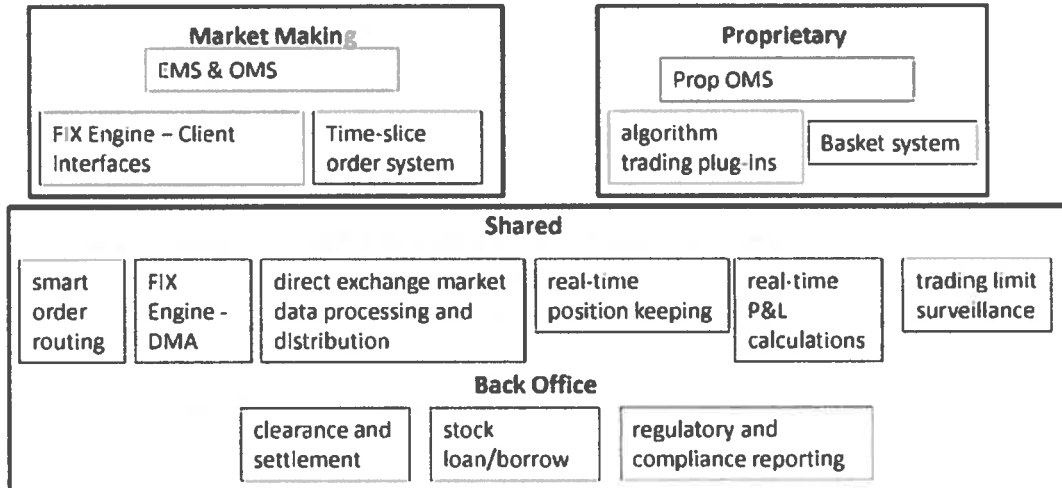
¹⁵⁷ Handwritten documents recovered from BLMIS. MADTSS01124091, MADTSS01124093, MADTSS01124089, MADTSS01120262 While a “schupt” file was not located for all years other than those listed above, there were, however, other documents located that appeared to contain similar information and to be following the same pattern.

¹⁵⁸ Lazard was the financial advisor to the Trustee who handled the liquidation sale of House 5 assets after Madoff’s arrest in December 2008. Lazard is an international financial advisory and asset management firm, specializing in providing advice on complex financial and strategic initiatives.

Figure 33

Summary

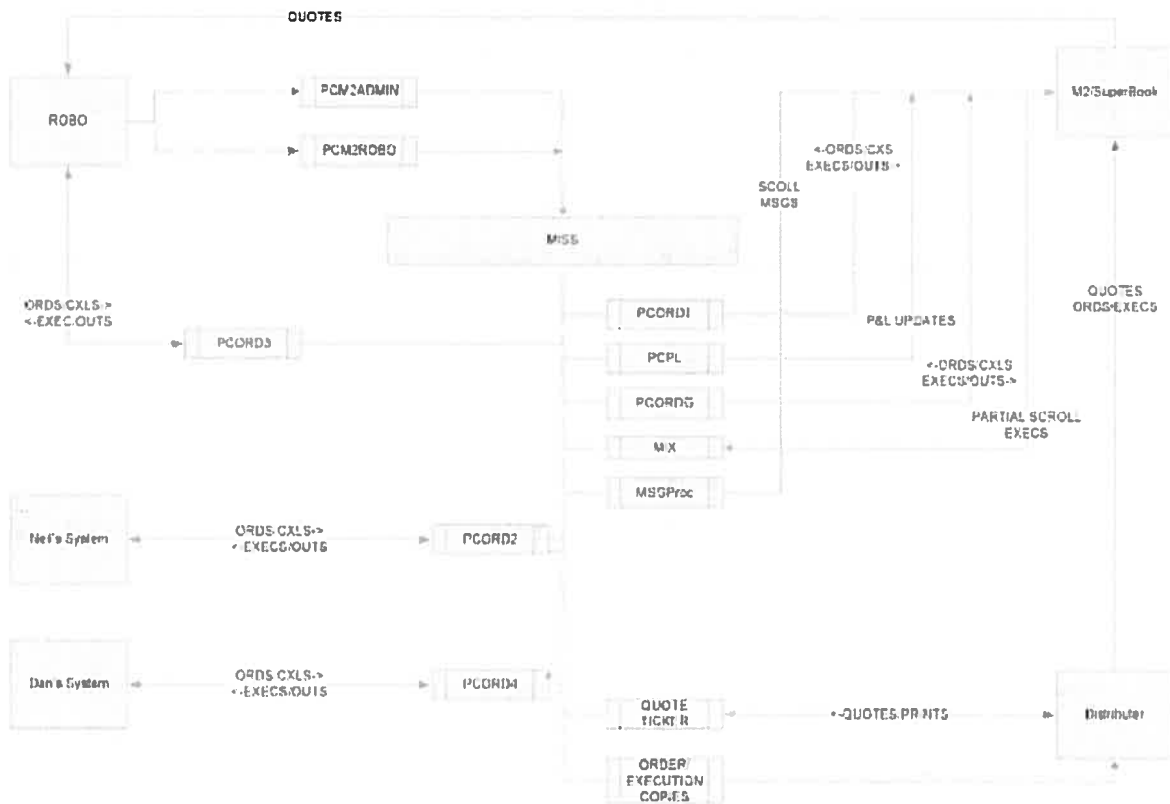
- The market making / proprietary trading business is supported by in-house trading applications built on a premise to be resilient, scalable and redundant.
- The trading system is a full fledged end-to-end equity market making and proprietary trading system with logical wall between the two. In addition, we have a comprehensive self clearing back office system.



All areas are developed and supported by knowledgeable and experienced in-house personnel.

187. Figure 34 is a more detailed diagram as of the trading systems in place at House 5 in December 2008¹⁵⁹:

Figure 34
Madoff Trading Systems
Interaction



LAZAA0004174

188. Not surprisingly, none of these trading systems described above were found in the House 17 computer environment nor were any systems allowing for trade execution or anything similar were found. In fact, as described below, House 17 relied on an IBM AS/400 computer along with a local area network of personal computers to perpetrate the fictitious trading activities to and generate the paper necessary to support the fictitious trading activities.

¹⁵⁹ Prepared by Lazard. LAZAA0004174

189. The software utilized by House 5 versus House 17 differed dramatically. The software utilized by House 5 was a combination of commercially-available, off-the-shelf software and interface systems (e.g., Bloomberg workstation, Thomson One, DTC, OCC) as well as custom-programmed software (e.g., the House 5 BLMIS Information System). However, the software utilized by House 17 was primarily custom-built in-house software (i.e., the House 17 BLMIS information system), supported only partially by commercially available, off-the-shelf software employed to perform specific functions, such as Integrated Custom Software Inc's FormSprint software for generating printed forms and Vision Solutions MIMIX software for supporting backup, restore, and disaster recovery.
190. While information in programs restored from House 17 backup tapes revealed certain limited electronic communications and interfaces for the AS/400 system, it was determined that the House 17 BLMIS custom RPG software did not communicate with any of the standard platforms one might expect to see in a trading and/or investment environment. Investment related data received by the House 17 custom RPG software was received from House 5 through either an electronic file transfer ("ftp") or via a manual process by which an operator inserted a tape into the House 17 AS/400 that contained data from the House 5 custom software. While House 5 utilized extensive systems to execute trades (e.g., MISS, M2/Superbook) and receive market data (e.g., Bloomberg, Muller) there was no evidence to show that House 17 connected to any of the connections available to the House 5 systems (e.g., NASDAQ, DTC, Bloomberg, Thomson, OATS). As a result, House 17 would have needed to place the purported trades through either House 5 or an outside broker-dealer; evidence of that occurring was not found.

h. The underlying computer code generated and utilized by House 17 was developed and modified over the years.

191. A model 520 AS/400 and a Magstar 3570 tape subsystem were procured and used to restore a working version of the House 17 AS/400 system to allow for analysis and investigation. Numerous libraries (i.e., repositories of data or code) were restored which contained both

code and data files.¹⁶⁰ The majority of the restored code used to run and operate the AS/400 was written in IBM Report Program Generator II (“RPG II”) language, which was identified from a number of factors including the following:

- The source from the restored backup tape was identified by the AS/400 system as “RPG36” code. Attribute flags (i.e., an identifying piece of data related to a particular source) identified that the code was created in the System/36 notation version of RPG II and, therefore, intended to run on an IBM System/36 platform.
- In order to work properly, the AS/400 had to be placed in System/36 emulation mode. If the program was started without being placed in system/36 emulation mode, the system consistently produced an error.¹⁶¹
- Also, the majority of the code was located in the IBM default location for creating RPGII code, which is a sub-library named QS36SRC within the TGIF library on the AS/400.

¹⁶⁰ During the computer investigation, it became apparent that certain code and data files no longer existed on the tapes containing the backup of the House 17 system from December 2008. Restoration of prior backup tapes confirmed this fact.

¹⁶¹ For example, one such error indicated, “Command menu in library *LIBL not found.” When placed into System/36 emulation mode, the error disappeared.

Figure 35

Screen shot of Restored AS/400: House 17 Main Menu

```
COMMAND
-----
MENU : MAIN - TGIF HOUSE 17 MAIN MENU
          COPYRIGHTS 1993
          BERNARD L. MADOFF INVESTMENT SECURITIES
-----
(1) MENU BACKUP.          (13) MENU SETUPS.
(2) MENU CASH17.         (14) MENU TRADES.
(3) MENU DIV17.          (15) MENU TAPE.
(4) MENU ERCHK.
(5) MENU LNGPOS.
(6) MENU MAINT.
(7) MENU MADF17.
(8) MENU NAMENU.
(9) MENU PORT.
(10) MENU SHEEPS.
(11) MENU TEFRA.
Ready for option number or command          (24) SIGN OFF.

==>
```

Figure 36

Screen shot of Restored AS/400: BTS (Basket Trading System) Menu
(Option 20 from MADF17 menu)

```
COMMAND                                MENU: LNGPOS                                #3
Select one of the following:
1. LONGPOS.
2. LONGPOS1 - Update R.LNGPOS
3. LONGPOS2 - Report by Acct
4. LONGPOS3 - Report by Symbol
5. LONGPOS6 - Ann's Rpt by Acct
6. LONGPOS7 - Ann's Rpt by Symbol
7. LONGPOS4 - Indv. Rpt by Acct
8. LPEDIT - EOM Lngpos/Stkrec
9. PORTPRIC - Update Prices File
10. SAVEPRIC - Save Prices File
11. PRICERPT - Frank's Prices Rpt
12. LONG13 - Process Splits
13. PR001 - Longpos Price Change
14.
15.
16.
17.
18.
19. LONGPOS5 - Indv. Ann's by Sym
20. PORTPR13 - Cusip Chg Price Upd
21.
22. LPEDIT2 - AFTER EOM Lngpos/Sr
23. GO TO MAIN MENU.
24.
Ready for option number or command
==>
```

192. Based on my review of the code, it appears that the majority of the code was developed in the late 1970s through the early-to-mid 1980s. It also appears that this code was initially used in the House 5 operations and then at some point was converted for use in the House 17 operations. Programmer documentation contained within the programs themselves show that there were hundreds, if not thousands, of modifications to the programs, many of which occurred in the early 1990s at a time when the amount of BLMIS customers increased dramatically. (See discussion *supra* regarding A&B and the transition of its customers directly to BLMIS.)

i. Underlying computer code in House 17 produced a random order generator to support fictitious trades on customer statements.

193. House 17 custom written software included code that enabled the assignment of prices and volumes for securities transactions to individual customer accounts in a scheme that was basically backing into data that would otherwise be generated in the normal course of business if one was utilizing a legitimate order or time slicing trading system.

194. In practice, it is the decision of a portfolio manager to determine what stocks to buy and how many shares will be purchased. Once determined, the role of a trader is to determine how best to purchase these stocks, balancing transaction costs and assorted market risks. This role is often exclusively automated by computers programmed with basic (or sometimes very sophisticated) trading algorithms.

195. Most common amongst these approaches is to either “volume-weight” or “time-weight” the execution of a large block of shares. These approaches strike a balance between risk and cost. A volume-weighted approach attempts to purchases shares at the same pace as the market is trading so that the buyer is never too large nor too small a participant. A time-weighted approach seeks to spread the desired transaction evenly over a fixed and pre-determined period of time.¹⁶²

¹⁶² David Cushin, et al., The Transaction Cost Challenge: A Comprehensive Guide for Institutional Equity Investors and Traders (New York: ITG Inc. 1999).

196. House 17 did not have a legitimate trading system using algorithms to execute trades as described above. What it had was a self-created program that simply mimicked and backfilled the output that would normally be the result of trades actually being executed by a system using trading algorithms. A detailed analysis of the code that was utilized in this regard confirms this.
197. A review of input and output files, as well as customer statements, indicated that a Java custom written application utilized an input file containing trade dates, settlement dates, security descriptions, pricing and other information, such as customer account numbers. It also contained the price that was to be allocated to each transaction.
198. The program utilized information from the input file and then generated a random set of orders for the specific security, randomly varying both the number of shares and the price for each order. The random number of shares was generated using a random function that was artificially limited by a configurable high and low value (i.e., 500 shares as a minimum and 10,000 as a maximum). The number of shares was also artificially limited by the total number of shares identified in the input file (i.e., if the input file totaled one million shares across all transaction in the input file, then the output of the program does not exceed one million shares across all orders in the output file). The random price for each order was also artificially limited by a configurable parameters which limited the range in the generated prices (i.e., a 5¢ bound would limit the randomly generated price to within five cents of the price identified in the input file).
199. The following example shows the input, processing and results of the random order generation program. The first input file shown below in Figure 37 identifies the total number of shares, 1,039,261, of Abbott Laboratories, as well as the average price \$48.41 assigned to that transaction on all applicable customer statements in House 17.¹⁶³

¹⁶³ See MESTAAF00009202- MESTAAF00009203.

Figure 37

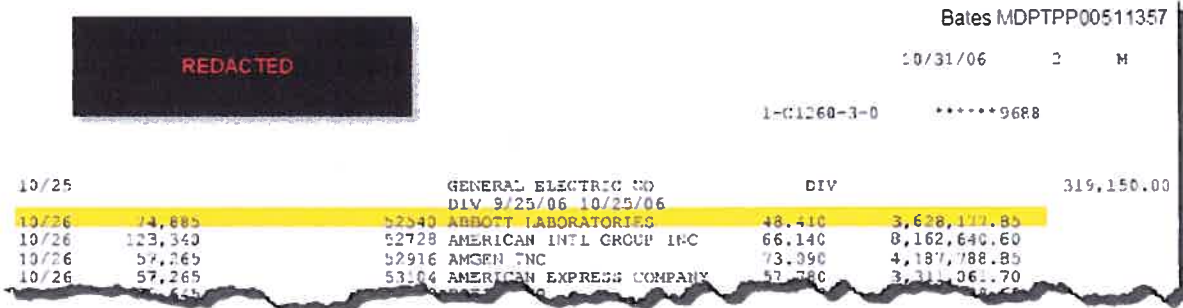
Abbott Laboratories Input

Abbott Laboratories Input for MADOFF Random Simulation Utility for 10/26/2007*											
#1/D	4/D	Account Number	Trans #	B/S Side	Quantity	Cusip	Security Description	Price	Principal Amount	Commission	Net Amount
23-Oct	26-Oct	1-C1260-3	52540	S	74885	2824100	ABBOTT LABORATORIES	48.41	3625182.85	2995	3628177.85
23-Oct	26-Oct	1-FN012-3	52554	S	717991	2824100	ABBOTT LABORATORIES	48.41	10552944.31	8719	10561663.31
23-Oct	26-Oct	1-FN043-3	52558	S	51	2824100	ABBOTT LABORATORIES	48.41	2468.91	2	2470.91
23-Oct	26-Oct	1-FN044-3	52559	S	493	2824100	ABBOTT LABORATORIES	48.41	23866.13	19	23885.13
23-Oct	26-Oct	1-FN045-3	52560	S	213282	2824100	ABBOTT LABORATORIES	48.41	10324981.62	8531	10333512.62
23-Oct	26-Oct	1-FN061-3	52562	S	190434	2824100	ABBOTT LABORATORIES	48.41	9218909.94	7617	9226526.94
23-Oct	26-Oct	1-FN086-3	52564	S	48943	2824100	ABBOTT LABORATORIES	48.41	2369330.61	1957	2371287.63
23-Oct	26-Oct	1-FN095-3	52568	S			ABBOTT LABORATORIES	48.41	4119787.82	3404	4123191.82
23-Oct	26-Oct	1-FR010-3	52572	S			ABBOTT LABORATORIES	48.41	912673.73	754	913427.73
23-Oct	26-Oct	1-FR062-3	52577	S			ABBOTT LABORATORIES	48.41	15636.43	12	15648.43
23-Oct	26-Oct	1-FR074-3	52581	S			ABBOTT LABORATORIES	48.41	72421.36	59	72480.36
23-Oct	26-Oct	1-FR080-3	52582	S			ABBOTT LABORATORIES	48.41	1785844.9	1475	1787319.9
23-Oct	26-Oct	1-FR083-3	52583	S	24514	2824100	ABBOTT LABORATORIES	48.41	1186727.74	980	1187707.74
23-Oct	26-Oct	1-FR093-3	52587	S	11764	2824100	ABBOTT LABORATORIES	48.41	569495.24	470	569965.24
23-Oct	26-Oct	1-FR096-3	52589	S	20213	2824100	ABBOTT LABORATORIES	48.41	978511.33	808	979319.33
23-Oct	26-Oct	1-GD092-3	52806	S	11690	2824100	ABBOTT LABORATORIES	48.41	566203.36	467	566670.36
23-Oct	26-Oct	1-G0371-3	52611	S	510	2824100	ABBOTT LABORATORIES	48.41	24689.1	20	24709.1
23-Oct	26-Oct	1-MR232-3	52650	S	8058	2824100	ABBOTT LABORATORIES	48.41	390087.78	322	390409.78
23-Oct	26-Oct	1-N0016-3	52651	S	3264	2824100	ABBOTT LABORATORIES	48.41	158010.24	130	158140.24
23-Oct	26-Oct	1-P0045-3	52654	S	2329	2824100	ABBOTT LABORATORIES	48.41	112746.89	93	112839.89
23-Oct	26-Oct	1-S0382-3	52670	S	2261	2824100	ABBOTT LABORATORIES	48.41	109455.01	90	109545.01
23-Oct	26-Oct	1-T0027-3	52674	S	60027	2824100	ABBOTT LABORATORIES	48.41	2905907.07	2401	2908308.07
23-Oct	26-Oct	1-W0043-3	52676	S	2210	2824100	ABBOTT LABORATORIES	48.41	106986.1	88	107074.1
23-Oct	26-Oct	1-Z8434-3	52691	S	3672	2824100	ABBOTT LABORATORIES	48.41	177761.52	146	177907.52
Total Shares								48.41	912673.73	754	913427.73
Price Assigned								\$	48.41		

* Refer to document ICFE_02_BR0000018

200. One of the accounts to which the purported Abbott Laboratories transactions was allocated was account number 1-C1260-3. The following excerpt from the customer statement file demonstrates the Abbott Laboratories pricing.

Figure 38



The image shows a document with a redacted area on the left and a table of financial data on the right. The redacted area is a black rectangle with the word "REDACTED" in red. The table contains the following data:

Date	Quantity	Price	Company Name	Price	Value
10/25			GENERAL ELECTRIC CO DIV 9/25/06 10/25/06		319,150.00
10/26	74,885	52540	ABBOTT LABORATORIES	48.410	3,628,422.85
10/26	123,340	52728	AMERICAN INTL GROUP INC	66.140	8,162,640.60
10/26	57,265	52916	AMGEN INC	73.090	4,187,788.85
10/26	57,265	53104	AMERICAN EXPRESS COMPANY	57.780	3,311,061.70

201. Also found during the investigation was an output file generated by the Java random order generation program that utilized the input files including the Abbott Laboratories shares and pricing. The excerpts from the full output file shown below in Figure 39 show that the random order generation utilized the total number of shares from the input file as well as the price from the input file as the basis for generating the randomly priced and sized (i.e., number of shares) orders.

Figure 39

Abbott Laboratories Output¹⁶⁴

Abbott Laboratories Orders Generated by MADOFFRandomSimulationUtility for 10/26/2007*							Price * Quantity
Num	T/D	Security Description	Quantity	Price	S/D	Cusip	
85195	23-Oct	ABBOTT LABORATORIES	5,195	\$ 48.42	26-Oct	2824100	\$ 251,541.90
64998	23-Oct	ABBOTT LABORATORIES	4,900	\$ 48.37	26-Oct	2824100	\$ 237,013.00
10509	23-Oct	ABBOTT LABORATORIES	509	\$ 48.43	26-Oct	2824100	\$ 24,650.87
64166	23-Oct	ABBOTT LABORATORIES	4,100	\$ 48.45	26-Oct	2824100	\$ 198,645.00
79956	23-Oct	ABBOTT LABORATORIES	9,900	\$ 48.44	26-Oct	2824100	\$ 479,556.00
9824	23-Oct	ABBOTT LABORATORIES	9,800	\$ 48.40	26-Oct	2824100	\$ 474,320.00
4780	23-Oct	ABBOTT LABORATORIES	4,780	\$ 48.40	26-Oct	2824100	\$ 231,352.00
94283	23-Oct	ABBOTT LABORATORIES	4,200	\$ 48.41	26-Oct	2824100	\$ 203,322.00
91250	23-Oct	Validation			i-Oct	2824100	\$ 58,068.00
44829	23-Oct	Total Shares		1,039,261	i-Oct	2824100	\$ 232,320.00
7641	23-Oct	Total Quantity * Price		\$ 50,310,283.23	i-Oct	2824100	\$ 367,612.00
29258	23-Oct	Weighted Average Price		\$ 48.41	i-Oct	2824100	\$ 445,372.00
83376	23-Oct	ABBOTT LABORATORIES	3,376	\$ 48.41	i-Oct	2824100	\$ 163,533.44
98508	23-Oct	ABBOTT LABORATORIES	8,500	\$ 48.44	26-Oct	2824100	\$ 411,740.00
46977	23-Oct	ABBOTT LABORATORIES	6,900	\$ 48.41	26-Oct	2824100	\$ 334,029.00
63066	23-Oct	ABBOTT LABORATORIES	3,000	\$ 48.38	26-Oct	2824100	\$ 145,140.00
74209	23-Oct	ABBOTT LABORATORIES	4,200	\$ 48.37	26-Oct	2824100	\$ 203,154.00
92888	23-Oct	ABBOTT LABORATORIES	2,800	\$ 48.42	26-Oct	2824100	\$ 135,576.00
15407	23-Oct	ABBOTT LABORATORIES	5,400	\$ 48.45	26-Oct	2824100	\$ 261,630.00
58704	23-Oct	ABBOTT LABORATORIES	8,700	\$ 48.41	26-Oct	2824100	\$ 421,167.00
89897	23-Oct	ABBOTT LABORATORIES	9,800	\$ 48.38	26-Oct	2824100	\$ 474,124.00
73566	23-Oct	ABBOTT LABORATORIES	3,566	\$ 48.44	26-Oct	2824100	\$ 172,737.04
57233	23-Oct	ABBOTT LABORATORIES	7,200	\$ 48.44	26-Oct	2824100	\$ 348,768.00
64857	23-Oct	ABBOTT LABORATORIES	4,800	\$ 48.41	26-Oct	2824100	\$ 232,368.00
2712	23-Oct	ABBOTT LABORATORIES	2,700	\$ 48.41	26-Oct	2824100	\$ 130,707.00
4609	23-Oct	ABBOTT LABORATORIES	4,609	\$ 48.40	26-Oct	2824100	\$ 223,075.60
13697	23-Oct	ABBOTT LABORATORIES	3,697	\$ 48.40	26-Oct	2824100	\$ 178,934.80
11154	23-Oct	ABBOTT LABORATORIES	1,100	\$ 48.38	26-Oct	2824100	\$ 53,218.00
18077	23-Oct	ABBOTT LABORATORIES	9,077	\$ 48.38	26-Oct	2824100	\$ 436,776.76

202. To confirm the processing performed by the Java random order generator code, the Java program code found in the records was compiled and executed using the input file found located during the investigation. The following screen shot shows that the order size (i.e., quantity of shares) and price differ at the individual transaction level, but the total number of

¹⁶⁴ See MESTAAF00000037- MESTAAF00000041.

shares across all orders, as well as the average price across all orders, is equal to the input values for Abbott Laboratories.

Figure 40
Abbott Laboratories Output¹⁶⁵

Abbott Laboratories Orders Generated by MADOFFRandomSimulationUtility for 10/26/2007 generated on 10/28/2011										
Number	T/D	Security Description	Quantity	Price	S/D	Cusip	Entry Time	Live Period	Cancel Time	Price * Quantity
83429896	23-Oct	ABBOTT LABORATORIES	3,361	\$ 48.42	26-Oct	2824100				\$ 162,739.62
73978546	23-Oct	ABBOTT LABORATORIES	12,100	\$ 48.43	26-Oct	2824100				\$ 586,003.00
41685019	23-Oct	ABBOTT LABORATORIES	6,700	\$ 48.41	26-Oct	2824100				\$ 324,347.00
10534289	23-Oct	ABBOTT LABORATORIES	3,500	\$ 48.37	26-Oct	2824100				\$ 169,295.00
40419240	23-Oct	ABBOTT LABORATORIES	5,700	\$ 48.41	26-Oct	2824100				\$ 275,937.00
39168254	23-Oct	ABBOTT LABORATORIES	6,000	\$ 48.38	26-Oct	2824100				\$ 290,280.00
90798533	23-Oct	ABBOTT LABORATORIES	3,300	\$ 48.41	26-Oct	2824100				\$ 159,753.00
17054794	23-Oct	ABBOTT LABORATORIES	2,937	\$ 48.37	26-Oct	2824100				\$ 142,062.69
12957418	23-Oct	ABBOTT LABORATORIES	11,100	\$ 48.42	26-Oct	2824100				\$ 537,462.00
96147388	23-Oct	ABBOTT LABORATORIES								\$ 469,674.00
74892370	23-Oct	ABBOTT LABORATORIES								\$ 227,527.00
41549864	23-Oct	ABBOTT LABORATORIES								\$ 221,040.06
57379639	23-Oct	ABBOTT LABORATORIES								\$ 159,786.00
51011932	23-Oct	ABBOTT LABORATORIES								\$ 440,531.00
9178948	23-Oct	ABBOTT LABORATORIES								\$ 210,932.01
74848056	23-Oct	ABBOTT LABORATORIES								\$ 474,418.00
18199678	23-Oct	ABBOTT LABORATORIES	6,800	\$ 48.43	26-Oct	2824100				\$ 329,324.00
23501899	23-Oct	ABBOTT LABORATORIES	3,100	\$ 48.39	26-Oct	2824100				\$ 150,009.00
62491693	23-Oct	ABBOTT LABORATORIES	7,800	\$ 48.38	26-Oct	2824100				\$ 377,364.00
66205904	23-Oct	ABBOTT LABORATORIES	4,673	\$ 48.43	26-Oct	2824100				\$ 226,313.39
50797623	23-Oct	ABBOTT LABORATORIES	5,800	\$ 48.41	26-Oct	2824100				\$ 280,778.00
41901521	23-Oct	ABBOTT LABORATORIES	7,000	\$ 48.45	26-Oct	2824100				\$ 339,150.00
39599511	23-Oct	ABBOTT LABORATORIES	4,506	\$ 48.39	26-Oct	2824100				\$ 218,045.34
57257973	23-Oct	ABBOTT LABORATORIES	6,400	\$ 48.40	26-Oct	2824100				\$ 309,760.00
33941607	23-Oct	ABBOTT LABORATORIES	12,400	\$ 48.41	26-Oct	2824100				\$ 600,284.00
66436292	23-Oct	ABBOTT LABORATORIES	3,400	\$ 48.39	26-Oct	2824100				\$ 164,526.00
99590692	23-Oct	ABBOTT LABORATORIES	3,200	\$ 48.39	26-Oct	2824100				\$ 154,848.00
										\$ 227,527.00
Validation										
Total Shares						1,039,261				
Total Quantity * Price						\$ 50,310,625.01				
Weighted Average Price						\$ 48.41				

203. As supported by internal BLMIS emails, this process was used to generate fictitious backdated trade histories. For example, an email on May 24, 2008 from BLMIS internal computer programmers detailed the requirements for the program as they “needed to generate about 600,000 random orders based on a set of criteria for the past 16 months.”¹⁶⁶

¹⁶⁵ See MDPTGG00000002

¹⁶⁶ See KFON-BR00030551

204. A legitimate business conducting an investment advisory, broker-dealer or proprietary market-making business would have no need for a random order generation program for backfilling trade data such as the one described above, as all of the orders would have a record generated from an external party that registered the trade (e.g., DTC) at the time the trade was properly executed, even for trades executed by a computer based trading algorithm. The fact that BLMIS built a random order generation program to backfill support for purported trades further illustrates that the securities listed on customer statements generated in House 17 were fictitious.

ii. Various reports that House 17 prepared were false.

a. Customer statements contained fictitious trades that were backdated.

205. House 17 customer statements contained false information regarding purported securities trades. Specifically, some customer statements reported trades that were purportedly executed in a prior month's period, sometimes stretching back years, but in actuality were never recorded on that previous month's statement ("prior month backdated trades"). For example, a March 1998 statement for account 1-A0035-3-0 showed purported transactions that occurred in March 1998, as well as trades going back to April 1997. If these trades had actually occurred and settled on the stated dates during the prior months or even years, they would have appeared on their respective monthly statement (i.e., a transaction in June 1997 would have appeared on the June 1997 customer statement). Many of these trades, however, did not appear on these previous month statements. Customer statements were analyzed for instances of such backdating by comparing the listed traded prices on the customer statement and the daily range of the stock prices for the respective dates in the prior year.
206. In the aggregate, the customer statements show a total of 14,749 prior month backdated trades which took place between December 1995 and November 30, 2008 across 893 accounts. The number of backdated trades per account range from 1 to 3,669. Furthermore, 50 of the 893 accounts contained more than 30 backdated trades.

207. The ability of BLMIS to backdate trades in House 17 was facilitated by the use of the custom software written by House 17 programmers in a module called STMTPro.¹⁶⁷ STMTPro allowed a House 17 user to restore a previous month's customer statement to the AS/400. For example, the data tape containing the Settled Cash table (i.e., SETCSH17 data file) for the desired month would be inserted into the AS/400. STMTPro would then restore that version of the SETCSH17 to a temporary location on the AS/400. STMTPro allowed the operator to change any item on a pre-existing customer statement (e.g., a purchase or sale of a security, the payment of a dividend) through a data entry screen (see Figure 41 below for STMTPro directions), and it also allowed the operator to print a revised customer statement. Were these prior month backdated trades an actual "error" in the customer statements, a corrected customer statement should have been issued as is standard in the industry. This did not occur in House 17. Instead, House 17 backdated trades on one month's statement and did not produce or reissue to customers revised statements for the prior months that indicated that these were restated statements.

¹⁶⁷ STMTPro is the specific procedure that is executed on the AS/400. House 17's Programming Development Manager Member List shows various modules such as STMTPRO03-Correct EOM Statements-User 1 and STMTMPRO08-Correct Prior STMTS From ASOF Trades (+Months). MDPTSS00001484

Figure 41

```
FIXING STATEMENTS

First - you need EGM data cartridge for month(s) you are
working with.

Second - you must restore files for the month you are
working with.

To Restore files KEY: RSTSTMP

These are 2 procedures to fix statement - STMTPRO3 &
STMTPRO4
When restoring files 3 restores files for STMTPRO3
(4 restores files for STMTPRO4)

Once files are restored KEY: STMTPRO3
then follow computer prompts

Note** You can make changes to the following (files):

A. Balance Forward (cashbal) (STAMBL17)
B. Body (STLCSH17)

C. Security Positions (SELECT17)
D. Year To Date Interest (YTDINT17)

You will get 4 BFW screens for each of the above
For BFW screens
CMD10 - Entry mode
CMD11 - Update mode
CMD4 - To Delete --> CMD4 - To Confirm Deletion

CMD7 - To End
CMD1 - To Dupe

Broker<--->House<--->is 17
Bought is Debit --> entered as a (old+)
adit -->
```

MMAN_02_BR_0000011

208. An example of how House 17 used STMTPro to backdate and manipulate transactions on customer statements is discussed below. First, Figure 42 below shows an example of a log file that was maintained by House 17, which tracked the various iterations of backdated changes for a particular group of customer accounts. Focusing attention on one particular account numbered 1-M0140-3-0, the log file records the date and months for numerous iterations of changes being made to that account.

Figure 42

* No Grad.

STMTPROB (2004)

MAGSTAR# F3A7D3C PAGE 1

SEQ#	ACCOUNT#	MON/YR	RUN DATE	SEQ#	ACCOUNT#	MON/YR	RUN DATE
1	15H025 30	Jan 04	3/29/04	28*	1M0140 30	Feb/04	4/28/04
2*	↓	Feb/04	↓	29*	1M0142 30	↓	↓
3*	↓	Feb/04	3/3/04	30*	1M0140 30	Mar/04	↓
4	↓	Mar/04	4/2/04	31*	1M0142 30	↓	↓
5	↓	Feb/04	4/26/04	32*	1M0140 30	Mar/03	4/29/04
6*	1M0140 30	Mar/03	4/27/04	33*	1M0142 30	↓	↓
7*	1M0142 30	↓	↓	34*	1M0140 30	Apr/03	↓
11*	1M0142 30	↓	↓	38*	1M0140 30	June/03	↓
12*	1M0140 30	June/03	4/27/04	39*	1M0142 30	↓	↓
13*	1M0142 30	↓	↓	40*	1M0140 30	July/03	↓
20	1M0140 30	Oct/03	↓	47*	1M0142 30	↓	↓
21*	1M0142 30	↓	↓	48*	1M0140 30	Nov/03	↓
22*	1M0140 30	Nov/03	↓	49*	1M0142 30	↓	↓
23*	1M0142 30	↓	↓	50*	1M0140 30	Dec/03	↓
24*	1M0140 30	Dec/03	↓	51*	1M0142 30	↓	↓
25*	1M0142 30	↓	4/27/04	52*	1M0140 30	Jan/04	↓
26*	1M0140 30	Jan/04	4/28/04	53*	1M0142 30	↓	↓
57*	1M0142 30	↓	↓	84	1M0142 30	↓	↓
58	1M0140 30	Mar/03	4/30/04	85	↓	↓	↓
59	1M0142 30	↓	↓	86	↓	↓	↓
74	1M0140 30	Nov/03	↓				
75	1M0142 30	↓	↓				
76	1M0140 30	Dec/03	↓				
77	1M0142 30	↓	↓				

MADTB801877335

MADTB801877336

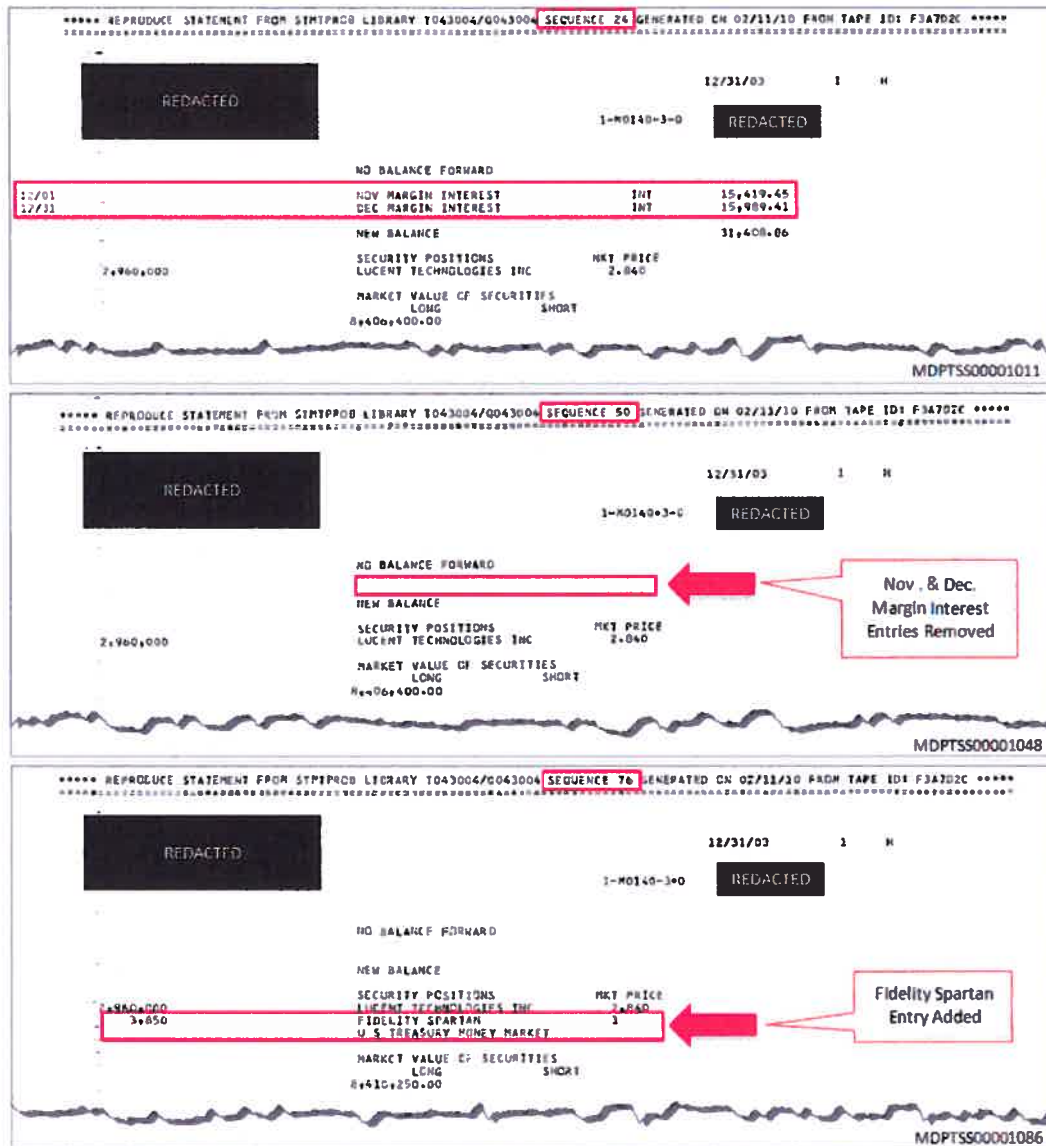
209. For illustrative purposes, the analysis focused on three months of changes to show what was happening. Seq#24, 50 and 76 were selected. As the log file indicates, Sequence 24 was run on April 27, 2004. Sequence 50 was run on April 29, 2004 and Sequence 76 was run on April

30, 2004. As the log file shows, Sequence 24, 50 and 76 all relate to December 2003 as the month that is being changed.

210. First, Figure 43 below shows the results of the backdating activity on the underlying data used to produce monthly statements for House 17 customers.¹⁶⁸ Sequence 24 and shows that there is margin interest being reported for both November and December 2003 in the respective amounts of \$15,419.45 and \$15,989.41 for a total of \$31,408.86. Moving to the Sequence 50 iteration shows that the November and December entries for margin interest have now been removed from the statement as if they never existed. Looking at the third portion of Figure 43, Sequence 76 shows that an entry for Fidelity Spartan U.S. Treasury Money Market for 3,850 shares has now been added to the account.

¹⁶⁸ Figure 43 was created using documents that were created from running the House 17 STMTPro computer program using data retrieved from backup tapes that were collected by the Trustee. Trustee's consultants conducted the restoration process in this regard and the resulting output documents were created from that process, hence the header listed on the top of each document in **Error! Reference source not found.** indicating the actual run date being February 11, 2010.

Figure 43



211. There were numerous examples of these types of backdating changes that were routinely being made to customer accounts at House 17 over the years. The manner in which these changes were being made months after the date of the original customer statement (in this example December 2003 was the original date of the customer statement and yet changes are being made nearly five months later in April 2004) shows how House 17 was manipulating customer statements and recording the fictitious trades.

(i) The financial and regulatory statements produced by BLMIS were false and misrepresented the firm's true financial state of affairs.

a. Registration statement ADV filed with the SEC was false and was not timely.

212. BLMIS was registered with the SEC as a broker-dealer as of January 19, 1960 and, it was not until 46 years later that it was registered beginning in 2006, as an investment adviser. Based on a review of regulatory requirements, and as further addressed below, BLMIS should have registered with the SEC as an investment adviser beginning in 1979 when Form ADV was required for investment advisers.¹⁶⁹
213. Investment advisers must register with the SEC by filing the Uniform Application for Investment Adviser Registration¹⁷⁰ ("Form ADV") unless they are exempt from registration.¹⁷¹ Investment advisers with 15 or more clients must register with the Commission.¹⁷² Despite having more than 15 accounts, BLMIS did not register as an Investment Adviser until August 2006. Between 1979 and 2006, BLMIS had more than 15 accounts and by not filing Form ADV as required, misrepresented its total number of clients (see Figure 14 for the number of accounts from 1978 to 2008).
214. Further, between 2006 and 2008 Madoff misrepresented the number of clients in his IA Business on the Form ADV. In or about January 2008, BLMIS filed with the SEC an Amended Uniform Application for Investment Adviser Registration. On the application, BLMIS reported representation of 23 customer accounts and assets under management of approximately \$17.1 billion.¹⁷³ In actuality, in or around January 2008, BLMIS had approximately 4,900¹⁷⁴ active customer accounts and purported assets under management of approximately \$74 billion.¹⁷⁵ Historical records show that there were more than 8,000 customer accounts at BLMIS over the life of the business.¹⁷⁶

¹⁶⁹ The Securities Exchange Act of 1934, 15 U.S.C. § 80b-3 (2010); [44 FR 21008, Apr. 9, 1979]

¹⁷⁰ *Id.*

¹⁷¹ Investment Advisers Act Rule §§ 203-1 & 203(b).

¹⁷² Investment Advisers Act § 203(b)(3).

¹⁷³ PUBLIC0003840

¹⁷⁴ SQL Query - All Customer Accounts - January 2008

¹⁷⁵ SQL Query - All Customer Accounts - as of December 31, 2007

¹⁷⁶ SQL Query - All Customer Accounts - All Years

b. FOCUS reports and the audited financial statements were false and misrepresented the true state of BLMIS.

215. As a registered broker-dealer operating through 2008, BLMIS was required to file FOCUS reports with the SEC.¹⁷⁷ FOCUS reports are financial and operational reports that set forth, among other information, assets, liabilities, revenues, and expenses of the company.
216. In addition, BLMIS was required to file Annual Audited Reports.¹⁷⁸ These Annual Audited Reports contain information about income, cash flows, changes in stockholders', partners', or sole proprietors' equity, and statement of financial condition.
217. The BLMIS FOCUS and Annual Audited Reports reveal inconsistencies with the business in which BLMIS was purportedly engaged as well as material misstatements in its financial statements. Both the FOCUS reports and Annual Audited Reports require broker-dealers to list the amount of cash on hand, as well as all of its other assets and liabilities. The reports BLMIS filed, however, often did not reflect the assets and liabilities BLMIS should have reported and, therefore, contained numerous misstatements as discussed in the following paragraphs.
218. BLMIS underreported the amount of cash it held on its FOCUS reports. For example, based on an analysis of House 17 bank account statements, on an almost nightly basis, BLMIS swept funds from the 703 Account into overnight deposits. According to the FOCUS report instructions, the funds in the 703 Account and the overnight deposits are considered "cash" and should have been included in the "cash" line on the FOCUS and Annual Audit Reports.¹⁷⁹ These accounts were excluded from the reported cash balances and in fact, cash in the 703 Account and the overnight deposits often exceeded the "cash" actually reported by BLMIS in the FOCUS and Annual Audited Reports.
219. For example, the December 2006 FOCUS report listed \$4,882,332 as the amount of cash on hand.¹⁸⁰ As of December 31, 2006, the ending balance of the 703 Account was \$394,700 and

¹⁷⁷ SEC Rule 17a-5, 17 C.F.R. 240.17a5.

¹⁷⁸ SEC Rule 17a-5(d), 17 C.F.R. 240.17a5(d).

¹⁷⁹ Instructions to FORM X-17A-5 PART IIA - All "cash" item except for "cash in banks subject to withdrawal restrictions" shall be included on the "cash" line of the report. http://www.sec.gov/about/forms/formx-17a-5_2a.pdf

¹⁸⁰ PUBLIC0002664

the amount in overnight deposits was approximately \$295,000,000, totaling \$295,394,700 of cash on hand.

220. BLMIS’s underreporting of its cash position was not isolated to the December 2006 FOCUS report. In every reporting period examined from December 31, 2006 through December 31, 2008, BLMIS underreported its cash position and thus, provided false and inaccurate statements to the SEC. Based on the 703 Account alone, cash reported on the FOCUS reports were significantly understated. Table 9 Figure 10 below shows a comparison of “cash and cash equivalents”¹⁸¹ reported on FOCUS reports and cash in the 703 Account:

Table 9

Date	FOCUS¹⁸²	703 Account Overnight Investment¹⁸³	703 Account Ending Balance¹⁸⁴
09/06	\$4,293,419	\$140,000,000	\$800,207
12/06	4,882,332	295,000,000	394,700
03/07	3,716,017	160,000,000	2,000,000
06/07	5,175,146	145,000,000	292,099
09/07	5,460,095	120,000,000	376,500
12/07	164,382,040	235,000,000	742,309
03/08	222,737,426	220,000,000	135,534
06/08	257,374,499	170,000,000	1,712,804
09/08	187,651,497	480,000,000	418,000

221. The FOCUS reports also did not properly reflect BLMIS’s liabilities. For example, an entity filing a FOCUS report must report “Bank loans payable.” As explained *infra* in greater detail in this report, during the House 17 liquidity crisis in late 2005, BLMIS obtained a \$95 million loan in November 2005, and an additional \$50 million in January 2006 from JPMorgan Chase

¹⁸¹ FASB ASC 305-10-20 defines cash equivalents as, “short-term investments of high liquidity, which are readily convertible into certain amounts of cash, subject to an insignificant risk of changes in value.”

¹⁸² Amounts taken from Line 1 – Cash for each respective FOCUS report.

¹⁸³ Amounts obtained from JPMC 703 respective monthly bank statement.

¹⁸⁴ Amounts obtained from JPMC 703 respective monthly bank statement ending balances.

- (“JPMC”) collateralized, in part, by a loan from a customer. The loans were repaid in June 2006. Yet the FOCUS report for the period ending December 2005 (“December 2005 FOCUS Report”) reported that BLMIS had no bank loan obligations outstanding.
222. Prior to September 2006, BLMIS recorded *de-minimis* commission revenue on the FOCUS report “Commissions” revenue line.¹⁸⁵ Nor did BLMIS report commission revenue on its Annual Audited Reports prior to October 2006. While this fact may have actually been true, it totally contradicts the contention that if House 17 was actually executing trades, customer commissions should have been reflected in the “Commissions” line item. The fact that no commission revenue was reported further shows that no trading in House 17 occurred.
223. As mentioned above, BLMIS registered with the SEC as an Investment Adviser in August 2006. The FOCUS and Annual Audited Reports filed by BLMIS after that time included amounts listed for “Commissions.” Comparing the revenue reported in the Annual Audited Reports for the fiscal years immediately before and after BLMIS registered as an investment adviser demonstrates the significance of the “newly” reported commission revenue. For the fiscal year ended 2005, BLMIS reported no commission revenue in its FOCUS report. By contrast, for the fiscal year ended 2007, BLMIS reported \$103,174,848 of commission revenue which represented approximately 60% of total reported BLMIS revenues for the year. However, since no trading activity occurred in House 17, no commission revenue was generated and the FOCUS reports thereby contained false information.
224. In addition, the FOCUS and Annual Audited Reports did not reflect other activity that would be expected of a broker conducting trades for investment adviser customers. BLMIS’s FOCUS and Annual Audited Reports did not include: (a) customer receivables, such as margin accounts; (b) customer payables, such as positive cash balances held by BLMIS on behalf of customers; or (c) a computation for reserve requirements for customer activity as required by the SEC under Rule 15c3-3, all of which would be reported by a broker-dealer with managed investment accounts.
225. For example, the December 2005 FOCUS report had no amounts recorded under the captions “Receivables from customers” and “Payable to customers.” In addition, the credit and debit

¹⁸⁵ From Q1 1983 through Q3 1987, BLMIS reported \$5,404 in commissions.

balance amounts in customer security accounts that form the basis for the computation for the Rule 15c3-3 reserve requirement were left blank.

226. The failure to report financial information demonstrating customer activity was not isolated to the December 2005 FOCUS report. None of the FOCUS reports and Annual Audited Reports included customer receivables or customer payables, and none included customer account balances in their computations for 15c3-3 reserve requirements.

227. As noted above, Friebling and F&H were not independent with respect to the BLMIS audit. Additionally, the investigation and analysis show that the FOCUS reports and Annual Audited Financial Statements contained material misstatements, inaccuracies and excluded required information.

c. F&H Audit Template Opinions Found at BLMIS

228. During a search of electronic files, numerous Microsoft® Word documents were found relating to the audits purportedly being performed by F&H. Several versions of standard AICPA template audit opinions were found on the House 17 computer of Eric Lipkin. These files contained metadata indicating that Eric Lipkin created the documents.¹⁸⁶

229. It appears that BLMIS was using different versions of template audit opinions depending on where they were directing the letter to be sent as several versions containing long form versus short form audit opinions were discovered. Further, as is evidenced in Figure 44 below, instructions were included to assure that certain audit opinion letters were not used as updated versions were created.

¹⁸⁶ ELIP-BR00007195

Figure 44

DO NOT USE THIS LETTER!!!! REPLACED WITH LETTER IN 'BLANKS' FOLDER IN STATEMENT OF FC FILE (INDEPENDENT AUDITORS' REPORT 3 PARAGRAPH LETTER)

December 12, 1997

Bernard L. Madoff
885 Third Avenue
New York, New York 10022

INDEPENDENT AUDITORS' REPORT

Dear Sir:

We have examined the Statement of Financial Condition of Bernard L. Madoff as of October 31, 1997. Our examination was made in accordance with generally accepted auditing standards, and accordingly included a review of the system of internal control and the procedures for safeguarding securities and such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion the aforementioned Statement of Financial Condition of Bernard L. Madoff at October 31, 1997, presents fairly the financial position of Bernard L. Madoff at October 31, 1997, in accordance with generally accepted accounting principles applied on a basis consistent with the practice of the industry.

ECOT-BR00010120

230. Also, during a tour of the House 17 space in the Lipstick Building, cases of F&H stationery and envelopes were found. Cases of F&H unused stationery were also found in the warehouse where BLMIS stored documents. In my experience it is highly unusual to find the amount of stationery that was found at the client's premises.

d. F&H were not independent auditors as required by the AICPA and other regulatory bodies.

231. The AICPA, the New York State Education Department Office of the Professions and the SEC standards require that auditors maintain client independence.¹⁸⁷ For example, the AICPA requires that “an auditor must be free from any obligation to or interest in the client, its management, or its owners.”¹⁸⁸
232. Under SEC regulations, independence is impaired when an accountant has “[b]rokerage or similar accounts maintained with a broker-dealer that is an audit client, if...[t]he value of assets in the accounts exceeds [\$500,000].”¹⁸⁹
233. According to the New York State Society of Certified Public Accounts, independence will be considered to be impaired if the public accountant, or a partner in the firm, (i) had a direct or material indirect financial relationship with any officer, director, employee or principal stockholder of the enterprise, or (ii) if the licensee or a member of his or her or the partner's immediate family, is or has been involved in any situation creating a conflict of interest, during the period covered by the examination or at the time of issuance of a report.¹⁹⁰
234. F&H was not independent with respects to the rules, regulations and requirements of the AICPA, the State of New York and the SEC. In particular, Friehling and/or his wife had investment accounts at BLMIS from the early 1980s. Between the years 1983 and 2008, the Friehling accounts had an average equity balance of at least \$6.2 million.¹⁹¹ It was also noted that Friehling's former partner, Horowitz, also had investment accounts in BLMIS.
235. F&H provided tax and possibly other services to BLMIS. It is unclear whether these services also violated independence rules.¹⁹²

¹⁸⁷ AIPCA Professional Standards, Auditing Section 220.03; New York State Accountancy Regulations, Title 8, Section 29.10a-5; Title 17, Code of Federal Regulations, Section 240.17a-5(f)(3)

¹⁸⁸ Code of Professional Conduct, ET § 101 (Am. Inst. of Certified Pub. Accountants 1988) Professional Standards, Auditing Section 220.03; 8 NYCRR§ 29.10a(5); 17 C.F.R. > §240.17a-5(f)(3).

¹⁸⁹ 17 C.F.R. § 210.2-01(b)(c); SIPA (15 U.S.C.78fff-3).

¹⁹⁰ New York State Education Department Office of the Professions Rules of the Board of Regents, 8 NYCRR § 29.10a(5). Commodity and Securities Exchanges Rule, 17 C.F.R. §§210.2-01(b)(c). Further according to the AICPA, an auditor “must be free from any obligation to or interest in the client, its management, or its owners.”

¹⁹¹ Per review of “All Accounts Listing” databases, Horowitz accounts with BLMIS had an average purported equity balance of \$5.5 million from 1983 - 2008.

¹⁹² F&H invoices were not available and therefore, a listing of other services and relative fees cannot be prepared and analyzed. Professional standards limit the services that can be performed

B. OPINION NO. 2: HOUSE 17 WAS A PONZI SCHEME.**i. Indicia of Ponzi****a. Definition of Ponzi scheme**

236. According to the Association of Certified Fraud Examiners, a Ponzi scheme is “an illegal business practice in which new investors’ money is used to make payments to earlier investors.”¹⁹³ The scheme is so named due to the widespread publicity of a fraud perpetrated by Charles Ponzi from 1919 to 1920 in Boston, MA.¹⁹⁴ Black’s Law Dictionary defines a Ponzi scheme as “a fraudulent investment scheme in which money contributed by later investors generates artificially high dividends for the original investors, whose example attracts even larger investments. Money from the new investors is used directly to repay or pay interest to old investors, usually without any operation or revenue-producing activity other than the continual raising of new funds.”¹⁹⁵

b. Background on Ponzi schemes.

237. A Ponzi scheme begins as an investment opportunity - sometimes legitimate, other times not.¹⁹⁶ The fraudster solicits investors with promises of returns within a specified time period (e.g., a return of 50% in 6 months). Before the return becomes due, the fraudster will have

by an auditor and consider, among others, the nature of and fees obtained for the other services in relation to the fees received for performing an audit. (See for example, SEC Rule

17 C.F.R. §210.2-01(c)(4).)

¹⁹³ Fraud Examiners Manual, 2009 at 1.1731.

¹⁹⁴ Encyclopedia of Fraud 602 (3rd ed. 2007).

¹⁹⁵ Black’s Law Dictionary 1180 (7th ed. 1999). This definition concurs with that of the SEC, which defines a Ponzi scheme as, “...an investment fraud that involves the payment of purported returns to existing investors from funds contributed by new investors. Ponzi scheme organizers often solicit new investors by promising to invest funds in opportunities claimed to generate high returns with little or no risk. In many Ponzi schemes, the fraudsters focus on attracting new money to make promised payments to earlier-stage investors and to use for personal expenses, instead of engaging in any legitimate investment activity.” *Frequently Asked Questions*, U.S. SEC (last visited Nov. 20, 2011), <http://www.sec.gov/answers/ponzi.htm#PonziWhatIs>

Moreover, this definition is also consistent with opinions issued by the Second Circuit: “A ‘Ponzi’ or ‘Pyramid’ scheme is a fraudulent investment scheme in which money contributed by later investors is used to pay artificially high dividends to the original investors, creating an illusion of profitability, thus attracting new investors.” *Bear, Stearns Sec. Corp. v. Gredd (In re Manhattan Inv. Fund Ltd.)*, 397 B.R. 1, 8 (S.D.N.Y. 2007); *aff’d*, 328 Fed. Appx. 709 (2d Cir. N.Y. 2009).

¹⁹⁶ Alex Altman, A Brief History of Ponzi Schemes, (Dec. 15, 2008); Time (last visited Aug. 11, 2011), <http://www.time.com/time/business/article/0,8599,1866680,00.html>.

solicited investment from other individuals and use that investment to pay the previously promised return (hereinafter referred to as “Other People’s Money”). In strict accounting terms, money is paid out as a return, described as income, but is actually a distribution of capital. Instead of returning profits, the fraudster spends cash reserves.¹⁹⁷

238. The appearance of a successful investment often draws more investors into the scheme. In fact, many of the original investors will *reinvest their proceeds and principal* back with the fraudster. This infusion of cash aids the fraudster in continually paying out the next round of investors.¹⁹⁸ Instead of actually investing the money the fraudster collects, the funds not used to pay other investors are usually used for personal enrichment.
239. The Ponzi scheme is dependent on a continuous flow of funds for its existence. Without cash coming in, the scheme is no longer able to pay older investors and collapse is inevitable.¹⁹⁹ Early investors who exit the scheme in time often escape with their principal and a substantial “phantom gain,” so called because the gain is just a portion of other investors’ principal. It is the later investors, and those who have not withdrawn from the scheme, who suffer the fallout upon collapse.²⁰⁰

ii. There was no legitimate trading or investment activity and, therefore, no profits from House 17.

240. As noted herein, a Ponzi scheme: (1) purports to be a legitimate business; (2) is dependent on a continuous flow of funds for its existence; and (3) generates artificially high dividends for the original investors. The only source of cash to House 17 sufficient to pay off investors was generated through a steady network of closely guarded relationships that helped to feed cash into House 17. House 17 had no profits from trading, received limited monies from House 5 and had no evidence of any outside financial support sufficient to fund pay offs to investors. The only source of cash available sufficient enough for House 17 to pay purported investment profits as well as redemption requests to its investors was from Other People’s Money.

¹⁹⁷ Encyclopedia of Fraud 603 (3rd ed. 2007).

¹⁹⁸ Encyclopedia of Fraud 601 (3rd ed. 2007).

¹⁹⁹ Steven L. Skalak, Thomas W. Golden, Mona M. Clayton & Jessica S. Pill, *A Guide to Forensic Accounting Investigation*, 496 (2nd Edition, Wiley, 2011).

²⁰⁰ *Id.*

a. No trading occurred in House 17 and redemptions were made using Other People's Money.

241. In order for House 17 to have realized the investment returns as reported on its customer statements and continue to make cash disbursements to customers from these earnings, the purported trades would have had to have been actually executed in the market. They were not. In comparison to House 5, which had nearly 80 connections to handle order flow, execution capabilities through its proprietary MISS system, connections to the exchanges and real time market data and information providers, House 17 had limited connectivity to the world outside of House 5. House 17's computer systems consisted largely of the AS/400 and hardware and software necessary only to perpetrate the fictitious trading activities and produce customer statements and related fictitious trading documentation.
242. As detailed above, the investigation and analysis of House 17 showed that beginning at least in the 1970s, the trades that House 17 purported to trade could not have been executed. The analyses show, among others:
- Trading volumes that exceed the daily U.S. trading volume for securities;
 - Trading prices that were either above or below the reported daily market trading price range;
 - Dividends that were not recorded to customers;
 - Trades executed on holidays and weekends;
 - Trades that settled at non-standard settlement durations; and
 - Purchasing of securities at market lows and selling securities at market highs at an unattainable consistent rate.
243. Further, had the securities reported on the House 17 customer statements actually been executed, a custody record would be available from the DTC. Analyses conducted during this investigation, however, show that only those securities traded through House 5 were custodied at or cleared through BLMIS's DTC and OCC accounts. As the DTC is also the clearing and custody agent for OTC trading, House 17 trades could not have been executed in the OTC market.

244. The trading of derivatives, such as options, in the OTC market is largely conducted under agreements published by the International Swaps and Derivatives Association (“ISDA”). ISDA agreements set forth the standard terms to which the counterparties would be bound by the derivative transaction. While ISDA agreements were in effect for BLMIS, they were executed for derivative trades outside the scope of House 17’s strategy (e.g., swaps) and were issued and signed by House 5 employees. No ISDA agreements were located for any purported House 17 option trades.
245. The investigation showed that not only were House 17 trades not executed through House 5, but they could not have been executed by MSIL on European exchanges. In many instances trades purportedly traded by House 17 were not traded on European exchanges since those equities were not registered to be sold on those exchanges. In other instances, the purported trades were traded at volumes on those European exchanges that were dwarfed by the volumes reflected on House 17 customer statements confirming that they were not legitimate trades.
246. The investigation and analyses show that, without actual trades being executed through House 17, payment of fictitious profits as well as customer redemptions could only have been fulfilled using Other People’s Money.

b. No other legitimate income-producing business activities were identified.

247. House 17 had no legitimate income-producing activities. Although acting as an investment adviser, no trades were executed and the entity was dependent on an increasing supply of investor funds in order to continually meet investor redemptions. Further evidence shows that Madoff was not charging an investment advisory fee, which is normal in the industry. Despite claims of charging a few cents per share commission on each trade, any such commission income was illusory as no trading actually took place. Accordingly, there is no evidence of any other legitimate business or any other legitimate source that would potentially provide a revenue stream for House 17 sufficient enough to cover distributions to its customers.

c. Dividends that were purported to have been distributed to House 17 customers were paid with Other People's Money.

248. Dividends that were to be paid to the purported owners of securities on record were not paid to House 17 customers from actual corporate dividend distributions. Instead, they were paid with Other People's Money. No records exist showing actual transfers of corporate dividend distributions to the House 17 bank accounts nor is there evidence of communication between House 17 and the transfer agents or corporations that would have disbursed the dividends. From 1995 to 2008, nearly \$4.6 billion in purported dividends were paid out to House 17 customers using Other People's Money (*see discussion supra*).

d. Apart from the liquidity crisis, no financial support vis-à-vis any profits from House 5 was evidenced.

249. The investigation and analysis of cash flows and cash transfers between House 5 and House 17 show that aside from the House 17 liquidity crisis (*described infra*) and transfers during the waning days of BLMIS in December 2008, House 5 did not provide financial support to House 17. Furthermore, other than during the House 17 liquidity crisis, the investigation shows that House 17 received no financial support from third parties (*i.e.*, loans). Therefore, any distributions to House 17 customers came from Other People's Money.

250. In fact, monies were being diverted not from House 5 to House 17, but from House 17 to House 5. During the investigation it was discovered that a significant percentage of the revenue accounted for in the FOCUS reports for House 5 was derived from Other People's Money being transferred to House 5 via (1) House 17 directly, (2) House 17 to a third party brokerage account, or (3) House 17 to MSIL (*see Table 10*).

Table 10

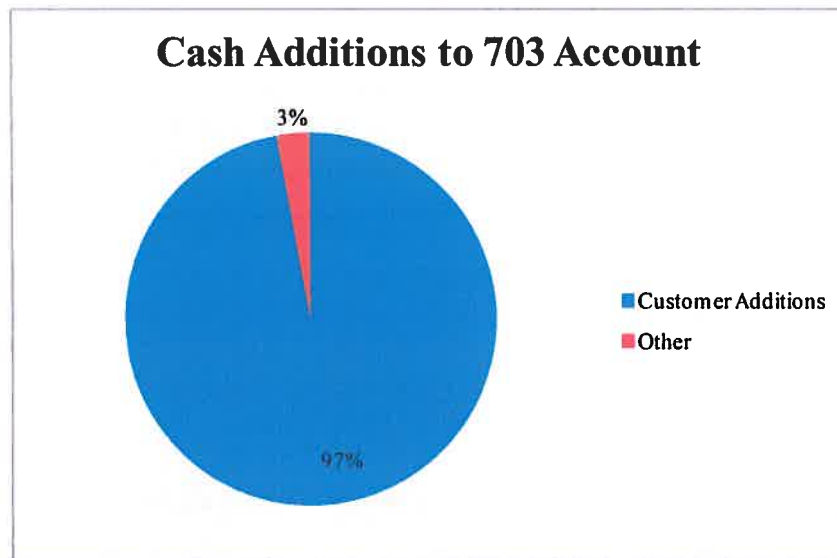
	Revenue reported on FOCUS Reports ("A")	House 17 Other People's Money in FOCUS Report ("B")	Total Excluding House 17 Other People's Money in FOCUS Report ("C")	"B" as a percent of "A"
2000	\$209,788,597.00	\$75,582,928.71	\$134,205,668.29	36.0%
2001	169,110,236.00	72,403,594.92	96,706,641.08	42.8%
2002	106,009,938.00	60,483,440.69	45,526,497.31	57.1%
2003	128,868,567.00	97,366,815.48	31,501,751.52	75.6%
2004	138,684,401.00	88,966,001.61	49,718,399.39	64.1%
2005	113,506,829.00	69,307,036.65	44,199,792.35	61.1%
2006	163,150,034.00	73,217,621.96	89,932,412.04	44.9%
2007	167,439,512.00	121,243,287.50	46,196,224.50	72.4%
2008	91,112,071.00	56,372,251.50	34,739,819.50	61.9%
Total	\$1,287,670,185.00	\$714,942,979.02	\$572,727,205.98	55.5%

Note: 2008 figures are through Q3 2008.

e. The 703 Account dealt almost entirely with customer deposits and redemptions.

251. The main account used by House 17, the 703 Account, consisted almost entirely of deposits from customers (which were commingled) and inflows and outflows from overnight interest-bearing accounts, which were themselves funded from customer money. There were no additions as a result of trading, dividends or any other legitimate income producing source.

Figure 45²⁰¹



252. Since there is no income-producing activity, Ponzi schemes are at risk of liquidity shortages when incoming cash flows diminish and outgoing redemptions increase. At one point, the balance of the 703 Account became so dangerously low that House 17 faced a severe liquidity crisis, which nearly forced the Ponzi scheme to unravel. From approximately October 2005 through June 2006, House 17 investor redemptions requests far exceeded investor deposits during this period. BLMIS survived, in part, by borrowing bonds from a long-time customer of Madoff, and transferring cash from the House 5 bank accounts to meet redemptions.
253. On November 14, 2005, BLMIS requested a \$95 million loan²⁰² from JPMC, collateralized by a Federal Home Loan Bank Bond in the principal amount of \$100 million due April 8, 2009.²⁰³ According to JPMC records, the \$100 million Federal Home Loan Bank Bond was received from the customer on November 4, 2005. However, BLMIS paid the customer approximately 30% interest²⁰⁴ on the bond by quarterly deposits into various accounts at JPMC held by the customer.

²⁰¹ Based on account activity from December 1998 to December 2008. "Other" transactions include, but are not limited to, overnight sweep additions, other incoming wires or checks.

²⁰² BLMIS request for loan to JPMorgan on November 14, 2005. JPMSBT0002332 at 2336.

²⁰³ *Id.*; JPMorgan Position Statement as of December 31, 2005. SECSBM0000041

²⁰⁴ Customer loan account document. MADTSS01163051

254. JPMC credited \$95 million to the 703 Account on November 14, 2005.²⁰⁵
255. On January 18, 2006, BLMIS requested an additional \$50 million loan²⁰⁶ from JPMC. Collateral for this loan was two more Federal Home Loan Bank Bonds from the customer, one bond was worth \$9 million and the other was worth \$45 million, together totaling \$54 million.²⁰⁷
256. On January 23, 2006, JPMC credited the 703 Account with \$50 million.²⁰⁸
257. On June 1, 2006, BLMIS notified JPMC that it was repaying both loans, for a total amount of approximately \$145 million²⁰⁹ in principal, from the 703 Account.
258. Separately, the House 17 bank accounts were reduced so dramatically during the liquidity crisis that BLMIS used the House 5 bank account (“621 account”) to meet four separate investor redemption requests totaling approximately \$262 million.²¹⁰
259. By June 2006, after the liquidity crisis had subsided, BLMIS transferred \$261.8 million of new investor money in the House 17 bank accounts to the House 5 bank accounts. The transfer effectively reimbursed the House 5 bank accounts for the investor redemptions paid from those accounts.
260. The liquidity crisis is but another indicator that House 17 was a Ponzi scheme.

f. House 17 was dependent on increasing cash inflows and promised large returns to customers.

261. In order to continue its Ponzi scheme, House 17 was dependent on a constant and ever increasing inflow of cash in order to satisfy customer redemptions. As shown in Figure 46, a very large network of feeders beginning in the early 1990s (e.g., Fairfield Greenwich Group

²⁰⁵ JPMorgan Chase Statement of Account ending November 30, 2005, JPMSAB0002491 at 2511.

²⁰⁶ BLMIS request for loan to JPMorgan on November 14, 2005. JPMSBT0002332 at 2338 and 2341

²⁰⁷ *Id.*

²⁰⁸ JPMorgan Chase Statement of Account ending January 31, 2006, JPMSAB0002865 at 2909

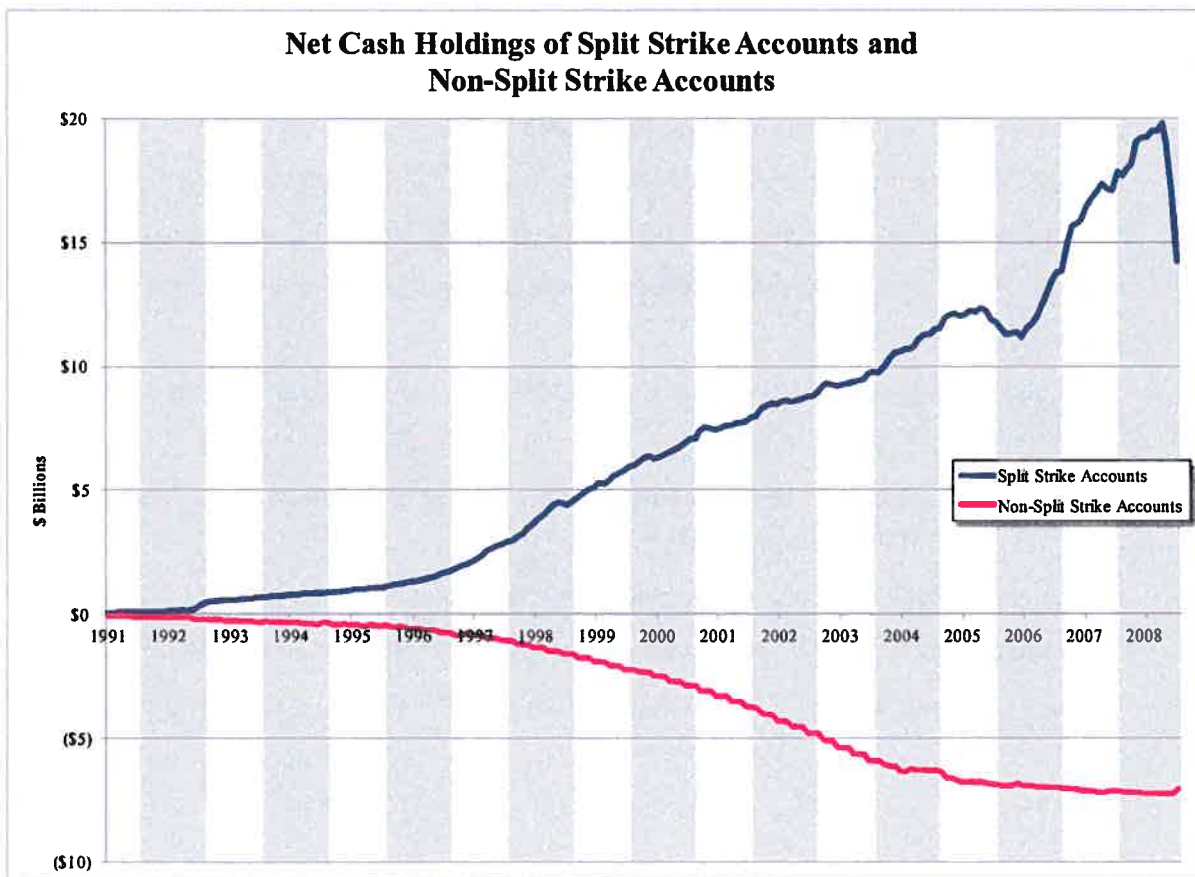
²⁰⁹ JPMSBT0002332 at p. 2342

²¹⁰ BONY bank statements SECSBJ0008118, SECSBJ0008135 and SECSBJ0008137 and Customer Statements MDPTPP05530971, MDPTPP00020510 and MDPTPP02979426.

established its first account at House 17 in 1991) sustained a much smaller group of House 17 customers who were withdrawing large sums of cash from customer accounts.²¹¹

262. The split strike conversion accounts (blue line) consisted of nearly 4,500 accounts; the non-split strike conversion accounts (red line) consisted of only 300 accounts. As the non-split strike conversion accounts began to withdraw greater amounts of money from at least 1992, House 17 was forced to attract increasingly greater amounts of cash through its investors, many of which were feeder funds.

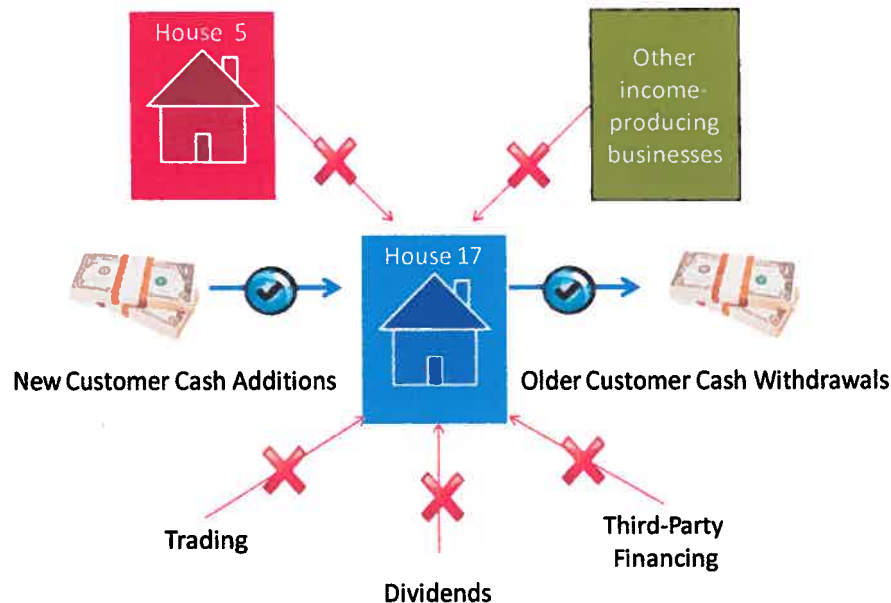
Figure 46



263. Given there were no profits from actual trading, investment or other legitimate business activity, House 17 had to use Other People's Money to pay back other investors thereby meeting the classic definition of a Ponzi scheme (see Figure 47).

²¹¹ Figure 46 assumes a zero dollar start beginning in 1991.

Figure 47



iii. Further evidence that House 17 was not a legitimate business and was a Ponzi scheme is that BLMIS was hopelessly insolvent.

264. The term “insolvent” means:

(A) with reference to an entity other than a partnership and a municipality, financial condition such that the sum of such entity's debts is greater than all of such entity's property, at a fair valuation, exclusive of

(i) property transferred, concealed, or removed with intent to hinder, delay, or defraud such entity's creditors; and

(ii) property that may be exempted from property of the estate under section 522 of this title.²¹²

265. Madoff's business was run as a sole proprietorship until 2001 at which time it was converted to a Limited Liability Corporation named Bernard L. Madoff Investment Securities, LLC with Madoff being the sole member/shareholder. At the time and all times thereafter, BLMIS was

²¹² 11 U.S.C. § 101(32) (2011).

comprised of the operations of both House 5 and House 17. (See discussion *supra* on the description of House 5 and House 17.) On December 11, 2008, BLMIS was placed into bankruptcy and on June 9, 2009 a consolidation order was granted by the United States Bankruptcy Court for the Southern District of New York, which had the effect of consolidating the bankruptcy of Bernie Madoff with that of BLMIS.

266. In assessing the legitimacy of House 17, the solvency of BLMIS was evaluated as of December 11, 2002 (a date selected by counsel for the six-year period prior to the BLMIS bankruptcy filing date). To complete the solvency analysis, the relevant assets and liabilities of both House 5 and House 17 were considered.
267. Important assumptions involving solvency: In evaluating the solvency of BLMIS, an important predicate assumption has been made. The standard of value that was assumed was Fair Market Value (“FMV”). Fair Market Value as used herein is defined as the price at which property would change hands between a willing buyer and willing seller, neither being under any compulsion to buy or sell and both having reasonable knowledge of relevant facts.²¹³ Accordingly, in the case of assessing the FMV of BLMIS, a willing buyer is assumed to be a hypothetical one that would have completed proper due diligence and if fraud at BLMIS was discovered at that time (i.e. December 2002), would have assessed that fact and any resulting value ascribed would be materially less than any value assuming no fraud existed.
268. In fact once the fraud was discovered, BLMIS was liquidated and under an order signed by U.S. Bankruptcy Judge Burton Lifland, a bidding process was ordered for House 5 with an auction proceeding on April 27, 2009. Castor Pollux Securities bought the trading business for \$25.5 million, with \$1 million payable at closing and \$24.5 million in deferred compensation through December 2013.²¹⁴ By August 2011, however, the board of directors of Castor Pollux decided to voluntarily wind-down the business as attempts to raise additional capital had failed. According to publicly available data, the Trustee has only received approximately \$1.2 million from the sale.²¹⁵

²¹³ Treas. Reg. § 20.2031-1b; Rev. Rul. 59-60, 1959-1 C.B. 41.

²¹⁴ See Press Release Irving H. Picard – Trustee Announces Winning Bid of Up to \$25.5 Million for Madoff Market Maker Business. PR Newswire (last visited Nov. 18, 2011), <http://www.prnewswire.com/news-releases/trustee-announces-winning-bid-of-up-to-255-million-for-madoff-market-maker-business-61997332.html>.

²¹⁵ See <http://online.wsj.com/article/SB10001424052970203388804576617230200603402.html>

269. However, to conduct a solvency analysis in the light most favorable to a finding of solvency, House 5 was valued using the FMV standard of value which assumes House 5 as a going concern rather than in a liquidation which would have yielded little if any value as evidenced by the Trustee's sale discussed above. Additionally, where other assumptions were made in the analysis, those assumptions were generally made in the light most favorable to the determination of a finding of solvency. Further, certain assumptions regarding aggregate compensation expense were made solely for the purposes of assessing the solvency of BLMIS. Accordingly, no analysis and, therefore, no opinion is made as to the reasonableness of, or the propriety of the compensation or other perquisites received by any individual employee, director or officer of BLMIS during these time periods.
270. To evaluate the solvency of BLMIS as of the Valuation Date, three tests are typically used when a company is in bankruptcy.²¹⁶ These tests include:
- Balance Sheet²¹⁷
 - Ability to Pay Debts²¹⁸
 - Capital Adequacy²¹⁹
271. Under these tests, to be solvent, a company is required to pass the Balance Sheet Test (further described below). The company is also required to have the ability to pay debts and be adequately capitalized in order to be considered solvent.²²⁰

²¹⁶ 11 U.S.C. § 548

²¹⁷ 11 U.S.C. § 548 (a)(1)(B)(ii)(I)

²¹⁸ 11 U.S.C. § 548(a)(1)(B)(ii)(III)

²¹⁹ 11 U.S.C. § 548(a)(1)(B)(ii)(II)

²²⁰ Adequate Capital requires that a company's capital be sufficient to afford managers a reasonable chance of executing a reasonable business strategy in expected market conditions. Judgment of capital adequacy should consider: (1) capital already obtained; (2) capital to which the company has reasonable access; and (3) the Company's flexibility to meet unexpected developments. In general, a company's capital requirements are driven by characteristics of its industry, its business strategy, the reasonably foreseeable actions of competitors, customers and suppliers, and contemporary external economic and capital market conditions. In its plainest meaning, the ability to pay debts is the ability to avoid default. Put another way, default is the inability to pay one's debts. Thus the simplest measure of ability to pay is (one minus) the probability of default. It is, for example, the probability of default that a credit rating is intended to reflect.

a. Balance Sheet Test:²²¹

272. Solvency, employing the Balance Sheet Test, is generally defined as the Fair Market Value of a company's assets (often determined by valuing the business enterprise on a going concern basis versus a liquidation basis) exceeding the stated amount (or expected value where appropriate) of its liabilities. There are three approaches commonly used to estimate the FMV of assets: an Adjusted Balance Sheet Approach, an Income Approach and a Market Approach.
273. A major assumption in the determination of FMV is that all of the relevant information as of the valuation date is disclosed to a hypothetical buyer of the business. This information includes, but is not limited to, accurate financial information and any other operating performance information that might affect the perception of value. In the case of House 5, it is now known that the revenue information that was contained in the FOCUS reports was significantly overstated, utilizing fictitious revenues derived from Other People's Money from House 17. Combined with the fact that House 17 was not a legitimate business and was perpetrating a Ponzi scheme, these facts would have had a materially negative impact on any FMV attributable to House 5 as of December 11, 2002 (*see discussion supra*). Moreover, to the extent that it would have been publicly known at the time that House 5 was reporting revenues that included hundreds of millions of dollars of Other People's Money from the IA Business, House 5 would have been so tainted by the negative association to the problems identified throughout this report that the House 5 business would have been virtually valueless.
274. Adjusted Balance Sheet Approach:²²² The Adjusted Balance Sheet Approach begins with a review of a company's balance sheet, prepared in accordance with U.S. generally accepted accounting principles ("GAAP") as of or near the valuation date. Assets and liabilities omitted from U.S. GAAP accounts (i.e., off balance sheet assets and liabilities) are then

²²¹ As of December 2002, for purposes of the solvency analysis, House 5 was considered to be a going concern and was valued as such. A liquidation value would not have been appropriate in this analysis and would have produced a significantly lower value than a value premised on a going concern value.

²²² AICPA Consulting Services Executive Committee, *Statement on Standards for Valuation Services* 18, June 2007. This approach is further detailed in Shannon P. Pratt, Robert F. Reilly & Robert P. Schweihs, *Valuing a Business* 311, (McGraw-Hill 4th Ed. 2000).

considered. Finally, the adjusted balance sheet analysis revalues all assets to reflect their FMV and subtracts all non-operating liabilities at their stated values (or expected costs basis where appropriate).

275. Income Approach:²²³ The Income Approach indicates the FMV of a business based on the value of the cash flows that the business can be expected to generate in the future. This approach evaluates the present value of the future economic benefits that accrue to an investor in a business. These benefits, or future cash flows, are discounted to the present at a rate commensurate with the company's inherent risks. The present worth of future cash flows determines the FMV of the business. The approach thus necessitates projections of future free cash flows and an estimation of the terminal value representing the value of the cash flows after the end of the projection period. The formula is as follows:

$$PV = \sum_{i=1}^n \frac{E_i}{(1+k)^i}$$

where:

PV	=	Present value;
n	=	The last period for which economic income is expected; n may equal infinity (i.e., ∞) if the economic income is expected to continue in perpetuity;
E_i	=	Expected economic income in the i th period in the future (paid at the end of the period);
k	=	Discount rate (the cost of capital, e.g., the expected rate of return available in the market for other investments of comparable risk and other investment characteristics
i	=	The period (usually stated as a number of years) in the future in which the prospective economic income is expected to be received

276. As explained above the present value calculation utilizes a discount rate represented by k . The discount rate here was calculated using the CAPM and was determined to be 16.5 percent.²²⁴ See Appendix C for further detail.

²²³ *Statement on Standards for Valuation Services, supra*, 16-18; Pratt, Reilly & Schweih, *supra*, 153-154.

²²⁴ The CAPM rate of return on equity capital is calculated using the formula: $Ke = Rf + B * ERP + Ssp + Alpha$ where: Ke = Rate of return on equity capital; Rf = Risk free rate of return; B = Beta or systematic risk for this type of equity investment; ERP = Equity risk premium; The expected return on a broad portfolio of stocks in the market (Rm) less the risk free rate (Rf); Ssp = The small company premium adjustment to the cost of equity due to the size of the subject company; $Alpha$ = Adjustment to the cost of equity due to characteristics specific to the subject company.

277. Market Approach.²²⁵ The Market Approach indicates the FMV of a business based on a comparison of the business to comparable firms in similar lines of business that are publicly-traded, comparable public or private sale transactions in similar businesses or prior transactions in a company's securities is generally estimated in this approach through the Guideline Company Method or the Guideline Transaction Method.
278. Guideline Company Method.²²⁶ The Guideline Company Method indicates the FMV of a business by comparing it to publicly-traded companies in similar lines of business. The conditions and prospects of companies in similar lines of business depend on common factors such as overall demand for their products and services. An analysis of the market multiples of companies engaged in similar businesses yields insight into investor perceptions, and therefore, the value of the subject company.
279. After identifying and selecting the guideline publicly-traded companies, their business and financial profiles are analyzed for relative similarity. Considerations of factors such as size, growth, profitability, risk, and return on investment are also analyzed and compared to the comparable businesses. Once these differences and similarities are assessed, for purposes of the House 5 valuation, equity value ("EV") multiples (i.e., EV/ Book Value) of the publicly-traded companies are calculated. These multiples are then applied to the subject company's operating results, and adjusted for special and nonrecurring items, to estimate the FMV of the subject company's enterprise. A control premium is then applied to this value to calculate the indicated Fair Market Value of the equity on a marketable, controlling basis.
280. Guideline Transaction Method: The Guideline Transaction Method estimates the FMV of a business based on exchange prices in actual transactions and on asking prices for controlling interests in public or private companies currently offered for sale. The process essentially involves comparison and correlation of the subject company with other similar companies. Adjustments for differences in factors described earlier (i.e., size, growth, profitability, risk, and return on investment) are also considered.
281. In selecting comparable transactions, merger and acquisition databases and financial publications are typically searched to identify transactions that are disclosed and to gather

²²⁵ *Statement on Standards for Valuation Services, supra*, 18-20; Pratt, Reilly & Schweih, *supra*, 226.

²²⁶ Pratt, Reilly & Schweih, *supra*, 260-261.

information about the prices paid for similar businesses under similar circumstances. The acquisitions are relevant indicators of an actual market participant's perception of Fair Market Value, and therefore, are a useful valuation indicator.

(i) Determination of Solvency of BLMIS

282. The Balance Sheet Test was employed to evaluate the solvency of BLMIS.²²⁷ Two business segments of BLMIS were considered: House 17 and House 5. First, House 17, was analyzed. As discussed *supra*, House 17 was a Ponzi scheme and was not a legitimate business. Since it would be inappropriate to consider House 17 as a going concern for purposes of a solvency analysis, the only relevant balance sheet components to consider are the cash held by BLMIS's House 17, its customer liabilities and other liabilities of general creditors. Second, House 5, which was treated in this analysis as a going concern as of the December 2002 was analyzed (*see* discussion *supra* regarding critical predicate assumptions). To determine the FMV of House 5, a complete business valuation of House 5 was performed. The resulting components of House 17 and House 5 were combined in order to arrive at a final conclusion of whether BLMIS was insolvent as of December 11, 2002.
283. The information relied upon for the solvency analysis was the best information available to form the basis for the opinions expressed herein. FOCUS reports, filed with the SEC, were obtained and the financial information contained in the reports was used as the basis for analyzing BLMIS's historical and projected financial performance. However, as more fully described below as well as in other sections of this Report, the FOCUS reports are known to have contained false information regarding the operations of BLMIS and were adjusted accordingly.
284. Cash Held as of December 11, 2002 - The total positive balances in the House 17 related accounts were approximately \$1.5 billion as of December 11, 2002.²²⁸

²²⁷ The Balance Sheet Test is the most clearly defined test by the Bankruptcy code and it is the first test typically employed when determining the solvency of an enterprise. That notwithstanding, as will be demonstrated below, the depth of BLMIS's insolvency is so great that there is virtually no way that BLMIS's debts (predominantly customer liabilities of \$12 billion as of December 31, 2002) could be paid as they came due nor did BLMIS have a level of real capital adequate to run its business.

²²⁸ It has been assumed for purposes of the solvency analysis, that certain brokerage/other accounts were business accounts attributable to House 17 rather than personal accounts of Madoff and/or his wife Ruth. Account opening

285. Customer Liabilities of House 17 as of December 2002- In order to determine customer liabilities, FTI calculated which customers had contributed more cash to House 17 than they withdrew. These amounts for all of these customers were aggregated on a given day to derive the total customer liability as of that date. As of October 31, 2002 and December 31, 2002 the customer liability was \$11.9 billion and \$12.0 billion, respectively.²²⁹
286. FTI determined the principal balance of a customer by crediting the amount of cash deposited from the inception of the customer account and subtracting the amount of cash withdrawn from a customer account through the date of determination.²³⁰ In addition to accounting for the cash-in and cash-out transactions, FTI also accounted for the direct transfer and withdrawal of real securities that were either deposited or withdrawn by customers from their accounts. By focusing on cash (or securities) deposited or withdrawn from a customer's account, the method excluded the following:
- Any purported earnings/gains from trading activity reflected in the account holders' account statements;²³¹
 - Any interest earned on cash balances from customer deposits in House 17's 703 Account; and
 - Any transfers of Other People's Money between accounts (i.e., transfers to an account for which the transferor account did not have sufficient principal at the time of the transfer).
287. In order to assess the accuracy of FTI's calculation of the principal balance of a customer a review of the full customer liabilities was undertaken for purposes of inclusion in a solvency analysis. Access was provided to information including numerous data bases including information derived from customer statements (or alternative sources if necessary) and other

documentation that would indicate whether the account was a business or personal account was not available. However, to view the facts in the light most favorable to the determination of solvency, we have included the value of those accounts in the analysis.

²²⁹ Net Loser Amounts by Account - 09302011.xlsx. MOTTAA00000922

²³⁰ *Id.* In certain circumstances customers deposited securities into their accounts. For purposes of calculating the customer liability, the customer's account was credited with a principal deposit at the time that the securities were liquidated.

²³¹ Any adjustment for the time value of money is also excluded from the calculation. To the extent that some form of investment return or time value of money was deemed appropriate, the customer liability would increase, which would have the effect of further deepening BLMIS's insolvency.

information which isolated the cash transactions that allowed for the calculation of customer liabilities described above. Additional testing for completeness and accuracy of the information was conducted by comparing the information in the databases to source documents as well as the replication of queries that were used to extract relevant information from the data bases.²³² Finally, a recalculation of customer liabilities was completed. As a result of testing the majority of the tables provided it was determined for purposes of the solvency analysis contained herein, that the customer liabilities was materially accurate and reliable for purposes of use in the solvency analysis.

288. Valuation of House 5 as of December 11, 2002 - To determine the value of House 5, a business valuation was performed as described below. Due to the situation at hand, the lack of transparent financial information, with limited access to detailed underlying support, was a limiting factor in conducting the business valuation. In order to conduct the analysis in the light generally most favorable to the solvency of BLMIS, where transparency was lacking, a judgment was made to generally err in favor of adjustments that supported a higher value of House 5.

a. House 5 Financial Background

289. House 5 operated as a securities broker-dealer registered with the SEC. It provided executions for broker-dealers, banks, and financial institutions, and was a member of the National Association of Securities Dealers, Inc.
290. In order to properly understand the financial condition of House 5, its financial statements covering two decades as well as numerous industry and equity analyst reports were analyzed and relied upon. For purposes of this Report, all financial information is presented for the year ending (“y/e”) December 31 (unless otherwise noted) and based on Adjusted FOCUS report data (*see* definition of “Adjusted” in Appendix C). The following table shows summary financial data for the periods prior to the valuation date.

²³² The customer statements were retrieved from Microfilm and electronic (StorQM) records retained by BLMIS. These records were compiled electronically by the Trustee’s consultants. Bank records were obtained directly from the banks or retrieved from BLMIS files for the period December 1998 to December 2008 and compiled electronically as well. These electronic data bases were tested and validated at the 98% confidence level with a variation of only 2%, the data was determined to be accurate and reliable in all material respects.

Table 11
Adjusted FOCUS Report Historical Financials²³³

House 5 – Adjusted Financials	<u>y/e 2000</u>	<u>y/e 2001</u>	<u>y/e 2002</u>
		(\$ in millions)	
Total Revenue	134.2	96.7	45.5
Commissions and clearance paid to all other brokers	30.6	13.8	4.8
Clearance paid to non-brokers	4.1	2.6	2.9
Communications	8.6	5.6	6.8
Occupancy and equipment costs	2.9	3.3	3.9
Adjustment for advisor occupancy	-.5	-.6	-.7
Promotional costs	.2	.1	.1
Data processing costs	.6	.8	.7
Regulatory fees and expenses	6.5	4.4	4.8
Other expenses	69.2	39.2	31.8
Total Operating Expenses before Compensation	122.0	69.2	55.1
Pre-Comp Operating Income	12.2	27.5	-9.6
Clerical and administrative employees' expenses	45.8	52.3	23.1
Adjustment to market participant headcount reduction	-6.9	-7.8	-3.5
Operating Income (EBIT)	-26.7	-16.9	-29.2
Interest expense	.5	.0	.0
Income before income taxes (EBT)	-27.2	-16.9	-29.3
Tax Expense @ 40%	-10.9	-6.8	-11.7
After Tax Income (Loss)	-16.3	-10.2	-17.6

iv. Selected Valuation Approaches

291. The Income Approach and Market Approach were selected to estimate the Fair Market Value of House 5, as explained below. For the Income Approach the discounted cash flow

²³³ Since the valuation conclusion in this report is based on the premise of value that House 5 is a going concern, any evidence to the contrary would have a significant negative impact on the valuation.

(“DCF”) method was considered. For the Market Approach, the Guideline Company and Comparable Transaction Methods were considered.

a. Income Approach

292. The most common and generally accepted method within the Income Approach is the DCF method. A DCF model is typically developed based on estimates of future revenues, overall operating costs, working capital requirements and capital expenditures, among other things. For House 5, projected financial information (“PFI”) was derived based on a review and analysis of House 5’s historical operating and financial performance, as well as a comparison to other industry participants. After conducting additional analysis, PFI was estimated for the calendar years ending December 31, 2003 through 2007 (the “Projection Period”).
293. As of the Valuation Date, House 5 was operating sub-optimally with less leverage and more non-restricted cash than its peers. Specifically, the calculated Leverage Ratio for House 5 as of the Valuation Date was 1.55, while the weighted average Leverage Ratio of the Concluded Guideline Companies was 3.17.²³⁴ Additionally, House 5 held \$107 million of non-restricted cash, for a Cash Ratio of 27 percent, compared to eight percent for the Concluded Guideline Companies as of the Valuation Date.²³⁵ House 5’s financial performance was adjusted to reflect a higher Leverage Ratio and lower Cash Ratio, which had the effect of increasing the valuation. By relevering the business, the resulting value derived is significantly increased. The predicate assumption for re-levering is based on the assumption that the business would be able to borrow more money to invest in the business. Accordingly, if the fraud and/or Ponzi was known at that time, the ability to borrow additional funds for House 5 would have been severely negatively impacted. *See* Appendix C for further detail.
294. Pro forma year end 2002 financial statements were derived by estimating income and expense based on historical information adjusted for the recapitalization describe above and in greater detail in Appendix C. PFI for the projection period was estimated by extrapolating growth in revenue and expenses over the Projection Period. Below is a table of projected income and expenses for the period from 2003-2007.²³⁶

²³⁴ The ratio of total assets to total liabilities. See page 8 of Appendix C.

²³⁵ The ratio of non restricted cash to total assets. See page 8 of Appendix C.

²³⁶ *See* Appendix C for assumptions related to this projection.

Table 12

Financial Metrics	2003	2004	2005	2006	2007
			(\$ in millions)		
Pre-Comp Operating Income	\$58.5	\$61.7	\$64.8	\$68.3	\$72.0
Comp Expense	19.4	20.5	21.5	22.7	23.9
Adjustment	-2.9	-3.1	-3.2	-3.4	-3.6
Net Compensation	16.5	17.4	18.3	19.3	20.3
EBIT	\$42.0	\$44.3	\$46.5	\$49.0	\$51.7

295. The estimated Fair Market Value of House 5 was then calculated as the sum of the present value of the projected Free Cash Flows and the present value of the terminal value. The Fair Market Value of House 5 on a marketable, controlling interest basis was estimated to be **\$460 million** using the Income Approach and is predicated on the caveats detailed *supra* in paragraphs 267 and 268. (See Appendix C for a detailed discussion of the valuation including assumptions used and limiting conditions).

b. Guideline Company Method

296. A series of selection criteria were applied to publicly traded companies to derive a group of comparable companies most similar to House 5 (see Appendix C for a discussion of specific selection criteria).

297. Once the Concluded Guideline Company set was established, trading multiples of the comparable companies were computed to be uses to estimate the value of House 5. First, EV was calculated on a marketable, controlling interest basis, reflecting a control premium. The EV for each company was calculated as the product of the closing stock price as of the day prior to the Valuation Date and the number of shares outstanding from most recent quarterly report as of the Valuation Date, plus a control premium of 40 percent.²³⁷ Then multiples of EV to Book Value (“BV”), Revenue, and Cash Earnings were then calculated for the selected

²³⁷ The control premium of 40 percent is based on the mean and median Mergerstat control premium study during the three years preceding the Valuation Date. 2002 Mergerstat Yearbook Industry Premiums.

comparable companies. The results from the comparable companies were then applied to House 5 to estimate value. See Appendix C for further detail.

298. Based on the Guideline Company Method as described above, the indicated Fair Market Value of House 5 on a marketable, controlling interest basis was \$420 million as of the Valuation Date and is predicated on the caveats detailed *supra* in paragraphs 267 and 268. This concluded value is based on the average of the range of results indicated by application of the BV, Cash Earnings and Revenue multiples as calculated using the Concluded Guideline Companies' valuations and financial metrics as described above and in Appendix C.

c. Comparable Transaction

299. To identify comparable transactions, merger transactions were screened in the relevant industry group or met keyword criteria that occurred in the two years prior to the valuation date. These criteria identified 13 potentially similar transactions; however, in each case the resulting company was too dissimilar to House 5 to make a reliable comparison for purposes of estimating value. As a result, the Comparable Transaction Method was not directly relied upon as a value indicator and was instead used primarily to corroborate the results of the Income Approach.
300. Based on the above analyses, the Fair Market Value of 100 percent of the equity of House 5, on a marketable, controlling interest basis, was estimated at \$450 million, as of the Valuation Date. The following table summarizes these findings:

Table 13

<u>Valuation Approach</u>	<u>Indicated Fair Market Value</u>
	(\$ millions)
Income Approach	\$460
Guideline Company Approach	\$420
Concluded Fair Market Value (rounded)	\$450

Note: Since the valuation conclusion in this report is based on the premise of value that House 5 is a going concern, any evidence to the contrary would have a significant negative impact on the valuation.

301. Accordingly, the solvency of BLMIS as of December 11, 2002 was computed as follows:

	<u>(in \$ billions)</u>
FMV of House 5	\$0.45
PLUS: House 17 Cash Balances	\$1.50
LESS: <u>Customer Liabilities</u>	<u>\$11.90</u>
INSOLVENT	(\$9.95)

302. The resulting negative \$9.95 billion demonstrates that BLMIS was deeply insolvent as of December 11, 2002.²³⁸ As a result of failing the Balance Sheet Test, it was determined that an analysis of BLMIS's capital adequacy or ability to pay debts was unnecessary since it is inconceivable that the business could pay its debts or operate based on the depth of its insolvency. Further, as a result of the growing customer liability from approximately \$12 billion in December 2002 to approximately \$19.7 billion on December 11, 2008, it is my opinion the BLMIS was insolvent at all times after December 11, 2002 as well.

303. It is my opinion, that even if you ascribed any additional value to the individual assets of Bernie and Ruth Madoff, or MSIL as of December 2002 through anytime up to December 2008, the significantly deep level of insolvency for BLMIS would not be affected in an amount anywhere closely sufficient to render BLMIS solvent.

v. The evidence shows that House 17 was a Ponzi scheme.

304. The investigation as detailed above shows that House 17 was a Ponzi scheme based on the fact that:

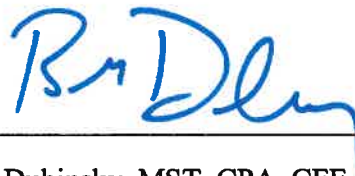
- There was no legitimate income producing activities and limited outside financial support—as a result all redemptions and payments to customers was facilitated using Other People's Money;

²³⁸ For purposes of the analysis the information provided by counsel regarding the assets of Bernie and Ruth Madoff (including real properties, investments, etc.) were considered (for example Bernie and Ruth's personal bank accounts had a balance of \$24.8 million on December 11, 2002). An estimate of value of MSIL was also considered, which, based on a multiple of 1.5 (rounded) times book value is \$68.4 million. There could also be potential other creditor liabilities that may also have a negative impact on solvency. To the best of my knowledge I am unaware of any asset amounts that would change the conclusion of insolvency of BLMIS. These assets were not formally included in the analysis.

- Greater inflows of cash from investors, including institutional feeder funds, were required to satisfy increasing outflows from a smaller group of customers; and
- House 17 was insolvent.

VII. BASES FOR THE OPINIONS IN MY REPORT

305. I base my opinions below on my formal education and over twenty eight years of practical experience as a C.P.A. and an expert in forensic accounting, fraud examinations, computer forensics, accounting, taxation, business valuations, bankruptcy accounting and investment advisory services. Additionally, my opinions and the bases for them are based in part on my knowledge of Generally Accepted Accounting Principles, industry accepted accounting practices, fraud examination theory, forensic accounting theory, commercial damage theory, business valuation theory, the Internal Revenue Code and related taxing authority pronouncements and rulings, investment theory and knowledge, investment advisory knowledge and economic forecasting methodology.
306. I further base my opinions on the documents that were made available to me by the lawyers at Baker. These documents are listed in Appendix B. I understand that these documents have, or will be produced by the parties in this litigation. I reserve the right to supplement and/or amend my opinions contained in this report should additional materials and/or documents become available that require such supplementation.



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January 6, 2011 (submitted with corrections)