

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

SECURITIES INVESTOR PROTECTION
CORPORATION,

Plaintiff-Applicant,

v.

BERNARD L. MADOFF INVESTMENT
SECURITIES LLC,

Defendant.

In re:

BERNARD L. MADOFF,

Debtor.

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

Plaintiff,

v.

J. EZRA MERKIN, GABRIEL CAPITAL, L.P., ARIEL
FUND LTD., ASCOT PARTNERS, L.P., ASCOT
FUND LTD., GABRIEL CAPITAL CORPORATION,

Defendants.

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

SIPA LIQUIDATION

(Substantively Consolidated)

Adv. Pro. No. 09-01182 (SMB)

**DECLARATION OF
BRUCE G. DUBINSKY, MST, CPA, CFE, CVA, CFF, MAFF**

I, Bruce G. Dubinsky, declare, under penalty of perjury, that the foregoing is true and correct:

1. I am a Managing Director in the Disputes & Investigations practice at Duff & Phelps, LLC (“D&P”). My practice at D&P places special emphasis on providing forensic accounting, fraud investigation 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.
2. I was retained by the law firm of Baker & Hostetler LLP (“Baker”), counsel for Irving H. Picard, Trustee (“Trustee”) for the substantively consolidated liquidation of Bernard L. Madoff Investment Securities LLC (“BLMIS”) under the Securities Investor Protection Act (“SIPA”), 15 U.S.C. §§78aaa *et seq.*, and the estate of Bernard L. Madoff (“Madoff”), to provide forensic accounting analyses and render certain expert opinions and conclusions (“the Assignment”). I submit this declaration and the accompanying Expert Report, dated August 20, 2013 (“Expert Report”), in support of the Trustee’s Memorandum of Law in Opposition to Defendants’ Motions for Summary Judgment.
3. Attached hereto as **Exhibit 1** is a true and correct copy of my Expert Report. I hereby incorporate by reference the contents of my Expert Report and all accompanying appendices and exhibits thereto as my sworn testimony as if fully set forth herein.¹
4. The opinions rendered in my Expert Report and the bases thereof are detailed in various sections of my Expert Report, including, but not limited to, ¶¶ 12-34 and Appendix B to my Expert Report, which identify (a) the methodology that I employed and/or supervised in connection with the analyses performed, and (b) the sources of information and data that form the basis of my findings, conclusions and opinions.
5. I earned a Bachelor of Science degree in Accounting from the University of Maryland,

¹ Appendices and exhibits to my Expert Report are available upon request.

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 Master Analyst in Financial Forensics ("MAFF"), all in good standing. I was formerly a Registered Investment Advisor Representative.

6. I have been qualified and have testified as an expert witness in various federal and state courts 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 fraud and forensics training as a CFE, CFF and MAFF.
7. I have also provided testimony on behalf of the United States Department of Justice in the criminal trial of five former BLMIS employees in the case *United States of America v. Daniel Bonventre, Annette Bongiorno, Joann Crupi a/k/a "Jodi," Jerome O'Hara, and George Perez* (Case No. S10 10 Cr. 228 (LTS)). In that trial, I was qualified as an expert in the fields of fraud examination, forensic accounting, and Securities and Exchange Commission ("SEC") fundamentals.
8. A current and accurate copy of my curriculum vitae and Federal Rules of Civil Procedure Rule 26 disclosures are attached hereto as **Exhibit 2**.
9. The opinions and conclusions 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. I relied upon my education, training, and over 32 years of professional

experience in reaching the opinions and conclusions herein, all of which are stated to a reasonable degree of accounting certainty.

10. As litigation service engagements performed by CPAs 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, I adhered to the applicable standards of those governing organizations in the performance of my work in this matter, and in the rendering of these opinions.

Pursuant to 28 U.S.C. §1746, I declare under penalty of perjury under the laws of the United States of America, to the best of my knowledge that the foregoing is true and correct.

Dated: November 24, 2015
New York, New York



Bruce G. Dubinsky, MST, CPA, CFE, CVA, CFF, MAFF

EXHIBIT 1

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

SECURITIES INVESTOR PROTECTION
CORPORATION,

Plaintiff-Applicant,

v.

BERNARD L. MADOFF INVESTMENT
SECURITIES LLC,

Defendant.

In re:

BERNARD L. MADOFF,

Debtor.

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

SIPA LIQUIDATION

(Substantively Consolidated)

EXPERT REPORT OF BRUCE G. DUBINSKY
MST, CPA, CFE, CVA, CFF, MAFF

TABLE OF CONTENTS

I. THE ASSIGNMENT	8
II. EXPERT BACKGROUND AND QUALIFICATIONS	8
III. SUMMARY OF ASSIGNMENT, SCOPE AND METHODOLOGY.....	10
A. Information Sources	10
B. Conduct of Information Review and Analysis	10
IV. SUMMARY OF OPINIONS	12
OPINION NO. 1: FRAUD PERMEATED BLMIS.....	12
A. The IA Business was a Fraud.....	12
B. The IA Business was a Ponzi Scheme	14
C. The Proprietary Trading Business was engaged in pervasive fraudulent activity	15
OPINION NO. 2: BLMIS WAS INSOLVENT FROM AT LEAST DECEMBER 11, 2002 ...	15
OPINION NO. 3: MSIL WAS USED TO FACILITATE THE TRANSFER OF FUNDS OUT OF THE IA BUSINESS.....	16
V. FACTUAL BACKGROUND.....	16
A. BLMIS.....	16
1. The IA Business	17
2. The Proprietary Trading Business.....	18
B. MSIL	19
C. Key Individuals	19
1. Bernard L. Madoff.....	19
2. Peter Madoff.....	20
3. Mark Madoff.....	20
4. Andrew Madoff.....	21
5. Shana Madoff	21
6. Frank DiPascali	21
7. David Kugel	22
8. Craig Kugel	23
9. Annette Bongiorno	23
10. Daniel Bonventre.....	24
11. Enrica Cotellessa-Pitz	24
12. Irwin Lipkin.....	25
13. Eric Lipkin.....	25

14. Joann “Jodi” Crupi	26
15. Jerry O’Hara and George Perez	26
16. Friehling and Horowitz	27
D. Bank Accounts	27
E. Computer Systems Overview	27
VI. OPINION NO. 1: FRAUD PERMEATED BLMIS	32
A. THE IA BUSINESS WAS A FRAUD	32
1. Fictitious Trading in the IA Business - There is no evidence that the purported investment transactions for IA Business customers ever occurred at least as far back as the 1970s. In fact, the evidence shows the trading did not occur.	32
a. The Purported Convertible Arbitrage Strategy – the 1970s to the 1990s: There is no evidence that the purported convertible arbitrage strategy for IA Business customers actually occurred. In fact, the evidence proves that the purported trades did not occur.	32
(i) Convertible arbitrage strategy - IA Business Customers	33
(ii) Purported convertible security trades exceeded the entire reported market volume for certain days.	35
(iii) Purported purchase prices of convertible securities on customer ledgers did not represent market prices.	38
(iv) Convertible securities were purportedly traded by the IA Business even after they were called for conversion.	40
(v) The IA Business did not account for dividend payments or accrued interest on the convertible securities thereby evidencing the fictitious nature of the underlying transactions.	40
(vi) There is no evidence that the IA Business converted the convertible securities into common shares.	41
(vii) Fictitious Convertible Arbitrage Trade Confirmations	46
b. Following the 1992 SEC investigation of A&B, BLMIS transitioned from convertible arbitrage to the split-strike conversion strategy.	51
c. The Split-Strike Conversion Strategy - the 1990s and later: There is no evidence that a split-strike conversion strategy for the IA Business customers ever occurred. In fact, the evidence shows that these transactions were fictitious.	56
(i) Purported equity and option trades exceeded the entire reported market volume for certain days.	58

(ii)	Hundreds of thousands of purported IA Business trades, affecting over 5,500 accounts, were priced outside the trading day’s price range evidencing that they could not have been executed.....	58
(iii)	The IA Business purportedly bought low 83 percent of the time and sold high 72 percent of the time (VWAP Trades) evidencing the fictitious nature of the trades.	60
(iv)	Thousands of purported transactions, affecting over 3,700 accounts, were reported by the IA Business as having settled on weekends or holidays when the exchanges are closed.	61
(v)	Thousands of purported IA Business 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.....	62
(vi)	The rate of return on the purported IA Business investments in the SSC strategy reflected an abnormally high level of consistently positive yearly returns when compared with relevant market indices.	63
d.	Non-convertible arbitrage strategy and non-SSC strategy customer accounts - evidence shows that these transactions were fictitious.	65
e.	There are no records from the DTC evidencing any legitimate trades occurring from the IA Business.....	65
(i)	There is no evidence that IA Business customer equity trades were executed through the Proprietary Trading Business.....	67
(ii)	There is no evidence that IA Business customer equity trades were executed through MSIL.....	69
(iii)	There is no evidence that purported IA Business customer US Treasuries were ever executed.	70
(iv)	Fake DTC Screen Reports created by the IA Business.....	71
(v)	Reconciliation of Proprietary Trading Business options trades to OCC.....	76
f.	Approximately \$4.3 billion of dividends reported on IA Business customer statements were fictitious and were never received by BLMIS.....	78
g.	The IA Business was “Schtupping” certain customer returns.....	82
h.	The IA Business computer system was used to facilitate the fictitious trading activity and to print trading documentation and customer statements.	89

i.	The underlying computer code generated and utilized by the IA Business was developed and modified over the years.....	91
(i)	Underlying computer code in the IA Business produced a random order generator to support fictitious trades on customer statements.	93
j.	Various statements and reports that the IA Business prepared were false.....	97
(i)	Customer statements contained fictitious trades that were backdated.	97
(ii)	The financial and regulatory statements produced by BLMIS were false and misrepresented the firm’s true financial state of affairs.	103
a.)	Registration statement Form ADV filed with the SEC was false and was not timely.....	103
b.)	FOCUS reports and the Annual Audited Reports were false and misrepresented the true state of BLMIS.....	104
c.)	F&H was not an independent auditor as required by the AICPA and other regulatory bodies.....	108
d.)	F&H Audit Template Opinions Found at BLMIS	109
B.	THE IA BUSINESS WAS A PONZI SCHEME.....	111
1.	Indicia of Ponzi Scheme.....	111
a.	Definition of Ponzi Scheme	111
b.	Background on Ponzi Schemes	111
2.	There was no legitimate trading or investment activity and, therefore, no profits from the IA Business.....	112
a.	No trading occurred in the IA Business and redemptions were made using IA Business Customer Money.....	113
b.	No legitimate income-producing business activities were identified.....	114
c.	Dividends that were purported to have been distributed to the IA Business customers were paid with IA Business Customer Money.....	115
d.	Apart from the liquidity crisis and December 2008, no financial support vis-à-vis any profits from the Proprietary Trading Business was evidenced.....	115
e.	The 703 Account dealt almost entirely with customer deposits and redemptions.	116
f.	The IA Business was dependent on increasing cash inflows and promised consistent returns to customers.	119

C.	THE PROPRIETARY TRADING BUSINESS WAS ENGAGED IN PERVASIVE FRAUDULENT ACTIVITY	121
1.	The Proprietary Trading Business Was Not a Going Concern	121
a.	Lack of profitability in the Proprietary Trading Business.....	122
(i)	The BLMIS financial statements were false and misleading.....	122
(ii)	Cash infusions of IA Business Customer Money from the IA Business	122
a.)	The cash infusions from the IA Business were recorded as fictitious trades in three main Proprietary Trading Business trading accounts.....	123
b.)	The fictitious trades in the Proprietary Trading Business trading systems were entered manually as adjustments	125
(iii)	Cash transfers from the IA Business brokerage accounts	134
(iv)	Cash transfers from MSIL.....	142
(v)	On its own, the Proprietary Trading Business could not sustain profits beginning in 2002.....	149
a.)	The Proprietary Trading Business no longer had positive cash beginning in 2000.....	150
b.)	The Proprietary Trading Business was in a negative net capital position beginning in 2004.....	151
c.)	BLMIS improperly compensated several non-BLMIS employees	152
VII.	OPINION NO. 2: BLMIS WAS INSOLVENT FROM AT LEAST DECEMBER 11, 2002....	153
A.	Balance Sheet Test	154
1.	Underlying Methodology Standard and Premise	154
2.	Application of Balance Sheet Test	157
a.	Analyzing the Assets of BLMIS	157
b.	Analyzing the Liabilities of BLMIS.....	158
3.	BLMIS fails the Balance Sheet Test	161
B.	Capital Adequacy Test	164
C.	Ability to Pay Debts Test	165
VIII.	OPINION NO. 3: MSIL WAS USED TO FACILITATE THE TRANSFER OF FUNDS OUT OF THE IA BUSINESS.....	165
A.	MSIL was part of the process of moving cash from the IA Business to the Proprietary Trading Business	165

B. MSIL's capital base was dependent on capital infusions from the IA Business..... 167

IX. BASES FOR THE OPINIONS IN MY REPORT 168

APPENDICES..... 169

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 Securities Investor Protection Act (“SIPA”) liquidation of Bernard L. Madoff Investment Securities LLC (“BLMIS”) and Bernard L. Madoff (“Madoff”), to provide forensic accounting analyses and render certain expert opinions and conclusions (“the Assignment”). In this report, I render opinions related to:

- Whether fraud permeated BLMIS, which included an investment advisory business (hereinafter referred to as the “IA Business”) as well as a market making and proprietary trading business (hereinafter referred to as the “Proprietary Trading Business”);
- Whether BLMIS was solvent as of December 11, 2002, and thereafter; and
- Whether Madoff Securities International Limited (hereinafter referred to as “MSIL”) was used to facilitate the transfer of funds out of the IA Business.

II. EXPERT BACKGROUND AND QUALIFICATIONS

2. I am a Managing Director in the Dispute Consulting practice at Duff & Phelps, LLC (“D&P”) 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, fraud investigation 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 Master Analyst in Financial Forensics (“MAFF”), all in good standing. I was formerly a Registered Investment Advisor Representative.
4. I have been qualified and have testified as an expert witness in various federal and state courts 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 fraud and forensics training as a CFE, CFF and MAFF.

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;¹
 - Lehman Brothers Bankruptcy;²
 - Washington Teachers Union fraud;³ 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 opinions and conclusions 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. I relied upon my education, training and over 30 years of professional experience in reaching the opinions and conclusions herein, all of which are stated to a reasonable degree of accounting certainty.
8. As litigation service engagements performed by CPAs 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, I adhered to the applicable standards of those

¹ *United States v. Int’l Bhd. of Teamsters*, 725 F. Supp. 162 (LAP) (S.D.N.Y. 1989).

² *In re Lehman Brothers Holdings, Inc.*, No. 08-13555, 2008 WL 4902179 (JMP) (Bankr. S.D.N.Y. Nov. 5, 2008).

³ *United States v. Hemphill*, 514 F.3d 1350 (D.C. Cir. 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. 2007); *Wolff v. United States (In re Firstpay, Inc.)*, No. 03 30102, 2006 WL 2959342 (PM) (Bankr. D.Md. Aug. 17, 2006).

governing organizations in the performance of my work in this matter, and in the rendering of these opinions.

9. 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 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.⁵
11. I am being compensated for my work in this matter at the rate of \$775.00 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. A complete listing of the materials considered in forming my opinions and conclusions rendered in this report is attached hereto as Appendix "B."⁶

B. Conduct of Information Review and Analysis⁷

13. The work I conducted in connection with the Assignment was planned, supervised and staffed in accordance with applicable professional standards. The work included, but was not limited to:
 - Review and analysis of customer statements, trade confirmations and other related documentation for the IA Business's customers dating back to the 1970s;

⁵ *Code of Ethics*, ACFE, <http://www.acfe.com/code-of-ethics.aspx> (last visited Nov. 21, 2011). Independent interviews of former BLMIS employees were not possible because there are parallel, ongoing criminal investigations and indictments pending in actions related to this matter, and several former BLMIS employees have pled guilty and/or are cooperating with the Federal authorities.

⁶ Access to documentation from the Trustee's counsel was not limited in any manner, and D&P was allowed to search for information and documentation that both supported the opinions contained herein, as well as any countervailing evidence, if any.

⁷ The time period in question spans nearly 50 years (1960-2008) and as a result certain records were not available. Nonetheless, the opinions contained herein are supported by available documentation dating back to the 1970s, and where historical documentation was no longer available, alternate sources were used.

- Review and analysis of certain purported trading activity for the IA Business's customers dating back to the 1970s;
 - Review and analysis of various bank accounts of BLMIS and Madoff;
 - Review and analysis of the Proprietary Trading Business, including, but not limited to its overall profitability;
 - Review and analysis of certain employment and compensation records for the IA Business and the Proprietary Trading Business;
 - Restoration, reconstruction, review and analysis of major portions of the IBM Application System 400 ("AS/400") computer systems utilized by the IA Business and the Proprietary Trading Business;⁸
 - Restoration, reconstruction, review and analysis of portions of the Proprietary Trading Business's computerized trading systems;
 - Review and analysis of certain third-party information regarding BLMIS's purported trading activity;
 - Review and analysis of accounting records;
 - Review and analysis of BLMIS communications (*e.g.*, emails);
 - Review and analysis of certain vendor files and invoices;
 - Computer forensic analysis of electronic media; and
 - Review of deposition transcripts and other sworn testimony.
14. FTI Consulting, Inc. ("FTI"), retained 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 independently tested by D&P to ensure reliability.⁹

⁸ See *infra* (describing the BLMIS computer systems).

⁹ By way of example, D&P conducted statistical sampling 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).

15. 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.

IV. SUMMARY OF OPINIONS

16. 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 herein.
17. Based on my training, education and experience, and the results of my investigation of BLMIS (described in detail throughout this report), I have concluded that:
- Fraud permeated BLMIS;¹⁰
 - BLMIS was insolvent from at least December 11, 2002 and all points after;¹¹ and
 - MSIL was used to facilitate the transfer of funds out of the IA Business.

OPINION NO. 1: FRAUD PERMEATED BLMIS

A. The IA Business was a Fraud

18. There is no evidence that the purported investment transactions for IA Business customers ever occurred at least as far back as the 1970s. Reconciliations of: i) IA Business equity and US Treasury positions to available BLMIS Depository Trust & Clearing (“DTC”) records, and ii) option trades to available Options Clearing Corporation (“OCC”) records, indicate that no securities transactions were executed by the IA Business.¹²

¹⁰ I am using the plain English meaning of the term “fraud” (and its derivative, “fraudulent”) to mean “intentional perversion of the truth in order to induce another to part with something of value or to surrender a legal right.” *Fraud Definition*, Merriam-Webster.com, <http://www.merriam-webster.com/dictionary/fraud> (last visited Sept. 20, 2012).

¹¹ December 11, 2002 was a date selected by the Trustee’s counsel for the six-year period prior to the BLMIS SIPA liquidation proceeding. As will be described *infra*, there is strong evidence to suggest that BLMIS was insolvent even decades before December 2002.

¹² See *infra* (discussing David Kugel’s plea allocution where he stated that there was no legitimate trading in the IA Business as far back as the 1970s); see also Tr. of Plea Allocution, *United States v. Kugel*, 10-CR-228 (S.D.N.Y. Nov. 21, 2011).

19. There was no trading using the so-called “convertible arbitrage trading strategy” purportedly implemented by BLMIS in the 1970s. In many instances, purported trades exceeded the entire reported market volume for particular securities on the days they were purportedly traded. On numerous trading days, trades were recorded at prices that were outside the range of market reported trading prices on a given day.
20. Convertible securities were reported by the IA Business 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. Further, dividend payments and/or accrued interest were not reported by the IA Business on many customer statements even though the real convertible securities paid such dividends and/or interest. 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. Similarly, no trading occurred under the so-called “split-strike conversion” (“SSC”) strategy, purportedly put into place by BLMIS in the 1990s. Many purported trades exceeded the entire reported market volume for particular securities on numerous trading days and were recorded at prices that were outside the range of reported trading prices on the days at issue.
22. The prices at which the IA Business supposedly bought and sold shares also evidenced the fictitious nature of the trades. The IA Business purportedly executed 83% of the buy transactions by share volume below the Volume Weighted Average Price (“VWAP”) and executed 72% of the sell transactions by share volume above the VWAP.
23. Further evidence that trading did not occur is that certain purported trades were recorded as being settled on weekends or holidays when the U.S. stock and option exchanges were closed. Many trades were also supposedly settled after the industry mandated time period of T+1 (for options) or T+3 (for equities).¹³ In addition, billions of dollars of purported dividends that were reported on IA Business customer statements were fictitious and were never received by BLMIS, again showing the fictitious nature of the trades.
24. A small, limited group of IA Business customer accounts did not follow either the purported convertible arbitrage strategy or the SSC strategy. Instead, securities (typically equities) were

¹³ As described *infra*, the industry requirement for the settlement of options is one day after the trade date, or T+1, and the industry requirement for the settlement of equity transactions is three days after the trade date, or T+3.

purportedly purchased, held for a certain duration, and then purportedly sold for a profit.

Trading anomalies reflected in these customer accounts also show how these purported trades could not have been executed and were therefore fictitious.

25. Other evidence of fraud in the IA Business was the creation of fake reports from the DTC trading clearinghouse. IA Business customer statements contained fictitious trades that were backdated using special software modified in-house to reprint customer statements after the fact. Extensive in-house computer programs were created and used to generate the fictitious investment transactions.
26. The IA Business was propping up, or “schtupping,”¹⁴ certain IA Business customers’ purported investment returns by providing those customers with extra fictitious trades that were intended to generate additional fictitious gains. This was done in order to reach predetermined rate of return thresholds. The process involved a careful monitoring of certain accounts to attain levels of reported investment returns throughout the year. Those accounts 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 Madoff had targeted for those customers.
27. Additionally, various regulatory reports reflected false financial and other information.

B. The IA Business was a Ponzi Scheme

28. The IA Business was a Ponzi scheme, utilizing new customer monies to fund BLMIS’s 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 evidenced by the fact that the IA Business was not generating any legitimate profits since no trading activity was taking place. Additionally, the IA Business was not receiving legitimate financial support from the Proprietary Trading Business in amounts sufficient to satisfy the cash requirement needs of the IA Business customer withdrawals. Nor was the IA Business receiving any legitimate outside financial support vis-à-vis loans or otherwise.

¹⁴ See *infra* (discussing the context surrounding the “schtupping” of certain IA Business customer returns).

C. The Proprietary Trading Business was engaged in pervasive fraudulent activity

29. The Proprietary Trading Business was also engaged in pervasive fraudulent activity. The Proprietary Trading Business's trading and other operations were funded from money taken from IA Business customer money. This funding was fraudulently reported as trading revenues and/or commissions on BLMIS's financial statements and other regulatory reports BLMIS filed.
30. The Financial and Operational Combined Uniform Single ("FOCUS") reports and financial statements filed with federal regulators were false, misleading, and grossly inaccurate. In reality, for certain periods, the Proprietary Trading Business was wholly dependent on enormous cash infusions of money derived from the IA Business. These cash infusions were falsely reflected as trading revenues or commissions on BLMIS's financial statements and regulatory reports. Despite what BLMIS represented on the reported financials, the Proprietary Trading Business was incurring significant net losses beginning in at least mid-2002. Without the fraudulent infusion of cash from the IA Business, the Proprietary Trading Business would not have been able to continue as a "going concern" beyond 2002.
31. Further, BLMIS provided salaries and benefits to individuals who did not work for, or provide services to, BLMIS. (*See discussion infra* regarding payments to "ghost employees.")

OPINION NO. 2: BLMIS WAS INSOLVENT FROM AT LEAST DECEMBER 11, 2002

32. The overall solvency of BLMIS was assessed as a part of the investigation. Businesses operating as a Ponzi scheme, such as the IA Business, are hopelessly insolvent by their very nature. A Ponzi scheme, by its design, becomes progressively more insolvent with each new transaction. By utilizing proceeds from later transactions to repay obligations of earlier transactions, the Ponzi scheme's ability to repay all its debts is entirely contingent on bringing in new funds. The amount of new money needed, which must not only cover the repayment of prior principal but also the promised investment returns or interest, creates a situation where the company's liabilities exceed its assets by an increasingly larger amount. The effect is that the Ponzi scheme's continued existence is dependent on an ever-increasing supply of

new money. Accordingly, a Ponzi scheme (*e.g.*, the IA Business), once initiated is hopelessly insolvent.¹⁵

33. The solvency of a company in a bankruptcy setting is typically determined by applying one of three tests, as will be described in greater detail *infra*: i) the Balance Sheet Test; ii) the Capital Adequacy Test; and iii) the Ability to Pay Debts Test. Under any of these tests, BLMIS was insolvent from at least December 11, 2002. The liabilities of BLMIS far outweighed its assets; BLMIS did not have adequate capital; and BLMIS could not pay its debts as they came due. Accordingly, BLMIS was deeply insolvent from at least December 11, 2002, and for all periods thereafter.

OPINION NO. 3: MSIL WAS USED TO FACILITATE THE TRANSFER OF FUNDS OUT OF THE IA BUSINESS

34. MSIL was wholly dependent on hundreds of millions of dollars in cash infusions from the IA Business to support its operations. Furthermore, hundreds of millions of dollars in cash infusions, which kept the Proprietary Trading Business afloat, were made possible in part through the Proprietary Trading Business's transactions with MSIL. MSIL advanced funds to the Proprietary Trading Business for the purported purchase of US Treasury bills that were recorded in an IA account in its name. MSIL then received distributions for the purported sale of these same US Treasury bills from the IA Business. Through these transactions, the Proprietary Trading Business received hundreds of millions of dollars in fraudulent revenue from the IA Business.

V. FACTUAL BACKGROUND¹⁶

A. BLMIS

35. In 1960, Madoff founded BLMIS as a sole proprietorship. BLMIS, a market making business in Over-the-Counter ("OTC") stocks, was registered as a broker-dealer with the Securities and

¹⁵ *Armstrong v. Collins*, No. 01-CIV-2437, 2010 U.S. Dist. LEXIS 28075, at *64 (S.D.N.Y. Mar. 24, 2010); *Picard v. Madoff (In re Bernard L. Madoff Inv. Sec. LLC)*, 458 B.R. 87, 118 (Bankr. S.D.N.Y. 2011).

¹⁶ My understanding of the factual background is based upon various sources of information including, but not limited to, the pleadings in this case, deposition transcripts and/or testimonial transcripts in connection with the parallel liquidation proceeding in the United Kingdom.

Exchange Commission (“SEC”) as of January 19, 1960¹⁷ and operated three business units: (i) a market making business; (ii) a proprietary trading business (together with the market making business known inside BLMIS as “House 5”); and (iii) an investment advisory business (known inside BLMIS as “House 17”).

36. 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.¹⁸ The Proprietary Trading Business was located on the 18th and 19th floors.¹⁹ Eventually, the IA Business moved from the 18th floor to the 17th floor.²⁰
37. In 2001, BLMIS was reorganized as a single-member LLC with Madoff as the sole member.²¹
38. 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.²²
39. During 2008, the IA Business’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.²³

1. The IA Business

40. The IA Business customer accounts were administered in two groups: (i) the split-strike conversion accounts; and (ii) the non-split-strike conversion accounts (which included the convertible arbitrage accounts).
41. The non-split-strike conversion accounts initially represented a significant portion of overall IA Business accounts, but became a small percentage of the total IA Business accounts in the 1990s. Generally, the non-split-strike conversion accounts were held in the name of BLMIS’s oldest IA Business customers and many of these accounts were overseen by BLMIS employee Annette Bongiorno (“Bongiorno”).

¹⁷ Form BD for Bernard L. Madoff, December 31, 1959 (PUBLIC0003607-PUBLIC0003614).

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

¹⁹ LAZAA0004351-LAZAA0004352.

²⁰ Bernard L. Madoff Lease Summary 885 Third Avenue (CWIE-BR00002468).

²¹ BLMIS Articles of Organization for New York State (MADTSS01160346).

²² BLMIS Form ADV at 8, Aug. 25, 2006 (PUBLIC0003729).

²³ Tr. of Plea Allocation of Bernard L. Madoff, *United States v. Madoff*, No. 09-CR-213 (DC), at 23 (S.D.N.Y. Mar. 12, 2009).

42. A convertible arbitrage trading strategy, as purported to have been executed by the IA Business, aims to generate profits by taking advantage of the pricing mismatches that can occur between the equity and bond/preferred equity markets.
43. The split-strike conversion accounts were overseen by BLMIS employee Frank DiPascali (“DiPascali”).²⁴ This group of accounts purported to employ a strategy which invested in a basket of common stocks within the Standard & Poor’s (“S&P”) 100 Index. These baskets were hedged by call and put options to limit customer gains and losses. Madoff would purportedly decide when to unwind positions upon which the stocks were sold, and the investments were moved into US Treasuries and/or money market funds and cash reserves.
44. 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,”²⁵ as discussed herein, the IA Business neither provided its customers with electronic customer statements nor provided real-time access to their individual IA Business accounts at BLMIS.

2. The Proprietary Trading Business

45. The Proprietary Trading Business operated as a securities broker-dealer registered with the SEC and was managed by the Co-Directors of Trading, Mark Madoff and Andrew Madoff.²⁶ It provided executions for broker-dealers, banks, and financial institutions, and was a member of the Financial Industry Regulatory Authority (“FINRA”) (formerly the National Association of Securities Dealers (“NASD”)).²⁷ The business was a market maker primarily in S&P 500 stocks, US convertible bonds, preferred stocks, warrants, units and rights.²⁸ The business also

²⁴ See generally DiPascali Plea Allocation, *United States v. Frank DiPascali*, No. 09-CR-764 (RJS) (S.D.N.Y. Aug. 11, 2009); DiPascali Information, *United States v. Frank DiPascali*, No. 09-CR-764 (RJS) (S.D.N.Y. Aug. 11, 2009).

²⁵ BLMIS web archive, (Oct. 23, 2005), <http://web.archive.org/web/20051023123110/http://www.madoff.com/dis/display.asp?id=20> (accessed by searching for Madoff.com in the Internet Archive index).

²⁶ See Complaint, *Picard v. Madoff*, No. 08-01789 (BRL), at 10-11 (S.D.N.Y. Oct. 2, 2009).

²⁷ *Brokercheck Report for Bernard L. Madoff Investment Securities LLC*, FINRA, 6-7, <http://brokercheck.finra.org/Search/SearchResults.aspx?SearchGroup=Firm&InclText=&FirmText=Bernard+Madoff+Investment+Securities&PageNumber=1> (last visited July 16, 2012).

²⁸ *Madoff Securities: Quality Executions and Service Through Innovative Technology*, BLMIS (Feb. 15, 1998), http://web.archive.org/web/19980215105508/http://www.madoff.com/public.asp?info_id=9 (accessed by searching for Madoff.com in the Internet Archive index).

engaged in proprietary trading through various strategies, such as arbitrage.²⁹ The Proprietary Trading Business's reported revenues included fraudulent cash infusions directly from the IA Business, as well as from the IA Business via MSIL.

B. MSIL

46. In February 1983, BLMIS established its foreign operations with the registration of Madoff Holdings Limited in London and worked out of 12 Berkeley Street.³⁰ In September 1988, Madoff Holdings Limited began operating as Madoff Securities International Limited (MSIL).³¹ MSIL was established primarily as a market maker until 2002 when it began to focus largely on its proprietary trading.³² MSIL operated under the Financial Services Authority (and its predecessors) in the United Kingdom³³ and became one of the first U.S. members of the London Stock Exchange.³⁴ As of December 31, 2007, MSIL employed approximately 25 people.³⁵

C. Key Individuals

1. Bernard L. Madoff

47. Madoff was the principal of BLMIS and oversaw both the IA Business and the Proprietary Trading Business.³⁶ On December 11, 2008, he was arrested for securities fraud and related charges.³⁷ On March 12, 2009, Madoff pled guilty to 11 counts of an indictment including

²⁹ BLMIS Written Plan of Organization (MESTAAAX00096671).

³⁰ See Madoff Holdings Ltd. incorporation documents (PUBLIC0006083).

³¹ "Special Resolution" indicating that Madoff Holdings Ltd. changed its name to Madoff Securities International Limited (PUBLIC0008959).

³² Madoff Securities International Limited Internal Capital Adequacy Assessment Process High Level Summary (AWOO-BR00016097).

³³ See MSIL Financial Statement and Directors Report (PUBLIC0005755 at PUBLIC0005757).

³⁴ BLMIS web archive, (Oct. 23, 2005),

<http://web.archive.org/web/20051023123110/http://www.madoff.com/dis/display.asp?id=20> (accessed by searching for Madoff.com in the Internet Archive index).

³⁵ See MSIL Financial Statement and Directors Report (PUBLIC0005785 at PUBLIC0005798).

³⁶ BLMIS Form ADV at 23, Aug. 25, 2006 (PUBLIC0003729).

³⁷ *United States v. Madoff*, 586 F. Supp. 2d 240, 244 (S.D.N.Y. 2009).

federal securities fraud and related offenses.³⁸ On June 29, 2009, Judge Denny Chin sentenced Madoff to the maximum of 150 years in federal prison.³⁹

2. Peter Madoff

48. Peter Madoff, Madoff's brother, started at BLMIS in 1965. He served as the company's Senior Managing Director and Chief Compliance Officer until its collapse in December 2008. Peter was a licensed investment professional and served as Director of the Securities Industry Financial Markets Association ("SIFMA"), as well as Vice Chairman of FINRA's Board of Governors.⁴⁰
49. In June 2012, Peter Madoff pled guilty to charges of conspiracy and falsifying records in relation to his employment at BLMIS. He is awaiting sentencing.⁴¹

3. Mark Madoff

50. Mark Madoff, Madoff's son, joined BLMIS in 1986 after graduating from college. Mark held the job titles Co-Director of Trading at BLMIS and Controller and Director at MSIL. He acquired the Series 7, 24 and 55 FINRA licenses and at one point, managed both the proprietary trading desk and market making operations. Mark Madoff served many industry roles such as the Chairman of the FINRA Inter-Market Committee, Governor of the Securities Traders Association ("STA") and Co-Chair of the STA Trading Committee, among others.⁴²

³⁸ Madoff Plea Allocation, *United States v. Madoff*, 09-CR-213, at 7-8 (S.D.N.Y. Mar. 12, 2009).

³⁹ *Id.* at 49. In his plea allocation, 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 IA Business customers. *Id.* at 24, 29. While I have considered information contained in Madoff's Plea Allocation, my opinions are in no way predicated or based upon information contained therein, and as set forth herein, my investigation contradicts the length and duration of the fraud at BLMIS. David Kugel also pled guilty in this matter and has admitted that the fraud started in the early 1970s in the IA Business and that no trading activity actually took place for IA Business customers, further corroborating my opinions contained in this report. Information contained in the Madoff Plea Allocation was considered solely as part of the record in this matter. *See generally*, David Kugel Plea Allocation, *United States v. David Kugel*, 10-CR-228 (LTS), at 35-36 (S.D.N.Y. Nov. 21, 2011).

⁴⁰ *See* Complaint, *Picard v. Madoff*, No. 08-01789 (BRL), at 4 (S.D.N.Y. Oct. 2, 2009).

⁴¹ Peter Madoff Information, *United States v. Peter Madoff*, S7 10-CR-228 (LTS) (S.D.N.Y. 2012); Peter Madoff Plea Agreement, *United States v. Peter Madoff*, S7 10-CR-228 (LTS), at 5 (S.D.N.Y. June 29, 2012).

⁴² Madoff Complaint at 4-5.

4. Andrew Madoff

51. Andrew Madoff, Madoff's other son, worked at BLMIS beginning in 1988 after graduating from college. He also held the titles Co-Director of Trading at BLMIS and Controller and Director at MSIL. Andrew Madoff managed many aspects of the trading operations, including the trading floor, trade audit procedures and other related functions. He obtained the Series 7, 24 and 55 FINRA licenses. He took on numerous industry positions such as the Chairman of Trading, Trading Issues and Technology, and Decimalization and Market Data Committees and Subcommittees at SIFMA, FINRA District Ten Committee Member, and NASDAQ's Technology Advisory Committee Member.⁴³

5. Shana Madoff

52. Shana Madoff, Madoff's niece and Peter Madoff's daughter, joined BLMIS in 1995 after graduating from law school. At various times she held different roles at BLMIS, including, Compliance Counsel, in-house Counsel, and Compliance Director. Shana was a member of the SIFMA Compliance and Legal Division Executive Committee, the FINRA Consultative Committee, Security Traders Association of New York, the NASD's Market Regulation Committee, the SIFMA Self-Regulatory and SRO Committee, and the SIFMA Continuing Education Committee.⁴⁴

6. Frank DiPascali

53. DiPascali started at BLMIS in 1975 right after he graduated from high school.⁴⁵ Over his years with BLMIS, he worked as a research analyst and options trader,⁴⁶ in addition to other

⁴³ *Id.* at 5.

⁴⁴ *Id.* at 6.

⁴⁵ DiPascali Plea Allocution at 45.

⁴⁶ *Id.*

roles.⁴⁷ DiPascali managed the IA Business and was critical to its day-to-day activities, interfacing with customers and overseeing IA Business employees.⁴⁸

54. 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 customers' accounts.⁴⁹ Instead, DiPascali created fraudulent account statements using information gleaned from historical stock data to create the returns that Madoff had promised his customers.⁵⁰
55. On August 11, 2009, DiPascali pled guilty to federal securities fraud and related offenses. DiPascali is facing 125 years in prison, but is awaiting sentencing.

7. David Kugel

56. David Kugel ("Kugel") worked for BLMIS for nearly 40 years, originally starting in 1970.⁵¹ Prior to working for BLMIS, Kugel worked as a trader specializing in convertible securities.⁵² 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.⁵³ This arbitrage strategy is similar to the purported strategy that BLMIS claimed to employ in IA Business accounts from at least the 1970s to the 1990s.⁵⁴
57. On November 21, 2011, Kugel pled guilty to federal securities fraud and related offenses, admitting that the investment fraud in the IA Business started in the 1970s.⁵⁵ He is awaiting sentencing.⁵⁶

⁴⁷ *Id.* at 47.

⁴⁸ *Id.*

⁴⁹ *Id.* at 46.

⁵⁰ *Id.* at 47.

⁵¹ David Kugel Plea Allocution, *United States v. David Kugel*, 10-CR-228 (LTS), at 35-36 (S.D.N.Y. Nov. 21, 2011).

⁵² *See generally id.*

⁵³ *See generally id.*

⁵⁴ *See infra* (discussing the convertible arbitrage strategy).

⁵⁵ Kugel stated the following:

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

8. Craig Kugel

58. Craig Kugel began his affiliation with BLMIS in 2001 as an employee of Primex Trading, N.A. (“Primex”), which was an electronic trading auctions system company nominally owned in part by members of Madoff’s family.⁵⁷ At Primex, Craig Kugel completed tasks consistent with the role of Controller and was ultimately offered a job at BLMIS in 2003.⁵⁸ While at BLMIS, he was responsible for the Proprietary Trading Business’s budget forecasting, BLMIS’s healthcare plan, and certain employee-related forms and records.⁵⁹
59. On June 5, 2012, Craig Kugel pled guilty to one count of conspiracy and multiple counts of falsifying documents.⁶⁰ He is awaiting sentencing.⁶¹

9. Annette Bongiorno

60. Bongiorno worked at BLMIS from July 1968 until December 11, 2008.⁶² She managed hundreds of IA Business accounts and supervised IA Business employees including the key punch operators responsible for entering the purported trades.⁶³ Many of the accounts that Bongiorno managed were close friends and family of Madoff and BLMIS employees, and included some of the oldest Madoff clients.⁶⁴

create fake, backdated trades. I provided historical trade information – sorry – first to Annette Bongiorno, and later to Joanne (*sic*) 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.

David Kugel Plea Allocation at 32.

⁵⁶ See generally David Kugel Information, *United States v. David Kugel*, No. 10-CR-228 (LTS) (S.D.N.Y. Nov. 21, 2011).

⁵⁷ Craig Kugel Information, *United States v. Craig Kugel*, No. 10-CR-228 (LTS), at 2 (S.D.N.Y. June 6, 2012); see also Complaint, *Picard v. Madoff Technologies LLC*, No. 08-01789 (BRL) (S.D.N.Y. Jul. 29, 2010).

⁵⁸ Craig Kugel Information at 2.

⁵⁹ *Id.* at 2-3.

⁶⁰ Craig Kugel Cooperation Agreement, *United States v. Craig Kugel*, No. 10-CR-228 (LTS), at 2 (S.D.N.Y. June 5, 2012).

⁶¹ *Id.*

⁶² Superseding Indictment, *United States v. Bonventre*, No. 10-CR-228, at 4 (S.D.N.Y. Oct. 1, 2012).

⁶³ *Id.* at 4.

⁶⁴ See generally *id.*

61. Bongiorno was charged with federal securities fraud and related offenses on November 17, 2010.⁶⁵ She is awaiting trial.

10. Daniel Bonventre

62. 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.⁶⁶ He was responsible for overseeing the accounting functions for both the IA Business and the Proprietary Trading Business, including maintenance of the BLMIS general ledger.⁶⁷ Bonventre provided information that was used in the creation of the FOCUS reports and the BLMIS financial statements.⁶⁸
63. Bonventre was charged with federal securities fraud and related offenses.⁶⁹ He is awaiting trial.

11. Enrica Cotellessa-Pitz

64. Enrica Cotellessa-Pitz ("Cotellessa-Pitz") began working for BLMIS in June 1978, eventually becoming Controller in 1998. She worked directly for Bonventre, helping to maintain the books and records of BLMIS, including the general ledger and the stock record, as well as the FOCUS reports and financial statements submitted to regulators.⁷⁰
65. In December 2011, Cotellessa-Pitz entered into a plea agreement, pleading guilty to charges that she conspired to falsify records of a broker-dealer, falsify records of an investment adviser, make false filings with the SEC, and obstruct and impede the lawful government function of the IRS, among other charges.⁷¹ She is awaiting sentencing.

⁶⁵ *Id.* at 94-152.

⁶⁶ *Id.* at 2-3.

⁶⁷ *Id.* at 2-3.

⁶⁸ *Id.* at 99-100.

⁶⁹ *Id.* at 94-152.

⁷⁰ Enrica Cotellessa-Pitz Cooperation Agreement, *United States v. Enrica Cotellessa-Pitz*, S5 10-CR-228 (LTS) (S.D.N.Y. Dec. 15, 2011).

⁷¹ "I caused inaccurate ledgers and other books and records to be kept by BLMIS, including inaccurate general ledgers and stock records. I then transferred the same inaccurate record entries into FOCUS reports and annual

12. Irwin Lipkin

66. Irwin Lipkin, hired in 1964, was one of the first employees at BLMIS. He helped grow the business from a few key employees to a large-scale operation, and was considered a member of Madoff's inner circle. Through his positions as Officer and Controller at BLMIS, Irwin Lipkin participated in a variety of tasks in the IA Business, including monthly reviews of customer accounts and internal audits of securities positions.⁷²
67. On November 8, 2012, Irwin Lipkin pled guilty to securities fraud for, among other things, creating false financial records, and related offenses.⁷³ He is awaiting sentencing.

13. Eric Lipkin

68. Eric 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.⁷⁴ By 1996, he began working with Bongiorno, Bonventre, DiPascali, Jodi Crupi, Jerry O'Hara, and George Perez to maintain false customer accounts. Eric Lipkin created letters to customers indicating the purported balances in their BLMIS accounts.⁷⁵
69. Eric Lipkin admitted to manufacturing customer statements to reflect the false holdings of customer accounts, as well as, falsifying the books and records of BLMIS. He was charged with federal securities fraud and related offenses.⁷⁶ Eric Lipkin entered into a cooperation agreement and on June 6, 2011, pled guilty to all six counts.⁷⁷ He is awaiting sentencing.

financial statements that I knew would be sent to the SEC.” Enrica Cotellessa-Pitz Plea Allocution, *United States v. Enrica Cotellessa-Pitz*, 55-CR-228 (LTS), at 30-31 (S.D.N.Y. Dec. 19, 2011).

⁷² Complaint, *Picard v. Lipkin*, No. 08-01789 (BRL), at 3, 16-17 (S.D.N.Y. Nov. 11, 2010).

⁷³ Specifically, Irwin Lipkin pled guilty to securities fraud, falsifying records of a broker-dealer, falsifying records of an Investment Adviser, making false statements to the SEC and falsifying documents with respect to the Employee Retirement Income Security Act (“ERISA”). See generally, Irwin Lipkin Information, *United States v. Irwin Lipkin*, S9 10-CR-228 (LTS), (S.D.N.Y. Nov. 8, 2012); Irwin Lipkin Plea Agreement, *United States v. Irwin Lipkin*, S9 10-CR-228 (LTS) (S.D.N.Y. Nov. 8, 2012).

⁷⁴ Eric Lipkin Information, *United States v. Eric Lipkin*, No. 10-CR-228 (LTS), at 5 (S.D.N.Y. June 6, 2011); Press Release, U.S. Attorney's Office, *Manhattan U.S. Attorney Announces Guilty Plea Of Another Employee Of Bernard L. Madoff Investment Securities LLC* (June 6, 2011).

⁷⁵ Eric Lipkin Information at 5-7.

⁷⁶ *Id.* at 7-9.

⁷⁷ See generally Eric Lipkin Information; Minute Entry, *United States v. Lipkin*, 10-CR-228 (LTS) (S.D.N.Y. Nov. 17, 2010).

14. Joann “Jodi” Crupi

70. Joann “Jodi” Crupi (“Crupi”), who worked for BLMIS for approximately 25 years,⁷⁸ performed many tasks for BLMIS. Crupi tracked the daily activity in the primary checking account for the IA Business operations 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 bank account balance, customer deposits, and all pending customer redemptions.⁷⁹ Similar to Bongiorno, Crupi was also responsible for managing several IA Business customer accounts,⁸⁰ for which she manufactured statements in order to produce certain promised rates of return.⁸¹
71. Crupi was charged with federal securities fraud and related offenses on November 17, 2010.⁸² She is awaiting trial.

15. Jerry O’Hara and George Perez

72. Jerry O’Hara (“O’Hara”) was hired in 1990 as a computer programmer in the IA Business 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.⁸³ 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.⁸⁴
73. O’Hara and Perez were both charged with federal securities fraud and related offenses.⁸⁵ They are awaiting trial.

⁷⁸ Superseding Indictment at 5.

⁷⁹ *Id.* at 5, 56-58.

⁸⁰ *Id.* at 16-17, 21-23, 29-30.

⁸¹ *Id.* at 16-17, 21-23, 29-30, 38-39, 42-43.

⁸² *Id.* at 94-152.

⁸³ *Id.* at 6, 11, 14, 31-51.

⁸⁴ *See, e.g.*, MDPTTT00000001-MDPTTT00002748.

⁸⁵ *See generally* Superseding Indictment.

16. Friehling and Horowitz

74. The BLMIS financial statements were purportedly audited by Friehling and Horowitz, C.P.A., P.C. (“F&H”), a three-person CPA firm.⁸⁶ Jerome Horowitz (“Horowitz”), a once licensed CPA in the State of New York,⁸⁷ worked for Alpern & Avellino before establishing his own accounting firm, F&H. Saul Alpern was Madoff’s father-in-law and founder of Alpern & Avellino. 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.
75. On November 3, 2009, Friehling pled guilty to federal securities fraud and related offenses.⁸⁸ 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.

D. Bank Accounts

76. The pervasive fraud in BLMIS was conducted through its main bank accounts. In the IA Business, the primary operating account was the JPMorgan Chase (“JPMC”) account number 140-081703 (the “703 Account”) and its associated controlled disbursement account, the JPMC account number 6301428151-509 (the “509 Account”). As later discussed, other money market accounts funded by the 703 Account were also used to perpetuate the fraud.
77. In the Proprietary Trading Business, the primary operating account was the Bank of New York (“BONY”) account number 8661126621 (the “621 Account”).

E. Computer Systems Overview

78. In operating a market making business, a proprietary trading 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

⁸⁶ See Audit Report to the 2000 audited financial statements (MADTEE00046020).

⁸⁷ *Office of the Professions*, New York State Education Department, <http://www.nysed.gov/coms/op001/opsc2a?profcd=07&plicno=017210&namecheck=HOR> (last visited Nov. 20, 2011).

⁸⁸ David Friehling Superseding Information *U.S. v. Friehling*, No. 09-CR-700 (S.D.N.Y. Nov. 3, 2009); Minute Entry of Plea entered by David Friehling, *U.S. v. Friehling*, No. 09-CR-700 (S.D.N.Y. Nov. 3, 2009) (Dkt. Entry 11-03-2009).

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.

79. Customer management systems obtain information from clients regarding deposits, market orders and withdrawals, as well as verify the accuracy of that information. 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 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.
80. Table 1 provides a summary of the key systems, both hardware and software, implemented in the Proprietary Trading Business and the IA Business.

Table 1

Name	Description	Proprietary Trading Business	IA Business
ACES	Routed orders between order-entry firms and market makers that had established relationships with BLMIS.	✓	
Bloomberg	Provided nearly instant financial and economic data, primarily stock prices.	✓	✓
CTCI Circuit	Reported trades to tape and cleared trades through the NASDAQ/Trade Reporting Facility and received trade acknowledgements.	✓	
Custom Software	Software, using the Report Program Generator (“RPG”) language, used to maintain customer accounts, individual securities, trading activity, pricing, dividend and proxy information, checks, and other information related to customer accounts.		✓

Name	Description	Proprietary Trading Business	IA Business
Data Warehouse (MDFDW2)	An Oracle database that received and processed data from various transactional databases and systems.	✓	
DTC System	Enabled securities movements for the National Securities Clearing Corporation's ("NSCC") (described <i>infra</i>) net settlements and settlements for institutional trades.	✓	
Fix Engine	Facilitated electronic communication of trade-related messages between equity market participants by incorporating the free Financial Information eXchange protocol, JAVA, XML and TIBCO integration technologies.	✓	
FormsPrint	Commercially available software used to generate forms and populate those forms with data from the AS/400.	✓	✓
Great Plains/Microsoft Dynamics - GP	Commercially available accounting software used to track accounts payable information.	✓	
IBM Application System 400 (AS/400)	A system for small and intermediate sized companies that hosted BLMIS's information systems.	✓	✓
M2	A proprietary trading system that provided traders with the ability to generate, route and manage orders. M2 provided user interfaces for placing orders, managing risk (via review of Profit & Loss information), and maintaining supporting data (<i>e.g.</i> , a master list of securities).	✓	
Maid	Tool providing the ability to query and review executions and make corrections in a batch process rather than one at a time.	✓	
MIMIX	Commercially available software for the AS/400 that provided the ability to perform backups and disaster recovery for data and software stored on the AS/400 platform.	✓	✓

Name	Description	Proprietary Trading Business	IA Business
MISS	A central order management system for most proprietary 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. The system was comprised of numerous individual software applications.	✓	
Muller	Delivered bond and dividend announcement data.	✓	
NASDAQ QIX	Provided real-time market data and trading system.	✓	
Network Connectivity	Approximately 80 connections to handle order flow and reconciliation of trades to automated clearing systems. These systems included extranet providers, private lines and Virtual Private Network internet connections.	✓	Limited ⁸⁹
Oracle Discoverer and Oracle Reports	Commercially available reporting system that provided web-based reporting of operations information (e.g., trading activity, profit and loss information) from various Oracle databases.	✓	
Order Audit Trail System (“OATS”)	Tracked order events, including origination, transmission and cancellation or execution.	✓	
ROBO and Blackbox	Trading platforms that executed trades and managed Profit and Loss accounting.	✓	
Securities Industry Automation Corporation (“SIAC”)	Provided real-time market data from SIAC’s Consolidated Tape/Ticker System and Consolidated Tape Association.	✓	
Settled Cash	Data file containing a record of customer account activity.	✓	✓

⁸⁹ The IA Business had very limited connectivity capabilities that basically consisted of an internet connection and a File Transfer Protocol (“FTP”) site, and had no connections to the DTC or exchanges.

Name	Description	Proprietary Trading Business	IA Business
STMTPro	Custom software built in the RPG programming language that provided the ability to revise and print customer statements from previous months or years.		✓
StorQM	Off-the-shelf software product that enabled viewing and managing legacy reports.	✓	✓
Stratus VOS	Front-end processing system to maximize trading speed that interacted with various third-party systems to process trades placed through the M2 and MISS systems.	✓	
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	A custom software package developed by BLMIS using the C++ programming language to manage data distribution within the M2 and MISS systems.	✓	
Time and Sales	Used by clients to view their historical trade data.	✓	
Time Slicing Web Application	Customer order portal that enabled registered clients to enter and track orders.	✓	

81. As discussed in greater detail later in this report, while the Proprietary Trading Business had robust computer systems typically found in a broker-dealer trading environment, the dearth of such comparable systems in the IA Business is in stark contrast and shows that trading in the IA Business did not occur.

VI. OPINION NO. 1: FRAUD PERMEATED BLMIS

A. THE IA BUSINESS WAS A FRAUD

1. Fictitious Trading in the IA Business - There is no evidence that the purported investment transactions for IA Business customers ever occurred at least as far back as the 1970s. In fact, the evidence shows the trading did not occur.⁹⁰

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

82. 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 myriad covenants for convertible securities, the most common conditions include a predetermined strike price (*i.e.*, the price at which the securities can be converted) and a predetermined timeframe necessary in order to convert the security into shares of common stock.⁹¹

83. 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.

⁹⁰ All discussion and opinions related to trading activities or positions held in the IA Business 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 the IA Business, which were the trading strategies purportedly 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 the Proprietary Trading Business. The *de minimis* number of these transactions does not impact my opinions herein.

⁹¹ Frank J. Fabozzi, *The Handbook of Fixed Income Securities* 1372 (7th ed. 2005).

84. 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 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.
85. 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.⁹²
86. 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 - IA Business Customers**

87. During the 1970s through the early 1990s, Madoff purportedly utilized a convertible arbitrage investment strategy. IA Business customer statements and ledgers suggest that this purported trading strategy occurred by showing 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).⁹³
88. In order to investigate the IA Business's purported convertible arbitrage strategy, customer transactions and ledgers were analyzed both in the aggregate (*i.e.*, across all convertible arbitrage customer accounts) and on an individual customer account basis.⁹⁴ All BLMIS customer accounts utilizing the purported convertible arbitrage strategy were analyzed for the following months (the "Monthly Time Period"):

⁹² "Delta neutral" implies that the investor is protected from price movement of the common stock. B. Arshanapalli, *New Evidence on the Market Impact of Convertible Bond Issues in the U.S.* 17-18 (2004).

⁹³ Similar to customer statements, the customer ledgers contained the monthly transactional details for the IA Business accounts. In certain instances, customer ledgers reflected the purported purchase and sale of warrants. These transactions were included in the analyses as described *infra*.

⁹⁴ See **Exhibit 1** and **Exhibit 2** for examples of a customer statement and a customer ledger, respectively.

- October 1979, November 1979;⁹⁵
- every March and December from 1981-1992;⁹⁶ and
- randomly selected months, other than March and December, between 1983 and 1992.⁹⁷

89. In addition to the accounts selected and analyzed for the Monthly Time Period, eight Avellino & Bienes (“A&B”)⁹⁸ accounts were analyzed from November 1978 through July 1992 (the “A&B Time Period”).⁹⁹
90. For the Monthly Time Period and the A&B Time Period, IA Business customer ledgers purportedly employing the convertible arbitrage strategy were tested against historical, independent market trading records for the applicable securities.¹⁰⁰ 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 ledgers.
91. An example of how the purported transactions in the IA Business were constructed can be seen in Table 2 below. Customer ledgers from the IA Business depicted that the customers were long in convertible securities and short in the underlying common stock. In this instance, the ledgers purport to show that 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 this trade, and the majority of the IA Business convertible arbitrage transactions, could not have occurred.

⁹⁵ The customer ledger data for these months were fully coded into a database by the Trustee’s consultants.

⁹⁶ This was the time period prior to the dissolution of Avellino & Bienes, when, thereafter, there was a movement away from purported IA Business investments pursuant to the convertible arbitrage strategy and towards the SSC strategy. March was chosen because it was a quarter-end statement; December was chosen because it was a year-end statement.

⁹⁷ A random number generator selected one additional month for each year to be analyzed in the 10-year period.

⁹⁸ A detailed overview of A&B is discussed later in this report.

⁹⁹ These accounts include: 1A0045 through 1A0050, as well as 1A0051 and 1B0018, which belonged to Frank Avellino and Diane Bienes, respectively. These eight accounts were utilized as the customer data associated with these accounts were fully coded by the Trustee’s consultants into a database. As noted *supra* in this report, the underlying data used in these analyses were validated and tested. This is the time period for which convertible arbitrage information was available for these accounts.

¹⁰⁰ Market data sources include: New York Stock Exchange Daily Stock Price Record, Over-the-Counter Exchange Daily Stock Price Record, American Stock Exchange Daily Stock Price Record, Wall Street Journal New York Exchange Bonds, Moody’s Industrial Manual, Moody’s Bank and Financial Manual, Frankfurter Allgemeine Zeitung and The Times (London).

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

Bates	Statement Transaction		Long	Short	Security	Price	Debit	Credit	
	Date	Date							
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

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

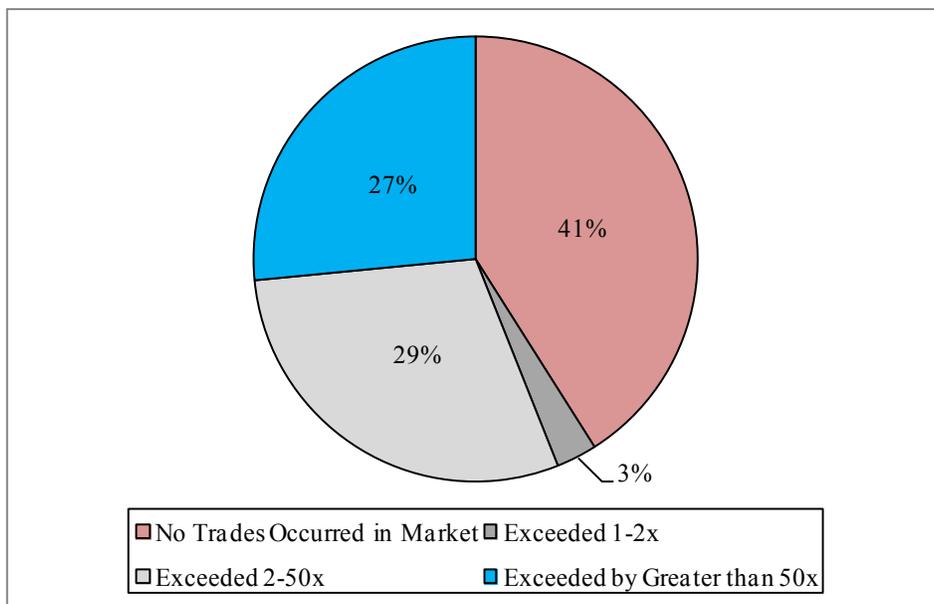
92. To test if the purported trades could have been legitimate, the daily volume from the long convertible positions as indicated on the customer ledgers was compared to the historical market volume for those securities on the specific days the trades purportedly occurred. Customer ledgers from the Monthly Time Period were aggregated to analyze the relevant transactions.
93. During the Monthly Time Period, the historical daily trading volume of 432 unique convertible security transactions reflected in BLMIS’s records was analyzed.¹⁰¹ The purported trading in 407 of the 432 unique convertible securities transactions (94%) exceeded the daily market volume traded by an average of over 200 times the entire reported daily volume for all market trades in those securities. (See Figure 1 and **Exhibit 3** – “Convertible Arbitrage IA Business Volume Analysis, Monthly Time Period”.)¹⁰² In fact one security, Westinghouse Electric Corp. Sub Debenture Convertible 9% due 8/15/2009, purportedly traded on November 28, 1989 nearly 5,051 times the actual daily volume, a fact that shows

¹⁰¹ There were 165 additional instances where publicly available market data could not be identified.

¹⁰² A volume analysis was also performed for all the common equity that was shorted for the transactions executed during the Monthly Time Period. Data was collected from the Daily Stock Price Record-New York Stock Exchange and the Daily Stock Price Record-American Stock Exchange, which provided the end-of-month short positions. The purported IA Business month-end short positions for the Monthly Time Period were then compared to the publicly available data. The investigation concluded that of the 494 short positions for which data was publicly available, 38% of the IA Business purported short common shares positions exceeded the end-of-month historical volume for the common shares. (See **Exhibit 4** – “Convertible Arbitrage IA Business Securities Short Interest Analysis, Monthly Time Period”.) In fact, one position, purportedly traded in February 1991, exceeded the volume by approximately 382 times the actual reported total market short position.

the purported trades were fictitious.¹⁰³ Forty-one percent of the trades occurred where there was no reported volume at all in that particular security for that particular day.

Figure 1
Breakdown of Purported Securities Exceeding Daily Volume
for the Monthly Time Period

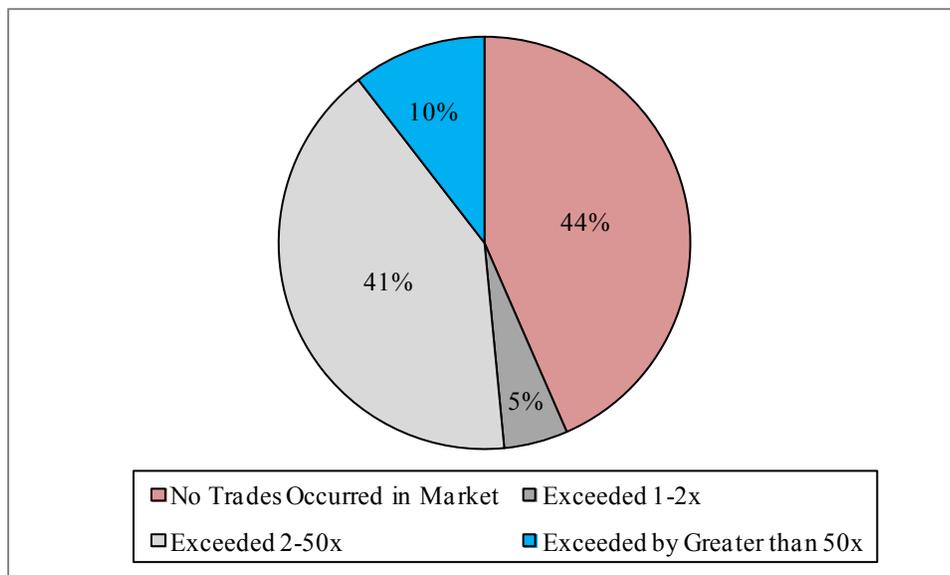


94. To further test the volume analysis, eight A&B accounts were similarly tested to determine whether the transactions exceeded the actual daily market volume for the chosen convertible securities during the A&B Time Period. The daily historical volume for these convertible securities was compared to the volume the IA Business purportedly traded per the customer account records, and results were similar to that of the Monthly Time Period analysis described above. Of the 1,081 convertible securities in these eight accounts, over ninety percent of the total exceeded the daily volume on the transaction day by an average of nearly 30 times the actual daily volume. (See Figure 2 and **Exhibit 5** – “Convertible Arbitrage IA Business Volume Analysis, A&B Time Period”.) Forty-four percent of the trades occurred

¹⁰³ 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. For the Monthly Time Period, the investigation showed that none of the convertible securities was traded on those exchanges and therefore could not have accounted for the potential excess volume that was not traded on the U.S. exchanges.

where there was no reported volume at all in that particular security for that particular day. In one instance, the volume in a particular security reported by the IA Business was over 500 times the total volume reported in the entire market for that security.

Figure 2
Breakdown of Purported Securities Exceeding Daily Volume
for 8 A&B Accounts for the A&B Time Period



95. Accordingly, the purported securities trades underlying the convertible arbitrage strategy for IA Business customers could not have been legitimate trades as they exceeded the reported volume of the entire market on the securities the IA Business purportedly executed. These volume discrepancies are further illustrated by an individual transaction on a single customer ledger. Referring to Table 2, on January 9, 1985, the A&B customer ledger for account 1A0045 reported that \$1,411,000 par value of Macmillan Inc. subordinated debt was traded (together Row A and Row B). However, on that day, this security did not change hands in the open market. (See Figure 3 below for listing of traded securities for January 9, 1985.)¹⁰⁴

¹⁰⁴ *New York Exchange Bonds Daily Record*, Wall St. J., Jan. 10, 1985.

each unique trade price was tested against the historical trading range for that day.¹⁰⁶ For the Monthly Time Period, 582 unique trade prices were tested.¹⁰⁷ Of the 582 unique trade prices, 444 (76%), were outside the actual daily market trading price range showing that the prices listed on the customer ledgers were fictitious. (See **Exhibit 7** – “Convertible Arbitrage IA Business Price Analysis, Monthly Time Period”.)¹⁰⁸

97. 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. Of the 1,118 securities with unique prices that were tested, 848 (76%) were outside the actual reported daily market price range. (See **Exhibit 8** – “Convertible Arbitrage IA Business Price Analysis, A&B Time Period”.)
98. This pricing discrepancy is further illustrated earlier in Table 2 with the Macmillan Inc. subordinated debt long position. The ledger for account 1A0045 shows that \$1,411,000 par value of the Macmillan Inc. 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, the IA Business could not have purchased the Macmillan Inc. subordinated debt for \$138.¹⁰⁹

¹⁰⁶ A price analysis was also performed for all the common equities that were purportedly shorted for the transactions executed during the Monthly Time Period. Data was collected from Center for Research in Security Prices, the Daily Stock Price Record-New York Stock Exchange, the Daily Stock Price Record-American Stock Exchange and the OTC Exchange Daily Stock Record. The investigation concluded that of the 2,244 short transactions for which data was publicly available, 10% of the IA Business purported short common shares transactions were outside the daily price range for the common shares. (See **Exhibit 6** – “Convertible Arbitrage IA Business Securities Short Sale Price Analysis, Monthly Time Period”.)

¹⁰⁷ In some instances, historical data was unavailable. In the cases of the OTC transactions and certain convertible bond transactions, the only publicly available information was the bid-ask and close prices. Therefore, no conclusive range could be determined. In instances where publicly available daily high price and low price data were not available, the purported trades were excluded from the analysis. For example, beginning in 1988, the *Wall Street Journal* no longer provided the daily high price and low price for bonds.

¹⁰⁸ In those cases where the purported IA Business trades were higher or lower than the actual recorded daily market traded prices, the IA Business prices themselves would have been the daily high or low. In the event that the out of range prices on the IA Business customer statements were the result of an inadvertent typing error (sometimes referred to as “fat fingering”), the IA Business would have had to issue corrected trade confirmations and customer statements with actual market prices. There is no evidence of any corrections or reissuances to account for these “corrections.”

¹⁰⁹ *New York Exchange Bonds Daily Records*, Wall St. J., Jan. 10, 1985.

(iv) **Convertible securities were purportedly traded by the IA Business even after they were called for conversion**

99. 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 multiple instances where customer ledgers show that a convertible arbitrage security was purportedly still being held by an IA Business customer despite the fact that the security had already been called.
100. For example, in the case of Macmillan Inc., the IA Business purportedly closed out its position on March 14, 1985 (Table 2, Row H); however, the subordinated debentures were converted into 1,645,071 shares of common stock in January 1985.¹¹⁰ This transaction simply could not have been legitimately completed, as reflected on the customer ledger, given that the debentures were retired by Macmillan Inc. well before the March 14, 1985 date when the IA Business purported to have converted the convertible security and to have bought back the common shares.

(v) **The IA Business did not account for dividend payments or accrued interest on the convertible securities thereby evidencing the fictitious nature of the underlying transactions**

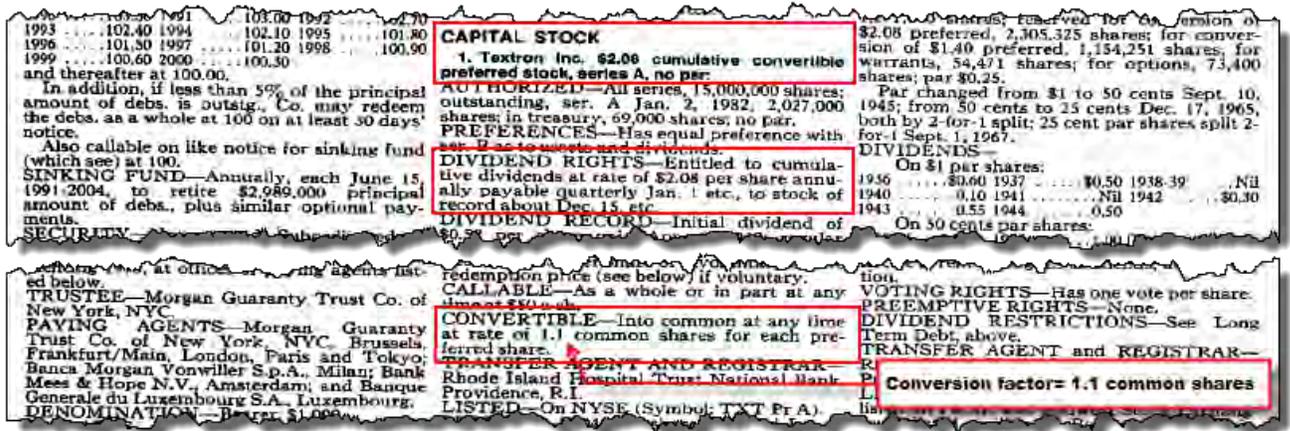
101. One major component of a convertible arbitrage transaction is that the underlying convertible security pays a regular coupon or dividend. This coupon or dividend is considered in the valuation of the underlying security, which is used to determine whether an arbitrage situation exists. In many instances, however, the IA Business did not account for the coupon or dividend payment during the purported convertible arbitrage transactions.
102. In the Monthly Time Period, an analysis was performed to identify actual dividend or coupon payments for those convertible securities in which the IA Business customers were purportedly invested as of the ex-dividend date. The dates and amounts were then reconciled

¹¹⁰ *Macmillan Inc.*, Moody's Industrial Manual 1985 at 4083.

to the customer ledgers to confirm whether the IA Business accurately recorded these payments. In most instances, the coupon or dividend payments were not recorded as being paid to the customer.

103. For example, Textron Inc. Preferred Convertible security paid a quarterly dividend of \$0.52/share to record holders as of June 15, 1982. (See Figure 4.)¹¹¹ A&B account 1A0045, for example, was an account holder as of this record date and should have received a dividend payment worth \$6,592.56 (12,678 shares times quarterly dividend of \$0.52/share). However, this payment does not appear on the A&B account 1A0045 ledger.

Figure 4



104. Based upon the foregoing discussion regarding dividend discrepancies, this investigation and analysis further support the conclusion that trading in the IA Business did not occur.

(vi) **There is no evidence that the IA Business converted the convertible securities into common shares**

105. 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. Although a company sometimes acts as its

¹¹¹ *Textron Inc.*, Moody's Industrial Manual 1982 at 4493.

own transfer agent, companies that issue preferred convertible stock and convertible subordinated debt must do so through these transfer or conversion agents.¹¹²

106. 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 makes dividend distributions by mailing out dividend checks or through other means.¹¹³
107. Given that these agents stand directly between the issuing company and the security holder, operations with these agents would have been essential to carrying out the IA Business'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.¹¹⁴ As a result, the SEC has strict rules and regulations in place for all registered transfer agents that include minimum performance standards regarding the issuance of new certificates and related recordkeeping.
108. 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 and sign a conversion notice provided by a transfer agent, and deliver such notice to the transfer agent;
 - Deliver a certificate or certificates representing the shares of convertible preferred stock/subordinated debt to be converted by the transfer agent; and
 - If required, furnish appropriate endorsements and transfer documents.¹¹⁵
109. In order to have converted preferred convertible stock and convertible debt into common stock, the IA Business would have needed documentation regarding the conversion of the

¹¹² See *Transfer Agents*, U.S. Securities and Exchange Commission, <http://www.sec.gov/answers/transferagent.htm> (last visited Nov. 20, 2011).

¹¹³ *Id.*

¹¹⁴ The Securities Exchange Act § 17A(c), 15 U.S.C. §78 (2010).

¹¹⁵ 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.

securities. To test whether proper documentation existed, ten purportedly converted securities were tested as shown in Table 3.¹¹⁶

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 SIEGLER 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 1 CONV \$4.40	12/11/1981	Morgan Guaranty Trust

110. No supporting documentation related to transfer agents or the conversion of these underlying convertible securities was identified. Absent this documentation and/or evidence of communication with the transfer agents (which also was not identified), the IA Business

¹¹⁶ Data obtained from Moody's Industrial Manual for each of the respective years indicated in Table 3. The transfer agent for each company is listed by year; data was reviewed for the year in which conversion occurred. *Aetna Life*, Moody's Bank & Finance Manual 1980 at 4303; *Reliance Group Inc.*, Moody's Bank & Finance Manual 1980 at 2478; *Eaton Corp.*, Moody's Industrial Manual 1984 at 296; *GATX Corp.*, Moody's Industrial Manual 1980 at 1156; *Lear Siegler*, Moody's Industrial Manual 1979 at 3898; *Liberty National Corp.*, Moody's Bank & Finance Manual 1981 at 1493; *TenneCo Corp.*, Moody's Industrial Manual 1979 at 3143; *Texas Gas Transmission Corp.*, Moody's Public Utility Manual 1979 at 1942; *Trane Co.*, Moody's Industrial Manual 1982 at 6053; *TRW Inc.*, Moody's Industrial Manual 1982 at 4518.

could not have converted the underlying shares into common stock for any of the thousands of transactions in its convertible arbitrage strategy.

111. Further, the IA Business consistently did not report on the customer ledgers that it had converted the convertible securities into the required number of common shares based on the correct conversion factor. For example, Cooper Industries, Inc. Preferred Security B was purportedly purchased by the IA Business on May 19, 1980. The adjusted conversion factor at that 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). (See Figure 5.) The IA Business, however, did not account for the stock split and continued to use the unadjusted conversion factor of 3.6 shares. As a result, the IA Business customers who purportedly owned Cooper Industries, Inc. Preferred Security B as of May 19, 1980, received half the common shares when the convertible security was converted to common shares in July 1980. As shown in Figure 6, IA Business customer account 1A0045 (formerly 1-00121) received 12,938 common shares when it should have received 25,876 shares based on the adjusted conversion factor.

Figure 5¹¹⁷

CAPITAL STOCK
1. Cooper Industries, Inc. \$2.50 cumulative convertible preferred, series B; no par.
NO PAR.—All series, 1,011,240 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—Annual 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 \$6.00 1981 \$5.50 1982 \$5.00
1983 \$4.50 1984 \$4.00 1985 \$3.50
1986 \$3.00
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.
PRELIMINARY 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 majority of the shs. of pfd. stock voting separately as a class will be required to effect (i) the sale, lease or conveyance by Co. of all or substantially all of its property or business, or its consolidation with or merger into any other corporation unless the corporation 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.
Whenever payment of a stock, which holders or holders of the stock, shall have the right to elect two members of the board of directors of 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

Conversion Factor =
7.2 common shares

¹¹⁷ Cooper Industries Inc., Moody's Industrial Manual 1980 at 126.

Figure 6

7/31/80		AVELLINO E. BIGNES		285 MADISON AVENUE		NEW YORK NY 10017		1-00121-1-0	
SUR 6.250 4/01/1995									
7/14	7/21	2811	31	CONOCO INC		143	1/2	403,378.50	
7/21	7/21	3594		COOPER INDS INC					DELV
7/21	7/21	12938		PFD SER B CONV \$2.50					RECO
7/21	7/21	11623		COOPER IND INC					DELV
7/21	7/21	10927		PETROLEUM & RESOURCES PFD					RECO
7/15	7/22	6017	38	PFD CONV \$1.75		56	1/2	339,960.50	
7/15	7/22	2271	93	PETROLEUM & RES CORP					
7/15	7/22			OGDEN CORP					
7/15	7/22			PFD CONV \$1.875					
7/15	7/22			ESTERLINE CORP					
7/15	7/22			70 25 EST					

MF00084918

112. 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.
113. In instances where fractional shares appeared on the IA Business customer ledgers, they were not paid out at the price on the conversion date as required. For example, the IA Business recorded a journal entry of \$18.90 on May 7, 1982 for fractional shares of Textron Inc. (See Table 4, Row D.) First, the fractional share should not have been reported on the customer ledger until the actual conversion date of June 30, 1982. Second, the price of \$18.90 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 per share of preferred. As of the conversion date, \$23.63 was not the price of the common stock. The value of the fractional share would not be known until the conversion date, which in this case

was June 30, 1982 (Row E in Table 4). 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 the IA Business recorded on May 7, 1982 (*i.e.*, a difference of 25%).

Table 4
A&B 1A0045 Account – Textron Inc. Pfd Conv \$2.08

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

114. Based upon the foregoing discussion regarding the IA Business’s incorrect conversion processes, this investigation and analysis show that trading in the IA Business did not occur.

(vii) **Fictitious Convertible Arbitrage Trade Confirmations**

115. Trade confirmations fabricated by the IA Business to support the convertible arbitrage trades were actually prepared backwards as though BLMIS was trading as a principal rather than an agent as represented in the customer account opening agreements.¹¹⁸ A good exemplar of this is a purported convertible trade executed for the account referenced in the customer statement depicted in Figure 7.

116. The purported convertible trade was as follows:

- A purchase of 761 shares of Aetna Life & Casualty \$2 Pfd (“Aetna Pfd”) on 6/23/80, settlement on 6/30/80 at \$83 7/8 per share. The shares had a conversion factor of 2.25.¹¹⁹

¹¹⁸ The customer account opening agreements state that BLMIS was acting as an agency broker in the purported transactions for its customer and not as principal, unless otherwise notified. Accordingly, the trade confirmations should follow the form and substance of those agreements. *See, e.g.*, AMF00000624.

¹¹⁹ The customer statements showed only the settlement dates and not the trade dates; June 30, 1980 was the settlement date for the purported June 23, 1980 trade for Aetna Pfd. The trade confirmations included the trade dates (*see* Figure 8, Figure 9 and Figure 10).

- Two sales of Aetna Life & Casualty common stock: one for 1052 shares at \$39 1/8 and one for 660 shares at \$39 1/4, both sold on 6/25/80 and settled on 7/2/80.
- 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 9/1/80.¹²⁰

¹²⁰ See generally **Exhibit 9** for examples of Adding Machine Tapes calculating projected profit on the purported trade see MADTSS00401002; for handwritten notes detailing the purported trades see MADTSS00400966 at MADTSS00400966; MADTSS00401003; MADTSS00400994; MADTSS00400966 at MADTSS00400986; MADTSS00400988; MADTSS00400990; MADTSS00400992; MADTSS00400993; MADTSS00401023; MADWAA00497515.

Figure 7¹²¹

IN ACCOUNT WITH



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
FAX (800) 221-2242

PERIOD ENDING

PAGE

12/31/80

YOUR ACCOUNT NUMBER

YOUR TAX PAYER IDENTIFICATION NUMBER

REDACTED

DATE	BOUGHT RECEIVED OR LONG	SOLD DELIVERED OR SHORT	TRN	DESCRIPTION	PRICE OR SYMBOL	AMOUNT DEBITED TO YOUR ACCOUNT	AMOUNT CREDITED TO YOUR ACCOUNT
				BALANCE FORWARDED			56,180.81
121	1260			RESERVE OIL & GAS			
				\$1.75 PFD	46 1/2	56,172.00	
122		653		RESERVE OIL & GAS COM	33		21,528.59
122		1310		RESERVE OIL & GAS COM	33 1/8		36,734.96
310		714		RESERVE OIL & GAS COM			16.46
310		1330		INA CORP	29 7/8		21,300.84
310				INA CORP	30		39,858.44
310				INA CORP			14.92
519	2926			INA CORP \$1.80 PFD	21 3/8	58,269.25	
505	2225			HEINZ \$1.70 PFD	27 1/2	61,187.50	
507		973		HEINZ COM	38 1/4		37,186.84
507		695		HEINZ COM	38 3/8		26,648.91
507				HEINZ COM			26.67
630	761			AETNA LIFE 82 PFD	83 7/8	63,828.88	
702		1052		AETNA LIFE COM.	39 1/8		41,126.62
702		660		AETNA LIFE COM.	39 1/8		25,884.37
702				AETNA LIFE COM.			9.77
903		521		AMAX INC.	51 1/4		26,688.97
903		850		AMAX INC.	51 3/8		43,642.19
903				AMAX INC.			31.24
903	1949			AMAX INC 83. PFD	64	67,008.00	
1024		1816		ROCKWELL INTL	34 1/8		61,934.68
1024		350		ROCKWELL INTL	34 1/4		11,980.50
1024				ROCKWELL INTL			10.23
1030	2497			ROCKWELL INTL \$1.80 PFD	40 1/4	79,408.75	
1231				CHECK		10,000.00	
				CHECK			5,000.00
				Balance			68,941.35

MADTSS00401023

PLEASE RETAIN THIS STATEMENT FOR INCOME TAX PURPOSES.

117. This customer statement shows the purported purchase of the Aetna Pfd and short sale of the Aetna Life & Casualty common stock. However, the purported trade confirmations fabricated by the IA Business show the opposite. The trade confirmations in Figure 8, Figure 9, and Figure 10, show that the Aetna Pfd was sold rather than bought on 6/23/80, and that the

¹²¹ Personal Identifying Information has been redacted throughout this Report and its accompanying Exhibits in compliance with Fed. R. Bankr. P. 9037 and applicable federal and state law.

Aetna Life & Casualty common stock was bought on 6/25/80 -- the direct opposite of what the customer statement showed for the purported trades.¹²²

Figure 8

MADF Bernard L. Madoff
INVESTMENT SECURITIES
Established 1980
110 Wall Street, New York, NY 10005

TELEPHONE (212) 825-3910
P & S DEPT. (212) 825-3916
TELETYPE (710) 581-3082
TELEX 235130
WATS (800) 221-2242

ORIGINATOR NO.	DELIVERED VIA	ACCOUNT NUMBER	D/R	TRANS. NO.	TR	CAP	SECT	TRADE DATE	SETTLEMENT DATE
0646								6/23/80	6/30/80

IDENTIFICATION NO.	CONTRA PARTY	C.H. NUMBER	SPECIAL DELIVERY INSTRUCTIONS
[REDACTED]			"SLD" 761"

WE	QUANTITY	ORDER NUMBER	SECURITY DESCRIPTION	NET AMOUNT
015	761		AETNA LIFE & CASUALTY 2.00 66W PFD	53328.88

PRICE	PRINCIPAL	COMMISSION	STATE TAX	INTEREST	SEC. FEE	MISC.
82 7/8	53328.88					

MEMBERS
NASDAQ NSCC SIAC DTC SIPC
MADTSS00400995

COMPARISON DUPLICATE

Figure 9

MADF Bernard L. Madoff
INVESTMENT SECURITIES
Established 1980
110 Wall Street, New York, NY 10005

TELEPHONE (212) 825-3910
P & S DEPT. (212) 825-3916
TELETYPE (710) 581-3082
TELEX 235130
WATS (800) 221-2242

ORIGINATOR NO.	DELIVERED VIA	ACCOUNT NUMBER	D/R	TRANS. NO.	TR	CAP	SECT	TRADE DATE	SETTLEMENT DATE
0646								6/25/80	7/7/80

IDENTIFICATION NO.	CONTRA PARTY	C.H. NUMBER	SPECIAL DELIVERY INSTRUCTIONS
[REDACTED]			"BOT" 1052"

WE	QUANTITY	ORDER NUMBER	SECURITY DESCRIPTION	NET AMOUNT
503	1052		AETNA LIFE & CASUALTY	41126.62

PRICE	PRINCIPAL	COMMISSION	STATE TAX	INTEREST	SEC. FEE	MISC.
39 1/8	41126.62		90.00			

MEMBERS
NASDAQ NSCC SIAC DTC SIPC
MADTSS00400997

COMPARISON DUPLICATE

¹²² See also Exhibit 10 for an example of a trade confirmation.

Figure 10

MADFI **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
TELEX 235130
WATS (800) 221-2242

ORIGINATOR NO.	DELIVERED VIA	ACCOUNT NUMBER	D/R	TRANS. NO.	TR	CAF	SETT	TRADE DATE	SETTLEMENT DATE
0646								6/25/80	7/2/80

IDENTIFICATION NO.	CONTRA PARTY	C.H. NUMBER	SPECIAL DELIVERY INSTRUCTIONS
		"BOT" "660"	

WE	QUANTITY	C.H. NUMBER	SECURITY DESCRIPTION	NET AMOUNT
761	761		AETNA LIFE & CASUALTY	64005.00

PRICE	PRINCIPAL	COMMISSION	STATE TAX	INTEREST	SEC. FEE	MISC.
83.875	64005.00		20.00			

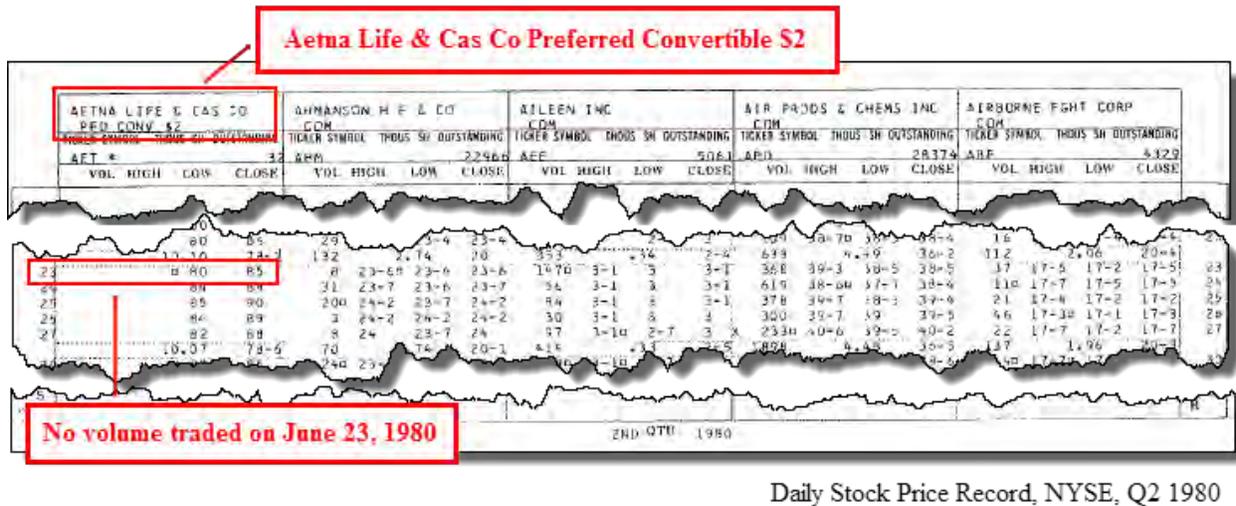
MEMBERS
NASD NSCC SIAC DTC SIPC

MADTSS00400999

COMPARISON DUPLICATE

118. As shown on the customer statement (*see* Figure 7), Madoff purportedly purchased 761 shares of Aetna Pfd for \$83.875. However, as shown below in Figure 11, the Daily Stock Price Record reflects that this security did not change hands in the open market that day. Therefore, it would not have been possible for the IA Business to legitimately trade Aetna Pfd on that day.

Figure 11



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

119. A&B was an accounting firm at its origin, but developed exclusively into a “private investing” firm in the mid-1980s.¹²³ Given that the investing business had increased in relative importance, it became “financially wise” to end the accounting practice.¹²⁴ A&B, however, was never registered as a broker-dealer, an investment company, or an investment adviser.¹²⁵ As of 1992, A&B had three partners: Frank Avellino (“Avellino”) was a 50% partner, and Michael Bienes (“Bienes”) and Dianne Bienes were each a 25% partner.¹²⁶
120. A&B first began investing with the IA Business in the 1960s through its predecessor firm, Alpern & Avellino.¹²⁷ Saul Alpern was Madoff’s father-in-law and founder of that firm. A&B attracted investor funds by promising guaranteed rates of return (typically 13%-18%) on money collected from individuals and entities¹²⁸ and labeling the transactions with

¹²³ Avellino and Bienes Dep. Ex. 02901-02902, July 7, 1992.

¹²⁴ *Id.*

¹²⁵ See Avellino and Bienes Dep. July 7, 1992 (MADOFF_EXHIBITS-03014).

¹²⁶ Avellino & Bienes Agreement of General Partnership, executed Aug. 12, 1988 (MBISAA0003076; MBISAA0003079).

¹²⁷ Complaint, *SEC v. Avellino & Bienes*, No. 92-CV-08314 (JES) (S.D.N.Y. Nov. 25, 1992).

¹²⁸ A&B Loans Detail by Investor (SECSDK0000325-SECSDK0000834); see also Avellino & Bienes SEC Complaint.

investors as “loans.”¹²⁹ A&B issued letters to investors that specified the rate of return on these loans.¹³⁰ A&B in turn invested customer funds with BLMIS and retained the difference between the “returns” BLMIS paid to A&B and the returns A&B promised to its underlying investors.¹³¹ At the time of the SEC’s investigation in 1992, A&B was one of the IA Business’s largest sources of investor monies, funneling hundreds of millions of dollars into the IA Business.¹³²

121. On November 25, 1992, after its investigation, 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.¹³³ To settle the claims against them, Avellino and Bienes entered into a consent decree in which they agreed not to sell securities without a registration statement or to act as an investment company. In addition, they agreed to pay fines to the SEC totaling \$350,000.¹³⁴
122. Prior to approximately June 23, 1992, A&B maintained IA accounts with the following account numbers: 1A0045, 1A0046,¹³⁵ 1A0047, 1A0048, 1A0049 and 1A0050 (the “Existing A&B IA Accounts”).¹³⁶ During that time, A&B used these IA Business accounts to invest money pooled from investors.¹³⁷
123. Documents provided in 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

¹²⁹ See, e.g., Avellino and Bienes Dep. Exs. 02913; 02925-02934, July 7, 1992.

¹³⁰ See generally Avellino & Bienes SEC Complaint.

¹³¹ Interview: Michael Bienes, Frontline (May 12, 2009), <http://www.pbs.org/wgbh/pages/frontline/madoff/interviews/bienes.html>; Avellino & Bienes SEC Complaint (MADOFF_EXHIBITS-03058).

¹³² BLMIS customer statements for A&B accounts through June 1992.

¹³³ See generally Avellino & Bienes SEC Complaint.

¹³⁴ Final Judgment of Permanent Injunction and Other Equitable Relief and Consent Against Avellino & Bienes, Frank J. Avellino and Michael S. Bienes, *SEC v. Avellino & Bienes*, No. 92-CV-08314 (JES) (S.D.N.Y. Nov. 25, 1992).

¹³⁵ Account number 1A0046 was in the name of the A&B Pension Plan & Trust. Account Maintenance File for 1A0046 (AMF00309438-9450).

¹³⁶ See Arbitrage Portfolio Transaction Reports (MF00545002-MF00545003); Portfolio Management Reports as of June 30, 1992 (MF00011542-MF00011551); see also Avellino and Bienes Dep. Ex. 03223, Nov. 20, 1992.

¹³⁷ BLMIS customer statements for A&B accounts through June 1992. See Avellino and Bienes Dep., Nov. 20, 1992.

approximately \$364 million.¹³⁸ On July 7, 1992, Avellino and Bienes testified to the SEC that A&B utilized Chemical Bank account(s) to handle investor funds and that the account balance was typically \$2 million to \$3 million but never higher than \$6 million.¹³⁹ Assuming that the Chemical Bank account(s) 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 Existing A&B IA Accounts, and less a maximum of \$6 million that could be purportedly held at Chemical Bank at any time) in its IA Business accounts.¹⁴⁰

124. The shortfall explained above demonstrates that a cushion did not exist in June 1992. In or about June 1992, the IA Business created an additional account for A&B (the “1A0053 Account”) and manufactured fictitious trading in order to account for the shortfall.¹⁴¹ 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.¹⁴² The creation of the 1A0053 Account in June 1992 allowed Avellino and Bienes to state, in sworn testimony provided to the SEC in July 1992, 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.¹⁴³ However, there is no evidence that

¹³⁸ See A&B Loans Detail by Investor (SECSDK0000325); Arbitrage Portfolio Transaction Reports (MF00545002-MF00545003); Portfolio Management Reports as of June 30, 1992 (MF00011542-MF00011551); *see generally* Avellino & Bienes Dep., July 7, 1992.

¹³⁹ Avellino and Bienes Dep. Ex. 02917-02918, July 7, 1992.

¹⁴⁰ See A&B Loans Detail by Investor (SECSDK0000325); Arbitrage Portfolio Transaction Reports (MF00545002-MF00545003); Portfolio Management Reports as of June 30, 1992 (MF00011542-MF00011551); Avellino and Bienes Dep. Ex. 02917-02918, July 7, 1992.

¹⁴¹ 1A0053 Account June 30, 1992 statements (MADTBB02391076-MADTBB02391078; MADTBB02391007-MADTBB02391017).

¹⁴² 1A0053 Account Nov. 1989 to Dec. 1992 statements (MADTBB02397292; MADTBB02397300; MADTBB02397304; MADTBB02391086; MADTBB02390998-2391007; MADTBB02391009; MADTBB02391011; MADTBB02391013; MADTBB02391015; MADTBB02391017; MADTBB02391076; MADTBB02391078; MADTBB003346469; SECSDK0010189; MADTBB03347804; MADTBB03346114; MADTBB03345819-5823; MADTBB02391071; MADTBB03345824; MADTBB03345825-5830; MADTBB03345817-5818; SECSDK0000035; MADTBB03345466-5467; SECSDK0000141, 143-149; MADTBB03345474-5475; MADTBB03345492; MADTBB03345476-5484; MADTBB03347613-7614; MADTBB03345495-5496; MADTBB03345485-5487; MADTBB03345497-5503; MADTBB03347604-7605; MADTBB03345504; MADTBB03114024; MADTBB03114026).

¹⁴³ Avellino and Bienes Dep. Ex. 02944-02951, July 7, 1992.

this balance was the result of deposits and investments of funds received by either A&B or by A&B clients.¹⁴⁴ Instead, the IA Business created fictitious backdated transactions to make it appear that the account had equity sufficient to make up the shortfall.¹⁴⁵

125. In addition, generally the IA Business 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, 1992.¹⁴⁶ Account 1A0054 (opened for a different BLMIS customer) was created in September 1992, with the first transaction posted on September 22, 1992 for the purported purchase of McKesson Corp. convertible subordinated debt.¹⁴⁷ 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 1989.¹⁴⁸ The out of order sequencing of the account creation dates, as well as the backdated trades on the June 1992 customer statement, support the conclusion that the 1A0053 Account was fabricated by the IA Business specifically in response to the SEC investigation. (*See* Figure 12.)

¹⁴⁴ 1A0053 Account June 30, 1992 statements (MADTB02391076-MADTB02391078; MADTB02391007-MADTB02391017).

¹⁴⁵ *Id.*

¹⁴⁶ 1A0052 Account May 31, 1992 statement (MF00462572).

¹⁴⁷ 1A0054 Account September 30, 1992 statement (MF00454666).

¹⁴⁸ 1A0053 Account November 30, 1989 statement (MADTB03346469).

Figure 12¹⁴⁹

June 30, 1992 Customer Statement

BERNARD L. MADOFF
Investment Securities
New York & London

AVELINO C. BIZNES 45
C/O FRANK AVELLINO
4750 NE 23RD AVENUE
FT LAUDERDALE FL 33308

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

1-00156-3-0
6/30/92
1-A0053-3-0
59-1664935

Date	Description	Transaction ID (TRN)	Amount
6/23	FORD MOTOR CO. DEL		40,000.00
6/23	DIV. 5/01/92 - 6/01/92		80,000.00
6/23	GENERAL MOTORS CORP.		96,800.00
6/23	DIV. 2/13/92 - 3/10/92		
6/23	INTERNATIONAL BUSINESS MACHS.		
6/23	DIV. 5/15/92 - 6/10/92		

12/10	100,000	6 FORD MOTOR CO. DEL	24 1/8	2,381,000.00
12/11	175,000	7 FORD MOTOR CO. DEL	24 1/8	2,325,000.00
12/11	80,000	15 INTEL CORP	41 1/8	4,221,875.00
12/12	125,000	16 INTEL CORP	41 1/8	3,290,000.00
12/13	150,000	8 FORD MOTOR CO. DEL	23 3/4	5,156,750.00
12/13	75,000	17 INTEL CORP	23 3/4	3,562,500.00
12/13	25,000	9 FORD MOTOR CO. DEL	40 7/8	3,065,625.00
12/19	100,000	20 AMR CORP	23 7/8	596,875.00
12/19	80,000	21 INTERNATIONAL BUSINESS MACHS.	61 1/4	5,125,000.00
			R9	7,120,000.00

CONTINUED ON PAGE 5

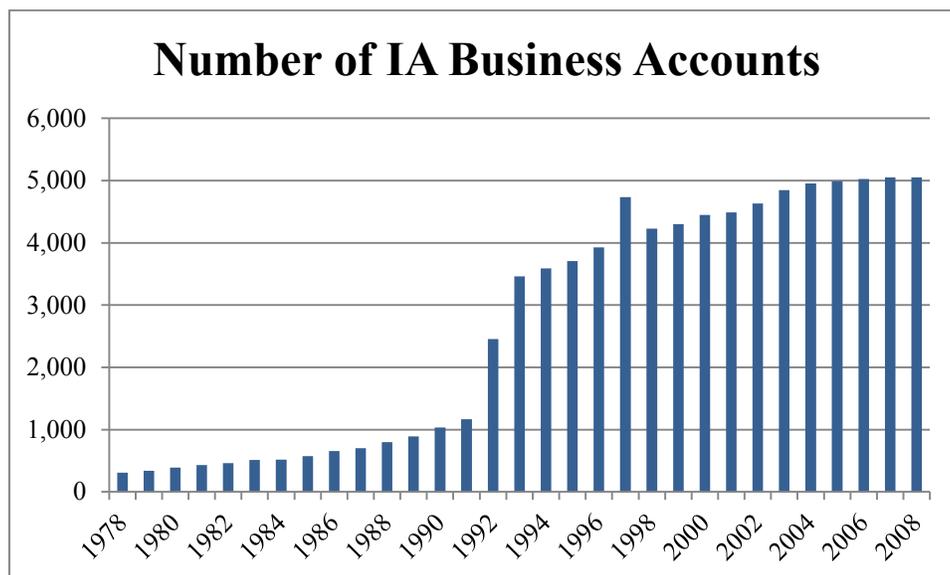
MADTBB02391013

126. 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.¹⁵⁰ (See Figure 13 below which highlights the dramatic increase in the IA Business customer accounts after the liquidation of A&B in 1992.) With the advent of these new accounts, the IA Business purportedly implemented a new investment strategy.

¹⁴⁹ The Transaction IDs (“TRN” column) for the various transactions on this customer statement are out of sequence with the reported dates of the transactions.

¹⁵⁰ See Portfolio Netcap Totals by Group-A&B dated March 31, 1993 (MADTBB03079814-MADTBB03079910).

Figure 13



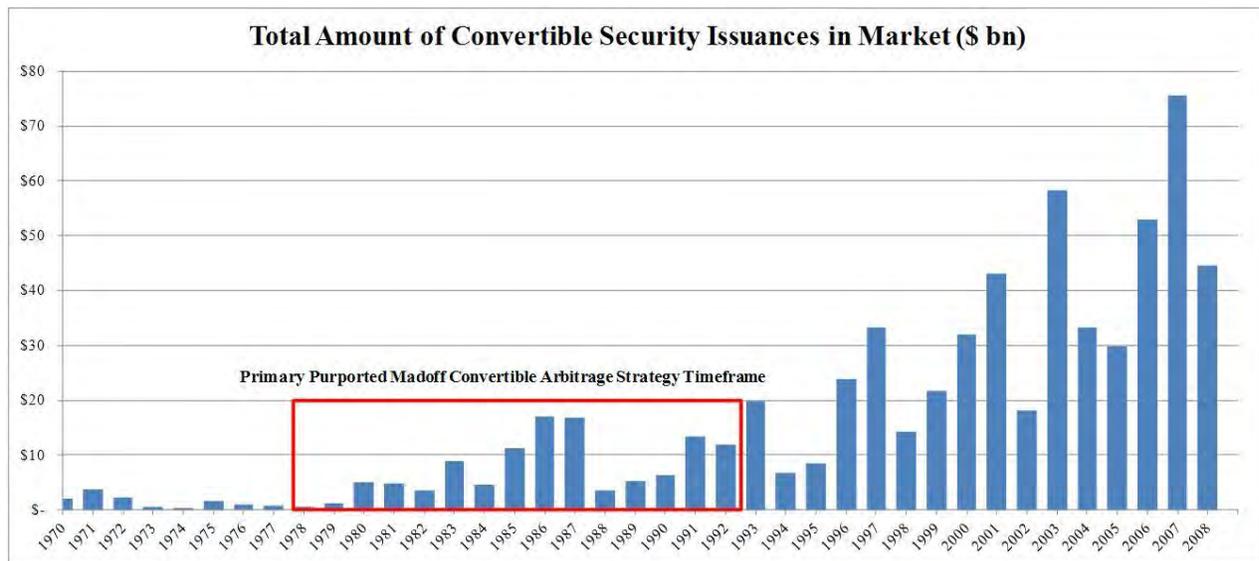
c. The Purported Split-Strike Conversion Strategy - the 1990s and later: There is no evidence that a split-strike conversion strategy for the IA Business customers ever occurred. In fact, the evidence shows that these transactions were fictitious.

127. In the early 1990s, the IA Business 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.”¹⁵¹ This, however, is in contrast with the increasing volume of convertible security issuances in the market. (See Figure 14):¹⁵²

¹⁵¹ Bernard Madoff – Letter to Client, March 16, 1999 (AMF00139075).

¹⁵² 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).

Figure 14



128. A 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. The IA Business 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.¹⁵³
129. A SSC strategy reduces a portfolio's volatility (and risk) by limiting the investor's possible gains and losses. This is commonly referred to as a "collar strategy," in which 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.
130. The collar strategy limits, but does not entirely eliminate, risk due to volatility. In fact, a properly designed and executed SSC strategy would trade with the same or very similar volatility as the S&P 100 index (or other market index) anytime the market value of the equity portfolio falls between the exercise prices of the options.

¹⁵³ Michael Ocrant, *Madoff tops charts; skeptics ask how* at 1, 89 MAR/Hedge, May 2001; see also *S&P 100*, Standard & Poors, <http://www.standardandpoors.com/indices/sp-100/en/us/?indexId=spusa-100-usduf-p-us-l--> (last visited Nov. 6, 2012).

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

131. Over the period January 2000 through November 2008 (the “Analyzed Time Period”),¹⁵⁴ there were 105 days when the IA Business transacted in equities above the market volume in the exchanges.¹⁵⁵ In total, over the 105 days, there were 912 instances when the IA Business purported stock transactions exceeded the overall market volume for the day. (See **Exhibit 11** – “Split-Strike Conversion IA Business Equity Volume Analysis, Analyzed Time Period”).¹⁵⁶
132. For the Analyzed Time Period, the IA Business traded 376 unique options in 1,388 unique transactions. Of these purported transactions, 71.1 percent of the contracts traded above the daily market volume, including 62.0 percent of transactions with purported volume occurring at 10 times above the daily market volume. (See **Exhibit 12** – “Split-Strike Conversion IA Business Options Volume Analysis, Analyzed Time Period”.)

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

133. During the Analyzed Time Period, 99,972 equity transactions were purportedly executed outside of the daily market traded price range. (See **Exhibit 13** – “Split-Strike Conversion IA Business Equity Price Analysis, Analyzed Time Period”.) These purported transactions were derived from 496 unique transactions: 321 of which, based on what was recorded on the IA Business 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 \$105.04.
134. Equity trades (such as the purported transactions recorded by BLMIS on IA Business customer records) that were 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

¹⁵⁴ This time period was chosen based on the available trade data in the IA Business Settled Cash (“SETCSH17”) database. See description of the Settled Cash database in Table 1.

¹⁵⁵ Market volume as reported by Bloomberg.

¹⁵⁶ 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 IA Business purported volume exceeded the aggregate historical daily volume for the U.S., London Stock Exchange and Frankfurt Stock Exchange.

obtained from Bloomberg, which receives its data directly from the exchanges and the OTC markets. In the event that the out of range prices on the IA Business customer statements were the result of an inadvertent typing error, the IA Business would have had to issue corrections with the appropriate prices.¹⁵⁷ There is no evidence of any corrections or reissuances of customer statements for these “mistakes.”

135. Most importantly, for the period during which DTC records are available, there are no DTC records evidencing the trades the IA Business purportedly executed.
136. In addition to the equity transactions discussed above, there were thousands of purported option trades executed outside of the daily price range. During the Analyzed Time Period, 34,501 options transactions traded outside of the daily price range. These trades were allocated across 5,271 customer accounts. (See **Exhibit 14** – “Split-Strike Conversion IA Business Options Price Analysis, Analyzed Time Period”.) Of the 49 unique options traded, 25 were purportedly sold above the daily high price and 24 were purportedly purchased below the daily low price.
137. Options traded above the daily high price by as much as \$15.25 higher and at an average of \$2.17 above the high price. Options traded below the daily low price by as much as \$6.05 lower and at an average of \$1.48 below the low price.
138. Similar to the equity trades discussed above, the purported options transactions recorded by BLMIS on IA Business customer records were reported as having been executed outside the daily price range of the entire U.S. options market and could not have occurred. The data used in this analysis was obtained from the Chicago Board of Options Exchange (“CBOE”).¹⁵⁸
139. Based upon the foregoing discussion regarding pricing discrepancies, this investigation and analysis show that the SSC trading in the IA Business did not occur.

¹⁵⁷ *Rules and Procedures*, National Securities Clearing Corporation, 51 (Sept. 4, 2012), http://www.dtcc.com/legal/rules_proc/nscc_rules.pdf (last visited Oct. 24, 2012). 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.” BLMIS Trading Manual (MMAD-BR00021287). As there would have been no buyer on the other side of these trades, these transactions could not have been executed.

¹⁵⁸ The S&P 100 Index options (OEX), purportedly traded by the IA Business, 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*, CBOE, (Dec. 4, 2001), http://www.cboe.com/LearnCenter/pdf/OEX_12-05-01.pdf (last visited Nov. 18, 2011).

(iii) **The IA Business purportedly bought low 83 percent of the time and sold high 72 percent of the time (VWAP Trades) evidencing the fictitious nature of the trades**

140. VWAP, the average price weighted by total volume, 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

141. 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. The theory is that if the price of a buy trade is lower than the VWAP, it is a good trade (and the opposite is true if the price is higher than the VWAP), but consistently achieving this is unrealistic.

142. As a result, another trading anomaly stemming from the IA Business's purported SSC strategy was how frequently the IA Business reported purchases or sales of equity at extremely favorable prices. A comparison of trading records for IA Business 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.

143. Given that the IA Business 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 the IA Business.

144. Alternatively, if the IA Business was not front-running (which it was not), the statistics of the purported IA Business trades showing that they were consistently outperforming VWAP by a wide margin are further evidence of the fictitious nature of the trades. A comparison of the purchase and sale of the same stock actually traded by the Proprietary Trading Business on the same day makes this clear.¹⁵⁹ The VWAP on those trades was consistently at or near VWAP, a finding consistent with actual implementation of algorithmic trading.

(iv) **Thousands of purported transactions, affecting over 3,700 accounts, were reported by the IA Business as having settled on weekends or holidays when the exchanges are closed**

145. During the Analyzed Time Period, 7,736 trades were reported as having settled on weekend days in 3,743 IA Business accounts. (See **Exhibit 15** – “Split-Strike Conversion IA Business Weekend Trade Detail, Analyzed Time Period”.) 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 IA Business accounts showed an aggregate of 7,464 trade settlements. These trades could not have settled on a Saturday, further evidencing that the trades in the IA Business could not have occurred.
146. During the Analyzed Time Period, IA Business customer statements show 37 trades settled on recognized market holidays. (See **Exhibit 16** – “Split-Strike Conversion IA Business Holiday Trade Detail, Analyzed Time Period”.) Specifically, seven trades settled on September 4, 2000 and September 1, 2008, both of which fell on Labor Day in their respective years. One trade settled on February 17, 2003, Washington’s Birthday. Two trades settled on May 31, 2004, Memorial Day. 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 the IA Business could not have occurred.¹⁶⁰

¹⁵⁹ For the Analyzed Time Period, approximately 51% of buy transactions executed out of the Proprietary Trading Business were below the VWAP versus 83% in the IA Business; and, approximately 48% of sell transactions executed out of the Proprietary Trading Business were above the VWAP versus 72% for the IA Business.

¹⁶⁰ *New York Stock Exchange Special Closings*, New York Stock Exchange, http://www.nyse.com/pdfs/presidents_closings.pdf (last visited Nov. 14, 2011).

(v) **Thousands of purported IA Business 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**

147. For equity transactions, the industry requirement for settlement is three days after the trade date (“T+3”).¹⁶¹ 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.¹⁶² The customer statements generated by the IA Business show equity transactions clearing outside the T+3 industry standard for a number of customer accounts. During the Analyzed Time Period, 340,774 trades were recorded as having settled outside the industry required timeframe 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 does not comply with standard trading practices and would have resulted in the disciplinary actions described above. For a number of accounts during the Analyzed Time Period, nearly 100 percent of trades in these accounts were settled outside the T+3 standard.
148. Similarly, with regard to purported option trades, a high percentage of option transactions were recorded as having settled in a timeframe outside the industry norm, which for options is trade date plus one day (“T+1”).¹⁶³ The IA Business statements regularly showed option transactions settling outside the T+1 industry norm for a number of accounts. During the Analyzed Time Period, IA Business customer statements show 546,999 option trades settling outside the T+1 industry norm. Of these trades, 539,449 or 98.6 percent, settled at least two days after the trade date (“T+2”), which does not comply with standard trading practices.¹⁶⁴ These non-standard trade settlements further confirm that trading in the IA Business did not occur.

¹⁶¹ *Conversion To T+3 Settlement, Reg. T, And SEC Rule 15c3-3(m), And Ex-Dividend Schedule*, FINRA Notice 95-26 (Apr. 1995).

¹⁶² DTC, Rules, By-Laws, and Organization Certificate of the Depository Trust Company 61-62 (June 2011).

¹⁶³ See *Index Options Product Specifications*, The Options Clearing Corporation, <http://www.optionsclearing.com/clearing/clearing-services/specifications-index-options.jsp> (last visited Nov. 18, 2011).

¹⁶⁴ Of these trades, 97% settled three days after the trade date (*i.e.*, “T+3”).

(vi) **The rate of return on the purported IA Business investments in the SSC strategy reflected an abnormally high level of consistently positive yearly returns when compared with relevant market indices**

149. As described *supra*, the SSC strategy that was purportedly implemented by the IA Business was a collar strategy that was intended to limit, but not eliminate, the portfolio's volatility. If executed properly, the portfolio would trade with the same or very similar volatility as the S&P 100 index when the market value of the equity portfolio fell between the exercise prices of the options.
150. To further test whether or not the IA Business investments were in fact made, the volatility of the purported IA Business's annual investment returns for the SSC strategy was calculated from January 1996 through December 2008.¹⁶⁵ As shown in Figure 15, the average annual rate of return for the IA Business accounts varies over the 13-year period from a low of approximately 10% to a high of approximately 20%.¹⁶⁶
151. Figure 15 also shows a comparison of the purported average annual rate of return of the IA Business accounts with the annual returns on two major market indices: the S&P 100 Index and the Dow Jones Industrial Average. As indicated in the chart, the annual rate of return for the S&P 100 Index vacillates between a high of 31% to a low of -37%. Similarly, the annual rate of return for the Dow Jones Industrial Average (DOW) swings from a high of approximately 25% to a low of approximately -34%.

¹⁶⁵ This period was utilized for analysis purposes since complete BLMIS electronic transaction information was available.

¹⁶⁶ Annual returns are calculated based on weighted averages over all SSC accounts.

Figure 15
IA Business Weighted Average Annual Rate of Return
vs. Annual Rate of Return on Major Indices



152. Unlike the major market indices, which show significant volatility in returns over the 13-year period, the average annual rate of return on the IA Business accounts is always positive over the period and within a much tighter band relative to comparable market indices. Over the chosen period, the range of fluctuation for the average rate of return for the IA Business is narrow, with the difference between the high and low of approximately ten percentage points (10%-20%). This is compared to the range for the S&P 100 (nearly 70 percentage points) and the Dow Jones Industrial Average (approximately 59 percentage points). In fact, the unreasonable compression of the IA Business fluctuation in the average rate of return is due

to the fact that, unlike the market indices, the IA Business accounts do not show a negative annual rate of return in any year during the period. Because the IA Business SSC strategy was supposedly engineered around the S&P 100, the returns the strategy would have necessarily generated should have been highly, positively correlated to the relevant indices discussed above. This clearly was not the case.

153. The lack of volatility in the annual rates of return for the purported IA Business investments, and the fact that the rates of returns never exhibited a negative period, lend further support that the trades in the IA Business did not occur.

d. Non-convertible arbitrage strategy and non-SSC strategy customer accounts - evidence shows that these transactions were fictitious

154. As described above, a small number of IA Business customer accounts did not follow either the purported convertible arbitrage strategy or the SSC strategy. Instead, securities (typically equities) were purportedly purchased, held for a certain duration, and then purportedly sold for a profit.
155. These accounts also reflected similar trading discrepancies that were identified for those accounts following the purported convertible arbitrage and SSC strategies. That is, these accounts also showed trading volumes of securities that exceeded the daily market trading volume, purported purchases and sales of securities at prices that were beyond the daily market highs or lows, backdated trades, trade settlement anomalies, and trades on weekends and holidays. Such trading discrepancies are further evidence that these purported transactions also could not have occurred.

e. There are no records from the DTC evidencing any legitimate trades occurring from the IA Business

156. Transfers of securities between licensed brokers are conducted by the DTC through automated book-entry changes to the broker's accounts.¹⁶⁷ Instead of trading paper stock

¹⁶⁷ The Depository Trust & Clearing Corporation ("DTCC") was formed in 1999 by combining the DTC and the NSCC. The DTCC, through its subsidiaries, provides clearance and settlement for almost all equity, bond,

- 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.¹⁶⁸
157. The NSCC, originally created in 1976, provides clearance and settlement services of equity, bond, exchange traded funds and unit investment trust transactions.¹⁶⁹ The NSCC acts as an intermediary between an exchange market (such as the New York Stock Exchange) 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.¹⁷⁰
158. 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 indices.
159. The OCC clears transactions for put and call options on common stocks and other equity issues, stock indices, foreign currencies, interest rate composites and single-stock futures.
160. As a registered Derivatives Clearing Organization under the CFTC's jurisdiction, the OCC offers clearing and settlement services for transactions in futures and options on futures.

government securities, mortgage-backed securities, money market instruments and OTC derivative transactions in the U.S. market. Therefore, for any of these types of trades to occur in the U.S., each individual security transaction must be routed through the DTCC before it can be finalized. *About DTCC: History*, The Depository Trust & Clearing Corporation, 17 (Aug. 17, 2011), <http://www.dtcc.com/about/history/> (last visited Oct. 24, 2012); *Responding to Wall Street's Paperwork Crisis*, The Depository Trust & Clearing Corporation, <http://www.dtcc.com/about/history/> (last visited Nov. 20, 2011); *An Introduction to DTCC Services and Capabilities*, The Depository Trust & Clearing Corporation, 2 (Aug. 16, 2011), http://www.dtcc.com/downloads/about/Introduction_to_DTCC.pdf (last visited Oct. 24, 2012); *An Overview*, The Depository Trust & Clearing Corporation, http://www.dtcc.com/downloads/about/Introduction_to_DTCC (last visited Nov. 20, 2011).

¹⁶⁸ *Following a Trade*, The Depository Trust & Clearing Corporation, <http://www.dtcc.com/downloads/about/Following%20a%20Trade.pdf> (last visited Oct. 24, 2012); *see also Products & Services Equities Clearance*, The Depository Trust & Clearing Corporation, http://www.dtcc.com/downloads/about/Broker_to_Broker_Trade (last visited Nov. 20, 2011).

¹⁶⁹ *See About DTCC*.

¹⁷⁰ *Following a Trade* at 6; *see also Products & Services Equities Clearance*.

Additionally, the OCC provides central counterparty clearing and settlement services for securities lending transactions.¹⁷¹

(i) **There is no evidence that IA Business customer equity trades were executed through the Proprietary Trading Business**

161. BLMIS maintained an account with the DTC (the “0646” account) for which trades would be cleared and/or custodied.¹⁷² However, based on my investigation and analysis of available DTC documentation during the time period of October 2002 through October 2008, only securities positions for the Proprietary Trading Business (including US-based securities out of MSIL, see *infra*), as recorded on the Proprietary Trading Business trading records, were held at the DTC.¹⁷³ Accordingly, there is no evidence that the security holdings purportedly held on behalf of the IA Business’s customers were held at the DTC for the time period examined.
162. For the years 2002-2008, the following analysis was performed:
- Identified all unique securities positions purportedly held by the IA Business on October 31st of each year (“Step 1”);¹⁷⁴
 - Identified unique securities held by the Proprietary Trading Business that corresponded to those identified in Step 1 on October 31st of each year (“Step 2”); and
 - Identified BLMIS’s DTC position records for the securities in Step 2.
163. For the seven-year period analyzed, all of the securities identified in Step 2, which were held on behalf of the Proprietary Trading Business as reported in the Proprietary Trading Business trading records, were reconciled to BLMIS’s DTC positions.
164. The securities purportedly held on behalf of the IA Business customers, as recorded in the IA Business trading records, were not shown on DTC records and were not held at the DTC.

¹⁷¹ See *What is the OCC?*, The Options Clearing Corporation, <http://www.theocc.com/about/corporate-information/what-is-occ.jsp> (last visited Nov. 20, 2011).

¹⁷² BLMIS had a DTC account from at least 1977. See The Depository Trust Participant Agreement, June 1977 (SNOW0000658-SNOW0000733); e-mail from BLMIS to a customer stating, “We clear through DTC.” (Feb. 13, 2007) (IBLSAA0000350).

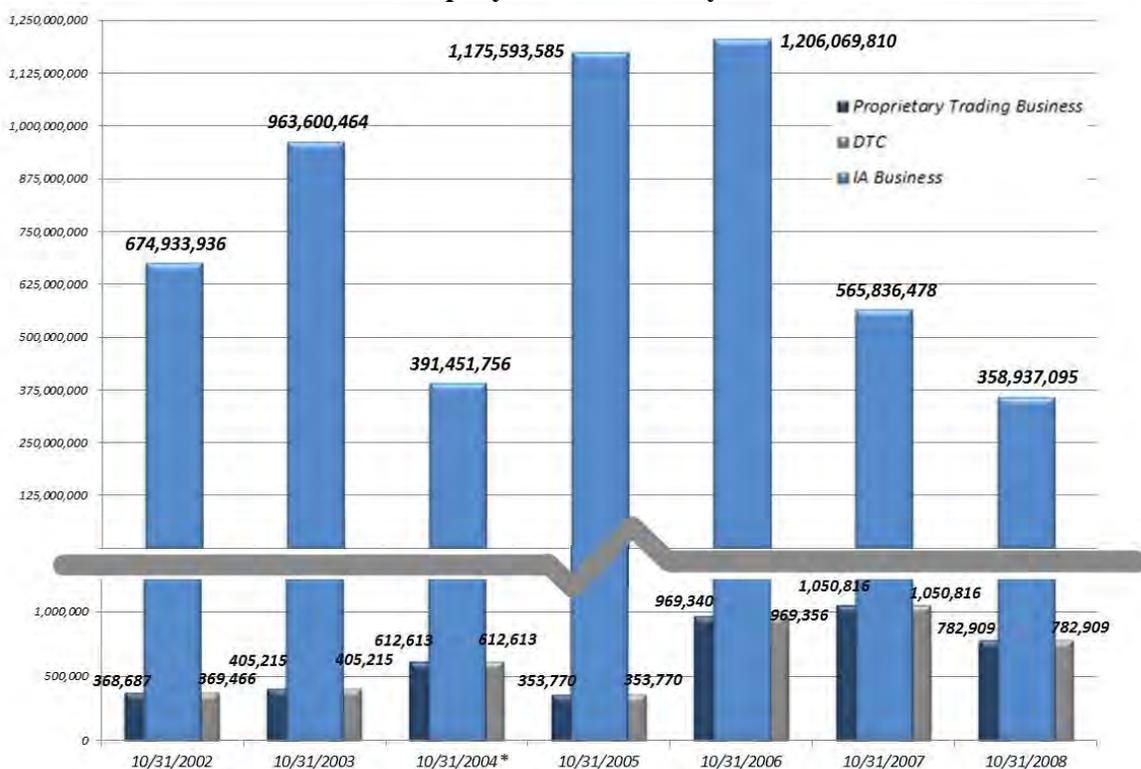
¹⁷³ Records for the DTC were only available from January 2002.

¹⁷⁴ October 31st was the fiscal year-end for BLMIS and corresponds to when the IA Business purported that its SSC strategy positions were still in the market.

Therefore, they could not have been legitimately executed as reported by BLMIS to its IA Business customers.

165. Figure 16 below compares the purported IA Business securities positions with the Proprietary Trading Business securities positions in common as of October 31st from 2002-2008. As shown in Figure 16, the extreme volume of purported equity positions from the IA Business on each October 31st dwarfs the numbers of the actual positions from the Proprietary Trading Business that were reconciled with the DTC.

Figure 16
Total Equity Shares Held by BLMIS



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

(ii) **There is no evidence that IA Business customer equity trades were executed through MSIL**

166. A security, such as a common stock, can only be bought or sold on an exchange by a broker-dealer that is a member of that exchange.¹⁷⁵ Since MSIL was not a member broker-dealer on US exchanges, it used the Proprietary Trading Business to execute US-based equity transactions. MSIL's US equities executed by the Proprietary Trading Business were custodied by the DTC under the same account used by BLMIS: the 0646 account.
167. For the years 2002-2008, the following analysis was performed:
- Identified all US equities traded by MSIL; and
 - Reconciled the positions in these equities to those executed and held by the Proprietary Trading Business.
168. The majority of US equities that were traded on behalf of MSIL were reconciled to those US equities executed directly by the Proprietary Trading Business. Given that the Proprietary Trading Business's equity holdings were reconciled to official DTC records, it stands that MSIL's US equity holdings, a subset of the overall Proprietary Trading Business equity holdings, were accounted for in the DTC positions.
169. For those remaining US equities that were traded on behalf of MSIL by a broker other than the Proprietary Trading Business, an analysis was performed to see if any MSIL trade in a US equity was traded on the same day as a purported trade from the IA Business. I also assessed whether the volume of shares purported to be traded from the IA Business and the price at which the trades were purportedly executed were possible based on the MSIL trade data. There were no instances where a US equity purportedly traded from the IA Business matched the day, volume and/or price of the US equities traded on behalf of MSIL.
170. Accordingly, since the IA Business purportedly traded US equities with respect to its SSC strategy, there is no evidence that the security holdings purportedly held on behalf of the IA Business's customers were executed through MSIL or held at DTC on behalf of MSIL for the

¹⁷⁵ *NASDAQ Stock Market Rules*, NASDAQ, <http://nasdaq.cchwallstreet.com/> (last visited July 18, 2012); *NYSE Equities Membership*, NYX, <http://usequities.nyx.com/membership/nyse-and-nyse-mkt-equities> (last visited July 18, 2012); *Trade Execution: What Every Investor Should Know*, SEC, <http://www.sec.gov/investor/pubs/tradexec.htm> (last visited on July 18, 2012); Michael Simmons, *Securities Operations: A Guide to Trade and Position Management*, 14-15, 151-152 (2002).

time period examined. Therefore, the IA Business's purported equity securities could not have been legitimately executed as reported by BLMIS to its IA Business customers.

(iii) **There is no evidence that purported IA Business customer US Treasuries were ever executed**

171. Similar to the above analysis, which reflects DTC positions of the Proprietary Trading Business equity holdings, my investigation also analyzed the available Treasury bills held by the DTC on behalf of the Proprietary Trading Business. Given the holdings reported for the Proprietary Trading Business Treasury bills at the DTC and other custodians, there is no evidence that the Treasury bill holdings purportedly held on behalf of the IA Business's customers were held at the DTC or any other custodian for the time period examined.¹⁷⁶
172. For the years 2002-2007, the following analysis was performed:
- Identified the unique Treasury bills held by the Proprietary Trading Business on December 31st of each year;
 - Compared those Treasury bill holdings to those Treasury bill positions held at BLMIS's DTC account; and
 - Compared the total Treasury bill holdings in the Proprietary Trading Business to those purportedly in the IA Business.¹⁷⁷
173. Those Proprietary Trading Business Treasury bills that were reported to have been custodied at the DTC were reconciled to BLMIS DTC position reports thus confirming that the Proprietary Trading Business Treasury bill positions in fact existed. Further, all of the Treasury bill CUSIPs (*i.e.*, unique security identifier) held at the DTC matched those reported as being purchased and held by the Proprietary Trading Business.¹⁷⁸ In contrast, none of the Treasury bill CUSIPs held at the DTC matched those purportedly held on behalf of the IA Business customers.

¹⁷⁶ In addition to the DTC, US Treasuries were also custodied at other institutions including the Canadian Imperial Bank of Commerce, JPMC and BONY. Although position statements were not received from those custodians, the vast majority of the Proprietary Trading Business's US Treasuries were custodied at the DTC. For example, at year-end 2002, 100% of Proprietary Trading Business Treasury bills were custodied at the DTC and at year-end 2003, 92% of US Treasury bills were held at the DTC.

¹⁷⁷ Data was used as of year-end as this was the time period during which the IA Business purported to have closed out of its SSC strategy positions and held its funds in US Treasury bills or cash.

¹⁷⁸ CUSIP is an acronym for Committee on Uniform Security Identification Procedures.

174. Furthermore, the total notional amount of Treasury bills held by the Proprietary Trading Business as of the relevant year-ends was *de minimis* compared to those purportedly held on behalf of the IA Business customers. Table 5 provides a year-end positions comparison from 2002 to 2007. By year-end 2007, the US Treasury positions in the Proprietary Trading Business represented approximately 0.1% of the value of the US Treasuries purportedly held on behalf of the IA Business customers. As a result, it is not possible that the purported IA Business US Treasury positions actually existed.

Table 5
Comparison of Year-End US Treasury Positions:
Proprietary Trading Business vs. IA Business

Year-End	Proprietary Trading Business	IA Business	Proprietary Trading Business positions as a percent of IA Business positions
2002	\$84,000,000	\$30,975,765,000	0.27%
2003	\$70,000,000	\$33,643,020,000	0.21%
2004	\$70,000,000	\$37,935,258,000	0.18%
2005	\$75,000,000	\$40,913,910,000	0.18%
2006	\$70,000,000	\$48,342,420,000	0.14%
2007	\$80,000,000	\$56,990,055,000	0.14%

(iv) Fake DTC Screen Reports created by the IA Business

175. Over 160 documents purportedly containing screen print-outs representing DTC inquiry look-ups were found in BLMIS's records.¹⁷⁹ 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 documents.

¹⁷⁹ See MESTAAM00000008-MESTAAM00000169.

176. For example, MESTAAM00000013 contained the following text which was typed into the document (see Figure 17):

Figure 17

```

  _ ACTD  _ ART  _ PEND  _ RMCI  _ SETP  _ Help
KMXR/POS /POSO          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
Pledged--->
Segregation----->:          TOTALS  Amount of TOTAL which is:
Investment ID----->:          8,545,639  IPO:          N/A
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:Next-Day 12/24:Details

```

MESTAAM00000013

177. A forensic examination of the metadata embedded in this document shows the following (see Figure 18):¹⁸⁰

¹⁸⁰ Metadata was examined utilizing the Pinpoint Laboratories Metaview program.

Figure 18

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

178. While the text in Figure 17 indicates that the information was obtained from the DTC on November 30, 2006 at 16:13:35 hrs, the metadata shows that this document was actually created on December 19, 2006 at 11:16:00 AM, twenty days after the date which appears in the text of the document.
179. More importantly, the fake DTC screen print shows that BLMIS was 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.
180. The two documents in Figure 19 and Figure 20, respectively, contain information pertaining to two different US Treasury bills yet show the exact same date and time stamp when they were supposedly retrieved from the DTC system.

Figure 19

```

ACTD ART PEND RMCI 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 00.000BILL070315BE# Date: 01 / 04 / 2007
Last Actv 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
----- PAGE 2
1/13:FREE Position 3/15:MISC Holdings 4/16:Prev-Day 5/17:Next-Day 12/24:Details
    
```

MESTAAM00000054

Figure 20

```

ACTD ART PEND RMCI 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: 912795YY1 00.000BILL070322BE# Date: 01 / 04 / 2007
Last Actv 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
----- PAGE 2
1/13:FREE Position 3/15:MISC Holdings 4/16:Prev-Day 5/17:Next-Day 12/24:Details
    
```

MESTAAM00000060

181. The fictitious nature of these documents is clearly evident since it is impossible to print these DTC screen inquiry reports for account 0646-Madoff from the DTC at the exact same minute

and second as depicted on both documents. In fact, embedded metadata for these two documents show that they were created on January 5, 2007 at 11:48 a.m., more than four hours before the date depicted in the documents. Creation of these fictitious DTC screens serves no legitimate business purpose; these screens serve to document purported trading activity that did not actually occur.

182. In addition to the fake DTC documents described above, additional investigation revealed that the IA Business custom-developed software was created to print a replica of a report called the Participant Position Statement from the DTC. Three components of computer programs were located on the AS/400 system in the IA Business and were utilized in combination to create the fake DTC participant position reports:

- A data file named DTCABAL containing fictitious security positions;
- A RPG II program named DTC021 that formatted the data from DTCABAL, adding headers and formatting to the data to replicate a real DTC report; and
- 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 a real DTC report.

183. As part of the investigation, a copy of an actual DTC report from the Proprietary Trading Business as of July 18, 1996 was found that was apparently utilized by BLMIS as the source for designing imitation DTC reports.¹⁸¹ The fake DTC report was re-created using the DTCABAL file, the DTC021 RPG II program, and the FormsPrint software located on a system backup tape from BLMIS. (See **Exhibit 17** for examples of screen shots of the data files.) The original and fake reports appear below in Figure 21:

¹⁸¹ This document contains numerous handwritten notes 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. See MADTSS00329120-MADTSS00329124; MADTSS00329114-MADTSS00329127.

Figure 21

ACCOUNT SUMMARY	SDFS EQUITY	CLOSING BALANCES
056462 10 7 LORAL SPACE & COMM <		67
P8797T 13 3 SUN INT'L HOTEL ORDC		59
Y1775U 10 7 CREATIVE TECH F *		83
000912 10 5 ACM OVMHNT INC FUNDC		119
000915 10 6		996
001855 10 2 AFLAC INC		58
001884 10 2 AGCO CORP		9
001957 10 9 AT&T CORP		2,244,198
002824 10 0 ABBOTT LABORATORIES<		747.603
003387 10 7		5,000
004898 10 2 ACKO ENERGY CORP *		20,289

184. There is no legitimate business reason to generate a fake DTC report because 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 trading did not occur in the IA Business.

(v) **Reconciliation of Proprietary Trading Business options trades to OCC**

185. BLMIS maintained an account with the OCC for clearing equity option trades. Based on the investigation and analysis of the OCC documentation available for October 2002 through October 2008, only option trades executed for the Proprietary Trading Business (as well as those for MSIL) as reported on the Proprietary Trading Business trading records, were cleared through OCC. Accordingly, there is no evidence that any options purportedly executed on

behalf of the IA Business's customers ever cleared through the OCC for the time period examined.

186. The following analysis was performed with respect to options transactions. For the years 2002-2008:

- Identified options traded by the Proprietary Trading Business as of October 31st of each year; and¹⁸²
- Identified OCC clearing records for the Proprietary Trading Business option positions.

187. For the seven-year period analyzed, nearly all of the options that were traded on behalf of the Proprietary Trading Business customers as reported in the Proprietary Trading Business trading records, were reconciled to the OCC thus confirming that the Proprietary Trading Business option transactions in fact occurred and were cleared.¹⁸³

188. The options purportedly traded on behalf of IA Business customers, as recorded in the IA Business trading records, were not shown on OCC records and were not cleared through the OCC. Therefore they could not have been legitimately executed as reported by BLMIS to its IA Business customers.

189. For example, on October 31, 2005, records from the Proprietary Trading Business 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 IA Business customer statements for the same date total 658,342. Therefore, options purportedly traded and held for the IA Business could not have been executed through the Proprietary Trading Business nor were they cleared through the OCC account associated with BLMIS.

¹⁸² October 31st was the fiscal year-end for BLMIS and was the date for which OCC records were available for the 2002-2008 time period.

¹⁸³ Approximately 3% of the options were not matched between the Proprietary Trading Business and the OCC records. However, in no cases were any of the unmatched options those that were purportedly traded by the IA Business during this time period.

f. Approximately \$4.3 billion of dividends reported on IA Business customer statements were fictitious and were never received by BLMIS

190. 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 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.¹⁸⁴
191. Although BLMIS was regularly recording dividend payments on the IA Business customer statements, the evidence is that such dividend payments were never received by BLMIS.
192. To test whether the IA Business actually received the dividend payments which were being reflected in the IA Business customer account statements, account number 1-B0039-3-0 was randomly selected in order to identify securities for which dividends were paid. Figure 22 below shows the January 31, 2007 customer account statement for that account and identifies the dividend payments that were purportedly received during that month:

¹⁸⁴ See discussion *infra* on SEC Transfer Agents; *Holding Your Securities – Get the Facts*, U.S. SEC, <http://www.sec.gov/investor/pubs/holdsec.htm> (last visited Nov. 20, 2011); see also *Transfer Agent*, United Technologies, <http://utc.com/Investor+Relations/Transfer+Agent> (last visited Nov. 20, 2011).

Figure 22

REDACTED				1/31/07	1
		1-B0039-3-0		*****9069	
		BALANCE FORWARD			.55
1/02		MERCK & CO	DIV		1,046.52
1/02		DIV 12/08/06 1/02/07			
1/02		PEPSICO INC	DIV		612.00
1/02		DIV 12/08/06 1/02/07			
1/02		WAL-MART STORES INC	DIV		512.55
1/02		DIV 12/15/06 1/02/07			
1/03		HEWLETT PACKARD CO	DIV		277.44
1/03		DIV 12/13/06 1/03/07			
1/04		UNITED PARCEL SVC INC	DIV		503.88
1/04		CLASS B			
1/04		DIV 11/27/06 1/04/07			
1/05		SCHLUMBERGER LTD	DIV		178.50
1/05		DIV 12/06/06 1/05/07			
1/31		FIDELITY SPARTAN	DIV		144.26
1/31		U S TREASURY MONEY MARKET			
1/31		DIV 01/31/07			
1/31		FIDELITY SPARTAN	1		34,219.00
1/31	25,000	U S TREASURY MONEY MARKET			
1/31		22239 U S TREASURY BILL	59.020	24,755.00	
1/31		DUE 4/12/2007			
1/31	12,739	4/12/2007			
1/31		24190 FIDELITY SPARTAN	1	12,739.00	
1/31		U S TREASURY MONEY MARKET			
CONTINUED ON PAGE 2					

MDPTPP00131984

193. Based on this customer statement, all dividends purportedly received by all the IA Business customers for these same securities for all of January 2007 were then aggregated and analyzed. These amounts are summarized below in Table 6:

Table 6¹⁸⁵

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

194. 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 those as shown in Table 7:¹⁸⁶

Table 7

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

195. An analysis was then conducted of all the IA Business bank account statements for the months of December 2006 and January 2007 to determine whether or not there were additions

¹⁸⁵ The IA Business continued to reference the Fidelity Spartan US Treasury Money Market Fund as such even though its name changed to the Fidelity US Treasury Money Market Fund effective August 15, 2005. *See Prospectus, Fidelity Spartan US Treasury Money Market Fund, U.S. Government Money Market Fund, & Money Market Fund* (June 29, 2005).

¹⁸⁶ 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.

to the IA Business bank accounts (*i.e.*, the 703 Account and 509 Account) in the amounts reflecting the purported total dividend payments to the IA Business customers.¹⁸⁷ No transactions from the above transfer agents or transactions 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.

196. Additional analyses were performed on dividends purportedly received by all IA Business customers between the years 1998 through 2008.¹⁸⁸ 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.¹⁸⁹ A breakdown by year of these dividend payments is shown below in Table 8:

¹⁸⁷ 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 found.

¹⁸⁸ The IA Business bank account statements were available from December 1998 through December 2008.

¹⁸⁹ Electronic data, which included dividend payments from customer statements, was available from December 1995 through December 2008. The total purported dividend distributions for this longer period totaled \$4,594,442,711.77. While BLMIS bank statements prior to 1998 are no longer available from the banks and were not found in the BLMIS records, nevertheless, there was no evidence that any prior dividend payments were ever received by BLMIS on behalf of its IA Business customers.

Table 8

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

197. The dividend transactions reported on the IA Business customer account statements were compared to the transactions in the 703 Account. Of the more than 8,300 dividend transactions identified, not one purported dividend payment matched to a cash addition on the BLMIS bank statements.
198. The foregoing analysis regarding dividend payments further shows that trading in the IA Business did not occur.

g. The IA Business was “Schtupping” certain customer returns

199. Documents and computer programs uncovered in the course of the investigation revealed that the IA Business was further falsifying customers’ purported investment returns with fictitious trades implemented through a special basket trading program. The name of the special basket trading program was called “B.SCHUPT.” The word “schtup” is a Yiddish word meaning to “push,” connoting the act of giving an extra effort in order to meet expectations.¹⁹⁰ While the special basket trading file was named B.SCHUPT, other BLMIS documents show that this

¹⁹⁰ *Schtup Definition*, Yiddish Dictionary Online, <http://www.yiddishdictionaryonline.com> (last visited Nov. 20, 2011).

was simply a spelling error on the part of the IA Business employee(s) who transcribed the name (*see, e.g.*, “SHTUP FORMU1.xls”).¹⁹¹

200. The investigation revealed that the use of the B.SHUPT 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 the IA Business. In fact, certain IA Business 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.SHUPT program.
201. For example, in December 2003, a four-page packet of instructions (two pages of which were handwritten instructions signed by DiPascali, *see* Figure 23) contained explicit instructions and details surrounding a B.SHUPT special trading basket that was to be run for that period.¹⁹² The instructions included 29 accounts that were to receive the benefits of the special option trades.

¹⁹¹ *See, e.g.*, “SHTUP FORMU.xls” at FDIP-BR00000338; “SHTUP FORMU1.xls” at FDIP-BR00000339; “SHTUPT 062100.xls” (ELIP_02_BR_00002254).

¹⁹² MADTSS01124263-MADTSS01124268.

Figure 23

PG 1 of 4

GOOD MORNING
ALEXIA,

PLZ PUT "F" ON

1E0156
1E0116
1E0133
1E0155
1E0159

THEN, PUNCH **B. SCHUPT**
RUN TRADING

THEN, RUN 2 BATCH TICKETS
~~RUN 4 BATCHES~~

THEN RUN 12/31 C+S

SEE YA
IN A MIN
P.T
Frank

MADTSS01124263

202. To investigate the effect of the B.SCHUPT option trades, one test account, account 1-B0227, was initially selected for detailed analysis. Based on the handwritten notes in Figure 24, this account was to receive 1.5 units of the special basket trade.

Figure 24

ACCT #	QUANT	
12R211	1.5	
1C 1277	2.0	(DANN CRUP)
1B 0136	1.5	
1B 0227	1.5	
1B 480	2.0	
1B 1107	1.5	

MADTSS01124265

203. The options associated with the B.SCHUPT file are shown below in Figure 25:

Figure 25

DATE: 1/01/04

BASKET TRADE LIST FOR FILE B.SCHUPT

PAGE: 1

DISTRIBUTION: FRANK

UPDATE/ DELETE	B/S	SYMBOL	QTY	PRICE	T/D	S/D	BMC	COMM
	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

204. Using the information above in Figure 24 and Figure 25 for account 1-B0227, and the “Quant” value of 1.5, the account would reflect the purchase of 15 contracts (1.5 times the QTY figure in the option table above) of the S&P Index OEBAJ option and 30 contracts (1.5 times the QTY) of S&P Index OEBAK option. These amounts agreed to the customer statements from the IA Business and show a purported total investment of \$6,045 in these options (see Table 9):

Table 9¹⁹³

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

205. The final two pages of the instructions detail the subsequent step in the transaction, which is the sale of these options. Figure 26 details the sale dates and sale prices of the options to be traded for account 1-B0227. 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.

Figure 26

Figure 26 displays two screenshots of a trading instruction form for 'HOUSE #17'. The left form is for OEBAJ and the right form is for OEBAK. Red arrows point to the 'Sale Price' and 'Settlement Date' fields in both forms.

Field	OEBAJ (Left)	OEBAK (Right)
BUY / SELL	S	S
ACCT GROUP		
SYMBOL	OEBAJ	OEBAK
ACCT TYPE	SHORT	SHORT
DOLLAR PRICE	6	3
FRACT \ CENTS	50	80
T \ D	12 / 30	12 / 30
S \ D	12 / 31	12 / 31
BLOTTER	4	4
MARKET		B
COMM	YES	YES
ACCT # 2	29000030 40-40	29000030 4
SHORT		
INSTR		
MADTSS01124267		MADTSS01124268

206. For account 1-B0227 discussed above, these purported option sales yielded \$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.

207. In total, the B.SCHUPT 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.

¹⁹³ As discussed *supra*, the IA Business customer statements reflected the settlement dates as opposed to trade dates; as a result the “purchase date” in this table is, in fact, the settlement date.

208. In November 2003, the Portfolio Management Report (“PMR”) for account 1-B0227 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.¹⁹⁴ (See Figure 27.)

Figure 27

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 224 DAYS			25,050.14CR
CAPITAL GAINS AND LOSSES			13,771.79CR
DIVIDENDS AND INTEREST			1,477.61CR
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
PRIOR YEAR END EQUITY		172,958.25CR	
ANNUALIZED RETURN FOR CURRENT YEAR	9.63 %		
PROJECTED ANNUALIZED RATE OF RETURN	8.76 %		
BUYING POWER	188	OVER/UNDER	11

MDPTQQ00039635

209. Examining the December 2003 PMR for account 1-B0227 just one month later, the annualized return for the current year went from just 9.63% to 17.73%, an increase of over 84%. (See Figure 28.)

¹⁹⁴ See Exhibit 18 for an example of a PMR. A PMR is a year-to-date IA Business report providing summary level information by customer account.

Figure 28

ACCOUNT # 1-B0227-3		REPORT FOR THE PERIOD FROM 1/01/03 TO 12/31/03	
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			27,375.15CR
CAPITAL GAINS AND LOSSES			28,987.79CR
DIVIDENDS AND INTEREST			1,681.72CR
REALIZED P/L			30,669.51CR
UNREALIZED P/L			
PROFITS WITHDRAWN			
OVER/UNDER BENCHMARK RETURN FOR CURRENT YEAR			3,294.36
CURRENT CASH BALANCE			.76CR
NET MARKET VALUE OF OPEN SECURITIES POSITIONS			203,627.00
TOTAL EQUITY			203,627.76CR
PRIOR YEAR END EQUITY		172,958.25CR	
ANNUALIZED RETURN FOR CURRENT YEAR	17.73 %		
PROJECTED ANNUALIZED RATE OF RETURN	17.63 %		
BUYING POWER	204	OVER/UNDER	24

MDPTQQ00039636

210. This enormous change in the annualized return for account 1-B0227 is a direct result of the fictitious trades implemented through the B.SCHUPT basket trading program. The fictitious option trades were recorded on the customer statement for this account as shown below in Figure 29:

Figure 29

RETIREMENT ACCTS INC CUST IRA		12/31/03		1
[REDACTED]		1-B0227-4-0		84-1314088
		BALANCE FORWARD	14,852.00	
12/01	BUY 15	8016 S & P 100 INDEX	1.800	2,715.00
12/18	30	JANUARY 550 CALL	1.100	3,330.00
12/31	SELL 15	8045 S & P 100 INDEX	6.500	9,735.00
12/31	30	JANUARY 555 CALL	3.800	11,370.00
12/31		8074 S & P 100 INDEX		
		JANUARY 550 CALL		
		8103 S & P 100 INDEX		
		JANUARY 555 CALL		
		TRANS TO 30 ACCT	JRNL	208.00
		NEW BALANCE		Return: 250% in avg. 20 days

211. The 29 accounts on the December 2003 special B.SCHUPT basket trading list 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 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 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 further 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.
212. Additional examples of the account listings and instructions were also located for the years 2002, 2004, 2005, 2006, and 2007.¹⁹⁵ Similar to the instructions discussed above, the additional listings also identified specific units of each fictitious trade to make for specific accounts. Account numbers and account holders varied by year.
213. In those years, the fictitious trades allocated pursuant to the 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 (in 2003) regarding the changes in the PMRs subsequent to the fictitious trades being allocated, the PMRs for those accounts in 2002, 2004, 2005, 2006, and 2007 showed similar patterns.

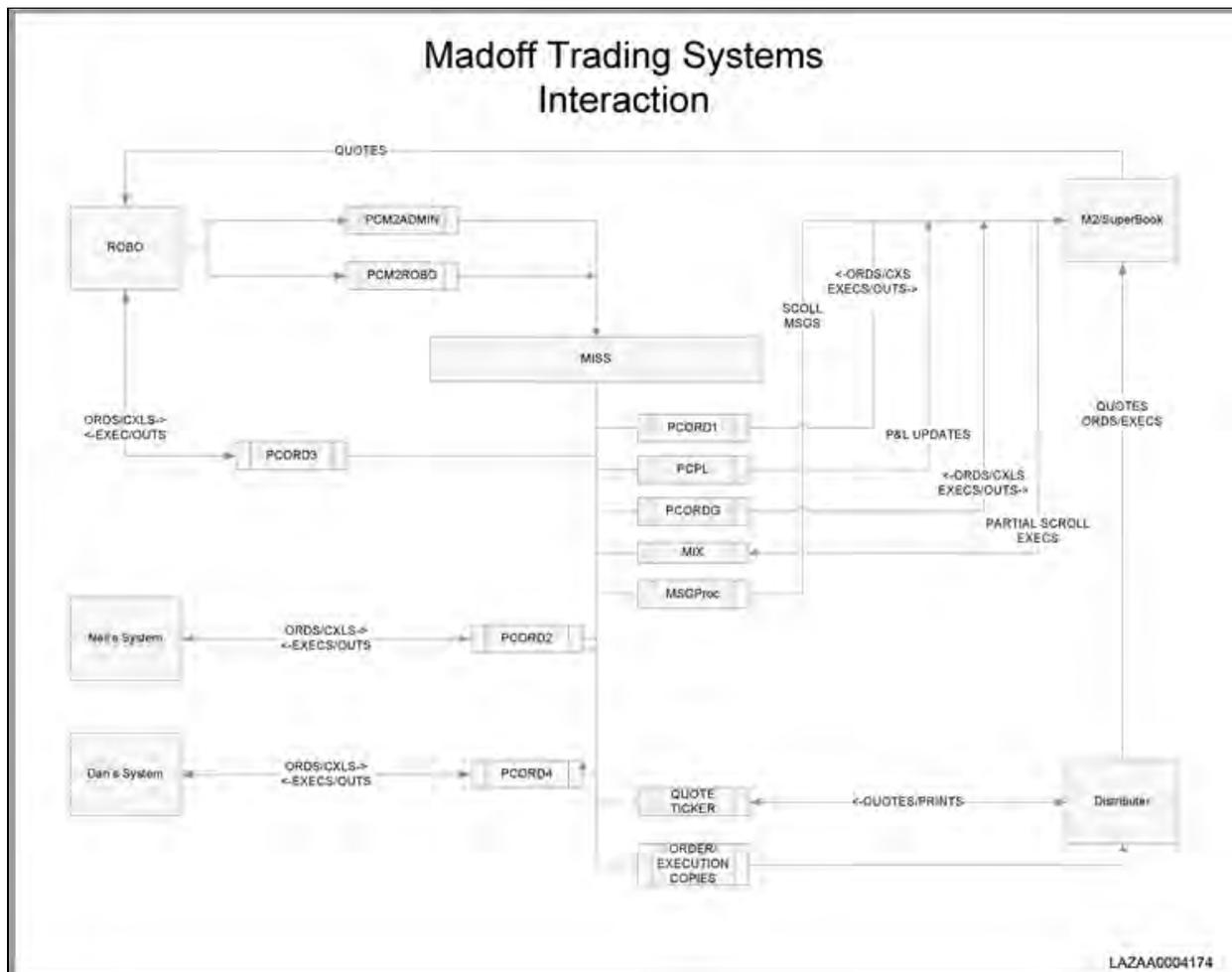
h. The IA Business computer system was used to facilitate the fictitious trading activity and to print trading documentation and customer statements

214. The Proprietary Trading Business and the IA Business computer systems’ capabilities were vastly different. The Proprietary Trading Business systems contained many of the components typically found in a broker-dealer environment where actual trades were being executed. The IA Business did not have these systems.

¹⁹⁵ See MADTSS01124251; MADTSS01124115; MADTSS01124117; MADTSS01124091-MADTSS01124093; MADTSS01124095; 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. See, e.g., MADTSS01124131; see also **Exhibit 19** for documents pertaining to the schupt lists.

215. Figure 30 is a more detailed diagram of the trading systems in place at the Proprietary Trading Business in December 2008:¹⁹⁶

Figure 30



216. Not surprisingly, none of these trading systems necessary for the execution of securities was found in the IA Business computer environment. In fact, as described below, the IA Business relied on an AS/400 computer along with a local area network of personal computers to generate the documentation necessary to support the fictitious trading activities.

¹⁹⁶ The figure was prepared by Lazard Ltd. ("Lazard") (LAZAA0004174). Lazard was the financial advisor to the Trustee who handled the liquidation sale of the Proprietary Trading Business's assets after Madoff's arrest in December 2008.

217. The software utilized by the Proprietary Trading Business was a combination of commercially available, off-the-shelf software and interface systems (*e.g.*, Bloomberg, Thomson One, DTC, OCC) as well as custom-programmed software (*e.g.*, MISS, M2). In contrast, the software utilized by the IA Business was primarily custom-built in-house software, supported only partially by commercially available, off-the-shelf software not designed for trade execution.
218. While information in programs restored from IA Business backup tapes revealed certain limited electronic communications and interfaces for the AS/400 system, it was determined that the IA Business's custom RPG software did not communicate with any of the standard platforms typically found in a trading and/or investment environment. Investment-related data received by the IA Business custom RPG software was received from the Proprietary Trading Business through either an FTP or via a manual process by which an operator inserted a tape into the IA Business AS/400 that contained data from the Proprietary Trading Business custom software. While the Proprietary Trading Business 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 the IA Business communicated with any of the connections available to the Proprietary Trading Business systems (*e.g.*, NASDAQ, DTC, Bloomberg, Thomson, OATS). As a result, the IA Business would have needed to place the purported trades through either the Proprietary Trading Business or an outside broker-dealer; evidence of that occurring was not found.

i. The underlying computer code generated and utilized by the IA Business was developed and modified over the years

219. During the investigation, a model 520 AS/400 and a Magstar 3570 tape subsystem were procured and used to restore a working version of the IA Business AS/400 system to allow for analysis. (*See Exhibit 20* for restored menu screen shots.) Numerous libraries (*i.e.*,

repositories of data or code) were restored which contained both code and data files.¹⁹⁷ The majority of the restored code used to run and operate the AS/400 was written in 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.¹⁹⁸
- Also, the majority of the code was located in the IBM default location for creating RPG II code, which is a sub-library named QS36SRC within the TGIF library on the AS/400.

220. 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 Proprietary Trading Business and later was converted for use in the IA Business. 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.) Thus, my investigation has found that the originating code that was used in the IA Business existed for decades.

¹⁹⁷ During the computer investigation, it became apparent that certain code and data files no longer existed on the tapes containing the backup of the IA Business system from December 2008. Restoration of prior backup tapes confirmed this fact.

¹⁹⁸ If the program was started without being placed in System/36 emulation mode, the system consistently produced an error. For example, one such error indicated, “Command menu in library *LIBL not found.” However, when placed into System/36 emulation mode, the error disappeared.

(i) **Underlying computer code in the IA Business produced a random order generator to support fictitious trades on customer statements**

221. The IA Business custom-written software included code that enabled the assignment of prices and volumes for securities transactions to individual customer accounts. The code allowed the IA Business to back into data that, in a legitimate business, would be generated through an order or time slicing trading system.
222. In practice, it is a portfolio manager's decision to determine what stocks to buy and how many shares will be purchased. Once determined, a trader's role is to determine how best to purchase those stocks, balancing transaction costs and associated market risks. This role is often exclusively automated by computers programmed with basic (or sometimes very sophisticated) trading algorithms.
223. 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 purchase shares at the same pace as the market is trading so that the buyer is never too large or too small a participant. A time-weighted approach seeks to spread the desired transaction evenly over a fixed and predetermined period of time.¹⁹⁹
224. A detailed analysis of the code that was utilized shows that the IA Business did not have a legitimate trading system using algorithms to execute trades. Instead, it had a self-created program that simply mimicked and backfilled the output that normally would be the result of trades actually being executed by a system using trading algorithms.
225. A review of input and output files for the random order generator, as well as customer statements, indicates that a Java custom written application program 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.

¹⁹⁹ *CFA Glossary*, CFA Institute, <http://www.cfainstitute.org/about/investor/cfaglossary/Pages/index.aspx> (last visited Nov. 1, 2012).

226. The program utilized information from the input file and 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 transactions in the input file, then the output of the program did not exceed one million shares across all orders in the output file). The random price for each order was also artificially limited by configurable parameters which limited the range in the generated prices (*i.e.*, a five cents boundary would limit the randomly generated price to within five cents of the price identified in the input file).
227. Figure 31 shows the input, processing and results of the random order generator program. The first input file 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 the IA Business.²⁰⁰

²⁰⁰ See MESTAAF00009202-MESTAAF00009203.

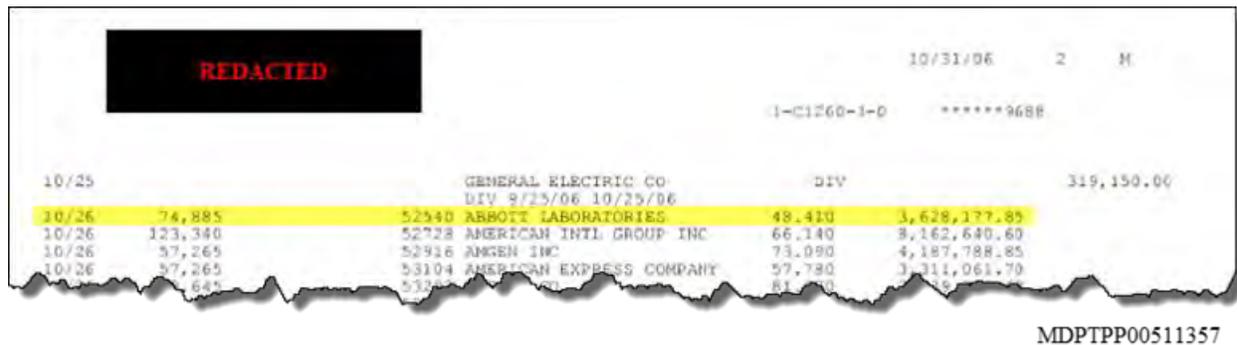
Figure 31²⁰¹

Abbott Laboratories Input for MADOFFRandomSimulationUtility for 10/26/2006											
#T/D	S/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	217991	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	2369330.63	1957	2371287.63
23-Oct	26-Oct	1-FN095-3	52568	S	85102	2824100	ABBOTT LABORATORIES	48.41	4119787.82	3404	4123191.82
23-Oct	26-Oct	1-FR010-3	52572	S	18853	2824100	ABBOTT LABORATORIES	48.41	912673.73	754	913427.73
23-Oct	26-Oct	1-FR062-3	52577	S				48.41	15636.43	12	15648.43
23-Oct	26-Oct	1-FR074-3	52581	S				48.41	72421.36	59	72480.36
23-Oct	26-Oct	1-FR080-3	52582	S				48.41	1785844.9	1475	1787319.9
23-Oct	26-Oct	1-FR083-3	52583	S				48.41	1186722.74	980	1187702.74
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-G0092-3	52606	S	11696	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-M0232-3	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-ZB434-3	52691	S	3672	2824100	ABBOTT LABORATORIES	48.41	177761.52	146	177907.52
Total Shares									1,039,261		
Price Assigned									\$ 48.41		

228. 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 for this account demonstrates the Abbott Laboratories pricing. (See Figure 32.)

²⁰¹ See MESTAAF00009202-MESTAAF00009285.

Figure 32



The screenshot shows a financial data output file. At the top left, there is a black redaction box with the word "REDACTED" in red. To the right of the redaction, the date "10/31/06" and the number "2" are visible. Below this, the text "1-C1260-1-0 *****9688" is present. The main part of the image is a table with columns for dates, prices, and company names. The table is partially obscured by a jagged, torn-edge effect at the bottom. The text "MDPTPP00511357" is located at the bottom right of the screenshot.

Date	Price	Company Name	Quantity	Total Value
10/25		GENERAL ELECTRIC CO		319,150.00
		DIV 9/25/06 10/25/06		
10/26	74.885	52540 ABBOTT LABORATORIES	48.410	3,628,177.85
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
	645	53280	81.700	

229. 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.²⁰² The excerpts from the full output file (shown in **Exhibit 21**) 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 orders (*i.e.*, number of shares).
230. 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 during the investigation.²⁰³ Although the order size (*i.e.*, quantity of shares) and price differ at the individual transaction level, the total number of shares across all orders, as well as the average price across all orders, is equal to the input values for Abbott Laboratories. (*See Exhibit 21.*)
231. As confirmed by internal BLMIS emails, this process was used to generate support for the fictitious backdated trades. 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.”²⁰⁴
232. A legitimate business conducting an investment advisory, market making or proprietary trading business would have no need for a random order generation program for backfilling

²⁰² See MESTAAF00000037-MESTAAF00000041.

²⁰³ See Java program code (MDPTGG00000002).

²⁰⁴ KFON-BR00030551 (emphasis added).

trade data. All of the orders in a legitimate business 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 after the period during which they were purportedly executed further illustrates that the securities listed on IA Business customer statements were fictitious.

j. Various statements and reports that the IA Business prepared were false

(i) Customer statements contained fictitious trades that were backdated

233. The IA Business customer statements contained trades that were backdated. 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 showed transactions that purportedly 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 April 1997 would have appeared on the April 1997 customer statement). Many of these trades, however, did not appear on these previous month's statements.
234. Customer statements were analyzed for instances of such backdating by comparing the IA Business customer statement date to the security transaction trade date. 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.²⁰⁵ (*See Exhibit 22 – "IA Business Backdated Trade Detail, December 1995 to November 30, 2008"*.) The number of backdated trades per account ranged from 1 to 3,669. Furthermore, 50 of the 893 accounts contained more than 30 backdated trades.

²⁰⁵ There are also instances prior to December 1995 where trades were backdated on customer statements. *See, e.g.*, MF00027730.

235. The ability of BLMIS to backdate trades in the IA Business was facilitated by the use of the custom software written by IA Business programmers in a module called STMTPro.²⁰⁶ STMTPro allowed an IA Business user to restore a previous month's customer statement to the AS/400. For example, the data tape containing the 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 33 below for STMTPro directions). It also allowed the operator to print a revised customer statement. If these prior month backdated trades were 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 the IA Business. Instead, the IA Business 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.

²⁰⁶ STMTPro is the specific procedure that was executed on the AS/400. The IA Business'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). As detailed *supra*, STMTPro was not software identified in the Proprietary Trading Business.

Figure 33

```
FIXING STATEMENTS

First - you need EQM 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: RSTSTMF

There 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 DFU screens for each of the above
For DFU 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 a Debit --> entered as a (field+)
Sold is a Credit --> entered as a (field-) MESTAAQ00000061

For STAMBL17
```

236. An example of how the IA Business used STMTPro to backdate and manipulate transactions on customer statements is discussed below. First, Figure 34 shows an example of a log file that was maintained by the IA Business, 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 dates for numerous iterations of changes being made to that account.

Figure 34

* No Good.

STMTPROB (2004)

MAGSTAR# F3A7D2C PAGE 1

SEQ#	ACCOUNT#	MON/YR	RUN DATE	SEQ#	ACCOUNT#	MON/YR	RUN DATE
1	15H025.30	Jan/04	3/29/04	28*	IM0140.30	FEB/04	4/28/04
2*	↓	Feb/04	↓	29*	IM0142.30	↓	↓
3*	↓	Feb/04	3/3/04	30*	IM0140.30	Mar/04	↓
4	↓	Mar/04	4/2/04	31*	IM0142.30	↓	↓
5	↓	Feb/04	4/26/04	32*	IM0140.30	Mar/03	4/29/04
6*	IM0140.30	Mar/03	4/27/04	33*	IM0142.30	↓	↓
7*	IM0142.30	↓	↓	34*	IM0140.30	Apr/03	↓
11*	IM0142.30	↓	↓	38*	IM0140.30	June/03	↓
12*	IM0140.30	June/03	4/27/04	39*	IM0142.30	↓	↓
13*	IM0142.30	↓	↓	40*	IM0140.30	July/03	↓
20	IM0140.30	Oct/03	↓	47*	IM0142.30	↓	↓
21*	IM0142.30	↓	↓	48*	IM0140.30	Nov/03	↓
22*	IM0140.30	Nov/03	↓	49*	IM0142.30	↓	↓
23*	IM0142.30	↓	↓	50*	IM0140.30	Dec/03	↓
24*	IM0140.30	Dec/03	↓	51*	IM0142.30	↓	↓
25*	IM0142.30	↓	4/27/04	52*	IM0140.30	Jan/04	↓
26*	IM0140.30	Jan/04	4/28/04	53*	IM0142.30	↓	↓
57*	IM0142.30	↓	↓	84	IM0142.30	↓	↓
58	IM0140.30	Mar/03	4/30/04	85			
59	IM0142.30	↓	↓	86			
74	IM0140.30	NOV/03	↓				
75	IM0142.30	↓	↓				
76	IM0140.30	Dec/03	↓				
77	IM0142.30	↓	↓				

MADTB01877335

MADTB01877336

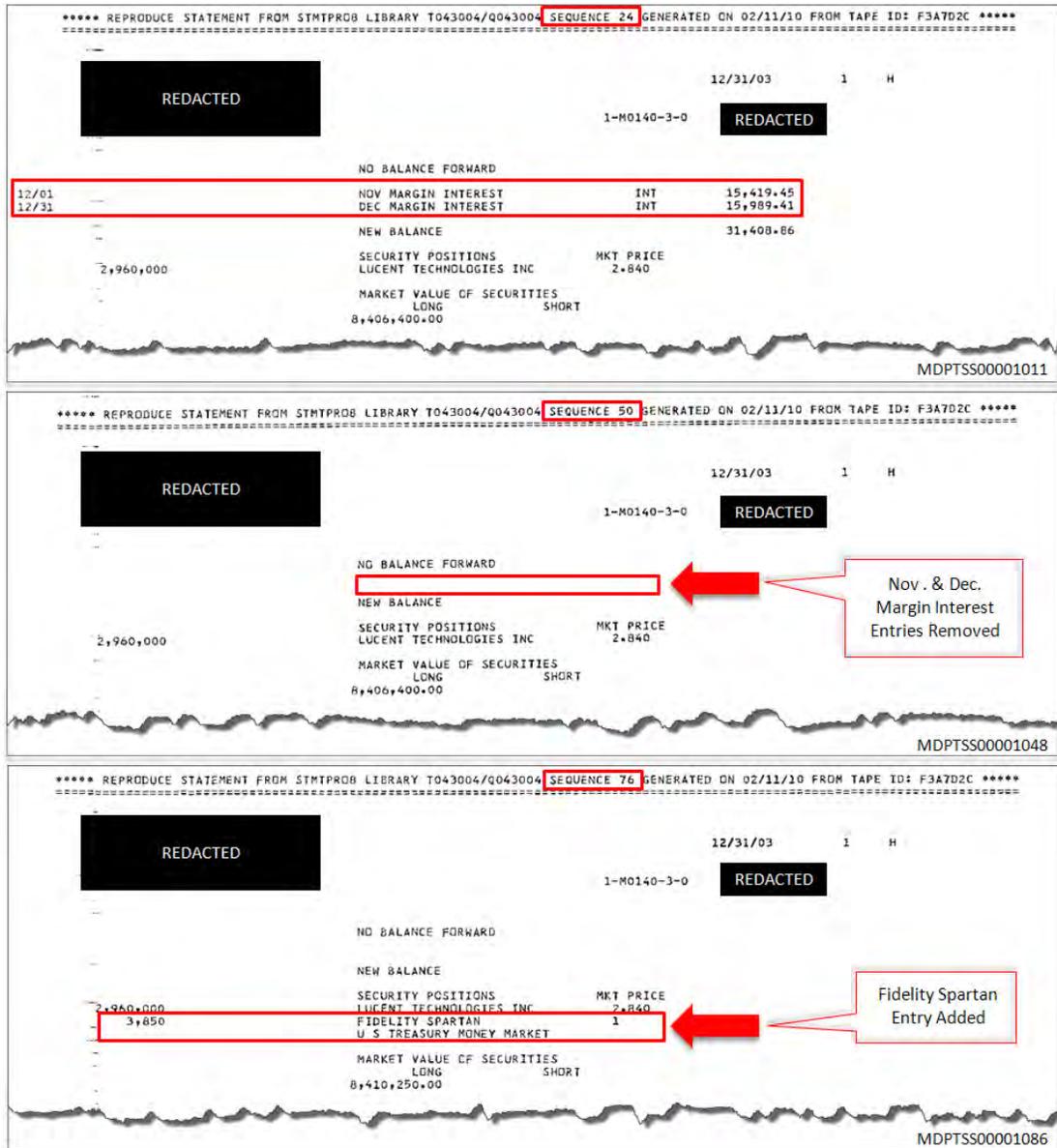
237. For illustrative purposes, the analysis focused on three sets of changes to show what was happening. Sequences 24, 50 and 76 were selected from Figure 34. As the log file indicates,

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.

238. Figure 35 shows the results of the backdating activity on the underlying data used to produce monthly statements for IA Business customers.²⁰⁷ Sequence 24 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. Sequence 50 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 35, Sequence 76 shows that an entry for Fidelity Spartan US Treasury Money Market for 3,850 shares was added to the account.

²⁰⁷ Figure 35 was created using documents generated by running the IA Business STMTPro computer program using data retrieved from backup tapes that were collected by the Trustee's counsel. The 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 Figure 35 indicates the actual run date being February 11, 2010.

Figure 35



239. There were numerous examples of these types of backdating changes that were routinely made to customer accounts at the IA Business over the years. The manner in which these changes were 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 were being

made four months later in April 2004) shows how the IA Business was manipulating customer statements and recording the fictitious trades.

(ii) The financial and regulatory statements produced by BLMIS were false and misrepresented the firm's true financial state of affairs²⁰⁸

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

240. BLMIS was registered with the SEC as a broker-dealer as of January 19, 1960 and it was not until more than 46 years later, beginning in 2006, that it was registered 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 the Uniform Application for Investment Adviser Registration ("Form ADV") was required for investment advisers.²⁰⁹
241. Investment advisers must register with the SEC by filing Form ADV²¹⁰ unless they are exempt from registration.²¹¹ Investment advisers with 15 or more clients must register with the SEC.²¹² Despite having more than 15 client accounts, BLMIS did not register as an Investment Adviser until August 2006. Between 1979 and 2006, BLMIS had more than 15 client accounts and by not filing Form ADV as required, misrepresented its total number of clients. (See Figure 13 *supra* for the number of accounts from 1978 to 2008.)
242. Between 2006 and 2008, Madoff misrepresented the number of clients in his IA Business on the Form ADV. For example, in or about January 2008, BLMIS filed with the SEC an Amended Form ADV. On the application, BLMIS reported 23 client accounts and assets under management of approximately \$17.1 billion.²¹³ In actuality, as of December 31, 2007, BLMIS had approximately 4,900 active customer accounts²¹⁴ and purported assets under

²⁰⁸ BLMIS Controllers, Irwin Lipkin and Cotellessa-Pitz, both pled guilty to falsifying the BLMIS books and records. In particular, Irwin Lipkin pled to falsifying BLMIS books and records from at least the mid-1970s. See Irwin Lipkin Plea Agreement; Irwin Lipkin Information at 8, 18; Enrica Cotellessa-Pitz Plea Allocution at 30-31.

²⁰⁹ Investment Advisers Act Rule §§ 203-1 & 203(b) (1940).

²¹⁰ Investment Advisers Act § 203(b)(3) (1940).

²¹¹ The Securities Exchange Act of 1934, 15 U.S.C. § 80b-3 (2010); 44 FR §21008 (Apr. 9, 1979).

²¹² *Id.*

²¹³ PUBLIC0003840.

²¹⁴ SQL Query-All Customer Accounts as of December 31, 2007.

management of approximately \$74 billion.²¹⁵ Historical records show that there were more than 8,000 customer accounts at BLMIS over the life of the business.²¹⁶

b.) FOCUS reports and the Annual Audited Reports were false and misrepresented the true state of BLMIS

243. As a registered broker-dealer operating through 2008, BLMIS was required to file FOCUS reports with the SEC.²¹⁷ FOCUS reports are financial and operational reports that set forth, among other information, assets, liabilities, revenues, and expenses of the company.
244. In addition, BLMIS was required to file Annual Audited Reports.²¹⁸ These Annual Audited Reports contain information about income, cash flows, changes in stockholders', partners', or sole proprietors' equity, and statement of financial condition.
245. The BLMIS FOCUS and Annual Audited Reports reveal inconsistencies in BLMIS's purported business activities as well as material misstatements in its financial statements. Both the FOCUS reports and Annual Audited Reports require a broker-dealer 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.
246. BLMIS inaccurately reported the amount of cash it held on its FOCUS reports. For example, based on an analysis of the IA Business 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 reports and Annual Audited Reports.²¹⁹ These amounts 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 reports and Annual Audited Reports.
247. For example, the December 2006 FOCUS report listed \$4,882,332 as the amount of cash on hand.²²⁰ As of December 31, 2006, the ending balance of the 703 Account was \$394,700 and

²¹⁵ SQL Query-All Customer Accounts as of December 31, 2007.

²¹⁶ SQL Query-All Customer Accounts for all Years.

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

248. BLMIS's underreporting of its cash position was not isolated to the December 2006 FOCUS report. In all but two instances during the reporting periods examined from September 30, 2006 through September 30, 2008, BLMIS underreported its cash position and thus, provided false and inaccurate statements to the SEC.²²¹

²¹⁷ SEC Rule 17a-5, 17 C.F.R. 240.17a5.

²¹⁸ SEC Rule 17a-5(d), 17 C.F.R. 240.17a5(d).

²¹⁹ All "cash" items except for "cash in banks subject to withdrawal restrictions" shall be included on the "cash" line of the report. *Form X-17A-5 Part IIA General Instructions*, Securities and Exchange Commission, http://www.sec.gov/about/forms/formx-17a-5_2a.pdf (last visited Oct. 24, 2012).

²²⁰ PUBLIC0002664.

²²¹ The March 2008 and June 2008 filings reported more cash than was reflected in the 703 Account.

249. Table 10 below shows a comparison of “cash and cash equivalents”²²² reported on FOCUS reports and cash in the 703 Account (*see* column ‘c’ vs. column ‘d’). Accordingly cash reported on the FOCUS reports was significantly understated.

Table 10

Date	703 Account Overnight Investment²²³	703 Account Ending Balance²²⁴	Total Cash from 703 Account	Cash and cash equivalents on FOCUS Report²²⁵
	(a)	(b)	(c) [(a) + (b)]	(d)
09/06	\$140,000,000	\$800,207	\$140,800,207	\$4,293,419
12/06	295,000,000	394,700	295,394,700	4,882,332
03/07	160,000,000	2,000,000	162,000,000	3,716,017
06/07	145,000,000	292,099	145,292,099	5,175,146
09/07	120,000,000	376,500	120,376,500	5,460,095
12/07	235,000,000	742,309	235,742,309	164,382,040
03/08	220,000,000	135,534	220,135,534	222,737,426
06/08	170,000,000	1,712,804	171,712,804	257,374,499
09/08	480,000,000	418,000	480,418,000	187,651,497

250. 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 in greater detail in this report, during the IA Business liquidity crisis in late 2005, BLMIS obtained a \$95 million loan in November 2005 and an additional \$50 million loan in January 2006 from JPMC,

²²² The FASB defines cash equivalents as short-term investments of high liquidity which are readily convertible into certain amounts of cash and subject to an insignificant risk of changes in value. Cash and Cash Equivalents, FASB ASC 205-10-20.

²²³ Amounts obtained from the JPMC 703 respective monthly bank statement.

²²⁴ Amounts obtained from the JPMC 703 respective monthly bank statement ending balances.

²²⁵ Amounts taken from “Line 1 – Cash” for each respective FOCUS report.

collateralized, in part, by bonds from a customer.²²⁶ 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.

251. Prior to September 2006, BLMIS recorded *de minimis* commission revenue on the FOCUS report “Commissions” revenue line.²²⁷ BLMIS also did not report any commission revenue on its Annual Audited Reports prior to October 2006. If the IA Business 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 the IA Business occurred.
252. 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 and FOCUS 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 the IA Business, no commission revenue was generated and the FOCUS reports thereby contained false information.
253. In addition, the FOCUS reports and Annual Audited Reports did not reflect other activity typical of a broker conducting trades for investment adviser customers. BLMIS’s FOCUS reports and Annual Audited Reports largely did not include: (i) customer receivables, such as margin accounts; (ii) customer payables, such as positive cash balances held by BLMIS on behalf of customers; or (iii) a computation for reserve requirements for customer activity as

²²⁶ Liquidity is: “(1) The ability of a bank or business to meet its current obligations; or (2) The quality that makes an asset quickly and readily convertible into cash without significant loss.” *Banking and Finance Terminology* 229 (4th ed. 1999). The inability of a business to meet its current obligations or convert its assets into cash without significant loss is referred to as a liquidity crisis. *Id.*

²²⁷ From Q1 1983 through Q3 1987, BLMIS reported \$5,404 in commissions; no other commissions were reported prior to Q3 2006.

required by the SEC under Rule 15c3-3, all of which should be reported by a broker-dealer with managed investment accounts.

254. For example, the December 2005 FOCUS Report had no amounts recorded under the captions “Receivables from customers” and “Payables to customers.” In addition, the credit and debit balance amounts in customer security accounts that form the basis for the computation for the Rule 15c3-3 reserve requirement were left blank.
255. The failure to report financial information demonstrating customer activity was not isolated to the December 2005 FOCUS Report. Except for a select few, the FOCUS reports and Annual Audited Reports did not include customer receivables or customer payables, nor did they include customer account balances in their computations for 15c3-3 reserve requirements.
256. As noted *infra*, Friehling 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 was not an independent auditor as required by the AICPA and other regulatory bodies

257. The AICPA, the New York State Education Department Office of the Professions and the SEC standards require that auditors maintain client independence.²²⁸ 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.”²²⁹
258. 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].”²³⁰
259. 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) has a direct or

²²⁸ Auditing §220.03 (AICPA 2012); New York State Accountancy Regulations Title 8; §29.10a-5; 17 C.F.R. §240.17a-5(f)(3).

²²⁹ Code of Professional Conduct, ET § 101 (Am. Inst. of Certified Pub. Accountants 1988); Auditing Standards §220.03 (AICPA 2012); 8 NYCRR §29.10a(5); 17 C.F.R. §240.17a-5(f)(3).

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

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.²³¹

260. 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 purported equity balance of at least \$6.2 million. Friehling's former partner, Horowitz, also had investment accounts with BLMIS.²³²

d.) F&H Audit Template Opinions Found at BLMIS

261. 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 Eric Lipkin's IA Business computer. These files contained metadata indicating that Eric Lipkin created the documents.²³³
262. It appears that BLMIS was using different versions of template audit opinions depending on where it was directing the letter to be sent because several versions containing long form versus short form audit opinions were discovered at BLMIS. Further, as is evidenced below in Figure 36, instructions were included to assure that certain audit opinion letters were not used as updated versions were created.

²³¹ 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." Auditing Standards §220.03 (AICPA 2012).

²³² Similarly, per review of "All Accounts Listing" in the SQL database, the Horowitz accounts with BLMIS had an average purported equity balance of \$5.5 million from 1983-2008.

²³³ MESTAAV02851627.

Figure 36



263. Also, cases of F&H stationery and envelopes were found at BLMIS. 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 this amount of auditor stationery at the client's premises.

B. THE IA BUSINESS WAS A PONZI SCHEME

1. Indicia of a Ponzi Scheme

a. Definition of Ponzi Scheme

264. 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.”²³⁴ The scheme is so named due to the widespread publicity of a fraud perpetrated by Charles Ponzi from 1919 to 1920 in Boston, Massachusetts.²³⁵ Black’s Law Dictionary defines a Ponzi scheme as “a fraudulent investment scheme in which money contributed by later investors generates artificially high dividends or returns for the original investors, whose example attracts even larger investments. Money from the new investors is used directly to repay or pay interest to earlier investors, usually without any operation or revenue-producing activity other than the continual raising of new funds.”²³⁶

b. Background on Ponzi Schemes

265. A Ponzi scheme begins as an investment opportunity.²³⁷ The fraudster solicits investors with promises of returns within a specified time period (*e.g.*, a return of 50% in 6 months). Before

²³⁴ Association of Certified Fraud Examiners, *Fraud Examiners Manual* §1.1731 (2009).

²³⁵ Dr. Joseph T. Wells, CPA, *Encyclopedia of Fraud* 602 (3d ed. 2007).

²³⁶ *Black’s Law Dictionary* (8th ed. 2005). This definition concurs with that of the SEC, which defines a Ponzi scheme as:

[A]n 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, <http://www.sec.gov/answers/ponzi.htm#PonziWhatIs> (last visited Nov. 20, 2011). 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. 2009).

²³⁷ Alex Altman, *A Brief History of Ponzi Schemes*, Time, <http://www.time.com/time/business/article/0,8599,1866680,00.html> (last visited Aug. 11, 2011).

the return becomes due, the fraudster will have solicited investments from other individuals and will have used those investments to pay the previously promised return (hereinafter referred to as “IA Business Customer 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.²³⁸ At times, when an early investor demands redemption of the investment, proceeds from new investors are used to repay and “cash-out” the earlier investor.

266. 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.²³⁹ Instead of actually investing the money the fraudster collects, the funds not used to pay other investors are usually used for personal enrichment.
267. 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 investors and collapse is inevitable.²⁴⁰ 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.²⁴¹

2. There was no legitimate trading or investment activity and, therefore, no profits from the IA Business

268. As noted herein, a Ponzi scheme: (i) purports to be a legitimate business; (ii) is dependent on a continuous flow of funds for its existence; and (iii) generates artificially high dividends for investors. The only source of cash available for the IA Business to pay off investors was generated through a steady network of closely guarded relationships that helped to feed cash into the IA Business. The IA Business had no profits from trading, received limited monies

²³⁸ Wells at 603.

²³⁹ *Id.* at 601.

²⁴⁰ Steven L. Skalak, Thomas W. Golden, Mona M. Clayton & Jessica S. Pill, *A Guide to Forensic Accounting Investigation* 496 (2d ed. 2011).

²⁴¹ *Id.*

from the Proprietary Trading Business and had no evidence of any outside financial support sufficient to fund payoffs to investors. The only source of cash available for the IA Business to pay purported investment profits as well as redemption requests to its investors was from IA Business Customer Money.

a. No trading occurred in the IA Business and redemptions were made using IA Business Customer money

269. In order for the IA Business to have realized the investment returns as reported on its customer statements and to continue to make cash disbursements to customers from these earnings, the purported trades would have to have been actually executed in the market. They were not. In comparison to the Proprietary Trading Business, 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, the IA Business had limited connectivity to the world outside of the Proprietary Trading Business. The IA Business'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.
270. As detailed above, the investigation and analysis of the IA Business showed that beginning at least in the 1970s, the IA Business's purported trades could not have been executed. The analyses show, among other things:
- Trading volumes that exceeded 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
 - Purchases of securities at market lows and sales of securities at market highs at an unattainably consistent rate.

271. Further, had the securities reported on the IA Business customer statements actually been executed, a custody record would be available from the DTC and/or the OCC. Analyses conducted during this investigation, however, show that only those securities traded through the Proprietary Trading Business 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, the IA Business trades could not have been executed in the OTC market.
272. The trading of derivatives, such as options, in the OTC market is largely conducted under agreements published by ISDA. ISDA agreements set forth the standard terms by which the counterparties would be bound in a derivative transaction. While ISDA agreements were in effect for the Proprietary Trading Business, they were executed for derivative trades outside the scope of the IA Business's strategy and were issued and signed by the Proprietary Trading Business employees. No ISDA agreements were located for any of the purported IA Business option trades.
273. The investigation showed that not only were the IA Business trades not executed through the Proprietary Trading Business, but they could not have been executed by MSIL on European exchanges. In many instances, trades purportedly executed by the IA Business were not traded at all on the largest European exchanges. In other instances, the purported trades were executed at volumes on those European exchanges that were dwarfed by the volumes reflected on the IA Business customer statements confirming that they were not legitimate trades.
274. The investigation and analyses show that, without actual trades being executed through the IA Business, payment of customer redemptions could only have been fulfilled using IA Business Customer Money.

b. No legitimate income-producing business activities were identified

275. The IA Business had no legitimate income-producing activities. It did not execute trades and 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 legitimate business or any legitimate source that would potentially provide a revenue stream for the IA Business sufficient to cover distributions to its customers.

c. Dividends that were purported to have been distributed to the IA Business customers were paid with IA Business Customer Money

276. Dividends that were to be paid to the purported owners of securities on record were not paid to the IA Business customers from actual corporate dividend distributions. Instead, they were paid with IA Business Customer Money. No records exist showing actual transfers of corporate dividend distributions to the IA Business bank accounts nor is there evidence of communication between the IA Business 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 the IA Business customers using IA Business Customer Money.

d. Apart from the liquidity crisis and December 2008, no financial support vis-à-vis any profits from the Proprietary Trading Business was evidenced

277. The investigation and analysis of cash flows and cash transfers between the Proprietary Trading Business and the IA Business show that aside from the IA Business liquidity crisis (described *infra*) and transfers during the waning days of BLMIS in December 2008, the Proprietary Trading Business did not provide financial support to the IA Business. Furthermore, other than during the IA Business liquidity crisis, the investigation shows that the IA Business received no financial support from third parties (*e.g.*, loans). Therefore, any distributions to the IA Business customers could only have come from IA Business Customer Money.
278. In fact, monies were being diverted not from the Proprietary Trading Business to the IA Business, but from the IA Business to the Proprietary Trading Business. During the investigation it was discovered that a significant percentage of the Proprietary Trading Business revenue, which was accounted for in the FOCUS reports, was derived from IA

Business Customer Money being transferred to the Proprietary Trading Business via: (i) the IA Business directly, (ii) the IA Business through a third-party brokerage account, or (iii) the IA Business through MSIL. (See Table 11.)

Table 11

	Total BLMIS Revenue as reported in FOCUS Reports (A)	IA Business Customer Money Included in "A" (B)	Total BLMIS Revenue as reported in FOCUS Reports Excluding IA Business Customer Money (C) [(A)-(B)]	"B" as a percentage of "A" (D) [(B)/(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.

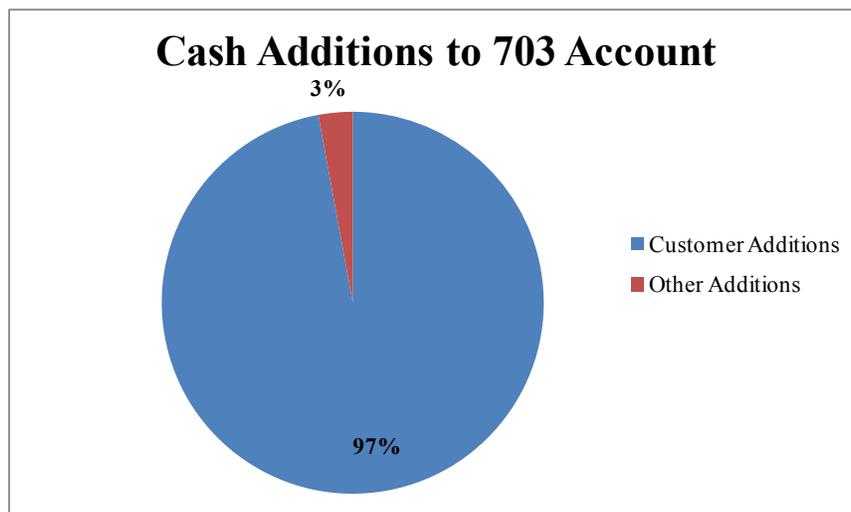
e. The 703 Account dealt almost entirely with customer deposits and redemptions

279. The main account used by the IA Business, the 703 Account, consisted almost entirely of deposits from customers (which were commingled) and inflows and outflows from interest-bearing accounts, which were themselves funded from customer money.²⁴² (See Figure

²⁴² Funds from the 703 Account were placed in ancillary accounts that earned additional funds on short-term instruments.

37.)²⁴³ There were no additions to the 703 Account as a result of trading from the execution of the purported IA Business strategies.

Figure 37²⁴⁴



280. 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 the end of 2005, the balance of the 703 Account became so dangerously low that the IA Business faced a severe liquidity crisis, which nearly forced the Ponzi scheme to unravel. From approximately October 2005 through April 2006, the IA Business investor redemption requests far exceeded investor deposits. BLMIS survived, in part, by holding bonds from a long-time customer of Madoff, and by transferring cash from the Proprietary Trading Business bank account (the 621 Account) to meet redemptions.
281. On November 14, 2005, BLMIS requested a \$95 million loan²⁴⁵ from JPMC, collateralized by Federal Home Loan Bank Bonds in the principal amount of \$100 million due April 8, 2009.²⁴⁶

²⁴³ See **Exhibit 23** for an example of a bank statement for the 703 Account. Further, customer redemptions were paid through two other accounts: the JPMC 509 Account, which was a controlled disbursement account funded by the 703 Account, and the Bankers Trust 599 Account, which was a checking account entirely funded by the 703 Account during the period for which bank records are available. See **Exhibits 24 and 25**, respectively, for examples of bank statements for the JPMC 509 Account and the Bankers Trust 599 Account.

²⁴⁴ This is based on account activity from December 1998 to December 2008. "Other" transactions include, but are not limited to, overnight sweep additions and incoming wires or checks.

According to JPMC records, the \$100 million Federal Home Loan Bank Bond was received from the customer on November 4, 2005.²⁴⁷ However, BLMIS paid the customer approximately 30% interest on the bond by quarterly deposits into various accounts at JPMC held by the customer.²⁴⁸ JPMC credited \$95 million to the 703 Account on November 14, 2005.²⁴⁹

282. On January 18, 2006, BLMIS requested an additional \$50 million loan from JPMC.²⁵⁰ Collateral for this loan included two more Federal Home Loan Bank Bonds from the customer; one bond had a principal value of \$9 million and the other had a principal value of \$45 million, together totaling \$54 million.²⁵¹ On January 23, 2006, JPMC credited the 703 Account with \$50 million.²⁵²
283. On June 1, 2006, BLMIS notified JPMC that it was repaying both loans, for a total amount of approximately \$145 million in principal, from the 703 Account.²⁵³
284. Separately, the IA Business bank account was reduced so dramatically during the liquidity crisis that BLMIS used the Proprietary Trading Business bank account (the 621 Account) to meet four separate investor redemption requests totaling approximately \$262 million.²⁵⁴
285. By June 2006, after the liquidity crisis had subsided, BLMIS transferred \$261.8 million of investor money from the IA Business bank accounts to the Proprietary Trading Business bank account. The transfer effectively reimbursed the Proprietary Trading Business bank account for the investor redemptions paid from those accounts.
286. The liquidity crisis is but another indicator that the IA Business was a Ponzi scheme.

²⁴⁵ BLMIS request for loan to JPMC on November 14, 2005 (JPMSBT0002332 at JPMSBT0002336).

²⁴⁶ *Id.*; JPMC Positions Statement as of December 31, 2005 (SECSBM0000041).

²⁴⁷ November 4, 2005, BLMIS letter to JPMC, regarding \$100,000,000 P/A Federal Home Loan Bank due 4/08/09 (JPMSBT0002335).

²⁴⁸ Bond account document (MADTSS01163051).

²⁴⁹ JPMC Statement of Account ending November 30, 2005 (JPMSAB0002491 at JPMSAB002511).

²⁵⁰ BLMIS request for loan to JPMC on November 14, 2005 (JPMSBT0002332 at JPMSBT0002338; JPMSBT0002341).

²⁵¹ *Id.*

²⁵² JPMC Statement of Account ending January 31, 2006 (JPMSAB0002865 at JPMSAB0002909).

²⁵³ JPMSBT0002332 at JPMSBT0002342.

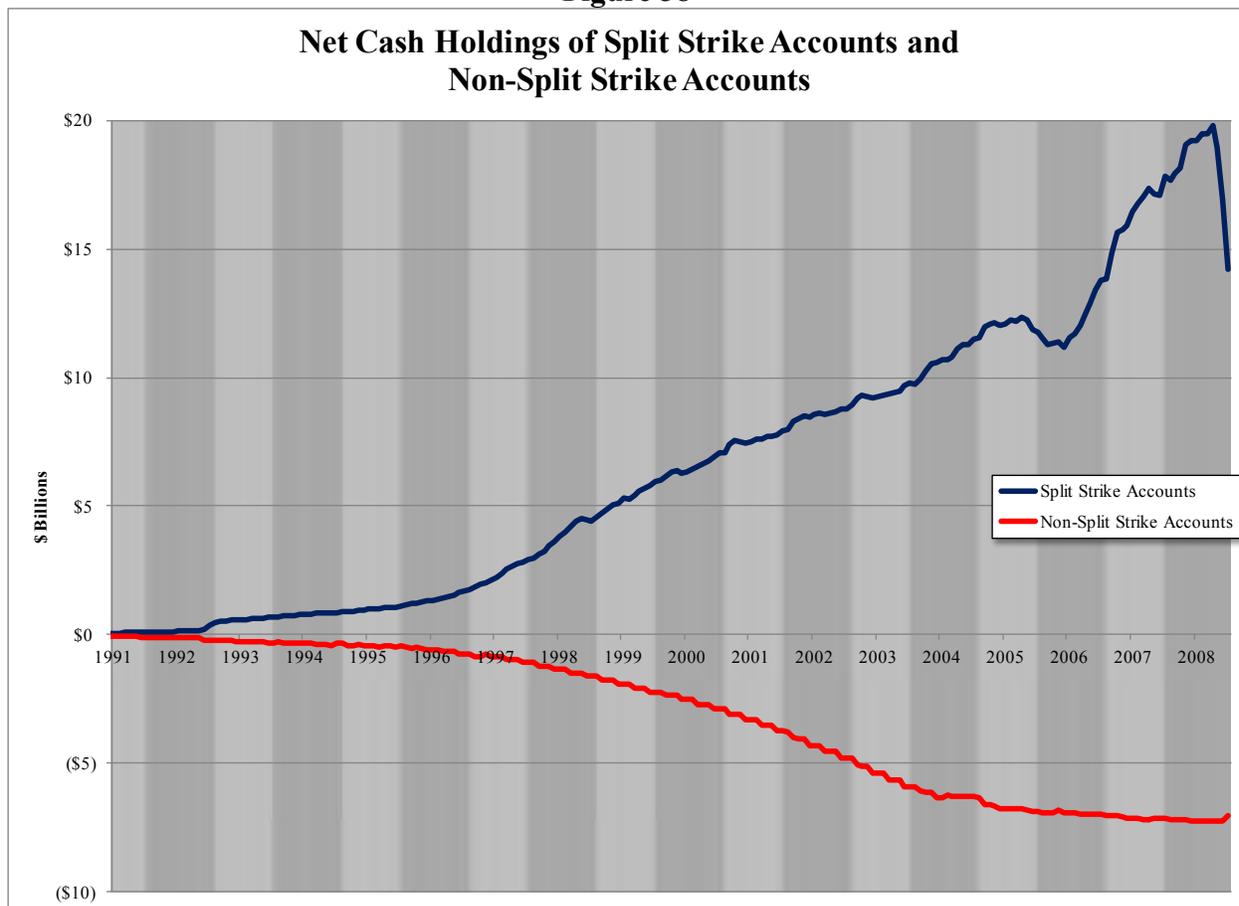
²⁵⁴ 621 Account statements (SECSBJ0008118; SECSBJ0008135; SECSBJ0008137); Customer Statements (MDPTPP05530971; MDPTPP00020510; MDPTPP02979426).

f. The IA Business was dependent on increasing cash inflows and promised consistent returns to customers

287. In order to continue its Ponzi scheme, the IA Business was dependent on a constant and ever-increasing inflow of cash in order to satisfy customer redemptions. Beginning in the early 1990s, a very large network of feeder funds sustained a much smaller group of the IA Business customers who were withdrawing large sums of cash from customer accounts.
288. During the timeframe reflected in Figure 38, the SSC accounts (blue line) consisted of nearly 4,500 accounts; the non-SSC accounts (red line) consisted of only 300 accounts.²⁵⁵ As the non-SSC accounts began to withdraw greater amounts of money from at least 1992, the IA Business attracted increasingly greater amounts of cash through its investors, many of which were feeder funds.

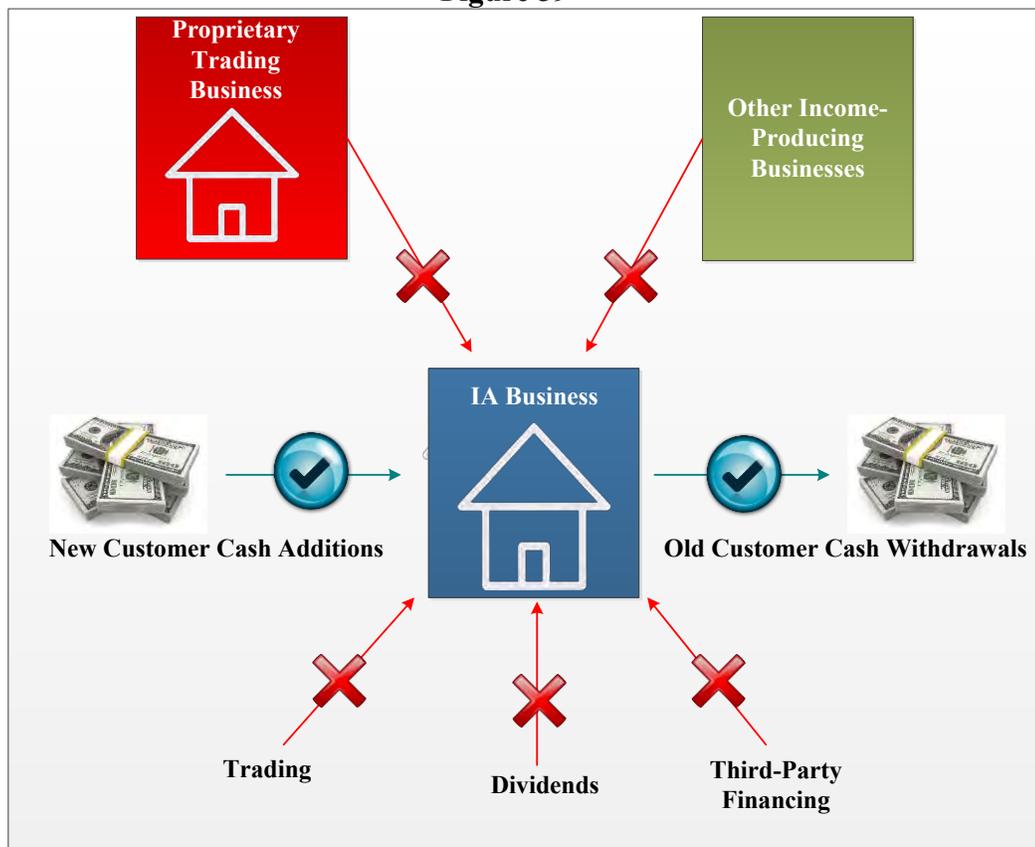
²⁵⁵ Figure 38 assumes a zero dollar starting basis beginning in 1991.

Figure 38



289. Given there were no profits from actual trading, investment or other legitimate business activity, the IA Business had to use IA Business Customer Money to pay back other investors thereby meeting the classic definition of a Ponzi scheme. (See Figure 39.)

Figure 39



C. THE PROPRIETARY TRADING BUSINESS WAS ENGAGED IN PERVASIVE FRAUDULENT ACTIVITY

1. The Proprietary Trading Business Was Not a Going Concern

290. According to the AICPA, an entity is a going concern if it has the ability to continue to function for a “reasonable period of time.”²⁵⁶ The entity will be deemed to no longer be a going concern after considering several factors including, but not limited to, recurring operating losses, working capital deficiencies, and negative cash flows. Despite its audited financial statements and its public filings that gave the appearance of being a profitable firm,

²⁵⁶ AU Section 341: *The Auditor’s Consideration of an Entity’s Ability to Consider as a Going Concern*, AICPA, <http://www.aicpa.org/research/standards/auditattest/downloadabledocuments/au-00341.pdf> (last visited July 10, 2012).

the Proprietary Trading Business relied on fraudulent infusions of cash originating from the IA Business. Without these cash infusions, the Proprietary Trading Business would have failed to produce any profit from at least 2002 forward and would have ceased to have been a going concern at that time.

a. Lack of profitability in the Proprietary Trading Business

(i) The BLMIS financial statements were false and misleading

291. As detailed herein, BLMIS's FOCUS reports and Annual Audited Reports were false and misrepresented the firm's true state of financial affairs. For example, BLMIS failed to report in its FOCUS reports and Annual Audited Reports hundreds of millions of dollars held in the 703 Account. Further, BLMIS failed to report certain liabilities (*e.g.*, bank loans and customer payables) and certain assets (*e.g.*, customer receivables for margin accounts) and omitted commissions from purported trades from the IA Business.
292. Conversely, as will be explained below, cash from the IA Business was transferred from the 703 Account to the 621 Account for investment transactions that never occurred, but were fraudulently represented on the FOCUS reports and Annual Audited Reports under such items as "Gains or losses on firm securities trading accounts" or "Commissions." The Chief Compliance Officer and the Controllers of BLMIS have pled guilty to falsifying these reports.²⁵⁷

(ii) Cash infusions of IA Business Customer Money from the IA Business

293. As previously detailed, the Proprietary Trading Business was improperly subsidized and propped up by numerous cash infusions of IA Business Customer Money from the IA Business. Over the ten-year period for which bank statements and corresponding data were available, over 185 separate cash infusions were made to the Proprietary Trading Business from the IA Business (directly or indirectly), totaling approximately \$800 million. (*See*

²⁵⁷ *See* Peter Madoff Plea Agreement, *United States v. Peter Madoff*, S7 10-CR-228 (LTS) (S.D.N.Y. June 29, 2012); Enrica Cotellessa-Pitz Cooperation Agreement, *United States v. Enrica Cotellessa-Pitz*, S5 10-CR-228 (LTS) (S.D.N.Y. Dec. 15, 2011); Irwin Lipkin Plea Agreement, *United States v. Irwin Lipkin*, S9 10-CR-228 (LTS) (S.D.N.Y. Nov. 8, 2012).

Exhibit 26 –“Cash Infusions of IA Business Customer Money from the IA Business to the Proprietary Trading Business, July 1999 to November 30, 2008”).²⁵⁸ Initially, cash was transferred via check or wire from the IA Business to the Proprietary Trading Business directly from the 703 Account or from an IA Business-funded brokerage account; later cash infusions were effectuated through a more complex scheme that purported to reflect securities transactions.

a.) The cash infusions from the IA Business were recorded as fictitious trades in three main Proprietary Trading Business trading accounts

294. The Proprietary Trading Business assigned trading accounts to its traders. Through these accounts, the trades and associated profit and loss positions on these transactions would be recorded, aggregated and then reflected on the firm’s financial statements. In connection with the cash infusions, fictitious securities transactions were recorded on three Proprietary Trading Business trading accounts: the “RP/EQ,” “Firm Spreads” and “US Govt (Treasuries)” accounts.²⁵⁹ Figure 40 provides an example of a Trading Position Report and the purported trade positions recorded in the RP/EQ trade account:

²⁵⁸ See Cotellessa-Pitz Plea Allocation.

²⁵⁹ The Proprietary Trading Business Account 6106 was named “RP/EQ” from 2004 through 2006. Prior to May 31, 2005, the RP/EQ account was associated with Trader 4, and after May 31, 2005, the RP/EQ account was associated with Trader U2. Account 6650 was named “Firm Spreads” from 1999 through 2008. Prior to May 31, 2005, the Firm Spreads account was associated with Trader 9, and after May 31, 2005, the Firm Spreads account was associated with Trader F1. Account 5884 was named the “UST” account from 1999 through 2000, the “US Govt” account from 2001 through 2004, and the “Treasuries” account from 2005 through 2008. Prior to May 31, 2005, account 5884 was associated with Trader 2, and after May 31, 2005, the account was associated with Trader F2. See MADTBA00287661; MADTBA00287371; MADTBA00287662; MADTBA00287372; MADTBA00287678; MADTBA00287383.

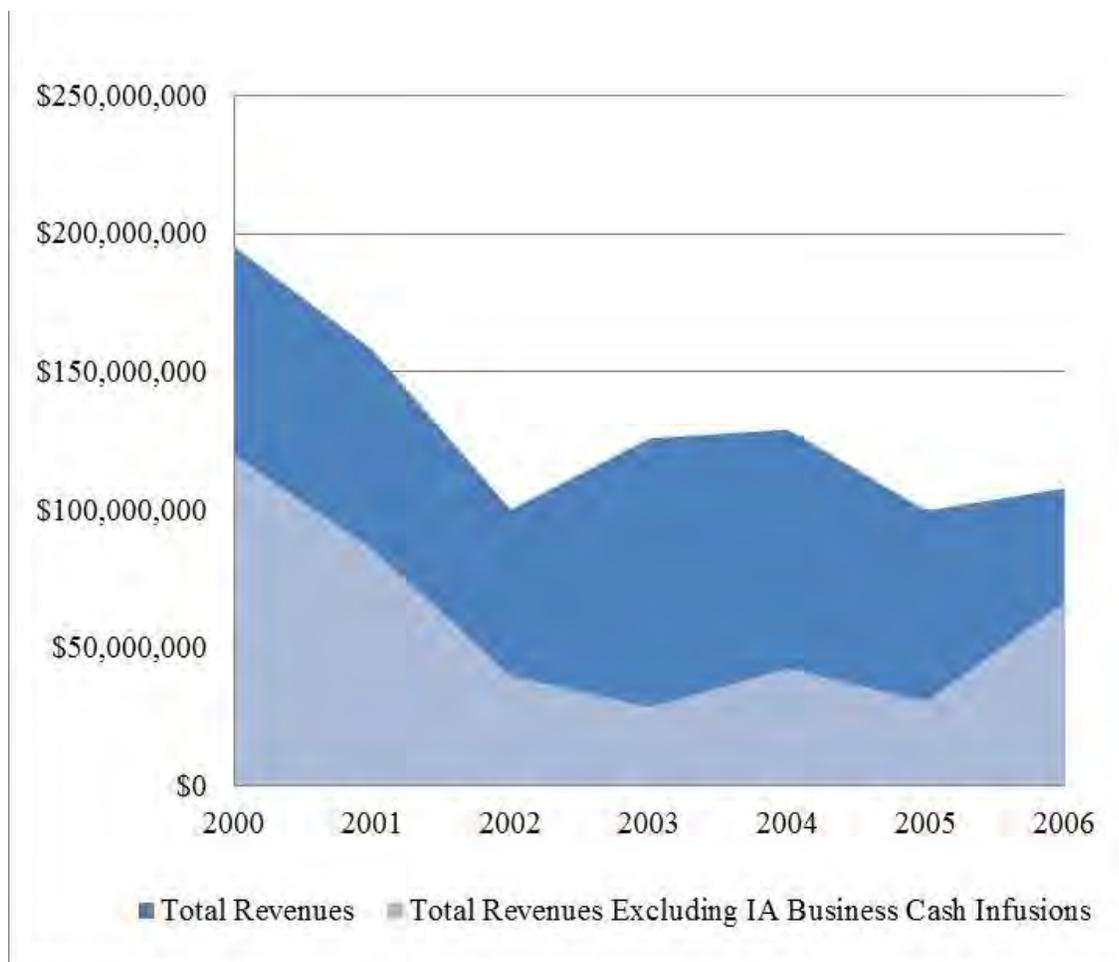
Figure 40

HOUSE #05	TRADING POSITIONS FOR ACCT # 0-00061-0-6	RP/EQ	U2	THRU TRADE DATE: 3/31/05	PAGE 2				
SYMBOL	PRICE	LONG	SHORT	LONG VALUE	SHORT VALUE	P/L RTD	P/L YTD	DIV/INT	BK CHGS
HSFT	27.210					589298.55CR	589278.95CR		
HS	62.820					70108.50CR	70138.50CR		
ORCL	13.690					228963.18CR	228953.18CR		
PEP	57.790					105336.39CR	105336.39CR		
PFE	24.920					472426.59CR	472426.59CR		
PG	57.620					216389.70CR	216389.70CR		
SLR	126.570					36279.33CR	36279.33CR		
S	25.840					190774.77CR	190774.77CR		
TGT	52.010					56075.49CR	56075.49CR		
TXN	32.470					98877.12CR	98877.12CR		
RMM	75.690					46830.36CR	46830.36CR		
THX	16.790					299391.84CR	299391.84CR		
TYC	26.880					123523.59CR	123523.59CR		
USB	30.530					116802.18CR	116802.18CR		
UPS	79.380					70224.24CR	70224.24CR		
UTX	57.970					64309.62CR	64309.62CR		
WZ	34.060					178034.97CR	178034.97CR		
HNT	47.240					162539.04CR	162539.04CR		
WFC	63.870					107218.68CR	107218.68CR		
ACCOUNT TOTALS:						8465374.71CR	16737651.06CR		

295. Despite the lengthy list of entries on the Proprietary Trading Business Trading Position Report as shown in Figure 40, none of these purported transactions actually occurred; they were fabricated and were derived from cash infusions from the IA Business. The monthly profits that are indicated for this account (*i.e.*, \$8,465,374.71) were, however, aggregated into the overall profit and financial reporting for the Proprietary Trading Business as described *infra*. Figure 41 highlights the reported Proprietary Trading Business revenues that were purportedly generated from all trading accounts as compared to the Proprietary Trading Business revenues if the cash infusions from the IA Business were removed from these trading accounts. A comparison of the data indicates the fact that overall Proprietary Trading Business trade account revenue was substantially less without the IA Business cash infusions.²⁶⁰

²⁶⁰ From mid-2006 through 2008, approximately \$228 million of the fictitious revenues were recorded directly to the BLMIS General Ledger as “Commission Income” and were not recorded in one of the trading accounts. Since this

Figure 41
Total Trading Account Revenue vs.
Trading Account Revenue Excluding IA Business Cash Infusions



b.) The fictitious trades in the Proprietary Trading Business trading systems were entered manually as adjustments

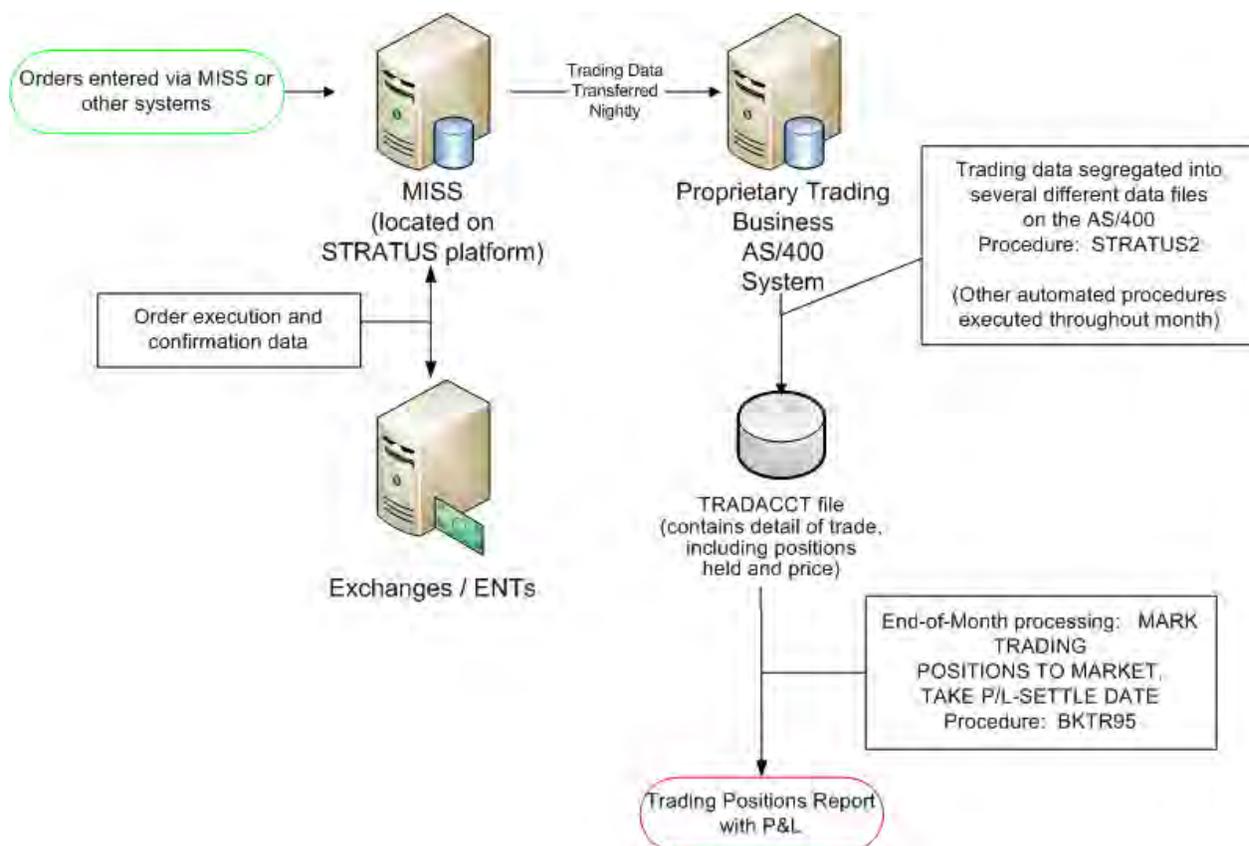
296. As will be described *infra*, my investigation into the underlying Proprietary Trading Business trading and reporting systems confirms that the fictitious trades assigned to the three trade accounts described above were entered into the Proprietary Trading Business AS/400

chart only shows the change in revenues due to the exclusion of the cash infusions in the Proprietary Trading Business trade accounts, the cash infusions from mid-2006 through 2008 are not reflected in this figure.

computer through manual override entries. These fictitious trades and their associated fictitious profits were ultimately captured in the Proprietary Trading Business's financials.

297. Generally for the Proprietary Trading Business, trades followed the path detailed in Figure 42:

Figure 42



298. Actual purchases and sales of securities by the Proprietary Trading Business traders were entered into the MISS execution system that was housed on the STRATUS trading platform.²⁶¹ The data from these trades was then transferred (and stored) on a nightly basis to the Proprietary Trading Business AS/400 computer system and segregated into various files.

299. One of the AS/400 files created from the trade data was the TRADACCT file, which reflected the profit and loss positions for Proprietary Trading Business trades. The TRADACCT file

²⁶¹ "MISS is the central order management system for most trading activities . . . MISS then sends the orders to the designated destination." LAZAA0004330.

was regularly updated through the automated processes in the Proprietary Trading Business AS/400 to account for additional trades, as well as corporate actions such as dividends and conversions.

300. My investigation has concluded there were also two methods of making manual adjustments directly to the TRADACCT file residing on the AS/400. The first method allowed manual adjustments for an account and CUSIP that already existed in the trade data; the second method allowed for the manual input of completely new trade data.

301. Based on the AS/400 code, the first method allowed for adjustments to existing securities in the database for corporate actions such as conversions, dividends and other adjustments. This trade updating process is explained in the BLMIS trading manual as shown in Figure 43.

Figure 43

5. UPDATE TRADING

Use this only if you are given Trading Updates from Danny, Jeff or Enrice. These C/S sheets will have IBM ONLY written on the top. The trading updates are coded as

**C - CONVERSION (MUST HAVE BOX NUMBER)
V - DIVIDEND
A - ADJUSTMENTS**

If the house number is 31 or 32 they will indicate this on the sheet, otherwise use HSE05.

ENTERING TRADING UPDATES

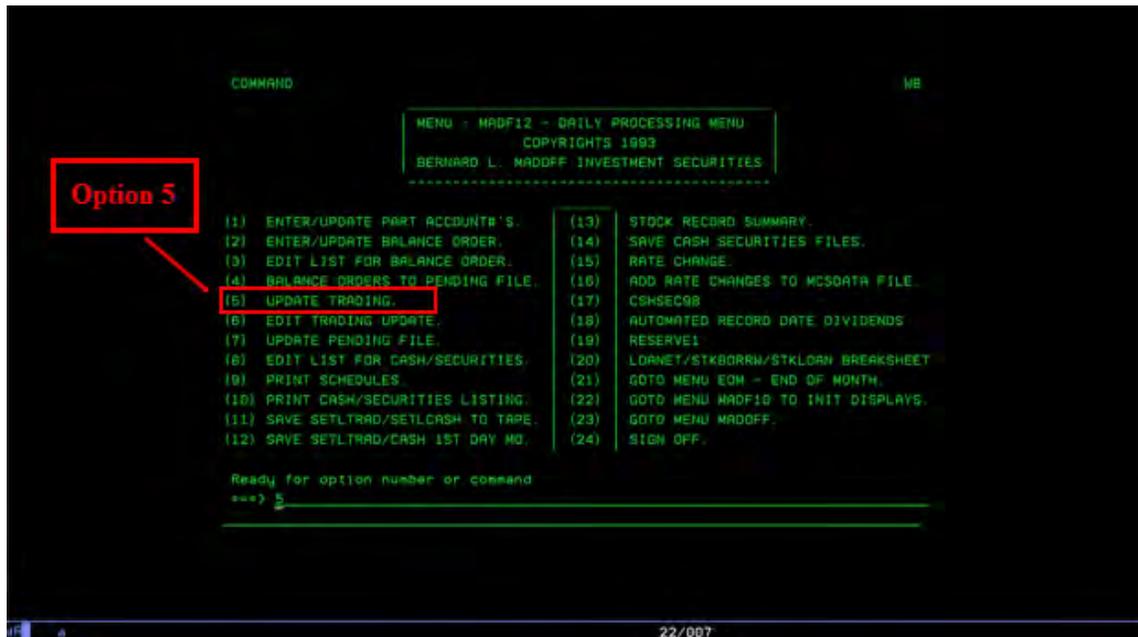
**CODE -----
HSE -----
ACCT# -----
CUSIP -----
SHARES -----
MONEY -----
BOX -----**

**RECEIVE SHARES AND MONIES DEBIT (+)
DELIVER SHARES AND MONIES CREDIT (-)**

MESTAAP04460367

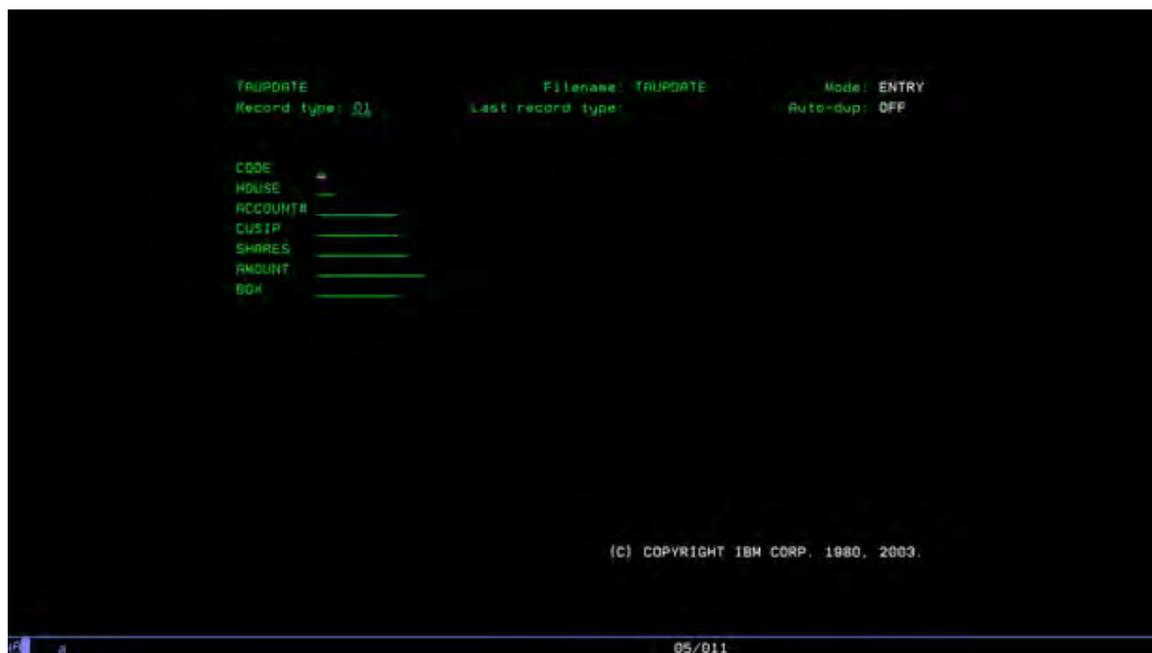
302. These types of manual adjustments were applied through entries in the Proprietary Trading Business AS/400 using Option #5 "Update Trading" of the Daily Processing Menu. (See Figure 44.)

Figure 44



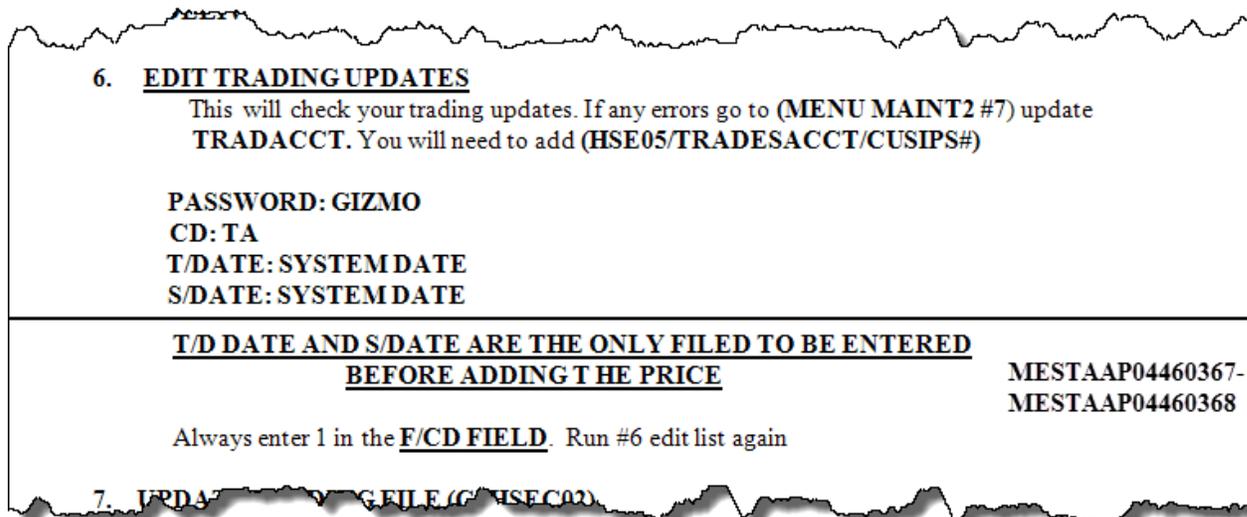
303. Option 5 produces the following screen in which the manual data, such as account number, CUSIP, number of shares, and dollar amount could be entered. (See Figure 45.)

Figure 45



304. The data saved on this screen is stored in a file called TAUPDATE, which subsequently updates the TRADACCT file containing the Proprietary Trading Business profit and loss positions.
305. The second method of making manual adjustments for a security (*i.e.*, CUSIP) that did not already exist in the AS/400 was documented in the BLMIS computer manual as shown in Figure 46:

Figure 46



306. These instructions indicated to the user that, if any of the manual updates failed, MENU MAINT2 #7 should be used to modify the TRADACCT as shown in Figure 47:

Figure 47



307. Once Option #7 is selected, the user is asked to enter a password.²⁶² Upon entering the password, the user would see the screen shown in Figure 48 and could view or edit any field in the TRADACCT file, including the ability to enter entirely new trading records.

Figure 48

```
TRADACCT MASTER FILE MAINTENANCE. BKTR80

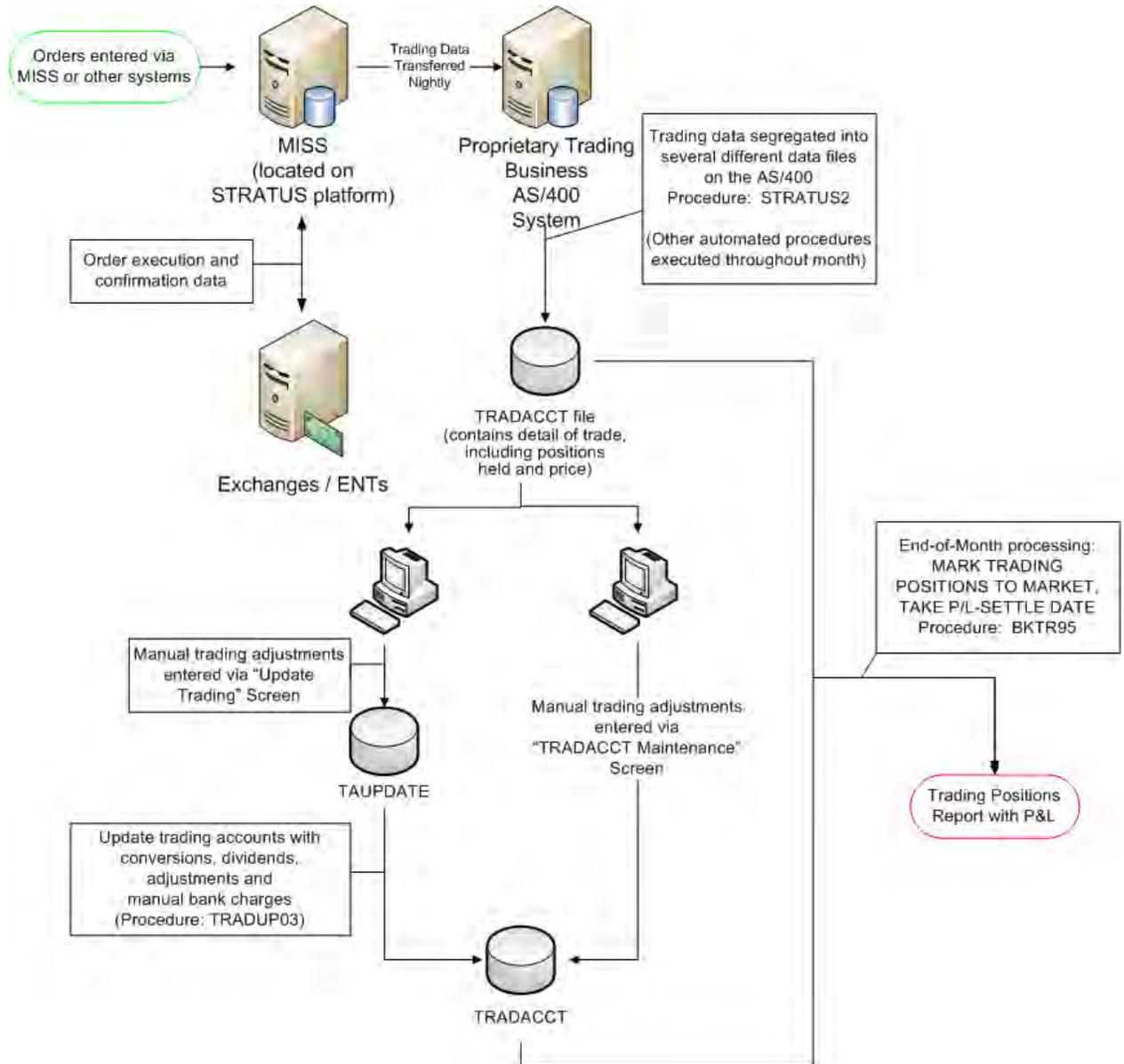
House: 05
Account: 00006106
Cusip: 594918104 Type Codes
Type: A I = Inquiry A = Add
C = Change

Cd: TA
T/Shr: 00000000
T/Cost: 0000000000
T/Date: 000000
Pl/D: 0000000000
Pl/M: 0000000000
Pl/Y: 0000000000
S/Shr: 00000000
S/Cost: 0000000000
S/Date: 000000
Pl/Ms: 0000000000
Pl/Ys: 0000000000
Divd: 0000000000
Bkcg: 000000
$: 000
Frac: | PRESS ENTER TO CONTINUE. |
F/Cd: | CMD 8 TO IGNORE UPDATE OF FILE. |
```

308. All changes and entries made via this data entry screen were applied to the TRADACCT file once they were saved, which would update and adjust the Proprietary Trading Business profit and loss positions. A summary of this process flow is shown in Figure 49:

²⁶² Based on the “Daily Work” instructions, *see* Figure 46 *supra*, and data contained on the AS/400, my investigation concluded that the password assigned to this function was GIZMO.

Figure 49



309. It is through this manual override mechanism that the fictitious trades (stemming from the massive cash infusions from the IA Business) were entered into the Proprietary Trading Business trading system under the three trade accounts described above.

310. For example, manual adjustments to the RP/EQ account (account number 6106) were identified in April 2004.²⁶³ Figure 50 details seven fictitious options that were to be added manually to the 6106 account:

Figure 50

IBM Only Conversion } *\$ Only!*
RECEIVE 00006106 DATE 4/22/04

TRN NO.	SHARES	CUSIP	MONIES	ACCOUNT
		783790DKB	29630.—	
		783790DMB	97294.—	
		783790ELB	126924.—	
		783790PJB	59260.—	
		783790PKB	127040.—	
		783790PLF	52694.—	
		783790QKB	126924.—	

MADWAA00808334

311. A confirmation report that the adjustments were made was printed from the AS/400, which shows the same options and amounts as detailed in the handwritten report (see Figure 51):

Figure 51

HQUSE #05 EDIT TRADING ACCOUNT UPDATES FOR 4/22/04

HSE/ACCT/CUSIP	SHARES	AMOUNT	BOX	PAGE	RECORD NUMBER
A 0500006106783790DKB		29,630.00		1	1
A 0500006106783790DMB		97,294.00		2	2
A 0500006106783790ELB		126,924.00		3	3
A 0500006106783790PJB		59,260.00		4	4
A 0500006106783790PKB		127,040.00		5	5
A 0500006106783790PLF		52,694.00		6	6
A 0500006106783790QKB		126,924.00		7	7
ADJ		619,756.00			
BANK					
CONV					
DIVD					

MADWAA00808332

312. Once saved to the TRADACCT file, a Proprietary Trading Business Trading Position Report was printed from the AS/400 showing the seven fictitious trades in the RP/EQ trade account.

²⁶³ Cash infusions using the RP/EQ account were identified starting in January 2004. This April 2004 cash infusion is used for illustrative purposes.

(See Figure 52, which also reflects other fictitious trades in the RP/EQ trade account that are not detailed in this example.) As will be described in greater detail *infra*, the profits from these (and hundreds of other) fictitious trades were aggregated into the overall profits for the Proprietary Trading Business.

Figure 52²⁶⁴

HOUSE #05	TRADING POSITIONS FOR ACCT # 0-00061-0-6 RP/EQ 4					THRU TRADE DATE: 4/30/04		PAGE 2	
SYMBOL	PRICE	LONG	SHORT	LONG VALUE	SHORT VALUE	P/L MTD	P/L YTD	DIV/INT	BK CHGS
HER	54.230					55846.56CR	163213.72CR		
NSFT	25.970					800907.36CR	1784922.12CR		
HWD	51.390					60923.52CR	178043.16CR		
ORCL	11.220					291625.80CR	870423.88CR		
PEP	54.490					96462.24CR	281939.12CR		
PFE	35.760					425279.44CR	1257935.32CR		
PG	105.750					71077.44CR	217454.52CR		
DEBDK						29630.00CR	29630.00CR		
DEBDM						97294.00CR	97294.00CR		
DEBEL						380772.00CR	380772.00CR		
DEBPJ						59260.00CR	59260.00CR		
DEBPK						127040.00CR	127040.00CR		
DEBPL						52694.00CR	52694.00CR		
DEBDX						126924.00CR	126924.00CR		
SBC	244.900					135291.32CR	349443.00CR		
SLR	58.530					31928.64CR	31928.64CR		
TKN	25.100					97516.12CR	286037.00CR		

(iii) **Cash transfers from the IA Business brokerage accounts**

313. The initial method of moving cash from the IA Business to the Proprietary Trading Business was through the direct transfer of funds from the 703 Account and/or through the use of various brokerage accounts that were funded by IA Business customer money. For instance, a Morgan Stanley account under the name of Bernard L. Madoff (“MS Account”) received its funding from transfers from the 703 Account; funds from this account were then used to infuse money into the Proprietary Trading Business’s 621 Account.
314. As an example, on December 22, 2004, \$4,304,000.00 was moved from the MS Account to the 621 Account (*see* Figure 53, which shows the outgoing payment from the MS Account and Figure 54, which shows the incoming receipt in the 621 Account of these funds):

²⁶⁴ MADTBAA00373843. The other line entries in this document also reflect fictitious transactions in the RP/EQ trade account.

Figure 53

STATEMENT OF YOUR ACCOUNT
FOR MONTH ENDING DECEMBER 31, 2004

PAGE 2 OF 7

BERNARD L MADOFF

Account Number
863 010719 005

DAILY ACTIVITY DETAILS

Date	Activity	Quantity	Description	Price	Amount	Cash Balance
			CLOSING BALANCE AS OF 11/30			.00
10/29	Dividend		LIQUID ASSET FUND			+13,068.96
	Direct Purchase	13068.960	LIQUID ASSET FUND	1.00	-13,068.96	.00
			REINVESTMENT			.00
11/30	Dividend		LIQUID ASSET FUND			+16,391.04
	Direct Purchase	16391.040	LIQUID ASSET FUND	1.00	-16,391.04	.00
			REINVESTMENT			.00
12/09	Sold	100000000	US TSY BILL 00000 04DE09	100.00	+100,000,000.00	+100,000,000.00
	Bought	100000000	U.S. TREASURY REDEMPTION			+100,000,000.00
			US TSY BILL 00000 05FB03	99.6889	-99,688,905.00	+311,095.00
			DISCOUNT YIELD 2			+311,095.00
12/10	Bought	311095	LIQUID ASSET FUND	1.00	-311,095.00	.00
12/16	Sold	750000000	US TSY BILL 00000 04DE16	100.00	+75,000,000.00	+75,000,000.00
	Bought	750000000	U.S. TREASURY REDEMPTION			+75,000,000.00
			US TSY BILL 00000 05FB10	99.6936	-74,770,205.00	+229,795.00
			DISCOUNT YIELD 1.9700			+229,795.00
12/17	Bought	863795	LIQUID ASSET FUND	1.00	-863,795.00	.00
12/22	Withdrawal		WIRHD FUNDS SERT			-4,304,000.00
			BRNE: BERNARD MADOFF INV SEC			-4,304,000.00
			ACCT: 8661126621			-4,304,000.00
	Sold	4304000	LIQUID ASSET FUND	1.00	+4,304,000.00	.00
12/31	Dividend		LIQUID ASSET FUND			+16,798.68
	Direct Purchase	16798.680	LIQUID ASSET FUND	1.00	-16,798.68	.00
			REINVESTMENT			.00
			CLOSING BALANCE AS OF 12/31			+ .00

Morgan Stanley Fund Summary

	YTD Dividends	YTD Cap Gains	YTD Taxes	Features
LIQUID ASSET FUND		100,245.39	0.00	0.00 Reinvest Dividends

Investments and services are offered through Morgan Stanley DW Inc., member SIPC.

Figure 54

BERNARD L MADOFF INVESTMENT									
Statement Number			CSM0412310000678			Account Number			866-1125-621
Statement Period			2004-12-01 - 2004-12-31			Opening Book Balance			3,201,304.13
Number of Enclosures			10			Total Credits			112,042,079.45
Page			1 of 5			Total Debits			107,832,851.40
						Closing Book Balance			4,410,529.18
Our Transaction Reference	Your Reference Related Reference Our Description	Beneficiary name (Ben)/ By Order of Party (B/O)/ Ordering Bank (O/B) Other Information	Value Date	Entry Date	Dr	Debits (U.S. Dollars)	Credits (U.S. Dollars)	Balance (U.S. Dollars)	
TAE0412167492470	CUSIP: S99990850	AC726716 PRNSAL JP MORGAN PRIME M	041216	041216			2,000,000.00		
BSJ0412160485044	BSJ0412160485044	B/O BROKER SERVICES NYC	041216	041216			1,000,000.00		
TAE0412167492460	CUSIP: S99990850	AC726716 PRNPUR JP MORGAN PRIME M	041216	041216		1,000,000.00			
FTJ0412167472144	JOHN/UDN	B/O BERNARD MADOFF	041216	041216		1,805,514.00			
FTJ0412167472044	EXP/TRN	BEN BERNARD L MADOFF INVESTMENT	041216	041216		30,800.00			
FTJ0412167471544	PRIVATE BK BLM	BEN BERNARD AND RUTH MADOFF	041216	041216		5,000.00			
FTJ0412167471544	CCC/PAY	BEN BERNARD MADOFF INVESTMENT	041216	041216		1,000.00			
		CLOSING BOOK BALANCE						3,201,304.13	
		CLOSING AVAILABLE BALANCE						3,201,304.13	
CPB3560043051630	CK NO 13387	B/O BERNARD L MADOFF	041221	041221		250.60			
CPB3560043051631	CK NO 13388	CHECK	041221	041221		170.00			
TAE04122121715160	CUSIP: S99990850	AC726716 PRNPUR JP MORGAN PRIME M	041221	041221		3,000,000.00			
FTJ041221217148144	EXP/TRN	BEN BERNARD L MADOFF INVESTMENT	041221	041221		310,000.00			
FTJ041221217148044	CCC/PAY	BEN BERNARD L MADOFF INVESTMENT	041221	041221		18,228.00			
		CLOSING BOOK BALANCE						4,410,529.18	
		CLOSING AVAILABLE BALANCE						4,410,529.18	
TAE0412220416480	CUSIP: S99990850	AC726716 PRNSAL JP MORGAN PRIME M	041222	041222			1,000,000.00		
FTJ0412220450100	T20041221027916	B/O BARCLAYS CAPITAL SECURITIES LI	041222	041222			700,000.00		
FTJ0412221346544	FTJ0412221346544	BEN BERNARD L MADOFF INVESTMENT	041222	041222			3,000.00		
BSJ041222757244	0048DR00041222	BEN BROTHERS SERVICES OWS	041222	041222		1,881,521.48			
BSJ041222748344	0048DR00041222	BEN BROTHERS SERVICES OWS	041222	041222		2,000,000.00			
FTJ0412221346344	EXP/TRN	BEN BERNARD L MADOFF INVESTMENT	041222	041222		25,000.00			
EBJ041222000500	EBJ041222134744	BEN BERNARD L MADOFF INVESTMENT	041222	041222		3,000.00			
		CLOSING BOOK BALANCE						4,410,529.18	
		CLOSING AVAILABLE BALANCE						4,410,529.18	

SECSBP0008130

315. As a result of the movement of money and the fictitious entry, the Proprietary Trading Business Trading Position Report for the month ending December 31, 2004 for the RP/EQ trade account reflects the full amount transferred from the MS Account to the 621 Account (and a *de minimis* amount of \$250.60), totaling \$4,304,250.60. (See Figure 55.)

Figure 55

HOUSE #05	TRADING POSITIONS FOR ACCT # 0-00061-0-6				RP/EQ 4	THRU TRADE DATE: 12/31/04		PAGE 2	
SYMBOL	PRICE	LONG	SHORT	LONG VALUE	SHORT VALUE	P/L MTD	P/L YTD	DIV/INT	BK CHGS
MSFT	26.710					346594.32CR	6453686.28CR		
MWD	55.520					33814.08CR	645919.56CR		
...	...					154981.20CR	4482.48CR		
...	...					64610.32CR	1200930.4		
USB	31.320					59174.64CR	1138743.29CR		
UTX	103.350					16907.04CR	311525.12CR		
VZ	40.510					87353.04CR	1656188.68CR		
VIA-B	36.390					56356.80CR	1050455.60CR		
WMT	52.820					135256.32CR	2576111.24CR		
WFC	62.150					53538.95CR	1018982.55CR		
ACCOUNT TOTALS:						4304250.62CR	82113303.20CR		

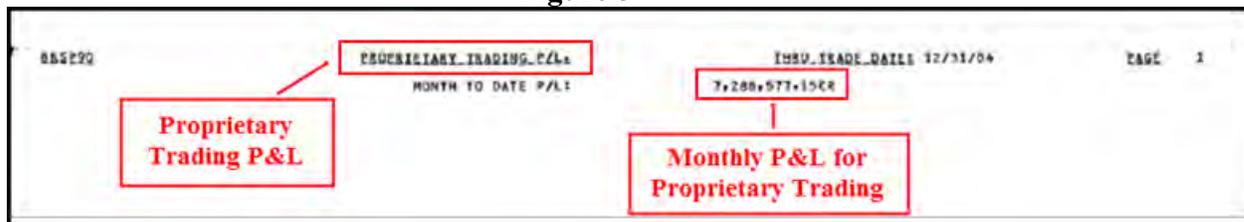
316. The Trading Position Report purports that the end-of-month profits (\$4,304,250.60) were the result of various security positions indicated on the report. This is false. Neither long nor short shares positions are indicated on the report, as would be standard, because these transactions did not occur. These purported transactions, evidenced by data pulled directly from the Proprietary Trading Business trading computer system backups, indicate that these securities were never purchased or sold, but were simply manual “adjustments” to the trade account. (See Figure 56 for a sample output of these RP/EQ “trades” from the Proprietary Trading Business trading system for December 2004; the adjustments are indicated by an “A” in the BuySell column rather than a “B” for buy or “S” for sale.)

Figure 56
Sample of Purported Trades from Proprietary Trading Business Trading System for RP/EQ Trade Account²⁶⁵

Cusip	Symbol	Shares	Account		Trader	Trade Date	Amount	Price	BuySell
			Number						
25816109	AXP	0	6106		4	12/22/2004	-39449.76	NULL	A
254687106	DIS	0	6106		4	12/22/2004	-64810.32	NULL	A
428236103	HPQ	0	6106		4	12/22/2004	-95806.56	NULL	A
589331107	MRK	0	6106		4	12/22/2004	-70446	NULL	A
594918104	MSFT	0	6106		4	12/22/2004	-346594.32	NULL	A
26874107	AIG	0	6106		4	12/22/2004	-81717.36	NULL	A
110122108	BMY	0	6106		4	12/22/2004	-61992.48	NULL	A
263534109	DD	0	6106		4	12/22/2004	-30996.24	NULL	A
38141G104	GS	0	6106		4	12/22/2004	-14089.2	NULL	A
585055106	MDT	0	6106		4	12/22/2004	-39449.76	NULL	A
24702R101	DELL	0	6106		4	12/22/2004	-78899.52	NULL	A
437076102	HD	0	6106		4	12/22/2004	-70446	NULL	A
88579Y101	MMM	0	6106		4	12/22/2004	-25360.56	NULL	A
931142103	WMT	0	6106		4	12/22/2004	-135256.32	NULL	A
949746101	WFC	0	6106		4	12/22/2004	-53538.96	NULL	A
713448108	PEP	0	6106		4	12/22/2004	-53538.96	NULL	A
902973304	USB	0	6106		4	12/22/2004	-59174.64	NULL	A
913017109	UTX	0	6106		4	12/22/2004	-16907.04	NULL	A

317. The fictitious profits from the RP/EQ trading account were then aggregated and rolled into the total P&L for December 2004 for all of the Proprietary Trading Business’s proprietary trading profits (*i.e.*, \$7,288,577.15). (See Figure 57.)

Figure 57



MADTBA00174188

²⁶⁵ Trade data from the Proprietary Trading Business was retrieved from backup tapes of the Proprietary Trading Business AS/400 computer system.

318. The total December 2004 P&L for the Proprietary Trading Business proprietary trading was then aggregated to produce a P&L figure for all other Proprietary Trading Business trading for December 2004 (i.e., \$9,443,334.55). (See Figure 58.)

Figure 58

Bernard L. Madoff LLC		
P&L		
12/31/04		
2d AOT		
Proprietary Trading	728857715	Cr
Options	257883930	Cr
CP	-0-	/
Deposits	-0-	/
Futures	-0-	/
4/1 Net Rev.	72001	Dr
12/31 Net Rev.	360401	Cr
T/D-S/D Prod Rev 4/1	28990505	Dr
Com Prod Rev 12/1	247762023	Dr
Com Prod yTD 12/31	234115938	Cr
Total	944333455	Cr

MADTEE00744948

319. Work papers from BLMIS’s auditors, F&H, show that the total profits from all other trading (“AOT”) (i.e., \$9,443,334.55) were incorporated into BLMIS’s financials and were aggregated into a final BLMIS income figure for the fiscal year ending October 31, 2005. (See Figure 59.)

Figure 59

George S. Madoff
Income
11/1/04 - 10/31/05

Income by Month for the
Fiscal Year ending
October 31, 2005

DRAW = 4,377,852.01

Line #	Account	11/04	12/04	1/05 - 3/05
2a	Gains or losses on firm securities traded			
9	From Market making	882402	2738422	7910157
i	UTC	1130282	1509125	4103601
b	Trading debt	(304414)	1088132	(1813626)
d	All other trading	19794910	9443334	19405976
e	Total gains or losses	20172898	13469893	25702471
10	Other revenue	497146	1475377	2283572
12	Total Revenue	20670044	14945272	27786048

FRISAB0007626

Line #	Account	4/05 - 6/05	7/05 - 9/05	10/05
2a		4207105		
9		4188776	9672310	879076
c		737484	4042430	66826
b		1393484	111818	212268
d		16970972	15210739	8710702
e		2262311	25439947	9807046
10		2736660	3286209	1026067
12		25360211	28726176	10833113

FRISAB0007628

Line #	Account	Total
2		26876976
9		26546476
c		17691040
b		1132707
d		89336623
e		17815806
10		11305718
12		128321324

Total "All Other Trading"
Income for the Fiscal Year
ending October 31, 2005

FRISAB0007629

320. Ultimately, the annual profits from all other trading (AOT), inclusive of the cash infusion from the MS Account, were reflected on BLMIS's audited financial statement for the year ending October 31, 2005. (See Figure 60).²⁶⁶

²⁶⁶ As shown, BLMIS's fiscal year-end was October 31st. My investigation has also concluded that adding all of the revenue "From All Other Trading" on BLMIS FOCUS reports from November 2004 through October 2005 sums to the exact total for this line item on the BLMIS 2005 financials: \$89,336,623. Thus, the cash infusions from the IA

Figure 60

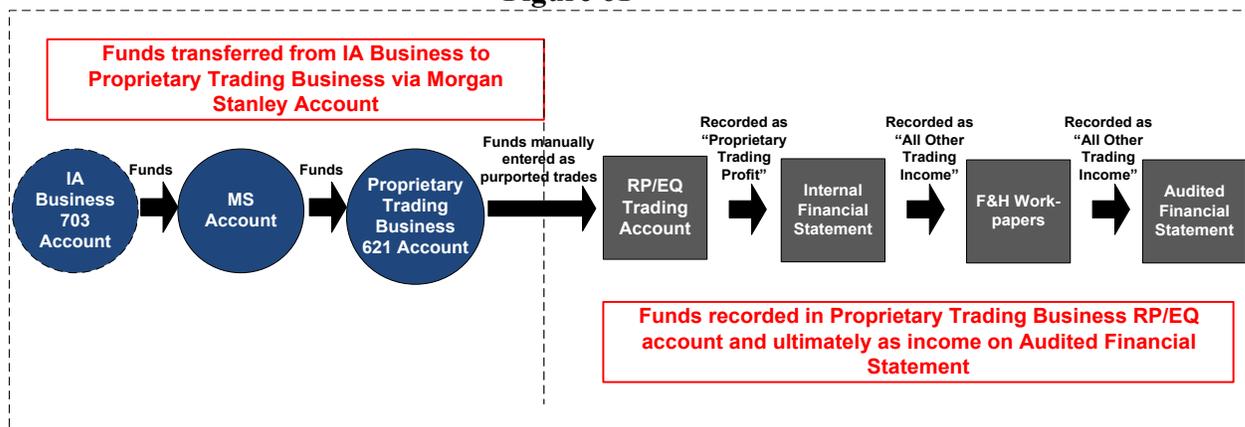
<u>BERNARD L. MADOFF INVESTMENT SECURITIES LLC</u>		
<u>STATEMENT OF OPERATIONS</u>		
<u>FOR THE YEAR ENDED OCTOBER 31, 2005</u>		
<u>REVENUE</u>		
2. Gains or losses on firm securities trading accounts:		
a. From market making in over-the-counter equity securities		\$ 26,546,476
i. Includes gains or (losses) OTC market making in exchange listed equity securities	\$ 15,641,040	
b. From trading in debt securities		1,132,707
d. From all other trading		<u>89,336,623</u>
e. Total gains or (losses)		\$117,015,806
10. Other revenue related to securities business		<u>11,377,367</u>
12. TOTAL REVENUE		\$128,393,173

MADTEE00726775

321. Figure 61 summarizes the movement of cash from the IA Business to the Proprietary Trading Business to BLMIS's financial statements:

Business were reflected both in BLMIS's financials and in its FOCUS reports. Further, although my report only details one cash infusion fraudulently recorded as revenue in the RP/EQ account during this time period, during fiscal year 2005 (*i.e.*, November 2004 through October 2005), cash infusions overall from the RP/EQ account totaled over \$73 million.

Figure 61²⁶⁷



(iv) **Cash transfers from MSIL**

322. The Proprietary Trading Business not only received cash infusions directly from the IA Business as described above, but beginning in 2005, cash was also transferred to the Proprietary Trading Business through cash infusions via MSIL. These cash infusions were accomplished through the use of an IA Business investment advisory account under MSIL's name. In total, from June 2005 through November 2008, approximately \$310 million was transferred from the IA Business to the Proprietary Trading Business by way of MSIL.
323. For example, on April 25, 2007, MSIL's IA Business customer statement indicated that a \$13,350,000 US Treasury bill was purportedly purchased for \$13,146,813 on behalf of MSIL. (See Figure 62.) As previously discussed, my investigation has proven that none of the securities (*i.e.*, equities or US Treasuries) purportedly traded by the IA Business were actually executed.

²⁶⁷ Cash infusions recorded as revenue using the Firm Spreads and US Govt (Treasuries) accounts were recorded following similar processes. In total, from 1999 through 2008, cash infusions recorded as revenue via the Firm Spreads and US Govt (Treasuries) accounts totaled nearly \$312 million and \$3.6 million, respectively. Similarly this same process occurred when cash infusions came directly from the 703 Account.

Figure 62

MADOFF SECURITIES INTL LTD 12 BERKELEY STREET LONDON ENGLAND W1X 5AD		MSIL Customer Statement		4/30/07	1	A
				1-FN023-3-0		
NO BALANCE FORWARD						
4/13	55,000,000	98414	U S TREASURY BILL DUE 6/21/2007	99.065		54,485,750.00
4/13			CHECK WIRE	CN	54,485,750.00	
4/25	13,350,000	91216	U S TREASURY BILL DUE 8/16/2007	98.478	13,146,813.00	
4/25				CA		13,146,813.00
NEW BALANCE						
13,350,000			SECURITY POSITIONS U S TREASURY BILL DUE 8/16/2007	MKT PRICE 98.563		
MARKET VALUE OF SECURITIES						
			LONG	SHORT		
			13,158,160.50		MDPTPP02985705	

324. Instead of sending the funds directly to the IA Business, on April 25, 2007, the Proprietary Trading Business 621 Account bank statement showed an incoming deposit of \$13,146,813 from MSIL's Barclays bank account for the purported purchase of the US Treasury bill. (See Figure 63 for the incoming deposit to the 621 Account from MSIL's Barclays account.)

Figure 63

Our Transaction Reference	Your Reference Related Reference Our Description	Beneficiary name (Ben) By Order of Party (B/O) Ordering Bank (O/B) Other Information	Value Date (Y/M/D)	Entry Date (M/D)	F	Debits (U.S. Dollars)	Credits (U.S. Dollars)	Balance (U.S. Dollars)
		CLOSING BOOK BALANCE	07/04/24					1,631,211.99
		CLOSING AVAILABLE BALANCE	07/04/24					1,631,211.99
CP21130041278165	ITEM COUNT 00011	DEPOSIT TO ACCOUNT	07/04/25				1,128,000.00	2,759,211.99
CP2113004127888	ITEM COUNT 00113	DEPOSIT TO ACCOUNT	07/04/25				1,000,000.00	3,759,211.99
BLM070425788644	LSAN 200002400	CEL LOAN PROCEEDS A/C 0284565105	07/04/25				1,000,000.00	4,759,211.99
FT070425788644	MESTL1 0000	BIO DE TRUST AMERICAS	07/04/25				1,146,813.00	5,906,024.99
CP21130041278551	CK NO 13537	CHECK	07/04/25			1,146,813.00		4,759,211.99
FT1070425788644	JOHN D	BIO BERNARD MADOFF	07/04/25			1,146,813.00		3,612,400.00
		GENERAL SERVICE	07/04/25					3,612,400.00
FT1070425788644	JOHN D	BIO BERNARD MADOFF	07/04/24				1,000,000.00	4,612,400.00
FT070425788644	JOHN D	BIO BERNARD MADOFF	07/04/24				1,000,000.00	5,612,400.00
		CLOSING BOOK BALANCE	07/04/24					5,612,400.00
		CLOSING AVAILABLE BALANCE	07/04/24					5,612,400.00
CP21130041278551	ITEM COUNT 00001	DEPOSIT TO ACCOUNT	07/04/25				1,146,813.00	6,759,213.00
CP21130041278551	ITEM COUNT 00001	BIO BARCLAYS BANK PLC FID BARCLAYS	07/04/25				1,146,813.00	7,906,026.00
CP21130041278551	ITEM COUNT 00001	BIO BARCLAYS BANK PLC FID BARCLAYS	07/04/25				1,146,813.00	9,052,839.00
FT070425788644	FT070425788644	BIO BERNARD MADOFF INVESTMENT	07/04/25				1,146,813.00	10,200,000.00
CP21130041278551	CK NO 13535	CHECK	07/04/25			1,146,813.00		9,053,187.00
BLM070425788644	LSAN 200002400	CEL PROCEEDS SERVICES CRISKAN	07/04/25				1,146,813.00	10,200,000.00
FT070425788644	LSAN 200002400	CEL PRIN PAYMENT A/C 0284565105	07/04/25				1,146,813.00	11,346,813.00
		GENERAL SERVICE	07/04/25					11,346,813.00

SECSBJ0008226

325. These funds sent from MSIL to the Proprietary Trading Business were then reflected on handwritten notes created by Cotellessa-Pitz and subsequently on the general ledger for BLMIS as “Commission Income.” (See Figure 64.)²⁶⁸

²⁶⁸ The IA Business purportedly charged a four-cent commission on transactions. See MADWAA00693305-MADWAA00693306. If this were applied to the current example, commissions would equal \$525,873 (\$0.04 x \$13,146,813 purchase price on the US Treasury bill). In the instant case, however, commissions were being reported in an amount equal to the entire purchase price (i.e., \$13,146,813), further supporting the fact that these funds sent to the Proprietary Trading Business were not “Commission Income,” but rather cash infusions.

Figure 64

Commission Income

	BERNARD L. MADOFF INVESTMENT SECURITIES LLC 385 Third Avenue New York, NY 10022	212 230-2424 800 221-2342 Fax 212 486-8178
	<i>2007</i>	
Jan	-0-	
Feb	10,737,292.-	<i>2/26</i>
Mar	14,828,550.-	<i>3/29</i>
Apr	13,146,813.-	<i>4/25</i>

MADTEE00744864

BERNARD L. MADOFF LLC GENERAL LEDGER FOR 4/25/07				PAGE 5
ACCT#	DATE	DESCRIPTION	AMOUNT	
	4/25		4,609,276.00	
		ACCOUNT TOTAL	19,977,813.00-	✓
240-00		SECURITIES & EXCHANGE FEES	8,892.28-	
		ACCOUNT TOTAL	8,892.28-	✓
255-00	4/25	FEDERAL WITHHOLDING	.00	
			116,901.27	
	4/25		4,549.82-	
	4/25		602.09-	
		ACCOUNT TOTAL	100,236.80-	
305-00		CAPITAL	613,000,000.00-	
		ACCOUNT TOTAL	613,000,000.00-	
500-00	4/25	COMMISSION INCOME	25,565,842.00-	
		ACCOUNT TOTAL	13,146,813.00-	✓
			38,712,655.00-	
501-00	4/25	MISCELLANEOUS INCOME	684,240.66-	
	4/25		3.86-	
			.01-	
		ACCOUNT TOTAL	684,244.53-	✓
56-00		TRADING PAPER LOSS	3,608,107.26-	

MADTEE00692239

326. Ultimately these entries for “Commission Income” for April 2007 were aggregated with other Proprietary Trading Business “Commission Income” for the second quarter of 2007. (See Figure 65 for the other “Commission Income” for Q2 2007.)

Figure 65

Account Number	Description	Amount
305-00	CAPITAL	613,000,000.00-
	ACCOUNT TOTAL	613,000,000.00-
500-00	COMMISSION INCOME	38,712,655.00-
6/21		4,969,500.00-
	ACCOUNT TOTAL	43,682,155.00-
501-00	MISCELLANEDUS INCOME	716,560.33-
	MADTEE00691972	

Account Number	Description	Amount
305-00	CAPITAL	613,000,000.00-
	ACCOUNT TOTAL	613,000,000.00-
500-00	COMMISSION INCOME	43,682,155.00-
6/22		3,803,121.00-
	ACCOUNT TOTAL	47,485,276.00-
	MADTEE00691965	

Account Number	Description	Amount
305-00	CAPITAL	613,000,000.00-
	ACCOUNT TOTAL	613,000,000.00-
500-00	COMMISSION INCOME	47,485,276.00-
6/25		4,276,522.00-
	ACCOUNT TOTAL	51,761,798.00-
501-00	MISCELLANEDUS INCOME	716,646.32-
6/25		66.00-
	MADTEE00691960	

327. These "Commission Income" entries were reported on the FOCUS reports for the second quarter of 2007. (See Figure 66.)

Figure 66

STATEMENT OF INCOME (LOSS)

Period Beginning 04/01/2007 [3932] Period Ending 06/30/2007 [3933] Number of months 3 [3931]

REVENUE

1. Commissions:

a. Commissions on transactions in exchange listed equity securities executed on an exchange	26,195,956 [3935]
b. Commissions on transactions in exchange listed equity securities executed over-the-counter	[3937]
c. Commissions on listed options transactions	[3938]
d. All other securities commissions	[3939]
e. Total securities commissions	26,195,956 [3940]

PUBLIC0002867

328. Two months later, on June 7, 2007, the IA Business purportedly closed out this position on behalf of MSIL. That is, the IA Business purportedly sold the US Treasury bill for \$13,229,316. (See Figure 67.)

Figure 67

MADOFF SECURITIES INTL LTD 6/30/07 1 A

12 BERKELEY STREET
LONDON ENGLAND W1X 5AD 1-FN023-3-0

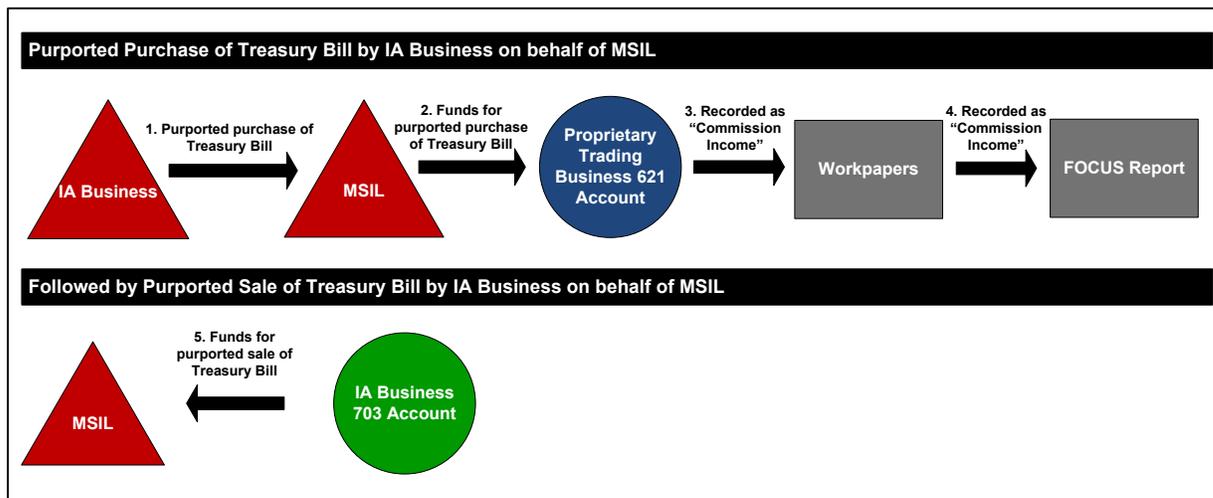
NO BALANCE FORWARD

6/07	13,350,000	70063	U S TREASURY BILL DUE 8/16/2007	99.096		13,229,316.00
6/07			CHECK WIRE	CW	13,229,316.00	
6/21	5,000,000	23774	U S TREASURY BILL DUE 8/9/2007	99.390	4,969,500.00	
6/21				CA		4,969,500.00

MDPTPP02985709

329. Although there are no corresponding transfers of cash from the Proprietary Trading Business to the IA Business, on June 7, 2007, the IA Business's 703 Account wire transferred

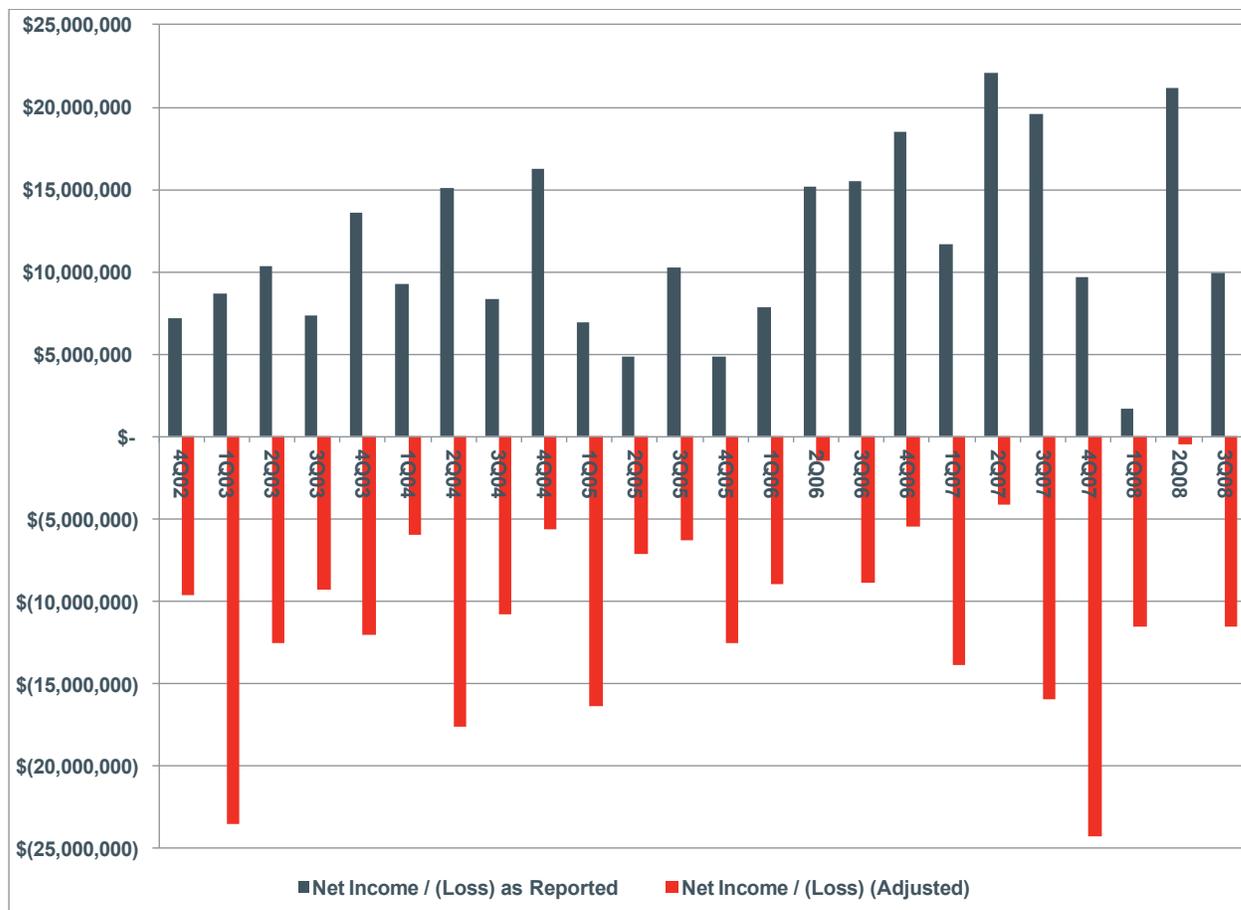
Figure 69



(v) **On its own, the Proprietary Trading Business could not sustain profits beginning in 2002**

331. The cash infusions from the IA Business, as described *supra*, allowed the Proprietary Trading Business to stay afloat and appear to generate profits. The reality is that the Proprietary Trading Business was not profitable. Beginning in mid-2002, the Proprietary Trading Business generated significant losses. As Figure 70 shows, the adjusted Proprietary Trading Business net income (loss), which removes the effects of the IA Business cash infusions, was in a significant loss position after the fourth quarter of 2002 through BLMIS's SIPA liquidation proceeding in December 2008.

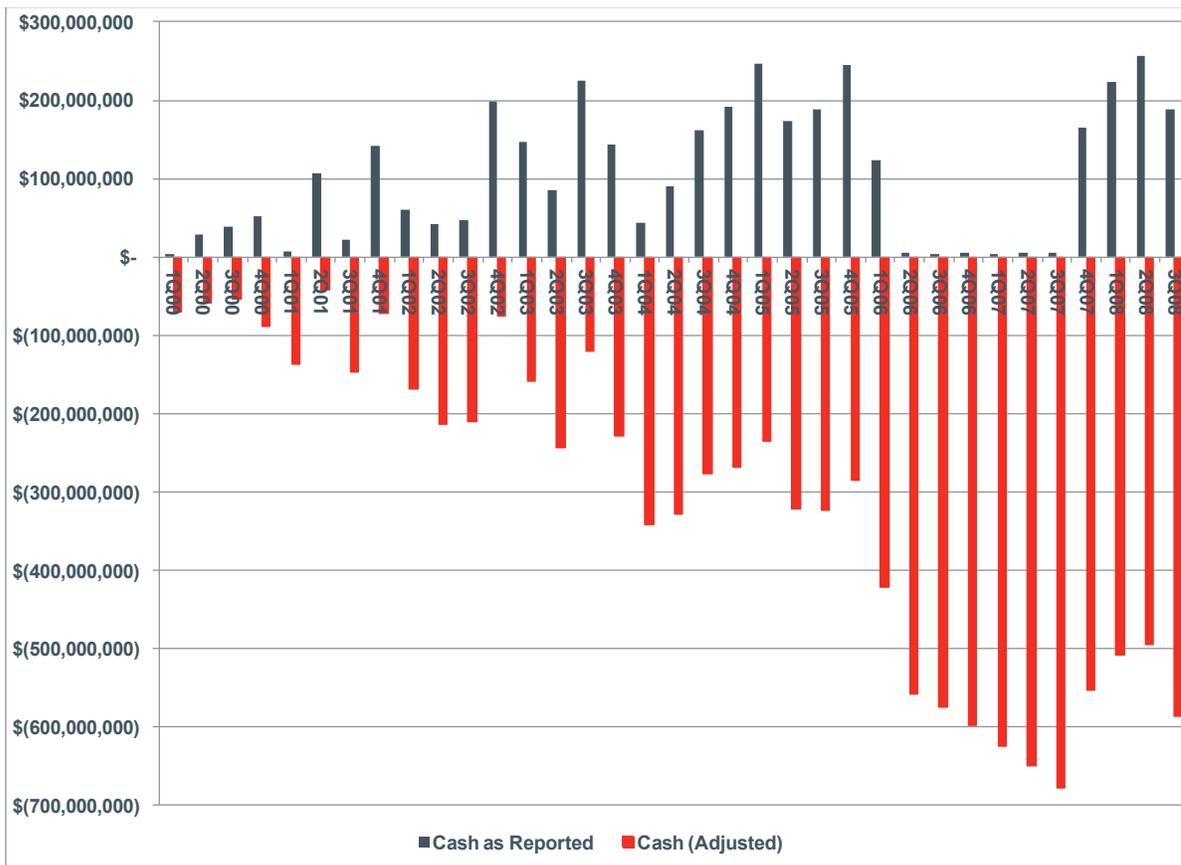
Figure 70
Comparison of Reported Net Income (Loss) and Adjusted Net Income (Loss) for Proprietary Trading Business



a.) The Proprietary Trading Business no longer had positive cash beginning in 2000

332. In order for a company to continue as a going concern, it must have cash available to cover its expenses. My investigation shows that if the cash infusions from the IA Business are removed from the cash as reported on the FOCUS reports, the Proprietary Trading Business would have been in a negative cash position beginning in 2000. (See Figure 71 where adjusted cash removes the cumulative impact of the IA Business cash infusions.)

Figure 71
Comparison of Reported Cash and Adjusted Cash for the Proprietary Trading Business



b.) The Proprietary Trading Business was in a negative net capital position beginning in 2004

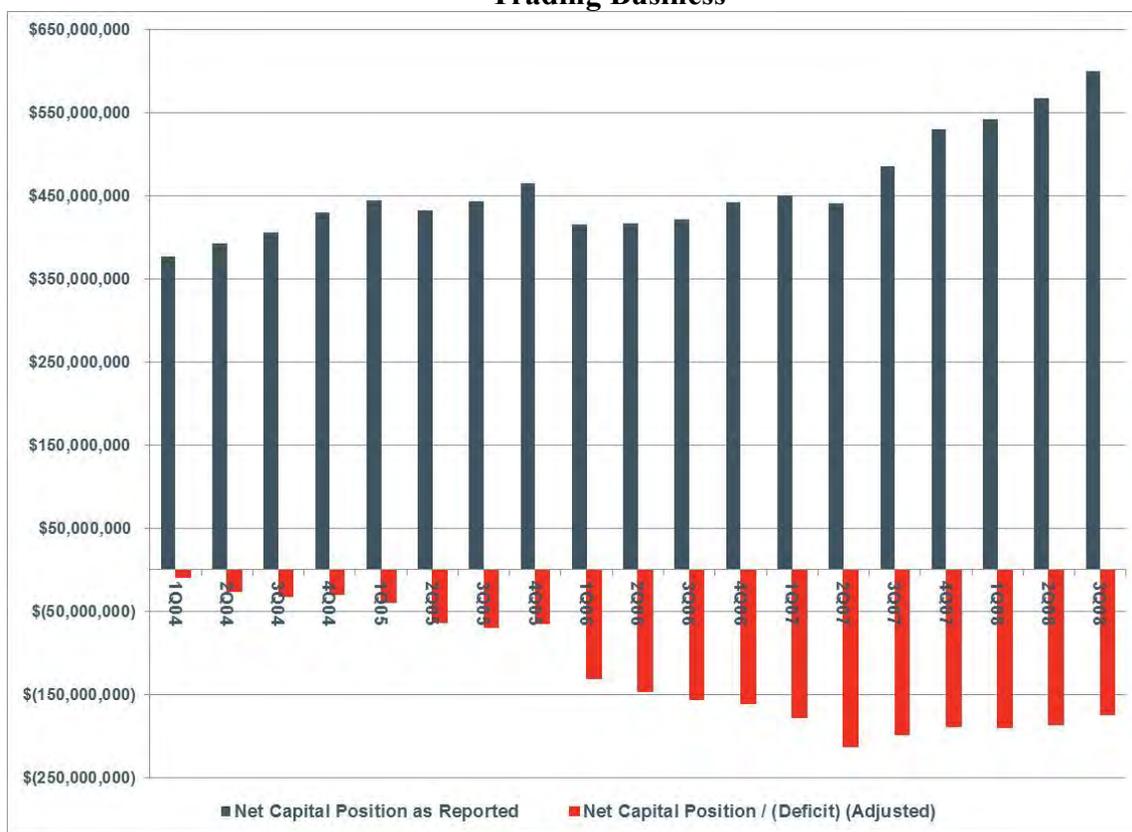
333. All SEC registered broker-dealers must comply with the SEC’s Net Capital Rule (Rule 15c3-1).²⁶⁹ This rule is intended to ensure that broker-dealers maintain sufficient liquid assets in order to: i) satisfy liabilities and ii) provide a liquid cushion in order to offset potential market, credit and other risks.²⁷⁰ The SEC requires that all broker-dealers disclose their net capital position in the FOCUS reports.

²⁶⁹ *Net Capital Requirements for Brokers or Dealers*, FINRA, <http://www.finra.org/web/groups/industry/@ip/@reg/@rules/documents/interpretationsfor/p037763.pdf> (last visited July 13, 2012).

²⁷⁰ *Key SEC Financial Responsibility Rules*, SEC, http://www.sec.gov/about/offices/oia/oia_market/key_rules.pdf (last visited July 13, 2012).

334. The Proprietary Trading Business purportedly complied with this requirement and provided its net capital calculations on a regular basis. These calculations, however, incorporated the cash infusions from the IA Business. As a result, although the Proprietary Trading Business appeared to be adequately capitalized, the removal of the cash infusions reflects a significantly different position. After adjusting for the IA Business cash infusions, the Proprietary Trading Business was in a negative net capital position, at a minimum, beginning in 2004. (See Figure 72.)

Figure 72
Comparison of Reported Net Capital and Adjusted Net Capital for the Proprietary Trading Business



c.) BLMIS improperly compensated non-BLMIS employees

335. Further, BLMIS was improperly compensating individuals for supposedly providing “services” to BLMIS, but, in fact, they were not. For example, Peter Madoff pled guilty to

providing salaries and benefits to his own wife, Marion Madoff, who did not work for the firm. From 1996-2008, Marion Madoff earned over \$1.5 million for performing no duties related to the business at BLMIS. Similarly, Irwin Lipkin pled guilty to providing a salary from BLMIS to his wife beginning in or about 1978 even though she did not perform any services to BLMIS.²⁷¹ Such instances provide further evidence of the pervasive fraud at BLMIS.

VII. OPINION NO. 2: BLMIS WAS INSOLVENT FROM AT LEAST DECEMBER 11, 2002²⁷²

336. 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 title 11 of the U.S. Code.²⁷³

337. In conducting my investigation, the solvency of BLMIS was evaluated as of each December 11th from 2002 through 2008. Three tests are typically used when evaluating the solvency of a company in bankruptcy.²⁷⁴ These tests include:

- Balance Sheet;²⁷⁵
- Capital Adequacy;²⁷⁶ and
- Ability to Pay Debts.²⁷⁷

²⁷¹ Peter Madoff Information at 7, 22-23; Craig Kugel Information at 3-5; Irwin Lipkin Information at 12.

²⁷² December 11, 2002 was a date selected by the Trustee’s counsel for the six-year period prior to the BLMIS SIPA liquidation proceeding. As will be described *infra*, there is strong evidence to suggest that BLMIS was insolvent going back decades before December 2002.

²⁷³ 11 U.S.C. § 101(32) (2011).

²⁷⁴ 11 U.S.C. § 548. These tests are applied in the analyses of fraudulent conveyances.

²⁷⁵ 11 U.S.C. § 548 (a)(1)(B)(ii)(I).

²⁷⁶ 11 U.S.C. § 548(a)(1)(B)(ii)(II).

²⁷⁷ 11 U.S.C. § 548(a)(1)(B)(ii)(III).

338. In order to be deemed insolvent, the company at issue need only fail one of these three tests. In the present case, BLMIS failed all three tests as described *infra*.

A. Balance Sheet Test

339. The Balance Sheet Test is generally defined as the comparison of the Fair Market Value (“FMV”) of a company’s assets to the stated amount (or expected value where appropriate) of its liabilities. There are three approaches commonly used to estimate the FMV of assets:

- Adjusted Balance Sheet Approach: the assets of the subject company are adjusted from their reported values to their FMV; liabilities at their stated value are then subtracted to indicate solvency (assets greater than liabilities) or insolvency (assets less than liabilities);
- Income Approach: indicates the FMV of the equity of a business based on the value of the cash flows that the business is expected to generate in the future; and
- Market Approach: indicates the FMV of a target company based on a comparison of the company to comparable firms in similar lines of business.

340. As discussed more fully below, based on the results of the expanded scope of my investigation, I conclude that a solvency analysis of BLMIS necessitates a Balance Sheet Test based on liquidation value. As such, I have only applied the Balance Sheet Test using the Adjusted Balance Sheet approach because the Income Approach and Market Approach would assume a going concern. To assess solvency under a liquidation premise, the assets and liabilities of both the IA Business and the Proprietary Trading Business were considered.

1. Underlying Methodology Standard and Premise

341. In general, when evaluating the solvency of an enterprise under the Balance Sheet Test, the following predicate assumptions are made: (i) the standard of value assumed is FMV and (ii) the premise of value assumed is a going concern (or liquidation value if the bankruptcy of the company is imminent). Both play a key role in determining value for any business.

342. The standard of value is the type of value that is being used (*e.g.*, FMV, Fair Value, Intrinsic Value, etc.). The premise of value reflects the set of circumstances surrounding the business

valuation. For example, a business that is being offered for sale, and will continue to operate under new ownership, will demand a price that is much different than that of a business that will be shut down and its assets sold at auction - the latter attracting a much lower price than the former.

343. FMV as used herein is defined as the price at which property would change hands between a willing buyer and a willing seller, neither being under any compulsion to buy or sell and both having reasonable knowledge of relevant facts.²⁷⁸ In the case of assessing the FMV of any business, a willing buyer is assumed to be a hypothetical one rather than any one specific buyer. Further, the hypothetical buyer is one that is assumed to have conducted due diligence before entering into any purchase contract. Going concern assumes that the entity will continue as an operating business in its present state into the future.²⁷⁹
344. In my Expert Report dated November 22, 2011, in *Irving H. Picard, Trustee for the Liquidation of Bernard L. Madoff Investment Securities LLC v. Saul B. Katz, et al.* (the “Katz Report”), I was asked to assess the solvency of BLMIS for the purpose of demonstrating the depth of BLMIS’s insolvency given the massive customer liabilities that existed. In the Katz Report, I predicated my valuation analysis of the Proprietary Trading Business on the assumption that it would be a going concern. Accordingly, using a going concern premise, I estimated the FMV at approximately \$450 million. However, my Katz Report noted that “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.”²⁸⁰
345. Since the filing of the Katz Report, I was asked to perform an additional investigation specifically on the profitability and operations of the Proprietary Trading Business, as described *supra*. As my investigation revealed, fraud permeated BLMIS - both the IA

²⁷⁸ Treas. Reg. § 20.2031-1b; Rev. Rul. 59-60, 1959-1 C.B. 41; *see also Statement on Standards for Valuation Services No. 1, Appendix B International Glossary of Business Valuation Terms*, AICPA 44 (2007).

²⁷⁹ Jay E. Fishman, Shannon P. Pratt, & William J. Morrison, *Standards of Value, Theory and Applications* 28-29 (2007); *see also Statement on Standards for Valuation Services No. 1, Appendix B International Glossary of Business Valuation Terms*, AICPA 45 (2007).

²⁸⁰ Moreover, the valuation analyses “were generally made in the light most favorable to the determination of a finding of solvency” and were done in order to give the greatest benefit in favor of estimating a value that would support a finding of solvency for BLMIS given its enormous level of customer liabilities. Katz Report at 111.

Business and the Proprietary Trading Business - to such an extent that the business could no longer be valued on a going concern basis. Not only did the Proprietary Trading Business receive fraudulent cash infusions from the IA Business, but by the early 2000s, it was wholly dependent on these funds in order to make it appear that it was a sustainable and profitable enterprise. In other words, these cash infusions came to be the dominant source of cash funding for the Proprietary Trading Business. The cash infusions, falsely identified as “revenues,” revealed the pervasive nature of the fraud in the Proprietary Trading Business. Because the company’s books and records could not be relied upon by a hypothetical buyer due to the extensive fraud, and because an adjustment of the false revenues would reveal ongoing significant net losses (*see* discussion *supra*), the Proprietary Trading Business could not continue as a going concern.

346. Further, the allocutions and/or guilty pleas of the BLMIS Controllers, Irwin Lipkin and Cotellessa-Pitz, and the Chief Compliance Officer, Peter Madoff, corroborate the fact that fraud permeated BLMIS to the extent that the company’s books and records could not be relied upon by a hypothetical buyer.²⁸¹ Since the Katz Report, Irwin Lipkin, Cotellessa-Pitz and Peter Madoff have pled guilty to manipulating and falsifying the BLMIS financial records and statements as well as regulatory filings, which further confirms my findings as to the pervasive nature of the fraud in the Proprietary Trading Business. For example, in her allocution, Cotellessa-Pitz admitted that:

I caused inaccurate ledgers and other books and records to be kept by BLMIS, including inaccurate general ledgers and stock records. I then transferred the same inaccurate record entries into FOCUS Reports and annual financial statements that I knew would be sent to the SEC. . . . I made false and inaccurate entries in the books and records of BLMIS relating to transfers of funds from BLMIS’s Investment Advisory business. . . . I booked these transfers improperly to the accounts of BLMIS’s Market Making and Proprietary Trading businesses.²⁸²

²⁸¹ Irwin Lipkin Plea Agreement, *United States v. Irwin Lipkin*, S9 10-CR-228 (LTS) (S.D.N.Y. November 8, 2012); Enrica Cotellessa-Pitz Plea Allocution, *United States v. Enrica Cotellessa-Pitz*, 55-CR-228 (LTS), at 31 (S.D.N.Y. Dec. 19, 2011); Peter Madoff Plea Agreement, *United States v. Peter Madoff*, S7 10-CR-228 (LTS) (S.D.N.Y. June 29, 2012).

²⁸² Cotellessa-Pitz Plea Allocution at 31. In addition, Cotellessa-Pitz stated, “I booked the transfers of funds at times into specific securities or trading positions and accounts that were part of the firm’s Market Making and Proprietary Trading businesses. I knew that the transfers bore no relation to these securities or positions, and that the funds did

347. In addition, assuming the fraud at BLMIS was discovered by a willing buyer, it is reasonable to assume that there would not be a willing buyer thereafter. Nor would there likely be a willing seller since Madoff would not have risked opening the books and records to a prospective purchaser and risk the exposure of the fraud.
348. I have therefore concluded that BLMIS would not continue as a going concern. As such, a Balance Sheet Test under a liquidation premise (sometimes commonly referred to as “liquidation value”), where the business’s assets are sold off as pieces of the business rather than as an intact operating business, is the only remaining premise of value which could be estimated under the circumstances.

2. Application of Balance Sheet Test

a. Analyzing the Assets of BLMIS

349. As discussed *supra*, the IA Business was a Ponzi scheme and a fraudulent business. Because it would be inappropriate to consider the IA Business as a going concern for purposes of a solvency analysis, the only relevant IA Business assets to consider are the cash held by the IA Business and the receivable from the Proprietary Trading Business for the cash infusions from the IA Business (since it had no other assets), as detailed *supra*.²⁸³
350. The total positive cash balances in the IA Business-related accounts were approximately \$1.5 billion as of December 11, 2002.²⁸⁴ The receivable from the Proprietary Trading Business was \$273.7 million as of December 2002.

not result from trading in these securities through the firm’s Market Making and Proprietary Trading businesses and, therefore, that my entries were false.” *Id.*

²⁸³ As will be discussed, the cash infusions received by the Proprietary Trading Business are being treated for purposes of the solvency analysis as a loan payable from the Proprietary Trading Business to the IA Business and therefore a loan receivable to the IA Business from the Proprietary Trading Business.

²⁸⁴ It has been assumed for purposes of the solvency analysis, that certain brokerage/other accounts were business accounts attributable to the IA Business rather than personal accounts of Madoff and/or his wife Ruth. Account opening 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, I have included the value of those accounts in the analysis.

351. In assessing the value of the Proprietary Trading Business under a liquidation premise, I first analyzed the value of its net assets assuming an orderly liquidation. That is, I analyzed the price at which the net assets of the business “will be sold with normal exposure to their appropriate secondary markets.”²⁸⁵ In so doing, I reviewed BLMIS’s historical financial statements to identify those assets that might be saleable in a liquidation sale.
352. In the case of the Proprietary Trading Business, this would include the trading positions that the business owned net of its obligations to cover its short positions. I assumed, for purposes of this analysis, that the security positions held on the balance sheet reflected market prices.²⁸⁶ The liquidation would also include cash and the sale of any fixed assets (*e.g.*, namely furniture, equipment, and leasehold improvements, to the extent they are not permanent leasehold improvements) plus additional other assets.²⁸⁷ The BLMIS financial statements include a category for “Other Assets.”²⁸⁸ For purposes of this analysis, I included those Other Assets assuming that they would represent saleable assets in a liquidation sale.

b. Analyzing the Liabilities of BLMIS

353. In order to determine customer liabilities of the IA Business as of December 2002, a calculation was performed to ascertain which customers had contributed more cash to the IA Business 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

²⁸⁵ Jay E. Fishman, Shannon P. Pratt, & William J. Morrison, *Standards of Value, Theory and Applications* 28-29 (2007).

²⁸⁶ To test this assumption, I determined that the net trading position in October 2008 was approximately \$315 million (calculated as securities and investments readily and not readily marketable minus securities sold, but not yet purchased). As of June 2009, these positions were sold in the market as part of the liquidation of the net trading positions of the Proprietary Trading Business for approximately \$300 million. I therefore concluded that the market values presented in the financial statements were reasonable approximations of their fair market value.

²⁸⁷ I have assumed for purposes of this analysis that the cash amounts reflected in the year-end FOCUS reports were attributable entirely to the Proprietary Trading Business. Cash balances for 2008 are based on Q3 2008 FOCUS report balances.

²⁸⁸ The BLMIS historical financial statements do not provide a detailed description of the Other Assets in all years. In some years, such as 2002, Other Assets include dividends, interest receivables, loans and advances. *See generally* MADTEE00726657-MADTEE00726675; MADTEE00726676-MADTEE00726697; MADTEE00726698-MADTEE00726731; MADTEE00726766-MADTEE00726796; MADTEE00726797-MADTEE00726823; MADTEE00045784-MADTEE00045803; MADTEE00726865-MADTEE00726884.

December 31, 2002 the net customer liability was \$11.9 billion and \$12.0 billion, respectively.²⁸⁹

354. The principal balance of a customer was determined by FTI 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.²⁹⁰ In addition to accounting for the cash-in and cash-out transactions, the direct transfer and withdrawal of real securities that were either deposited or withdrawn by customers from their accounts were calculated. 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;
- Any interest earned on cash balances from customer deposits in IA Business's 703 Account; and
- Any book transfers of IA Business customer money between customer accounts (*i.e.*, transfers to an account for which the transferor account did not have sufficient principal at the time of the transfer).

355. In order to assess the accuracy of FTI's calculation of a customer's principal balance as described above, a review of the full customer liabilities was undertaken for purposes of inclusion in a solvency analysis. Access was provided to numerous databases including those derived from customer statements and other 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 databases to source documents, as well as the replication of queries that were used to extract relevant information from the databases.²⁹¹ Finally, a recalculation of customer liabilities was

²⁸⁹ Net Loser Amounts by Account - 09302011.xlsx (MOTTAA00000922). The net equity methodology was upheld by the United States Court of Appeals for the Second Circuit. *In re Bernard L. Madoff Inv. Sec. LLC*, 654 F.3d 229 (2d Cir. 2011).

²⁹⁰ *In re Bernard L. Madoff Inv. Sec. LLC*, 654 F.3d 229 (2d Cir. 2011). 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.

²⁹¹ 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

completed. As a result of testing the majority of the data tables provided, it was determined that the customer liability balances were materially accurate and reliable for use in the solvency analysis.

356. With respect to the Proprietary Trading Business, BLMIS's liabilities would include line items such as Account Payables and Accrued Expenses plus any other liabilities (*i.e.*, on-balance sheet or off-balance sheet) such as loans and/or borrowings that would need to be extinguished. In the present case, however, the Proprietary Trading Business failed to account for the massive liability it owed to the IA Business for the hundreds of millions of dollars it received from the IA Business. Since I have assumed, for purposes of this analysis only, that the net trading positions are assets of the Proprietary Trading Business and not assets of the IA Business (an assumption that is extremely conservative given the facts of this fraud), it is necessary to account for hundreds of millions of dollars taken from the IA business by the Proprietary Trading Business as a liability that would be offset against the value of its assets. In other words, it is a reasonable assumption that the hundreds of millions of dollars taken by the Proprietary Trading Business allowed it to accumulate the trading positions and other assets over the years since, without the fraudulent movement of money, the Proprietary Trading Business had significant net losses for many years prior to its final demise in late 2008.²⁹²
357. Accordingly, the total assets and liabilities for BLMIS as of December 2002 are shown in Table 12:

the banks or retrieved from BLMIS files for the period December 1998 to December 2008 and compiled electronically as well. These electronic databases 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.

²⁹² There is a dearth of evidence regarding the value of any trading algorithms in the Proprietary Trading Business. As described *infra*, Surge Trading Inc. purchased the assets of the Proprietary Trading Business at an auction based on a five-year earn out. Under the Asset Purchase Agreement, 50% of the purchase price was for "the purchase of the algorithms and the arbitrage models[.]" Acquisition for the Purchase of Certain Assets of Bernard L. Madoff Investment Securities LLC by Surge Trading Inc. Closing Volume, *In re Bernard L. Madoff*, No. 08-01789, Schedule 4.2 (S.D.N.Y. Apr. 23, 2010) (Dkt. No. 139). Since only \$1,389,423.16 was paid for the Proprietary Trading Business, as described below, 50% of this purchase price would render a *de minimis* value, if any, to the algorithms. There is, therefore, no basis to ascribe any value to these algorithms that would be sufficient to render the Proprietary Trading Business as having a positive liquidation value.

Table 12²⁹³

	December 11, 2002			
	IA Business	Proprietary Trading	Intercompany Eliminations	BLMIS
	(\$ millions)			
ASSETS				
Cash	\$1,500.00	\$198.10		\$1,698.10
Receivables	273.70		(\$273.70)	0.00
Net Trading Positions		107.00		107.00
Fixed Assets		10.50		10.50
Other Assets		2.10		2.10
Total	<u>\$1,773.70</u>	<u>\$317.70</u>	<u>(\$273.70)</u>	<u>\$1,817.70</u>
LIABILITIES				
Customer liabilities	\$11,907.28			\$11,907.28
Payables		\$273.70	(\$273.70)	0.00
Total	<u>\$11,907.28</u>	<u>\$273.70</u>	<u>(\$273.70)</u>	<u>\$11,907.28</u>

3. BLMIS fails the Balance Sheet Test

358. The solvency of BLMIS, based on the Balance Sheet Test, as of December 11, 2002 was computed as follows:

	(\$billions)
Total BLMIS Assets	\$1.82
Total BLMIS Liabilities	<u>(\$11.91)</u>
INSOLVENT	(\$10.09)

359. The resulting negative \$10.1 billion demonstrates that BLMIS was deeply insolvent as of December 11, 2002.²⁹⁴ Further, as a result of the growing IA Business customer liability

²⁹³ The Intercompany Elimination in 2002 is a cumulative figure beginning in 1999.

²⁹⁴ Even assuming *arguendo* that the personal bank accounts of Bernard and Ruth Madoff that indicated transfers to and from the 703 Account were properly added back to the assets of BLMIS for purposes of a solvency analysis, the

from approximately \$12 billion in December 2002 to approximately \$19.7 billion on December 11, 2008, it is my opinion that BLMIS was insolvent at all times after December 11, 2002 as well. (See Table 13.)

Table 13²⁹⁵

	As of December 11						
	2002	2003	2004	2005	2006	2007	2008
	(\$billions)						
Total BLMIS Assets	\$1.82	\$1.21	\$1.09	\$0.98	\$0.19	\$0.43	\$0.53
Total BLMIS Liabilities	(\$11.91)	(\$12.89)	(\$14.92)	(\$15.49)	(\$17.84)	(\$21.99)	(\$19.70)
INSOLVENT	(\$10.09)	(\$11.68)	(\$13.83)	(\$14.50)	(\$17.64)	(\$21.57)	(\$19.16)

360. Further, there is reasonable evidence to believe that BLMIS was insolvent going back to at least 1983.²⁹⁶ An analysis of the IA Business customer liabilities back to 1983 reveals: i) the massive customer liabilities that were not reported on the BLMIS FOCUS reports (and financial statements) for decades, and ii) the recording of these liabilities could have rendered BLMIS insolvent dating back to this earlier time period (*i.e.*, the liabilities would have eliminated the shareholders equity on the FOCUS and financial reports). (See Table 14.)

significantly deep level of insolvency for BLMIS would not be affected in an amount anywhere closely sufficient to render BLMIS solvent.

²⁹⁵ Additional support for this table can be found in **Exhibit 27** – “Annual Solvency Calculations for BLMIS from 2002 through 2008”.

²⁹⁶ Customer liabilities were calculated beginning in 1983.

Table 14²⁹⁷

Year	Reported BLMIS Shareholders Equity	Non-Reported IA Business Customer Liabilities as of December 31 (\$ millions)	Net BLMIS Shareholders Equity
	(a)	(b)	(c) [(a)-(b)]
1983	\$18	\$280	(\$262)
1984	\$21	\$298	(\$277)
1985	\$26	\$319	(\$293)
1986	\$35	\$352	(\$316)
1987	\$42	\$370	(\$328)
1988	\$49	\$433	(\$385)
1989	\$56	\$560	(\$504)
1990	\$62	\$689	(\$627)
1991	\$73	\$823	(\$749)
1992	\$87	\$1,527	(\$1,440)
1993	\$103	\$1,729	(\$1,627)
1994	\$122	\$2,119	(\$1,997)
1995	\$152	\$2,638	(\$2,486)
1996	\$177	\$3,362	(\$3,184)
1997	\$205	\$4,573	(\$4,368)
1998	\$235	\$6,560	(\$6,325)
1999	\$285	\$8,469	(\$8,184)
2000	\$326	\$9,592	(\$9,266)
2001	\$413	\$10,785	(\$10,372)
2002	\$440	\$12,020	(\$11,580)
2003	\$480	\$13,089	(\$12,609)
2004	\$529	\$15,163	(\$14,634)
2005	\$556	\$15,486	(\$14,930)
2006	\$613	\$18,327	(\$17,714)
2007	\$676	\$22,673	(\$21,997)

361. BLMIS was ultimately liquidated under an order signed by U.S. Bankruptcy Judge Burton Lifland. A bidding process was ordered for the Proprietary Trading Business and an auction

²⁹⁷ Shareholders equity based on BLMIS FOCUS reports from 1983-2007; customer liabilities based on Net Loser Amounts by Account - 09302011.xlsx (MOTTAA00000922).

took place on April 27, 2009. Surge Trading Inc. (hereinafter “Surge”) bought the trading business for \$1 million cash payable at closing and \$24.5 million in deferred purchase price payments payable through December 2013. By August 2011, however, Surge decided to voluntarily wind-down the business as attempts to raise additional capital had failed. The Trustee has publicly reported that he received only \$1,389,423.16 from the sale.²⁹⁸

362. Accordingly, my conclusion that the liquidation value of BLMIS was significantly negative under the Balance Sheet Test is reasonable when compared to the nominal value derived by the Trustee from the sale to Surge in the bankruptcy process. The bankruptcy process affords the sale of assets to a prospective buyer without the burden of attaching the liabilities to any such sale and reducing the proceeds, as the liabilities are the subject of relief in the bankruptcy arena. This is contrasted with a hypothetical sale under the FMV standard using a liquidation premise of value as was utilized in my analysis.

B. Capital Adequacy Test

363. Capital Adequacy 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: (i) capital already obtained; (ii) capital to which the company has reasonable access; and (iii) 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.
364. In the case of BLMIS, by any measure, the firm did not have sufficient capital. First, as detailed in my analysis of the Balance Sheet Test, BLMIS’s tremendous liabilities far outweighed its assets, thereby eliminating any shareholders equity. Second, any ability for BLMIS to access the capital markets for additional funding would have been severely limited due to the extensive fraud throughout the entity. However, even if BLMIS were able to secure third-party funding (*e.g.*, a loan), the likelihood of receiving enough funding to cover

²⁹⁸ See *Trading Firm, Built on Madoff Platform, Closes Doors*, WSJ, <http://online.wsj.com/article/SB10001424052970203388804576617230200603402.html> (last visited Sept. 20, 2012).

its liabilities and provide sufficient resources and capital for any future volatility in its business is unrealistic.

365. As such, BLMIS did not have sufficient capital from December 11, 2002 and all points thereafter, thereby failing the Capital Adequacy Test.

C. Ability to Pay Debts Test

366. 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. The simplest measure of ability to pay is the probability of default. It is, for example, the probability of default that a credit rating is intended to reflect.
367. Similar to the analysis of BLMIS's capital adequacy, at no point in time from December 11, 2002 onward did BLMIS have the ability to pay back its debts when due. In fact, by December 11, 2002, BLMIS had a \$12 billion customer liability, which it was unable to pay; this liability only deepened between December 2002 and December 2008. Thus, based on the depth of its insolvency, BLMIS was unable to pay its debts and, therefore, failed the Ability to Pay Debts Test.

VIII. OPINION NO. 3: MSIL WAS USED TO FACILITATE THE TRANSFER OF FUNDS OUT OF THE IA BUSINESS

A. MSIL was part of the process of moving cash from the IA Business to the Proprietary Trading Business

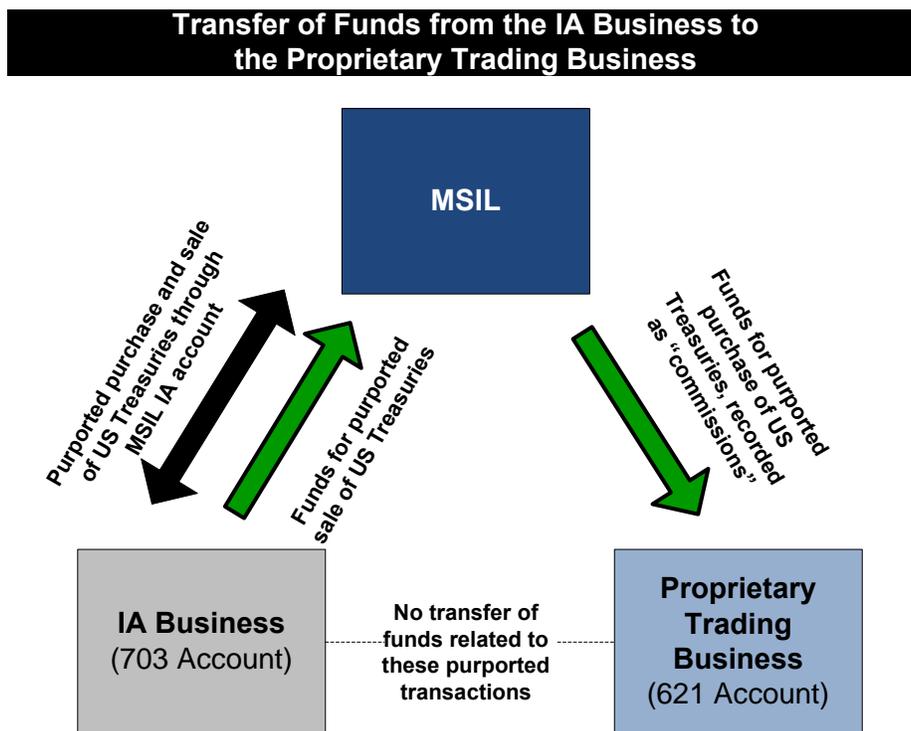
368. As discussed *supra*, approximately \$800 million of cash was transferred from the IA Business to the Proprietary Trading Business from 1999 through 2008. (See Table 15.)

Table 15

Year	IA Business Derived Cash Infusions
1999	\$65,152,029
2000	75,582,929
2001	72,403,595
2002	60,483,441
2003	97,366,816
2004	88,966,002
2005	69,307,037
2006	73,217,622
2007	121,243,288
2008	75,459,701
Total	\$799,182,460

369. Of this amount, approximately \$310 million was transferred by way of MSIL. As such, MSIL was used to facilitate the transfer of funds in BLMIS.
370. As detailed in the example below, the following steps occurred in the transfers of funds from the IA Business to the Proprietary Trading Business:
- MSIL requested the purported purchase of US Treasuries through its IA account;
 - MSIL wire transferred funds to the Proprietary Trading Business 621 Account for the purported purchase of the US Treasuries; the amount was approximately equal to the full value of the US Treasuries although the funds were recorded as “commissions” on the BLMIS financials;
 - US Treasuries were purportedly posted to the MSIL IA account;
 - After a short duration (*e.g.*, 2-3 months), MSIL requested the purported sale of the US Treasuries; and
 - Without receiving any transfers from the Proprietary Trading Business, the IA Business 703 Account wire transferred funds to MSIL for distribution from the purported sale of the US Treasuries. (*See* Figure 73.)

Figure 73



371. Through these transactions, MSIL was used to perpetrate and perpetuate the fraud in BLMIS.

B. MSIL's capital base was dependent on capital infusions from the IA Business

372. Similar to the Proprietary Trading Business, MSIL also received financial support from the IA Business. During the period for which data were available, MSIL received nearly \$205 million in capital through the use of cash, loans or the issuance of MSIL equity, all paid for through the use of funds from the IA Business. (See Table 16.)²⁹⁹

²⁹⁹ The cash, loans and equity were transferred from the 703 Account or through 703 Account-funded brokerage accounts, such as the IA Business's Fidelity account X08-289403 (approximately \$46 million in US Treasuries were delivered to MSIL) or the IA Business's Lehman Brothers account 831-04398 (approximately \$347,108 were transferred to MSIL). See FMRSA0001557-FMRSA0001559.

Table 16

IA Business	
Year	Infusions
2000	\$45,856,480
2001	26,195,040
2002	3,947,108
2003	9,337,400
2004	2,700,000
2005	5,600,000
2006	6,453,423
2007	104,279,222
2008	400,000
Total	\$204,768,672

IX. BASES FOR THE OPINIONS IN MY REPORT

373. I base my opinions above on my formal education and over 30 years of practical experience as a CPA 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 founded 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.



Bruce G. Dubinsky, MST, CPA, CFE, CVA, CFF, MAFF
August 20, 2013

APPENDICES

APPENDIX A

QUALIFICATIONS OF BRUCE G. DUBINSKY



Bruce G. Dubinsky
Managing Director
Duff & Phelps, LLC

PROFESSIONAL CREDENTIALS

Bruce Dubinsky, MST, CPA, CVA, CFE, CFF, MAFF is a Managing Director in the Dispute and Legal Management Consulting Practice and City Leader of the Washington, D.C. office of Duff & Phelps, LLC. Bruce has over thirty years' experience providing accounting, tax, expert witness and forensic accounting services.

Professional Experience

- *Bruce's practice places special emphasis on providing dispute consulting, forensic accounting and expert witness services to a variety of clients including law firms, general counsels of corporations, governmental agencies and law enforcement bodies. Bruce frequently works on complex litigation cases where the claims in many instances are in the tens of billions dollars.*
- *Bruce has been qualified and testified as an expert witness in cases involving criminal and civil fraud, commercial business damages, intellectual property and patent damages, business valuations, federal income taxation, bankruptcy, accounting malpractice and standard of care cases as well as various other disputes.*
- *He has been employed on numerous occasions as a testifying expert for federal income tax matters by the United States Department of Justice, Tax Division, as well as the Office of Chief Counsel for the Internal Revenue Service on cases involving abusive tax shelters and Listed Transactions.*
- *Currently, Bruce is retained as the testifying expert witness 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 in the largest Ponzi scheme in the world's history.*
- *Recently, Bruce led the forensic investigation on campaign finance fraud for the United States Department of Justice through appointment by the U.S. District Court for the Southern District of New York for the 2010-2011 International Brotherhood of Teamsters (IBT) International Officers Election. Bruce has led the forensic investigation for the past three election cycles for the IBT dating to 1997.*
- *During 2009, Bruce was one of the forensic accounting investigators who worked on the Lehman Brothers bankruptcy investigation conducted by the Special Examiner appointed by the bankruptcy trustee for the Lehman Brothers bankruptcy estate.*
- *In 2003, Bruce and his team investigated fraud allegations on behalf of the Washington Teachers Union where the presiding officers were thought to have embezzled millions of dollars from union coffers. This investigation resulted in the perpetrators being convicted of various federal crimes in the United States District Court for the District of Columbia and incarcerated as a result.*

***Professional
Experience
(continued)***

Areas of Bruce's practice include:

- Fraud Investigations
- Forensic Accounting
- Accounting Malpractice
- Complex Tax Controversy Cases
- Commercial Damage/Lost Profits Analysis
- Bankruptcy Investigations
- Investment/Securities Damages
- Campaign Finance Compliance
- White Collar Criminal Fraud
- Boardroom Investigations

Representative Cases:

- Hired as a testifying forensic accounting expert for the defense in the Parmalat SpA fraud case, one of the world's largest accounting fraud cases to date. Provided expert testimony in multi-day deposition regarding various matters including the nature of the frauds perpetrated, methods utilized by various alleged fraudsters and the underlying transactions at issue.
- Hired as a testifying damages expert for the defense in a case with nearly \$1 billion dollars of alleged damages for an alleged patent licensing breach of contract case involving hard disk drive spindle motors and related hard disk drive component products.
- Hired as a testifying forensic accountant and damages expert in a case involving hundreds of millions of dollars of consumer credit card and debt accounts in several asset-backed securitization vehicles.
- Hired as a testifying forensic accountant expert in several cases surrounding alleged fraudulent tax shelters involving hundreds of millions of dollars in unpaid federal income taxes.
- Hired as a testifying forensic accountant in a white collar criminal case involving allegation of bankruptcy and tax fraud.
- Hired as a testifying damages expert in a health care insurance case involving breach of contract and other claims.
- Hired as a testifying damages expert in a case involving lost profits arising from intentional disruption of distributorship channels.
- Hired as a testifying damages expert in a case involving lost profits and damages arising from alleged trespassing and unauthorized utilization of a internet service provider network.

**Professional
Experience**

(continued)

Selected Professional Accomplishments:

- In 2013, Bruce was elected to the Association of Certified Fraud Examiners Board of Regents by the vote of the entire membership of the ACFE's. The Board of Regents functions to set standards that will promote professionalism and ensure the future of the organization as a whole.
- Bruce was honored by the National Association of Certified Valuators and Analysts (NACVA) with the "2012 Instructor of Exceptional Distinction" award in connection with his outstanding instructor performance based on participant evaluations.
- In 2007 Bruce was named one of the "Top 100 Most Influential People in the Accounting Profession" by Accounting Today, the premier news vehicle for the tax and accounting community for over 22 years. He was described in the article as "a pioneer of forensic accounting."
- In 2005 Bruce received the distinguished award as the *Fraud Examiner of the Year* from the Washington Metropolitan Chapter of Certified Fraud Examiners for his work on the Washington Teachers Union embezzlement case. He also received the *Fraud Examiner of the Year* in 2001 for his efforts in the International Brotherhood of Teamsters investigative work.
- Bruce currently serves on Editorial Board of The Value Examiner, an independent, professional development journal dedicated to the exploration of value and its ramifications for consultants. It is the singular source of timely, technical, in-depth articles written for consultants by practitioners and academics at the top of their respective fields.
- Bruce was a contributing editor for the CPA Digest, a nationally published, technical journal for the accounting profession, for two years. After serving as a contributing editor and writer, he remained an Editorial Board Advisor for one year. Bruce also served as a Continuing Education Course evaluator for McGraw Hill Publishing Company as well as a technical reviewer for Fraud Alert, published by PDI, Inc. in Chicago, IL. He has written and published articles on various matters relating to forensic accounting, fraud investigations, business valuations and commercial damages for a variety of legal and professional publications.
- Bruce has also served as a member of the Commercial Panel of Arbitrators for the American Arbitration Association. He was selected to the panel on the basis of his involvement in the business and legal community, in recognition of his expertise and leadership in forensic and public accounting, and his reputation for integrity and fair judgment.
- Bruce has been quoted as an expert in numerous print media as well as appearing on local and national television and radio newscasts, to discuss various tax, accounting and fraud issues.
- Bruce frequently lectures at the college level on issues relating to forensic accounting and accounting ethics. He has presented seminars to law firms, professional groups and law enforcement bodies, including the Federal Bureau of Investigation.

**Professional
Experience**
(continued)

Prior Relevant Work Experience:

Mr. Dubinsky began his career as an auditor at one of the large international public accounting firms. Following several years practicing as an auditor, he served in the tax department as a Senior Tax Specialist, including a position in the National Tax Practice Group. Following the public accounting firm, he served as an officer for a financial acquisition group, and then co-founded a multi-faceted real estate development and construction company. He later served as the head of the tax department for a C.P.A. firm in Maryland. Prior to joining Duff and Phelps, Mr. Dubinsky became a partner in another C.P.A. firm where he built the forensic accounting and litigation services practice group which eventually split off and became Dubinsky & Company, P.C., which was later acquired by Duff and Phelps.

**Education &
Licenses/
Certifications**

Masters of Science-Taxation, *(high honors)*, Georgetown University, Washington, D.C. – 1986

Bachelors of Science - Accounting, University of Maryland – 1983

Mr. Dubinsky continues his education in the field of forensic accounting, damage analysis, data mining, computer forensics and related topics through annual extensive course study

- Certified Public Accountant - Maryland, 1985
- Certified Fraud Examiner - Association of Certified Fraud Examiners, 1998
- Certified Valuation Analyst - National Association of Certified Valuators and Analysts, 1997
- Master Analyst in Financial Forensics - National Association of Certified Valuators and Analysts, 2008
- Certified in Financial Forensics - American Institute of Certified Public Accountants, 2010
- Commercial Arbitrator - American Arbitration Association, 2002-2004
- Registered Investment Advisor Representative - State of Maryland, 1999-2008

**Professional
Associations &
Affiliations**

National Association of Certified Valuators and Analysts

- Litigation and Forensics Board, Term: 2007-2010 Chair - 2008-2010
- Editorial Review Board, 2010 - present

Association of Certified Fraud Examiners

- Board of Regents, 2013-2015

American Institute of Certified Public Accountants

- Business Valuation & Forensic Services Section

DUFF & PHELPS

BRUCE G. DUBINSKY, MST, CPA, CVA, CFE, CFF, MAFF
FEDERAL RULE 26(a)(2)(B) DISCLOSURE
FEDERAL RULES OF CIVIL PROCEDURE

TESTIMONY AT TRIAL AND/OR DEPOSITION

(underline denotes retaining party)

	<p><u>Christopher Cohan, individually and as sole Trustee of the Christopher Cohan Separate Property Trust, and Angelina Cohan v. KPMG LLP</u> State Court of Fulton County – State of Georgia Civil Action No. 12EV0114325G July 3, 2013 (Deposition)</p>
<p><u>Thomas & Kidd Oil Production, Ltd. V. United States of America</u> United States District Court for the Northern District of Texas – Lubbock Division Case No.: 5:10-CV-00108-C (consolidated with 5:10-CV-110-C, 5L10-CV-111-C, and 5:10-CV-161-C) March 27 & 28, 2013 (Trial) December 6, 2012 (Deposition)</p>	<p><u>Eagle Materials, Inc. v. United States of America</u> United States District Court for the Northern District of Texas Civil Action No. 3:11-CV-00936-F January 29, 2013 (Deposition)</p>
<p><u>Department of Enforcement v. William B. Fretz, Jr. (CRD 1545760), John P. Freeman (CRD 1651569), and the Keystone Equities Group (CRD 127529)</u> Financial Industry Regulatory Authority - Office of Hearing Officers Disciplinary Proceeding No. 2010024889501 July 11 and 12, 2012 (Trial)</p>	<p><u>In re Bernard L. Madoff Investment Securities LLC</u> <u>Irving H. Picard, Trustee for the Liquidation of Bernard L. Madoff Investment Securities LLC v. Saul B. Katz, et al.</u> U.S. District Court for the Southern District of New York Adv. Pro. No. 08-01789 (BRL) SIPA LIQUIDATION (Substantively Consolidated) Adv. Pro. No. 10-5287 (BRL) 11-CV-03605 (JSR) (HBP) January 11, 2012 (Deposition)</p>
<p><u>South Florida Physician’s Network, LLC and United Health Networks, Inc. and United Health Network of Florida, Inc.</u> American Arbitration Association Case No. 32 193 Y 00567 10 December 14, 2011 (Trial) August 11, 2011 (Deposition)</p>	<p><u>Estate of Elizabeth S. Snow, Deceased, Philip F. Brown, Executor v. United States of America</u> U.S. District Court of Washington at Tacoma Case No. 3:10-cv-05793-RBL October 27, 2011 (Deposition)</p>

<p><u>Clay Vance Richardson et al v. Frontier Spinning Mills Inc. et al.</u> General Court of Justice Superior Court, North Carolina Case No: 10 CVS 1040 June 3, 2011 (Deposition)</p>	<p><u>Clay Vance Richardson et al v. EDO Corporation</u> U.S. District Court for the District of Maryland Case No. 1:07-cv-01660-JFM February 25, 2011 (Deposition)</p>
<p><u>HCP et al v. Sunrise Senior Living Management, Inc. et al.</u> Court of Chancery of the State of Delaware Case Nos. 4691-VCS; 4692-VCS; 4693-VCS; 4694-VCS; 4696-VCS; 4697-VCS; 4698-VCS; 4699-VCS July 21, 2010 (Deposition)</p>	<p><u>Perot Systems Government Services, Inc. v. 21st Century Systems, Inc. et al.</u> Circuit Court for Fairfax County Virginia Case No. 2009-08867 June 22, 2010 (Trial) May 28, 2010 (Deposition)</p>
<p><u>ClassicStar Mare Lease Litigation James D. Lyon, Chapter 7 Trustee of ClassicStar, LLC v. Tony P. Ferguson et al.</u> U.S. District Court Eastern District of Kentucky, Lexington MDL No. 1877; Civil Action No. 5:07-cv0353-JMH and 5:09-215-JMH May 13, 2010 (Deposition)</p>	<p><u>Sands Capital Management, LLC v. Scott E. O’Gorman</u> American Arbitration Association Case No. 16 148 Y 00459 09 April 28, 2010 (Trial)</p>
<p><u>Bemont Investments LLC v. United States</u> United States District Court for the Eastern District of Texas-Sherman Division Case No: 4:07cv9 & 4:07cv10 March 25, 2010 (Trial) August 28, 2009 (Deposition) June 24, 2008 (Deposition)</p>	<p><u>HCP Laguna Creek CA et al v. Sunrise Senior Living Management, Inc.</u> U.S. District Court for the District of Eastern Virginia Case No: 1:09 CV 824-GBL/JFA February 26, 2010 (Deposition)</p>
<p><u>Global Express Money Orders, Inc. v. Farmers & Merchants Bank et al</u> Circuit Court for Baltimore City Case No: 24-C-08-004896 OT January 13, 19 & 25, 2010 (Deposition)</p>	<p><u>In re UnitedHealth Group, et al. v. American Multispecialty Group d/b/a/ Esse Health</u> American Arbitration Association Case No. 57 193 Y 00004 08 June 9 & 10, 2009 (Trial) April 24, 2009 (Deposition)</p>
<p><u>Wills Family Trust v. Martin K. Alloy et al.</u> Circuit Court for Montgomery County, MD Case Nos: 252430-V & 2722511-V June 1 & 2, 2009 (Trial) Judge Ronald B. Rubin April 10, 2009 (Deposition)</p>	<p><u>Southgate Master Fund v. United States</u> U.S. District Court for the Northern District of Texas – Dallas Division Case No: 3:06-CV-2335-K January 14-15, 2009 (Trial) September 17, 2008 (Deposition)</p>
<p><u>Elize T. Meijer and Marcel Windt, Trustees in the Bankruptcy for KPNOwest, N.V. and Global Telesystems v. H. Brian Thompson</u> U.S. District Court for the Eastern District of Virginia – Alexandria Division Case No: 1:08CV673 December 2, 2008 (Deposition)</p>	<p><u>Hoehn Family, LLC v. Price Waterhouse Coopers, LLC</u> Circuit Court of Jackson County Missouri at Independence Case No: 0516-CV36227 September 3, 2008 (Deposition)</p>

<p><u>World-Wide Network Services, LLC, et al.</u> Pg 178 of 182 <u>Dyncorp, Inc. and EDO Corp.</u> United States District Court for the Eastern District of Virginia Case No:1:07-cv-00627-GBL-BRP January 24, 2008 (Deposition)</p>	<p><u>Admiris v. Tompros, et al.</u> Superior Court for the District of Columbia Case No: ADM 2000-2175-00 January 17, 2008 (Trial)</p>
<p><u>Harslem et al. v. Ernst & Young, LLP</u> American Arbitration Association Case No: 30 107 Y 00303 06 November 6 & 7, 2007 (Trial)</p>	<p><u>Rosenbach et al. v. KPMG, LLP et al.</u> American Arbitration Association Case No: 13 181 Y 00437 06 October 22, 2007 (Trial)</p>
<p><u>United States v. Timothy D. Naegele, Defendant</u> U.S. District Court for the District of Columbia Criminal Action: Case No. 05-0151 (PLF) September 24 & 25, 2007 (Trial); January 9, 2007 and January 10, 2007 (Daubert Testimony)</p>	<p><u>Autoscribe Corp. v. 9801 Washingtonian Office, Inc. et al.</u> Circuit Court for Montgomery County, Maryland Civil Action: Case No. 274847 September 11, 2007 (Deposition)</p>
<p><u>In re Parmalat Securities Litigation</u> U.S. District Court for the Southern District of New York Civil Action: Case No. 04 MD 1653 (LAK) August 22-24, 2007 (Deposition)</p>	<p><u>Jerald M. Spilsbury et al. v. KPMG, LLP et al.</u> District Court, Clark County, Nevada Civil Action: Case No: A479003 July 12, 2007 (Deposition)</p>
<p><u>John E. Gallus et al. v. Ameriprise Financial, Inc.</u> United States District Court, District of Minnesota Civil Action, Docket No.: 0:04-cv-4498 January 23, 2007 (Deposition)</p>	<p><u>Michael J. Sullivan and Jill P. Sullivan v. KPMG LLP and QA Investments LLC</u> Superior Court of New Jersey Law Division, Monmouth County Civil Action, Docket No.: MON-L-4279-04 November 30, 2006 & December 12, 2006 (Deposition)</p>
<p><u>In Re: Estate of First Pay, Inc.; Bankruptcy No. 03-30102-PM</u> United States Bankruptcy Court – District of Maryland (Greenbelt Division) Michael G. Wolff v. United States of America: Adversary No 05-1700-PM Judge Mannes August 9, 2006 (Trial)</p>	<p><u>Robert K. Cohen, et al. v. KPMG, L.L.P., et al.</u> State Court of Fulton County, Georgia Case No. 2003VS060471 May 23, 2006 (Deposition)</p>
<p><u>Riddle Farm Financial Limited Partnership v. Route 50 Partners, LP and Worcester Partners, LP and Riddle Farm Associates, LP and Goodwin H. Taylor, Jr.</u> Circuit Court for Worcester County, State of Maryland Case No. 23-C-03-0913 April 4 & 5, 2006 (Trial) February 3, 2006 (Deposition) May 16, 2005 (Hearing)</p>	<p><u>Estate of Keith R. Fetridge v. Aronson & Company, A Professional Corporation</u> Circuit Court for Montgomery County, Maryland Case No. 256856 Judge Eric Johnson March 9, 2006 (Trial)</p>

<p><u>Tolt Ventures, L.L.C., et al. v. KPMG, LLP et al.</u> District Court of Harris County, Texas, 333rd Judicial District Cause No. 2003-69957 January 27, 2006 (Deposition)</p>	<p><u>William C. Eacho III & Donna Eacho v. KPMG, LLP et al.</u> Superior Court for the District of Columbia Case No. 04-005746 November 29 & December 1, 2005 (Deposition)</p>
<p><u>Richard W. Coleman, Jr. v. KPMG et al.</u> Matter in Arbitration by Agreement of the Parties October 31-November 2, 2005 (Trial) October 17-19, 2005 (Trial) August 22, 2005 (Deposition)</p>	<p><u>Lawrence L. Gaslow v. KPMG et al.</u> Supreme Court Of The State Of New York County Of New York Case No. 600771/04 August 8, July 1, and June 30, 2005 (Deposition)</p>
<p><u>Minebea Co., Ltd, Precision Motors Deutsche Minebea GmbH, and Nippon Miniature Bearing Corp. v. George Papst, Papst Licensing GmbH, and Verwaltungsgesellschaft MIT Beschränkter Haftung</u> U.S. District Court for the District of Columbia Case No. 97-05-90 (SSH) (DAR) August 4 & 5, 2005 (Trial); June 2, 2005 (Hearing) May 11, 2005 (Deposition)</p>	<p><u>Joseph J. Jacoboni v. KPMG LLP</u> United States District Court for the Middle District of Florida – Orlando Division Case No. 6:02-CV-510-Orl-22DAB(M.D.Fla.) May 4, 2005 (Deposition)</p>
<p><u>Hemanth Rao, et al. v. H-QUOTIENT, Inc., Douglas A. Cohn, and Laurence Burden</u> United States District Court for the District of Virginia- Eastern District February 10 and 11, 2005 (Trial)</p>	<p><u>James, LTD. v. Saks Fifth Avenue, et al.</u> Circuit Court for Arlington County, Virginia Chancery No. 03-802 January 12 and 25, 2005 (Trial) December 10, 2004 (Deposition)</p>
<p><u>Sensormatic Security Corp. v. Sensormatic Electronics Corporation, ADT Security Services, Inc., & Wallace Computer Services, Inc.</u> United States District Court for the District of Maryland Southern Division Case No. 02-Civ-1565 (DKC) September 28, 2004, February 19, 2004 & October 24, 2003 (Deposition)</p>	<p><u>Todd Roy Earl Bentley III v. Deutsche Post Global Mail, LTD</u> Superior Court of The State of California For The County of Los Angeles Case No: BC 293389 September 23, 2004 & September 14, 2004 (Deposition)</p>
<p><u>Alex Alikhani v. System Engineering International, Inc.</u> American Arbitration Association No. 16 168 00611 03 August 31, 2004 (Trial)</p>	<p><u>Ruben A. Perez, et al v. KPMG LLP, et al</u> 92nd Judicial District Court Hidalgo County, Texas Cause No: C-2593-02-A November 7, 2003 (Deposition)</p>
<p><u>Joseph J. Jacoboni v. KPMG LLP</u> United States District Court for the Middle District Of Florida Orlando Division Case No. 6:02-CV-510-Orl-22DAB (M.D.Fla.) October 15, 2003 (Deposition)</p>	<p><u>Semtek International, Inc. v. Lockheed Martin Corporation</u> Circuit Court for Baltimore City, Maryland Case No. 97183023/CC 3762 September 30 – October 1, 2003 (Trial) June 17, 2003 & May 27, 2003 (Deposition)</p>
<p><u>Jordan v. Washington Mutual Bank, F.A.</u> United States District Court, District of Maryland Case No. H02CV1465 March 12, 2003 (Deposition)</p>	<p><u>Midland Credit v. MBNA America Bank</u> Superior Court State Of Arizona, County Of Maricopa Case No. CV2001-002497 February 27, 2003 & November 26, 2002 (Deposition)</p>

<p><u>Epstein v. Epstein</u> Circuit Court for Montgomery County, Maryland Family law No: 21608 January 8, 2003 (Trial)</p>	<p>Pg 180 of 182 <u>Space Joint Venture v. E.I. Dupont De Nemours & Company, Inc.</u> United States District Court For The Western District Of Texas, Austin Division Civil Action No. A 02CA 04 3SS January 3, 2003 (Deposition)</p>
<p><u>Cates v. Cates</u> Circuit Court of Fairfax County, Virginia Chancery No 176170 June 17, 2002 (Deposition)</p>	<p><u>Phil Adams Company Profit Sharing Plan v. Trautman Wasserman, Inc. & CIBC Oppenheimer, Inc.</u> NASD Arbitration, Washington, D.C. May 22, 2002 (Trial)</p>
<p><u>Boryczka, et al. v. Phil Collyer v. Apex Data Services, Inc.</u> Circuit Court of Fairfax County, Virginia Chancery No 171437 March 12, 2002 (Deposition)</p>	<p><u>Frank A. Pietranton, Jr. et al. v. Kenneth J. Mahon & Mahon, Inc.</u> Circuit Court of Arlington County, Virginia Chancery No. 00-617 Judge Benjamin NA Kendrick February 13, 2002 (Trial)</p>
<p><u>Rinearson v. Rinearson</u> Circuit Court of Fairfax County, Virginia Chancery No. 170354 Judge Robert Wooldridge, Jr. January 24, 2002 (Trial)</p>	<p><u>Amtote International, Inc., v. Bally's of Maryland, Inc.</u> Circuit Court for Baltimore County, Maryland Civ. No. 03-C-01-001715 October 19, 2001 (Deposition)</p>
<p><u>America Online, Inc., v. Netvision Audiotext, Inc. et al.</u> United States District Court- Eastern District of Virginia Case No 99-1186-A October 16, 2001 (Deposition)</p>	<p><u>In Re: Robert S. Beale, Jr.</u> <u>In Re: Robert S. Beale, Jr., M.D., P.A.</u> United States Bankruptcy Court – District of Maryland (Baltimore Division) Case Nos: 99-65815-ESD; 00-55731-ESD Judge E. Stephen Derby August 2, 2001 (Trial)</p>
<p><u>Marvin BenBassett v. Ritz Camera Centers, Inc.</u> Circuit Court for Montgomery County, Maryland Case No. 207934 February 23, 2001 (Deposition)</p>	<p><u>Diamond v. Diamond</u> Circuit Court of Fairfax County, Virginia Chancery No. 165804 Judge M. Langhorne Keith February 6, 2001 (Trial)</p>
<p><u>Giesting & Associates, Inc. v. Harris Corp. Inc.</u> United States District Court, Middle District of Florida, Orlando Division No. 6:98-cv-1363-Orl-3ABF (M.D. Fla.) Judge David A. Baker November, 2000 (Trial)</p>	<p><u>Bell Atlantic-Maryland, Inc. v. Furguson Trenching Company, Inc. et al.</u> Circuit Court for Anne Arundel County, Maryland Case No. C-98-498130C Judge Michael Looney November 1, 2000 (Trial)</p>
<p><u>First Guaranty Mortgage Corporation v. Greater Atlantic Federal Savings Bank, et al.</u> Circuit Court for Arlington County, Virginia Chancery No. 99-488 Judge Joann Alper September 29, 2000 (Trial)</p>	<p><u>United States of America v. Lawrence Edwin Crumbliss</u> United States District Court, Eastern District of North Carolina, Western Division Criminal Case No: 5:99-CR-24-BR Judge Britt July 21, 2000 (Trial)</p>

<p><u>Sportsolution, Inc. v. National Football League Players Association</u> Pg 181 of 182 United States District Court, Middle District of Florida, Orlando Division Case No. 98-1154-Civ-Orl-22C Judge Duffy March 22-23, 2000 (Trial)</p>	<p><u>Konizias v. CVS, Inc.</u> Circuit Court of Fairfax County, Virginia Civil Action No. 178049 Judge Thatcher March 21, 2000 (Trial)</p>
<p><u>York Distributors, A Division Of Home Paramount Pest Control Companies, Inc. v. FMC Corporation/Agricultural Products Group</u> In The United States District Court For The District Of Maryland Civil Action No. L-98-2533 January 27, 2000 (Deposition)</p>	<p><u>Brown v. Brown</u> Circuit Court for Baltimore County, Maryland Case No. 03-C-98-003633 Judge Daniels September 30, 1999 (Trial)</p>
<p><u>Laura I. Merriex, et al. v. Robert S. Beale, Jr., M.D., PC</u> Superior Court For The District of Columbia Case No. 96-CA05313 Judge Diaz August 1999 (Trial)</p>	<p><u>Rees, Broome & Diaz, P.C. v. Bella Vista Condominium Association</u> Circuit Court for Arlington County, Virginia Chancery No. 98-260 Judge Joann Alper June 2, 1999 (Trial)</p>
<p><u>Charnis v. Kats et al.</u> Circuit Court for Montgomery County, Maryland Civil No.174341-V Judge Donohue March 1999 (Trial)</p>	<p><u>Robert S. Joselow v. Robert J. Katz, et al.</u> Superior Court of the District of Columbia Civil No.96-00871 May 4, 1998 (Deposition)</p>
<p><u>Regina L. Amann v. Washington Romance Writers (Board of Directors), et. al.</u> Circuit Court for Montgomery County, Maryland Civil No.166949 February 1998 (Deposition)</p>	<p><u>International Fidelity Company v. Williams Overman Pierce & Company LLP</u> In the United States District Court For the Eastern District of North Carolina Raleigh Division Case No. 5:96-CV-1001-BO(1) October 1997 (Deposition)</p>
<p><u>Kasten v. Kasten</u> District of Columbia Superior Court Judge Duncan-Peters March 1997 (Trial)</p>	<p><u>Roddy v. O'Brien</u> Circuit Court of Maryland for Montgomery County Master of the Court Mahayfee October 1996 (Trial)</p>
<p><u>Zittelman v. The Sun Box Company</u> Arbitration Case- Rockville, Maryland Judge Miller December 1995 (Trial)</p>	<p><u>Commercial Recovery Systems, Inc. v. MCI Telecommunications Company, Inc.</u> Arbitration Case-Washington, D.C. January 1995 (Trial)</p>

Revised 07/2013

DUFF & PHELPS

Articles Published By Bruce G. Dubinsky, MST, CPA, CVA, CFE, CFF, MAFF

Bruce G. Dubinsky and W. Christopher Bakewell et al., *Valuation of Patents: Legislative and Judicial Developments on Damages in Infringement Cases*, The Value Examiner, May/June 2009.

Steve Pomerantz and Bruce G. Dubinsky, *Monte Carlo Simulation Analysis: A Tool for Projecting the Unknown*, CPA Expert, AICPA Newsletter for Providers of Business Valuation, Forensic & Litigation Services, Winter 2007.

Steve Pomerantz and Bruce G. Dubinsky, *Monte Carlo Simulation Analysis: Part II: Beyond the Theory*, CPA Expert, AICPA Newsletter for Providers of Business Valuation, Forensic & Litigation Services, Spring 2007.

Steve Pomerantz and Bruce G. Dubinsky, *Monte Carlo Simulation Analysis: Part III: A Case Story*, CPA Expert, AICPA Newsletter for Providers of Business Valuation, Forensic & Litigation Services, Summer 2007.

Bruce G. Dubinsky and Christine L. Warner, *Uncovering Accounts Payable Fraud Using "Fuzzy Matching Logic: Part 1,"* Fraud Magazine (Journal of the Association of Certified Fraud Examiners), July/August 2006.

Bruce G. Dubinsky and Christine L. Warner, *Uncovering Accounts Payable Fraud Using "Fuzzy Matching Logic: Part 2,"* Fraud Magazine (Journal of the Association of Certified Fraud Examiners), July/August 2006.

Bruce G. Dubinsky, *The Quagmire of Business Valuation*, The Legal Times, Washington, D.C., October 21, 2002.

Bruce G. Dubinsky, *Cooking the Books*, Maryland State Bar Association Newsletter, Baltimore, April 2002.

Bruce G. Dubinsky, *Math Formula Fights Fraud*, The Legal Times, Washington, D.C., February 2001.

Bruce G. Dubinsky, *Fraud Specialists*, The Legal Times, Washington, D.C., March 2000.

Bruce G. Dubinsky, *Protect Your Firm Against Fraud*, The Legal Times, Washington, D.C., February 2000.

The CPA Digest, Harcourt Brace Publishing Company, 116 articles published on various subjects from April 1993 to September 1994.

EXHIBIT 2

QUALIFICATIONS OF BRUCE G. DUBINSKY



PROFESSIONAL CREDENTIALS

Bruce G. Dubinsky
Global Leader-
Forensic Services &
Managing Director
Duff & Phelps, LLC

Bruce G. Dubinsky, MsT, CPA, CVA, CFE, CFF, MAFF, is a managing director and leader of Global Business Development & Strategy for Duff & Phelps' Disputes & Investigations practice. He sits on the leadership committee for the practice and serves as the city leader for the firm's Washington D.C. office. Bruce has more than 30 years of financial investigative and dispute consulting experience. He has testified nearly 100 times and has provided expert witness testimony in over 40 trials, many of which were jury trials.

Bruce's practice places special emphasis on providing dispute consulting services to a variety of clients including law firms, corporations, governmental agencies, law enforcement bodies and self-regulatory organizations. Bruce frequently works on complex litigation cases where the claims in many instances are in the billions of dollars.

Professional Experience

Bruce has been qualified and testified as an expert witness in cases involving criminal and civil fraud, SEC matters, commercial business damages, intellectual property and patent damages, business valuations, federal income taxation, accounting issues and bankruptcy matters as well as various other types of disputes.

He has been employed on numerous occasions as a testifying expert for federal income tax matters by the United States Department of Justice (DOJ), Tax Division, as well as the Office of Chief Counsel for the Internal Revenue Service. These cases involved extremely large abusive tax shelters and similar Listed Transactions. Bruce testified as the U.S. government's forensic accounting expert in the Madoff 5 criminal trial in the United States District Court for the Southern District of New York. The Madoff 5 criminal trial related to the Madoff Ponzi, the largest Ponzi scheme in the world's history.

Currently, Bruce is retained as the testifying expert witness 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 related to the Madoff Ponzi.

Bruce is leading the forensic investigation on campaign finance fraud for the United States Department of Justice through appointment by the U.S. District Court for the Southern District of New York for the 2015-2016 International Brotherhood of Teamsters (IBT) Union Delegate and Officer Election. Bruce has led the forensic investigation for the past four election cycles for the IBT dating to 1997.

During 2009, Bruce was one of the lead forensic accounting investigators who worked on the Lehman Brothers bankruptcy investigation conducted by the Special Examiner appointed by the bankruptcy trustee for the Lehman Brothers bankruptcy estate. The Lehman bankruptcy was the largest bankruptcy filing in United States history.

In 2003, Bruce and his team investigated fraud allegations on behalf of the Washington Teachers' Union where the presiding officers were thought to have embezzled millions of dollars from union coffers. This investigation resulted in the perpetrators being convicted of various federal crimes in the United States District Court for the District of Columbia and incarcerated as a result.

**Professional
Experience**
(continued)

Areas of Bruce's practice include:

- Fraud Investigations
- Forensic Accounting
- White Collar Criminal Fraud
- Complex Tax Controversy Cases
- Commercial Damage/Lost Profits Analysis
- Bankruptcy Investigations
- Investment/Securities Damages
- Campaign Finance Compliance
- Post-Acquisition Disputes
- Accounting/GAAP Disputes

Representative Cases:

- Hired by the United States Department of Justice as the testifying forensic accounting expert in the Madoff 5 criminal trial in the U.S.D.C. - S.D.N.Y. in 2013 to testify as to the nature of the Madoff Ponzi and the extent of the fraud in the organization.
- Hired as a testifying forensic accounting expert for the defense in the Parmalat SpA fraud case, one of the world's largest accounting fraud cases to date. Provided expert testimony in multi-day deposition regarding various matters including the nature of the frauds perpetrated, methods utilized by various alleged fraudsters and the underlying transactions at issue.
- Hired as a testifying damages expert for the defense in a case with nearly \$1 billion dollars of alleged damages for an alleged patent licensing breach of contract case involving hard disk drive spindle motors and related hard disk drive component products.
- Hired as a testifying forensic accountant and damages expert in a case involving hundreds of millions of dollars of consumer credit card and debt accounts in several asset-backed securitization vehicles.
- Hired as a testifying forensic accountant expert in several cases surrounding alleged fraudulent tax shelters involving hundreds of millions of dollars in unpaid federal income taxes.
- Hired as a testifying forensic accountant for the defense in a white-collar criminal case involving allegation of bankruptcy and tax fraud.
- Hired as a testifying forensic accountant for the defense in a white-collar criminal case involving allegations of campaign finance fraud and tax fraud.
- Hired as a testifying damages expert in a health care insurance case involving breach of contract and other claims.
- Hired as a testifying damages expert in a case involving lost profits arising from intentional disruption of distributorship channels.
- Hired as a testifying damages expert in a case involving lost profits and damages arising from alleged trespassing and unauthorized utilization of an internet service provider network.

**Professional
Experience**

(continued)

Selected Professional Accomplishments:

- In 2014, Bruce was appointed to the Advisory Council for the Center for the Study of Business Ethics, Regulation and Crime (C-BERC) at the Smith School of Business, University of Maryland.
- In 2014 Bruce was elected as the Chairman of the Board of Regents for the Association of Certified Fraud Examiners. In 2013, Bruce was elected to the Association of Certified Fraud Examiners Board of Regents by the vote of the entire membership of the ACFE's. The Board of Regents functions to set standards that will promote professionalism and ensure the future of the organization as a whole.
- Bruce was honored by the National Association of Certified Valuators and Analysts (NACVA) with the 2014 & 2012 Instructor of Exceptional Distinction awards in connection with his outstanding instructor performance based on participant evaluations.
- In 2007 Bruce was named one of the "Top 100 Most Influential People in the Accounting Profession" by Accounting Today, the premier news vehicle for the tax and accounting community. He was described in the article as "a pioneer of forensic accounting."
- In 2005 Bruce received the distinguished award as the *Fraud Examiner of the Year* from the Washington Metropolitan Chapter of Certified Fraud Examiners for his work on the Washington Teachers Union embezzlement case. He also received the *Fraud Examiner of the Year* in 2001 for his efforts in the International Brotherhood of Teamsters investigative work.
- Bruce served two terms on the Editorial Board of The Value Examiner, an independent, professional development journal dedicated to the exploration of value and its ramifications for consultants. It is the singular source of timely, technical, in-depth articles written for consultants by practitioners and academics at the top of their respective fields.
- Bruce was a contributing editor for the CPA Digest, a nationally published, technical journal for the accounting profession, for two years. After serving as a contributing editor and writer, he remained an Editorial Board Advisor for one year. Bruce also served as a Continuing Education Course evaluator for McGraw Hill Publishing Company as well as a technical reviewer for Fraud Alert, published by PDI, Inc. in Chicago, IL. He has written and published articles on various matters relating to forensic accounting, fraud investigations, business valuations and commercial damages for a variety of legal and professional publications.
- Bruce has also served as a member of the Commercial Panel of Arbitrators for the American Arbitration Association. He was selected to the panel on the basis of his involvement in the business and legal community, in recognition of his expertise and leadership in forensic and public accounting, and his reputation for integrity and fair judgment.
- Bruce has been quoted as an expert in numerous print media as well as appearing on local and national television and radio newscasts, to discuss various tax, accounting and fraud issues.
- Bruce frequently lectures at the college level on issues relating to forensic accounting and accounting ethics. He has presented seminars to law firms, professional groups and law enforcement bodies, including the Federal Bureau of Investigation.

**Professional
Experience**
(continued)

Prior Relevant Work Experience:

Mr. Dubinsky began his career as an auditor at one of the large international public accounting firms. Following several years practicing as an auditor, he served in the tax department as a Senior Tax Specialist, including time in the National Tax Practice Group. Following the public accounting firm, he served as an officer for a financial acquisition group, and then co-founded a multi-faceted real estate development and construction company. He later served as the head of the tax department for a C.P.A. firm in metropolitan D.C. region. Prior to joining Duff and Phelps, Mr. Dubinsky became a partner in another C.P.A. firm where he built the forensic accounting and litigation services practice group which eventually split off and became Dubinsky & Company, P.C., which was later acquired by Duff and Phelps in 2008.

**Education &
Licenses/
Certifications**

Masters of Science, Taxation, (high honors), Georgetown University, Washington, D.C. – 1986

Bachelors of Science, Accounting, University of Maryland – 1983

Mr. Dubinsky continues his education in the field of forensic accounting, damage analysis, data mining, computer forensics and related topics through annual extensive course study

- Certified Public Accountant - Maryland, 1985
- Certified Fraud Examiner - Association of Certified Fraud Examiners, 1998
- Certified Valuation Analyst - National Association of Certified Valuators and Analysts, 1997
- Master Analyst in Financial Forensics - National Association of Certified Valuators and Analysts, 2008
- Certified in Financial Forensics - American Institute of Certified Public Accountants, 2010
- Commercial Arbitrator - American Arbitration Association, 2002-2004
- Registered Investment Advisor Representative - State of Maryland, 1999-2008

**Professional
Associations &
Affiliations**

LexisNexis Fraud Defense Network

- Advisory Board, 2015

University of Maryland, Smith College of Business

- Advisory Council for the Center for the Study of Business Ethics, Regulation and Crime (C-BERC), April 2014-present

National Association of Certified Valuators and Analysts

- Litigation and Forensics Board, Term: 2007-2010; Chair - 2008-2010
- Editorial Review Board, 2010-2014

Association of Certified Fraud Examiners

- Chair, Board of Regents, 2014-2015.
 - Board Member, Board of Regents, 2013-2015

American Institute of Certified Public Accountants

- Business Valuation & Forensic Services Section

DUFF & PHELPS

BRUCE G. DUBINSKY, MST, CPA, CVA, CFE, CFF, MAFF
FEDERAL RULE 26(a)(2)(B) DISCLOSURE
FEDERAL RULES OF CIVIL PROCEDURE

TESTIMONY AT TRIAL AND/OR DEPOSITION

(underline denotes retaining party)

	<p><u>In re: Samuel E. Wyly, et al.</u> U.S. Bankruptcy Court-Northern District of Texas Case No. 14-35043-(BJH) November 19, 2015(Deposition)</p>
<p><u>In re Bernard L. Madoff Investment Securities LLC</u> <u>Irving H. Picard, Trustee for the Liquidation of Bernard L. Madoff Investment Securities LLC v. Andrew H. Cohen</u> U.S. Bankruptcy Court - Southern District of New York Adv. Pro. No. 08-01789 (SMB) SIPA LIQUIDATION (Substantively Consolidated) Adv. Pro. No. 10-04311(SMB) October 14, 2015 (Trial)</p>	<p><u>Department of Enforcement v. Paul E. Taboada</u> Financial Industry Regulatory Authority Office of Hearing Office Disciplinary Proceeding No. 2012034719701 October 5, 2015 (Trial)</p>
<p><u>Spentex Netherlands, B.V. v. Republic of Uzbekistan</u> International Centre for Settlement of Investment Disputes ICSID Case No.: ARB/13/26 September 24, 2015 (Trial)</p>	<p><u>In re Bernard L. Madoff Investment Securities LLC</u> <u>Irving H. Picard, Trustee for the Liquidation of Bernard L. Madoff Investment Securities LLC v. J. Ezra Merkin, et al.</u> U.S. Bankruptcy Court - Southern District of New York Adv. Pro. No. 08-01789 (SMB) SIPA LIQUIDATION (Substantively Consolidated) Adv. Pro. No. 09-01182 (SMB) April 27, 2015 (Deposition)</p>
<p><u>National Railroad Passenger Corporation v. Ace Bermuda Insurance Ltd., et al.</u> United States District Court – Southern District of New York Civil Action No.: 14-cv-7510 (JSR) February 25, 2015 (Deposition)</p>	<p><u>Walpart Trust Reg, Trustee of the Acconci Trust, on behalf of Lincolnshire Equity Partners, L.P. and American National Insurance Company on behalf of Lincolnshire Equity Fund, L.P. v. Thomas J. Maloney, Lincolnshire Management, Inc. and Lincolnshire Equity, Inc.</u> Supreme Court of the State of New York-County of New York Case No. 651096/2011 October 9, 2014 (Deposition)</p>

<p><u>The People of the State of New York by Andrew M. Cuomo, Attorney General of the State of New York, against Bank of America Corporation, Kenneth D. Lewis and Joseph L. Price</u> Supreme Court of the State of New York – County of New York Case No. 450115/2010 January 29, 2014 (Deposition)</p>	<p><u>United States of America v. Daniel Bonventre, Annette Bongiorno, Joann Crupi a/k/a “Jodi,” Jerome O’Hara, and George Perez (Madoff criminal case)</u> United States District Court – Southern District of New York Case No. S10 10 Cr. 228 (LTS) October 24, 28-30, 2013 (Trial)</p>
<p><u>First Technology, Inc., v. Siemens Energy, Inc.</u> American Arbitration Association – Orlando Division Case No. 50-198-T-00200-12 August 20, 2013 (Trial)</p>	<p><u>Christopher Cohan, individually and as sole Trustee of the Christopher Cohan Separate Property Trust, and Angelina Cohan v. KPMG LLP</u> State Court of Fulton County – State of Georgia Civil Action No. 12EV0114325G July 3, 2013 (Deposition)</p>
<p><u>Thomas & Kidd Oil Production, Ltd. V. United States of America</u> United States District Court for the Northern District of Texas – Lubbock Division Case No.: 5:10-CV-00108-C (consolidated with 5:10-CV-110-C, 5L10-CV-111-C, and 5:10-CV-161-C) March 27 & 28, 2013 (Trial) December 6, 2012 (Deposition)</p>	<p><u>Eagle Materials, Inc. v. United States of America</u> United States District Court for the Northern District of Texas Civil Action No. 3:11-CV-00936-F January 29, 2013 (Deposition)</p>
<p><u>Department of Enforcement v. William B. Fretz, Jr. (CRD 1545760), John P. Freeman (CRD 1651569), and the Keystone Equities Group(CRD 127529)</u> Financial Industry Regulatory Authority - Office of Hearing Officers Disciplinary Proceeding No. 2010024889501 July 11 and 12, 2012 (Live Hearing)</p>	<p><u>In re Bernard L. Madoff Investment Securities LLC</u> <u>Irving H. Picard, Trustee for the Liquidation of Bernard L. Madoff Investment Securities LLC v. Saul B. Katz, et al.</u> U.S. District Court for the Southern District of New York Adv. Pro. No. 08-01789 (BRL) SIPA LIQUIDATION (Substantively Consolidated) Adv. Pro. No. 10-5287 (BRL) 11-CV-03605 (JSR) (HBP) January 11, 2012 (Deposition)</p>
<p><u>South Florida Physician’s Network, LLC and United Health Networks, Inc. and United Health Network of Florida, Inc.</u> American Arbitration Association Case No. 32 193 Y 00567 10 December 14, 2011 (Trial) August 11, 2011 (Deposition)</p>	<p><u>Estate of Elizabeth S. Snow, Deceased, Philip F. Brown, Executor v. United States of America</u> U.S. District Court of Washington at Tacoma Case No. 3:10-cv-05793-RBL October 27, 2011 (Deposition)</p>

<p><u>Clay Vance Richardson et al v. Frontier Spinning Mills Inc. et al.</u> General Court of Justice Superior Court, North Carolina Case No: 10 CVS 1040 June 3, 2011 (Deposition)</p>	<p><u>Clay v. EDO Corporation</u> U.S. District Court for the District of Maryland Case No. 1:07-cv-01660-JFM February 25, 2011 (Deposition)</p>
<p><u>HCP et al v. Sunrise Senior Living Management, Inc. et al.</u> Court of Chancery of the State of Delaware Case Nos. 4691-VCS; 4692-VCS; 4693-VCS; 4694-VCS; 4696-VCS; 4697-VCS; 4698-VCS; 4699-VCS July 21, 2010 (Deposition)</p>	<p><u>Perot Systems Government Services, Inc. v. 21st Century Systems, Inc. et al.</u> Circuit Court for Fairfax County Virginia Case No. 2009-08867 June 22, 2010 (Trial) May 28, 2010 (Deposition)</p>
<p><u>ClassicStar Mare Lease Litigation James D. Lyon, Chapter 7 Trustee of ClassicStar, LLC v. Tony P. Ferguson et al.</u> U.S. District Court Eastern District of Kentucky, Lexington MDL No. 1877; Civil Action No. 5:07-cv0353- JMH and 5:09-215-JMH May 13, 2010 (Deposition)</p>	<p><u>Sands Capital Management, LLC v. Scott E. O’Gorman</u> American Arbitration Association Case No. 16 148 Y 00459 09 April 28, 2010 (Trial)</p>
<p><u>Bemont Investments LLC v. United States</u> United States District Court for the Eastern District of Texas-Sherman Division Case No: 4:07cv9 & 4:07cv10 March 25, 2010 (Trial) August 28, 2009 (Deposition) June 24, 2008 (Deposition)</p>	<p><u>HCP Laguna Creek CA et al v. Sunrise Senior Living Management, Inc.</u> U.S. District Court for the District of Eastern Virginia Case No: 1:09 CV 824-GBL/JFA February 26, 2010 (Deposition)</p>
<p><u>Global Express Money Orders, Inc. v. Farmers & Merchants Bank et al</u> Circuit Court for Baltimore City Case No: 24-C-08-004896 OT January 13, 19 & 25, 2010 (Deposition)</p>	<p><u>In re UnitedHealth Group, et al. v. American Multispecialty Group d/b/a/ Esse Health</u> American Arbitration Association Case No. 57 193 Y 00004 08 June 9 & 10, 2009 (Trial) April 24, 2009 (Deposition)</p>
<p><u>Wills Family Trust v. Martin K. Alloy et al.</u> Circuit Court for Montgomery County, MD Case Nos: 252430-V & 2722511-V June 1 & 2, 2009 (Trial) Judge Ronald B. Rubin April 10, 2009 (Deposition)</p>	<p><u>Southgate Master Fund v. United States</u> U.S. District Court for the Northern District of Texas – Dallas Division Case No: 3:06-CV-2335-K January 14-15, 2009 (Trial) September 17, 2008 (Deposition)</p>
<p><u>Elize T. Meijer and Marcel Windt, Trustees in the Bankruptcy for KPNQwest, N.V. and Global Telesystems v. H. Brian Thompson</u> U.S. District Court for the Eastern District of Virginia – Alexandria Division Case No: 1:08CV673 December 2, 2008 (Deposition)</p>	<p><u>Hoehn Family, LLC v. Price Waterhouse Coopers, LLC</u> Circuit Court of Jackson County Missouri at Independence Case No: 0516-CV36227 September 3, 2008 (Deposition)</p>

<p><u>World-Wide Network Services, LLC, et al. v. Pg 9 of 14</u> <u>Dyncorp, Inc. and EDO Corp.</u> United States District Court for the Eastern District of Virginia Case No:1:07-cv-00627-GBL-BRP January 24, 2008 (Deposition)</p>	<p><u>Chomiris v. Tompros, et al.</u> Superior Court for the District of Columbia Case No: ADM 2000-2175-00 January 17, 2008 (Trial)</p>
<p><u>Harslem et al. v. Ernst & Young, LLP</u> American Arbitration Association Case No: 30 107 Y 00303 06 November 6 & 7, 2007 (Trial)</p>	<p><u>Rosenbach et al. v. KPMG, LLP et al.</u> American Arbitration Association Case No: 13 181 Y 00437 06 October 22, 2007 (Trial)</p>
<p><u>United States v. Timothy D. Naegele, Defendant</u> U.S. District Court for the District of Columbia Criminal Action: Case No. 05-0151 (PLF) September 24 & 25, 2007 (Trial); January 9, 2007 and January 10, 2007 (Daubert Testimony)</p>	<p><u>Autoscribe Corp. v. 9801 Washingtonian Office, Inc. et al.</u> Circuit Court for Montgomery County, Maryland Civil Action: Case No. 274847 September 11, 2007 (Deposition)</p>
<p><u>In re Parmalat Securities Litigation</u> U.S. District Court for the Southern District of New York Civil Action: Case No. 04 MD 1653 (LAK) August 22-24, 2007 (Deposition)</p>	<p><u>Jerald M. Spilsbury et al. v. KPMG, LLP et al.</u> District Court, Clark County, Nevada Civil Action: Case No: A479003 July 12, 2007 (Deposition)</p>
<p><u>John E. Gallus et al. v. Ameriprise Financial, Inc.</u> United States District Court, District of Minnesota Civil Action, Docket No.: 0:04-cv-4498 January 23, 2007 (Deposition)</p>	<p><u>Michael J. Sullivan and Jill P. Sullivan v. KPMG LLP and QA Investments LLC</u> Superior Court of New Jersey Law Division, Monmouth County Civil Action, Docket No.: MON-L-4279-04 November 30, 2006 & December 12, 2006 (Deposition)</p>
<p><u>In Re: Estate of First Pay, Inc.; Bankruptcy No. 03-30102-PM</u> United States Bankruptcy Court – District of Maryland (Greenbelt Division) Michael G. Wolff v. United States of America: Adversary No 05-1700-PM Judge Mannes August 9, 2006 (Trial)</p>	<p><u>Robert K. Cohen, et al. v. KPMG, L.L.P., et al.</u> State Court of Fulton County, Georgia Case No. 2003VS060471 May 23, 2006 (Deposition)</p>
<p><u>Riddle Farm Financial Limited Partnership v. Route 50 Partners, LP and Worcester Partners, LP and Riddle Farm Associates, LP and Goodwin H. Taylor, Jr.</u> Circuit Court for Worcester County, State of Maryland Case No. 23-C-03-0913 April 4 & 5, 2006 (Trial) February 3, 2006 (Deposition) May 16, 2005 (Hearing)</p>	<p><u>Estate of Keith R. Fetridge v. Aronson & Company, A Professional Corporation</u> Circuit Court for Montgomery County, Maryland Case No. 256856 Judge Eric Johnson March 9, 2006 (Trial)</p>

<p><u>Tolt Ventures, L.L.C., et al. v. KPMG, LLP et al.</u> District Court of Harris County, Texas, 333rd Judicial District Cause No. 2003-69957 January 27, 2006 (Deposition)</p>	<p><u>William C. Eacho III & Donna Eacho v. KPMG, LLP et al.</u> Superior Court for the District of Columbia Case No. 04-005746 November 29 & December 1, 2005 (Deposition)</p>
<p><u>Richard W. Coleman, Jr. v. KPMG et al.</u> Matter in Arbitration by Agreement of the Parties October 31-November 2, 2005 (Trial) October 17-19, 2005 (Trial) August 22, 2005 (Deposition)</p>	<p><u>Lawrence L. Gaslow v. KPMG et al.</u> Supreme Court of The State of New York County of New York Case No. 600771/04 August 8, July 1, and June 30, 2005 (Deposition)</p>
<p><u>Minebea Co., Ltd, Precision Motors Deutsche Minebea GmbH, and Nippon Miniature Bearing Corp. v. George Papst, Papst Licensing GmbH, and Verwaltungsgesellschaft MIT Beschränkter Haftung</u> U.S. District Court for the District of Columbia Case No. 97-05-90 (SSH) (DAR) August 4 & 5, 2005 (Trial); June 2, 2005 (Hearing) May 11, 2005 (Deposition)</p>	<p><u>Joseph J. Jacoboni v. KPMG LLP</u> United States District Court for the Middle District of Florida – Orlando Division Case No. 6:02-CV-510-Orl-22DAB(M.D.Fla.) May 4, 2005 (Deposition)</p>
<p><u>Hemanth Rao, et al. v. H-QUOTIENT, Inc., Douglas A. Cohn, and Laurence Burden</u> United States District Court for the District of Virginia- Eastern District February 10 and 11, 2005 (Trial)</p>	<p><u>James, LTD. v. Saks Fifth Avenue, et al.</u> Circuit Court for Arlington County, Virginia Chancery No. 03-802 January 12 and 25, 2005 (Trial) December 10, 2004 (Deposition)</p>
<p><u>Sensormatic Security Corp. v. Sensormatic Electronics Corporation, ADT Security Services, Inc., & Wallace Computer Services, Inc.</u> United States District Court for the District of Maryland Southern Division Case No. 02-Civ-1565 (DKC) September 28, 2004, February 19, 2004 & October 24, 2003 (Deposition)</p>	<p><u>Todd Roy Earl Bentley III v. Deutsche Post Global Mail, LTD</u> Superior Court of The State of California For The County of Los Angeles Case No: BC 293389 September 23, 2004 & September 14, 2004 (Deposition)</p>
<p><u>Alex Alikhani v. System Engineering International, Inc.</u> American Arbitration Association No. 16 168 00611 03 August 31, 2004 (Trial)</p>	<p><u>Ruben A. Perez, et al v. KPMG LLP, et al</u> 92nd Judicial District Court Hidalgo County, Texas Cause No: C-2593-02-A November 7, 2003 (Deposition)</p>
<p><u>Joseph J. Jacoboni v. KPMG LLP</u> United States District Court for the Middle District Of Florida Orlando Division Case No. 6:02-CV-510-Orl-22DAB (M.D.Fla.) October 15, 2003 (Deposition)</p>	<p><u>Semtek International, Inc. v. Lockheed Martin Corporation</u> Circuit Court for Baltimore City, Maryland Case No. 97183023/CC 3762 September 30 – October 1, 2003 (Trial) June 17, 2003 & May 27, 2003 (Deposition)</p>
<p><u>Jordan v. Washington Mutual Bank, F.A.</u> United States District Court, District of Maryland Case No. H02CV1465 March 12, 2003 (Deposition)</p>	<p><u>Midland Credit v. MBNA America Bank</u> Superior Court State Of Arizona, County Of Maricopa Case No. CV2001-002497 February 27, 2003 & November 26, 2002 (Deposition)</p>

<p><u>Epstein v. Epstein</u> Circuit Court for Montgomery County, Maryland Family law No: 21608 January 8, 2003 (Trial)</p>	<p>Pg 11 of 14 <u>Surface Joint Venture v. E.I. Dupont De Nemours & Company, Inc.</u> United States District Court For The Western District Of Texas, Austin Division Civil Action No. A 02CA 04 3SS January 3, 2003 (Deposition)</p>
<p><u>Cates v. Cates</u> Circuit Court of Fairfax County, Virginia Chancery No 176170 June 17, 2002 (Deposition)</p>	<p><u>Phil Adams Company Profit Sharing Plan v. Trautman Wasserman, Inc. & CIBC Oppenheimer, Inc.</u> NASD Arbitration, Washington, D.C. May 22, 2002 (Trial)</p>
<p><u>Boryczka, et al. v. Phil Collyer v. Apex Data Services, Inc.</u> Circuit Court of Fairfax County, Virginia Chancery No 171437 March 12, 2002 (Deposition)</p>	<p><u>Frank A. Pietranton, Jr. et al. v. Kenneth J. Mahon & Mahon, Inc.</u> Circuit Court of Arlington County, Virginia Chancery No. 00-617 Judge Benjamin NA Kendrick February 13, 2002 (Trial)</p>
<p><u>Rinearson v. Rinearson</u> Circuit Court of Fairfax County, Virginia Chancery No. 170354 Judge Robert Wooldridge, Jr. January 24, 2002 (Trial)</p>	<p><u>Amtote International, Inc., v. Bally's of Maryland, Inc.</u> Circuit Court for Baltimore County, Maryland Civ. No. 03-C-01-001715 October 19, 2001 (Deposition)</p>
<p><u>America Online, Inc., v. Netvision Audiotext, Inc. et al.</u> United States District Court- Eastern District of Virginia Case No 99-1186-A October 16, 2001 (Deposition)</p>	<p><u>In Re: Robert S. Beale, Jr.</u> <u>In Re: Robert S. Beale, Jr., M.D., P.A.</u> United States Bankruptcy Court – District of Maryland (Baltimore Division) Case Nos: 99-65815-ESD; 00-55731-ESD Judge E. Stephen Derby August 2, 2001 (Trial)</p>
<p><u>Marvin BenBassett v. Ritz Camera Centers, Inc.</u> Circuit Court for Montgomery County, Maryland Case No. 207934 February 23, 2001 (Deposition)</p>	<p><u>Diamond v. Diamond</u> Circuit Court of Fairfax County, Virginia Chancery No. 165804 Judge M. Langhorne Keith February 6, 2001 (Trial)</p>
<p><u>Giesting & Associates, Inc. v. Harris Corp. Inc.</u> United States District Court, Middle District of Florida, Orlando Division No. 6:98-cv-1363-Orl-3ABF (M.D. Fla.) Judge David A. Baker November, 2000 (Trial)</p>	<p><u>Bell Atlantic-Maryland, Inc. v. Furguson Trenching Company, Inc. et al.</u> Circuit Court for Anne Arundel County, Maryland Case No. C-98-498130C Judge Michael Looney November 1, 2000 (Trial)</p>
<p><u>First Guaranty Mortgage Corporation v. Greater Atlantic Federal Savings Bank, et al.</u> Circuit Court for Arlington County, Virginia Chancery No. 99-488 Judge Joann Alper September 29, 2000 (Trial)</p>	<p><u>United States of America v. Lawrence Edwin Crumbliss</u> United States District Court, Eastern District of North Carolina, Western Division Criminal Case No: 5:99-CR-24-BR Judge Britt July 21, 2000 (Trial)</p>

<p><u>Sportsolution, Inc. v. National Football League Players Association</u> United States District Court, Middle District of Florida, Orlando Division Case No. 98-1154-Civ-Orl-22C Judge Duffy March 22-23, 2000 (Trial)</p>	<p><u>Konzi v. CVS, Inc.</u> Circuit Court of Fairfax County, Virginia Civil Action No. 178049 Judge Thatcher March 21, 2000 (Trial)</p>
<p><u>York Distributors, A Division Of Home Paramount Pest Control Companies, Inc. v. FMC Corporation/Agricultural Products Group</u> In The United States District Court For The District Of Maryland Civil Action No. L-98-2533 January 27, 2000 (Deposition)</p>	<p><u>Brown v. Brown</u> Circuit Court for Baltimore County, Maryland Case No. 03-C-98-003633 Judge Daniels September 30, 1999 (Trial)</p>
<p><u>Laura I. Merriex, et al. v. Robert S. Beale, Jr., M.D., PC</u> Superior Court For The District of Columbia Case No. 96-CA05313 Judge Diaz August 1999 (Trial)</p>	<p><u>Rees, Broome & Diaz, P.C. v. Bella Vista Condominium Association</u> Circuit Court for Arlington County, Virginia Chancery No. 98-260 Judge Joann Alper June 2, 1999 (Trial)</p>
<p><u>Charnis v. Kats et. al.</u> Circuit Court for Montgomery County, Maryland Civil No.174341-V Judge Donohue March 1999 (Trial)</p>	<p><u>Robert S. Joselow v. Robert J. Katz, et. al.</u> Superior Court of the District of Columbia Civil No.96-00871 May 4, 1998 (Deposition)</p>
<p><u>Regina L. Amann v. Washington Romance Writers (Board of Directors), et. al.</u> Circuit Court for Montgomery County, Maryland Civil No.166949 February 1998 (Deposition)</p>	<p><u>International Fidelity Company v. Williams Overman Pierce & Company LLP</u> In the United States District Court For the Eastern District of North Carolina Raleigh Division Case No. 5:96-CV-1001-BO(1) October 1997 (Deposition)</p>
<p><u>Kasten v. Kasten</u> District of Columbia Superior Court Judge Duncan-Peters March 1997 (Trial)</p>	<p><u>Roddy v. O'Brien</u> Circuit Court of Maryland for Montgomery County Master of the Court Mahayfee October 1996 (Trial)</p>
<p><u>Zittelman v. The Sun Box Company</u> Arbitration Case- Rockville, Maryland Judge Miller December 1995 (Trial)</p>	<p><u>Commercial Recovery Systems, Inc. v. MCI Telecommunications Company, Inc.</u> Arbitration Case-Washington, D.C. January 1995 (Trial)</p>

DUFF & PHELPS

Articles Published By **Bruce G. Dubinsky, MST, CPA, CVA, CFE, CFF, MAFF**

Bruce G. Dubinsky and Tiffany Gdowik, *The Art of Illusion: Look for What's Not on the Page*, Fraud Magazine (A Publication of the Association of Certified Fraud Examiners), September 2013.

Bruce G. Dubinsky and W. Christopher Bakewell et al., *Valuation of Patents: Legislative and Judicial Developments on Damages in Infringement Cases*, The Value Examiner, May/June 2009.

Steve Pomerantz and Bruce G. Dubinsky, *Monte Carlo Simulation Analysis: A Tool for Projecting the Unknown*, CPA Expert, AICPA Newsletter for Providers of Business Valuation, Forensic & Litigation Services, Winter 2007.

Steve Pomerantz and Bruce G. Dubinsky, *Monte Carlo Simulation Analysis: Part II: Beyond the Theory*, CPA Expert, AICPA Newsletter for Providers of Business Valuation, Forensic & Litigation Services, Spring 2007.

Steve Pomerantz and Bruce G. Dubinsky, *Monte Carlo Simulation Analysis: Part III: A Case Story*, CPA Expert, AICPA Newsletter for Providers of Business Valuation, Forensic & Litigation Services, Summer 2007.

Bruce G. Dubinsky and Christine L. Warner, *Uncovering Accounts Payable Fraud Using "Fuzzy Matching Logic"*, Fraud Magazine (Journal of the Association of Certified Fraud Examiners), July/August 2006.

Bruce G. Dubinsky and Christine L. Warner, *Uncovering Accounts Payable Fraud Using "Fuzzy Matching Logic: Part 1"*, Business Credit Magazine, March 2008.

Bruce G. Dubinsky and Christine L. Warner, *Uncovering Accounts Payable Fraud Using "Fuzzy Matching Logic: Part 2"*, Business Credit Magazine, April 2008.

Bruce G. Dubinsky, *The Quagmire of Business Valuation*, The Legal Times, Washington, D.C., October 21, 2002.

Bruce G. Dubinsky, *Cooking the Books*, Maryland State Bar Association Newsletter, Baltimore, April 2002.

Bruce G. Dubinsky, *Math Formula Fights Fraud*, The Legal Times, Washington, D.C., February 2001.

Bruce G. Dubinsky, *Fraud Specialists*, The Legal Times, Washington, D.C., March 2000.

Bruce G. Dubinsky, *Protect Your Firm Against Fraud*, The Legal Times, Washington, D.C., February 2000.

DUFF & PHELPS

The CPA Digest, Harcourt Brace Publishing Company, 116 articles published on various subjects from April 1993 to September 1994.