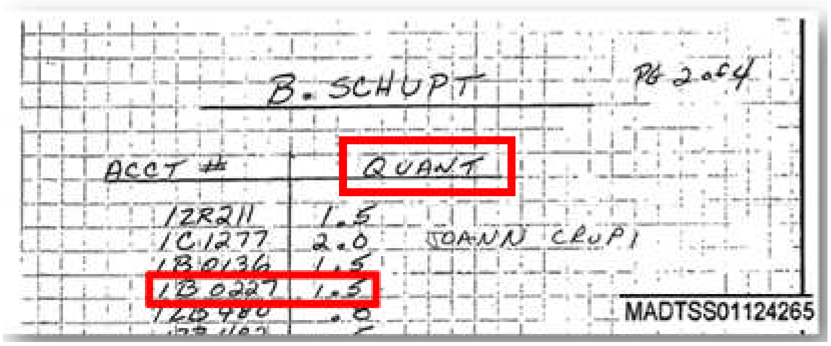
EXHIBIT 1

(Part 2 of 3)

Figure 27


B. SCHUPT Pg 2 of 4

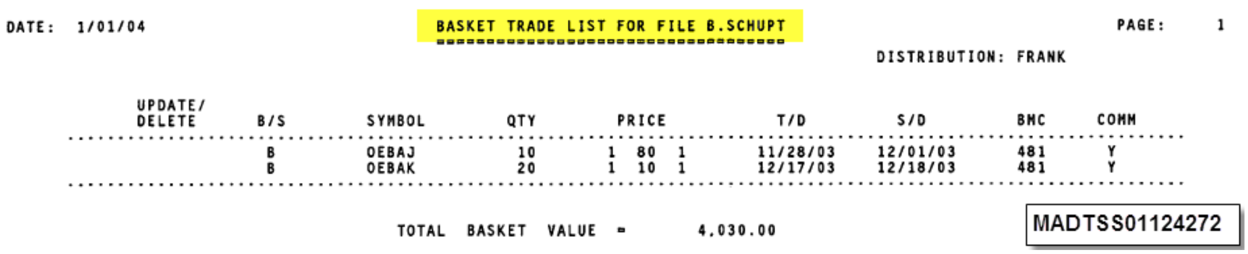
ACCT #	QUANT
12R211	1.5
1C1277	2.0
1B0136	1.5
1B0227	1.5

JOANN CRUPI

MADTSS01124265

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

Figure 28


DATE: 1/01/04 BASKET TRADE LIST FOR FILE B.SCHUPT 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

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

Table 8

Account_No	Purchase Date	Symbol	Price	Value
1-B0227-4-0	12/1/2003	OEBAJ	$1.80	$2,715.00
1-B0227-4-0	12/18/2003	OEBAK	$1.10	$3,330.00

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

Figure 29

HOUSE #17					
BUY / SELL	S	CXL		CXL TRD #	
ACCT GROUP		A\J\F	F	DELETE	
SYMBOL	OEBAJ	ACCT TYPE	4	ODD\EVEN	
DOLLAR PRICE	6	FRACT\CENTS	50	PRICE CODE	1
T\D	12 / 30	S\D	12 / 31		
BLOTTER	4	MARKET	8	TRANS	1
COMM	YES				
ACCT # 2	~~29000030~~ 40-40				
SHORT		INSTR			MADTSS01124267

HOUSE #17					
BUY / SELL	S	CXL		CXL TRD #	
ACCT GROUP		A\J\F	F	DELETE	
SYMBOL	OEBAK	ACCT TYPE	40	ODD\EVEN	
DOLLAR PRICE	3	FRACT\CENTS	80	PRICE CODE	1
T\D	12 / 30	S\D	12 / 31		
BLOTTER	4	MARKET	8	TRANS	1
COMM	YES				
ACCT # 2	~~29000030~~ 40-40				
SHORT		INSTR			MADTSS01124268

176. The OEBAJ options purportedly bought on December 1, 2003 for $1.80 per option were purportedly sold on December 31, 2003 for $6.50, realizing a return of <u>261% in 30 days</u>. 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 <u>245% in 13 days</u>.

177. For the Account 1B0227 discussed above, these purported option sales yield $21,105 of sales proceeds on December 31, 2003, with a purchase price of $6,045. This is a total return of 250% over the period of the investment.

178. In total, the B.SCHUPT [*sic*] program in December 2003 highlighted 29 accounts needing additional investment returns with an initial purported investment of $2,099,227 in the two options. The resulting $5,229,836 from the purported sale of the options yielded a 149% return over an average of 21.5 days held.

179. Examining the portfolio management reports ("PMR") for account 1-B0227 for 2003 reveals telling facts. In November 2003, the PMR shows a 9.63% annualized return for the current year which is dramatically lower than the 18% "Benchmark" rate of return shown on the PMR.

Figure 30

ACCOUNT # 1-B0227-3 [redacted]		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 334 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

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

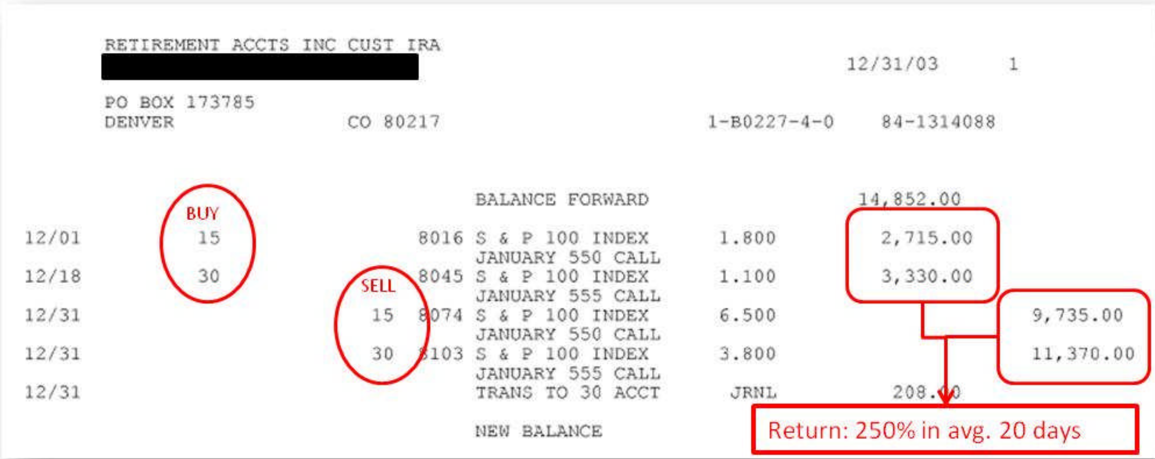
Figure 31

ACCOUNT # 1-B0227-3 [redacted]		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

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

Figure 32



RETIREMENT ACCTS INC CUST IRA
[redacted]
PO BOX 173785
DENVER CO 80217

12/31/03 1
1-B0227-4-0 84-1314088

				BALANCE FORWARD		14,852.00		
12/01	15		8016	S & P 100 INDEX JANUARY 550 CALL	1.800	2,715.00		
12/18	30		8045	S & P 100 INDEX JANUARY 555 CALL	1.100	3,330.00		
12/31		15	8074	S & P 100 INDEX JANUARY 550 CALL	6.500		9,735.00	
12/31		30	8103	S & P 100 INDEX JANUARY 555 CALL	3.800		11,370.00	
12/31				TRANS TO 30 ACCT	JRNL	208.00		
				NEW BALANCE				

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

183. Additional examples of the "schupt" account listings and instructions were also located for the years 2004, 2005, 2006, and 2007.[157] Similar to the instructions discussed above, the additional "schupt" listings also listed specific units of each fictitious trade to make for specific accounts. Account numbers and holders varied by year.

184. In those additional years, the fictitious trades allocated pursuant to the Schupt instructions yielded a range of returns to each account over December of each year between 140% in 2002 and 268% in 2004. Similar to the discussion above regarding the changes in the PMRs subsequent to the fictitious trades being allocated, the account PMRs for those accounts in 2002, 2004, 2006, and 2007 showed similar patterns.

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

185. House 5 and House 17 computer systems capabilities were vastly different. House 5 systems contained many of the components one would expect to find in a broker-dealer environment where actual trades were being executed. Simply put, House 17 did not.

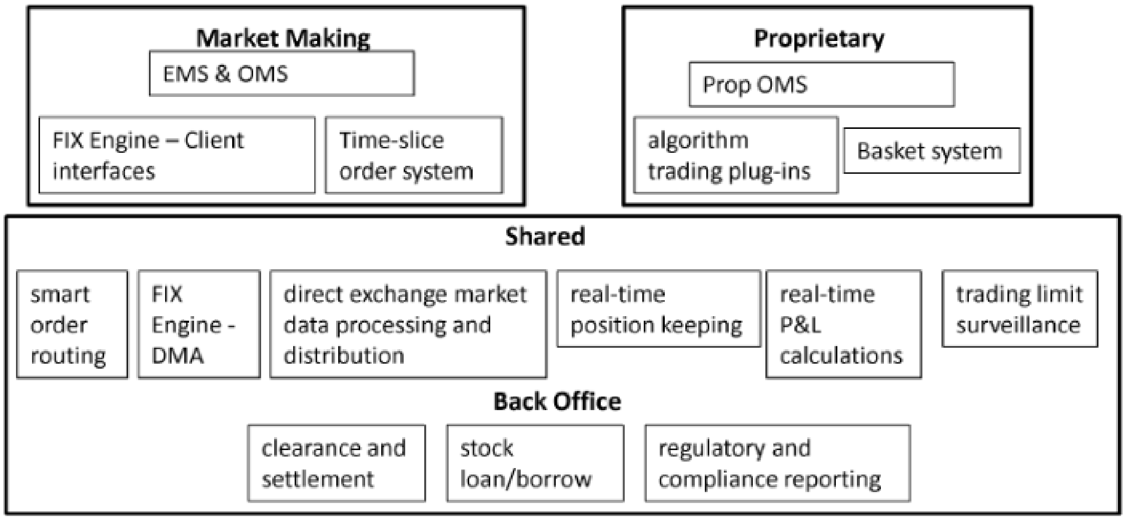
186. A summary description of House 5 trading systems in place as of December 2008 that was prepared by Lazard, Ltd. ("Lazard"), is depicted below in Figure 33[158]:

[157] Handwritten documents recovered from BLMIS. MADTSS01124091, MADTSS01124093, MADTSS01124089, MADTSS01120262 While a "schupt" file was not located for all years other than those listed above, there were, however, other documents located that appeared to contain similar information and to be following the same pattern.
[158] Lazard was the financial advisor to the Trustee who handled the liquidation sale of House 5 assets after Madoff's arrest in December 2008. Lazard is an international financial advisory and asset management firm, specializing in providing advice on complex financial and strategic initiatives.

Figure 33

Summary

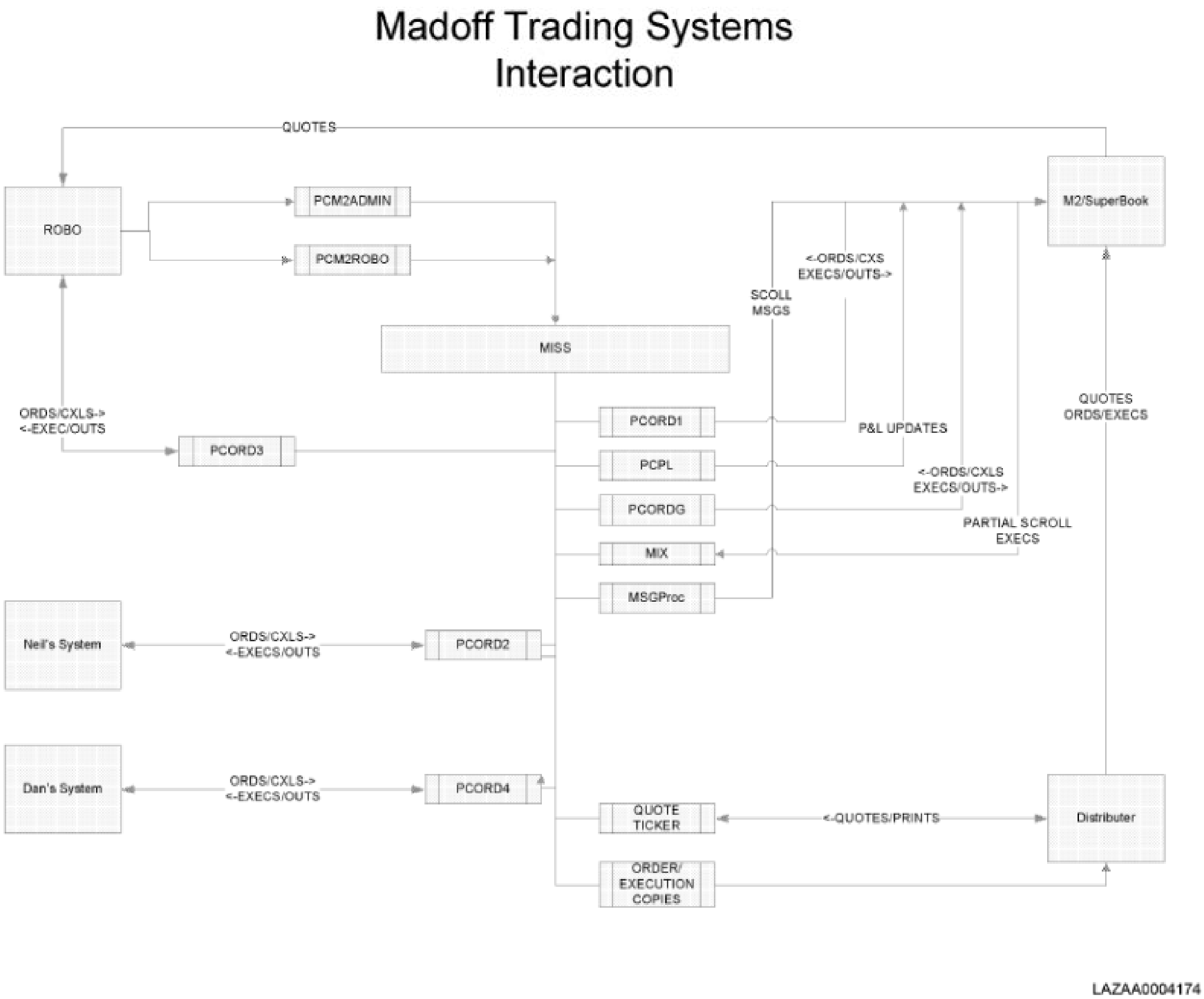
- The market making / proprietary trading business is supported by in-house trading applications built on a premise to be resilient, scalable and redundant.
- The trading system is a full fledged end-to-end equity market making and proprietary trading system with logical wall between the two. In addition,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



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

187. Figure 34 is a more detailed diagram as of the trading systems in place at House 5 in December 2008[159]:

Figure 34



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

[159] Prepared by Lazard. LAZAA0004174

189. The software utilized by House 5 versus House 17 differed dramatically. The software utilized by House 5 was a combination of commercially-available, off-the-shelf software and interface systems (e.g., Bloomberg workstation, Thomson One, DTC, OCC) as well as custom-programmed software (e.g., the House 5 BLMIS Information System). However, the software utilized by House 17 was primarily custom-built in-house software (i.e., the House 17 BLMIS information system), supported only partially by commercially available, off-the-shelf software employed to perform specific functions, such as Integrated Custom Software Inc's FormSprint software for generating printed forms and Vision Solutions MIMIX software for supporting backup, restore, and disaster recovery.

190. While information in programs restored from House 17 backup tapes revealed certain limited electronic communications and interfaces for the AS/400 system, it was determined that the House 17 BLMIS custom RPG software did not communicate with any of the standard platforms one might expect to see in a trading and/or investment environment. Investment related data received by the House 17 custom RPG software was received from House 5 through either an electronic file transfer ("ftp") or via a manual process by which an operator inserted a tape into the House 17 AS/400 that contained data from the House 5 custom software. While House 5 utilized extensive systems to execute trades (e.g., MISS, M2/Superbook) and receive market data (e.g., Bloomberg, Muller) there was no evidence to show that House 17 connected to any of the connections available to the House 5 systems (e.g., NASDAQ, DTC, Bloomberg, Thomson, OATS). As a result, House 17 would have needed to place the purported trades through either House 5 or an outside broker-dealer; evidence of that occurring was not found.

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

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

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

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

[160] During the computer investigation, it became apparent that certain code and data files no longer existed on the tapes containing the backup of the House 17 system from December 2008. Restoration of prior backup tapes confirmed this fact.
[161] For example, one such error indicated, "Command menu in library *LIBL not found." When placed into System/36 emulation mode, the error disappeared.

Figure 35

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

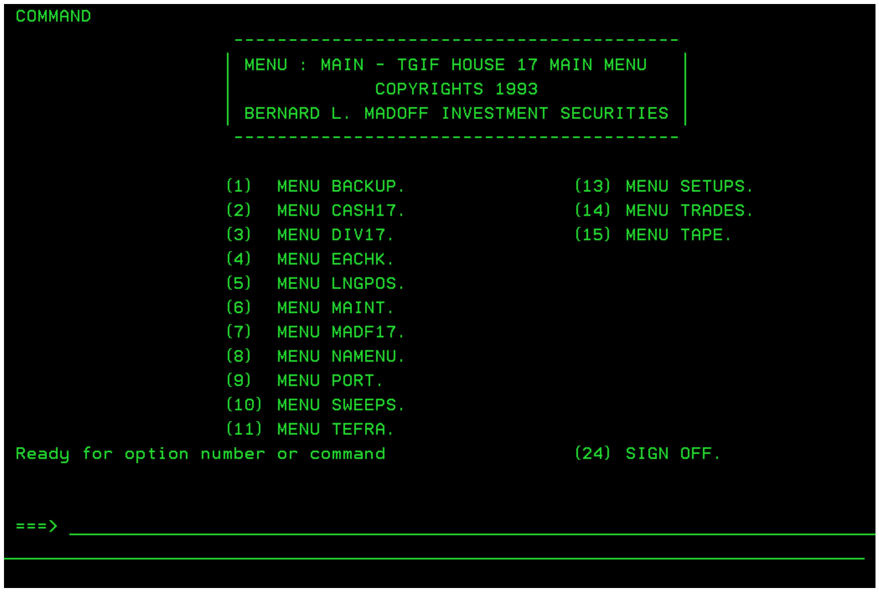
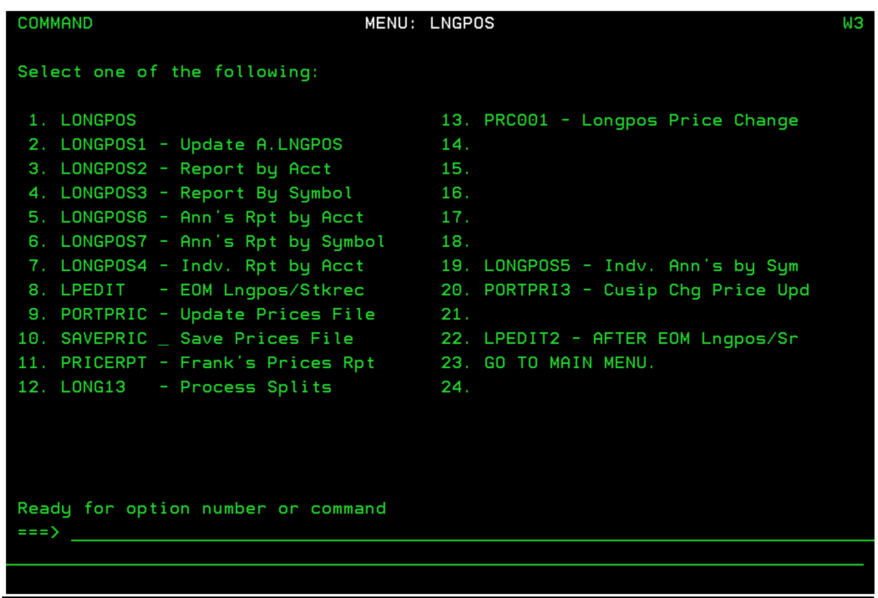


Figure 36

Screen shot of Restored AS/400: BTS (Basket Trading System) Menu

(Option 20 from MADF17 menu)



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

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

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

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

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

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

196. House 17 did not have a legitimate trading system using algorithms to execute trades as described above. What it had was a self-created program that simply mimicked and backfilled the output that would normally be the result of trades actually being executed by a system using trading algorithms. A detailed analysis of the code that was utilized in this regard confirms this.

197. A review of input and output files, as well as customer statements, indicated that a Java custom written application utilized an input file containing trade dates, settlement dates, security descriptions, pricing and other information, such as customer account numbers. It also contained the price that was to be allocated to each transaction.

198. The program utilized information from the input file and then generated a random set of orders for the specific security, randomly varying both the number of shares and the price for each order. The random number of shares was generated using a random function that was artificially limited by a configurable high and low value (i.e., 500 shares as a minimum and 10,000 as a maximum). The number of shares was also artificially limited by the total number of shares identified in the input file (i.e., if the input file totaled one million shares across all transaction in the input file, then the output of the program does not exceed one million shares across all orders in the output file). The random price for each order was also artificially limited by a configurable parameters which limited the range in the generated prices (i.e., a 5¢ bound would limit the randomly generated price to within five cents of the price identified in the input file).

199. The following example shows the input, processing and results of the random order generation program. The first input file shown below in Figure 37 identifies the total number of shares, 1,039,261, of Abbott Laboratories, as well as the average price $48.41 assigned to that transaction on all applicable customer statements in House 17.[163]

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[163] *See* MESTAAF00009202- MESTAAF00009203.

Figure 37

Abbott Laboratories Input

Abbott Laboratories Input for MADOFFRandomSimulationUtility for 10/26/2007*											
#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	[illegible]	[illegible]	[illegible]	[illegible]	4119787.82	3404	4123191.82
23-Oct	26-Oct	1-FR010-3	52572	S	[illegible]	[illegible]	[illegible]	[illegible]	912673.73	754	913427.73
23-Oct	26-Oct	1-FR062-3	52577	S	[illegible]	[illegible]	[illegible]	[illegible]	15636.43	12	15648.43
23-Oct	26-Oct	1-FR074-3	52581	S	[illegible]	[illegible]	[illegible]	[illegible]	72421.36	59	72480.36
23-Oct	26-Oct	1-FR080-3	52582	S	[illegible]	[illegible]	[illegible]	48.41	1785844.9	1475	1787319.9
23-Oct	26-Oct	1-FR083-3	52583	S	24514	2824100	ABBOTT LABORATORIES	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

* Refer to document TCHE_02_BR00000018

Total Shares	1,039,261
Price Assigned	$ 48.41

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

Figure 38

REDACTED

Bates MDPTPP00511357

10/31/06 2 M

1-C1260-3-0 ******9688

10/25			GENERAL ELECTRIC CO DIV 9/25/06 10/25/06	DIV		319,150.00
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	

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

Figure 39

Abbott Laboratories Output[164]

Abbott Laboratories Orders Generated by MADOFFRandomSimulationUtility for 10/26/2007*

Num	T/D	Security Description	Quantity	Price	S/D	Cusip	Price * Quantity
85195	23-Oct	ABBOTT LABORATORIES	5,195	$ 48.42	26-Oct	2824100	$ 251,541.90
64998	23-Oct	ABBOTT LABORATORIES	4,900	$ 48.37	26-Oct	2824100	$ 237,013.00
10509	23-Oct	ABBOTT LABORATORIES	509	$ 48.43	26-Oct	2824100	$ 24,650.87
64166	23-Oct	ABBOTT LABORATORIES	4,100	$ 48.45	26-Oct	2824100	$ 198,645.00
79956	23-Oct	ABBOTT LABORATORIES	9,900	$ 48.44	26-Oct	2824100	$ 479,556.00
9824	23-Oct	ABBOTT LABORATORIES	9,800	$ 48.40	26-Oct	2824100	$ 474,320.00
4780	23-Oct	ABBOTT LABORATORIES	4,780	$ 48.40	26-Oct	2824100	$ 231,352.00
94283	23-Oct	ABBOTT LABORATORIES	4,200	$ 48.41	26-Oct	2824100	$ 203,322.00
91250	23-Oct				-Oct	2824100	$ 58,068.00
44829	23-Oct				-Oct	2824100	$ 232,320.00
7641	23-Oct				-Oct	2824100	$ 367,612.00
29258	23-Oct				-Oct	2824100	$ 445,372.00
83376	23-Oct				-Oct	2824100	$ 163,533.44
98508	23-Oct	ABBOTT LABORATORIES	8,500	$ 48.44	26-Oct	2824100	$ 411,740.00
46977	23-Oct	ABBOTT LABORATORIES	6,900	$ 48.41	26-Oct	2824100	$ 334,029.00
63066	23-Oct	ABBOTT LABORATORIES	3,000	$ 48.38	26-Oct	2824100	$ 145,140.00
74209	23-Oct	ABBOTT LABORATORIES	4,200	$ 48.37	26-Oct	2824100	$ 203,154.00
92888	23-Oct	ABBOTT LABORATORIES	2,800	$ 48.42	26-Oct	2824100	$ 135,576.00
15407	23-Oct	ABBOTT LABORATORIES	5,400	$ 48.45	26-Oct	2824100	$ 261,630.00
58704	23-Oct	ABBOTT LABORATORIES	8,700	$ 48.41	26-Oct	2824100	$ 421,167.00
89897	23-Oct	ABBOTT LABORATORIES	9,800	$ 48.38	26-Oct	2824100	$ 474,124.00
73566	23-Oct	ABBOTT LABORATORIES	3,566	$ 48.44	26-Oct	2824100	$ 172,737.04
57233	23-Oct	ABBOTT LABORATORIES	7,200	$ 48.44	26-Oct	2824100	$ 348,768.00
64857	23-Oct	ABBOTT LABORATORIES	4,800	$ 48.41	26-Oct	2824100	$ 232,368.00
2712	23-Oct	ABBOTT LABORATORIES	2,700	$ 48.41	26-Oct	2824100	$ 130,707.00
4609	23-Oct	ABBOTT LABORATORIES	4,609	$ 48.40	26-Oct	2824100	$ 223,075.60
13697	23-Oct	ABBOTT LABORATORIES	3,697	$ 48.40	26-Oct	2824100	$ 178,934.80
11154	23-Oct	ABBOTT LABORATORIES	1,100	$ 48.38	26-Oct	2824100	$ 53,218.00
19027	23-Oct	ABBOTT LABORATORIES	9,027	$ 48.38	26-Oct	2824100	$ 436,726.26

Validation	
Total Shares	1,039,261
Total Quantity * Price	$ 50,310,283.23
Weighted Average Price	$ 48.41

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

164 *See* MESTAAF00000037- MESTAAF00000041.

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

Figure 40

Abbott Laboratories Output[165]

Abbott Laboratories Orders Generated by MADOFFRandomSimulationUtility for 10/26/2007 generated on 10/28/2011

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

Validation	
Total Shares	1,039,261
Total Quantity * Price	$ 50,310,625.01
Weighted Average Price	$ 48.41

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

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165 *See* MDPTGG00000002
166 *See* KFON-BR00030551

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

ii. Various reports that House 17 prepared were false.

a. Customer statements contained fictitious trades that were backdated.

205. House 17 customer statements contained false information regarding purported securities trades. Specifically, some customer statements reported trades that were purportedly executed in a prior month's period, sometimes stretching back years, but in actuality were never recorded on that previous month's statement ("prior month backdated trades"). For example, a March 1998 statement for account 1-A0035-3-0 showed purported transactions that occurred in March 1998, as well as trades going back to April 1997. If these trades had actually occurred and settled on the stated dates during the prior months or even years, they would have appeared on their respective monthly statement (i.e., a transaction in June 1997 would have appeared on the June 1997 customer statement). Many of these trades, however, did not appear on these previous month statements. Customer statements were analyzed for instances of such backdating by comparing the listed traded prices on the customer statement and the daily range of the stock prices for the respective dates in the prior year.

206. In the aggregate, the customer statements show a total of 14,749 prior month backdated trades which took place between December 1995 and November 30, 2008 across 893 accounts. The number of backdated trades per account range from 1 to 3,669. Furthermore, 50 of the 893 accounts contained more than 30 backdated trades.

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

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

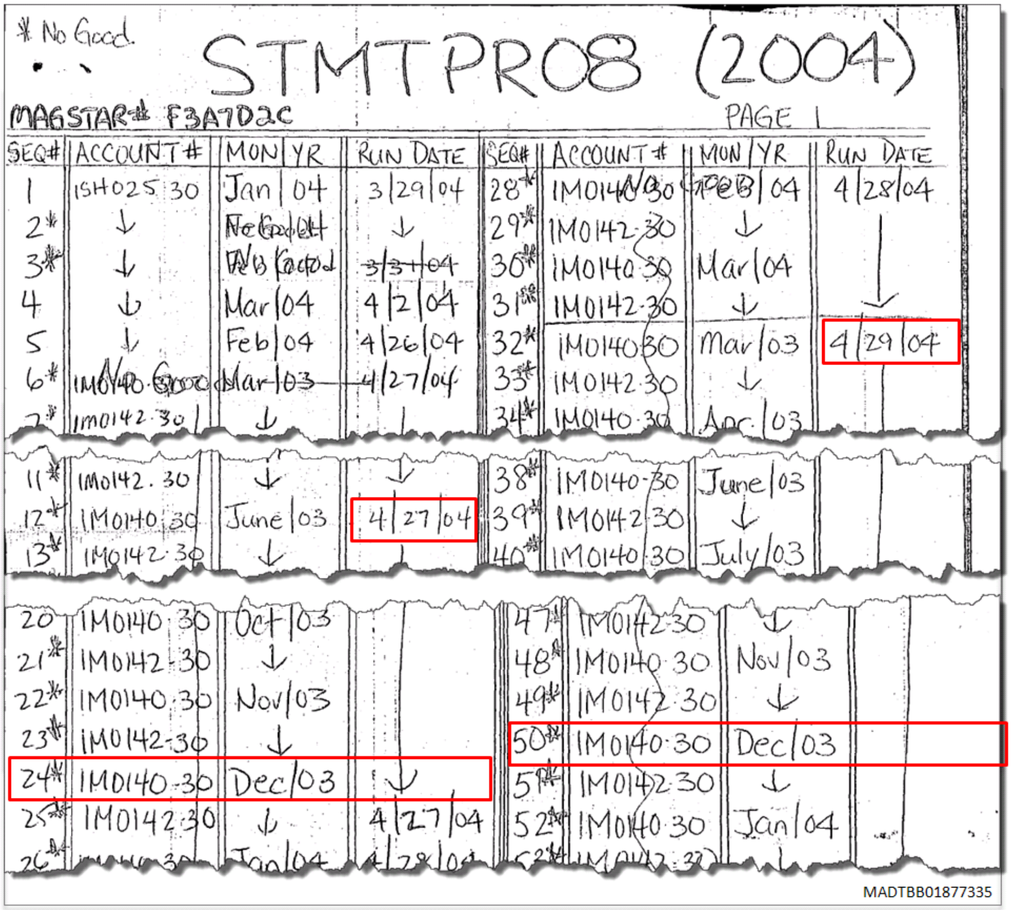
Figure 41

```
                    FIXING STATEMENTS


     First - you need EOM 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   Debit --> entered as a   eld+)
```

MMAN_02_BR_00000011

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

Figure 42



* No Good.

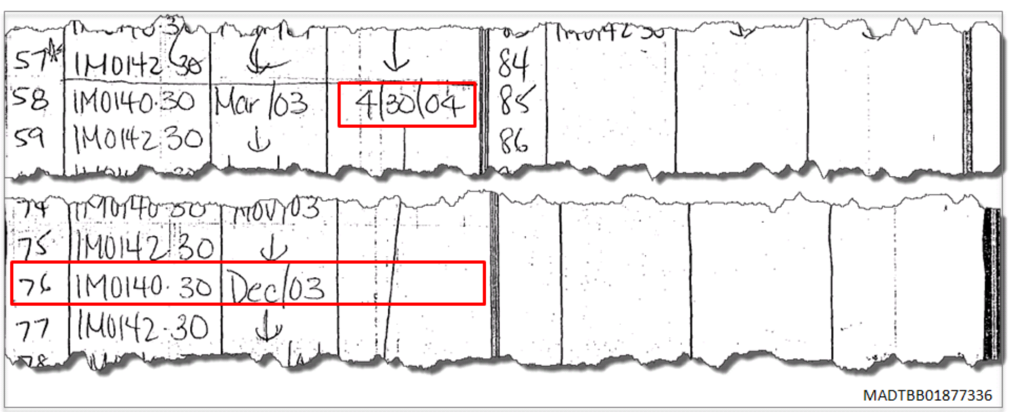
STMTPRO8 (2004)

MAGSTAR# F3A7D2C

PAGE 1

SEQ#	ACCOUNT#	MON/YR	RUN DATE	SEQ#	ACCOUNT#	MON/YR	RUN DATE
1	1SH025 30	Jan/04	3/29/04	28*	1M0140 30	Feb/04	4/28/04
2*	↓	No Good	↓	29*	1M0142 30	↓	
3*	↓	No Good	3/31/04	30*	1M0140 30	Mar/04	
4	↓	Mar/04	4/2/04	31*	1M0142 30	↓	
5	↓	Feb/04	4/26/04	32*	1M0140 30	Mar/03	4/29/04
6*	1M0140 No Good	Mar/03	4/27/04	33*	1M0142 30	↓	
7*	1M0142 30	↓		34*	1M0140 30	Apr/03	
11*	1M0142 30	↓	↓	38*	1M0140 30	June/03	
12*	1M0140 30	June/03	4/27/04	39*	1M0142 30	↓	
13*	1M0142 30	↓		40*	1M0140 30	July/03	
20	1M0140 30	Oct/03		47*	1M0142 30	↓	
21*	1M0142 30	↓		48*	1M0140 30	Nov/03	
22*	1M0140 30	Nov/03		49*	1M0142 30	↓	
23*	1M0142 30	↓		50*	1M0140 30	Dec/03	
24*	1M0140 30	Dec/03	↓	51*	1M0142 30	↓	
25*	1M0142 30	↓	4/27/04	52*	1M0140 30	Jan/04	

MADTBB01877335



57*	1M0142 30	↓	↓	84
58	1M0140 30	Mar/03	4/30/04	85
59	1M0142 30	↓		86
75	1M0142 30	↓		
76	1M0140 30	Dec/03		
77	1M0142 30	↓		

MADTBB01877336

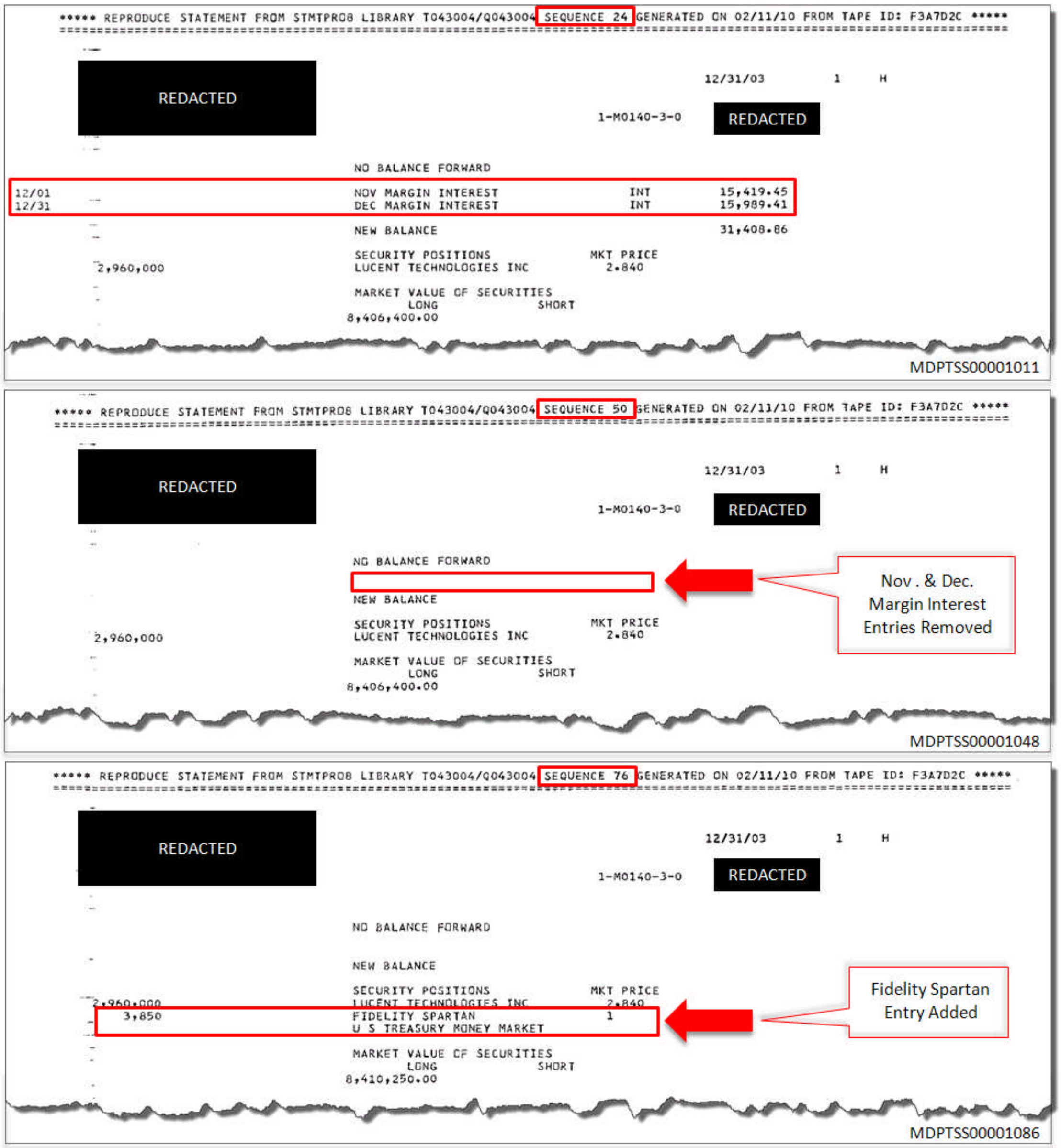
209. For illustrative purposes, the analysis focused on three months of changes to show what was happening. Seq#24, 50 and 76 were selected. As the log file indicates, Sequence 24 was run on April 27, 2004. Sequence 50 was run on April 29, 2004 and Sequence 76 was run on April

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

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

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

Figure 43


***** REPRODUCE STATEMENT FROM STMTPROB LIBRARY T043004/Q043004 SEQUENCE 24 GENERATED ON 02/11/10 FROM TAPE ID: F3A7D2C *****

REDACTED

12/31/03 1 H

1-M0140-3-0 REDACTED

NO BALANCE FORWARD

12/01 NOV MARGIN INTEREST INT 15,419.45
12/31 DEC MARGIN INTEREST INT 15,989.41

NEW BALANCE 31,408.86

SECURITY POSITIONS MKT PRICE
2,960,000 LUCENT TECHNOLOGIES INC 2.840

MARKET VALUE OF SECURITIES
LONG SHORT
8,406,400.00

MDPTSS00001011

***** REPRODUCE STATEMENT FROM STMTPROB LIBRARY T043004/Q043004 SEQUENCE 50 GENERATED ON 02/11/10 FROM TAPE ID: F3A7D2C *****

REDACTED

12/31/03 1 H

1-M0140-3-0 REDACTED

NO BALANCE FORWARD

NEW BALANCE

SECURITY POSITIONS MKT PRICE
2,960,000 LUCENT TECHNOLOGIES INC 2.840

MARKET VALUE OF SECURITIES
LONG SHORT
8,406,400.00

Nov . & Dec. Margin Interest Entries Removed

MDPTSS00001048

***** REPRODUCE STATEMENT FROM STMTPROB LIBRARY T043004/Q043004 SEQUENCE 76 GENERATED ON 02/11/10 FROM TAPE ID: F3A7D2C *****

REDACTED

12/31/03 1 H

1-M0140-3-0 REDACTED

NO BALANCE FORWARD

NEW BALANCE

SECURITY POSITIONS MKT PRICE
2,960,000 LUCENT TECHNOLOGIES INC 2.840
3,850 FIDELITY SPARTAN 1
U S TREASURY MONEY MARKET

MARKET VALUE OF SECURITIES
LONG SHORT
8,410,250.00

Fidelity Spartan Entry Added

MDPTSS00001086

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

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

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

212. BLMIS was registered with the SEC as a broker-dealer as of January 19, 1960 and, it was not until 46 years later that it was registered beginning in 2006, as an investment adviser. Based on a review of regulatory requirements, and as further addressed below, BLMIS should have registered with the SEC as an investment adviser beginning in 1979 when Form ADV was required for investment advisers.[169]

213. Investment advisers must register with the SEC by filing the Uniform Application for Investment Adviser Registration[170] ("Form ADV") unless they are exempt from registration.[171] Investment advisers with 15 or more clients must register with the Commission.[172] Despite having more than 15 accounts, BLMIS did not register as an Investment Adviser until August 2006. Between 1979 and 2006, BLMIS had more than 15 accounts and by not filing Form ADV as required, misrepresented its total number of clients (s*ee* Figure 14 for the number of accounts from 1978 to 2008).

214. Further, between 2006 and 2008 Madoff misrepresented the number of clients in his IA Business on the Form ADV. In or about January 2008, BLMIS filed with the SEC an Amended Uniform Application for Investment Adviser Registration. On the application, BLMIS reported representation of 23 customer accounts and assets under management of approximately $17.1 billion.[173] In actuality, in or around January 2008, BLMIS had approximately 4,900[174] active customer accounts and purported assets under management of approximately $74 billion.[175] Historical records show that there were more than 8,000 customer accounts at BLMIS over the life of the business.[176]

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[169] The Securities Exchange Act of 1934, 15 U.S.C. § 80b-3 (2010); [44 FR 21008, Apr. 9, 1979]
[170] *Id.*
[171] Investment Advisers Act Rule §§ 203-1 & 203(b).
[172] Investment Advisers Act § 203(b)(3).
[173] PUBLIC0003840
[174] SQL Query - All Customer Accounts - January 2008
[175] SQL Query - All Customer Accounts – as of December 31, 2007
[176] SQL Query - All Customer Accounts - All Years

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

215. As a registered broker-dealer operating through 2008, BLMIS was required to file FOCUS reports with the SEC.[177] FOCUS reports are financial and operational reports that set forth, among other information, assets, liabilities, revenues, and expenses of the company.

216. In addition, BLMIS was required to file Annual Audited Reports.[178] These Annual Audited Reports contain information about income, cash flows, changes in stockholders', partners', or sole proprietors' equity, and statement of financial condition.

217. The BLMIS FOCUS and Annual Audited Reports reveal inconsistencies with the business in which BLMIS was purportedly engaged as well as material misstatements in its financial statements. Both the FOCUS reports and Annual Audited Reports require broker-dealers to list the amount of cash on hand, as well as all of its other assets and liabilities. The reports BLMIS filed, however, often did not reflect the assets and liabilities BLMIS should have reported and, therefore, contained numerous misstatements as discussed in the following paragraphs.

218. BLMIS underreported the amount of cash it held on its FOCUS reports. For example, based on an analysis of House 17 bank account statements, on an almost nightly basis, BLMIS swept funds from the 703 Account into overnight deposits. According to the FOCUS report instructions, the funds in the 703 Account and the overnight deposits are considered "cash" and should have been included in the "cash" line on the FOCUS and Annual Audit Reports.[179] These accounts were excluded from the reported cash balances and in fact, cash in the 703 Account and the overnight deposits often exceeded the "cash" actually reported by BLMIS in the FOCUS and Annual Audited Reports.

219. For example, the December 2006 FOCUS report listed $4,882,332 as the amount of cash on hand.[180] As of December 31, 2006, the ending balance of the 703 Account was $394,700 and

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[177] SEC Rule 17a-5, 17 C.F.R. 240.17a5.
[178] SEC Rule 17a-5(d), 17 C.F.R. 240.17a5(d).
[179] Instructions to FORM X-17A-5 PART IIA - All "cash" item except for "cash in banks subject to withdrawal restrictions" shall be included on the "cash" line of the report. http://www.sec.gov/about/forms/formx-17a-5_2a.pdf
[180] PUBLIC0002664

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

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

Table 9

Date	FOCUS[182]	703 Account Overnight Investment[183]	703 Account Ending Balance[184]
09/06	$4,293,419	$140,000,000	$800,207
12/06	4,882,332	295,000,000	394,700
03/07	3,716,017	160,000,000	2,000,000
06/07	5,175,146	145,000,000	292,099
09/07	5,460,095	120,000,000	376,500
12/07	164,382,040	235,000,000	742,309
03/08	222,737,426	220,000,000	135,534
06/08	257,374,499	170,000,000	1,712,804
09/08	187,651,497	480,000,000	418,000

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

[181] FASB ASC 305-10-20 defines cash equivalents as, "short-term investments of high liquidity, which are readily convertible into certain amounts of cash, subject to an insignificant risk of changes in value."
[182] Amounts taken from Line 1 – Cash for each respective FOCUS report.
[183] Amounts obtained from JPMC 703 respective monthly bank statement.
[184] Amounts obtained from JPMC 703 respective monthly bank statement ending balances.

("JPMC") collateralized, in part, by a loan from a customer. The loans were repaid in June 2006. Yet the FOCUS report for the period ending December 2005 ("December 2005 FOCUS Report") reported that BLMIS had no bank loan obligations outstanding.

222. Prior to September 2006, BLMIS recorded *de-minimis* commission revenue on the FOCUS report "Commissions" revenue line.[185] Nor did BLMIS report commission revenue on its Annual Audited Reports prior to October 2006. While this fact may have actually been true, it totally contradicts the contention that if House 17 was actually executing trades, customer commissions should have been reflected in the "Commissions" line item. The fact that no commission revenue was reported further shows that no trading in House 17 occurred.

223. As mentioned above, BLMIS registered with the SEC as an Investment Adviser in August 2006. The FOCUS and Annual Audited Reports filed by BLMIS after that time included amounts listed for "Commissions." Comparing the revenue reported in the Annual Audited Reports for the fiscal years immediately before and after BLMIS registered as an investment adviser demonstrates the significance of the "newly" reported commission revenue. For the fiscal year ended 2005, BLMIS reported no commission revenue in its FOCUS report. By contrast, for the fiscal year ended 2007, BLMIS reported $103,174,848 of commission revenue which represented approximately 60% of total reported BLMIS revenues for the year. However, since no trading activity occurred in House 17, no commission revenue was generated and the FOCUS reports thereby contained false information.

224. In addition, the FOCUS and Annual Audited Reports did not reflect other activity that would be expected of a broker conducting trades for investment adviser customers. BLMIS's FOCUS and Annual Audited Reports did not include: (a) customer receivables, such as margin accounts; (b) customer payables, such as positive cash balances held by BLMIS on behalf of customers; or (c) a computation for reserve requirements for customer activity as required by the SEC under Rule 15c3-3, all of which would be reported by a broker- dealer with managed investment accounts.

225. For example, the December 2005 FOCUS report had no amounts recorded under the captions "Receivables from customers" and "Payable to customers." In addition, the credit and debit

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

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

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

227. As noted above, 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 Audit Template Opinions Found at BLMIS

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

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

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[186] ELIP-BR00007195

Figure 44

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

December 12, 1997

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

INDEPENDENT AUDITORS' REPORT

Dear Sir:

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

In our opinion the aforementioned Statement of Financ
financial position of Bernard L. Madoff at October 31, 19
accepted accounting principles applied on a basis consi

ECOT-BR00010120

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

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

231. The AICPA, the New York State Education Department Office of the Professions and the SEC standards require that auditors maintain client independence.[187] For example, the AICPA requires that "an auditor must be free from any obligation to or interest in the client, its management, or its owners."[188]

232. Under SEC regulations, independence is impaired when an accountant has "[b]rokerage or similar accounts maintained with a broker-dealer that is an audit client, if…[t]he value of assets in the accounts exceeds [$500,000]."[189]

233. According to the New York State Society of Certified Public Accounts, independence will be considered to be impaired if the public accountant, or a partner in the firm, (i) had a direct or material indirect financial relationship with any officer, director, employee or principal stockholder of the enterprise, or (ii) if the licensee or a member of his or her or the partner's immediate family, is or has been involved in any situation creating a conflict of interest, during the period covered by the examination or at the time of issuance of a report.[190]

234. F&H was not independent with respects to the rules, regulations and requirements of the AICPA, the State of New York and the SEC. In particular, Friehling and/or his wife had investment accounts at BLMIS from the early 1980s. Between the years 1983 and 2008, the Friehling accounts had an average equity balance of at least $6.2 million.[191] It was also noted that Friehling's former partner, Horowitz, also had investment accounts in BLMIS.

235. F&H provided tax and possibly other services to BLMIS. It is unclear whether these services also violated independence rules.[192]

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

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

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

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

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

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

B. OPINION NO. 2: HOUSE 17 WAS A PONZI SCHEME.

i. Indicia of Ponzi

a. Definition of Ponzi scheme

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

b. Background on Ponzi schemes.

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

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by an auditor and consider, among others, the nature of and fees obtained for the other services in relation to the fees received for performing an audit. (*See* for example, SEC Rule 17 C.F.R. §210.2-01(c)(4).)

[193] Fraud Examiners Manual, 2009 at 1.1731.

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

[195] Black's Law Dictionary 1180 (7th ed. 1999). This definition concurs with that of the SEC, which defines a Ponzi scheme as, "…an investment fraud that involves the payment of purported returns to existing investors from funds contributed by new investors. Ponzi scheme organizers often solicit new investors by promising to invest funds in opportunities claimed to generate high returns with little or no risk. In many Ponzi schemes, the fraudsters focus on attracting new money to make promised payments to earlier-stage investors and to use for personal expenses, instead of engaging in any legitimate investment activity." *Frequently Asked* Questions, U.S. SEC (last visited Nov. 20, 2011), http://www.sec.gov/answers/ponzi.htm#PonziWhatIs
Moreover, this definition is also consistent with opinions issued by the Second Circuit: "A 'Ponzi' or 'Pyramid' scheme is a fraudulent investment scheme in which money contributed by later investors is used to pay artificially high dividends to the original investors, creating an illusion of profitability, thus attracting new investors." *Bear, Stearns Sec. Corp. v. Gredd (In re Manhattan Inv. Fund Ltd.)*, 397 B.R. 1, 8 (S.D.N.Y. 2007); *aff'd*, 328 Fed. Appx. 709 (2d Cir. N.Y. 2009).

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

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

238. The appearance of a successful investment often draws more investors into the scheme. In fact, many of the original investors will *reinvest their proceeds and principal* back with the fraudster. This infusion of cash aids the fraudster in continually paying out the next round of investors.[198] Instead of actually investing the money the fraudster collects, the funds not used to pay other investors are usually used for personal enrichment.

239. The Ponzi scheme is dependent on a continuous flow of funds for its existence. Without cash coming in, the scheme is no longer able to pay older investors and collapse is inevitable.[199] Early investors who exit the scheme in time often escape with their principal and a substantial "phantom gain," so called because the gain is just a portion of other investors' principal. It is the later investors, and those who have not withdrawn from the scheme, who suffer the fallout upon collapse.[200]

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

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

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[197] Encyclopedia of Fraud 603 (3rd ed. 2007).
[198] Encyclopedia of Fraud 601 (3rd ed. 2007).
[199] Steven L.Skalak, Thomas W. Golden, Mona M. Clayton & Jessica S. Pill, *A Guide to Forensic Accounting Investigation*, 496 (2nd Edition, Wiley, 2011).
[200] *Id.*

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

241. In order for House 17 to have realized the investment returns as reported on its customer statements and continue to make cash disbursements to customers from these earnings, the purported trades would have had to have been actually executed in the market. They were not. In comparison to House 5, which had nearly 80 connections to handle order flow, execution capabilities through its proprietary MISS system, connections to the exchanges and real time market data and information providers, House 17 had limited connectivity to the world outside of House 5. House 17's computer systems consisted largely of the AS/400 and hardware and software necessary only to perpetrate the fictitious trading activities and produce customer statements and related fictitious trading documentation.

242. As detailed above, the investigation and analysis of House 17 showed that beginning at least in the 1970s, the trades that House 17 purported to trade could not have been executed. The analyses show, among others:

- Trading volumes that exceed the daily U.S. trading volume for securities;
- Trading prices that were either above or below the reported daily market trading price range;
- Dividends that were not recorded to customers;
- Trades executed on holidays and weekends;
- Trades that settled at non-standard settlement durations; and
- Purchasing of securities at market lows and selling securities at market highs at an unattainable consistent rate.

243. Further, had the securities reported on the House 17 customer statements actually been executed, a custody record would be available from the DTC. Analyses conducted during this investigation, however, show that only those securities traded through House 5 were custodied at or cleared through BLMIS's DTC and OCC accounts. As the DTC is also the clearing and custody agent for OTC trading, House 17 trades could not have been executed in the OTC market.

244. The trading of derivatives, such as options, in the OTC market is largely conducted under agreements published by the International Swaps and Derivatives Association ("ISDA"). ISDA agreements set forth the standard terms to which the counterparties would be bound by the derivative transaction. While ISDA agreements were in effect for BLMIS, they were executed for derivative trades outside the scope of House 17's strategy (e.g., swaps) and were issued and signed by House 5 employees. No ISDA agreements were located for any purported House 17 option trades.

245. The investigation showed that not only were House 17 trades not executed through House 5, but they could not have been executed by MSIL on European exchanges. In many instances trades purportedly traded by House 17 were not traded on European exchanges since those equities were not registered to be sold on those exchanges. In other instances, the purported trades were traded at volumes on those European exchanges that were dwarfed by the volumes reflected on House 17 customer statements confirming that they were not legitimate trades.

246. The investigation and analyses show that, without actual trades being executed through House 17, payment of fictitious profits as well as customer redemptions could only have been fulfilled using Other People's Money.

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

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

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

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

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

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

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

Table 10

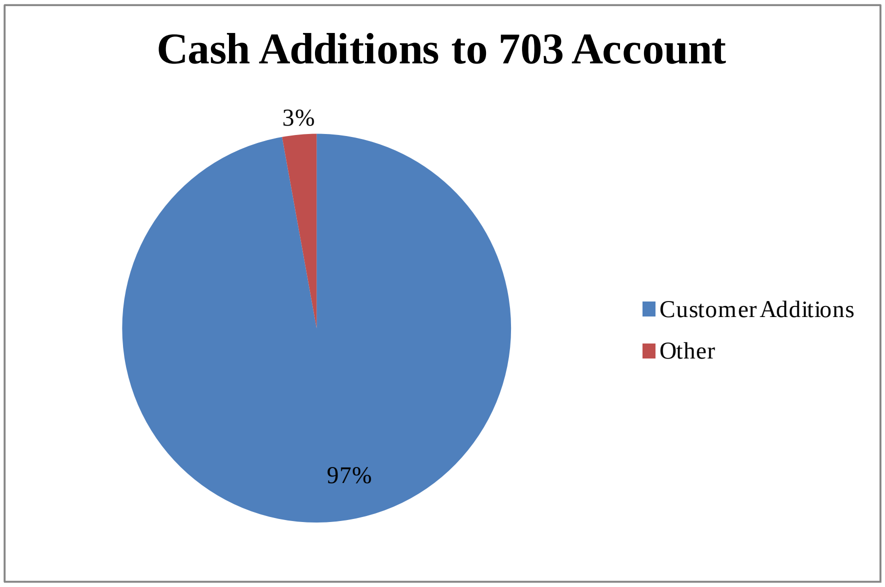
	Revenue reported on FOCUS Reports ("A")	House 17 Other People's Money in FOCUS Report ("B")	Total Excluding House 17 Other People's Money in FOCUS Report ("C")	"B" as a percent of "A"
2000	$209,788,597.00	$75,582,928.71	$134,205,668.29	36.0%
2001	169,110,236.00	72,403,594.92	96,706,641.08	42.8%
2002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

Note: 2008 figures are through Q3 2008.

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

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

Figure 45[201]



252. Since there is no income-producing activity, Ponzi schemes are at risk of liquidity shortages when incoming cash flows diminish and outgoing redemptions increase. At one point, the balance of the 703 Account became so dangerously low that House 17 faced a severe liquidity crisis, which nearly forced the Ponzi scheme to unravel. From approximately October 2005 through June 2006, House 17 investor redemptions requests far exceeded investor deposits during this period. BLMIS survived, in part, by borrowing bonds from a long-time customer of Madoff, and transferring cash from the House 5 bank accounts to meet redemptions.

253. On November 14, 2005, BLMIS requested a $95 million loan[202] from JPMC, collateralized by a Federal Home Loan Bank Bond in the principal amount of $100 million due April 8, 2009.[203] According to JPMC records, the $100 million Federal Home Loan Bank Bond was received from the customer on November 4, 2005. However, BLMIS paid the customer approximately 30% interest[204] on the bond by quarterly deposits into various accounts at JPMC held by the customer.

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[201] Based on account activity from December 1998 to December 2008. “Other” transactions include, but are not limited to, overnight sweep additions, other incoming wires or checks.
[202] BLMIS request for loan to JPMorgan on November 14, 2005. JPMSBT0002332 at 2336.
[203] *Id.*; JPMorgan Position Statement as of December 31, 2005. SECSBM0000041
[204] Customer loan account document. MADTSS01163051

254. JPMC credited $95 million to the 703 Account on November 14, 2005.[205]

255. On January 18, 2006, BLMIS requested an additional $50 million loan[206] from JPMC. Collateral for this loan was two more Federal Home Loan Bank Bonds from the customer, one bond was worth $9 million and the other was worth $45 million, together totaling $54 million.[207]

256. On January 23, 2006, JPMC credited the 703 Account with $50 million.[208]

257. On June 1, 2006, BLMIS notified JPMC that it was repaying both loans, for a total amount of approximately $145 million[209] in principal, from the 703 Account.

258. Separately, the House 17 bank accounts were reduced so dramatically during the liquidity crisis that BLMIS used the House 5 bank account ("621 account") to meet four separate investor redemption requests totaling approximately $262 million.[210]

259. By June 2006, after the liquidity crisis had subsided, BLMIS transferred $261.8 million of new investor money in the House 17 bank accounts to the House 5 bank accounts. The transfer effectively reimbursed the House 5 bank accounts for the investor redemptions paid from those accounts.

260. The liquidity crisis is but another indicator that House 17 was a Ponzi scheme.

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

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

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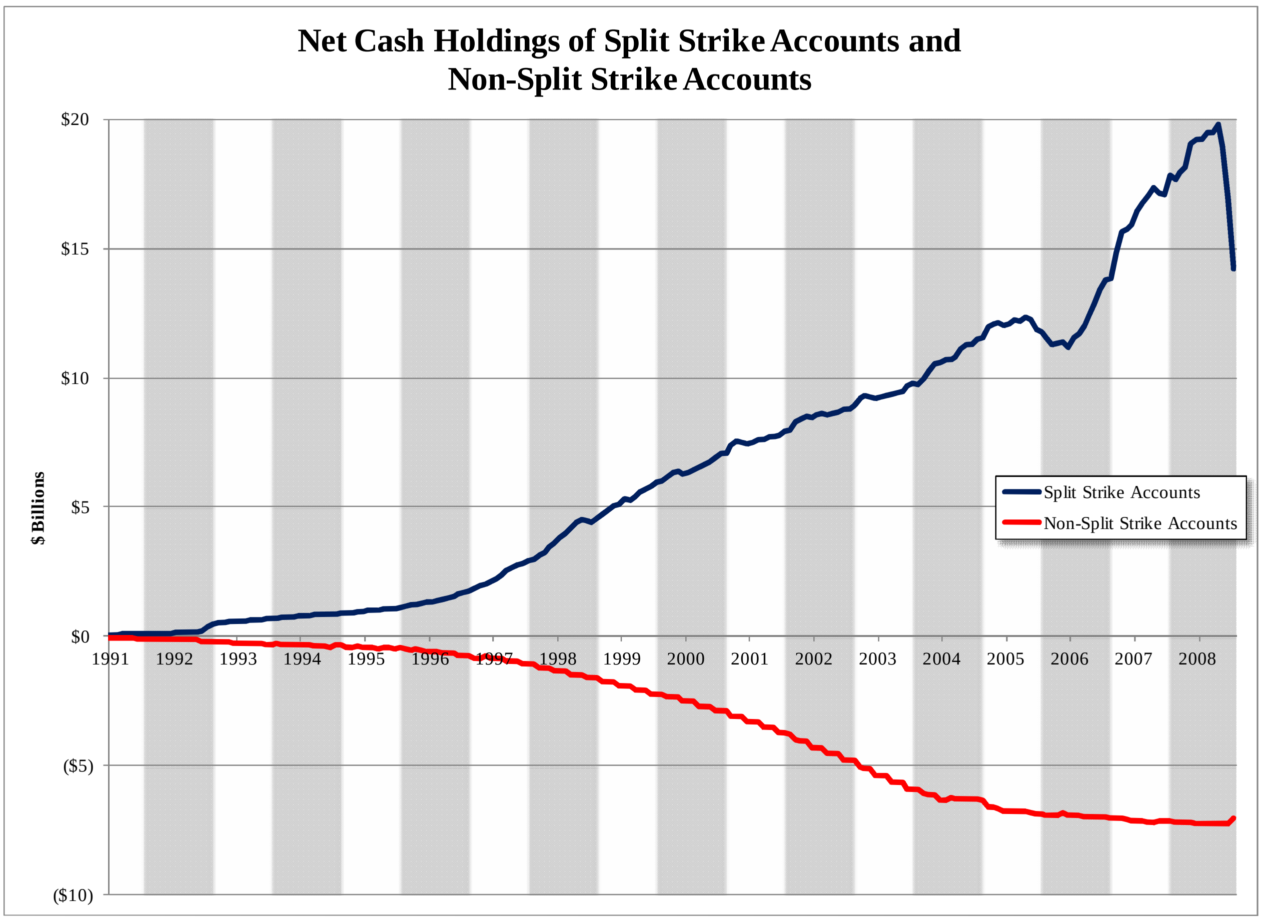
[205] JPMorgan Chase Statement of Account ending November 30, 2005, JPMSAB0002491 at 2511.
[206] BLMIS request for loan to JPMorgan on November 14, 2005. JPMSBT0002332 at 2338 and 2341
[207] *Id.*
[208] JPMorgan Chase Statement of Account ending January 31, 2006, JPMSAB0002865 at 2909
[209] JPMSBT0002332 at p. 2342
[210] BONY bank statements SECSBJ0008118, SECSBJ0008135 and SECSBJ0008137 and Customer Statements MDPTPP05530971, MDPTPP00020510 and MDPTPP02979426.

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

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

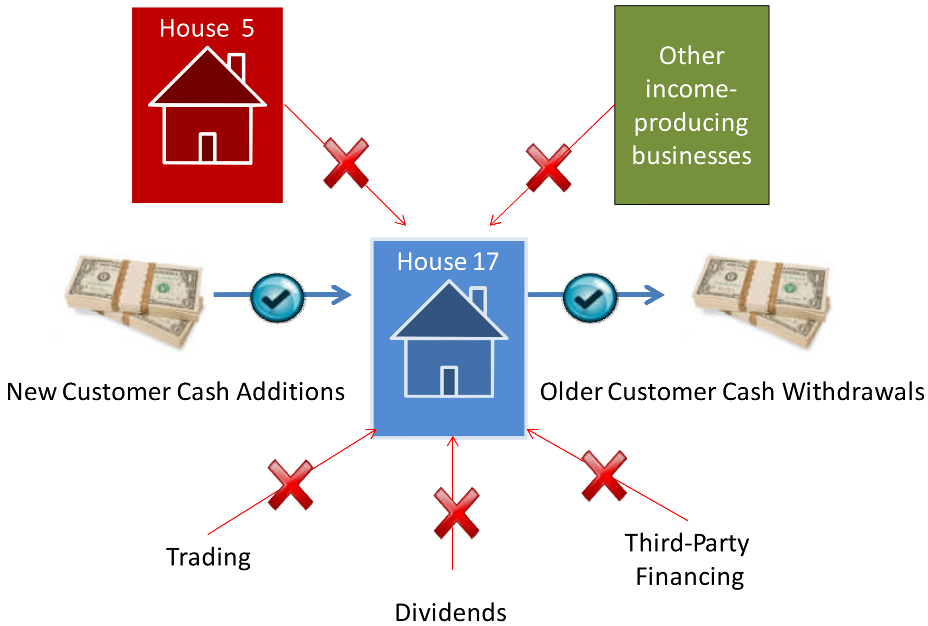
Figure 46



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

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

Figure 47



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

264. The term "insolvent" means:

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

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

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

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

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[212] 11 U.S.C. § 101(32) (2011).

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

266. In assessing the legitimacy of House 17, the solvency of BLMIS was evaluated as of December 11, 2002 (a date selected by counsel for the six-year period prior to the BLMIS bankruptcy filing date). To complete the solvency analysis, the relevant assets and liabilities of both House 5 and House 17 were considered.

267. <u>Important assumptions involving solvency:</u> In evaluating the solvency of BLMIS, an important predicate assumption has been made. The standard of value that was assumed was Fair Market Value ("FMV"). Fair Market Value as used herein is defined as the price at which property would change hands between a willing buyer and willing seller, neither being under any compulsion to buy or sell and both having reasonable knowledge of relevant facts.[213] Accordingly, in the case of assessing the FMV of BLMIS, a willing buyer is assumed to be a hypothetical one that would have completed proper due diligence and if fraud at BLMIS was discovered at that time (i.e. December 2002), would have assessed that fact and any resulting value ascribed would be materially less than any value assuming no fraud existed.

268. In fact once the fraud was discovered, BLMIS was liquidated and under an order signed by U.S. Bankruptcy Judge Burton Lifland, a bidding process was ordered for House 5 with an auction proceeding on April 27, 2009. Castor Pollux Securities bought the trading business for $25.5 million, with $1 million payable at closing and $24.5 million in deferred compensation through December 2013.[214] By August 2011, however, the board of directors of Castor Pollux decided to voluntarily wind-down the business as attempts to raise additional capital had failed. According to publicly available data, the Trustee has only received approximately $1.2 million from the sale.[215]

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[213] Treas. Reg. § 20.2031-1b; Rev. Rul. 59-60, 1959-1 C.B. 41.
[214] *See Press Release Irving H. Picard – Trustee Announces Winning Bid of Up to $25.5 Million for Madoff Market Maker Business*. PR Newswire (last visited Nov. 18, 2011), http://www.prnewswire.com/news-releases/trustee-announces-winning-bid-of-up-to-255-million-for-madoff-market-maker-business-61997332.html.
[215] *See* http://online.wsj.com/article/SB10001424052970203388804576617230200603402.html

269. However, to conduct a solvency analysis in the light most favorable to a finding of solvency, House 5 was valued using the FMV standard of value which assumes House 5 as a going concern rather than in a liquidation which would have yielded little if any value as evidenced by the Trustee's sale discussed above. Additionally, where other assumptions were made in the analysis, those assumptions were generally made in the light most favorable to the determination of a finding of solvency. Further, certain assumptions regarding aggregate compensation expense were made solely for the purposes of assessing the solvency of BLMIS. Accordingly, no analysis and, therefore, no opinion is made as to the reasonableness of, or the propriety of the compensation or other perquisites received by any individual employee, director or officer of BLMIS during these time periods.

270. To evaluate the solvency of BLMIS as of the Valuation Date, three tests are typically used when a company is in bankruptcy.[216] These tests include:

- Balance Sheet[217]
- Ability to Pay Debts[218]
- Capital Adequacy[219]

271. Under these tests, to be solvent, a company is required to pass the Balance Sheet Test (further described below). The company is also required to have the ability to pay debts and be adequately capitalized in order to be considered solvent.[220]

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[216] 11 U.S.C. § 548
[217] 11 U.S.C. § 548 (a)(1)(B)(ii)(I)
[218] 11 U.S.C. § 548(a)(1)(B)(ii)(III)
[219] 11 U.S.C. § 548(a)(1)(B)(ii)(II)
[220] Adequate Capital requires that a company's capital be sufficient to afford managers a reasonable chance of executing a reasonable business strategy in expected market conditions. Judgment of capital adequacy should consider: (1) capital already obtained; (2) capital to which the company has reasonable access; and (3) the Company's flexibility to meet unexpected developments. In general, a company's capital requirements are driven by characteristics of its industry, its business strategy, the reasonably foreseeable actions of competitors, customers and suppliers, and contemporary external economic and capital market conditions. In its plainest meaning, the ability to pay debts is the ability to avoid default. Put another way, default is the inability to pay one's debts. Thus the simplest measure of ability to pay is (one minus) the probability of default. It is, for example, the probability of default that a credit rating is intended to reflect.

a. Balance Sheet Test:[221]

272. Solvency, employing the Balance Sheet Test, is generally defined as the Fair Market Value of a company's assets (often determined by valuing the business enterprise on a going concern basis versus a liquidation basis) exceeding the stated amount (or expected value where appropriate) of its liabilities. There are three approaches commonly used to estimate the FMV of assets: an Adjusted Balance Sheet Approach, an Income Approach and a Market Approach.

273. A major assumption in the determination of FMV is that all of the relevant information as of the valuation date is disclosed to a hypothetical buyer of the business. This information includes, but is not limited to, accurate financial information and any other operating performance information that might affect the perception of value. In the case of House 5, it is now known that the revenue information that was contained in the FOCUS reports was significantly overstated, utilizing fictitious revenues derived from Other People's Money from House 17. Combined with the fact that House 17 was not a legitimate business and was perpetrating a Ponzi scheme, these facts would have had a materially negative impact on any FMV attributable to House 5 as of December 11, 2002 (*see* discussion *supra*). Moreover, to the extent that it would have been publicly known at the time that House 5 was reporting revenues that included hundreds of millions of dollars of Other People's Money from the IA Business, House 5 would have been so tainted by the negative association to the problems identified throughout this report that the House 5 business would have been virtually valueless.

274. <u>Adjusted Balance Sheet Approach:</u>[222] The Adjusted Balance Sheet Approach begins with a review of a company's balance sheet, prepared in accordance with U.S. generally accepted accounting principles ("GAAP") as of or near the valuation date. Assets and liabilities omitted from U.S. GAAP accounts (i.e., off balance sheet assets and liabilities) are then

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

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

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

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

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

where:

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

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

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

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

277. Market Approach:[225] The Market Approach indicates the FMV of a business based on a comparison of the business to comparable firms in similar lines of business that are publicly-traded, comparable public or private sale transactions in similar businesses or prior transactions in a company's securities is generally estimated in this approach through the Guideline Company Method or the Guideline Transaction Method.

278. Guideline Company Method:[226] The Guideline Company Method indicates the FMV of a business by comparing it to publicly-traded companies in similar lines of business. The conditions and prospects of companies in similar lines of business depend on common factors such as overall demand for their products and services. An analysis of the market multiples of companies engaged in similar businesses yields insight into investor perceptions, and therefore, the value of the subject company.

279. After identifying and selecting the guideline publicly-traded companies, their business and financial profiles are analyzed for relative similarity. Considerations of factors such as size, growth, profitability, risk, and return on investment are also analyzed and compared to the comparable businesses. Once these differences and similarities are assessed, for purposes of the House 5 valuation, equity value ("EV") multiples (i.e., EV/ Book Value) of the publicly-traded companies are calculated. These multiples are then applied to the subject company's operating results, and adjusted for special and nonrecurring items, to estimate the FMV of the subject company's enterprise. A control premium is then applied to this value to calculate the indicated Fair Market Value of the equity on a marketable, controlling basis.

280. Guideline Transaction Method: The Guideline Transaction Method estimates the FMV of a business based on exchange prices in actual transactions and on asking prices for controlling interests in public or private companies currently offered for sale. The process essentially involves comparison and correlation of the subject company with other similar companies. Adjustments for differences in factors described earlier (i.e., size, growth, profitability, risk, and return on investment) are also considered.

281. In selecting comparable transactions, merger and acquisition databases and financial publications are typically searched to identify transactions that are disclosed and to gather

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[225] *Statement on Standards for Valuation Services*, *supra*, 18-20; Pratt, Reilly & Schweihs, *supra*, 226.
[226] Pratt, Reilly & Schweihs, *supra*, 260-261.

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

(i) Determination of Solvency of BLMIS

282. The Balance Sheet Test was employed to evaluate the solvency of BLMIS.[227] Two business segments of BLMIS were considered: House 17 and House 5. First, House 17, was analyzed. As discussed *supra*, House 17 was a Ponzi scheme and was not a legitimate business. Since it would be inappropriate to consider House 17 as a going concern for purposes of a solvency analysis, the only relevant balance sheet components to consider are the cash held by BLMIS's House 17, its customer liabilities and other liabilities of general creditors. Second, House 5, which was treated in this analysis as a going concern as of the December 2002 was analyzed (*see* discussion *supra* regarding critical predicate assumptions). To determine the FMV of House 5, a complete business valuation of House 5 was performed. The resulting components of House 17 and House 5 were combined in order to arrive at a final conclusion of whether BLMIS was insolvent as of December 11, 2002.

283. The information relied upon for the solvency analysis was the best information available to form the basis for the opinions expressed herein. FOCUS reports, filed with the SEC, were obtained and the financial information contained in the reports was used as the basis for analyzing BLIMS's historical and projected financial performance. However, as more fully described below as well as in other sections of this Report, the FOCUS reports are known to have contained false information regarding the operations of BLMIS and were adjusted accordingly.

284. Cash Held as of December 11, 2002 - The total positive balances in the House 17 related accounts were approximately $1.5 billion as of December 11, 2002.[228]

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

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

285. Customer Liabilities of House 17 as of December 2002- In order to determine customer liabilities, FTI calculated which customers had contributed more cash to House 17 than they withdrew. These amounts for all of these customers were aggregated on a given day to derive the total customer liability as of that date. As of October 31, 2002 and December 31, 2002 the customer liability was \$11.9 billion and \$12.0 billion, respectively.[229]

286. FTI determined the principal balance of a customer by crediting the amount of cash deposited from the inception of the customer account and subtracting the amount of cash withdrawn from a customer account through the date of determination.[230] In addition to accounting for the cash-in and cash-out transactions, FTI also accounted for the direct transfer and withdrawal of real securities that were either deposited or withdrawn by customers from their accounts. By focusing on cash (or securities) deposited or withdrawn from a customer's account, the method excluded the following:

- Any purported earnings/gains from trading activity reflected in the account holders' account statements;[231]
- Any interest earned on cash balances from customer deposits in House 17's 703 Account; and
- Any transfers of Other People's Money between accounts (i.e., transfers to an account for which the transferor account did not have sufficient principal at the time of the transfer).

287. In order to assess the accuracy of FTI's calculation of the principal balance of a customer a review of the full customer liabilities was undertaken for purposes of inclusion in a solvency analysis. Access was provided to information including numerous data bases including information derived from customer statements (or alternative sources if necessary) and other

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

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

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

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

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

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

a. House 5 Financial Background

289. House 5 operated as a securities broker-dealer registered with the SEC. It provided executions for broker-dealers, banks, and financial institutions, and was a member of the National Association of Securities Dealers, Inc.

290. In order to properly understand the financial condition of House 5, its financial statements covering two decades as well as numerous industry and equity analyst reports were analyzed and relied upon. For purposes of this Report, all financial information is presented for the year ending ("y/e") December 31 (unless otherwise noted) and based on Adjusted FOCUS report data (*see* definition of "Adjusted" in Appendix C). The following table shows summary financial data for the periods prior to the valuation date.

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

Table 11

Adjusted FOCUS Report Historical Financials[233]

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

iv. Selected Valuation Approaches

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

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

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

a. Income Approach

292. The most common and generally accepted method within the Income Approach is the DCF method. A DCF model is typically developed based on estimates of future revenues, overall operating costs, working capital requirements and capital expenditures, among other things. For House 5, projected financial information ("PFI") was derived based on a review and analysis of House 5's historical operating and financial performance, as well as a comparison to other industry participants. After conducting additional analysis, PFI was estimated for the calendar years ending December 31, 2003 through 2007 (the "Projection Period").

293. As of the Valuation Date, House 5 was operating sub-optimally with less leverage and more non-restricted cash than its peers. Specifically, the calculated Leverage Ratio for House 5 as of the Valuation Date was 1.55, while the weighted average Leverage Ratio of the Concluded Guideline Companies was 3.17.[234] Additionally, House 5 held $107 million of non-restricted cash, for a Cash Ratio of 27 percent, compared to eight percent for the Concluded Guideline Companies as of the Valuation Date.[235] House 5's financial performance was adjusted to reflect a higher Leverage Ratio and lower Cash Ratio, which had the effect of increasing the valuation. By relevering the business, the resulting value derived is significantly increased. The predicate assumption for re-levering is based on the assumption that the business would be able to borrow more money to invest in the business. Accordingly, if the fraud and/or Ponzi was known at that time, the ability to borrow additional funds for House 5 would have been severely negatively impacted. *See* Appendix C for further detail.

294. Pro forma year end 2002 financial statements were derived by estimating income and expense based on historical information adjusted for the recapitalization describe above and in greater detail in Appendix C. PFI for the projection period was estimated by extrapolating growth in revenue and expenses over the Projection Period. Below is a table of projected income and expenses for the period from 2003-2007.[236]

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[234] The ratio of total assets to total liabilities. See page 8 of Appendix C.
[235] The ratio of non restricted cash to total assets. See page 8 of Appendix C.
[236] *See* Appendix C for assumptions related to this projection.

Table 12

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

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

b. Guideline Company Method

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

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

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

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

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

c. Comparable Transaction

299. To identify comparable transactions, merger transactions were screened in the relevant industry group or met keyword criteria that occurred in the two years prior to the valuation date. These criteria identified 13 potentially similar transactions; however, in each case the resulting company was too dissimilar to House 5 to make a reliable comparison for purposes of estimating value. As a result, the Comparable Transaction Method was not directly relied upon as a value indicator and was instead used primarily to corroborate the results of the Income Approach.

300. Based on the above analyses, the Fair Market Value of 100 percent of the equity of House 5, on a marketable, controlling interest basis, was estimated at $450 million, as of the Valuation Date. The following table summarizes these findings:

Table 13

Valuation Approach	**Indicated Fair Market Value**
	($ millions)
Income Approach	$460
Guideline Company Approach	$420
Concluded Fair Market Value (rounded)	**$450**

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

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

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

302. The resulting negative $9.95 billion demonstrates that BLMIS was deeply insolvent as of December 11, 2002.[238] As a result of failing the Balance Sheet Test, it was determined that an analysis of BLMIS's capital adequacy or ability to pay debts was unnecessary since it is inconceivable that the business could pay its debts or operate based on the depth of its insolvency. Further, as a result of the growing customer liability from approximately $12 billion in December 2002 to approximately $19.7 billion on December 11, 2008, it is my opinion the BLMIS was insolvent at all times after December 11, 2002 as well.

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

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

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

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

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

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

VII. BASES FOR THE OPINIONS IN MY REPORT

305. I base my opinions below on my formal education and over twenty eight years of practical experience as a C.P.A. and an expert in forensic accounting, fraud examinations, computer forensics, accounting, taxation, business valuations, bankruptcy accounting and investment advisory services. Additionally, my opinions and the bases for them are based in part on my knowledge of Generally Accepted Accounting Principles, industry accepted accounting practices, fraud examination theory, forensic accounting theory, commercial damage theory, business valuation theory, the Internal Revenue Code and related taxing authority pronouncements and rulings, investment theory and knowledge, investment advisory knowledge and economic forecasting methodology.

306. I further base my opinions on the documents that were made available to me by the lawyers at Baker. These documents are listed in Appendix B. I understand that these documents have, or will be produced by the parties in this litigation. I reserve the right to supplement and/or amend my opinions contained in this report should additional materials and/or documents become available that require such supplementation.

Bruce G. Dubinsky, MST, CPA, CFE, CVA, CFF, CFFA
November 22, 2011 (originally submitted)

January 6, 2012 (submitted with corrections)

APPENDICES

APPENDIX A

QUALIFICATIONS OF BRUCE G. DUBINSKY

Bruce G. Dubinsky
Managing Director
Duff & Phelps, LLC

DUFF & PHELPS

P R O F E S S I O N A L   C R E D E N T I A L S

Bruce Dubinsky, MST, CPA, CVA, CFE, CFF, CFFA 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 twenty-eight 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 an expert for federal income tax matters by the United States Department of Justice as well as the Office of Chief Counsel for the Internal Revenue Service. Many of these cases involved abusive tax shelters and Listed Transactions which surrounded the purchase and sale of notional principle contracts for a variety of derivative financial instruments valued in the hundreds of millions of dollars.***

- ***Bruce is currently 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 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.***

Phone: 202-649-1212 ▪ Fax: 240-312-2340 ▪ Mobile: 240-413-3145 ▪ E-mail: bruce.dubinsky@duffandphelps.com

Professional Experience *(continued)*

Areas of Bruce's practice included:

- Fraud Investigations
- Complex Tax Controversy Cases
- Commercial Damage/Lost Profits Analysis
- Intellectual Property Damages
- Accounting Malpractice
- Bankruptcy Investigations/Compliance
- 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 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.

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

Bachelors of Science - Accounting, University of Maryland – 1983

Education & Certifications

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
- Certified Forensic Financial Analyst - 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

American Institute of Certified Public Accountants
- Business Valuation & Forensic Services Section

DUFF & PHELPS

BRUCE G. DUBINSKY, MST, CPA, CVA, CFE, CFF, CFFA

FEDERAL RULE 26(a)(2)(B) DISCLOSURE

FEDERAL RULES OF CIVIL PROCEDURE

TESTIMONY AT TRIAL AND/OR DEPOSITION

(underline denotes party represented)

Estate of Elizabeth S. Snow, Deceased, Philip F. Brown, Executor v. United States of America U.S. District Court of Washington at Tacoma Case No. 3:10-cv-05793-RBL October 27, 2011 (Deposition)	***South Florida Physician's Network, LLC and United Health Networks, Inc. and United Health Network of Florida, Inc.*** American Arbitration Association Case No. 32 193 Y 00567 10 August 11, 2011 (Deposition)
Clay Vance Richardson et al v. Frontier Spinning Mills Inc. et al. General Court of Justice Superior Court, North Carolina Case No: 10 CVS 1040 June 3, 2011 (Deposition)	***Glynn v. EDO Corporation*** U.S. District Court for the District of Maryland Case No. 1:07-cv-01660-JFM February 25, 2011 (Deposition)
HCP et al v. Sunrise Senior Living Management, Inc. et al. 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)	***Perot Systems Government Services, Inc. v. 21st Century Systems, Inc. et al.*** Circuit Court for Fairfax County Virginia Case No. 2009-08867 June 22, 2010 (Trial) May 28, 2010 (Deposition)
ClassicStar Mare Lease Litigation James D. Lyon, Chapter 7 Trustee of ClassicStar, LLC v. Tony P. Ferguson et al. 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)	***Sands Capital Management, LLC v. Scott E. O'Gorman*** American Arbitration Association Case No. 16 148 Y 00459 09 April 28, 2010 (Trial)
Bemont Investments LLC v. United States 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)	***HCP Laguna Creek CA et al v. Sunrise Senior Living Management, Inc.*** U.S. District Court for the District of Eastern Virginia Case No: 1:09 CV 824-GBL/JFA February 26, 2010 (Deposition)

<u>Global Express Money Orders, Inc</u>. v. Farmers & Merchants Bank et al Circuit Court for Baltimore City Case No: 24-C-08-004896 OT January 13, 19 & 25, 2010 (Deposition)	***In re <u>UnitedHealth Group, et al</u>. v. American Multispecialty Group d/b/a/ Esse Health*** American Arbitration Association Case No. 57 193 Y 00004 08 June 9 & 10, 2009 (Trial) April 24, 2009 (Deposition)
<u>Wills Family Trust</u> v. Martin K. Alloy et al. 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)	***Southgate Master Fund v. <u>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)
<u>Elize T. Meijer and Marcel Windt, Trustees in the Bankruptcy for KPNQwest, N.V. and Global Telesystems</u> v. H. Brian Thompson U.S. District Court for the Eastern District of Virginia – Alexandria Division Case No: 1:08CV673 December 2, 2008 (Deposition)	***<u>Hoehn Family, LLC</u> v. Price Waterhouse Coopers, LLC*** Circuit Court of Jackson County Missouri at Independence Case No: 0516-CV36227 September 3, 2008 (Deposition)
World-Wide Network Services, LLC, et al. v. <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)	***<u>Calomiris v. Tompros, et al</u>.*** Superior Court for the District of Columbia Case No: ADM 2000-2175-00 January 17, 2008 (Trial)
<u>Harslem et al</u>. v. Ernst & Young, LLP American Arbitration Association Case No: 30 107 Y 00303 06 November 6 & 7, 2007 (Trial)	***<u>Rosenbach et al</u>. v. KPMG, LLP et al.*** American Arbitration Association Case No: 13 181 Y 00437 06 October 22, 2007 (Trial)
United States v. <u>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)	***<u>Autoscribe Corp</u>. v. 9801Washingtonian Office, Inc. et al.*** Circuit Court for Montgomery County, Maryland Civil Action: Case No. 274847 September 11, 2007 (Deposition)
<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)	***<u>Jerald M. Spilsbury et al</u>. v. KPMG, LLP et al.*** District Court, Clark County, Nevada Civil Action: Case No: A479003 July 12, 2007 (Deposition)
<u>John E. Gallus et al</u>. v. Ameriprise Financial, Inc. United States District Court, District of Minnesota Civil Action, Docket No.: 0:04-cv-4498 January 23, 2007 (Deposition)	***<u>Michael J. Sullivan and Jill P. Sullivan</u> v. KPMG LLP and QA Investments LLC*** Superior Court of New Jersey Law Division, Monmouth County Civil Action, Docket No.: MON-L-4279-04 November 30, 2006 & December 12, 2006 (Deposition)

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Revised 11/11

DUFF & PHELPS

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APPENDIX B

DOCUMENTS CONSIDERED

APPENDIX "B"

LISTING OF DOCUMENTS CONSIDERED BY BRUCE G. DUBINSKY, MST, CPA, CVA, CFE, CFF, CFFA

I have considered the pleadings in this case, as well as documents & other information produced by the parties to this case & gathered during my research. Accordingly, my report & Appendix C contain various footnote references & discussion of documents specifically relied upon by me in issuing my expert opinions in this case. In addition to the documents cited in my report & Appendix C, the following documents were considered by me in issuing my expert opinions in this report. Documents identified / named below are to be considered inclusive of any & all exhibits to the particular document.

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847	New York Exchange Bonds at 44, Wall St. J. (Mar. 5, 1980).
848	New York Exchange Bonds at 44, Wall St. J. (May. 15, 1979).
849	New York Exchange Bonds at 44, Wall St. J. (May. 16, 1979).
850	New York Exchange Bonds at 44, Wall St. J. (May. 21, 1980).
851	New York Exchange Bonds at 44, Wall St. J. (May. 22, 1980).
852	New York Exchange Bonds at 44, Wall St. J. (May. 29, 1980).
853	New York Exchange Bonds at 44, Wall St. J. (May. 4, 1981).
854	New York Exchange Bonds at 44, Wall St. J. (May. 4, 1981).
855	New York Exchange Bonds at 44, Wall St. J. (May. 7, 1980).
856	New York Exchange Bonds at 44, Wall St. J. (May. 7, 1980).
857	New York Exchange Bonds at 44, Wall St. J. (May. 7, 1980).
858	New York Exchange Bonds at 44, Wall St. J. (May. 8, 1980).
859	New York Exchange Bonds at 44, Wall St. J. (Nov. 14, 1979).
860	New York Exchange Bonds at 44, Wall St. J. (Nov. 15, 1979).
861	New York Exchange Bonds at 44, Wall St. J. (Nov. 15, 1979).
862	New York Exchange Bonds at 44, Wall St. J. (Nov. 21, 1979).
863	New York Exchange Bonds at 44, Wall St. J. (Nov. 21, 1979).
864	New York Exchange Bonds at 44, Wall St. J. (Nov. 22, 1978).
865	New York Exchange Bonds at 44, Wall St. J. (Nov. 27, 1979).
866	New York Exchange Bonds at 44, Wall St. J. (Nov. 27, 1979).
867	New York Exchange Bonds at 44, Wall St. J. (Nov. 28, 1979).
868	New York Exchange Bonds at 44, Wall St. J. (Nov. 29, 1979).

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869	New York Exchange Bonds at 44, Wall St. J. (Nov. 6, 1978).
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872	New York Exchange Bonds at 44, Wall St. J. (Oct. 2, 1979).
873	New York Exchange Bonds at 44, Wall St. J. (Oct. 22, 1979).
874	New York Exchange Bonds at 44, Wall St. J. (Oct. 3, 1979).
875	New York Exchange Bonds at 44, Wall St. J. (Sep. 11, 1979).
876	New York Exchange Bonds at 44, Wall St. J. (Sep. 11, 1980).
877	New York Exchange Bonds at 44, Wall St. J. (Sep. 19, 1979).
878	New York Exchange Bonds at 44, Wall St. J. (Sep. 20, 1979).
879	New York Exchange Bonds at 44, Wall St. J. (Sep. 20, 1979).
880	New York Exchange Bonds at 44, Wall St. J. (Sep. 26, 1979).
881	New York Exchange Bonds at 44, Wall St. J. (Sep. 26, 1979).
882	New York Exchange Bonds at 45, Wall St. J. (Feb. 13, 1987).
883	New York Exchange Bonds at 45, Wall St. J. (Mar. 9, 1987).
884	New York Exchange Bonds at 46, Wall St. J. (Aug. 19, 1981).
885	New York Exchange Bonds at 46, Wall St. J. (Aug. 6, 1981).
886	New York Exchange Bonds at 46, Wall St. J. (Feb. 11, 1982).
887	New York Exchange Bonds at 46, Wall St. J. (Feb. 11, 1982).
888	New York Exchange Bonds at 46, Wall St. J. (Jan. 16, 1985).
889	New York Exchange Bonds at 46, Wall St. J. (Jan. 17, 1985).
890	New York Exchange Bonds at 46, Wall St. J. (Jan. 31, 1985).
891	New York Exchange Bonds at 46, Wall St. J. (Jun. 24, 1987).
892	New York Exchange Bonds at 46, Wall St. J. (May. 21, 1987).
893	New York Exchange Bonds at 46, Wall St. J. (May. 28, 1981).
894	New York Exchange Bonds at 46, Wall St. J. (Oct. 27, 1980).
895	New York Exchange Bonds at 46, Wall St. J. (Oct. 27, 1980).
896	New York Exchange Bonds at 47, Wall St. J. (Dec. 22, 1986).
897	New York Exchange Bonds at 47, Wall St. J. (Dec. 22, 1986).
898	New York Exchange Bonds at 47, Wall St. J. (Feb. 17, 1982).
899	New York Exchange Bonds at 48, Wall St. J. (Aug. 20, 1981).
900	New York Exchange Bonds at 48, Wall St. J. (Feb. 17, 1982).
901	New York Exchange Bonds at 48, Wall St. J. (Feb. 3, 1982).
902	New York Exchange Bonds at 48, Wall St. J. (Feb. 4, 1982).
903	New York Exchange Bonds at 48, Wall St. J. (Feb. 4, 1982).
904	New York Exchange Bonds at 48, Wall St. J. (Jan. 24, 1985).
905	New York Exchange Bonds at 48, Wall St. J. (Jan. 28, 1981).
906	New York Exchange Bonds at 48, Wall St. J. (Jul. 10, 1985).
907	New York Exchange Bonds at 48, Wall St. J. (Oct. 15, 1980).
908	New York Exchange Bonds at 48, Wall St. J. (Sep. 24, 1980).
909	New York Exchange Bonds at 49, Wall St. J. (Jun. 27, 1986).
910	New York Exchange Bonds at 49, Wall St. J. (Jun. 27, 1986).
911	New York Exchange Bonds at 50, Wall St. J. (Jan. 28, 1985).
912	New York Exchange Bonds at 50, Wall St. J. (Jan. 8, 1985).

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913	New York Exchange Bonds at 50, Wall St. J. (Mar. 27, 1981).
914	New York Exchange Bonds at 50, Wall St. J. (May. 9, 1985).
915	New York Exchange Bonds at 50, Wall St. J. (Oct. 5, 1981).
916	New York Exchange Bonds at 50, Wall St. J. (Oct. 5, 1981).
917	New York Exchange Bonds at 50, Wall St. J. (Oct. 5, 1981).
918	New York Exchange Bonds at 50, Wall St. J. (Oct. 5, 1981).
919	New York Exchange Bonds at 50, Wall St. J. (Sep. 17, 1982).
920	New York Exchange Bonds at 52, Wall St. J. (Apr. 13, 1983).
921	New York Exchange Bonds at 52, Wall St. J. (Apr. 30, 1981).
922	New York Exchange Bonds at 52, Wall St. J. (Dec. 12, 1980).
923	New York Exchange Bonds at 52, Wall St. J. (Dec. 4, 1981).
924	New York Exchange Bonds at 52, Wall St. J. (Jan. 10, 1985).
925	New York Exchange Bonds at 52, Wall St. J. (Jan. 15, 1985).
926	New York Exchange Bonds at 52, Wall St. J. (Jan. 22, 1985).
927	New York Exchange Bonds at 52, Wall St. J. (Jan. 23, 1985).
928	New York Exchange Bonds at 52, Wall St. J. (Jan. 27, 1981).
929	New York Exchange Bonds at 52, Wall St. J. (Jan. 27, 1981).
930	New York Exchange Bonds at 52, Wall St. J. (Jan. 27, 1982).
931	New York Exchange Bonds at 52, Wall St. J. (Jan. 29, 1985).
932	New York Exchange Bonds at 52, Wall St. J. (Jan. 29, 1985).
933	New York Exchange Bonds at 52, Wall St. J. (Jun. 25, 1985).
934	New York Exchange Bonds at 52, Wall St. J. (Jun. 26, 1986).
935	New York Exchange Bonds at 52, Wall St. J. (Mar. 10, 1981).
936	New York Exchange Bonds at 52, Wall St. J. (Mar. 12, 1981).
937	New York Exchange Bonds at 52, Wall St. J. (Mar. 16, 1983).
938	New York Exchange Bonds at 52, Wall St. J. (Mar. 21, 1985).
939	New York Exchange Bonds at 52, Wall St. J. (May. 19, 1981).
940	New York Exchange Bonds at 52, Wall St. J. (Nov. 16, 1982).
941	New York Exchange Bonds at 52, Wall St. J. (Nov. 19, 1980).
942	New York Exchange Bonds at 52, Wall St. J. (Nov. 25, 1980).
943	New York Exchange Bonds at 52, Wall St. J. (Oct. 22, 1982).
944	New York Exchange Bonds at 52, Wall St. J. (Oct. 28, 1980).
945	New York Exchange Bonds at 52, Wall St. J. (Oct. 29, 1981).
946	New York Exchange Bonds at 52, Wall St. J. (Oct. 7, 1981).
947	New York Exchange Bonds at 52, Wall St. J. (Sep. 16, 1982).
948	New York Exchange Bonds at 54, Wall St. J. (Mar. 23, 1983).
949	New York Exchange Bonds at 54, Wall St. J. (Mar. 23, 1983).
950	New York Exchange Bonds at 55, Wall St. J. (Mar. 24, 1986).
951	New York Exchange Bonds at 56, Wall St. J. (Apr. 26, 1983).
952	New York Exchange Bonds at 56, Wall St. J. (Oct. 9, 1986).
953	New York Exchange Bonds at 6, Wall St. J. (Dec. 1, 1989).
954	New York Exchange Bonds at 63, Wall St. J. (Dec. 8, 1987).
955	New York Exchange Bonds at C14, Wall St. J. (Sep. 19, 1990).
956	New York Exchange Bonds at C16, Wall St. J. (Jul. 7, 1992).

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957	New York Exchange Bonds, Wall St. J. (Apr. 29, 1988).
958	New York Exchange Bonds, Wall St. J. (Aug. 22, 1988).
959	New York Exchange Bonds, Wall St. J. (Aug. 23, 1988).
960	New York Exchange Bonds, Wall St. J. (Dec. 1, 1989).
961	New York Exchange Bonds, Wall St. J. (Feb. 10, 1988).
962	New York Exchange Bonds, Wall St. J. (Feb. 15, 1990).
963	New York Exchange Bonds, Wall St. J. (Feb. 27, 1989).
964	New York Exchange Bonds, Wall St. J. (Jun. 16, 1988).
965	New York Exchange Bonds, Wall St. J. (Jun. 7, 1989).
966	New York Exchange Bonds, Wall St. J. (Mar. 14, 1990).
967	New York Exchange Bonds, Wall St. J. (Mar. 24, 1983).
968	New York Exchange Bonds, Wall St. J. (Mar. 6, 1990).
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986	NYSE Daily Stock Price Record, Quarter 1 (1981).
987	NYSE Daily Stock Price Record, Quarter 1 (1982).
988	NYSE Daily Stock Price Record, Quarter 1 (1982).
989	NYSE Daily Stock Price Record, Quarter 1 (1982).
990	NYSE Daily Stock Price Record, Quarter 1 (1983).
991	NYSE Daily Stock Price Record, Quarter 1 (1984).
992	NYSE Daily Stock Price Record, Quarter 1 (1985).
993	NYSE Daily Stock Price Record, Quarter 1 (1985).
994	NYSE Daily Stock Price Record, Quarter 1 (1986).
995	NYSE Daily Stock Price Record, Quarter 1 (1987).
996	NYSE Daily Stock Price Record, Quarter 1 (1987).
997	NYSE Daily Stock Price Record, Quarter 1 (1988).
998	NYSE Daily Stock Price Record, Quarter 1 (1989).
999	NYSE Daily Stock Price Record, Quarter 1 (1990).
1000	NYSE Daily Stock Price Record, Quarter 1 (1995).

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1001	NYSE Daily Stock Price Record, Quarter 1 (2000).
1002	NYSE Daily Stock Price Record, Quarter 2 (1979).
1003	NYSE Daily Stock Price Record, Quarter 2 (1979).
1004	NYSE Daily Stock Price Record, Quarter 2 (1980).
1005	NYSE Daily Stock Price Record, Quarter 2 (1981).
1006	NYSE Daily Stock Price Record, Quarter 2 (1982).
1007	NYSE Daily Stock Price Record, Quarter 2 (1982).
1008	NYSE Daily Stock Price Record, Quarter 2 (1983).
1009	NYSE Daily Stock Price Record, Quarter 2 (1983).
1010	NYSE Daily Stock Price Record, Quarter 2 (1984).
1011	NYSE Daily Stock Price Record, Quarter 2 (1984).
1012	NYSE Daily Stock Price Record, Quarter 2 (1985).
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1014	NYSE Daily Stock Price Record, Quarter 2 (1986).
1015	NYSE Daily Stock Price Record, Quarter 2 (1987).
1016	NYSE Daily Stock Price Record, Quarter 2 (1988).
1017	NYSE Daily Stock Price Record, Quarter 2 (1989).
1018	NYSE Daily Stock Price Record, Quarter 2 (2007).
1019	NYSE Daily Stock Price Record, Quarter 2.2 (1979).
1020	NYSE Daily Stock Price Record, Quarter 3 (1979).
1021	NYSE Daily Stock Price Record, Quarter 3 (1979).
1022	NYSE Daily Stock Price Record, Quarter 3 (1980).
1023	NYSE Daily Stock Price Record, Quarter 3 (1980).
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1030	NYSE Daily Stock Price Record, Quarter 3 (1985).
1031	NYSE Daily Stock Price Record, Quarter 3 (1985).
1032	NYSE Daily Stock Price Record, Quarter 3 (1986).
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1045	NYSE Daily Stock Price Record, Quarter 4 (1984).
1046	NYSE Daily Stock Price Record, Quarter 4 (1985).
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1051	NYSE Daily Stock Price Record, Quarter 4 (1988).
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1067	OTC Daily Stock Price Record, Quarter 1 (1982).
1068	OTC Daily Stock Price Record, Quarter 1 (1983).
1069	OTC Daily Stock Price Record, Quarter 1 (1985).
1070	OTC Daily Stock Price Record, Quarter 1 (1985).
1071	OTC Daily Stock Price Record, Quarter 1 (1986).
1072	OTC Daily Stock Price Record, Quarter 1 (1987).
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1074	OTC Daily Stock Price Record, Quarter 2 (1979).
1075	OTC Daily Stock Price Record, Quarter 2 (1980).
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1085	OTC Daily Stock Price Record, Quarter 3 (1979).
1086	OTC Daily Stock Price Record, Quarter 3 (1980).
1087	OTC Daily Stock Price Record, Quarter 3 (1981).
1088	OTC Daily Stock Price Record, Quarter 3 (1982).

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1089	OTC Daily Stock Price Record, Quarter 3 (1983).
1090	OTC Daily Stock Price Record, Quarter 3 (1985).
1091	OTC Daily Stock Price Record, Quarter 3 (1986).
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1098	OTC Daily Stock Price Record, Quarter 4 (1980).
1099	OTC Daily Stock Price Record, Quarter 4 (1981).
1100	OTC Daily Stock Price Record, Quarter 4 (1982).
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1234	Union Pacific Corp. at 221, Moody's Transportation Manual (1980).
1235	Union Pacific Corp. at 243, Moody's Transportation Manual (1983).
1236	Unisys Corp. at 3484, Moody's Industrial Manual (1988).
1237	United States Gypsum at 4557, Moody's Industrial Manual (1982).
1238	United States Steel Corp. at 6280, Moody's Industrial Manual (1985).
1239	United Technologies Corp. at 4434, Moody's Industrial Manual (1981).
1240	United Technologies Corp. at 4513, Moody's Industrial Manual (1983).
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1242	United Technologies Corp. at 4574, Moody's Industrial Manual (1982).
1243	US Air Inc. at 1336, Moody's Transportation Manual (1981).
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1245	USX Corp. at 6254, Moody's Industrial Manual (1987).
1246	UV Industries at 4294, Moody's Industrial Manual (1979).
1247	UV Industries at 4297, Moody's Industrial Manual (1978).
1248	Valero Energy Corp. at 4380, Moody's Industrial Manual (1989).
1249	Viacom at 6123, Moody's Industrial Manual (1984).
1250	Wal Mart Stores at 6209, Moody's Industrial Manual (1986).
1251	Walgreen Co. at 3520, Moody's Industrial Manual (1982).
1252	Walter Jim Corp. at 6193, Moody's Industrial Manual (1985).
1253	Wang Laboratories at 5643, Moody's Industrial Manual (1981).
1254	Wang Laboratories at 6115, Moody's Industrial Manual (1982).
1255	Wang Laboratories at 6129, Moody's Industrial Manual (1983).
1256	Warner Communications at 4325, Moody's Industrial Manual (1979).
1257	Warner Communications at 6414, Moody's Industrial Manual (1989).
1258	Warner Communications Inc. at 4328, Moody's Industrial Manual (1978).
1259	Warner Communications Inc. at 5345, Moody's Industrial Manual (1980).
1260	Western Air Lines at 1449, Moody's Transportation Manual (1986).
1261	Western Union Corp. at 3748, Moody's Public Utility Manual (1981).
1262	Western Union Corp. at 3789, Moody's Public Utility Manual (1982).
1263	Westinghouse Electric Corp. at 4402, Moody's Industrial Manual (1989).
1264	Wetterau Inc. at 2655, Moody's OTC Industrial Manual (1985).

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1265	Wheelabrator at 4636, Moody's Industrial Manual (1982).
1266	White Consolidated Industries at 3337, Moody's Industrial Manual (1979).
1267	Woolworth FW Co. at 3546, Moody's Industrial Manual (1985).
1268	Woolworth FW Co. at 3642, Moody's Industrial Manual (1986).
1269	Zenith National Insurance Corp. at 7327, Moody's Bank & Finance Manual (1985).
1270	Zondervan Corp. at 1470, Moody's OTC Industrial Manual (1979).

DEPOSITIONS/UK INTERVIEW TRANSCRIPTS	
1271	Alistair George Deposition May 11, 2009.
1272	Amber Wood Deposition June 10, 2009 & May 18, 2010.
1273	Anthony Marshall Deposition June 25, 2010.
1274	Arthur Friedman Deposition June 22, 2010, June 23, 2010, June 24, 2010, & June 29, 2010.
1275	Ashok Chachra Deposition Oct. 08, 2010.
1276	Belle Jones Deposition May 17, 2010.
1277	Carl Shapiro Deposition Dec. 14, 2009 & Dec. 15, 2009.
1278	Charles Klein Deposition Nov. 08, 2010.
1279	Chris Dale Deposition July 08, 2009 & July 19, 2010.
1280	Chris Pengelly Deposition May 06, 2009.
1281	Christopher Cutler Deposition Jan. 21, 2010.
1282	Colin Bond Deposition June 25, 2010.
1283	David Katz Deposition Aug. 31, 2010 & Sept. 1, 2010.
1284	David Steinmann Deposition Sept. 29, 2010.
1285	Dylan Grice Deposition May 05, 2009.
1286	Elliot Margolis Deposition Aug. 12, 2010.
1287	Felicity Raven Deposition July 28, 2010.
1288	Frank Avellino & Michael Bienes Deposition July 7, 1992.
1289	Frank Avellino Deposition Sept. 30, 2010.
1290	Fred Wilpon Deposition July 20, 2010.
1291	Gilles Frachet Deposition May 11, 2009.
1292	James Henchey Deposition June 18, 2010.
1293	John Purcell Deposition June 25, 2010.
1294	Julia Fenwick Deposition June 04, 2009 & May 19, 2010.
1295	Leon Flax Deposition Aug. 06, 2009 & July 21, 2010.
1296	Leon Gross Deposition Oct. 22, 2010.
1297	Linda Sutton Howard Deposition Aug. 17, 2010.
1298	Malcolm Stephenson Deposition June 05, 2009 & Aug. 18, 2010.
1299	Marcus Hagnesten Deposition May 05, 2009.
1300	Mark Hughes Deposition May 20, 2009.
1301	Mark Peskin Deposition July 29, 2010 & July 30, 2010.
1302	Matthew Byrom Deposition May 11, 2009.
1303	Michael Bienes Deposition Oct. 05, 2010.
1304	Michael Lieberbaum Deposition July 29, 2010, Aug. 5, 2010, & Oct. 18, 2010.

	DEPOSITIONS/UK INTERVIEW TRANSCRIPTS
1305	Peter Allen Deposition July 15, 2009 & July 28, 2010.
1306	Peter Deadman Deposition May 06, 2009.
1307	Peter Stamos Deposition Aug. 19, 2010.
1308	Philip Toop Deposition June 08, 2009 & July 16, 2010.
1309	Richard Karyo Deposition Sept. 22, 2010.
1310	Rodney Yates Deposition Sept. 06, 2010.
1311	Saul Katz Deposition Aug. 04, 2010.
1312	Stanley Shapiro Deposition Sept. 30, 2010 & Oct. 1, 2010.
1313	Stephen Raven Deposition July 14, 2009 & July 26, 2010.
1314	Tim Vines Deposition May 12, 2009.
1315	William Hui Deposition May 18, 2009 & May 18, 2010.

	BEGINNING BATES	ENDING BATES
1316	17SH_02_OZ_00000001	17SH_02_OZ_00000017
1317	17SH_03_OZ_00000001	17SH_03_OZ_00000042
1318	17SH-OZ00000004	17SH-OZ00007819
1319	ABON_02_BR_00000001	ABON_02_BR_00007828
1320	ABON-BR00000004	ABON-BR00098122
1321	ACOP_03_BR_00000001	ACOP_03_BR_00001358
1322	ADAM_03_BR_00000001	ADAM_03_BR_00000001
1323	AFELD_03_BR_00000001	AFELD_03_BR_00001475
1324	AFOS-BR00000002	AFOS-BR00002376
1325	AGEO_02_BR_00000001	AGEO_02_BR_00000023
1326	AGEO-BR00000002	AGEO-BR00000295
1327	AGRE_03_BR_00000001	AGRE_03_BR_00000163
1328	AJOE_02_BR_00000001	AJOE_02_BR_00000335
1329	AJOE_03_BR_00000001	AJOE_03_BR_00000006
1330	AJOE-BR00000001	AJOE-BR00000133
1331	AKSSAA00000001	AKSSAA0000020
1332	AKSSAB0000001	AKSSAB0000071
1333	AKSSAC0000001	AKSSAC0000027
1334	AKSSAD0000001	AKSSAD0000573
1335	ALAN_03_BR_00000001	ALAN_03_BR_00001740
1336	ALBASAA0000001	ALBSAC0006359
1337	ALCO_03_BR_00000001	ALCO_03_BR_00058754
1338	ALLM_02_BR_00000001	ALLM_02_BR_00002795
1339	ALLM-BR00000003	ALLM-BR00018970
1340	ALON-BR00000001	ALON-BR00018141
1341	AMAD_02_BR_00000001	AMAD_02_BR_00003379
1342	AMAD_03_BR_00000001	AMAD_03_BR_00000051
1343	AMAD-BR00000057	AMAD-BR30002151
1344	AMAD-BRa00018510	AMAD-BRa00020372

	BEGINNING BATES	ENDING BATES
1345	AMAD-BRb00018538	AMAD-BRb00018927
1346	AMAD-BRc00018819	AMAD-BRc00018831
1347	AMAD-BRd00018826	AMAD-BRd00020564
1348	AMAD-BRf00000046	AMAD-BRf00001843
1349	AMF00022564	AMF00309518
1350	AMUI_02_BR_00000001	AMUI_02_BR_00000330
1351	AMUI-BR00000001	AMUI-BR00000125
1352	ARBS_03_BR_00000001	ARBS_03_BR_00000236
1353	ARICH_03_BR_00000001	ARICH_03_BR_00000001
1354	ARIG_03_BR_00000001	ARIG_03_BR_00000712
1355	BACK_03_BR_00000001	BACK_03_BR_00146188
1356	BARSAA0006285	BARSAA0019550
1357	BARSAD0000001	BARSAD0000037
1358	BASE_02_BR_00000001	BASE_02_BR_00000161
1359	BASE-BR00000001	BASE-BR00000221
1360	BATSAA0000001	BATSAA0002893
1361	BEN_03_BR_00000001	BEN_03_BR_00027886
1362	BGIM_03_BR_00000001	BGIM_03_BR_00022604
1363	BING0000001	BING0000170
1364	BLAR_03_BR_00000001	BLAR_03_BR_00000024
1365	BMAD_02_BR_00000001	BMAD_02_BR_00001365
1366	BMAD-BR00000029	BMAD-BR00000198
1367	BMAD-BR00018019	BMAD-BR00021272
1368	BMEDS_02_BR_00000001	BMEDS_02_BR_00000066
1369	BNYSAE0000010	BNYSAE0000244
1370	BOASAA0001412	BOASAA0004640
1371	BOASAB0000001	BOASAB0000043
1372	BOASAC0000001	BOASAC0000375
1373	BOASAD0000001	BOASAD0001281
1374	BOASAE0000001	BOASAE0003973
1375	BOASAF0000001	BOASAF0008605
1376	BOASAG0000001	BOASAG0000516
1377	BOASAH0000001	BOASAH0000565
1378	BOASAI0000001	BOASAI0002686
1379	BOASAJ0000001	BOASAJ0000110
1380	BOASAK0000001	BOASAK0000381
1381	BOASAL0000001	BOASAL0007262
1382	BOASAM0000001	BOASAM0000001
1383	BOASAN0000001	BOASAN0004659
1384	BOASAO0000001	BOASAO0011649
1385	BOASAP0000001	BOASAP0007549
1386	BOASAQ0000001	BOASAQ0001850
1387	BOASAR0000001	BOASAR0003427
1388	BOASAS0000001	BOASAS0000511

	BEGINNING BATES	ENDING BATES
1389	BOASAT0000001	BOASAT0000676
1390	BOASAU0000001	BOASAU0002044
1391	BOASAV0000001	BOASAV0003593
1392	BOASAW0000001	BOASAW0000486
1393	BOASAX0000001	BOASAX0003100
1394	BOASAY0000001	BOASAY0000552
1395	BOASAZ0000001	BOASAZ0000839
1396	BOASBA0000001	BOASBA0000985
1397	BOASBB0000001	BOASBB0000152
1398	BOASBC0000001	BOASBC0000344
1399	BOASBD0000001	BOASBD0000024
1400	BOASBE0000001	BOASBE0002282
1401	BOASBF0000001	BOASBF0000383
1402	BOASBG0000001	BOASBG0001143
1403	BOASBH0000001	BOASBH0001590
1404	BOASBI0000001	BOASBI0000306
1405	BOASBJ0000001	BOASBJ0000726
1406	BOASBK0000001	BOASBK0000708
1407	BOASBL00000001	BOASBL0008095
1408	BOASBM0000001	BOASBM0000380
1409	BOASBN0000001	BOASBN0005446
1410	BOASBO0000001	BOASBO0000619
1411	BOASBP0000001	BOASBP00000468
1412	BOASBQ0000001	BOASBQ0043973
1413	BOASBR0000001	BOASBR0004648
1414	BROS_03_BR_00000001	BROS_03_BR_00000016
1415	BRU-ACd00001070	BRU-ACd00001384
1416	BRU-ACe00000013	BRU-ACe00018306
1417	BRU-ACf00000146	BRU-ACf00048062
1418	BRU-ACg00000001	BRU-ACg00052558
1419	BRU-ACh00000001	BRU-ACh00002412
1420	BRU-ACi00000001	BRU-ACi00015083
1421	BRU-ACj00000003	BRU-ACj00046521
1422	BRU-ACk00000001	BRU-ACk00002035
1423	BRU-BA00000001	BRU-BA00042992
1424	BRU-BA00067990	BRU-BA00090445
1425	BRU-BA00090451	BRU-BA00146030
1426	BRU-BA00146033	BRU-BA00157577
1427	BRU-BB00000001	BRU-BB00395663
1428	BRU-BB00395666	BRU-BB00405281
1429	BRU-BC00000001	BRU-BC00020852
1430	BRU-BC00020880	BRU-BC00084593
1431	BRU-BC00089866	BRU-BC00116702
1432	BRU-BD00000005	BRU-BD00063181

	BEGINNING BATES	ENDING BATES
1433	BRU-BDf00018782	BRU-BDf00018841
1434	BRU-BE00000001	BRU-BE00287408
1435	BRU-BF00000001	BRU-BF00008808
1436	BRU-BF00008810	BRU-BF00017912
1437	BRU-BF00019784	BRU-BF00023870
1438	BRU-BG00000001	BRU-BG00421783
1439	BRU-BH00000001	BRU-BH00231383
1440	BRU-BI00000009	BRU-BI00697541
1441	BRU-BJ00000001	BRU-BJ00135816
1442	BRU-BK00000022	BRU-BK00192206
1443	BRU-BL00000008	BRU-BL00240603
1444	BRU-BM00000010	BRU-BM00553040
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1449	BRU-BM00451057	BRU-BM00515981
1450	BRU-BM00451129	BRU-BM00516700
1451	BRU-BM00451244	BRU-BM00452381
1452	BRU-BM00452478	BRU-M00009080
1453	BRU-BM00452518	BRU-M00009612
1454	BRU-BM00453531	BRU-BM00453545
1455	BRU-BM00457759	BRU-M00009446
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1457	BRU-BN00000005	BRU-BN00000006
1458	BRU-BO00000008	BRU-BO00000458
1459	BRU-BO00000138	BRU-BO00000145
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1461	BRU-CSd00000001	BRU-CSd00007105
1462	BRU-CSd00000001	BRU-CSd00000264
1463	BRU-CSd00000001_1	BRU-CSd00006265_1
1464	BRU-CSd00006266_1	BRU-CSd00007105_1
1465	BRU-CSe00000001	BRU-CSe00037339
1466	BRU-CSe00000001	BRU-CSe00009783
1467	BRU-CSe00009784	BRU-CSe00014356
1468	BRU-CSe00014357	BRU-CSe00016385
1469	BRU-CSe00016386	BRU-CSe00037339
1470	BRU-CSf00000002	BRU-CSf00007134
1471	BRU-CSg00002901	BRU-CSg00007048
1472	BRU-CSh00000001	BRU-CSh00004162
1473	BRU-CSh00004869	BRU-CSh00004869
1474	BRU-CSi00000001	BRU-CSi00017461
1475	BRU-CSj00000111	BRU-CSj00042727
1476	BRU-CSj00043299	BRU-CSj00043317

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1477	BRU-CSj00044839	BRU-CSj00136110
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1479	BRU-JTa00000129	BRU-JTa00001124
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1481	BRU-JTa00032909	BRU-JTa00041201
1482	BRU-JTa00042085	BRU-JTa00043760
1483	BRU-JTc00000062	BRU-JTc00565557
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1485	BRU-M00000001	BRU-M00080497
1486	BRU-M00000295	BRU-M00009278
1487	BRU-M00000337	BRU-M00000402
1488	BRU-M00001299	BRU-M00001375
1489	BRU-M00001662	BRU-M00002152
1490	BRU-M00002011	BRU-M00002015
1491	BRU-M00002353	BRU-M00078059
1492	BRU-M00002405	BRU-M00002417
1493	BRU-M00002495	BRU-M00002781
1494	BRU-M00002828	BRU-M00002838
1495	BRU-M00002930	BRU-M00002981
1496	BRU-M00003122	BRU-M00003141
1497	BRU-M00003267	BRU-M00003305
1498	BRU-M00003466	BRU-M00003475
1499	BRU-M00003732	BRU-M00005164
1500	BRU-M00004739	BRU-M00004802
1501	BRU-M00004861	BRU-M00085948
1502	BRU-M00005230	BRU-M00137609
1503	BRU-M00006956	BRU-M00006956
1504	BRU-M00006966	BRU-M00006967
1505	BRU-M00007344	BRU-M00007419
1506	BRU-M00007478	BRU-M00007542
1507	BRU-M00007602	BRU-M00007644
1508	BRU-M00007785	BRU-M00009536
1509	BRU-M00009187	BRU-M00009200
1510	BRU-M00009509	BRU-M00009511
1511	BRU-M00077466	BRU-M00077597
1512	BRU-M00077799	BRU-M00077803
1513	BRU-M00077822	BRU-M00077832
1514	BRU-M00078074	BRU-M00080327
1515	BRU-M00078636	BRU-M00078643
1516	BRU-M00080375	BRU-M00151662
1517	BRUNA000000001	BRUNA001783598
1518	BRUNA000000001	BRUNA001678132
1519	BRUNA000471789	BRUNA001234711
1520	BRUNA000785619	BRUNA001774328

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1521	BRUNA001235551	BRUNA001681913
1522	BRUNA001681971	BRUNA001755081
1523	BRUNA001755093	BRUNA001783598
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1525	BRUNB000002436	BRUNB000178900
1526	BRUNB000025563	BRUNB001068045
1527	BRUNB000178901	BRUNB000561371
1528	BRUNB000178901_1	BRUNB000178901_1
1529	BRUNB000443290	BRUNB001053248
1530	BRUNB000555356	BRUNB000605773
1531	BRUNB001053291	BRUNB001079751
1532	BRUNB001079752	BRUNB001185623
1533	BRUNC000003071	BRUNC000733655
1534	BRUNC000003071	BRUNC000670699
1535	BRUNC000216434	BRUNC000488337
1536	BRUNC000488340	BRUNC000656442
1537	BRUNC000656479	BRUNC000714051
1538	BRUNC000656680	BRUNC000730766
1539	BRUNC000714052	BRUNC000732115
1540	BRUNC000732116	BRUNC000733655
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1542	BRUND000000001	BRUND000461265
1543	BRUND000461266	BRUND000724830
1544	BRUND000500017	BRUND000939162
1545	BRUND000726703	BRUND000920024
1546	BRUND000920061	BRUND000948156
1547	BRUND000948157	BRUND000966112
1548	BRUNE000003392	BRUNE000696324
1549	BRUNE000003392	BRUNE000564965
1550	BRUNE000054217	BRUNE000664514
1551	BRUNE000564971	BRUNE000657352
1552	BRUNE000657415	BRUNE000686964
1553	BRUNE000686966	BRUNE000692637
1554	BRUNE000692640	BRUNE000693794
1555	BRUNE000693795	BRUNE000696324
1556	BRUNF000000001	BRUNF000287086
1557	BRUNF000287142	BRUNF000476454
1558	BRUNG000000001	BRUNG000078751
1559	BRUNH000000001	BRUNH000183149
1560	BRUNH000009648	BRUNH000176068
1561	BRUNI000000001	BRUNI000099524
1562	BRUNI000000001	BRUNI000073810
1563	BRUNI000073813	BRUNI000099524
1564	BRUNI000073929	BRUNI000091906

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1566	BRUNJ000000001	BRUNJ000336174
1567	BRUNJ000336176	BRUNJ000507904
1568	BRUNJ000347844	BRUNJ000597727
1569	BRUNJ000507938	BRUNJ000643685
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1571	BRUNK000000001	BRUNK000237334
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1574	BRUNK000441515	BRUNK000573374
1575	BRUNM000000001	BRUNM000331542
1576	BRUNM000083342	BRUNM000083342
1577	BRUNM000089046_1	BRUNM000089046_1
1578	BRUNM000235972	BRUNM000235981
1579	BRUNN000000001	BRUNN000338324
1580	BRUNN000000001	BRUNN000281939
1581	BRUNN000199144	BRUNN000300110
1582	BRUNN000282781	BRUNN000338324
1583	BRUNY000000001	BRUNY000353313
1584	BRUNY000000001	BRUNY000243313
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1586	BRUNY000243383	BRUNY000353313
1587	BRU-OZa00000002	BRU-OZa00003780
1588	BRU-OZa00000002	BRU-OZa00003639
1589	BRU-OZa00003640	BRU-OZa00003780
1590	BRU-STa00000191	BRU-STa00011157
1591	BRU-STa00000191	BRU-STa00000879
1592	BRU-STa00000880	BRU-STa00000880
1593	BRU-STa00000940	BRU-STa00000940
1594	BRU-STa00000941	BRU-STa00008421
1595	BRU-STa00008422	BRU-STa00011157
1596	BRU-STa00011187	BRU-STd00001207
1597	BRU-STb00000058	BRU-STb00010250
1598	BRU-STc00000029	BRU-STc00006855
1599	BRU-STc00000029	BRU-STc00004317
1600	BRU-STc00004390	BRU-STc00004398
1601	BRU-STc00004634	BRU-STc00004692
1602	BRU-STc00004695	BRU-STc00006855
1603	BRU-STd00001714	BRU-STd00005237
1604	BRU-STe00000001	BRU-STe00012696
1605	BRU-STf00000001	BRU-STf00024977
1606	BRU-STj00006355	BRU-STj00021312
1607	BRU-STj00006355	BRU-STj00021310
1608	BRU-STj00021311	BRU-STj00021312

	BEGINNING BATES	ENDING BATES
1609	BRU-STk00000710	BRU-STk00000771
1610	BRU-STk00002164	BRU-STk00020040
1611	BRU-STl00000001	BRU-STl00024249
1612	BRU-STo00026264	BRU-STo00033023
1613	BRU-STo00033273	BRU-STo00074290
1614	BSCH_03_BR_00000001	BSCH_03_BR_00000439
1615	BSHE_03_BR_00000001	BSHE_03_BR_00002558
1616	BSTSAA0037217	BSTSAA0046408
1617	BSTSAB0320274	BSTSAB0795234
1618	BSTSAC0000002	BSTSAC0000574
1619	BULCC_02_B_00000001	BULCC_02_B_00000949
1620	BULCC-BR00000002	BULCC-BR00001579
1621	CBLSAA0000001	CBLSAA0000177
1622	CBOSAA0000001	CBOSAA0000340
1623	CBUL_02_BR_00000001	CBUL_02_BR_00000012
1624	CBUL-BR00000001	CBUL-BR00000038
1625	CDAL_02_BR_00000001	CDAL_02_BR_00000005
1626	CDAL-BR00000003	CDAL-BR00063052
1627	CJOA_03_BR_00000001	CJOA_03_BR_00000022
1628	CKUG_02_BR_00000001	CKUG_02_BR_00002254
1629	CKUG_03_BR_00000001	CKUG_03_BR_00012381
1630	CKUG-BR00000013	CKUG-BR01179654
1631	CKUG-BR00000013	CKUG-BR00672826
1632	CKUG-BR00672827	CKUG-BR01179654
1633	CLEO_03_BR_00000001	CLEO_03_BR_00000018
1634	CMAR_03_BR_00000001	CMAR_03_BR_00000344
1635	CRAD_03_BR_00000001	CRAD_03_BR_00000002
1636	CRAL_03_BR_00000001	CRAL_03_BR_00000001
1637	CSHI_03_BR_00000001	CSHI_03_BR_00000108
1638	CSSSAA0001601	CSSSAA0003277
1639	CTOM_03_BR_00000001	CTOM_03_BR_00000012
1640	CUWA_03_BR_00000001	CUWA_03_BR_00000079
1641	CWIE_02_BR_00000001	CWIE_02_BR_00000955
1642	CWIE_03_BR_00000001	CWIE_03_BR_00000407
1643	CWIE-BR00000006	CWIE-BR00019711
1644	DBER_02_BR_00000001	DBER_02_BR_00002818
1645	DBER-BR00000003	DBER-BR00051861
1646	DBON_02_BR_00000001	DBON_02_BR_00000890
1647	DBON-BR00000003	DBON-BR00012378
1648	DCON_02_BR_00000001	DCON_02_BR_00005583
1649	DCON-BR00000001	DCON-BR00000303
1650	DDAN_03_BR_00000001	DDAN_03_BR_00000002
1651	DERI_03_BR_00000001	DERI_03_BR_00067627
1652	DGRI_02_BR_00000001	DGRI_02_BR_00000070

	BEGINNING BATES	ENDING BATES
1653	DGRI-BR00000002	DGRI-BR00000262
1654	DKHA_02_BR_00000001	DKHA_02_BR_00000029
1655	DKHA-BR00000002	DKHA-BR00000437
1656	DKUG_02_BR_00000001	DKUG_02_BR_00001142
1657	DKUG_03_BR_00000001	DKUG_03_BR_00000019
1658	DKUG-BR00000005	DKUG-BR00013943
1659	DMAG_02_BR_00000001	DMAG_02_BR_00001799
1660	DMAG-BR00000007	DMAG-BR00000464
1661	DOWL0000001	DOWL0001657
1662	DPEN_03_BR_00000001	DPEN_03_BR_00000035
1663	DSR00000001	DSR00000748
1664	DTAR_03_BR_00000001	DTAR_03_BR_00000164
1665	ECOT_02_BR_00000001	ECOT_02_BR_00009698
1666	ECOT-BR00000001	ECOT-BR00028594
1667	ECOU_02_BR_00000001	ECOU_02_BR_00001756
1668	ECOU-BR00000001	ECOU-BR00021422
1669	ECOU-BRf00000002	ECOU-BRf00000039
1670	EDUA_03_BR_00000001	EDUA_03_BR_00000062
1671	EFLO_02_BR_00000001	EFLO_02_BR_00000004
1672	EFLO-BR00000002	EFLO-BR00022394
1673	EKAT_03_BR_00000001	EKAT_03_BR_00000019
1674	ELAI_03_BR_00000001	ELAI_03_BR_00000008
1675	ELIP_02_BR_00000001	ELIP_02_BRa00002378
1676	ELIP-BR00000017	ELIP-BR00094469
1677	ELIP-BRa00000002	ELIP-BRa00002371
1678	ELVI_03_BR_00000001	ELVI_03_BR_00000001
1679	EREA_03_BR_00000001	EREA_03_BR_00000006
1680	FCCSAA0000001	FCCSAA0012412
1681	FDIP_02_BR_00000001	FDIP_02_BR_00003997
1682	FDIP_02-BR00000001	FDIP_02-BR00000041
1683	FDIP-BR00000001	FDIP-BR00003946
1684	FILI-BR00000001	FILI-BR00001027
1685	FILI-BR00000238	FILI-BR00000960
1686	FMAD_03_03_03_BR_00000001	FMAD_03_BR_00055801
1687	FMRSAA0001062	FMRSAA0116456
1688	FRISAA0000001	FRISAA0000008
1689	FRISAB0000001	FRISAB0035266
1690	FRISAC0000001	FRISAC0000001
1691	FSTE_03_BR_00000001	FSTE_03_BR_00038877
1692	GARD0000001	GARD0000049
1693	GBRU_03_BR_00000001	GBRU_03_BR_00002769
1694	GDUP_02_BR_00000001	GDUP_02_BR_00000054
1695	GDUP-BR00000002	GDUP-BR00005367
1696	GFRA_02_BR_00000001	GFRA_02_BR_00000003

	BEGINNING BATES	ENDING BATES
1697	GFRA-BR00000002	GFRA-BR00013541
1698	GJAS_03_BR_00000001	GJAS_03_BR_00000441
1699	GKGL0000001	GKGL0000057
1700	GLEN_03_BR_00000001	GLEN_03_BR_00067797
1701	GLIZ_03_BR_00000001	GLIZ_03_BR_00000014
1702	GMAR_03_BR_00000001	GMAR_03_BR_00000035
1703	GNAN_03_BR_00000001	GNAN_03_BR_00027037
1704	GOLD0000001	GOLD0000267
1705	GPER_03_BR_00000001	GPER_03_BR_00000007
1706	GROB_03_BR_00000001	GROB_03_BR_00000001
1707	GVIN_03_BR_00000001	GVIN_03_BR_00000010
1708	HDAN_03_BR_00000001	HDAN_03_BR_00000016
1709	HRON_00000001	HRON_00000018
1710	HSBSAA0000663	HSBSAA0001545
1711	HWN00000001	HWN00003217
1712	IBLSAA0000001	IBLSAA0007870
1713	IBMVAA0000001	IBMVAA0000119
1714	ICEL-BR00000001	ICEL-BR00444412
1715	ICOH_03_BR_00000001	ICOH_03_BR_00008560
1716	IDEL_02_BR_00000001	IDEL_02_BR_00001136
1717	IDEL_03_BR_00000001	IDEL_03_BR_00001368
1718	IDEL-BR00000003	IDEL-BR00003101
1719	ILON-BR00000001	ILON-BR00000001
1720	ILON-BR00000003	ILON-BR00000024
1721	ILX_02_BR_00000001	ILX_02_BR_00000010
1722	ILX-BR00000001	ILX-BR00000230
1723	ITLM_02_BR_00000001	ITLM_02_BR_00000003
1724	ITLM-BR00000001	ITLM-BR00000686
1725	ITON_03_BR_00000001	ITON_03_BR_00010088
1726	IVYSAA0000302	IVYSAA0583665
1727	IVYSAB0000743	IVYSAB0049068
1728	IVYSAC0002074	IVYSAC0028790
1729	IVYSAD0000004	IVYSAD0000070
1730	JAJE_03_BR_00000001	JAJE_03_BR_00000030
1731	JANT_03_BR_00000001	JANT_03_BR_00000020
1732	JASI0000001	JASI0000080
1733	JBON_02_BR_00000001	JBON_02_BR_00002379
1734	JBON-BR00000001	JBON-BR00014086
1735	JCRU_02_BR_00000001	JCRU_02_BR_00003881
1736	JCRU-BR00000001	JCRU-BR00016977
1737	JDUM_03_BR_00000001	JDUM_03_BR_00009833
1738	JFEN_02_BR_00000001	JFEN_02_BR_00000007
1739	JFEN-BR00000002	JFEN-BR00001210
1740	JFER_02_BR_00000001	JFER_02_BR_00001318

	BEGINNING BATES	ENDING BATES
1741	JFER_03_BR_00000001	JFER_03_BR_00000003
1742	JFER-BR00000003	JFER-BR00008364
1743	JHEN_02_BR_00000001	JHEN_02_BR_00000057
1744	JHEN-BR00000002	JHEN-BR00000201
1745	JHSSAA0000001	JHSSAA0005432
1746	JHSSAB0000001	JHSSAB0002180
1747	JLAR_02_BR_00000001	JLAR_02_BR_00000974
1748	JLAR-BR00000003	JLAR-BR00005664
1749	JLEN_03_BR_00000001	JLEN_03_BR_00001365
1750	JNEW_02_BR_00000001	JNEW_02_BR_00000001
1751	JNEW-BR00000002	JNEW-BR00015173
1752	JOHA_03_BR_00000001	JOHA_03_BR_00000002
1753	JOHA-BR00000977	JOHA-BR00000977
1754	JPISAA0000011	JPISAA0000084
1755	JPMSAA0013051	JPMSAA0020079
1756	JPMSAB0000001	JPMSAB0004570
1757	JPMSAE0001247	JPMSAE0002669
1758	JPMSAF0000001	JPMSAF0072931
1759	JPMSAG0000002	JPMSAG0001912
1760	JPMSAH0000001	JPMSAH0002873
1761	JPMSAI0000001	JPMSAI0014006
1762	JPMSBL0000012	JPMSBL0000419
1763	JPMSBT0002332	JPMSBT0002343+C918
1764	JPMSCQ0000001	JPMSCQ0000028
1765	JPMSDM0000001	JPMSDM0000009
1766	JPMTAA0000002	JPMTAA0000331
1767	JPMTAC0000001	JPMTAC0000064
1768	JPMTAD0000001	JPMTAD0000282
1769	JRIC_03_BR_00000001	JRIC_03_BR_00000002
1770	JROS_03_BR_00000001	JROS_03_BR_00003664
1771	KATT0000001	KATT2005253
1772	KFON-BR00000002	KFON-BR00048818
1773	KFON-BRf00000049	KFON-BRf00017435
1774	KKAN_03_BR_00000001	KKAN_03_BR_00001778
1775	KKIE_03_BR_00000001	KKIE_03_BR_00000001
1776	KNISAA0000001	KNISAA0000732
1777	KRAS0000001	KRAS0000190
1778	KWES_03_BR_00000001	KWES_03_BR_00009668
1779	LAND_03_BR_00000001	LAND_03_BR_00038153
1780	LARC-BR00488135	LARC-BR00488136
1781	LAWA0000001	LAWA0000138
1782	LAZAA0000001	LAZAA0004673
1783	LAZAA0000001	LAZAA0000045
1784	LAZAA0000160	LAZAA0004096

	BEGINNING BATES	ENDING BATES
1785	LAZAA0004101	LAZAA0004286
1786	LAZAA0004311	LAZAA0004590
1787	LAZA-BR00000001	LAZA-BR00000542
1788	LBRE_03_BR_00000001	LBRE_03_BR_00000018
1789	LBUC_02_BR_00000001	LBUC_02_BR_00000005
1790	LBUC-BR00000001	LBUC-BR00000096
1791	LBUL-BR00000001	LBUL-BR00016651
1792	LFLA_02_BR_00000001	LFLA_02_BR_00000032
1793	LFLA-BR00000003	LFLA-BR00006728
1794	LINE-BR00000001	LINE-BR00000009
1795	LITT0000001	LITT0001416
1796	MADTBA00303169	MADTBA00303173
1797	MADTBB01732636	MADTBB03373053
1798	MADTBB03342901	MADTBB03343466
1799	MADTEE00045777	MADTEE00746251
1800	MADTEE00115171	MADTEE00726731
1801	MADTNN00109620	MADTNN00127389
1802	MADTNN00126735	MADTNN00126735
1803	MADTSS00114387	MADTSS01380186
1804	MADTSS00114387	MADTSS01327797
1805	MADTSS00196027	MADTSS00201174
1806	MADTSS01380147	MADTSS01380186
1807	MADWAA00004137	MADWAA01122084
1808	MADWAA00010198	MADWAA01125031
1809	MAITAA0015875	MAITAA0016436
1810	MAITAD00000001	MAITAD00000002
1811	MBAC-BR00000001	MBAC-BR00000001
1812	MBYR_02_BR_00000001	MBYR_02_BR_00000008
1813	MBYR-BR00000003	MBYR-BR00000902
1814	MCFSAA0000011	MCFSAA0000129
1815	MDPTFF00000294	MDPTFF00000721
1816	MDPTGG00000001	MDPTGG00000026
1817	MDPTHH00000001	MDPTHH00000015
1818	MDPTPP00017576	MDPTPP07693095
1819	MDPTQQ00002368	MDPTQQ00002834
1820	MDPTSS00000001	MDPTSS00001688
1821	MDPTTT00000001	MDPTTT00002748
1822	MDPTVV00000001	MDPTVV00346036
1823	MEBU_03_BR_00000001	MEBU_03_BR_00010743
1824	MELSAA0000001	MELSAA0000037
1825	MELSAB0000001	MELSAD0001659
1826	MELSAB0000001	MELSAB0000108
1827	MESTAAC00000001	MESTAAC00000195
1828	MESTAAE00000004	MESTAAE00049382

	BEGINNING BATES	ENDING BATES
1829	MESTAAF00000001	MESTAAF00199972
1830	MESTAAG00000001	MESTAAG00055161
1831	MESTAAH00000001	MESTAAH00002034
1832	MESTAAK00000001	MESTAAK00000005
1833	MF00000001	MF00716212
1834	MF00000012	MF00545003
1835	MFER_02_BR_00000001	MFER_02_BR_00000418
1836	MFER_03_BR_00000001	MFER_03_BR_00000009
1837	MFER-BR00000001	MFER-BR00002668
1838	MGAV_02_BR_00000001	MGAV_02_BR_00000790
1839	MGAV_03_BR_00000001	MGAV_03_BR_00000143
1840	MGAV-BR00000023	MGAV-BR00007156
1841	MGRE_03_BR_00000001	MGRE_03_BR_00000045
1842	MGUT_03_BR_00000001	MGUT_03_BR_00001423
1843	MGUY_03_BR_00000001	MGUY_03_BR_00005610
1844	MHAG-BR00000002	MHAG-BR00001534
1845	MHUG_02_BR_00000001	MHUG_02_BR_00000040
1846	MHUG-BR00000002	MHUG-BR00000168
1847	MILL0000001	MILL0000147
1848	MKEV_03_BR_00000001	MKEV_03_BR_00079978
1849	MLISAA0000001	MLISAA0000181
1850	MLSIAB0000001	MLISAB0005212
1851	MMAD_02_BR_00000001	MMAD_02_BR_00003337
1852	MMAD_03_BR_00000001	MMAD_03_BR_00000367
1853	MMAD-BR00000029	MMAD-BR00035331
1854	MMAD-BRf00000002	MMAD-BRf00022748
1855	MMAN_02_BR_00000001	MMAN_02_BR_00000021
1856	MMAN-BR00000001	MMAN-BR00000010
1857	MMAR_03_BR_00000001	MMAR_03_BR_00000023
1858	MNEI_03_BR_00000001	MNEI_03_BR_00020661
1859	MOTTAA00000922	MOTTAA00000922
1860	MPAD_03_BR_00000001	MPAD_03_BR_00000575
1861	MSYSAB0000100	MSYSAB0000446
1862	MSYSAE0000468	MSYSAE0008121
1863	MTRSAA0000002	MTSSAA0000095
1864	MWPTAP000005673	MWPTAP00023613
1865	NIBR_02_BR_00000001	NIBR_02_BR_00000003
1866	NIBR-BR00000001	NIBR-BR00000027
1867	OCCSAA0000001	OCCSAA0003965
1868	OCCSAB0000001	OCCSAB0000059
1869	OCCSAC00000001	OCCSAC00003358
1870	OJAM_03_BR_00000001	OJAM_03_BR_00000012
1871	PALL_02_BR_00000001	PALL_02_BR_00000001
1872	PALL-BR00000001	PALL-BR00001163

	BEGINNING BATES	ENDING BATES
1873	PANL-BR00000001	PANL-BR00010862
1874	PAOL_03_BR_00000001	PAOL_03_BR_00000068
1875	PCISAA0000003	PCISAA0000008
1876	PDEA_02_BR_00000001	PDEA_02_BR_00000053
1877	PDEA-BR00000002	PDEA-BR00000307
1878	PELE_03_BR_00000001	PELE_03_BR_00000004
1879	PIDJ0000001	PIDJ0000127
1880	PJASAA0000001	PJASAA0000052
1881	PJASAB0000001	PJASAB0002542
1882	PJASAC0000001	PJASAC0001084
1883	PJASAD0000001	PJASAD0003954
1884	PJASAE0000001	PJASAE0001129
1885	PJASAF0000001	PJASAF0005311
1886	PJASAG0000001	PJASAG0001975
1887	PJASAH0000001	PJASAH0003988
1888	PJASAH0000001	PJASAI0000025
1889	PJASAI0000001	PJASAI0000025
1890	PJASAJ0000001	PJASAJ0000009
1891	PMAD_02_BR_00000001	PMAD_02_BR_00001714
1892	PMAD_03_BR_00000001	PMAD_03_BR_00000009
1893	PMAD-BR00000005	PMAD-BR00034906
1894	PMAT_03_BR_00000001	PMAT_03_BR_00000123
1895	PROS0000001	PROS0004812
1896	PUBLIC0000001	PUBLIC0016681
1897	PUBLIC0005382	PUBLIC0006357
1898	PVIC_03_BR_00000001	PVIC_03_BR_00005737
1899	PYEF_03_BR_00000001	PYEF_03_BR_00000001
1900	RCAR_02_BR_00000001	RCAR_02_BR_00000459
1901	RCAR_03_BR_00000001	RCAR_03_BR_00000047
1902	RCAR-BR00000024	RCAR-BR00001861
1903	RCOLL_03_BR_00000001	RCOLL_03_BR_00001236
1904	RECY_02_BR_00000001	RECY_02_BR_00000764
1905	RECY-BR00000007	RECY-BR00007656
1906	RENVAB0000001	RENVAB0008159
1907	RGUT_03_BR_00000001	RGUT_03_BR_00003791
1908	RMAD_02_BR_00000001	RMAD_02_BR_00000287
1909	RMAD-BR00000001	RMAD-BR00000264
1910	RMAS00000001	RMAS00000016
1911	RSHA_03_BR_00000001	RSHA_03_BR_00000908
1912	RSOB_03_BR_00000001	RSOB_03_BR_00000003
1913	RYEH_03_BR_00000001	RYEH_03_BR_00000130
1914	SAND_02_BR_00000001	SAND_02_BR_00002193
1915	SAND-BR00000001	SAND-BR00019351
1916	SAND-BR00000001	SAND-BR00000582

	BEGINNING BATES	ENDING BATES
1917	SAND-BR00000583	SAND-BR00019351
1918	SCOL_02_BR_00000001	SCOL_02_BR_00000303
1919	SCOLa-BR00000001	SCOLa-BR00004524
1920	SCOLb-BR00000001	SCOLb-BR00004097
1921	SCOL-BR00000002	SCOL-BR00000482
1922	SCOLc-BR00000164	SCOLc-BR00004657
1923	SCON_02_BR_00000001	SCON_02_BR_00000056
1924	SCON-BR00000001	SCON-BR00000159
1925	SDEC_03_BR_00000001	SDEC_03_BR_00002221
1926	SECSAG0000185	SECSAG0000188
1927	SECSAH0000307	SECSAH0002310
1928	SECSAI0004777	SECSAI0004858
1929	SECSAV0007977	SECSAV0009531
1930	SECSBA0000029	SECSBA0000054
1931	SECSBF0000016	SECSBF0002888
1932	SECSBJ0005595	SECSBJ0015946
1933	SECSBM0000041	SECSBM0000042
1934	SECSBP0007775	SECSBP0019489
1935	SECSBS0000001	SECSBS0000072
1936	SECSCC0000001	SECSCC0000001
1937	SECSCF0000001	SECSCF0000001
1938	SECSCR0000001	SECSCR0000076
1939	SECSDK0000014	SECSDK0010270
1940	SECSEE0000344	SECSEE0000424
1941	SECSFE0000001	SECSFE0003415
1942	SECSFF0000001	SECSFF0000521
1943	SEDI_03_BR_00000001	SEDI_03_BR_00000817
1944	SFRI_03_BR_00000001	SFRI_03_BR_00004699
1945	SHAN-BR00000002	SHAN-BR00000392
1946	SHEN_03_BR_00000001	SHEN_03_BR_00002583
1947	SKUR_03_BR_00000001	SKUR_03_BR_00000029
1948	SLYO-BR00002588	SLYO-BR00008885
1949	SMAD_02_BR_00000001	SMAD_02_BR_00004372
1950	SMAD-BR00000004	SMAD-BR20018565
1951	SNOW0000001	SNOW0008898
1952	SSMSAA0000001	SSMSAA2406204
1953	SSMSAB0000001	SSMSAB0000149
1954	SSMSAC0000001	SSMSAC0002625
1955	SSMSAD0000001	SSMSAD0000034
1956	SSMSAE0000001	SSMSAE0000091
1957	SSMSAF0000001	SSMSAF0000147
1958	SSMSAI0000001	SSMSAI0000448
1959	SSMSAJ0000001	SSMSAJ0000113
1960	SSMSAK0000001	SSMSAK0000811

	BEGINNING BATES	ENDING BATES
1961	SSMSAL0000001	SSMSAL0004430
1962	SSMSAM0000001	SSMSAM0000081
1963	SSMSAN0000001	SSMSAN0000009
1964	SSTE_03_BR_00000001	SSTE_03_BR_00014755
1965	SSUL_03_BR_00000001	SSUL_03_BR_00001145
1966	STESAA0000212	STESAA0021745
1967	STESAB0000001	STESAB0000356
1968	STESAC0000001	STESAC0135989
1969	STESAD0000001	STESAD0112642
1970	STESAE0000001	STESAE0000035
1971	STESAF0000001	STESAF0129907
1972	STESAG0000001	STEAG0026078
1973	STESAH0000001	STESAH0016146
1974	STESAI0000001	STESAI0019504
1975	STESAJ0000001	STESAJ0010095
1976	STESAK0000001	STESAK0004117
1977	STESAL0000001	STESAL0074552
1978	STESAM0000001	STESAM0000026
1979	STESAN0000001	STESAN0000084
1980	STESAO0000001	STESAO0003090
1981	STESAP0000001	STESAP0000703
1982	STESAQ0000001	STESAQ0001893
1983	STESAR0000001	STESAR0000599
1984	STESAS0000001	STESAS0000626
1985	STESAT0000001	STESAT0006234
1986	STESAU0000001	STESAU0000896
1987	STESAV0000001	STESAV0001516
1988	STESAW0000001	STESAW0000911
1989	STESAX0000001	STESAX0001088
1990	STESAY0000001	STESAY0002956
1991	STESAZ0000001	STESAZ0045267
1992	STESBA0000001	STESBA0000001
1993	STESBB0000001	STESBB0000055
1994	STESBC0000001	STESBC0002379
1995	STESBD0000001	STESBD0003436
1996	STESBE0000001	STESBE0020227
1997	STESBF0000001	STESBF0000262
1998	STESBG0000001	STESBG0001082
1999	STESBH0000001	STESBH0000047
2000	STESBI0000001	STESBI0013455
2001	STESBJ0000001	STESBJ0007496
2002	STESBK0000001	STESBK0004190
2003	STESBL0000001	STESBL0004606
2004	TCHE_02_BR_00000001	TCHE_02-BR00000023

	BEGINNING BATES	ENDING BATES
2005	TCHE_03_BR_00000001	TCHE_03_BR_00010458
2006	TCHE-BR00000018	TCHE-BR01119716
2007	TFUL-BR00000002	TFUL-BR00007008
2008	TLON-BR00000001	TLON-BR00000005
2009	UBSSAA0000084	UBSSAA0000218
2010	UKMSLLBE00000001	UKMSLLBE00006476
2011	UKMSLLBE00000670	UKMSLLBE00006056
2012	UKMSLLDI00000001	UKMSLLDI00002385
2013	UKMSLLES00000001	UKMSLLES00015421
2014	UKMSLLWA00000001	UKMSLLWA00004397
2015	UKSKO00000001	UKSKO00000944
2016	VHEN_03_BR_00000001	VHEN_03_BR_00000007
2017	WACSAA0000010	WACSAA0000637
2018	WFCSAA0000049	WFCSAA0000107
2019	WHIT0000001	WHIT0006148
2020	WHUI_02_BR_00000001	WHUI_02_BR_00000003
2021	WHUI-BR00000002	WHUI-BR00025375
2022	WILL0000001	WILL0000335
2023	WILM0000001	WILM0009824
2024	WJAC_02_BR_00000001	WJAC_02_BR_00000062
2025	WJAC_03_BR_00000001	WJAC_03_BR_00000001
2026	WJAC-BR00000002	WJAC-BR00000331
2027	WNA_03_BR_00000001	WNA_03_BR_00001700
2028	WSASAA0000024	WSASAA0000082
2029	XZHE_03_BR_00000001	XZHE_03_BR_00004965
2030	YPEC_03_BR_00000001	YPEC_03_BR_00005631
2031	YRIC_03_BR_00000001	YRIC_03_BR_00000005
2032	ZBAR_03_BR_00000001	ZBAR_03_BR_00001054

	SQL QUERIES
2033	Microsoft SQL Server Query File: Complaints Analysis - MASTER_Backdated_Trades_08252011.sql
2034	Microsoft SQL Server Query File: Complaints Analysis - MASTER_Holiday_Trades_08252011.sql
2035	Microsoft SQL Server Query File: Complaints Analysis - MASTER_OptionsAnalysis_ALL_08252011.sql
2036	Microsoft SQL Server Query File: Complaints Analysis - MASTER_Out_of_Range_Trades_08252011.sql
2037	Microsoft SQL Server Query File: Complaints Analysis - MASTER_Weekend_Trades_08252011.sql

APPENDIX C

VALUATION REPORT

DUFF & PHELPS

House 5 Common Equity Valuation

November 22, 2011

As of December 11, 2002

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Section 01

Executive Summary

Summary of Scope

The Fair Market Value of a 100 percent interest in the common equity of the broker-dealer business ("House 5") of Bernard L. Madoff Investment Securities LLC ("BLMIS"), on a marketable, controlling interest basis, as of December 11, 2002 (the "Valuation Date") was determined.

Definition of Fair Market Value

For purposes of this Report, the definition of fair market value ("Fair Market Value") is the price at which property would change hands between a willing buyer and a willing seller, neither being under any compulsion to buy or to sell, and both having reasonable knowledge of relevant facts.[1] In estimating Fair Market Value, it is assumed House 5's existing business is ongoing.

Disclaimers and Concluding Remarks

Valuation reports may contain estimates of future financial performance, based on reasonable expectations at a particular point in time but such information, estimates, or opinions are not offered as predictions or as assurances that a particular level of income or profit will be achieved, that events will occur, or that a particular price will be offered or accepted. Actual results achieved during the period covered by the prospective financial analyses will vary from those described in this Report, and the variations may be material.

The work performed did not include the performance of an audit, review, or examination (as defined by the American Institute of Certified Public Accountants) of any of the historical or prospective financial information used, or other information obtained in the course of the investigation, and, therefore, no opinion is expressed with regard to the same. Further, the valuation did not include any investigation of the titles to, or any liens against House 5 property.

[1] Estate Tax Regs., Sec. 20.2031-1(b); Rev. Rul. 59-60, 1959-1 C.B. 237.

Findings[2]

Based on the analyses herein, the estimate of the Fair Market Value of 100 percent of the equity of House 5, on a marketable, controlling interest basis, is **$450 million**, as of the Valuation Date.[3] The following table summarizes the findings:

Valuation Approach	Indicated Fair Market Value
	($ in millions)
Income Approach	$460
Comparable Company Method	420
Concluded Fair Market Value (rounded) [4]	**$450**

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. The use of Fair Market Value as a valuation standard is premised upon both participants to the hypothetical transaction having full disclosure of all the relevant facts, known or knowable as of the Valuation Date, for the valuation to be reliable. The analysis included herein has been performed assuming that the information presented in the regulatory financial reports is correct with minimal adjustments required beyond the specific adjustments made and outlined herein (see definition of Adjusted). Evidence exists which indicates House 5 revenues were artificially enhanced via the transfer of customer monies from House 17[5] which had the effect of significantly overstating the reported revenues. Accordingly, adjustments have been made to as-reported historical FOCUS report data to remove these revenues. Further, since House 5 revenues were propped up by customer monies from House 17, it calls into question House 5's ability to fund its

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[2] A calculation of the implied value of the United Kingdom-based entity Madoff Securities International Limited ("MSIL") was performed by multiplying MSIL's y/e 2002 book value of $46.5 million by the implied House 5 EV/BV multiples of 1.5x and 1.4x, averaging the implied values resulting in an implied value of $68.4 million. MSIL's BV was converted from GBP to USD using the spot exchange rate as of December 11, 2002 of 1.5699 USD/GBP.

[3] 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. Further, there is evidence that House 5 was artificially supported by millions of dollars of Other People's Money from the IA Business.

[4] *Id.*

[5] House 17 is the investment advisory business of BLMIS. During the investigation it was discovered that a significant percentage of the revenue accounted for in the FOCUS reports for House 5 was derived from Other People's Money being transferred to House 5 via (1) House 17 directly, (2) House 17 to a third party brokerage account, or (3) House 17 to MSIL (See Table 10 of the Dubinsky expert report dated November 22, 2011 for more details).

own operations, and, therefore, calls into question its ability to operate as a going concern.

Section 02

Defined Terms

Defined Terms

The following is a non-exhaustive list of defined terms used throughout this Report:

FOCUS report data – refers to the Financial and Operational Combined Uniform Single ("FOCUS") electronic data files including historical quarterly financial statements for BLMIS from 1Q 1983 through 3Q 2008.

Adjusted – the word "Adjusted," where capitalized in this Report, refers to adjustments made to the as-reported FOCUS report data for 2000, 2001 and 2002. These adjustments were made to eliminate from revenues transfers of money from House 17, as shown in Table 10 of the Dubinsky expert report dated November 22, 2011, which did not support a legitimate business purpose. Additionally, the FOCUS report data was adjusted to eliminate employee expenses that were included for House 17 employees and any resulting adjustments that are required to the assets, liabilities, and equity accounts due to the changes in revenues and expenses.

Leverage Ratio – refers to the ratio of total assets to total equity on a book value basis.

Cash Ratio – refers to the ratio of non-restricted cash to total assets.

Trading Assets – refers to the securities and spot commodities owned at market value line item from FOCUS report data.

Trading Liabilities – refers to the securities sold, not yet repurchased at market value line item from FOCUS report data.

Short Ratio – refers to the ratio of Trading Liabilities, divided by Trading Assets on a book value basis.

Trading Revenue – refers to the sum of the following FOCUS report data line items:

- Gains or losses on firm securities trading accounts – from market making in over-the-counter equity securities;
- Gains or losses on firm securities trading accounts – from market making in options on a national securities exchange;
- Gains or losses on firm securities trading accounts – from trading in debt securities;
- Gains or losses on firm securities trading accounts – from all other trading; and
- Other revenue related to securities business.

Turnover – refers, in this Report, to the ratio of Total Revenue, divided by Trading Assets, with Trading Assets stated on a book value basis.

Sustainable Growth Rate – refers, in this Report, to the ratio of return on assets, divided by the Short Ratio, and represents the implied rate of growth in Trading Assets that could be sustained by the operations, as forecast

Pre-Compensation Operating Expense – refers to all operating expense, other than compensation expenses.

Pre-Comp Operating Income – refers to Total Revenue, minus Pre-Compensation Operating Expenses.

Comp Expense – refers to clerical and administrative employees' expenses line item from FOCUS report data.

Payout Ratio – refers to the ratio of Comp Expense to Pre-Compensation Operating Income.

Debt – refers to bank loans payable line item from FOCUS report data for historical periods and the debt amount in pro forma 2002 and the Projection Period, stated on a book value basis.

Equity Value ("EV") – refers to the market value of a company's common equity, calculated as the share price as of the day prior to the Valuation Date, times the share count on the cover of the most recently-filed SEC filing on Form 10-Q as of the Valuation Date, times a factor of 140 percent, to reflect an estimated control premium[6] and valuation on a controlling interest basis.

Book Value ("BV") – refers to the balance sheet carrying amount of common equity as of the Valuation Date.

Tangible Book Value ("TBV") – refers to the balance sheet carrying amount of common equity, less intangible assets, as of the Valuation Date.

Revenue – refers to LTM revenue available as of the Valuation Date.

Cash Earnings – refers to LTM net income, plus LTM amortization expense as of the Valuation Date.

[6] The premium paid above the market price of the target company's stock prior to a transaction's announcement date will generally include consideration for the value of control and may also include synergy value in a controlling interest transaction.

Return on Equity ("ROE") – refers to the calculation of LTM net income, divided by BV.

Concluded Comparable Companies – refers to Knight Capital Group, Inc. and LaBranche & Co. Inc.

Section 03

Sources of Information

In the course of the analyses, financial and other information, made available to or requested in electronic format from Baker as well as information available in the public domain or purchased databases was considered. The following is a partial listing of the information sources which were considered in the analysis:

- Audited Financial Statements of BLMIS;
- FOCUS Reports;
- FOCUS report data;
- House 17 revenue calculations (see Table 10 in the Dubinsky expert report dated November 22, 2011);
- Salomon Smith Barney Equity Research, *Brokers & Asset Managers*, February 21, 2002 (the "Salomon Report");
- Deutsche Bank Equity Research, *Brokers & Asset Managers*, August 2002 (the "Deutsche Bank Report");
- U.S. Securities Exchange Commission, *Regulatory and Compliance Issues in a Decimalized Environment*, June 8, 2001;
- U.S. Securities Exchange Commission, *Testimony Concerning the Effects of Decimalization on the Securities Markets*, May 24, 2001;
- Standard & Poor's, *Industry Survey: Investment Services*, October 31, 2002 (the "S&P Report");
- Securities Industry Association Research Reports, *Bottom Formation*: Securities Industry Update, November 29, 2002;
- 2002 Mergerstat Yearbook;
- The Capital IQ, SNL Financial ("SNL"), Federal Reserve and Bloomberg on-line financial databases; and
- Securities and Exchange Commission ("SEC") filings, including annual reports on Form 10-K, and quarterly reports on Form 10-Q.

Section 04

House 5 Description and Developments

House 5 Description and Developments[7]

House 5 operated as a securities broker-dealer registered with the U.S. Securities and Exchange Commission in the United States. It provided executions for broker-dealers, banks, and financial institutions, and was a member of the National Association of Securities Dealers, Inc. House 5 commenced operations in 1960 and was headquartered in New York, NY.

House 5 was an international market maker. The firm provided executions for broker-dealers, banks, and financial institutions since its inception.

House 5's customers included securities firms and banks. The firm was a market maker in S&P 500 stocks, US convertible bonds, preferred stocks, warrants, units, and rights. As-reported FOCUS report data indicated that market making generated approximately 45 percent of revenue in 2001 and 35 percent of revenue in 2002.

In addition to market making, House 5 acted as a proprietary trader on its own account. According to as-reported FOCUS report data, proprietary trading generated approximately 48 percent of revenue in 2001 and 59 percent in 2002.

Other revenue generated approximately 7 percent of revenue in 2001 and 6 percent of revenue in 2002.

Recent Financial Overview[8]

For purpose of this Report, unless otherwise noted, all financial information is presented as of and for the year ending ("y/e") December 31, based on FOCUS report data.

Based on the unadjusted FOCUS reports, which are known to be incorrect, House 5's BV at the y/e 2002 was $440 million, up from $413 million at the y/e 2001, representing growth due to earnings. Net capital information was made available as of the end of the fiscal quarters, and is presented below based on net capital at the fiscal year ended ("fye") October 31. Net capital at fye 2002 was $351 million, or 80 percent of BV. The following table illustrates the amount of equity and net capital at fye 2001 and 2002:

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[7] All financial data referenced in this section is based on as-reported FOCUS report data, and, therefore, does not reflect any adjustments to remove the historical impact of House 17 revenue.

[8] 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. Further, there is evidence that House 5 was artificially supported by millions of dollars of Other People's Money from the IA Business.

Equity Type[9]	FYE October 31, 2001	2002	Change
	($ in millions)		(%)
Total Ownership Equity	$400	$438	9.5
Net Capital	311	351	12.8
Net Capital Margin (%)	77.7%	80.1%	2.4

Total Trading Revenue for the y/e 2002 approximated $106 million, a decline of 37 percent from the prior year, due to declines in all revenue types as indicated in the following table:

Revenue[10]	y/e 2001	y/e 2002	Change
	($ in millions)		(%)
Market Making	$ 76	$ 36	(52)
Proprietary Trading	81	63	(22)
Other Revenue	12	6	(48)
Trading Revenue	$169	$106	(37)

Non-Compensation Operating Expenses, including commissions, clearing fees, communications, occupancy costs, regulatory fees and other expenses related to trading on exchanges, equated to 41 percent and 53 percent of Trading Revenue for the y/e 2001 and 2002, respectively. The same measure averaged 49 percent of Trading Revenue for the ten years ended 2002.

Comp Expense equated to a 53 percent and 46 percent Payout Ratio for the y/e 2001 and 2002, respectively. The Payout Ratio averaged 38 percent over the ten years ended 2002.

Profit after tax was 17 percent and 16 percent for the y/e 2001 and 2002, respectively. While House 5 had always operated as a pass-through entity for income tax purposes, for purposes of this Report, income taxes were imputed, consistent with valuation approaches as of the Valuation Date, for each year presented.

As a result of the improper use of Other People's Money, the following adjustments are required to recast the above FOCUS report financial information.

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[9] 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. Further, there is evidence that House 5 was artificially supported by millions of dollars of Other People's Money from the IA Business.

[10] *Id*.

Adjustment[11]	y/e 2000	y/e 2001	Total
		($ in millions)	
House 17 Revenue	(76)	(72)	(148)
House 17 Expenses			
Comp Expense	(7)	(8)	(15)
Occupancy	(1)	(1)	(1)
Pretax Income	(68)	(64)	(132)

	y/e 2001		
	As-Reported	Adjustments	Adjusted
		($ in millions)	
Cash	141	(51)	91
Trading Assets	428	(137)	291
Other Assets	214	(63)	151
Total Assets	783	(251)	533
Debt	-	-	-
Trading Liabilities	329	(105)	224
Other Liabilities	42	(13)	28
Total Liabilities	370	(118)	252
Book Value of Equity	413	(132)	281
Total Liabilities and Equity	783	(251)	533

[11] 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. Further, there is evidence that House 5 was artificially supported by millions of dollars of Other People's Money from the IA Business.

Section 05

Contemporaneous 2002 Industry Developments

Current Industry Developments[12]

Market spreads in U.S. equity trading decreased in the years leading up to 2002. Average relative spreads on the National Association of Securities Dealers Automated Quotation or "NASDAQ" exchange decreased dramatically due to overall over-the-counter ("OTC") trading spreads decreasing by 90 percent over past ten years ending June 2002. The New York Stock Exchange ("NYSE") also saw trading spreads compressing, narrowing 37 percent between December 2000 and March 2001. The compression of trading spreads increased capital intensity for broker-dealers, resulting in consolidation in registered broker-dealer industry, leaving the 25 largest NYSE firms controlling 79 percent of capital and 75 percent of revenue as of December 1999.

Both exchanges not only saw market spreads decrease, but quote sizes as well. Quote sizes decreased 60 percent and 68 percent on the NYSE and NASDAQ, respectively as of May 2001. Smaller trades at smaller spreads led to significantly less revenue per trade and lower profitability. However, this was partially offset by an increase in trading frequency.

Most of these trends can be explained by the decimalization of the NYSE, which began in 2000. Trading volume increases, pricing spread decreases, increased competitiveness and the elimination of price disparities with international markets were also attributed to this conversion.

Trading volume increased dramatically in the years approaching the Valuation Date. From 1997 to 1999, daily on-line trading volume increased 400 percent overall, and increased from 7 percent to 16 percent on all equity trades. Despite low spreads and quote sizes, industry revenue was estimated to grow by 5 percent in 2003 due to the large increase in trading volume. A key reason was primarily due to the internet, allowing more people to invest and trade daily. Furthermore, the capabilities of the internet caused elimination of informational advantages of professional money managers.

In the broker-dealer industry, mark to market accounting of assets made and continues to make EV/BV multiple valuations the norm. Earnings are

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[12] Adapted from various sources: Salomon Smith Barney Equity Research, *Brokers & Asset Manager*, February 21, 2002; Deutsche Bank Equity Research, *Brokers & Asset Managers*, August 2002; U.S. Securities Exchange Commission, Regulatory *and Compliance Issues in a Decimalized Environment*, June 8, 2001; U.S. Securities Exchange Commission, *Testimony Concerning the Effects of Decimalization on the Securities Markets*, May 24, 2011; Standard & Poor's, *Industry Survey: Investment Services*, October 31, 2002; and Securities Industry Association Research Reports, *Bottom Formation: Securities Industry Update*, November 29, 2002.

typically volatile, making price-to-earnings valuation ratios less reliable. As of the date of the Deutsche Bank Report, EV/BV valuations were in line with the historical range 1.5x - 2.5x, with the group trading, on average, at 1.95x as of the date of the source material referenced above.[13]

Financial Market Commentary[14]

As of the Valuation Date, year-to-date stock market indicators were broadly negative with the Dow Jones Industrial Average ("DJIA"), S&P 500, and NASDAQ 100 ("NDX") down 14 percent, 21 percent, and 37 percent, respectively. Furthermore, the VIX volatility index was up 12 percent year-over-year. Compared to the 52-week high, the DJIA was down 19 percent, the S&P 500 was down 23 percent, and the NDX was down 38 percent. Compared to the 52-week low, the DJIA was up 18 percent, the S&P 500 was up 16 percent, and the NDX was up 65 percent.

Third quarter 2002 domestic securities industry profits were more than slashed in half to $0.9 billion from the second quarter's $2 billion, which was already down one-third from the first quarter's $3 billion. Fourth quarter profits were estimated at $2.0 billion for a full-year 2002 total of $7.9 billion, a seven-year low. While all revenue lines were down across the board in 3Q 2000 versus 2Q 2000, so too were every expense line, except for interest and floor costs. Securities industry layoffs had reached 10 percent of the workforce, worse than in the post-1987 environment, and in aggregate terms, at least 75,100 in the United States alone, double the post-1987 job losses.

Most, if not all, securities firms were focusing more intensely on core competencies and getting back to Wall Street's business basics – improving customer satisfactions and operational efficiency – in hopes of ensuring an eventual long-term recovery of both margins and ROEs. With hopes of another major bull market unlikely before late 2003 or 2004, firms were expected to continue to reduce controllable expenses, at least sufficiently to offset largely non-controllable items, such as benefit costs per employee, which were still rising at double-digit annual rates.

One positive trend that emerged in 2002 was the end of the decades-long decline in average commission revenue earned by securities firms on each "ticket". Average per-ticket commissions flattened out in the third quarter

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[13] The "group" referenced in the Deutsche Bank Report refers to the Independent Brokers (Bear Stearns, Goldman Sachs, Lehman Brothers, Merrill Lynch, and Morgan Stanley) and the trading multiples were calculated using stock price data as of August 19, 2002 and financial metrics as of 2Q 2002.

[14] Adapted from Securities Industry Association Research Reports, *Bottom Formation: Securities Industry Update*, November 29, 2002.

as the industry adjusted to the advent of decimal pricing and of compensation based on spreads. Deep discounting practices also subsided, allowing some restoration of “pricing power”.

Another positive trend was higher clearing revenues, reflecting higher fees charged on still strong volume in secondary markets. A third trend, was higher fees earned for financial advisory services provided to customers engaging in corporate restructuring, mergers and acquisitions and leverage buyouts, all types of activity that were expected to rise as economic activity slowed and uncertainty remained high in 4Q 2002.

Section 06

General Economic Overview

Introduction[15]

As part of the analysis, consideration was given to the general economic outlook as of the Valuation Date and its potential impact on House 5. An assessment of the general economy can often identify underlying causes for fluctuations in the financial and operating performance of a company. This overview of the general economic outlook is based on an examination of various economic analyses and the consensus forecasts of *Blue Chip Economic Indicators* (the "Consensus").

Economic Growth

Following another month of discouraging reports, Consensus forecasts of U.S. economic growth for the final quarter of 2002 and for 2003 declined. The forecast annual real gross domestic product ("GDP") growth dropped back to 2.3 percent for 2002, losing the 0.1 of a percentage point gained last month, and forecasts for 2003 were lowered another 0.2 of a percentage point to 2.8 percent. The Consensus estimates that real GDP growth in Q3 was 3.1 percent, based on strong truck and vehicle sales; however, this was half a percentage point below the prior month's estimates. The forecast for growth in Q4 fell even further to 1.6 percent, down 0.6 of a percentage point from last month's numbers, while expectations for Q1 of 2003 dropped from 3.4 percent in September to 2.7 percent in November 2002. The only forecast left unchanged from the prior month was for real GDP growth in Q2 of 2003, remaining at 3.3 percent. Current-dollar (nominal) GDP expectations slipped to 3.5 percent in 2002 and to 4.5 percent in 2003, compared to 2.6 percent in 2001.

A significant decline in vehicle sales in September led to the first drop in personal consumption expenditures ("PCE") since November 2001, and car and light truck sales continued to decline slightly in October. In addition, reports indicated that the manufacturing sector was weakening at the end of Q3. In September, total industrial production fell 0.1 percent and manufacturing output dropped 0.3 percent, which led to a decline in capacity utilization for the second straight month. Many sectors at the time had a large amount of excess capacity, which led to a poor outlook for growth in capital spending. In October, the Institute of Supply Management's index of activity in the factory sector fell to 48.5, the lowest level of the year. The average workweek, manufacturing workweek, and aggregate hours worked index also declined in October.

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[15] The General Economic Overview section is based off resources including: *Blue Chip Economic Indicators*, November 10, 2002; *Standard & Poor's Trends & Projections*, November 14, 2002; and Federal Reserve Statistical Release, H.10, *Foreign Exchange Rates*, November 18, 2002.

Consumption and Investment

Based on strong vehicle sales during the first two months of Q3, the Consensus maintained its estimate of PCE growth in the third quarter at a rate of 4.2 percent, following the slight growth of 1.8 percent in Q2. For Q4, however, forecasts fell to just 1.1 percent, the weakest quarterly performance since the early 1990s. For 2002 as a whole, the panel expected PCE to grow 3.1 percent, whereas the forecast for calendar year 2003 declined to 2.6 percent.

The Consensus predicted new housing starts would total 1.67 million units in 2002 and 1.61 million units in 2003, compared to 1.60 million units in 2001. Total vehicle sales were expected to number 16.8 million units in 2002 and 16.5 million units in 2003, compared to 17.5 million units in 2001. Nonresidential investment was expected to decline by 5.5 percent in 2002 and to grow 4.0 percent in 2003 after declining 5.2 percent during 2001.

Inflation and Unemployment

The expectation of slower than predicted GDP growth in 2003 was also reflected in Consensus forecasts for inflation and unemployment. The Consensus maintained its prediction of an increase in the Consumer Price Index ("CPI") of 1.6 percent in 2002, but lowered its prediction further to 2.2 percent in 2003, following a high of 2.5 percent in July. The chained-GDP price index, meanwhile, was expected to rise 1.2 percent in 2002 and 1.6 percent in 2003, after increasing 2.4 percent in 2001.

Unemployment was expected to peak in Q2 of 2003 and reach an average of 5.8 percent during both 2002 and 2003, compared to 4.8 percent in 2001.

Interest Rate Environment

On November 12, 2002, Fed funds were trading at 1.25 percent, three-month T-bills at 1.19 percent, and ten-year T-notes at 3.85 percent, while the dollar was trading at 120 yen and $1.01/euro. At its last meeting on November 6, 2002, the Federal Open Market Committee ("FOMC") lowered the Fed funds rate to 1.25 percent and the discount rate to 0.75 percent.

Section 07

Valuation Approaches

In estimating the Fair Market Value of a 100 percent interest in the common equity of House 5, as of the Valuation Date, the Income Approach and the Market Approach were considered.

Income Approach

The Income Approach is a valuation technique that provides an estimation of the Fair Market Value of an asset or a business based on the cash flows that an asset or a business can be expected to generate over its remaining useful life. The Income Approach begins with an estimation of the annual cash flows a hypothetical buyer would expect the subject asset or business to generate over a discrete projection period. The estimated cash flows for each of the years in the discrete projection period are then converted to their present value equivalent using a rate of return appropriate for the risk of achieving the projected cash flows. The present value of the estimated cash flows are then added to the present value equivalent of the residual value of the asset (if any) or the business at the end of the discrete projection period to arrive at an estimate of Fair Market Value.

Market Approach

The Market Approach is a valuation technique that provides an estimation of Fair Market Value based on market prices in actual transactions and on asking prices for assets or businesses. The valuation process is a comparison and correlation between the subject asset or business and other similar assets or businesses. Considerations such as time and condition of sale and terms of agreements are analyzed for comparable assets or businesses and are adjusted to arrive at an estimation of the Fair Market Value of the subject asset or business.

Comparable Company Method. The Comparable Company Method indicates the Fair Market Value of a business by comparing it to publicly-traded companies in similar lines of business. The conditions and prospects of companies in similar lines of business depend on common factors such as overall demand for their products and services. An analysis of the market multiples of companies engaged in similar businesses yields insight into investor perceptions and, therefore, the value of the subject company.

After identifying and selecting the guideline publicly-traded companies, their business and financial profiles are analyzed for relative similarity. Considerations for factors such as size, growth, profitability, risk, and return on investment are also analyzed and compared to the comparable businesses. Once these differences and similarities are assessed, the EV multiples (i.e., EV / BV, EV / Cash Earnings and EV / Revenue) of the publicly-traded companies are calculated. These EV multiples are then applied to the subject company's operating results, adjusted for special and nonrecurring items, to estimate the Fair Market Value of the subject company's equity on a marketable, minority value. A control premium is then applied to this value to calculate the indicated Fair Market Value of the equity on a marketable, controlling basis.

Comparable Transaction Method. One variation of the Market Approach includes estimating the Fair Market Value of a business based on exchange prices in actual transactions and on asking prices for controlling interests in public or private companies currently offered for sale. The process essentially involves comparison and correlation of the subject company with other similar companies. Adjustments for differences in factors described earlier (i.e., size, growth, profitability, risk, and return on investment) are also considered.

In selecting comparable transactions, several merger and acquisition databases and financial publications are searched in which transactions are disclosed to gather information about the prices paid for similar businesses under similar circumstances. The acquisitions are relevant indicators of an actual market participant's perception of Fair Market Value, and, therefore, are a useful valuation indicator. Based on a review of selected financial databases of companies in the industry, transactions are identified and selected.

In general, many transactions that would be relevant are either private, in which case sufficient information is not usually made available to the public, or deemed immaterial to the overall operations of larger companies that are parties to the transaction. If the transaction is deemed immaterial, the SEC does not require disclosure of information about the market transaction.

The Income Approach and Market Approach are used as the methods to estimate the Fair Market Value of a 100 percent interest in the common equity of House 5, as explained below. While a number of publicly-traded companies and market transactions involving companies providing services with some similarity to those of House 5 were identified, ultimately a set of two companies, referred to as the Concluded Comparable Companies, were utilized in estimating the Fair Market Value of a 100 percent interest in the common equity of House 5, as of the Valuation Date under the Market Approach. The Comparable Transactions Method under the Market Approach was deemed to be of limited applicability, due mostly to the target companies being more tilted toward retail brokerage activities (whereas House 5 dealt exclusively with institutions in its market making activities and had a significant portion of its Trading Revenue derived from proprietary trading activities). As a result, the Comparable Transaction

Method was used to generally corroborate the results using the Income Approach and Comparable Company Method.

Discount for Lack of Marketability

The holder of a non-marketable investment is subject to the risk that the investment's value will decline before the investment can be sold to another investor in a private transaction. Conversely, the holder of an investment that is identical but for the fact that there exists an active public market is not subject to the same lack of marketability risk. Therefore, the holder of the non-marketable investment will have a higher required rate of return on the investment than the holder of the marketable investment. Consequently, the holder of the non-marketable investment will generally sell to the hypothetical willing buyer at a discount to the marketable investment. The factors that affect the size of the discount for lack of marketability fall into two general categories: (1) factors that affect the duration of the holding period necessary to locate a buyer and negotiate a sale, and (2) factors that affect the degree of risk faced per unit of time during this holding period. Risk per unit of time is expressed as the volatility of an investment's total return (i.e., both dividends and capital appreciation), or the propensity for an investment's actual return to differ from its expected return. Numerous factors are typically assessed in analyzing an equity investment's marketability.

Section 08

Selection of Discount Rate

Equity Cost of Capital

The equity cost of capital was calculated to be 16.5 percent[16] (see Exhibit 2.C). This rate was applied to the equity cash flows expected to be generated by House 5 over the projection period and the terminal value at the end of the projection period to calculate the present value of both. Generally, the selection of a rate of return applicable to the valuation of a business is based on the required rates of return on the full complement of capital securities, including debt, preferred and common equity capital. Since House 5 and market participants are primarily financed with equity capital, and because the leveraged business model projections consider the financing cost on leverage directly in estimating net income after taxes, the equity cost of capital is computed using the Capital Asset Pricing Model ("CAPM"), as is described in more detail below.

CAPM

The rate of return on common equity capital was estimated using the CAPM. CAPM has been empirically tested and is widely accepted for the purpose of estimating a company's required return on equity capital.[17] In applying the CAPM, the rate of return on common equity is estimated as the current or normalized risk-free rate of return on long-term U.S. Government bonds as of the Valuation Date, plus a market risk premium expected over the risk-free rate of return, multiplied by the "beta" for the stock. Beta is defined as a risk measure that reflects the sensitivity of a company's stock price to the movements of the stock market as a whole. Additional risk premiums, if applicable, may also be included in the calculation of the required return on common equity using the CAPM approach, such as a size-based premium and a company-specific risk premium, as described below.

The CAPM rate of return on equity capital is calculated using the formula:

Ke = Rf + B * ERP + Ssp + Alpha

where:

Ke = Rate of return on equity capital;

Rf = Risk free rate of return;

B = Beta or systematic risk for this type of equity investment;

ERP = Equity risk premium: The expected return on a broad portfolio of stocks in the market (Rm) less the risk free rate (Rf);

[16] 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. Further, there is evidence that House 5 was artificially supported by millions of dollars of Other People's Money from the IA Business.

[17] Investments, W.F.Sharpe, Prentice Hall: Englewood Cliffs, New Jersey (1985).

Ssp	=	The small company premium adjustment to the cost of equity due to the size of the subject company;
Alpha	=	Adjustment to the cost of equity due to characteristics specific to the subject company.

Risk Free Rate of Return

The selected risk-free rate of return was the long-term local bond yield-to-maturity as of market close on December 10, 2002. The projections for House 5 were denominated in USD and thus the 20-year U.S. Treasury Bond was selected. The yield on the 20-year Treasury bond was 5.02 percent as of the Valuation Date.

Beta

Beta is a statistical measure of the volatility of the price of a specific stock relative to the movement of a general group. Generally, beta is considered to be indicative of the market's perception of the relative risk of the specific stock. Practical application of the CAPM is dependent upon the ability to identify publicly-traded companies that have similar risk characteristics as the company, to derive a meaningful measure of beta that would apply to the company.

Betas reported in public sources are typically "leveraged," meaning that they incorporate the added risk to a common equity investor due to the leveraged capital structure of the company. To derive a beta applicable to the equity investor in a business, the reported levered betas for publicly traded companies considered as comparable to the business must first be unlevered to estimate the beta risk to the equity investment as if 100 percent equity financed, and then re-levered at an assumed normalized market participant amount of debt in the capital structure. The un-levering and re-levering process is intended to normalize for any comparable companies that might have a materially different capital structure, and, therefore, levered beta, than that of the average comparable company. The market participant unlevered beta of 1.46 was re-levered based on a capital structure of 88 percent equity and 12 percent debt, consistent with the weighted average capital structure of the concluded comparable company set, resulting in a re-levered beta of 1.58.

Equity Risk Premium

Practical application of CAPM also relies on an estimate of the Equity Risk Premium. Since the expectations of the average investor are not directly observable, the Equity Risk Premium must be inferred using one of several methods. One approach is to use premiums that investors have historically earned over and above the returns on long-term government bonds. The premium obtained using the historical approach is sensitive to the time period over which one calculates the average. Depending on the time period chosen, the historical approach yields an average premium of 5 to 8 percent. Another approach is to incorporate expected rates of return obtained from analysts who follow the stock market. Again, this approach will lead to differing estimates depending upon the source

An Equity Risk Premium of 6 percent was applied, based on the Long-Horizon Equity Risk Premium of 7.42 percent[18] and adjusted 1.5 percent[19] for survivorship bias.

Premium for Small Size

The CAPM rate of return is usually adjusted by a premium, which reflects the extra risk of an investment in a small company. This premium is derived from historical differences in returns between small companies and large companies, using data published by Morningstar. This adjustment is deemed applicable because the analysis behind the estimation of the Equity Risk Premium was based on large-capitalization stocks, and, therefore, would provide an indication only of the Equity Risk Premium applicable to an equity investment in a large capitalization stock. Since House 5 would not be considered a large-capitalization stock if publicly traded, a small stock premium was applied, based on the size of House 5, of 1.94 percent.[20] This premium is based on the "8th decile" from a commonly-referenced Ibbotson Associates study.[21]

Alpha

The Alpha risk premium represents the additional return required by an investor due to risks that are unique to House 5, which typically relate to differences between House 5 and the comparable company set. In the analysis, an alpha adjustment was not applied to House 5 because the valuation methodology was applied to financial projections which were assembled according to the assumption that a market participant buyer of House 5 would increase the leverage of the company to a level that is more consistent with that of the market participants as of the Valuation Date. Therefore, the specific attributes of House 5 are replaced with those of a market participant in the application of the Income Approach, and, therefore, an Alpha premium was not applied.

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[18] Long-Horizon Equity Risk Premium based on the Market Total Return of the S&P 500 Index. Ibbotson Associates: Stocks, Bonds, Bills, & Inflation, 2002 Yearbook.

[19] Copeland, Koller, and Murrin, 2000, *Valuation: Measuring and Managing the Value of Companies.*

[20] 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. Further, there is evidence that House 5 was artificially supported by millions of dollars of Other People's Money from the IA Business.

[21] Ibbotson Associates: Stocks, Bonds, Bills, & Inflation, 2002 Yearbook.

Concluded Equity Cost of Capital

By substituting the appropriate factors in the CAPM as discussed above, the common equity rate of return applicable to an investment in the equity of House 5, as of the Valuation Date, was estimated to be approximately 16.5 percent, as summarized below:[22]

CAPM Input	Input
Risk-free rate (Rf)	5.02%
Beta (B)	1.58
Equity Risk Premium (ERP)	6.00%
Small Stock Premium (Ssp)	1.94%
Alpha (A)	0.00%
Equity Cost of Capital (rounded)	**16.5%**

[22] 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. Further, there is evidence that House 5 was artificially supported by millions of dollars of Other People's Money from the IA Business.

Section 09

Income Approach

The future cash flows of House 5 were estimated to assist with the calculation of the Fair Market Value of a 100 percent interest in the common equity of House 5 under the DCF Method.

DCF Method

Application of the DCF Method

Forecast Financial Information ("FFI") was derived based on understanding the nature of the business of House 5, the reported historical financial performance as reported in the FOCUS reports, Adjusted FOCUS report data, and the attributes of the market participants. FFI was estimated for the calendar years ending December 31, 2003 through 2007 (the "Projection Period").

The following tables illustrate the adjustments made to the as-reported financial data to eliminate House 17 revenues, certain employee and other costs associated with House 17 and the resulting effects on the assets, liabilities and equity accounts:

Adjustment[23]	y/e 2000	y/e 2001	Total
		($ in millions)	
House 17 Revenue	(76)	(72)	(148)
House 17 Expenses			
Comp Expense	(7)	(8)	(15)
Occupancy	(1)	(1)	(1)
Pretax Income	(68)	(64)	(132)

	y/e 2001		
	As-Reported	Adjustments	Adjusted
		($ in millions)	
Cash	141	(51)	91
Trading Assets	428	(137)	291
Other Assets	214	(63)	151
Total Assets	783	(251)	533
Debt	-	-	-
Trading Liabilities	329	(105)	224
Other Liabilities	42	(13)	28
Total Liabilities	370	(118)	252
Book Value of Equity	413	(132)	281
Total Liabilities and Equity	783	(251)	533

[23] 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. Further, there is evidence that House 5 was artificially supported by millions of dollars of Other People's Money from the IA Business.

Consequently, FFI was based on the (i) Adjusted FOCUS report data, and (ii) an assumed re-capitalization of the Adjusted FOCUS report data based on market participant assumptions. The following steps were generally employed to derive Adjusted FOCUS report data, and estimate quarterly financial statements on a pro forma basis for the y/e 2002:

1) Subtracted House 17 revenues of $75.6 million, $72.4 million, and $60.5 million for the y/e 2000, 2001, and 2002, respectively from the as-reported Total Revenue;
2) Made historical expense adjustments to remove House 17-related expenses from as-reported Pre-Compensation Operating Expenses and Comp Expense;
3) Re-calculated the y/e 2000, 2001, and 2002 BV based on the adjustments to back out House 17 revenue and expenses;
4) Computed Adjusted Turnover on a quarterly basis for the y/e 2002 (see Exhibit 2.B);
5) Re-calculated as-reported assets and liabilities for the y/e 2000, 2001 and 2002 based on as-reported common-size ratios of BV, multiplied by the Adjusted BV;
6) Re-leveraged the business as of the y/e 2001, based on comparable company operating levels using a Leverage Ratio of 3.17 and a Cash Ratio of 8 percent;
7) Prepared pro forma 2002 quarterly financial statements as if the business had been operated according to market participant assumptions for the y/e 2002, and, excluding the estimable impact of removing House 17 revenue and expenses for the y/e 2000, 2001 and 2002;
8) Prepared pro forma Total Revenues that would be have been achieved by House 5 during 2002 by applying Adjusted Turnover[24] to the pro forma level of Trading Assets;
9) Computed average historical Company margins and Comp Expense achieved during periods when House 5's Leverage Ratio was in-line with current market participant levels for application to pro forma revenue streams;
10) Calculated pro forma earnings before interest and taxes ("EBIT") based on the above assumptions;
11) Computed interest expense related to incremental debt used to leverage the business to market participant levels, and subtracted

[24] Adjusted Turnover as calculated in Exhibit 2.B.

forecast interest expense to arrive at earnings before taxes ("EBT");

12) Calculated income taxes based on effective tax rates of the Concluded Comparable Companies and subtracted those taxes from EBT to arrive at after tax income;

13) Used pro forma quarterly after tax income to calculate the increase in Trading Assets and Trading Liabilities that would be consistent with the operations;

14) Calculated end of quarter balance sheets based on aforementioned growth in Trading Assets and Trading Liabilities and commensurate growth in other assets and liabilities; and

15) Summed the quarterly income statements to estimate a pro forma income statement for the y/e 2002, which also forms the basis for LTM financials applied in the Market Approach.

Following the estimation of pro forma y/e 2002 financial statements, the following procedures were used to arrive at FFI for the Projection Period and to estimate the Fair Market Value of a 100 percent interest in the common equity of House 5 under the DCF Method:

16) Forecast Trading Asset growth for the Projection Period based on third-party research articles and reports, and also based on the Sustainable Growth Rate;

17) Estimated Total Revenue by applying Adjusted Turnover to average Trading Assets during each forecast year;

18) Computed forecast Pre-Compensation Operating Expense levels by growing expense line items either at the rate of growth in Trading Assets or the rate of growth due to inflation, or by applying the historical average expense ratio relative to Total Revenue, and subtracted the Pre-Compensation Operating Expense from Total Revenue to calculate Pre-Comp Operating Income;

19) Forecast Comp Expense based on the historical average[25] Payout ratio of 33 percent, which is below-average compared to the Payout ratio of comparable companies, and subtracted Comp Expense to calculate EBIT;

[25] Historical average expense ratio was calculated as the average ratio during historical years where the Leverage Ratio ranged from 3.0 to 4.0.

20) Calculated interest expense based on the average forecast Debt balance, times an implied interest rate of 3.75 percent,[26] and subtracted interest expense from EBIT to calculate EBT;

21) Calculated income taxes based on effective tax rates of the Concluded Comparable Companies and subtracted those taxes from EBT to arrive at after tax income;

22) Calculated operating cash flow by summing after tax income with the net investment in non-cash assets and non-debt liabilities;

23) Calculated annual free cash flows to equity generated by House 5 during the Projection Period based on the assumption that Debt would remain at the y/e 2002 pro forma levels in all future periods;

24) Annual free cash flow to equity, if positive, was assumed to be distributed at the end of the calendar year and was discounted accordingly at the equity cost of capital of 16.5 percent and summed to arrive at the present value of free cash flows during the Projection Period;

25) Estimated the terminal value of the business beyond the Projection Period based on the application of an EV / BV multiple as of the December 31, 2007; and

26) Combined the present values of the aforementioned Projection Period cash flows, and the terminal value.

Free Cash Flows

Recapitalization[27]

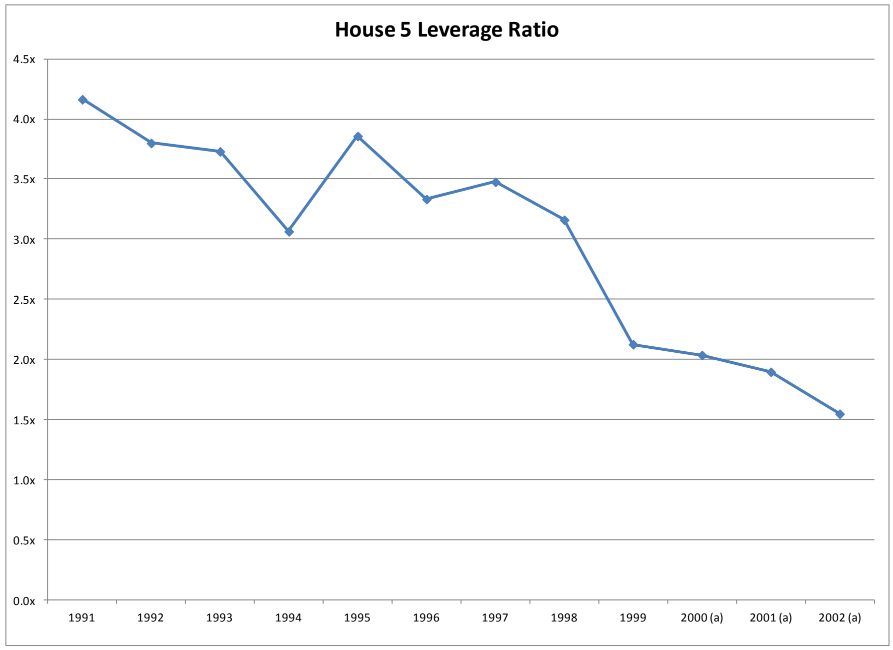
Based on a comparison to market participants, House 5 was operating at a below-average Leverage Ratio. For purposes of this analysis, it was presumed that House 5's business was otherwise run in a similar manner to the market participants in terms of inter-period leverage and balance sheet common size metrics. The calculated Leverage Ratio for House 5 as of y/e 2002 was 1.55, as compared to a weighted average ratio of 3.17 for the Concluded Comparable Companies. Additionally, House 5's Adjusted non-restricted cash balance at y/e 2002 was $106.9 million,[28] or a

[26] Calculated as Prime Rate, minus 0.50 percent, as of the Valuation Date, which is consistent with the implied historical average pricing of House 5's Debt relative to the prevailing Prime Rate.

[27] The calculated weighted average Leverage Ratio and Cash Ratio are based on results of the Concluded Comparable Companies, as well as three other similar, but significantly smaller companies, which were excluded from the Concluded Comparable Companies due to size.

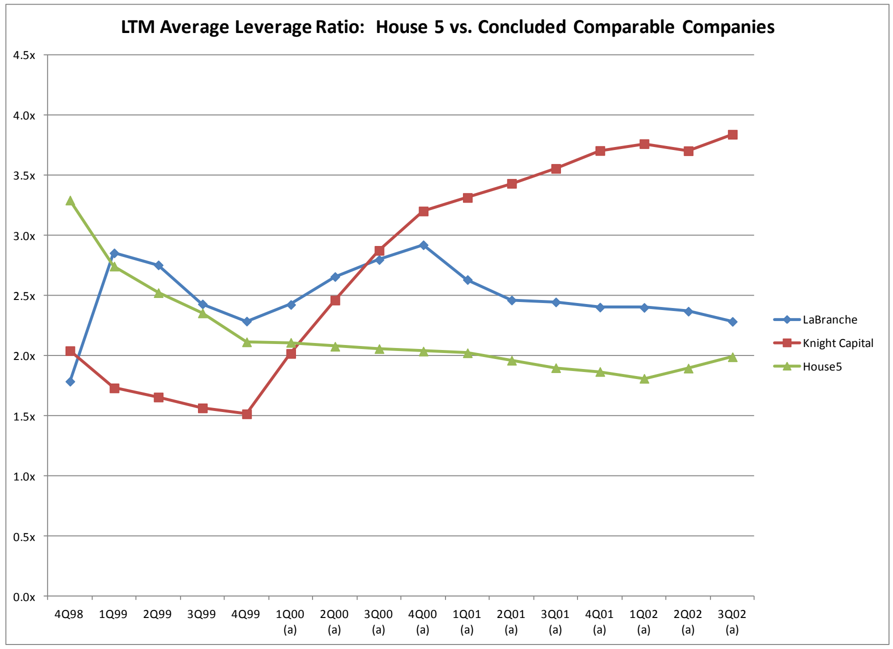
[28] Since the valuation conclusion in this report is based on the premise of value that House 5 is a going concern, any evidence to the contrary would have a significant negative impact on the valuation. Further, there is evidence that House 5 was artificially supported by millions of dollars of Other People's Money from the IA Business.

Cash Ratio of 27 percent (vs. 8 percent for the Concluded Comparable Companies) as of the Valuation Date. The following charts illustrate that House 5 operated with a higher Leverage Ratio in the past and that the Concluded Comparable Companies, as of the Valuation Date, operated with a higher Leverage Ratio than that of House 5:



(a) Adjusted, as defined in this Report.[29]

[29] 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. Further, there is evidence that House 5 was artificially supported by millions of dollars of Other People's Money from the IA Business.



(a) Adjusted, as defined in this Report.[30]

As seen in the above chart,[31] as recently as 1998, House 5 had operated with a Leverage Ratio in excess of the Concluded Comparable Companies, which suggests that House 5 could operate at the Concluded Comparable Companies' average Leverage Ratio as of the Valuation Date.

The following chart illustrates the historical Cash Ratio of House 5, based on as-reported FOCUS report data through 1999 and based on Adjusted FOCUS report data thereafter:

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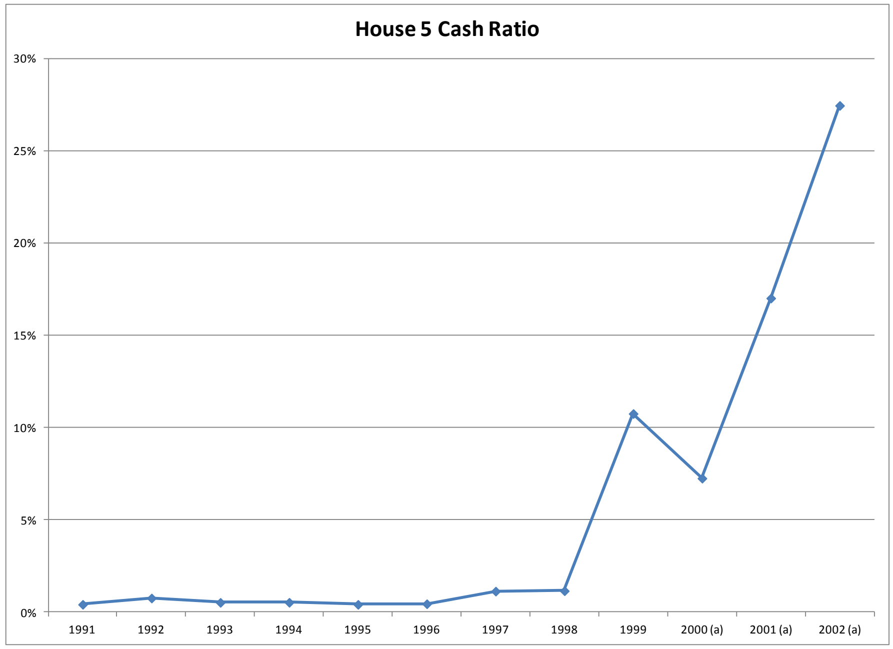
[30] Since the valuation conclusion in this report is based on the premise of value that House 5 is a going concern, any evidence to the contrary would have a significant negative impact on the valuation. Further, there is evidence that House 5 was artificially supported by millions of dollars of Other People's Money from the IA Business.

[31] Charts were compiled using data from Capital IQ and SEC filings for LaBranche and Knight Capital, and using as-reported FOCUS report data.



(a) Adjusted, as defined in this Report.[32]

The above chart illustrates that the Cash Ratio was materially above historical levels, which suggests a lower level of investment relative to House 5 historical operations. The excessive Cash Ratio was interpreted to indicate the business held excess cash as of the Valuation Date.

Based on the presumption that a market participant buyer would recapitalize House 5 and operate it with a Leverage Ratio that is more consistent with industry norms, as indicated by the Concluded Comparable Companies, the Adjusted financials for the y/e 2002 were re-cast as if House 5 operated with a 3.17 Leverage Ratio and an 8 percent Cash Ratio at the beginning of 2002. Leverage was re-cast based on the premise that the Adjusted BV as of the y/e 2001 of $280.9 million could support $890.4 million of total assets, an increase of approximately $357.7 million versus Adjusted total assets. An approximate $377.1 million increase in Trading Assets would be funded by $235.3 million of Debt, $122.4 million of Trading Liabilities, and $19.4 million of excess cash.

[32] 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. Further, there is evidence that House 5 was artificially supported by millions of dollars of Other People's Money from the IA Business.

Balance Sheet Item	y/e 2001[33] Adjusted	Pro Forma	Change
	($ in millions)		
Cash	90.6	71.2	-19.4
Trading Assets	291.3	668.4	+377.1
Trading Liabilities	223.5	345.9	+122.4
Debt	0	235.3	+235.3

Total Revenue

Pro forma 2002 Total Revenue of approximately $99.1 million was calculated based on the pro forma balance sheet items illustrated in the above tables; the Total Revenue was forecast on a quarterly basis, based on Adjusted Turnover being multiplied by the leveraged Trading Asset balance.

Total Revenue was forecast on a quarterly basis in 2003 using quarterly 2002 Adjusted Turnover expressed on average assets, multiplied by average Trading Assets during the quarter.

The following table summarizes pro forma 2002 and forecast 2003 quarterly Total Revenue and Trading Assets:

Financial Metric[34]	Q1	Q2	Q3	Q4	y/e
			($ in millions)		
2002 Total Revenue	26.0	23.2	22.3	27.5	99.1
2003 Total Revenue	27.4	24.4	23.5	28.9	104.2
% Change	5	5	5	5	5
2002 Trading Assets	678.9	687.3	695.2	706.7	706.7
2003 Trading Assets	712.8	721.7	730.0	742.1	742.1
% Change	5	5	5	5	5

[33] 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. Further, there is evidence that House 5 was artificially supported by millions of dollars of Other People's Money from the IA Business.

[34] *Id.*

Trading Assets were forecast during the Projection Period according to growth rates noted in research reports and observations from historical financials of House 5. The following table illustrates the Trading Asset growth rates during the Projection Period:

Financial Metric[35]	2003	2004 - 2007
	(in percent)	
Trading Assets	5	5[36]
Total Revenue	5	5

Pre-Compensation Operating Expense

Broker-dealer and other investment industry businesses generally determine compensation payments to employees based on a targeted Payout Ratio. Thus, Pre-Compensation Operating Expense was identified from the FOCUS report data and was forecast based on either (i) the growth rate in Trading Assets, (ii) the growth rate due to inflation, or (iii) as a percentage of Total Revenue. The following points summarize the Pre-Comp Operating Expenses and the basis for their projections:

- Commissions and clearance paid to all other brokers and clearance paid to non-brokers expenses were grown at the same rate as Trading Assets.
- Communications, promotional costs, and regulatory fees and expenses were grown by forecast inflation rates of 2.9 percent for first three years, 2.6 percent in year four and 2.4 percent in year five and beyond.[37]
- Occupancy and equipment costs were forecast based on contractual payments for all future years.[38] A reduction was made to adjust for occupancy costs related to other activities of BLMIS outside of House 5. This adjustment approximated 19 percent of forecast occupancy and equipment costs before adjustment.[39]

[35] 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. Further, there is evidence that House 5 was artificially supported by millions of dollars of Other People's Money from the IA Business.

[36] Projection Period Trading Asset growth was based on the Sustainable Growth Rate, and, therefore, represents the amount of growth that would be supportable by the operations of House 5 as forecast.

[37] Source: DRI-WEFA.

[38] Contractual payments were based on the disclosure in the fiscal year 2002 audited financial statements.

[39] Based on 2008/09 floor plan information made available, and is calculated based on the percent of total workstations for all occupied floors relating to House 17.

- Other Expenses includes fees paid to exchanges on commission revenue. Such expenses were forecast at 21 percent of Total Revenue.[40]

Pre-Comp Operating Income and Comp Expense[41]

The above Pre-Compensation Operating Expense was subtracted to calculate Pre-Comp Operating Income during the Projection Period. Comp Expense was then calculated to equate to a 33 percent Payout Ratio.[42] Similar to occupancy and equipment costs, an adjustment was made to remove headcount costs associated with other activities of BLMIS deemed to be outside of House 5. The adjustment approximated 15 percent of Comp Expense as calculated above.[43]

The following table summarizes Projection Period Pre-Comp Operating Income, Comp Expense, EBIT and margin:

Financial Metric[44]	2003	2004	2005 ($ in millions)	2006	2007
Pre-Comp Operating Income	$58.5	$61.7	$64.8	$68.3	$72.0
Comp Expense	19.4	20.5	21.5	22.7	23.9
Adjustment	-2.9	-3.1	-3.2	-3.4	-3.6
Net Compensation	16.5	17.4	18.3	19.3	20.3
EBIT	$42.0	$44.3	$46.5	$49.0	$51.7
EBIT Margin (%)	*40*	*41*	*41*	*41*	*41*

Interest Expense

Interest expense was applied to the average Debt balance, which was presumed to be a fixed level of debt throughout the Projection Period. The

[40] Represents the average other expense ratio of Total Revenue during historical periods when the Leverage Ratio ranged from 3.0 to 4.0.

[41] The Payout Ratio is an aggregate expense amount based on historical performance as well as a review of market participants. No consideration was given to the compensation of any individual employee of BLMIS nor was any consideration given to the reasonableness of the amount paid to any individual employee based on the services that the individual provided.

[42] Represents the average Payout Ratio during the historical periods when Leverage ratio ranged from 3.0 to 4.0.

[43] Based on 2008/09 floor plan and seating charts and representing the 2002 Comp Expense associated with House 17.

[44] 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. Further, there is evidence that House 5 was artificially supported by millions of dollars of Other People's Money from the IA Business.

level of Debt was determined to be approximately $235.3 million, based on the amount of financing required to fund the increase in Trading Assets to obtain a market participant Leverage Ratio, while considering the funding provided from other sources (an increase in Trading Liabilities and use of excess cash). The rate of interest applied in the Projection Period was 3.75 percent,[45] which is consistent with implied pricing during historical periods when House 5 carried bank debt. The interest expense applied during the Projection Period was $8.8 million per year, and was subtracted from EBIT to calculate EBT.

Depreciation and Amortization

Non-cash expenses related to depreciation and amortization were not available in the FOCUS report data made available, but were identified in BLMIS audited financial statements. However, as is typically the case with financial services businesses, depreciation, amortization and capital expenditures are not material expenses or expenditure items and, therefore, for the purpose of estimating FFI, it was assumed that depreciation (a non-cash expense) would be 100 percent offset by capital expenditures, and accordingly, no specific adjustment is made to FFI.

Taxes

Cash income taxes were calculated based on taxable income and were deducted from EBT to estimate after-tax income. While House 5's ownership structure was an LLC, and, therefore, no taxes were paid at the entity level, due to the fact that standard valuation practice would impute taxes in this situation, and that comparable companies are C-Corporations which pay income taxes, it was determined that the estimated Fair Market Value of a 100 percent interest in the common equity of House 5 should assume a willing buyer that is subject to a market participant tax rate. An average effective tax rate of 40 percent was calculated using available data from the Concluded Comparable Companies and calculated income taxes on this basis, which were subtracted from EBT to calculate after tax income.

After Tax Income and Free Cash Flow

After tax income was presumed as a proxy for cash basis income given the presumption that non-cash expenses were immaterial. Given the presumption of immaterial non-cash adjustments to after tax income, operating cash flow was calculated as after tax income, minus investment

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[45] An analysis of historical financial statement data from FOCUS reports indicated that interest expense, divided by average bank debt resulted in a rate of interest that was, on average, 50 basis points ("bps") or 0.5 percent, below the prevailing average Prime Rate during the relevant year. The prevailing Prime Rate, taken from the Federal Reserve H15 release, as of the Valuation Date was 4.25 percent.

in non-cash assets (primarily Trading Assets), plus increase in non-debt liabilities (primarily Trading Liabilities).

The following is a listing of non-cash assets, as obtained from reading FOCUS report data files made available, and a description of growth assumptions applied in the FFI over the Projection Period:

- Receivables from brokers or dealers and clearing organizations – grown based on Trading Asset growth rates;
- Securities and spot commodities owned, at market value (Trading Assets) – grown assuming 100 percent reinvestment of earnings during pro forma 2002 and based on market participant growth rates for the Projection Period;
- Memberships in exchanges – no growth is forecast on the basis that these investments would be held at cost;
- Fixed assets – no growth is forecast on the basis that depreciation and capital expenditures would offset;
- Other assets – grown based on Trading Asset growth rates.

The following is a listing of non-debt liabilities, as obtained from reading FOCUS report data files made available, and a description of growth assumptions applied in the FFI over the Projection Period:

- Payable to brokers or dealers and clearing organizations – grown based on Trading Asset growth rates;
- Securities sold, not yet repurchased at market value (Trading Liabilities) – forecast based on 52 percent of Trading Assets;[46]
- Accounts payable and accrued liabilities – grown based on Trading Asset growth rates.

The investment in non-cash assets (see list above) represents a cash outflow, and the increase in non-debt liabilities represents effectively a cash inflow and the two are netted in the calculation of net investment.

The following table summarizes after tax income, the elements of net investment, and Free Cash Flow applied in pro forma 2002, which illustrate the assumption made that after tax income is 100 percent reinvested in the business through expansion of Trading Assets and Trading Liabilities:

[46] Represents the average Short Ratio calculated during periods where the Leverage Ratio ranged 3.0 to 4.0.

Pro Forma 2002[47]

Financial Metric (Cash Impact)	**Q1**	**Q2**	**Q3**	**Q4**	**y/e**
			($ in millions)		
After tax income	5.0	4.1	3.8	5.6	18.5
Increase in Non-cash Assets	-10.5	-8.5	-7.9	-11.5	-38.3
Increase in Non-debt Liabilities	5.4	4.4	4.1	6.0	19.8
Net Change in Debt	0.0	0.0	0.0	0.0	0.0
Free Cash Flow to Equity	.0	.0	.0	.0	.0

The following table illustrates after tax income, the elements of net investment, and Free Cash Flow as forecast for the Projection Period:

Financial Metric (Cash Impact)	**2003**	**2004**	**2005**	**2006**	**2007**
			($ in millions)		
After tax income	19.9	21.3	22.6	24.1	25.7
Increase in Non-cash Assets	-42.1	-39.9	-42.7	-45.5	-48.6
Increase in Non-debt Liabilities	19.7	18.7	20.0	21.3	22.7
Net Change in Debt	0.0	0.0	0.0	0.0	0.0
Free Cash Flow to Equity	-2.5	0.0	-0.1	-0.1	-0.2

As illustrated in the tables above, pro forma 2002 after tax income is assumed to be reinvested in the business to grow the balance sheet, and, it is assumed that, with the exception of 2003, balance sheet expansion reflects growth slightly in excess of earnings, with the shortfall being funded by the cash balance.

Free Cash Flow to Equity[48]

As illustrated above, Free Cash Flow to Equity ("Free Cash Flow") was estimated at approximately -$2.5 million in 2003, and ranges from -$0.2 million to $0.0 million for 2004 to 2007. These annual Free Cash Flows, if positive, are assumed to be distributed to equity investors at the end of each year. If negative, Free Cash Flows are presumed to be absorbed by the cash balance. The Free Cash Flows are then discounted to their respective present values at the equity cost of capital of 16.5 percent and summed to calculate the sum of present value of Free Cash Flows. The sum of present value of Free Cash Flows was zero.

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[47] 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. Further, there is evidence that House 5 was artificially supported by millions of dollars of Other People's Money from the IA Business.

[48] *Id.*

Terminal Value[49]

The terminal value of House 5, as of the y/e 2007 was computed by applying the selected terminal EV / BV multiple of 2.4x to the forecast y/e 2007 BV of $413 million, resulting in a terminal value as of the y/e 2007 of $991 million. The terminal value was then discounted to its present value based on the equity cost of capital of 16.5 percent to $458 million, which represents the amount an investor would pay for the rights to the cash flows of the business for years subsequent to the Projection Period.

The selected multiple of 2.4x was based on the following calculation:

Industry average multiple x (1 + control premium) x Relative Factor

The industry average multiple was calculated as the midpoint of the range of the Concluded Comparable Companies of 1.9x, which is also consistent with the midpoint of expected EV / BV multiples as indicated in the Deutsche Bank Report, of 2.0x.[50] The control premium applied was 40 percent, which represents the average control premium from recently-completed merger transactions in the "Brokerage, Investment & Mgmt. Consulting" industry from 1999 to 2001.[51] Additionally, a "Relative Factor" was applied to reflect primarily the difference in size between House 5 and the size of the industry comparable companies referred to in the Deutsche Bank Report and the Concluded Comparable Companies. The Relative Factor applied is 90 percent, and was calculated as the ratio of the concluded EV, divided by the EV based on a discount rate that does not include a small stock premium.

Results of the Income Approach

The estimated Fair Market Value of a 100 percent interest in the common equity of House 5 was then calculated as the sum of the present value of Free Cash Flows of zero and the present value of the terminal value of $458 million. Based on the Income Approach as described above and as detailed in Exhibit 2, the Fair Market Value of a 100 percent interest in the common equity of House 5, on a marketable, controlling interest basis was estimated to be **$460 million**. Since the valuation conclusion in this report is based on the premise of value that House 5 is a going concern, any

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[49] 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. Further, there is evidence that House 5 was artificially supported by millions of dollars of Other People's Money from the IA Business.

[50] The Deutsche Bank Report indicates an expected trading range of 1.5 - 2.5 times BV, which was corroborated by the S&P Report which stated a range of 1.6 - 2.6.

[51] 2002 Mergerstat Yearbook industry premiums for "Brokerage, Investment & Mgmt. Consulting" industry.

evidence to the contrary would have a significant negative impact on the valuation. Further, there is evidence that House 5 was artificially supported by millions of dollars of Other People's Money from the IA Business.

Section 10

Comparable Company Method

Market Approach

The Market Approach indicates the EV, as defined in this Report, based on a comparison of the company to comparable firms in similar lines of business that are publicly traded or which are part of a public or private transaction. This methodology presumes that the comparable companies or the subject company are not tainted by fraud or other improprieties which would render the comparison invalid. This approach can be implemented through the Comparable Company Method and/or the Comparable Transaction Method. The Comparable Company Method was used in our determination of Fair Market Value and the Comparable Transaction Method was used to corroborate the results of the Income Approach and the Comparable Company Method.

Application of the Comparable Company Method

Comparable Company Method

The Comparable Company Method indicates the value of a business by comparing it to publicly traded companies in the same or similar lines of business. The conditions and prospects of companies in similar lines of business depend on common factors such as overall demand for their products and services. An analysis of the market multiples of companies engaged in the same or similar businesses yields insight into investor perceptions and, therefore, the value of the company.

Publicly-traded companies are selected and their financial profiles are analyzed relative to the business. Considerations for factors such as size, prices, growth, profitability, risk, and return on investment, etc. are also analyzed and compared to the comparable businesses. Once these differences and similarities are determined and proper adjustments are made, price or EV multiples of the publicly traded companies are calculated. These EV multiples are then applied to the operating results attributable to the company to estimate the EV of the company.

Determination of Concluded Comparable Companies

An initial screen of companies using Capital IQ's financial database was run to identify relevant comparable companies. Four filters were applied to narrow the database of companies. Filtering for publicly-traded companies returned 61,181 companies. The list was narrowed to include companies with a primary industry classification of "Security Brokers," resulting in 188 companies. The next two filters identified companies with stocks trading as of December 10, 2002; this returned 102 companies. Finally, the list was filtered for companies geographically in the United States, narrowing the list to 10 companies.

To corroborate the list of comparable companies, the SNL database was searched to identify publicly-traded broker-dealers as of December 10,

2002. To do so, the component companies of several SNL indexes were reviewed including: SNL U.S. National Broker-Dealer (7 companies), SNL U.S. Regional Broker-Dealer (14 companies), and SNL U.S. Institutional Broker-Dealer (24 companies).

The industry lists were then cross-referenced from equity analyst research reports. From the Solomon Report, the Large-Cap Brokers, Mid-Cap Broker, and Exchanges & Market Intermediaries companies were used. Online Brokers were excluded, which had fundamentally different business models. From the Deutsche Bank Report, the Independent Brokers, Universal Banks, and Regional Brokers companies were used.

To make the preliminary list of comparable companies as expansive as possible, proxy filings of the direct market making competitors were searched.

Once a list of potential comparable companies was formed, the list was narrowed by reading income statements to identify companies with similar line items and comparable revenue mixes (i.e. at least 75 percent of revenue from brokerage commissions and trading revenue). Additionally, due to the absence of beta estimates for certain companies, such companies were eliminated.

The list of companies is as follows:

- Merriman Holdings, Inc.
- LaBranche & Co. Inc.
- Paulson Capital Corp.
- Investors Capital Holdings, Ltd.
- BGC Financial Group, Inc.
- Instinet Group Incorporate
- Investment Technology Group Inc.
- Jesup & Lamont, Inc.
- Westech Capital Corp.
- Detwiler Fenton Group, Inc.
- Dupont Direct Financial Holdings, Inc.
- AB Watley Group Inc.
- First Montauk Financial Corp.
- Knight Capital Group Inc.

- Progressive Asset Management, Inc.
- Soundview Technology Group, Inc.
- National Holdings Corp.
- Millennium Healthcare, Inc.
- BGC Partners, Inc.
- Siebert Financial Corp.
- Brandt, Inc.
- Ladenburg Thalmann Financial Services Inc.

Furthermore, common-size income statements were calculated based on data from Capital IQ to determine the percentage of total revenue that related specifically to Capital IQ's "trading revenue." Since essentially 100 percent of House 5 revenue related to trading activity, it was determined that the Concluded Comparable Companies should include only those companies which generated at least 75 percent of revenues from trading and had a significant amount of revenue (measure of size, of at least $50 million) during the LTM period. The group of companies meeting these final criteria includes the following:

- Knight Capital Group Inc.; and
- LaBranche & Co Inc.

Concluded Comparable Companies:[52]

Knight Trading Group, Inc., a Delaware corporation, and its subsidiaries operate in two business segments: wholesale securities market-making and asset management. It was the leading wholesale equities market maker in The NASDAQ Stock Market and the Nasdaq Intermarket in the U.S., and, during the two years prior to the Valuation Date, it had established majority-owned wholesale equity market-making operations in Europe and Japan. The company also operated a leading listed options market-making business and a professional options execution business in the U.S. Through its Deephaven Capital Management LLC subsidiary, it also operated an asset management business for institutions and high net worth individuals.

LaBranche & Co Inc. was a holding company that was the sole member of LaBranche & Co. LLC and owned all the outstanding stock of LaBranche Financial Services, Inc. ("LFSI"). Founded in 1924, LaBranche & Co. LLC

[52] The descriptions were taken from SEC filings of the Concluded Comparable Companies as of the Valuation Date.

was one of the oldest and largest specialist firms on the New York Stock Exchange. It also acted as a specialist in stocks and options on the American Stock Exchange. Its LFSI subsidiary was a clearing broker for customers of introducing brokers and provides direct access floor brokerage services to institutional customers, securities clearing and other related services to individual and institutional clients, including traders, professional investors and broker-dealers. In addition, LFSI also provided front-end order execution, analysis and reporting solutions for the wholesale securities dealer market. As of December 31, 2001, its former subsidiaries Henderson Brothers, Inc. and Internet Trading Technologies, Inc. were merged with and into its ROBB PECK McCOOEY Clearing Corporation subsidiary. RPM Clearing Corporation changed its name to LFSI in January 2002 and was a registered broker-dealer and NYSE member firm as of the Valuation Date.

Application of the Market Approach

Once the Concluded Comparable Companies were established, valuation multiples were computed. Valuation multiples are ratios of EV to the operating results of a company, where EV is calculated on a marketable, controlling interest basis, reflecting a control premium. The EV for each company was calculated as the product of the closing stock price as of the day prior to the Valuation Date and the share count on the cover of the most recent quarterly report as of the Valuation Date, plus a premium of 40 percent.[53] Multiples were then calculated for EV to BV, Revenue, and Cash Earnings. The following points illustrate the multiples calculated for the Concluded Comparable Companies, and how those multiples were applied to House 5 financials to estimate Fair Market Value as of the Valuation Date:

- EV / BV
  - The average multiple for the Concluded Comparable Companies, which included a control premium of 40 percent, was approximately 1.9x with a range of multiples of 1.2x to 2.5x. It was presumed that a relative adjustment of 90 percent is warranted to account for the smaller size of House 5 relative to the Concluded Comparable Companies. No other adjustments were included in the EV / BV multiple applied since it is presumed the pro forma ROE of House 5 would approximate that of the Concluded Comparable Companies.
  - A range of multiples of 1.1x to 2.3x was applied to the pro

[53] The control premium of 40 percent is based on an analysis of recent comparable transactions occurring during the three years preceding the Valuation Date.

forma y/e 2002 BV of $299.4 million[54] to arrive at a range of Fair Market Value of a 100 percent interest in the common equity of House 5 of approximately $329 to $677 million.

- EV / Cash Earnings

  – The average multiple for the Concluded Comparable Companies, which included a control premium of 40 percent, was 26.9x. It was presumed that a relative adjustment of 90 percent is warranted to account for the smaller size of House 5 relative to the Concluded Comparable Companies. No other adjustments were included in the EV / Cash Earnings multiple applied since it is presumed the pro forma growth of House 5 would approximate that of the Concluded Comparable Companies.

  – A multiple of 24.2x was applied to House 5's pro forma Cash Earnings of $18.5 million[55] to arrive at an estimate of the indicated Fair Market Value of a 100 percent interest in the common equity of House 5 of approximately $448 million.

- EV / Revenue
  – The average multiple for the Concluded Comparable Companies, which included a control premium of 40 percent, was approximately 3.6x with a range of multiples of 1.7x to 5.5x. It was presumed that a relative adjustment of 90 percent is warranted to account for the smaller size of House 5 relative to the Concluded Comparable Companies. No other adjustments were included in the EV / Revenue multiple applied since it is presumed the pro forma profit margin and growth of House 5 would approximate that of the Concluded Comparable Companies.

  – A range of multiples of 1.5x to 4.9x was applied to House 5's pro forma 2002 Revenue of $99.1 million[56] to arrive at a range of Fair Market Value of a 100 percent interest in the common equity of House 5 of approximately $152 to $490 million.

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[54] 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. Further, there is evidence that House 5 was artificially supported by millions of dollars of Other People's Money from the IA Business.

[55] 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. Further, there is evidence that House 5 was artificially supported by millions of dollars of Other People's Money from the IA Business.

[56] *Id.*

Results of the Comparable Company Method

Based on the Comparable Company Method as described above, the indicated Fair Market Value of a 100 percent interest in the common equity of House 5 on a marketable, controlling interest basis was estimated to be **$420 million**, as of the Valuation Date. 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. Further, there is evidence that House 5 was artificially supported by millions of dollars of Other People's Money from the IA Business. This concluded value is based on the average of the range of results indicated by application of the BV, Cash Earnings and Revenue multiples as calculated using the Concluded Comparable Companies' valuations and financial metrics.

Refer to Exhibits 3 and 3.A for the details of the Comparable Company Method.

Section 11

Findings

Valuation Findings

Findings[57]

Based on the analyses herein, the estimated Fair Market Value of 100 percent of the equity of House 5, on a marketable, controlling interest basis, is **$450 million**, as of the Valuation Date. 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. Further, there is evidence that House 5 was artificially supported by millions of dollars of Other People's Money from the IA Business. The following table summarizes the valuation findings:

Valuation Approach	Indicated Fair Market Value ($ in millions)
Income Approach	$460
Comparable Company Method	420
Concluded Fair Market Value (rounded) [58]	**$450**

A discount for lack of marketability was considered as part of the determination of the Concluded Fair Market Value of a 100 percent equity interest on a controlling basis in House Five. As a privately held company with limited interim cash flow a discount for lack of marketability would generally be required. Moreover, given the existence of fraud and the fact that House 5 was artificially supported by millions of dollars of Other People's Money from the IA Business, a discount for marketability could be large and could approach 100 percent. In the interest of being conservative and generally presenting the valuation in the light most favorable to demonstrating solvency, no lack of marketability discount was applied for purposes of determining the Concluded Fair Market Value above.

[57] A calculation of the implied value of MSIL was performed by multiplying MSIL's y/e 2002 book value of $46.5 million by the implied House 5 EV/BV multiples of 1.5x and 1.4x, averaging the implied values resulting in an implied value of $68.4 million. MSIL's BV was converted from GBP to USD using the spot exchange rate as of December 11, 2002 of 1.5699 USD/GBP.

[58] 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. Further, there is evidence that House 5 was artificially supported by millions of dollars of Other People's Money from the IA Business.

Section 12

Valuation Exhibits

HOUSE 5 **Exhibit 1**

ESTIMATION OF THE FAIR MARKET VALUE OF EQUITY
AS OF DECEMBER 11, 2002
SUMMARY OF VALUES
(USD in millions)

	Notes	Indicated Value	Implied EV/BV (4)	Exhibit
Income Approach	(1)	$460	1.5X	Exhibit 2
Market Approach (EV/TBV or EV/BV)	(2)	420	1.4X	Exhibit 3.A
Concluded Value (rounded)	(3)	**$450**	1.5X	

Notes:

(1) Adjusted Capitalization DCF Approach based on recapitalization of House 5 in 2002 to reflect a Leverage Ratio of Concluded Comparable Companies and is assumed to reflect a controlling interest value. Assumed a Leverage Ratio of 3.17 and 8% Cash Ratio. Indicated value is the middle of the Adjusted Capitalization DCF range.

(2) Based on the range of values indicated by applying the price-to-tangible book value of the two Concluded Comparable Companies. Indicated value is the median. Based on minority interest basis trading market values, plus a control premium of 40%.

(3) Average of the indicated values from the Adjusted Capitalization Discounted Cash Flow and Concluded Comps methods. Rounded to the nearest $50 million.

(4) Implied multiple of tangible book value.

HOUSE 5 **Exhibit 2**

ESTIMATION OF THE FAIR MARKET VALUE OF EQUITY
AS OF DECEMBER 11, 2002
INCOME APPROACH: RECAPITALIZATION
(USD in millions)

		Historical year ending 12/31 (1)			Pro Forma (2)			Projected year ending 12/31				
	Notes	2000	2001	2002	Adj.	Beg.	2002	2003	2004	2005	2006	2007
INCOME STATEMENT												
Reported Revenue		**209.8**	**169.1**	**106.0**								
Revenue Adjustments	(3)	-75.6	-72.4	-60.5								
Total Revenue, As Adjusted	(4)	**134.2**	**96.7**	**45.5**			**99.1**	**104.2**	**109.1**	**114.1**	**119.4**	**125.1**
% Growth		*-18%*	*-28%*	*-53%*			*2%*	*5%*	*5%*	*5%*	*5%*	*5%*
Expenses												
Commissions and clearance paid to all other brokers	(5)	30.6	13.8	4.8			4.8	5.1	5.3	5.5	5.8	6.1
Clearance paid to non-brokers	(5)	4.1	2.6	2.9			2.9	3.1	3.2	3.4	3.5	3.7
Communications	(5)	8.6	5.6	6.8			6.8	7.0	7.2	7.4	7.6	7.8
Occupancy and equipment costs	(6)	2.9	3.3	3.9			3.9	3.9	3.9	3.9	3.9	3.9
Adjustment for advisor occupancy	(6)	-.5	-.6	-.7			-.7	-.7	-.7	-.7	-.7	-.7
Promotional costs	(7)	.2	.1	.1			.1	.1	.1	.1	.1	.1
Data processing costs	(7)	.6	.8	.7			.7	.7	.7	.8	.8	.8
Regulatory fees and expenses	(7)	6.5	4.4	4.8			4.8	5.0	5.1	5.3	5.4	5.5
Other expenses	(8)	69.2	39.2	31.8			20.5	21.6	22.6	23.6	24.7	25.9
Total Operating Expenses before Compensation		**122.0**	**69.2**	**55.1**			**43.9**	**45.7**	**47.5**	**49.3**	**51.1**	**53.1**
% of Revenue		*91%*	*72%*	*121%*			*44%*	*44%*	*43%*	*43%*	*43%*	*42%*
Pre-Comp Operating Income		**12.2**	**27.5**	**-9.6**			**55.2**	**58.5**	**61.7**	**64.8**	**68.3**	**72.0**
Clerical and administrative employees' expenses	(9)	45.8	52.3	23.1			18.3	19.4	20.5	21.5	22.7	23.9
Adjustment to market participant headcount reduction	(10)	-6.9	-7.8	-3.5			-2.7	-2.9	-3.1	-3.2	-3.4	-3.6
Comp % of Pre-Comp Operating Income (before adjustment)		*376%*	*190%*	*-240%*			*33%*	*33%*	*33%*	*33%*	*33%*	*33%*
Operating Income (EBIT)		**-26.7**	**-16.9**	**-29.2**			**39.6**	**42.0**	**44.3**	**46.5**	**49.0**	**51.7**
EBIT Margin		*-20%*	*-17%*	*-64%*			*40%*	*40%*	*41%*	*41%*	*41%*	*41%*
Interest expense	(11)	.5	.0	.0			8.8	8.8	8.8	8.8	8.8	8.8
Income before income taxes (EBT)		**-27.2**	**-16.9**	**-29.3**			**30.8**	**33.2**	**35.4**	**37.7**	**40.2**	**42.9**
Tax Expense @ 40%	(12)	-10.9	-6.8	-11.7			12.3	13.3	14.2	15.1	16.1	17.1
After Tax Income	(13)	**-16.3**	**-10.2**	**-17.6**			**18.5**	**19.9**	**21.3**	**22.6**	**24.1**	**25.7**
% of Revenue		*-12%*	*-11%*	*-39%*			*19%*	*19%*	*19%*	*20%*	*20%*	*21%*

See the footnotes, which are deemed an integral part of this exhibit, on Pages 6 and 7.

* * *IMPORTANT NOTICE TO READER* * *

This schedule contains financial information based upon certain critical assumptions as set forth in the narrative section of the report. Accordingly, this schedule must be considered in conjunction with those assumptions and should not be read on a stand-alone basis.