
APPENDIX B

**CHRONOLOGIES OF INDEX-RELATED
TRADING ON NYSE**

The attached charts provide a chronology of index-related trading on the New York Stock Exchange during the October Market Break. In addition, index-related trading effected on the London market appears at the end of each day's chronology. An explanation of the chart headings are as follows:

1. Time - Time of order entry (Eastern Time)
2. Principal - (firm proprietary)
Agent - (customer)
3. Strategy:
 - AO - Arbitrage (opening)
 - AC - Arbitrage (closing)
 - SB - Substitution (treated as arbitrage)
 - AD - Adjustments of Portfolio Hedges
(treated as arbitrage)
 - EFP - Exchanges for Physical
(London Market)
 - PI - Portfolio Insurance Stock Transaction
 - OS - Other Strategies
4. Order entry method for stocks:
 - Automated (DOT system)
 - Manual (phoning orders to floor)
5. B - Buy
S - Sell
SS - Sell Short
6. Number of shares of stock (exact)
7. Dollar amount (millions of dollars)
8. Index Products:
 - SPZ - S&P 500 Futures
 - MMI - Major Market Index Futures
 - KVL - Kansas City Value Line Futures
 - NYF - NYSE Composite Index Option
 - OEX - S&P 100 Index Option

There are various other derivative products which account for a very small amount of program trading. If no derivative contract was involved, "NA" or "Not Applicable" appears in this column. If this column is blank, either the transactions involved a fractional adjustment to an

arbitrage position (too small to involve a full future contract) or the exact number of contracts involved is unavailable.

9. Number of derivative contracts used in an arbitrage program.

COMPOSITE CHRONOLOGY
Index-Related Trading on NYSE
October 6, 1987

TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
09:30 AM	PRINCIPAL	AC	AUTOMATED	S	437,750	22.2	SPZ	140
09:30 AM	PRINCIPAL	AC	AUTOMATED	S	22,000	1.8	MMI	14
09:30 AM	PRINCIPAL	OS	AUTOMATED	B	16,700	0.7	NA	0
09:30 AM	PRINCIPAL	OS	AUTOMATED	S	9,700	0.4	NA	0
09:33 AM	PRINCIPAL	OS	AUTOMATED	SS	65,098	0.2	NA	0
09:33 AM	PRINCIPAL	OS	AUTOMATED	B	40,301	0.8	NA	0
09:34 AM	PRINCIPAL	AC	MANUAL	S	400,700	20.0	SPZ	130
09:36 AM	PRINCIPAL	AO	AUTOMATED	SS	400,000	17.0	SPZ	104
09:36 AM	AGENT	AC	AUTOMATED	S	309,700	15.7	SPZ	100
09:36 AM	PRINCIPAL	AC	AUTOMATED	S	123,000	8.4	SPZ	60
09:40 AM	PRINCIPAL	AO	AUTOMATED	B	40,000	3.0	MMI	25
09:41 AM	PRINCIPAL	AO	AUTOMATED	B	44,000	3.6	MMI	28
09:42 AM	PRINCIPAL	OS	AUTOMATED	SS	247,900	4.9	NA	0
09:42 AM	AGENT	OS	AUTOMATED	B	75,000	5.0	NA	0
09:43 AM	PRINCIPAL	AO	AUTOMATED	B	20,000	2.7	MMI	13
09:49 AM	PRINCIPAL	AO	AUTOMATED	B	20,000	2.7	MMI	13
09:56 AM	PRINCIPAL	AC	AUTOMATED	S	106,150	5.3	SPZ	30
09:58 AM	AGENT	AC	AUTOMATED	S	196,800	9.4	SPZ	58
10:02 AM	PRINCIPAL	AO	AUTOMATED	B	22,000	1.8	MMI	14
10:03 AM	PRINCIPAL	AO	AUTOMATED	B	40,000	3.0	MMI	25
10:05 AM	PRINCIPAL	AO	AUTOMATED	SS	400,000	17.0	SPZ	104
10:09 AM	AGENT	OS	AUTOMATED	B	60,000	4.0	NA	0
10:14 AM	PRINCIPAL	OS	AUTOMATED	B	104,800	5.7	NA	0
10:15 AM	PRINCIPAL	OS	AUTOMATED	B	114,700	4.2	NA	0
10:20 AM	AGENT	AC	AUTOMATED	S	262,484	13.1	SPZ	81
10:20 AM	PRINCIPAL	AC	AUTOMATED	S	208,600	8.4	SPZ	50

COMPOSITE CHRONOLOGY
Index-Related Trading on NYSE
October 6, 1987

TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
10:21 AM	AGENT	AC	AUTOMATED	S	198,300	9.5	SPZ	56
10:27 AM	PRINCIPAL	AO	AUTOMATED	B	40,000	3.0	MMI	25
10:28 AM	AGENT	AC	AUTOMATED	S	309,700	15.7	SPZ	100
10:28 AM	PRINCIPAL	AC	AUTOMATED	S	279,200	13.5	SPZ	85
10:30 AM	AGENT	OS	AUTOMATED	S	280,000	21.0	NA	0
10:30 AM	PRINCIPAL	AC	AUTOMATED	S	222,300	10.9	SPZ	60
10:30 AM	PRINCIPAL	AC	AUTOMATED	S	212,900	10.0	SPZ	68
10:33 AM	PRINCIPAL	AC	AUTOMATED	S	518,200	28.0	SPZ	165
10:33 AM	PRINCIPAL	AC	AUTOMATED	S	39,800	4.3	SPZ	30
10:37 AM	PRINCIPAL	AO	AUTOMATED	B	9,900	1.0	MMI	8
10:41 AM	PRINCIPAL	AO	AUTOMATED	B	14,300	1.4	MMI	11
10:42 AM	PRINCIPAL	AO	AUTOMATED	B	20,000	2.7	MMI	13
10:45 AM	PRINCIPAL	OS	AUTOMATED	B	30,000	1.8	FNC	94
10:48 AM	PRINCIPAL	AO	AUTOMATED	B	19,800	1.1	MMI	9
11:01 AM	PRINCIPAL	AC	MANUAL	S	544,900	27.7	SPZ	175
11:04 AM	PRINCIPAL	AC	AUTOMATED	S	124,700	6.0	SPZ	38
11:04 AM	PRINCIPAL	AC	AUTOMATED	S	83,200	4.0	SPZ	30
11:08 AM	PRINCIPAL	AO	AUTOMATED	B	24,200	2.4	MMI	19
11:08 AM	AGENT	OS	AUTOMATED	B	22,000	1.8	NA	0
11:22 AM	PRINCIPAL	AO	AUTOMATED	B	39,800	4.3	SPZ	30
11:34 AM	PRINCIPAL	AC	AUTOMATED	S	235,800	13.6	SPZ	85
11:34 AM	PRINCIPAL	AC	AUTOMATED	S	24,200	2.4	MMI	19
11:35 AM	PRINCIPAL	AC	MANUAL	S	200,900	10.0	SPZ	62
11:36 AM	PRINCIPAL	AC	AUTOMATED	S	100,000	7.5	MMI	25
11:45 AM	AGENT	AC	AUTOMATED	S	45,000	1.7	SPZ	10
11:46 AM	AGENT	AC	AUTOMATED	S	3,300	0.2	SPZ	0

COMPOSITE CHRONOLOGY
 Index-Related Trading on NYSE
 October 6, 1987

TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
12:07 PM	AGENT	AC	AUTOMATED	S	45,000	1.7	SPZ	10
12:11 PM	PRINCIPAL	AO	AUTOMATED	B	40,000	3.0	MMI	25
12:17 PM	AGENT	OS	AUTOMATED	B	35,000	1.0	NA	0
12:18 PM	PRINCIPAL	AC	AUTOMATED	S	60,100	2.3	SPZ	15
12:19 PM	AGENT	OS	AUTOMATED	S	50,000	4.9	NA	0
12:19 PM	PRINCIPAL	AC	AUTOMATED	S	9,900	1.0	MMI	8
12:23 PM	AGENT	AC	AUTOMATED	S	45,000	1.7	SPZ	10
12:29 PM	PRINCIPAL	AO	AUTOMATED	B	9,900	1.0	MMI	8
12:31 PM	PRINCIPAL	OS	AUTOMATED	B	159,650	5.1	NA	0
12:39 PM	PRINCIPAL	AO	AUTOMATED	B	9,900	1.0	MMI	8
12:41 PM	PRINCIPAL	AO	AUTOMATED	B	14,300	1.4	MMI	11
12:44 PM	AGENT	OS	AUTOMATED	B	200,000	16.0	NA	0
12:54 PM	AGENT	OS	AUTOMATED	B	12,600	0.5	NA	0
01:04 PM	PRINCIPAL	AO	AUTOMATED	B	175,450	10.5	OEX	332
01:07 PM	AGENT	AC	AUTOMATED	S	45,000	1.6	SPZ	10
01:19 PM	AGENT	AC	AUTOMATED	S	45,000	1.6	SPZ	10
01:19 PM	PRINCIPAL	AO	AUTOMATED	B	19,800	1.1	MMI	9
01:22 PM	PRINCIPAL	OS	AUTOMATED	B	107,000	5.7	NA	0
01:23 PM	PRINCIPAL	OS	AUTOMATED	B	114,700	4.2	NA	0
01:57 PM	AGENT	AC	AUTOMATED	S	45,000	1.6	SPZ	10
02:01 PM	PRINCIPAL	AC	MANUAL	S	200,900	10.0	SPZ	62
02:01 PM	PRINCIPAL	AC	AUTOMATED	S	58,650	1.9	SPZ	10
02:03 PM	AGENT	OS	AUTOMATED	S	661,600	32.0	NA	0
02:03 PM	PRINCIPAL	AC	AUTOMATED	S	319,000	17.6	SPZ	115
02:03 PM	PRINCIPAL	AC	AUTOMATED	S	289,000	13.0	KVL	114
02:04 PM	PRINCIPAL	AC	AUTOMATED	S	218,300	10.7	KVL	60

COMPOSITE CHRONOLOGY
Index-Related Trading on NYSE
October 6, 1987

TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
02:19 PM	AGENT	OS	AUTOMATED	B	170,800	6.6	NA	0
02:23 PM	AGENT	AC	AUTOMATED	S	45,000	1.6	SPZ	10
02:25 PM	PRINCIPAL	AC	AUTOMATED	S	24,200	2.4	MMI	19
02:26 PM	PRINCIPAL	AC	AUTOMATED	S	437,750	21.9	SPZ	140
02:49 PM	PRINCIPAL	AO	MANUAL	B	22,000	1.8	MMI	14
02:55 PM	AGENT	AC	AUTOMATED	S	45,000	1.6	SPZ	10
02:59 PM	PRINCIPAL	AC	AUTOMATED	S	60,100	2.3	SPZ	15
03:24 PM	PRINCIPAL	AC	AUTOMATED	S	289,300	14.7	SPZ	91
03:24 PM	PRINCIPAL	AC	AUTOMATED	S	58,650	1.9	SPZ	10
03:24 PM	AGENT	AC	AUTOMATED	S	45,000	1.6	SPZ	10
03:26 PM	AGENT	OS	AUTOMATED	S	531,300	20.0	NA	0
03:26 PM	PRINCIPAL	AC	MANUAL	S	200,900	10.0	SPZ	62
03:27 PM	PRINCIPAL	AC	AUTOMATED	S	518,200	28.0	SPZ	165
03:27 PM	PRINCIPAL	AC	AUTOMATED	S	40,000	3.0	MMI	25
03:31 PM	PRINCIPAL	AC	AUTOMATED	S	19,800	1.1	MMI	9
03:32 PM	PRINCIPAL	AC	AUTOMATED	S	435,653	17.0	NYF	200
03:32 PM	PRINCIPAL	AC	MANUAL	S	200,900	10.0	SPZ	62
03:40 PM	AGENT	OS	AUTOMATED	S	661,600	32.0	NA	0
03:40 PM	PRINCIPAL	AC	AUTOMATED	S	437,750	21.8	SPZ	140
03:40 PM	PRINCIPAL	AC	AUTOMATED	S	311,700	6.9	SPZ	40
03:41 PM	PRINCIPAL	AC	AUTOMATED	S	212,900	10.0	SPZ	67
03:41 PM	AGENT	AC	AUTOMATED	S	95,000	5.0	SPZ	30
03:42 PM	PRINCIPAL	AC	AUTOMATED	S	1,340,000	27.0	KVL	194
03:42 PM	AGENT	AC	AUTOMATED	S	309,700	15.4	SPZ	100
03:42 PM	AGENT	OS	AUTOMATED	S	66,000	4.0	NA	0
03:43 PM	PRINCIPAL	AC	AUTOMATED	S	620,000	31.9	SPZ	200

COMPOSITE CHRONOLOGY
Index-Related Trading on NYSE
October 6, 1987

TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
03:44 PM	PRINCIPAL	AC	AUTOMATED	S	200,300	9.9	SPZ	60
03:46 PM	AGENT	OS	AUTOMATED	S	661,600	32.0	NA	0
03:48 PM	AGENT	AC	AUTOMATED	S	309,700	15.4	SPZ	100
03:48 PM	AGENT	OS	AUTOMATED	B	89,500	4.8	NA	0
03:48 PM	PRINCIPAL	AC	AUTOMATED	S	44,000	3.5	MMI	28
03:49 PM	AGENT	OS	AUTOMATED	S	16,650	0.6	NA	0
03:50 PM	PRINCIPAL	AC	MANUAL	S	200,900	10.0	SPZ	62
03:51 PM	AGENT	OS	AUTOMATED	S	33,000	2.0	NA	0
03:52 PM	AGENT	AC	AUTOMATED	S	45,300	1.7	SPZ	10
03:53 PM	AGENT	OS	AUTOMATED	S	661,600	32.0	NA	0
03:53 PM	PRINCIPAL	AC	AUTOMATED	S	620,000	31.9	SPZ	200
03:53 PM	PRINCIPAL	OS	AUTOMATED	S	238,100	9.8	NA	0
03:55 PM	PRINCIPAL	AC	MANUAL	S	401,800	20.0	SPZ	124
03:55 PM	PRINCIPAL	AC	AUTOMATED	S	156,200	9.3	OEX	300
03:56 PM	PRINCIPAL	AC	AUTOMATED	S	229,150	13.4	SPZ	90
03:57 PM	PRINCIPAL	AC	AUTOMATED	S	620,000	31.9	SPZ	200
03:59 PM	PRINCIPAL	AC	AUTOMATED	S	100,000	7.5	MMI	25

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PROGRAMS EXECUTED "ALL DAY"

PRINCIPAL	OS	AUTOMATED	B	1,180,000	81.6	SPZ	520
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COMPOSITE CHRONOLOGY
 Index-Related Trading on NYSE
 October 6, 1987

TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
	PRINCIPAL	AO	AUTOMATED	B	160,000	12.8	MMI	102
	PRINCIPAL	AC	AUTOMATED	S	160,000	12.8	MMI	102

LONDON MARKET

	AGENT	EFP	MANUAL	SS	1,240,000	64.0	SPZ	400
	PRINCIPAL	EFP	MANUAL	B	1,240,000	64.0	SPZ	400

COMPOSITE CHRONOLOGY
Index-Related Trading on NYSE
October 14, 1987

TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
09:30 AM	PRINCIPAL	AO	AUTOMATED	SS	248,000	14.0	SPZ	93
09:30 AM	PRINCIPAL	AC	AUTOMATED	S	287,000	13.0	SPZ	83
09:30 AM	PRINCIPAL	AC	AUTOMATED	S	125,000	5.0	SPZ	31
09:30 AM	AGENT	OS	AUTOMATED	S	55,100	2.7	NA	0
09:30 AM	PRINCIPAL	AC	AUTOMATED	S	22,000	1.7	MMI	20
09:30 AM	PRINCIPAL	AC	AUTOMATED	S	66,000	5.1	MMI	0
09:32 AM	PRINCIPAL	AC	MANUAL	B	40,000	3.0	MMI	25
09:33 AM	PRINCIPAL	AC	AUTOMATED	S	444,000	21.2	SPZ	140
09:34 AM	PRINCIPAL	AC	AUTOMATED	S	40,000	3.0	MMI	25
09:38 AM	PRINCIPAL	AC	MANUAL	B	40,000	3.0	MMI	25
09:44 AM	AGENT	OS	AUTOMATED	S	10,000	0.8	NA	0
09:44 AM	PRINCIPAL	OS	AUTOMATED	B	19,800	0.7	NA	0
09:45 AM	PRINCIPAL	AC	AUTOMATED	S	220,300	10.3	SPZ	70
09:48 AM	AGENT	OS	AUTOMATED	B	6,000	0.2	NA	0
09:52 AM	PRINCIPAL	AC	MANUAL	B	40,000	3.0	MMI	25
09:54 AM	PRINCIPAL	AC	AUTOMATED	S	287,000	13.0	SPZ	83
09:56 AM	PRINCIPAL	AC	AUTOMATED	S	9,900	0.9	MMI	8
09:57 AM	AGENT	AC	AUTOMATED	S	309,100	15.0	SPZ	99
09:57 AM	PRINCIPAL	AC	AUTOMATED	S	40,000	3.0	MMI	25
09:58 AM	PRINCIPAL	AO	AUTOMATED	SS	382,000	16.5	SPZ	104
09:58 AM	PRINCIPAL	AC	AUTOMATED	S	287,000	13.0	SPZ	83
09:58 AM	PRINCIPAL	AC	AUTOMATED	S	163,900	7.7	SPZ	50
09:58 AM	PRINCIPAL	AO	AUTOMATED	SS	248,000	14.0	SPZ	93
09:58 AM	PRINCIPAL	AC	AUTOMATED	S	319,400	16.9	SPZ	115
09:59 AM	PRINCIPAL	AC	AUTOMATED	S	287,000	13.0	SPZ	83
09:59 AM	PRINCIPAL	AC	AUTOMATED	S	125,000	5.0	SPZ	31

COMPOSITE CHRONOLOGY
Index-Related Trading on NYSE
October 14, 1987

TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
10:00 AM	PRINCIPAL	AO	AUTOMATED	B	9,900	0.9	MMI	8
10:14 AM	PRINCIPAL	AC	AUTOMATED	S	24,200	2.3	MMI	19
10:20 AM	AGENT	AC	AUTOMATED	S	309,100	15.0	SPZ	99
10:20 AM	AGENT	SB	AUTOMATED	S	231,393	11.0	SPZ	69
10:23 AM	PRINCIPAL	AC	AUTOMATED	S	123,600	4.2	SPZ	25
10:26 AM	PRINCIPAL	AO	AUTOMATED	SS	248,000	14.0	SPZ	93
10:33 AM	PRINCIPAL	AO	AUTOMATED	SS	212,900	10.0	SPZ	67
10:38 AM	PRINCIPAL	AO	AUTOMATED	SS	395,000	16.4	SPZ	104
10:39 AM	AGENT	AC	AUTOMATED	S	309,100	15.0	SPZ	99
10:44 AM	AGENT	AO	AUTOMATED	S	600,000	24.0	SPZ	185
11:13 AM	PRINCIPAL	AO	AUTOMATED	SS	248,000	14.0	SPZ	93
11:14 AM	AGENT	AC	AUTOMATED	S	309,100	15.0	SPZ	99
11:24 AM	PRINCIPAL	AO	AUTOMATED	B	40,000	3.0	MMI	25
11:28 AM	AGENT	OS	AUTOMATED	B	54,000	2.5	NA	0
11:33 AM	PRINCIPAL	AO	AUTOMATED	SS	362,000	16.3	SPZ	104
11:52 AM	PRINCIPAL	AO	AUTOMATED	SS	400,000	20.0	SPZ	135
11:52 AM	PRINCIPAL	AO	AUTOMATED	SS	395,000	16.4	SPZ	104
11:58 AM	PRINCIPAL	AO	AUTOMATED	SS	443,000	20.0	SPZ	135
12:11 PM	PRINCIPAL	AO	AUTOMATED	B	24,200	2.3	MMI	19
12:13 PM	PRINCIPAL	AO	AUTOMATED	B	20,000	1.3	MMI	12
12:14 PM	PRINCIPAL	AO	AUTOMATED	B	22,000	1.7	MMI	5
12:39 PM	AGENT	OS	AUTOMATED	S	10,000	0.8	NA	0
12:40 PM	PRINCIPAL	AC	MANUAL	S	200,100	10.0	SPZ	62
12:43 PM	PRINCIPAL	AO	AUTOMATED	SS	248,000	14.0	SPZ	93
12:44 PM	PRINCIPAL	AC	AUTOMATED	S	22,000	1.7	MMI	5
12:47 PM	PRINCIPAL	AC	AUTOMATED	S	157,900	7.5	SPZ	50

COMPOSITE CHRONOLOGY
Index-Related Trading on NYSE
October 14, 1987

TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
12:47 PM	AGENT	AO	AUTOMATED	S	600,000	24.0	SPZ	185
12:48 PM	PRINCIPAL	AO	AUTOMATED	B	40,000	3.0	MMI	25
12:52 PM	PRINCIPAL	AC	AUTOMATED	S	9,900	0.9	MMI	8
12:52 PM	PRINCIPAL	AO	AUTOMATED	SS	54,500	2.8	KVL	5
12:54 PM	AGENT	AO	AUTOMATED	S	580,000	22.0	SPZ	144
12:55 PM	PRINCIPAL	AC	AUTOMATED	S	444,000	21.1	SPZ	140
12:57 PM	AGENT	OS	AUTOMATED	B	190,000	10.0	NA	0
12:57 PM	PRINCIPAL	AC	MANUAL	S	200,100	10.0	SPZ	62
12:57 PM	AGENT	SB	AUTOMATED	S	245,855	12.0	SPZ	75
12:58 PM	PRINCIPAL	AC	AUTOMATED	S	219,700	10.2	SPZ	70
12:58 PM	PRINCIPAL	AO	AUTOMATED	B	40,000	3.0	MMI	25
01:00 PM	AGENT	AO	AUTOMATED	S	580,000	22.0	SPZ	144
01:01 PM	AGENT	AC	AUTOMATED	S	309,100	15.0	SPZ	99
01:02 PM	PRINCIPAL	AC	AUTOMATED	S	167,400	7.6	SPZ	50
01:03 PM	AGENT	AO	AUTOMATED	S	560,000	28.0	SPZ	189
01:03 PM	PRINCIPAL	AO	AUTOMATED	B	9,900	0.9	MMI	8
01:04 PM	PRINCIPAL	AO	AUTOMATED	B	89,500	5.0	OEX	165
01:07 PM	PRINCIPAL	AC	AUTOMATED	S	40,000	3.0	MMI	25
01:09 PM	PRINCIPAL	AC	AUTOMATED	S	40,000	3.0	MMI	25
01:10 PM	PRINCIPAL	AC	MANUAL	S	200,100	10.0	SPZ	62
01:10 PM	PRINCIPAL	AC	AUTOMATED	S	44,000	3.4	MMI	28
01:10 PM	PRINCIPAL	AC	AUTOMATED	S	229,000	12.9	SPZ	90
01:12 PM	PRINCIPAL	AC	AUTOMATED	S	40,000	3.0	MMI	25
01:13 PM	AGENT	AC	AUTOMATED	S	384,490	14.8	SPZ	93
01:13 PM	AGENT	AC	AUTOMATED	S	614,700	20.7	SPZ	99
01:13 PM	PRINCIPAL	AC	AUTOMATED	S	151,000	6.1	SPZ	40

COMPOSITE CHRONOLOGY
Index-Related Trading on NYSE
October 14, 1987

TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
01:13 PM	AGENT	AC	AUTOMATED	S	199,400	12.5	SPZ	93
01:14 PM	AGENT	AO	AUTOMATED	S	580,000	22.0	SPZ	144
01:14 PM	PRINCIPAL	AO	AUTOMATED	SS	533,267	9.2	XOC	
01:14 PM	PRINCIPAL	AC	AUTOMATED	B	212,900	10.0	SPZ	68
01:33 PM	PRINCIPAL	AC	AUTOMATED	S	22,000	1.7	MMI	14
01:35 PM	PRINCIPAL	AC	AUTOMATED	S	134,400	5.5	YXZ	60
01:36 PM	PRINCIPAL	AC	AUTOMATED	S	63,900	1.9	SPZ	10
01:50 PM	PRINCIPAL	AC	AUTOMATED	S	9,900	0.9	MMI	8
01:51 PM	PRINCIPAL	AO	AUTOMATED	SS	248,000	14.0	SPZ	93
01:51 PM	PRINCIPAL	AC	AUTOMATED	S	14,300	1.4	MMI	11
01:54 PM	PRINCIPAL	AC	AUTOMATED	S	126,100	5.3	YXZ	60
01:57 PM	AGENT	AO	AUTOMATED	S	580,000	22.0	SPZ	165
02:05 PM	PRINCIPAL	AC	AUTOMATED	S	139,200	5.5	YXZ	60
02:11 PM	PRINCIPAL	AC	AUTOMATED	S	218,200	10.1	SPZ	70
02:13 PM	PRINCIPAL	AC	AUTOMATED	S	133,100	5.2	YXZ	60
02:13 PM	PRINCIPAL	AC	AUTOMATED	S	137,600	5.4	YXZ	60
02:24 PM	PRINCIPAL	AO	AUTOMATED	SS	248,000	14.0	SPZ	93
02:27 PM	PRINCIPAL	AO	AUTOMATED	SS	395,000	16.4	SPZ	104
02:30 PM	AGENT	AO	AUTOMATED	S	800,000	36.0	SPZ	240
02:31 PM	PRINCIPAL	AO	AUTOMATED	SS	382,000	16.5	SPZ	104
02:33 PM	PRINCIPAL	AC	AUTOMATED	S	129,700	5.2	YXZ	60
02:36 PM	AGENT	AO	AUTOMATED	S	800,000	36.0	SPZ	240
02:38 PM	PRINCIPAL	AC	MANUAL	S	200,100	10.0	SPZ	62
02:40 PM	PRINCIPAL	AC	AUTOMATED	S	19,800	1.1	MMI	9
02:41 PM	AGENT	AO	AUTOMATED	S	800,000	36.0	SPZ	240
02:41 PM	PRINCIPAL	AC	AUTOMATED	S	129,300	5.3	YXZ	60

COMPOSITE CHRONOLOGY
Index-Related Trading on NYSE
October 14, 1987

TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
02:44	PM PRINCIPAL	AO	AUTOMATED	B	20,000	1.3	MMI	13
02:46	PM PRINCIPAL	AO	AUTOMATED	B	44,000	3.4	MMI	28
02:47	PM AGENT	OS	AUTOMATED	S	10,000	0.8	NA	0
02:48	PM PRINCIPAL	AC	MANUAL	B	40,000	3.0	MMI	25
02:48	PM PRINCIPAL	AO	AUTOMATED	B	20,000	1.3	MMI	13
02:50	PM AGENT	OS	AUTOMATED	B	54,000	2.5	NA	0
02:58	PM AGENT	SB	AUTOMATED	S	476,200	24.0	SPZ	148
03:04	PM AGENT	OS	AUTOMATED	S	3,400	0.3	NA	0
03:04	PM PRINCIPAL	AC	MANUAL	B	40,000	3.0	MMI	25
03:06	PM AGENT	OS	AUTOMATED	B	54,000	2.5	NA	0
03:07	PM PRINCIPAL	AC	AUTOMATED	S	129,700	5.5	YXZ	60
03:08	PM PRINCIPAL	AC	MANUAL	S	40,000	3.0	MMI	25
03:08	PM PRINCIPAL	AC	AUTOMATED	S	156,200	8.9	OEX	300
03:09	PM PRINCIPAL	AC	AUTOMATED	S	76,200	4.4	OEX	150
03:12	PM AGENT	AO	AUTOMATED	S	800,000	36.0	SPZ	240
03:16	PM AGENT	PI	AUTOMATED	S	168,700	9.3	NA	0
03:23	PM PRINCIPAL	AC	MANUAL	S	40,000	3.0	MMI	25
03:30	PM PRINCIPAL	AC	AUTOMATED	S	44,000	3.4	MMI	28
03:30	PM PRINCIPAL	AC	MANUAL	S	200,100	10.0	SPZ	62
03:31	PM PRINCIPAL	AC	MANUAL	S	40,000	3.0	MMI	25
03:32	PM PRINCIPAL	AC	AUTOMATED	S	40,000	3.0	MMI	25
03:32	PM AGENT	AO	AUTOMATED	S	580,000	22.0	SPZ	144
03:32	PM PRINCIPAL	AO	AUTOMATED	SS	248,000	14.0	SPZ	93
03:34	PM AGENT	SB	AUTOMATED	S	476,200	24.0	SPX	148
03:34	PM AGENT	AO	AUTOMATED	S	580,000	22.0	SPZ	144
03:40	PM AGENT	OS	AUTOMATED	B	17,000	5.0	SPX	0

COMPOSITE CHRONOLOGY
Index-Related Trading on NYSE
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TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
03:40 PM	PRINCIPAL	AO	AUTOMATED	B	44,000	3.4	MMI	28
03:42 PM	AGENT	OS	AUTOMATED	B	31,000	1.0	NA	0
03:43 PM	AGENT	AC	AUTOMATED	S	36,000	1.7	SPZ	67
03:43 PM	AGENT	OS	AUTOMATED	B	176,400	4.9	OS	0
03:50 PM	AGENT	OS	AUTOMATED	B	54,000	2.5	NA	0
03:52 PM	PRINCIPAL	AO	AUTOMATED	S	44,000	3.4	MMI	28
03:57 PM	AGENT	AO	AUTOMATED	S	800,000	36.0	SPZ	240
04:00 PM	AGENT	OS	MANUAL	S	320,250	7.4	NA	0

PROGRAMS EXECUTED "ALL DAY"

PRINCIPAL	OS	AUTOMATED	S	1,480,000	113.0	NA	2315
PRINCIPAL	AC	AUTOMATED	S	680,000	50.0	MMI	426
PRINCIPAL	AO	AUTOMATED	B	440,000	33.0	MMI	275
AGENT	OS	MANUAL	B	205,000	42.5	NA	0

LONDON MARKET

08:51 AM	PRINCIPAL	AO	MANUAL	SS	972,300	46.0	SPZ	297
08:51 AM	AGENT	AO	MANUAL	B	648,200	31.0	SPZ	198

COMPOSITE CHRONOLOGY
 Index-Related Trading on NYSE
 October 14, 1987

TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
08:51 AM	AGENT	AO	MANUAL	B	972,300	46.0	SPZ	297
08:51 AM	PRINCIPAL	AO	MANUAL	SS	648,200	31.0	SPZ	198
04:26 PM	PRINCIPAL	EFP	MANUAL	B	744,996	36.9	SPZ	243
04:26 PM	AGENT	EFP	MANUAL	S	788,106	36.8	SPZ	243
04:27 PM	AGENT	EFP	MANUAL	S	245,855	12.0	SPZ	76
04:27 PM	PRINCIPAL	EFP	MANUAL	B	249,367	11.7	SPZ	76

COMPOSITE CHRONOLOGY
Index-Related Trading on NYSE
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TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
09:30 AM	PRINCIPAL	AO	AUTOMATED	S	650,000	30.0	MMI	250
09:30 AM	AGENT	OS	AUTOMATED	B	650,000	30.0	NA	0
09:30 AM	PRINCIPAL	AO	AUTOMATED	S	650,000	30.0	MMI	250
09:30 AM	AGENT	OS	AUTOMATED	B	341,800	19.0	NA	0
09:30 AM	PRINCIPAL	AC	AUTOMATED	S	239,242	11.2	SPZ	76
09:30 AM	AGENT	OS	AUTOMATED	S	213,500	10.6	NA	0
09:30 AM	PRINCIPAL	AO	AUTOMATED	S	212,900	10.0	SPZ	68
09:30 AM	PRINCIPAL	AO	AUTOMATED	SS	126,000	7.0	OEX	514
09:30 AM	AGENT	OS	AUTOMATED	S	85,000	5.5	NA	0
09:30 AM	AGENT	OS	AUTOMATED	S	85,000	5.5	NA	0
09:30 AM	PRINCIPAL	AO	AUTOMATED	SS	53,900	1.7	SPZ	7
09:30 AM	PRINCIPAL	AO	AUTOMATED	SS	46,300	1.2	SPZ	5
09:30 AM	AGENT	OS	AUTOMATED	B	40,000	3.0	NA	0
09:30 AM	PRINCIPAL	OS	AUTOMATED	S	1,900	0.1	NA	0
09:31 AM	PRINCIPAL	AO	AUTOMATED	SS	400,000	16.0	SPZ	104
09:32 AM	PRINCIPAL	AC	AUTOMATED	S	252,690	11.8	SPZ	81
09:33 AM	PRINCIPAL	AO	AUTOMATED	SS	250,000	13.0	SPZ	93
09:34 AM	PRINCIPAL	AC	AUTOMATED	S	650,000	30.0	SPZ	200
09:37 AM	AGENT	PI	AUTOMATED	S	283,000	13.3	NA	0
09:38 AM	PRINCIPAL	AC	AUTOMATED	S	650,000	30.0	SPZ	200
09:38 AM	PRINCIPAL	AO	MANUAL	B	40,000	3.0	MMI	26
09:39 AM	PRINCIPAL	AO	AUTOMATED	SS	1,073,879	17.0	KVL	149
09:41 AM	PRINCIPAL	AC	AUTOMATED	S	129,200	5.2	YZZ	60
09:41 AM	PRINCIPAL	AO	MANUAL	B	40,000	3.0	MMI	26
09:46 AM	AGENT	OS	MANUAL	B	997,000	4.4	NA	0
09:46 AM	AGENT	OS	AUTOMATED	B	47,500	3.5	KVL	0

COMPOSITE CHRONOLOGY
Index-Related Trading on NYSE
October 15, 1987

TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
09:47	AM PRINCIPAL	AC	AUTOMATED	S	650,000	30.0	SPZ	200
09:48	AM PRINCIPAL	AO	AUTOMATED	B	30,000	1.8	FNC	
09:49	AM PRINCIPAL	AO	MANUAL	B	40,000	3.0	MMI	26
09:52	AM PRINCIPAL	AO	AUTOMATED	B	30,000	1.8	FNC	
09:52	AM PRINCIPAL	AO	AUTOMATED	B	9,900	0.9	MMI	8
09:54	AM AGENT	OS	AUTOMATED	B	100,000	7.5	NA	0
09:55	AM PRINCIPAL	AC	AUTOMATED	S	9,900	0.9	MMI	8
09:57	AM PRINCIPAL	AC	AUTOMATED	S	40,000	3.0	MMI	25
10:01	AM PRINCIPAL	AC	AUTOMATED	S	650,000	30.0	SPZ	200
10:01	AM PRINCIPAL	AO	AUTOMATED	SS	177,900	1.4	XOC	0
10:02	AM PRINCIPAL	AO	AUTOMATED	B	174,950	9.7	OEX	
10:02	AM PRINCIPAL	AO	AUTOMATED	B	89,500	5.0	OEX	165
10:04	AM PRINCIPAL	AC	AUTOMATED	S	40,000	3.0	MMI	25
10:04	AM PRINCIPAL	AC	MANUAL	S	40,000	3.0	MMI	25
10:04	AM PRINCIPAL	AC	AUTOMATED	S	9,900	0.9	MMI	8
10:06	AM PRINCIPAL	AO	AUTOMATED	SS	400,000	16.0	SPZ	104
10:07	AM AGENT	OS	AUTOMATED	S	300,000	13.5	NA	0
10:09	AM AGENT	AC	AUTOMATED	S	309,100	14.0	SPZ	99
10:09	AM PRINCIPAL	AO	AUTOMATED	B	40,000	3.0	MMI	25
10:09	AM AGENT	AO	AUTOMATED	B	17,000	1.0	OEX	0
10:09	AM PRINCIPAL	AO	AUTOMATED	B	9,900	0.9	MMI	8
10:10	AM AGENT	SB	AUTOMATED	S	632,200	30.0	SPZ	205
10:10	AM PRINCIPAL	AO	AUTOMATED	B	44,000	3.3	MMI	28
10:10	AM PRINCIPAL	AO	MANUAL	B	40,000	3.0	MMI	26
10:11	AM AGENT	AC	AUTOMATED	S	91,850	3.4	KVL	35
10:11	AM PRINCIPAL	AO	AUTOMATED	B	89,500	5.0	OEX	165

COMPOSITE CHRONOLOGY
Index-Related Trading on NYSE
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TIME INITIATED	PRINCIPAL/AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
10:11 AM	PRINCIPAL	AO	AUTOMATED	B	20,000	1.3	MMI	13
10:14 AM	PRINCIPAL	AO	AUTOMATED	B	221,700	10.1	SPZ	70
10:14 AM	AGENT	OS	AUTOMATED	B	47,500	3.5	NA	0
10:18 AM	AGENT	AO	AUTOMATED	B	17,000	1.0	OEX	0
10:18 AM	AGENT	AO	AUTOMATED	B	17,000	1.0	OEX	0
10:35 AM	PRINCIPAL	AO	AUTOMATED	B	174,950	9.7	OEX	295
10:35 AM	AGENT	OS	AUTOMATED	S	13,200	0.5	NA	0
10:49 AM	PRINCIPAL	AO	AUTOMATED	B	174,950	9.8	OEX	295
10:52 AM	PRINCIPAL	AC	AUTOMATED	B	272,400	12.6	SPZ	84
10:53 AM	PRINCIPAL	AO	AUTOMATED	B	44,000	3.3	MMI	28
10:55 AM	AGENT	OS	AUTOMATED	B	76,400	3.4	NA	0
11:00 AM	AGENT	OS	AUTOMATED	B	73,400	4.3	NA	0
11:01 AM	PRINCIPAL	AO	AUTOMATED	B	22,000	1.7	MMI	14
11:04 AM	PRINCIPAL	AO	AUTOMATED	B	380,100	18.8	SPZ	130
11:04 AM	PRINCIPAL	AO	AUTOMATED	B	158,300	8.8	OEX	299
11:05 AM	PRINCIPAL	AO	AUTOMATED	B	44,000	3.4	MMI	28
11:06 AM	PRINCIPAL	AO	AUTOMATED	B	40,000	5.6	NA	0
11:09 AM	PRINCIPAL	AO	AUTOMATED	B	22,000	1.7	MMI	14
11:19 AM	AGENT	OS	AUTOMATED	S	65,100	3.1	NA	0
11:21 AM	PRINCIPAL	AC	AUTOMATED	S	22,000	1.7	MMI	14
11:24 AM	AGENT	OS	AUTOMATED	S	40,000	3.0	NA	0
11:25 AM	AGENT	PI	AUTOMATED	S	179,900	9.4	NA	0
11:28 AM	PRINCIPAL	AO	AUTOMATED	SS	250,000	13.0	SPZ	93
11:30 AM	AGENT	OS	AUTOMATED	S	40,000	3.0	NA	0
11:47 AM	PRINCIPAL	AO	AUTOMATED	B	22,000	1.7	MMI	14
11:50 AM	PRINCIPAL	AO	AUTOMATED	B	158,300	8.8	OEX	299

COMPOSITE CHRONOLOGY
 Index-Related Trading on NYSE
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TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
11:59 AM	PRINCIPAL	AO	AUTOMATED	B	167,400	7.6	SPZ	50
12:00 PM	PRINCIPAL	AC	AUTOMATED	B	214,200	7.9	SPZ	17
12:03 PM	PRINCIPAL	AO	AUTOMATED	B	22,000	1.7	MMI	14
12:05 PM	AGENT	AO	AUTOMATED	B	614,700	29.0	SPZ	198
12:10 PM	PRINCIPAL	AC	AUTOMATED	B	126,700	8.3	SPZ	16
12:13 PM	PRINCIPAL	AO	AUTOMATED	B	50,400	4.3	OEX	166
12:15 PM	PRINCIPAL	AO	AUTOMATED	B	44,000	3.4	MMI	28
12:17 PM	PRINCIPAL	AO	AUTOMATED	B	22,000	1.7	SPZ	14
12:22 PM	PRINCIPAL	AO	AUTOMATED	B	20,000	1.3	MMI	13
12:26 PM	PRINCIPAL	OS	AUTOMATED	B	154,700	5.9	NA	0
12:34 PM	PRINCIPAL	OS	AUTOMATED	B	130,700	7.4	NA	0
12:47 PM	PRINCIPAL	AC	AUTOMATED	S	22,000	1.7	MMI	14
12:52 PM	PRINCIPAL	AC	AUTOMATED	S	66,000	5.0	MMI	42
12:56 PM	PRINCIPAL	AC	MANUAL	S	40,000	3.0	MMI	25
01:00 PM	AGENT	OS	AUTOMATED	B	65,400	4.2	NA	0
01:03 PM	PRINCIPAL	AC	AUTOMATED	B	95,300	5.7	XII	187
01:05 PM	PRINCIPAL	AO	AUTOMATED	B	22,000	1.7	MMI	14
01:06 PM	PRINCIPAL	AO	AUTOMATED	B	22,000	1.7	SPZ	14
01:14 PM	PRINCIPAL	AO	AUTOMATED	B	22,000	1.7	MMI	0
01:16 PM	PRINCIPAL	AC	AUTOMATED	S	130,300	5.5	YXZ	60
01:19 PM	PRINCIPAL	AC	AUTOMATED	S	44,000	3.3	MMI	28
01:28 PM	PRINCIPAL	AC	AUTOMATED	S	40,000	3.0	MMI	25
01:29 PM	AGENT	AC	AUTOMATED	S	309,100	14.0	SPZ	99
01:35 PM	PRINCIPAL	AC	AUTOMATED	S	22,000	1.7	MMI	14
01:38 PM	PRINCIPAL	AC	AUTOMATED	S	380,100	18.7	SPZ	130
01:39 PM	PRINCIPAL	AC	AUTOMATED	S	22,000	1.6	MMI	0

COMPOSITE CHRONOLOGY
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TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
01:40 PM	AGENT	AC	AUTOMATED	S	309,100	14.0	SPZ	99
01:40 PM	PRINCIPAL	AC	AUTOMATED	S	22,000	1.6	MMI	14
01:41 PM	PRINCIPAL	AC	AUTOMATED	S	30,000	1.8	FNC	
01:44 PM	PRINCIPAL	AO	AUTOMATED	B	40,000	3.0	MMI	25
01:44 PM	PRINCIPAL	AO	AUTOMATED	B	22,000	1.6	MMI	14
01:48 PM	PRINCIPAL	AO	AUTOMATED	B	22,000	1.7	MMI	0
01:49 PM	PRINCIPAL	AO	AUTOMATED	SS	250,000	13.0	SPZ	93
01:55 PM	PRINCIPAL	AC	AUTOMATED	B	137,400	7.0	OEX	514
01:57 PM	PRINCIPAL	AO	AUTOMATED	B	158,300	8.8	OEX	299
01:57 PM	PRINCIPAL	AO	AUTOMATED	B	124,550		OEX	
01:58 PM	PRINCIPAL	AC	AUTOMATED	S	130,000	5.2	YXZ	60
02:03 PM	PRINCIPAL	AO	AUTOMATED	B	50,400	4.3	OEX	
02:05 PM	PRINCIPAL	AC	AUTOMATED	B	137,400	7.0	OEX	514
02:06 PM	PRINCIPAL	AO	AUTOMATED	B	39,700	4.0	SPZ	30
02:09 PM	AGENT	OS	AUTOMATED	B	15,206	0.5	NA	0
02:09 PM	AGENT	OS	AUTOMATED	S	5,526	0.2	NA	0
02:11 PM	AGENT	PI	AUTOMATED	S	36,400	1.8	NA	0
02:13 PM	AGENT	OS	AUTOMATED	B	196,600	3.9	NA	0
02:13 PM	AGENT	OS	AUTOMATED	S	108,259	2.3	NA	0
02:18 PM	PRINCIPAL	AO	AUTOMATED	B	83,200	3.8	SPZ	30
02:18 PM	PRINCIPAL	AO	AUTOMATED	B	22,000	1.7	MMI	14
02:20 PM	AGENT	OS	AUTOMATED	B	650,000	30.0	NA	0
02:20 PM	AGENT	AO	AUTOMATED	B	204,700	10.3	SPZ	67
02:21 PM	AGENT	OS	AUTOMATED	B	650,000	30.0	NA	0
02:21 PM	PRINCIPAL	AO	AUTOMATED	B	137,400	7.3	OEX	514
02:24 PM	PRINCIPAL	AO	MANUAL	B	200,900	10.0	SPZ	62

COMPOSITE CHRONOLOGY
Index-Related Trading on NYSE
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TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
02:27 PM	AGENT	OS	AUTOMATED	B	650,000	30.0	NA	0
02:32 PM	PRINCIPAL	AC	AUTOMATED	S	40,000	3.0	MMI	25
02:32 PM	PRINCIPAL	AC	AUTOMATED	S	39,700	3.9	SPZ	30
02:32 PM	PRINCIPAL	AC	AUTOMATED	S	22,000	1.6	MMI	14
02:33 PM	PRINCIPAL	AC	AUTOMATED	S	168,300	7.5	SPZ	50
02:53 PM	PRINCIPAL	AO	AUTOMATED	B	20,000	1.3	MMI	13
03:06 PM	PRINCIPAL	AC	AUTOMATED	S	22,000	1.7	MMI	14
03:08 PM	PRINCIPAL	AC	AUTOMATED	S	83,200	3.8	SPZ	30
03:11 PM	AGENT	OS	AUTOMATED	B	115,800	6.9	NA	0
03:13 PM	PRINCIPAL	AO	MANUAL	B	40,000	3.0	MMI	26
03:15 PM	AGENT	OS	AUTOMATED	S	575,842	26.5	NA	0
03:15 PM	PRINCIPAL	AO	AUTOMATED	B	39,700	4.0	SPZ	30
03:21 PM	PRINCIPAL	AC	AUTOMATED	S	128,500	5.1	YXZ	60
03:31 PM	PRINCIPAL	AC	AUTOMATED	S	165,100	7.3	SPZ	50
03:33 PM	AGENT	OS	AUTOMATED	S	217,000	12.5	NA	0
03:33 PM	PRINCIPAL	AC	AUTOMATED	S	39,700	3.9	SPZ	30
03:34 PM	PRINCIPAL	AC	AUTOMATED	S	380,100	18.6	SPZ	130
03:34 PM	PRINCIPAL	AC	AUTOMATED	S	22,000	1.6	MMI	14
03:41 PM	AGENT	AC	AUTOMATED	S	309,100	14.0	SPZ	99
03:41 PM	PRINCIPAL	AC	AUTOMATED	S	204,971	11.7	SPZ	81
03:42 PM	PRINCIPAL	A	AUTOMATED	S	280,000	15.0	MMI	107
03:42 PM	PRINCIPAL	AC	MANUAL	B	200,900	10.0	SPZ	62
03:43 PM	PRINCIPAL	AO	AUTOMATED	SS	1,073,089	17.0	KVL	149
03:43 PM	PRINCIPAL	AC	AUTOMATED	S	128,300	5.2	YXZ	60
03:45 PM	AGENT	AC	AUTOMATED	S	309,100	14.0	SPZ	99
03:46 PM	AGENT	AC	AUTOMATED	S	309,100	14.0	SPZ	99

COMPOSITE CHRONOLOGY
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TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
03:46 PM	PRINCIPAL	AC	AUTOMATED	S	22,000	1.6	MMI	14
03:47 PM	PRINCIPAL	AC	AUTOMATED	S	132,000	5.2	YXZ	60
03:48 PM	AGENT	OS	AUTOMATED	S	561,400	27.0	NA	0
03:48 PM	PRINCIPAL	AO	AUTOMATED	B	22,000	1.6	MMI	16
03:48 PM	PRINCIPAL	AO	AUTOMATED	B	22,000	1.6	MMI	14
03:49 PM	AGENT	AO	AUTOMATED	S	660,000	30.0	SPZ	200
03:50 PM	AGENT	OS	AUTOMATED	B	2,400	0.1	NA	0
03:51 PM	AGENT	OS	AUTOMATED	S	575,842	26.5	NA	0
03:54 PM	AGENT	OS	AUTOMATED	S	300,000	13.5	NA	0
03:56 PM	PRINCIPAL	AC	MANUAL	S	40,000	3.0	MMI	25
03:57 PM	AGENT	AO	AUTOMATED	S	660,000	30.0	SPZ	200
03:57 PM	AGENT	OS	AUTOMATED	S	300,000	13.5	NA	0
03:57 PM	AGENT	OS	AUTOMATED	S	142,000	7.1	NA	0
03:57 PM	PRINCIPAL	AO	AUTOMATED	B	30,000	1.8	FNC	

PROGRAMS EXECUTED "ALL DAY"

PRINCIPAL	AO	AUTOMATED	B	740,000	56.0	MMI	464
PRINCIPAL	OS	AUTOMATED	S	660,000	50.0	NA	0

LONDON MARKET

AGENT	AO	MANUAL	SS	650,000	30.0	SPZ	200
AGENT	AO	MANUAL	SS	650,000	30.0	SPZ	200

COMPOSITE CHRONOLOGY
 Index-Related Trading on NYSE
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TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
	AGENT	AO	MANUAL	B	648,200	30.0	SPZ	198
	AGENT	AO	MANUAL	SS	2,600,000	120.0	SPZ	800
	PRINCIPAL	AO	MANUAL	B	3,900,000	180.0	SPZ	1200
	PRINCIPAL	AO	MANUAL	SS	1,944,600	90.0	SPZ	594
	AGENT	AO	MANUAL	B	1,944,600	90.0	SPZ	594
	PRINCIPAL	AO	MANUAL	SS	648,200	30.0	SPZ	198
	PRINCIPAL	AD	MANUAL	S	2,631,500	100.0	SPZ	596

COMPOSITE CHRONOLOGY
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TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
09:30 AM	PRINCIPAL	AO	AUTOMATED	SS	7,700	0.1	SPZ	
09:30 AM	PRINCIPAL	AO	AUTOMATED	SS	212,900	10.0	SPZ	67
09:30 AM	AGENT	PI	AUTOMATED	S	309,500	14.8	NA	0
09:30 AM	AGENT	OS	AUTOMATED	S	1,147,055	53.0	NA	0
09:30 AM	PRINCIPAL	AO	AUTOMATED	SS	1,065,689	16.0	KVL	130
09:34 AM	PRINCIPAL	AO	AUTOMATED	SS	87,100	0.4	XOC	0
09:35 AM	AGENT	OS	AUTOMATED	S	600	0.0	NA	0
09:35 AM	AGENT	OS	AUTOMATED	S	10,400	0.4	NA	0
09:35 AM	AGENT	OS	AUTOMATED	S	159,350	8.0	NA	0
09:35 AM	AGENT	OS	AUTOMATED	S	23,650	1.0	NA	0
09:35 AM	PRINCIPAL	AO	AUTOMATED	B	40,000	3.0	MMI	25
09:39 AM	PRINCIPAL	AO	AUTOMATED	B	40,000	3.0	MMI	26
09:41 AM	PRINCIPAL	AO	AUTOMATED	B	40,000	3.0	MMI	26
09:41 AM	PRINCIPAL	AO	MANUAL	B	40,000	2.9	MMI	25
09:45 AM	PRINCIPAL	AC	AUTOMATED	S	219,600	9.8	SPZ	70
09:47 AM	AGENT	AC	AUTOMATED	S	309,100	14.0	SPZ	99
09:48 AM	PRINCIPAL	AC	AUTOMATED	S	650,000	30.0	SPZ	200
09:50 AM	PRINCIPAL	AO	AUTOMATED	SS	400,000	15.0	SPZ	104
09:50 AM	AGENT	PI	AUTOMATED	S	53,300	2.6	NA	0
09:50 AM	AGENT	AC	AUTOMATED	S	309,100	14.0	SPZ	99
09:51 AM	PRINCIPAL	AC	AUTOMATED	S	650,000	30.0	SPZ	200
09:52 AM	PRINCIPAL	AO	AUTOMATED	SS	250,000	13.0	SPZ	93
09:53 AM	PRINCIPAL	AC	AUTOMATED	S	182,933	9.3	SPZ	68
09:53 AM	PRINCIPAL	AC	MANUAL	S	40,000	2.9	MMI	25
09:54 AM	PRINCIPAL	OS	AUTOMATED	B	209,200	9.0	SPZ	0
09:56 AM	PRINCIPAL	AO	AUTOMATED	B	20,000	1.5	MMI	13

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TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
09:57 AM	PRINCIPAL	OS	AUTOMATED	B	208,800	9.0	SPZ	0
09:58 AM	PRINCIPAL	AO	AUTOMATED	B	44,000	3.3	MMI	28
10:04 AM	PRINCIPAL	OS	AUTOMATED	B	208,500	9.0	SPZ	0
10:11 AM	PRINCIPAL	AC	AUTOMATED	S	20,000	1.5	MMI	13
10:12 AM	PRINCIPAL	AC	AUTOMATED	S	44,000	3.3	MMI	28
10:15 AM	PRINCIPAL	OS	AUTOMATED	B	208,400	9.0	SPZ	0
10:16 AM	AGENT	OS	AUTOMATED	B	37,600	1.6	NA	0
10:17 AM	AGENT	OS	AUTOMATED	B	15,000	0.7	NA	0
10:18 AM	AGENT	SB	AUTOMATED	S	1,294,900	29.9	SPZ	205
10:18 AM	AGENT	OS	AUTOMATED	B	11,600	0.5	NA	0
10:20 AM	AGENT	PI	AUTOMATED	S	104,000	4.8	NA	0
10:23 AM	PRINCIPAL	AC	AUTOMATED	S	89,500	4.7	OEX	165
10:24 AM	PRINCIPAL	AO	AUTOMATED	SS	400,000	15.0	SPZ	104
10:28 AM	AGENT	OS	AUTOMATED	S	142,000	7.1	SPZ	0
10:30 AM	AGENT	PI	AUTOMATED	S	293,700	13.8	NA	0
10:30 AM	AGENT	PI	AUTOMATED	S	283,000	13.1	NA	0
10:30 AM	PRINCIPAL	AC	AUTOMATED	S	174,950	9.6	OEX	664
10:35 AM	PRINCIPAL	AC	AUTOMATED	S	174,950	9.6	OEX	664
10:36 AM	PRINCIPAL	AO	MANUAL	B	40,000	2.9	MMI	25
10:38 AM	AGENT	OS	AUTOMATED	B	51,300	2.9	NA	0
10:56 AM	PRINCIPAL	AO	AUTOMATED	B	44,000	3.3	MMI	28
11:02 AM	PRINCIPAL	AO	AUTOMATED	B	9,900	0.9	MMI	8
11:13 AM	PRINCIPAL	AO	AUTOMATED	SS	250,000	13.0	SPZ	95
11:13 AM	AGENT	AC	AUTOMATED	S	614,700	28.5	SPZ	198
11:14 AM	PRINCIPAL	AC	AUTOMATED	S	9,900	0.9	MXV	8
11:17 AM	PRINCIPAL	AO	AUTOMATED	SS	400,000	15.0	SPZ	90

COMPOSITE CHRONOLOGY
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TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
11:20 AM	AGENT	SB	AUTOMATED	S	1,294,900	29.4	SPZ	205
11:20 AM	PRINCIPAL	AC	AUTOMATED	S	650,000	30.0	SPZ	200
11:23 AM	AGENT	OS	AUTOMATED	S	20,000	1.5	NA	0
11:25 AM	AGENT	SB	AUTOMATED	S	476,200	24.0	SPZ	148
11:25 AM	PRINCIPAL	AO	AUTOMATED	B	49,200	2.8	OEX	100
11:26 AM	PRINCIPAL	AC	AUTOMATED	S	650,000	30.0	SPZ	200
11:27 AM	PRINCIPAL	AC	AUTOMATED	S	105,781	3.5	SPZ	18
11:27 AM	AGENT	OS	AUTOMATED	S	142,000	7.0	SPZ	0
11:27 AM	AGENT	OS	AUTOMATED	B	32,500	4.0	NA	0
11:28 AM	AGENT	PI	AUTOMATED	S	104,000	4.7	NA	0
11:29 AM	PRINCIPAL	AO	MANUAL	B	40,000	2.9	MMI	25
11:29 AM	AGENT	OS	AUTOMATED	B	50,000	8.0	NA	0
11:34 AM	AGENT	AC	AUTOMATED	S	17,000	1.0	OEX	0
11:38 AM	PRINCIPAL	AO	AUTOMATED	B	44,000	3.2	MMI	28
11:38 AM	PRINCIPAL	AO	AUTOMATED	B	40,000	3.0	MMI	25
11:39 AM	PRINCIPAL	AC	AUTOMATED	B	285,400	12.7	SPZ	53
11:48 AM	PRINCIPAL	AC	AUTOMATED	B	212,900	10.0	SPZ	68
11:48 AM	AGENT	OS	AUTOMATED	B	107,600	5.0	NA	0
11:51 AM	AGENT	OS	AUTOMATED	B	3,300	0.2	NA	0
11:51 AM	PRINCIPAL	AO	AUTOMATED	B	44,000	3.2	MMI	28
11:55 AM	PRINCIPAL	AO	AUTOMATED	B	40,000	3.0	MMI	25
12:00 PM	PRINCIPAL	OS	AUTOMATED	B	280,000	15.0	NA	0
12:01 PM	PRINCIPAL	AO	AUTOMATED	B	229,000	12.4	SPZ	90
12:07 PM	AGENT	AC	AUTOMATED	S	90,500	4.1	SPZ	28
12:09 PM	PRINCIPAL	AO	AUTOMATED	S	88,000	6.5	MMI	56
12:33 PM	AGENT	AC	AUTOMATED	S	614,700	28.2	SPZ	198

COMPOSITE CHRONOLOGY
 Index-Related Trading on NYSE
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TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
12:35	PM PRINCIPAL	AC	AUTOMATED	S	229,000	12.3	SPZ	90
12:35	PM PRINCIPAL	OS	AUTOMATED	S	280,000	15.0	NA	0
01:02	PM PRINCIPAL	AC	AUTOMATED	S	40,000	3.0	MMI	26
01:04	PM PRINCIPAL	AC	AUTOMATED	S	44,000	3.2	MMI	28
01:05	PM PRINCIPAL	AC	AUTOMATED	S	40,000	3.0	MMI	26
01:06	PM PRINCIPAL	AC	MANUAL	S	40,000	2.9	MMI	25
01:06	PM AGENT	AO	AUTOMATED	S	315,350	14.1	SPZ	100
01:07	PM PRINCIPAL	AC	AUTOMATED	S	40,000	3.0	MMI	0
01:09	PM PRINCIPAL	AC	AUTOMATED	S	44,000	3.2	MMI	28
01:24	PM PRINCIPAL	AO	AUTOMATED	S	44,000	3.2	MMI	28
01:26	PM AGENT	AC	AUTOMATED	S	17,000	1.0	OEX	
01:26	PM PRINCIPAL	AC	AUTOMATED	S	40,000	3.0	MMI	0
01:26	PM AGENT	SB	AUTOMATED	S	476,200	24.0	SPZ	148
01:27	PM AGENT	AC	AUTOMATED	S	17,000	1.0	OEX	
01:28	PM PRINCIPAL	AC	AUTOMATED	S	30,000	1.8	FNC	0
01:28	PM AGENT	AC	AUTOMATED	S	455,400	20.4	SPZ	144
01:28	PM PRINCIPAL	AC	AUTOMATED	S	22,000	1.6	MMI	14
01:28	PM PRINCIPAL	AO	AUTOMATED	SS	1,073,179	17.0	KVL	130
01:29	PM PRINCIPAL	AO	AUTOMATED	B	40,000	3.0	NA	0
01:29	PM PRINCIPAL	AC	AUTOMATED	S	650,000	30.0	SPZ	200
01:31	PM AGENT	OS	AUTOMATED	S	5,000	0.4	NA	0
01:32	PM AGENT	AO	AUTOMATED	S	313,800	14.1	SPZ	100
01:33	PM PRINCIPAL	AO	AUTOMATED	B	22,000	1.6	MMI	14
01:35	PM PRINCIPAL	AO	AUTOMATED	B	22,000	1.6	MMI	14
01:36	PM PRINCIPAL	OS	AUTOMATED	B	280,000	15.0	NA	0
01:42	PM PRINCIPAL	AC	AUTOMATED	S	44,000	3.2	MMI	28

COMPOSITE CHRONOLOGY
Index-Related Trading on NYSE
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TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
01:44 PM	PRINCIPAL	AC	AUTOMATED	S	650,000	30.0	SPZ	200
01:47 PM	AGENT	OS	AUTOMATED	S	5,000	0.4	NA	0
01:49 PM	AGENT	PI	AUTOMATED	S	283,000	12.7	NA	0
01:50 PM	PRINCIPAL	OS	AUTOMATED	S	280,000	15.0	NA	0
01:50 PM	AGENT	SB	AUTOMATED	S	622,300	29.0	SPZ	198
01:51 PM	AGENT	OS	AUTOMATED	S	80,000	3.4	NA	0
01:51 PM	PRINCIPAL	AC	AUTOMATED	S	22,000	1.6	MMI	14
01:51 PM	PRINCIPAL	AC	AUTOMATED	S	650,000	30.0	SPZ	200
01:55 PM	AGENT	OS	AUTOMATED	S	160,000	5.0	NA	0
01:56 PM	PRINCIPAL	AC	AUTOMATED	S	30,000	1.8	FNC	0
01:56 PM	PRINCIPAL	AC	AUTOMATED	S	44,000	3.2	SPZ	28
01:57 PM	PRINCIPAL	AC	AUTOMATED	S	238,010	8.8	YXZ	109
01:58 PM	PRINCIPAL	AC	AUTOMATED	S	650,000	30.0	SPZ	200
01:58 PM	AGENT	AO	AUTOMATED	S	313,800	14.1	SPZ	100
02:04 PM	PRINCIPAL	AO	MANUAL	B	40,000	2.9	MMI	25
02:05 PM	PRINCIPAL	AO	AUTOMATED	B	40,000	3.0	MMI	25
02:06 PM	PRINCIPAL	AO	AUTOMATED	B	30,000	1.8	FNC	0
02:08 PM	PRINCIPAL	AO	AUTOMATED	B	30,000	1.8	FNC	0
02:11 PM	PRINCIPAL	AO	AUTOMATED	B	40,000	3.0	MMI	26
02:12 PM	AGENT	OS	AUTOMATED	S	1,050,000	46.3	NA	0
02:12 PM	AGENT	OS	AUTOMATED	B	120,000	5.0	NA	0
02:16 PM	PRINCIPAL	AO	AUTOMATED	B	40,000	3.0	MMI	26
02:17 PM	PRINCIPAL	AO	MANUAL	B	40,000	2.9	MMI	25
02:17 PM	PRINCIPAL	AO	AUTOMATED	B	40,000	3.0	MMI	25
02:17 PM	PRINCIPAL	AC	AUTOMATED	S	50,400	2.7	OEX	100
02:18 PM	PRINCIPAL	AO	AUTOMATED	B	40,000	3.0	MMI	0

COMPOSITE CHRONOLOGY
Index-Related Trading on NYSE
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TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
02:18 PM	PRINCIPAL	AO	AUTOMATED	B	40,000	3.0	MMI	0
02:18 PM	PRINCIPAL	AC	AUTOMATED	S	52,300	2.7	OEX	100
02:19 PM	PRINCIPAL	AO	AUTOMATED	N	22,000	1.6	MMI	14
02:20 PM	PRINCIPAL	AO	AUTOMATED	B	44,000	3.2	MMI	28
02:23 PM	PRINCIPAL	AC	AUTOMATED	S	87,500	4.7	OEX	165
02:26 PM	PRINCIPAL	AC	AUTOMATED	S	44,000	3.2	MMI	28
02:28 PM	PRINCIPAL	AO	AUTOMATED	SS	212,900	10.0	SPZ	67
02:31 PM	PRINCIPAL	AC	AUTOMATED	S	650,000	30.0	SPZ	200
02:35 PM	AGENT	AO	AUTOMATED	S	550,000	26.0	SPZ	187
02:41 PM	AGENT	AC	AUTOMATED	S	619,100	27.9	SPZ	200
02:41 PM	AGENT	OS	AUTOMATED	S	500,000	18.0	NA	0
02:41 PM	AGENT	AO	AUTOMATED	S	315,350	14.1	SPZ	100
02:43 PM	PRINCIPAL	AO	AUTOMATED	B	40,000	7.0	MMI	25
02:46 PM	AGENT	OS	AUTOMATED	S	11,200	0.4	NA	0
02:47 PM	PRINCIPAL	AO	AUTOMATED	B	40,000	7.0	MMI	25
02:48 PM	AGENT	OS	AUTOMATED	S	10,500	0.4	NA	0
02:50 PM	AGENT	OS	AUTOMATED	S	180,500	2.8	NA	0
02:54 PM	PRINCIPAL	AC	AUTOMATED	S	40,000	3.0	MMI	0
02:54 PM	AGENT	PI	AUTOMATED	S	650,000	30.0	NA	0
02:58 PM	PRINCIPAL	AC	AUTOMATED	S	40,000	3.0	MMI	0
03:00 PM	AGENT	OS	AUTOMATED	S	180,500	2.8	NA	0
03:00 PM	AGENT	AO	AUTOMATED	S	550,000	26.0	SPZ	187
03:02 PM	PRINCIPAL	AC	AUTOMATED	S	40,000	3.0	MMI	0
03:02 PM	PRINCIPAL	AC	AUTOMATED	S	40,000	3.0	MMI	0
03:03 PM	AGENT	AC	AUTOMATED	S	477,100	21.2	SPZ	153
03:03 PM	AGENT	AC	AUTOMATED	S	614,700	27.8	SPZ	198

COMPOSITE CHRONOLOGY
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TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
03:04	PM PRINCIPAL	AC	AUTOMATED	S	40,000	3.0	MMI	26
03:06	PM AGENT	OS	AUTOMATED	B	134,400	2.7	NA	0
03:07	PM PRINCIPAL	AO	AUTOMATED	SS	1,073,179	17.0	KVL	130
03:08	PM PRINCIPAL	AC	AUTOMATED	S	40,000	3.0	NA	0
03:08	PM AGENT	AO	AUTOMATED	S	615,000	25.0	SPZ	185
03:09	PM AGENT	OS	AUTOMATED	S	91,667	1.4	NA	0
03:11	PM PRINCIPAL	AO	MANUAL	B	40,000	2.9	MMI	26
03:11	PM PRINCIPAL	AO	AUTOMATED	B	40,000	3.0	MMI	25
03:13	PM PRINCIPAL	AO	AUTOMATED	B	44,000	3.2	MMI	28
03:20	PM AGENT	AO	AUTOMATED	S	315,700	13.9	SPZ	100
03:22	PM AGENT	PI	AUTOMATED	S	650,000	30.0	NA	0
03:23	PM AGENT	OS	AUTOMATED	S	180,500	2.8	NA	0
03:26	PM AGENT	AO	AUTOMATED	S	650,000	28.0	SPZ	200
03:26	PM PRINCIPAL	AO	AUTOMATED	B	40,000	3.0	MMI	25
03:27	PM AGENT	OS	AUTOMATED	B	32,500	4.0	NA	0
03:27	PM AGENT	OS	AUTOMATED	S	6,300	0.4	NA	0
03:28	PM AGENT	OS	AUTOMATED	B	36,000	0.8	NA	0
03:28	PM AGENT	OS	AUTOMATED	B	176,600	8.6	NA	0
03:31	PM PRINCIPAL	AO	AUTOMATED	B	20,000	1.7	MMI	13
03:35	PM AGENT	PI	AUTOMATED	S	1,193,700	52.1	SPZ	93
03:36	PM PRINCIPAL	AC	AUTOMATED	S	829,125	41.0	OEX	1494
03:37	PM AGENT	AO	AUTOMATED	S	650,000	35.0	SPZ	240
03:38	PM AGENT	OS	AUTOMATED	S	80,000	3.4	NA	0
03:38	PM AGENT	SB	AUTOMATED	S	217,925	9.7	SPZ	69
03:38	PM PRINCIPAL	AC	AUTOMATED	S	270,700	14.5	OEX	1028
03:39	PM AGENT	PI	AUTOMATED	S	517,800	23.2	SPZ	44

COMPOSITE CHRONOLOGY
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TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
03:39 PM	AGENT	AO	AUTOMATED	S	500,000	24.0	SPZ	165
03:40 PM	AGENT	OS	AUTOMATED	S	10,400	0.4	NA	0
03:40 PM	AGENT	OS	AUTOMATED	S	23,650	1.0	NA	0
03:40 PM	AGENT	OS	AUTOMATED	S	600	0.0	NA	0
03:40 PM	AGENT	OS	AUTOMATED	S	159,350	8.0	NA	0
03:40 PM	AGENT	AO	AUTOMATED	S	650,000	35.0	SPZ	240
03:40 PM	AGENT	AO	AUTOMATED	S	313,800	14.0	SPZ	100
03:41 PM	AGENT	OS	AUTOMATED	S	180,500	2.8	NA	0
03:41 PM	PRINCIPAL	AC	MANUAL	S	40,000	2.9	MMI	25
03:41 PM	AGENT	AO	AUTOMATED	S	313,800	14.0	SPZ	100
03:42 PM	AGENT	SB	AUTOMATED	S	217,925	9.7	SPZ	69
03:42 PM	AGENT	AO	AUTOMATED	S	650,000	28.0	SPZ	200
03:43 PM	AGENT	AC	AUTOMATED	S	455,200	19.9	SPZ	144
03:43 PM	PRINCIPAL	AC	AUTOMATED	S	44,000	3.1	MMI	28
03:45 PM	PRINCIPAL	AC	MANUAL	S	960,000	33.0	MMI	624
03:45 PM	AGENT	SB	AUTOMATED	S	476,000	24.0	SPZ	148
03:46 PM	PRINCIPAL	AC	MANUAL	S	40,000	2.9	MMI	25
03:46 PM	AGENT	AO	AUTOMATED	S	315,700	13.9	SPZ	100
03:50 PM	AGENT	OS	AUTOMATED	S	80,000	3.4	NA	0
03:50 PM	AGENT	AC	AUTOMATED	S	329,200	6.9	SPZ	71
03:55 PM	AGENT	AC	AUTOMATED	S	32,554	1.6	SPZ	11
03:59 PM	PRINCIPAL	AC	AUTOMATED	S	88,000	6.2	MMI	56
04:00 PM	PRINCIPAL	AC	AUTOMATED	S	180,000	10.8	FNC	564
04:00 PM	PRINCIPAL	AC	AUTOMATED	S	1,163,500	61.7	OEX	0
04:00 PM	PRINCIPAL	AC	AUTOMATED	S	30,000	1.8	FNC	94
04:00 PM	PRINCIPAL	AC	AUTOMATED	S	89,500	4.7	OEX	0

COMPOSITE CHRONOLOGY
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TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
04:00 PM	PRINCIPAL	AC	MANUAL	S	41,800	3.0	MMI	25
04:00 PM	PRINCIPAL	AC	MANUAL	S	791,500	40.9	OEX	1495
04:00 PM	AGENT	SB	AUTOMATED	S	550,000	26.0	NSX	0
04:00 PM	AGENT	SB	AUTOMATED	S	550,000	26.0	NSX	0
04:00 PM	AGENT	OS	MANUAL	S	680,000	47.8	NA	0
04:00 PM	PRINCIPAL	AC	MANUAL	B	2,240,000	140.0	MMI	0
04:00 PM	PRINCIPAL	AC	MANUAL	B	591,150	70.0	OEX	0
04:00 PM	AGENT	OS	MANUAL	S	560,000	45.0	NA	0
04:00 PM	AGENT	OS	MANUAL	S	640,000	39.3	NA	0

PROGRAMS EXECUTED "ALL DAY"

PRINCIPAL	AO	AUTOMATED	B	320,000	24.0	MMI	200
PRINCIPAL	AC	AUTOMATED	S	240,000	18.0	MMI	150

LONDON MARKET

PRINCIPAL	EFP	MANUAL	B	5,850,000	270.0	SPZ	1800
AGENT	EFP	MANUAL	SS	1,300,000	60.0	SPZ	400
PRINCIPAL	AD	MANUAL	S	1,052,600	40.0	SPZ	264
AGENT	EFP	MANUAL	SS	3,250,000	150.0	SPZ	1000
AGENT	EFP	MANUAL	SS	1,300,000	60.0	SPZ	400
PRINCIPAL	AD	MANUAL	B	1,684,200	64.0	NA	0

COMPOSITE CHRONOLOGY
Index-Related Trading on NYSE
October 19, 1987

TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
09:30 AM	PRINCIPAL	AC	AUTOMATED	S	700,000	30.0	SPZ	200
09:30 AM	AGENT	OS	MANUAL	S	388,000	16.3	NA	0
09:30 AM	AGENT	OS	AUTOMATED	S	222,000	9.6	NA	0
09:30 AM	AGENT	OS	MANUAL	S	387,400	16.9	NA	0
09:30 AM	AGENT	PI	AUTOMATED	S	279,900	11.2	NA	0
09:30 AM	AGENT	PI	AUTOMATED	S	32,900	1.2	NA	0
09:30 AM	AGENT	OS	MANUAL	S	387,400	16.6	NA	0
09:30 AM	AGENT	OS	AUTOMATED	S	463,100	21.1	NA	0
09:30 AM	AGENT	OS	AUTOMATED	S	522,600	21.2	NA	0
09:31 AM	PRINCIPAL	AO	AUTOMATED	SS	357,900	18.6	SPZ	140
09:32 AM	AGENT	OS	AUTOMATED	S	495,400	20.1	NA	0
09:32 AM	PRINCIPAL	AO	AUTOMATED	SS	725,000	9.0	KVL	35
09:40 AM	AGENT	OS	AUTOMATED	S	501,800	20.2	NA	0
09:41 AM	PRINCIPAL	AO	AUTOMATED	SS	13,500	0.4	SPZ	
09:41 AM	PRINCIPAL	AO	AUTOMATED	SS	380,100	18.3	SPZ	140
09:46 AM	PRINCIPAL	AC	AUTOMATED	S	700,000	30.0	SPZ	200
09:48 AM	PRINCIPAL	AO	AUTOMATED	SS	212,900	10.0	SPZ	67
09:49 AM	PRINCIPAL	AC	AUTOMATED	S	700,000	30.0	SPZ	200
09:52 AM	PRINCIPAL	AO	AUTOMATED	SS	372,000	18.0	SPZ	140
09:54 AM	PRINCIPAL	AC	AUTOMATED	S	650,000	30.0	SPZ	200
09:56 AM	PRINCIPAL	AO	AUTOMATED	SS	1,073,179	18.0	KVL	70
09:57 AM	PRINCIPAL	AC	AUTOMATED	S	650,000	30.0	SPZ	200
10:00 AM	PRINCIPAL	AC	AUTOMATED	S	650,000	30.0	SPZ	200
10:01 AM	PRINCIPAL	AC	AUTOMATED	S	650,000	30.0	SPZ	200
10:05 AM	PRINCIPAL	AC	AUTOMATED	S	650,000	30.0	SPZ	200
10:07 AM	AGENT	AO	AUTOMATED	S	615,000	24.0	SPZ	185
10:08 AM	AGENT	AO	AUTOMATED	S	650,000	30.0	SPZ	200

COMPOSITE CHRONOLOGY
Index-Related Trading on NYSE
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TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
10:09 AM	AGENT	AO	AUTOMATED	S	650,000	30.0	SPZ	200
10:10 AM	AGENT	AO	AUTOMATED	S	650,000	30.0	SPZ	200
10:12 AM	AGENT	AO	AUTOMATED	S	650,000	30.0	SPZ	200
10:12 AM	PRINCIPAL	AO	AUTOMATED	SS	400,000	12.0	SPZ	104
10:18 AM	AGENT	AO	AUTOMATED	S	650,000	30.0	SPZ	200
10:24 AM	AGENT	AO	AUTOMATED	S	471,000	18.0	SPZ	144
10:29 AM	PRINCIPAL	AO	AUTOMATED	SS	400,000	12.0	SPZ	104
10:33 AM	AGENT	PI	AUTOMATED	S	2,005,400	100.0	NA	0
10:34 AM	AGENT	AO	AUTOMATED	S	650,000	30.0	SPZ	200
10:35 AM	AGENT	PI	AUTOMATED	S	650,000	30.0	NA	0
10:45 AM	AGENT	AO	AUTOMATED	S	615,000	24.0	SPZ	190
10:46 AM	AGENT	PI	AUTOMATED	S	650,000	30.0	NA	0
10:47 AM	AGENT	PI	AUTOMATED	S	2,005,400	100.0	NA	0
10:48 AM	AGENT	AC	AUTOMATED	S	471,500	18.4	SPZ	153
10:54 AM	PRINCIPAL	AO	AUTOMATED	B	100,000	6.8	MMI	65
10:54 AM	PRINCIPAL	AO	MANUAL	B	80,000	5.8	MMI	51
10:55 AM	PRINCIPAL	AO	AUTOMATED	B	100,000	6.8	MMI	65
10:59 AM	PRINCIPAL	AO	AUTOMATED	B	100,000	6.8	MMI	65
11:00 AM	AGENT	PI	AUTOMATED	S	2,005,400	100.0	NA	0
11:00 AM	AGENT	OS	AUTOMATED	B	220,400	8.4	SPZ	70
11:04 AM	PRINCIPAL	AO	AUTOMATED	B	44,000	2.8	MMI	28
11:04 AM	PRINCIPAL	AO	AUTOMATED	B	44,000	2.8	MMI	28
11:04 AM	PRINCIPAL	AO	AUTOMATED	B	44,000	2.8	MMI	28
11:05 AM	PRINCIPAL	AO	MANUAL	B	80,000	5.8	MMI	51
11:08 AM	AGENT	OS	AUTOMATED	S	503,000	20.3	NA	0
11:09 AM	PRINCIPAL	AO	MANUAL	B	80,000	5.8	MMI	51
11:15 AM	PRINCIPAL	AO	MANUAL	B	44,000	2.9	MMI	28

COMPOSITE CHRONOLOGY
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October 19, 1987

TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
11:15 AM	PRINCIPAL	AO	AUTOMATED	B	44,000	2.9	MMI	28
11:19 AM	PRINCIPAL	AC	AUTOMATED	B	1,127,679	18.0	KVL	140
11:20 AM	PRINCIPAL	AO	AUTOMATED	B	100,000	6.8	MMI	
11:22 AM	AGENT	PI	AUTOMATED	S	411,700	19.3	NA	0
11:24 AM	AGENT	PI	AUTOMATED	S	2,005,400	100.0	NA	0
11:28 AM	PRINCIPAL	AC	AUTOMATED	B	212,900	10.0	SPZ	67
11:34 AM	PRINCIPAL	AO	MANUAL	B	88,000	5.9	MMI	56
11:39 AM	PRINCIPAL	OS	AUTOMATED	B	43,640	0.9	NA	0
11:41 AM	PRINCIPAL	AO	AUTOMATED	B	100,000	6.8	MMI	65
11:47 AM	AGENT	OS	AUTOMATED	S	600,000	30.0	NA	0
11:52 AM	PRINCIPAL	AC	AUTOMATED	S	100,000	6.8	MMI	65
11:54 AM	AGENT	AO	AUTOMATED	S	780,000	31.0	SPZ	240
11:55 AM	AGENT	PI	AUTOMATED	S	2,005,400	100.0	NA	0
11:57 AM	AGENT	PI	AUTOMATED	S	498,500	20.5	NA	0
11:58 AM	AGENT	AO	AUTOMATED	S	780,000	31.0	SPZ	240
11:59 AM	PRINCIPAL	AC	AUTOMATED	S	100,000	6.8	MMI	65
11:59 AM	PRINCIPAL	AC	AUTOMATED	S	168,400	6.6	SPZ	50
12:00 PM	PRINCIPAL	AO	AUTOMATED	B	165,000	6.4	SPZ	50
12:01 PM	AGENT	AO	AUTOMATED	S	550,000	28.0	SPZ	185
12:07 PM	AGENT	PI	AUTOMATED	S	2,005,400	100.0	NA	0
12:09 PM	AGENT	AO	AUTOMATED	S	550,000	28.0	SPZ	185
12:14 PM	AGENT	PI	AUTOMATED	S	204,400	8.9	NA	0
12:16 PM	AGENT	AO	AUTOMATED	S	780,000	31.0	SPZ	240
12:17 PM	AGENT	SB	AUTOMATED	S	479,130	21.0	SPZ	150
12:19 PM	AGENT	OS	AUTOMATED	S	600,000	30.0	NA	0
12:21 PM	PRINCIPAL	AC	MANUAL	S	40,000	2.9	MMI	25
12:22 PM	PRINCIPAL	AO	AUTOMATED	SS	250,000	10.0	SPZ	93

COMPOSITE CHRONOLOGY
Index-Related Trading on NYSE
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TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
12:24 PM	AGENT	PI	AUTOMATED	S	2,005,400	100.0	NA	0
12:26 PM	PRINCIPAL	AO	AUTOMATED	SS	347,720	17.0	SPZ	25
12:27 PM	PRINCIPAL	AO	AUTOMATED	SS	400,000	12.0	SPZ	104
12:30 PM	PRINCIPAL	AO	AUTOMATED	SS	347,330	17.0	SPZ	50
12:36 PM	PRINCIPAL	AC	MANUAL	S	40,000	2.9	MMI	26
12:36 PM	AGENT	PI	AUTOMATED	S	650,000	30.0	NA	0
12:37 PM	AGENT	PI	AUTOMATED	S	504,300	25.0	NA	0
12:40 PM	PRINCIPAL	AC	AUTOMATED	S	165,800	6.4	SPZ	50
12:40 PM	PRINCIPAL	AO	AUTOMATED	SS	250,000	10.0	SPZ	93
12:41 PM	PRINCIPAL	AC	AUTOMATED	S	44,000	2.8	MMI	28
12:41 PM	PRINCIPAL	AC	MANUAL	S	88,000	5.7	MMI	56
12:42 PM	AGENT	PI	AUTOMATED	S	146,100	5.9	NA	0
12:43 PM	AGENT	AO	AUTOMATED	S	550,000	28.0	SPZ	187
12:49 PM	PRINCIPAL	AC	MANUAL	S	88,000	5.6	MMI	56
12:50 PM	AGENT	AC	AUTOMATED	S	169,900	6.8	SPZ	51
12:50 PM	AGENT	PI	AUTOMATED	S	2,005,400	100.0	NA	0
12:52 PM	AGENT	OS	AUTOMATED	S	24,000	1.0	NA	0
12:52 PM	AGENT	PI	AUTOMATED	S	375,000	13.0	NA	0
12:52 PM	AGENT	AO	AUTOMATED	S	297,200	11.6	SPZ	100
12:53 PM	AGENT	AO	AUTOMATED	S	297,200	11.6	SPZ	100
12:53 PM	PRINCIPAL	AO	AUTOMATED	SS	250,000	10.0	SPZ	93
12:55 PM	AGENT	PI	AUTOMATED	S	629,700	25.0	NA	0
01:00 PM	PRINCIPAL	AO	AUTOMATED	SS	250,000	10.0	SPZ	93
01:00 PM	PRINCIPAL	AO	AUTOMATED	B	40,000	3.0	MMI	25
01:02 PM	AGENT	AC	AUTOMATED	S	169,900	6.8	SPZ	51
01:03 PM	AGENT	OS	AUTOMATED	B	26,000	1.1	NA	0
01:04 PM	AGENT	AO	AUTOMATED	S	550,000	28.0	SPZ	187

COMPOSITE CHRONOLOGY
Index-Related Trading on NYSE
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TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
01:06 PM	AGENT	PI	AUTOMATED	S	2,005,400	100.0	NA	0
01:09 PM	AGENT	AO	AUTOMATED	S	298,500	11.6	SPZ	100
01:10 PM	AGENT	PI	AUTOMATED	S	2,005,400	100.0	NA	0
01:11 PM	AGENT	AO	AUTOMATED	S	298,500	11.6	SPZ	100
01:13 PM	PRINCIPAL	AO	MANUAL	B	44,000	2.8	MMI	28
01:17 PM	AGENT	AO	AUTOMATED	S	550,000	28.0	SPZ	187
01:18 PM	PRINCIPAL	AO	AUTOMATED	SS	400,000	12.0	SPZ	104
01:18 PM	PRINCIPAL	AC	MANUAL	S	40,000	2.9	MMI	25
01:20 PM	AGENT	AC	AUTOMATED	S	169,500	6.8	SPZ	51
01:20 PM	AGENT	AO	AUTOMATED	S	550,000	28.0	SPZ	187
01:22 PM	AGENT	SB	AUTOMATED	S	492,100	25.0	SPZ	152
01:23 PM	PRINCIPAL	AC	MANUAL	S	40,000	2.9	MMI	26
01:23 PM	PRINCIPAL	AO	AUTOMATED	SS	400,000	12.0	SPZ	104
01:24 PM	AGENT	PI	AUTOMATED	S	93,300	5.0	NA	0
01:24 PM	AGENT	AO	AUTOMATED	S	281,050	10.8	SPZ	100
01:25 PM	AGENT	AO	AUTOMATED	S	281,050	10.8	SPZ	100
01:28 PM	AGENT	PI	AUTOMATED	S	2,005,400	100.0	NA	0
01:29 PM	PRINCIPAL	AC	AUTOMATED	S	44,000	2.8	MMI	28
01:29 PM	PRINCIPAL	AC	AUTOMATED	S	44,000	2.8	MMI	28
01:29 PM	PRINCIPAL	AC	MANUAL	S	40,000	2.9	MMI	25
01:30 PM	PRINCIPAL	AC	MANUAL	S	80,000	5.8	MMI	51
01:31 PM	AGENT	AO	AUTOMATED	S	471,000	18.0	SPZ	144
01:31 PM	AGENT	PI	AUTOMATED	S	318,700	15.0	NA	0
01:32 PM	AGENT	AO	AUTOMATED	S	100,000	3.0	SPZ	29
01:32 PM	AGENT	AC	AUTOMATED	S	324,500	6.1	SPZ	81
01:32 PM	AGENT	AC	MANUAL	S	45,800	3.0	MMI	
01:32 PM	AGENT	PI	AUTOMATED	S	650,000	30.0	NA	0

COMPOSITE CHRONOLOGY
 Index-Related Trading on NYSE
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TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
01:33 PM	PRINCIPAL	AO	AUTOMATED	SS	250,000	10.0	SPZ	93
01:33 PM	AGENT	SB	AUTOMATED	S	508,800	19.3	SPZ	155
01:34 PM	AGENT	OS	AUTOMATED	B	10,000	0.6	NA	0
01:35 PM	AGENT	PI	AUTOMATED	S	2,005,400	100.0	NA	0
01:35 PM	AGENT	AC	AUTOMATED	S	164,500	6.4	SPZ	51
01:36 PM	AGENT	PI	AUTOMATED	S	583,600	22.4	NA	0
01:42 PM	PRINCIPAL	AC	MANUAL	S	80,000	5.8	MMI	51
01:45 PM	PRINCIPAL	AC	AUTOMATED	S	40,000	2.7	MMI	26
01:45 PM	AGENT	AC	AUTOMATED	S	125,500	4.6	SPZ	51
01:45 PM	AGENT	PI	AUTOMATED	S	413,800	15.3	NA	0
01:46 PM	PRINCIPAL	AC	AUTOMATED	S	29,100	1.3	OEX	100
01:47 PM	AGENT	PI	AUTOMATED	S	144,000	5.7	NA	0
01:47 PM	PRINCIPAL	AC	AUTOMATED	S	40,000	3.0	MMI	26
01:48 PM	PRINCIPAL	AC	AUTOMATED	S	100,000	6.8	MMI	65
01:49 PM	PRINCIPAL	AO	AUTOMATED	SS	443,000	20.0	SPZ	135
01:51 PM	AGENT	SB	AUTOMATED	S	489,200	25.0	SPZ	152
01:51 PM	AGENT	PI	AUTOMATED	S	338,642	12.6	NA	0
01:53 PM	AGENT	AC	AUTOMATED	S	115,200	4.3	SPZ	51
01:53 PM	AGENT	OS	AUTOMATED	S	110,635	4.0	NA	0
01:54 PM	AGENT	PI	AUTOMATED	S	2,005,400	100.0	NA	0
01:55 PM	AGENT	PI	AUTOMATED	S	418,700	15.2	NA	0
01:56 PM	PRINCIPAL	OS	AUTOMATED	B	26,400	0.6	NA	0
01:57 PM	PRINCIPAL	AC	AUTOMATED	S	40,000	2.7	NA	
01:57 PM	PRINCIPAL	AC	AUTOMATED	S	20,000	1.4	MMI	13
01:59 PM	PRINCIPAL	AO	AUTOMATED	SS	104,100	3.7	SPZ	50
02:00 PM	AGENT	PI	AUTOMATED	S	318,800	15.0	NA	0
02:00 PM	AGENT	PI	AUTOMATED	S	422,900	14.6	NA	0

COMPOSITE CHRONOLOGY
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TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
02:02 PM	PRINCIPAL	AC	MANUAL	S	120,000	7.7	MMI	76
02:02 PM	AGENT	OS	AUTOMATED	B	10,000	0.6	NA	0
02:06 PM	AGENT	OS	AUTOMATED	S	110,635	4.0	NA	0
02:13 PM	PRINCIPAL	AO	AUTOMATED	SS	347,720	18.0	SPZ	50
02:23 PM	AGENT	AC	AUTOMATED	S	131,100	4.8	SPZ	51
02:30 PM	AGENT	PI	AUTOMATED	S	310,000	13.1	NA	0
02:35 PM	PRINCIPAL	AO	AUTOMATED	SS	443,000	20.0	SPZ	135
02:35 PM	PRINCIPAL	AO	AUTOMATED	B	100,000	6.8	MMI	
02:41 PM	AGENT	SB	AUTOMATED	S	217,925	8.2	SPZ	69
02:44 PM	PRINCIPAL	AC	MANUAL	S	80,000	5.8	MMI	50
02:45 PM	AGENT	AC	AUTOMATED	S	137,200	5.2	SPZ	51
02:46 PM	PRINCIPAL	AC	AUTOMATED	S	100,000	6.8	MMI	65
02:47 PM	PRINCIPAL	AO	AUTOMATED	SS	443,000	20.0	SPZ	135
02:48 PM	AGENT	OS	AUTOMATED	SS	650,000	22.0	NA	0
02:50 PM	PRINCIPAL	AC	MANUAL	S	80,000	5.8	MMI	50
02:52 PM	AGENT	OS	AUTOMATED	S	1,088,921	39.7	NA	0
02:54 PM	PRINCIPAL	AC	AUTOMATED	S	100,000	6.8	MMI	
02:56 PM	PRINCIPAL	AC	MANUAL	S	120,000	5.8	MMI	76
02:57 PM	AGENT	PI	AUTOMATED	S	177,500	7.1	NA	0
02:58 PM	AGENT	AC	AUTOMATED	S	146,400	5.4	SPZ	51
03:00 PM	PRINCIPAL	AC	MANUAL	S	80,000	5.8	MMI	50
03:01 PM	AGENT	SB	AUTOMATED	S	634,400	25.0	SPZ	200
03:04 PM	PRINCIPAL	AC	MANUAL	S	80,000	5.8	MMI	50
03:04 PM	AGENT	PI	AUTOMATED	S	444,700	16.3	NA	0
03:07 PM	AGENT	OS	AUTOMATED	S	221,270	8.0	NA	0
03:08 PM	AGENT	OS	AUTOMATED	S	33,000	1.7	NA	0
03:09 PM	PRINCIPAL	AO	AUTOMATED	SS	347,720	18.0	SPZ	25

COMPOSITE CHRONOLOGY
Index-Related Trading on NYSE
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TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
03:10 PM	PRINCIPAL	AC	MANUAL	S	80,000	5.8	MMI	50
03:15 PM	AGENT	PI	AUTOMATED	S	565,500	20.4	NA	0
03:17 PM	PRINCIPAL	AC	MANUAL	S	80,000	5.8	MMI	50
03:19 PM	AGENT	AC	AUTOMATED	S	114,000	3.6	KVL	
03:19 PM	AGENT	AC	AUTOMATED	S	387,000	6.6	KVL	
03:21 PM	AGENT	PI	AUTOMATED	S	454,200	16.5	NA	0
03:21 PM	PRINCIPAL	AC	MANUAL	S	80,000	5.8	MMI	50
03:22 PM	AGENT	OS	AUTOMATED	B	9,000	7.0	NA	0
03:26 PM	PRINCIPAL	AO	AUTOMATED	SS	212,900	10.0	SPZ	68
03:26 PM	AGENT	PI	AUTOMATED	S	586,900	20.9	NA	0
03:29 PM	AGENT	PI	AUTOMATED	S	450,500	16.4	NA	0
03:30 PM	PRINCIPAL	AO	AUTOMATED	SS	22,000	1.3	MMI	14
03:31 PM	PRINCIPAL	OS	AUTOMATED	B	43,640	0.9	NA	0
03:33 PM	AGENT	OS	AUTOMATED	S	169,000	5.9	NA	0
03:33 PM	AGENT	OS	AUTOMATED	S	879,600	31.7	NA	0
03:33 PM	AGENT	OS	AUTOMATED	SS	1,300,000	44.0	NA	0
03:37 PM	AGENT	OS	AUTOMATED	S	504,300	25.0	NA	0
03:37 PM	AGENT	PI	AUTOMATED	S	566,900	20.2	NA	0
03:40 PM	AGENT	OS	AUTOMATED	SS	1,300,000	44.0	NA	0
03:40 PM	PRINCIPAL	AC	MANUAL	S	80,000	5.8	MMI	50
03:42 PM	AGENT	PI	AUTOMATED	S	438,700	15.7	NA	0
03:44 PM	PRINCIPAL	AC	MANUAL	S	80,000	5.8	MMI	50
03:45 PM	AGENT	OS	AUTOMATED	S	202,500	7.0	NA	0
03:45 PM	AGENT	PI	AUTOMATED	S	556,600	19.6	NA	0
03:48 PM	PRINCIPAL	AC	MANUAL	S	80,000	5.8	MMI	50
03:50 PM	AGENT	OS	AUTOMATED	S	22,100	1.2	NA	0
03:51 PM	AGENT	PI	AUTOMATED	S	561,000	19.6	NA	0

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TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
04:00 PM	PRINCIPAL	AC	MANUAL	S	587,300	35.0	SPZ	215
04:00 PM	PRINCIPAL	AC	MANUAL	S	200,000	14.5	MMI	125

PROGRAMS EXECUTED "ALL DAY"

AGENT	OS	MANUAL	S	30,000	1.1	NA	0
AGENT	OS	MANUAL	S	16,500	0.5	NA	0
AGENT	OS	MANUAL	S	20,100	0.6	NA	0
AGENT	OS	MANUAL	S	19,500	0.6	NA	0
AGENT	OS	MANUAL	S	20,900	0.7	NA	0
PRINCIPAL	AC	AUTOMATED	S	200,000	13.0	MMI	125
PRINCIPAL	AO	AUTOMATED	B	120,000	8.0	MMI	75

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LONDON MARKET

AGENT	AO	MANUAL	SS	1,300,000	60.0	SPZ	400
AGENT	AO	MANUAL	SS	1,950,000	90.0	SPZ	600
PRINCIPAL	AO	MANUAL	B	3,250,000	150.0	SPZ	1000
PRINCIPAL	AD	MANUAL	S	2,401,000	96.0	NA	965

COMPOSITE CHRONOLOGY
 Index-Related Trading on NYSE
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TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
09:30 AM	AGENT	OS	AUTOMATED	SS	25,700	1.0	NA	0
09:30 AM	AGENT	OS	AUTOMATED	SS	290,100	10.0	NA	0
09:30 AM	AGENT	OS	AUTOMATED	S	60,400	3.5	NA	0
09:30 AM	AGENT	OS	AUTOMATED	SS	251,900	8.0	NA	0
09:30 AM	AGENT	OS	AUTOMATED	S	33,000	1.7	NA	0
09:30 AM	PRINCIPAL	OS	AUTOMATED	B	40,000	3.0	NA	0
09:30 AM	AGENT	PI	AUTOMATED	S	142,702	5.8	NA	0
09:30 AM	AGENT	PI	AUTOMATED	S	271,875	10.6	NA	0
09:30 AM	AGENT	PI	AUTOMATED	S	83,516	3.2	NA	0
09:30 AM	AGENT	OS	AUTOMATED	S	197,910	7.3	NA	0
09:30 AM	AGENT	OS	AUTOMATED	S	650,000	24.0	NA	0
09:30 AM	AGENT	OS	MANUAL	S	348,870	30.0	NA	0
09:30 AM	PRINCIPAL	AO	AUTOMATED	SS	165,800	8.0	KVL	10
10:00 AM	AGENT	AD	MANUAL	S	283,800	9.6	SPZ	80
10:04 AM	AGENT	OS	AUTOMATED	B	146,500	5.8	NA	0
10:06 AM	AGENT	OS	AUTOMATED	B	147,200	5.8	NA	0
10:23 AM	PRINCIPAL	AO	MANUAL	SS	96,000	4.6	MMI	60
10:26 AM	PRINCIPAL	AC	MANUAL	S	80,000	4.6	MMI	50
10:28 AM	AGENT	OS	MANUAL	S	625,000	31.0	NA	0
10:31 AM	PRINCIPAL	AC	MANUAL	S	80,000	4.6	MMI	50
10:32 AM	PRINCIPAL	AO	AUTOMATED	SS	150,000	5.0	SPZ	40
10:37 AM	PRINCIPAL	AO	MANUAL	SS	332,400	11.4	SPZ	100
10:37 AM	PRINCIPAL	AC	MANUAL	S	80,000	4.6	MMI	50
10:40 AM	PRINCIPAL	AC	MANUAL	S	80,000	4.6	MMI	50
10:44 AM	AGENT	OS	AUTOMATED	SS	500,000	20.0	NA	0
10:53 AM	PRINCIPAL	AC	MANUAL	S	80,000	4.6	MMI	50

COMPOSITE CHRONOLOGY
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TIME INITIATED	PRINCIPAL/ AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/ SHORT SELL	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
11:00 AM	PRINCIPAL	AC	MANUAL	S	80,000	4.6	MMI	50
11:10 AM	AGENT	PI	MANUAL	S	2,100,000	75.0	NA	0
11:12 AM	PRINCIPAL	AO	MANUAL	SS	60,000	3.4	MMI	38
11:12 AM	PRINCIPAL	AC	MANUAL	S	80,000	4.6	MMI	50
11:15 AM	AGENT	OS	AUTOMATED	SS	650,000	22.0	NA	0
11:20 AM	AGENT	PI	MANUAL	S	4,200,000	150.0	NA	0
11:22 AM	AGENT	OS	AUTOMATED	SS	250,000	10.0	NA	0
11:27 AM	AGENT	AC	MANUAL	S	30,000	1.7	MMI	0
11:28 AM	PRINCIPAL	AO	MANUAL	SS	230,150	9.3	SPZ	90
11:43 AM	PRINCIPAL	AO	MANUAL	SS	151,601	5.6	SPZ	40
11:52 AM	PRINCIPAL	AO	MANUAL	SS	64,100	1.8	SPZ	10
12:37 PM	AGENT	OS	AUTOMATED	B	316,900	7.0	NA	0
12:49 PM	PRINCIPAL	AO	MANUAL	B	40,000	2.3	MMI	25
01:11 PM	AGENT	OS	AUTOMATED	SS	650,000	22.0	NA	0
01:30 PM	AGENT	PI	MANUAL	S	2,100,000	75.0	NA	0
01:30 PM	PRINCIPAL	AC	MANUAL	B	1,129,800	18.0	KVL	196
01:39 PM	PRINCIPAL	AO	MANUAL	B	40,000	2.3	MMI	25
01:50 PM	AGENT	OS	MANUAL	S	348,870	30.0	NA	0
01:54 PM	PRINCIPAL	AO	MANUAL	B	40,000	2.3	MMI	25
02:00 PM	AGENT	PI	MANUAL	S	1,063,000	38.0	NA	0
02:15 PM	AGENT	OS	MANUAL	S	2,198,200	70.2	NA	0
02:33 PM	AGENT	OS	MANUAL	S	348,870	30.0	NA	0
02:35 PM	AGENT	OS	MANUAL	S	348,870	30.0	NA	0
02:40 PM	AGENT	PI	MANUAL	S	530,000	20.0	NA	0
02:44 PM	PRINCIPAL	AO	MANUAL	B	64,000	3.6	MMI	40
02:55 PM	PRINCIPAL	AO	MANUAL	B	64,000	3.6	MMI	40

COMPOSITE CHRONOLOGY
Index-Related Trading on NYSE
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TIME INITIATED	PRINCIPAL/AGENT	STRATEGY	ORDER ENTRY METHOD	BUY/SELL/SHORT	SHARES	DOLLAR AMOUNT (MILLIONS)	INDEX PRODUCT	NO. OF CONTRACTS
03:20 PM	AGENT	OS	MANUAL	S	348,870	30.0	NA	0
03:31 PM	PRINCIPAL	AO	MANUAL	S	64,000	3.8	MMI	40
03:31 PM	AGENT	OS	MANUAL	B	400,000	21.0	NA	0
03:39 PM	PRINCIPAL	AC	MANUAL	S	64,000	3.8	MMI	40
03:42 PM	PRINCIPAL	AC	MANUAL	S	80,000	4.6	MMI	50
03:44 PM	AGENT	OS	MANUAL	S	850,000	45.0	NA	0
03:45 PM	AGENT	OS	MANUAL	S	152,300	5.3	NA	0
03:54 PM	PRINCIPAL	AC	MANUAL	S	80,000	4.6	MMI	50
04:00 PM	PRINCIPAL	AC	MANUAL	S	360,000	20.7	MMI	225

PROGRAMS EXECUTED "ALL DAY"

	AGENT	OS	AUTOMATED	S	5,900	0.2	NA	0
	AGENT	SB	AUTOMATED	S	551,100	20.5	SPZ	189
	AGENT	OS	AUTOMATED	S	1,234,000	60.0	NA	0

LONDON MARKET

	AGENT	OS	MANUAL	S	2,615,939	7.4	NA	0
	PRINCIPAL	AD	MANUAL	S	23,249,700	843.0	SPZ	7415