



Edward J. Joyce
President and
Chief Operating Officer

Phone: 312 786-7310
Fax: 312 786-7407
joyce@cboe.com

November 1, 2007

Ms. Elizabeth King
Associate Director
Division of Market Regulation
Securities and Exchange Commission
100 F Street, N.E.
Washington D.C. 20549

Re: Penny Pilot Report – May 1, 2007 through September 27, 2007

Dear Ms. King:

The Chicago Board Options Exchange, Incorporated (“CBOE” or “Exchange”) is submitting this letter and the attached report which describes the impact of the changes to the minimum increments in the thirteen Penny Pilot classes during the period May 1, 2007 through September 27, 2007.¹ Previously, CBOE submitted a report analyzing the first three months of the Penny Pilot Program.² The attached report provides data pertaining to such areas as average spread, average size, NBBO spread at time of trade, total quotes per day (inbound to CBOE and outbound to OPRA), peak quote rates, and industry average daily volume.

In its June 1, 2007 Penny Pilot report to the SEC, CBOE stated that notwithstanding the claims by some in the options industry that the Pilot Program has been successful, CBOE is concerned that some of the initial trends from the initial three months signal potentially negative consequences for the options industry. For instance, liquidity at the best bid or offer in the Pilot classes has decreased substantially, volume in many Pilot classes has decreased, quote traffic has increased substantially, and the number of liquidity providers in certain Pilot classes has decreased. CBOE concluded that further analysis must be conducted over a longer period of time before drawing any firm conclusions as to the impact of quoting and trading in these reduced increments, and in order to determine which classes benefit from trading in penny increments versus those that should be removed from the Penny Pilot.

CBOE’s findings and conclusions from the initial three months of the Pilot Program have not changed, as the initial trends that were identified in CBOE’s June 1 report have continued and accelerated. Two classes, IWM and QQQQ, continue to skew most of the statistic greatly. For example, although industry average daily volume increased 61% from 1.22 million contracts to 1.9 million contracts for all Pilot classes, much of the increase is due to volume increasing 152% in IWM and 71% in QQQQ. Volume in these two classes, when combined, actually doubled. In

¹ The six-month Penny Pilot Program started on January 26, 2007, with one class (Whole Foods (WFMI)). Two more classes were added to the Pilot Program on February 2, 2007, and the remaining ten classes were added on February 9, 2007.

² See letter from CBOE’s President Edward Joyce to Elizabeth King, dated June 1, 2007.

the remaining Pilot classes, however, total average daily volume decreased 5%. In some classes, volume continues to drop precipitously, *e.g.*, MSFT and TXN volume is down 32%. Moreover, when comparing the average daily volume of the individual Pilot classes to their respective sectors, seven of ten Pilot classes performed substantially worse compared to their sectors. Clearly, this suggests that some classes are not good candidates for penny quoting. CBOE intends to develop objective criteria to distinguish which classes should be eligible for penny increments versus those that should not, and the process for de-selecting an option class from the Pilot program. CBOE intends to share that with the SEC staff early next year.

Quote traffic also increased dramatically in some classes during this reporting period. During the initial three months of the Pilot Program, CBOE's quote traffic in the Pilot classes increased 36% in the penny series, and 30% in nickel series. During this reporting period, CBOE's quote traffic in the Pilot classes increased 120% in the penny series from 5.95 million to 13.1 million, and 86% in nickel series from 4.3 million to 7.99 million. The options industry overall experienced greater quote traffic increases of 180% in penny series and 98% in nickel series. CBOE has implemented a number of quote mitigation strategies in connection with the Penny Pilot, including modifying Market-Maker and RMM quoting obligations, implementing a Holdback Timer, adopting a delisting policy, and assessing a Hybrid quoting fee (which CBOE recently revised to promote more competitive quotes and reduce unnecessary and duplicative quotes). At this time, CBOE cannot accurately quantify the impact of these quote mitigation measures and assess their effectiveness. CBOE believes, though, that they have been effective in mitigating quotations and does not believe they have had a negative impact on CBOE's marketplace.

In terms of the impact of the Penny Pilot on displayed size and non-displayed "depth of book", the story has not changed. CBOE's average sizes are down 86% in penny series, and 60% in nickel series during this reporting period. CBOE is continuing to evaluate the impact of the Penny Pilot on the market and execution quality, including on the ability of market participants to execute large size orders. Anecdotally, CBOE's members and customers have advised that executing institutional orders in Pilot classes is more difficult. CBOE is reviewing this and is seeking to make changes to the Linkage Plan to facilitate the execution of large-sized orders.

Based on the data and analysis of the first eight months of the Penny Pilot Program, CBOE remains very concerned about the impact of quoting in penny increments in certain option classes on market participants, transparency, liquidity, market structure, and quote traffic. If you have any questions concerning CBOE's report, please feel free to call me.

Sincerely,

A handwritten signature in cursive script, appearing to read "Edward J. Joyce".

Edward J. Joyce

Attachment

CBOE Penny Pilot Report

Time Period

All comparisons are done between a 3-month pre-period and an approximately 5-month post period that starts on the May 1, 2007 and ends on September 27, 2007. For Whole Foods (WFMI), the pre-period is from October through December 2006. For the remaining classes the pre-period is from November 2006 through January 2007.¹ Also, please note that SUNW changed its symbol to JAVA during this reporting period; CBOE's data and statistics reflect this change.

Quote Quality

The section focuses on CBOE quotes disseminated to OPRA for each of the thirteen pilot classes. The summary covers all quotes sent in all of the series and differentiates between quotes in series that are subject to quoting in penny differentials (penny series) and series that are quoted in nickel differentials (nickel series).

1. Average Spreads

Average spread is calculated as a straight average of the spreads (disseminated offer less disseminated bid) of all quotes disseminated to OPRA. Overall, CBOE's average spreads in penny series decreased by an average of 42% from \$0.09 in the pre-period to \$0.05 in the post-period. This is slightly lower than the average decrease of 49% in the previous report. Average spreads in the post period ranged from \$0.04 to \$0.07. In nickel series, spreads decreased an average of 14%, substantially lower than the 29% in the previous report, from \$0.18 to \$0.16. Average spreads in the post period ranged from \$0.11 to \$0.21. The table below shows CBOE's average spreads in the pre and post periods for each pilot stock for penny series and nickel series. Penny series are all series under \$3, while nickel series are all series \$3 or higher with the exception of QQQQ, where all series are quoted in pennies.

CBOE Average Spreads

Class	<i>Penny Series</i>			<i>Nickel Series</i>			<i>All Series</i>		
	<i>Average Spread</i>			<i>Average Spread</i>			<i>Average Spread</i>		
	Pre	Post	% Chg	Pre	Post	% Chg	Pre	Post	% Chg
A	0.11	0.07	-39%	0.23	0.20	-15%	0.16	0.13	-20%
AMD	0.09	0.04	-48%	0.18	0.17	-7%	0.13	0.09	-34%
CAT	0.09	0.05	-40%	0.20	0.19	-3%	0.15	0.15	-4%
FLEX	0.10	0.06	-36%	0.17	0.16	-4%	0.13	0.09	-30%
GE	0.07	0.04	-44%	0.17	0.13	-26%	0.11	0.08	-28%
INTC	0.07	0.04	-45%	0.15	0.13	-15%	0.10	0.08	-24%
IWM	0.09	0.06	-38%	0.22	0.20	-10%	0.18	0.15	-17%
MSFT	0.06	0.04	-40%	0.15	0.12	-20%	0.10	0.08	-13%
QQQQ	0.11	0.06	-43%				0.11	0.06	-43%
SMH	0.08	0.05	-35%	0.16	0.14	-12%	0.12	0.09	-18%
SUNW	0.08	0.04	-46%	0.15	0.11	-29%	0.09	0.05	-42%
TXN	0.08	0.04	-44%	0.17	0.15	-13%	0.12	0.10	-18%
WFMI	0.10	0.05	-47%	0.25	0.21	-16%	0.20	0.14	-30%
Average	0.09	0.05	-42%	0.18	0.16	-14%	0.13	0.10	-24%

2. Average Quoted Size

Average quoted size is calculated by averaging both bid sizes and ask sizes disseminated to OPRA. The bid size and the ask sizes are then averaged together on a per series basis. Quoted size has decreased significantly in the post period. CBOE's average sizes are down 86% (versus 83% in the

¹ Pre-period information for IWM quote information is from 12/19/06 when it was moved to the Hybrid Trading System.

previous report) from 3,837 to 529 in penny series and 60% (versus 47% in the previous report) from 1,184 to 475 in nickel series. The decrease in sizes was very similar in all classes in penny series. QQQQ, for example decreased from an average size of 17,022 to an average size of 2,052. The size decrease at CBOE was similar to the size decrease in the industry where sizes in penny series decreased 85% and sizes in nickel series decreased 54% with an overall increase of 78%. The table below shows average size in penny series and nickel series for the pilot classes in the pre and post periods.

CBOE Average Size

Class	<i>Penny Series</i>			<i>Nickel Series</i>			<i>All Series</i>		
	<i>Average Size</i>			<i>Average Size</i>			<i>Average Size</i>		
	Pre	Post	% Chg	Pre	Post	% Chg	Pre	Post	% Chg
A	249	54	-78%	117	61	-48%	366	115	-69%
AMD	1,666	203	-88%	825	303	-63%	2,492	506	-80%
CAT	937	160	-83%	507	188	-63%	1,443	348	-76%
FLEX	348	82	-76%	275	124	-55%	623	206	-67%
GE	3,641	469	-87%	1,585	564	-64%	5,226	1,033	-80%
INTC	6,090	655	-89%	2,616	906	-65%	8,706	1,561	-82%
IWM	4,269	1,429	-67%	1,478	1,226	-17%	5,747	2,655	-54%
MSFT	5,295	558	-89%	2,320	742	-68%	7,614	1,300	-83%
QQQQ	17,022	2,052	-88%				17,022	2,052	-88%
SMH	5,784	540	-91%	1,940	688	-65%	7,725	1,228	-84%
SUNW	1,374	267	-81%	1,006	429	-57%	2,380	696	-71%
TXN	2,628	311	-88%	1,249	360	-71%	3,878	672	-83%
WFMI	575	96	-83%	294	112	-62%	868	207	-76%
Average	3,837	529	-86%	1,184	475	-60%	4,930	968	-80%

3. *Average Spread at Trade Time*

In an attempt to quantify savings to customers, this section provides the average spread in the NBBO at the time of a trade. The data looks at each trade in the pre and post period to calculate the averages. One note, since NBBO was used for this comparison the spread width can be less than the minimum increment due to locked or crossed NBBOs. Average NBBO spread at the time of each trade decreased even more significantly than overall average spreads did. In penny series the average decrease was 59% (versus 65% in the previous report) from \$0.05 in the pre period to \$0.02 in the post period. In nickel series the average decrease was 19% (versus 40% in the previous report) from \$0.12 to \$0.10. The largest decrease in penny series was 81% in QQQQ where the NBBO spread decreased from \$0.05 to \$0.01. The table below shows a pre and post period comparison of average NBBO spreads at the time of a trade for penny series, nickel series and all series.

NBBO Spread at Time of CBOE Trade

Class	<i>Penny Series</i>			<i>Nickel Series</i>			<i>All Series</i>		
	<i>Average Spread</i>			<i>Average Spread</i>			<i>Average Spread</i>		
	Pre	Post	% Chg	Pre	Post	% Chg	Pre	Post	% Chg
A	0.06	0.03	-48%	0.14	0.10	-29%	0.08	0.04	-47%
AMD	0.05	0.02	-61%	0.13	0.11	-12%	0.06	0.03	-57%
CAT	0.06	0.03	-45%	0.12	0.11	-14%	0.08	0.06	-18%
FLEX	0.06	0.03	-50%	0.12	0.14	9%	0.06	0.03	-48%
GE	0.05	0.02	-61%	0.13	0.09	-31%	0.06	0.03	-51%
INTC	0.05	0.01	-70%	0.12	0.08	-36%	0.06	0.02	-60%
IWM	0.04	0.02	-45%	0.11	0.12	6%	0.05	0.04	-15%
MSFT	0.04	0.01	-66%	0.11	0.08	-32%	0.05	0.02	-58%
QQQQ	0.05	0.01	-81%				0.05	0.01	-81%
SMH	0.05	0.02	-61%	0.11	0.08	-25%	0.06	0.03	-53%
SUNW	0.05	0.01	-73%	0.11	0.08	-25%	0.06	0.01	-74%
TXN	0.05	0.02	-58%	0.12	0.10	-20%	0.06	0.04	-38%
WFMI	0.06	0.03	-53%	0.14	0.11	-18%	0.09	0.05	-45%
Average	0.05	0.02	-59%	0.12	0.10	-19%	0.06	0.03	-48%

Quote Quantity

This section focuses on the number of quotes that CBOE disseminated to OPRA and the number of quotes that individual quoters sent to CBOE. As described above, the numbers are compared for the pre and post periods.

1. Total Quotes per Day Outbound to OPRA

CBOE's total number of quotes per day in the penny series increased 120% from 5.95 million to 13.1 million. This is a substantial increase since the previous report where the same series were up 36%. In the nickel series CBOE's total number of quotes per day increased 80% from 4.3 million to 7.99 million - a substantial increase over the last report where these quotes were up 30%. In penny series, changes ranged from a decrease of 47% in Microsoft to an increase of 261% in IWM. QQQQ traffic increased 229%. The entire industry experienced a significantly larger quote traffic increase in penny series of 180%. In nickel series, the industry increase was also higher at 98%. The table below compares pre- and post-period quote traffic for each of the penny pilot classes in penny and nickel series.

CBOE Quotes Disseminated to OPRA

Class	Penny Series			Nickel Series			All Series		
	Disseminated Quotes			Disseminated Quotes			Disseminated Quotes		
	Pre	Post	% Chg	Pre	Post	% Chg	Pre	Post	% Chg
A	96,968	186,463	92%	67,912	169,333	149%	164,880	355,796	116%
AMD	496,385	329,759	-34%	401,890	156,747	-61%	898,275	486,506	-46%
CAT	423,938	512,940	21%	626,780	1,124,575	79%	1,050,718	1,637,515	56%
FLEX	21,798	43,337	99%	22,387	20,616	-8%	44,185	63,953	45%
GE	247,392	354,883	43%	180,931	330,876	83%	428,323	685,760	60%
INTC	250,646	253,105	1%	184,622	209,503	13%	435,269	462,608	6%
IWM	787,260	2,840,825	261%	1,513,354	4,852,994	221%	2,300,615	7,693,819	234%
MSFT	419,059	221,133	-47%	263,325	280,567	7%	682,384	501,700	-26%
QQQQ	2,279,513	7,491,859	229%				2,279,513	7,491,859	229%
SMH	243,011	238,840	-2%	185,948	209,374	13%	428,959	448,213	4%
SUNW	34,459	50,539	47%	4,619	7,758	68%	39,078	58,298	49%
TXN	345,644	380,456	10%	258,786	374,125	45%	604,430	754,581	25%
WFMI	308,405	213,784	-31%	597,516	255,098	-57%	905,921	468,882	-48%
Total	5,954,478	13,117,923	120%	4,308,070	7,991,566	86%	10,262,548	21,109,490	106%

2. Total Quotes per Day Inbound to CBOEdirect

Quotes sent by market makers to CBOEdirect in the penny classes increased by 464% from 12 million per day to 67 million per day. This is a substantial increase over the previous report where CBOE experienced an increase of 73%. IWM and QQQQ each showed increases of more than 800%. The table below shows inbound quotes for each of the penny classes.

Inbound Quotes to CBOE

Class	All Series		
	Inbound Quotes		
	Pre	Post	% Chg
A	195,756	957,145	389%
AMD	1,069,749	1,371,839	28%
CAT	1,235,153	5,002,690	305%
FLEX	55,782	188,220	237%
GE	500,263	2,038,868	308%
INTC	483,828	1,367,215	183%
IWM	2,802,030	27,096,156	867%
MSFT	741,638	1,433,588	93%
QQQQ	2,513,034	22,648,739	801%
SMH	545,211	1,357,748	149%
SUNW	50,166	176,770	252%
TXN	685,617	2,304,300	236%
WFMI	1,088,053	1,597,737	47%
Total	11,966,280	67,541,013	464%

3. Inbound and Outbound Peak Quotes per Second

Peak quotes are based on sustained rates over a 1-minute period. All of the quotes in a minute are counted and the total is divided by 60 to determine the quotes per second. For this portion of the analysis, the pre

period is from December 1, 2007 through the penny pilot start date for each stock. Peak rates for quotes inbound to CBOE increased substantially, with peaks in IWM increasing 271%, TXN increasing 214%, and SUNW increasing 190%. Ten of the 13 classes had increases in peak quote rates outbound to OPRA. SUNW had the biggest increase at 230%. The table below shows the inbound and outbound peak rates in the pre and post periods for each of the pilot classes.

CBOE Peak Quote Rates

Class	<i>Inbound</i>			<i>Outbound</i>		
	<i>Peak Quotes</i>			<i>Peak Quotes</i>		
	Pre	Post	% Chg	Pre	Post	% Chg
A	218	501	130%	154	345	123%
AMD	445	557	25%	323	527	63%
CAT	728	1,107	52%	499	611	22%
FLEX	211	132	-38%	169	76	-55%
GE	344	397	15%	238	275	16%
INTC	341	413	21%	271	208	-23%
IWM	857	3,181	271%	700	1,722	146%
MSFT	545	634	16%	434	396	-9%
QQQQ	825	2,124	157%	743	1,417	91%
SMH	171	403	136%	151	169	12%
SUNW	57	165	190%	48	158	230%
TXN	285	896	214%	225	397	76%
WFMI	600	690	15%	468	397	-15%

Trading Volume

1. *Average Daily Volume*

Industry volume in the pilot classes has increased. Overall, industry average daily volume has increased 61% from 1.22 million contracts to 1.9 million contracts. Much of this increase is due to volume increasing 152% in IWM and 71% in QQQQ – already the two most active classes. In fact, without IWM & QQQQ, industry volume was actually down 5%. Only seven of the thirteen classes showed volume increases. Of the six classes that showed decreases in volume, MSFT and TXN both showed 32% decreases. Customer, firm and market maker average daily volume all increased, however, customer and firm decreased 9% and 12% respectively when IWM and QQQQ are excluded. Customer, firm and market maker are the trading origin ranges defined by The Options Clearing Corp.

Industry Average Daily Volume

Class	Total ADV			Customer ADV			Firm ADV			Market Maker ADV		
	Pre	Post	% Chg	Pre	Post	% Chg	Pre	Post	% Chg	Pre	Post	% Chg
A	3,437	3,447	0%	1,476	1,198	-19%	423	452	7%	1,537	1,798	17%
AMD	52,962	60,999	15%	22,454	22,671	1%	8,654	13,619	57%	21,854	24,709	13%
CAT	30,672	26,056	-15%	12,257	11,100	-9%	4,875	2,431	-50%	13,540	12,524	-8%
FLEX	2,910	2,626	-10%	1,207	955	-21%	244	348	42%	1,459	1,324	-9%
GE	70,181	98,268	40%	20,601	28,415	38%	11,382	20,219	78%	38,198	49,634	30%
INTC	97,807	80,036	-18%	43,253	33,551	-22%	17,478	12,613	-28%	37,076	33,873	-9%
IWM	287,934	726,316	152%	108,773	260,254	139%	57,467	108,067	88%	121,695	357,996	194%
MSFT	100,409	67,791	-32%	44,493	25,525	-43%	19,250	11,997	-38%	36,665	30,269	-17%
QQQQ	433,088	738,576	71%	208,561	297,434	43%	57,336	96,604	68%	167,192	344,538	106%
SMH	35,318	39,521	12%	11,942	16,001	34%	8,698	6,390	-27%	14,677	17,130	17%
SUNW	15,455	22,227	44%	7,906	10,985	39%	2,679	2,032	-24%	4,870	9,209	89%
TXN	31,791	21,764	-32%	10,886	8,280	-24%	7,663	3,670	-52%	13,242	9,814	-26%
WFMI	17,362	14,879	-14%	4,417	5,742	30%	4,701	1,576	-66%	8,244	7,561	-8%
Total	1,179,326	1,902,506	61%	498,226	722,112	45%	200,850	280,017	39%	480,251	900,378	87%

2. Sector Comparison

Seven of the 10 pilot equity classes behaved in an opposite fashion than the options volume in the corresponding sector. Microsoft, for example had a 32% decrease in options volume while the Applications Software sector showed a 1% increase in options volume. Similarly Caterpillar had a 15% decrease in industry options volume while the Machinery-Construction & Mining sector showed a 47% increase in options volume. The sectors used were the Bloomberg Sub-Industry Classifications and include all optionable stocks in those sub-industry categories, excluding the penny classes. The time periods used for the comparison were identical to those used for the pilot stocks. The table below shows the comparison for each of the 10 equity classes in the pilot.

Industry Average Daily Volume

Class	Total ADV			Sector Comparison			
	Pre	Post	% Chg	Sector	Pre	Post	% Chg
A	3,437	3,447	0%	Electronic Measur Instr	1,519	2,543	67%
AMD	52,962	60,999	15%	Electronic Compo-Semicon	176,797	174,433	-1%
CAT	30,672	26,056	-15%	Machinery-Constr&Mining	6,693	9,814	47%
FLEX	2,910	2,626	-10%	Electronic Compo-Misc	25,162	37,839	50%
GE	70,181	98,268	40%	Diversified Manufact Op	44,505	52,614	18%
INTC	97,807	80,036	-18%	Electronic Compo-Semicon	176,797	174,433	-1%
MSFT	100,409	67,791	-32%	Applications Software	23,751	23,935	1%
SUNW	15,455	22,227	44%	Computers	411,659	462,580	12%
TXN	31,791	21,764	-32%	Electronic Compo-Semicon	176,797	174,433	-1%
WFMI	17,362	14,879	-14%	Food-Retail	4,436	6,649	50%
Total	422,986	398,093	-6%		1,048,117	1,119,274	7%