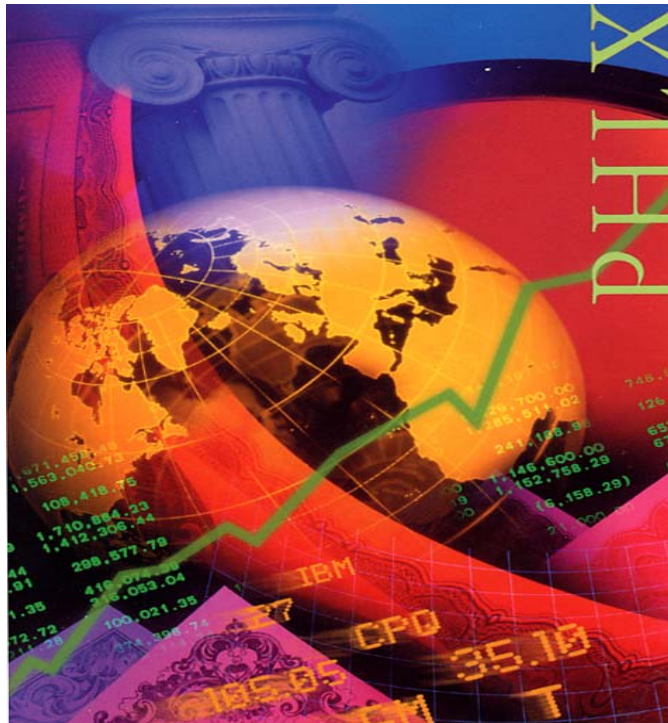


NASDAQ OMXSM

PHLX

NASDAQ OMX PHLX Options Penny Pilot Expansion Report 3



August 28, 2008
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Background

On June 7, 2006, the NASDAQ OMX PHLX, Inc. (“Phlx”) received a letter from Chairman Cox of the Securities and Exchange Commission (“Commission”) urging the Phlx to begin quoting a limited number of options classes with a minimum price variation (“MPV”) of a penny by January 29, 2007. The options exchanges, in conjunction with the Commission, began a six-month pilot (“Penny Pilot”) in which 13 options would be quoted in penny and nickel increments. Under the Penny Pilot, all option series overlying QQQQ are quoted with an MPV of \$0.01, and all other options included in the Penny Pilot are quoted with an MPV of \$0.01 if priced below \$3.00 or with an MPV of \$0.05 if priced at \$3.00 and above. Subsequently, on August 17, 2007 Phlx filed a rule change with the Commission, and received approval by the Commission, to extend the original Penny Pilot and expand the Penny Pilot to include fifty additional option classes in two phases. Phase I of the expansion (“Penny Pilot Expansion-Phase I”) began on September 28, 2007 by adding an additional twenty-two option classes. Each of those 22 new options in the expansion are quoted with an MPV of \$0.01 for options priced below \$3.00 and with an MPV of \$0.05 for options priced at \$3.00 and above. Phase II of the expansion (“Penny Pilot Expansion-Phase II”) began on March 28, 2008, and will continue for one year. For the Penny Pilot Expansion-Phase II, the Phlx added an additional twenty-eight option classes from among the most actively-traded, multiply-listed option classes.

The exchange filed a report on May 31, 2007 (“Penny Pilot Initial Report”) that analyzed the results of the original thirteen issues trading in penny and nickel increments, Phlx also committed in its rule filing to deliver four reports on the Penny Pilot to the Commission.

The first report filed during the pilot expansion (“Penny Pilot Expansion Report 1”) was issued on October 31, 2007. In that report, the exchange analyzed the Penny Pilot impacts on quality of markets and market data growth for the original thirteen option classes from May 1, 2007 through September 27, 2007 using a baseline of November 2006 to January 2007.

The second report filed during the pilot expansion (“Penny Pilot Expansion Report 2”) was issued on February 29, 2008. In that report, the exchange analyzed the Penny Pilot impacts on quality of markets and market data growth for the original thirteen option classes from September 28, 2007 through January 31, 2008 using a baseline of November 2006 to January 2007. In addition, the report included the twenty-two expansion issues that were added to the Penny Pilot on September 28, 2007 analyzing the impacts on quality of markets and market data growth from September 28, 2007 through January 31, 2008 using a baseline of July 2007 through September 27, 2007.

This is the third report (“Penny Pilot Expansion Report 3”) issued on August 28, 2008. This report further analyzes the impacts on quality of markets and market data

growth from February 1, 2008 through July 31, 2008 for the original thirteen issues in the Penny Pilot using a baseline of November 2006 to January 2007. In addition, the report includes the twenty-two expansion issues added to the Penny Pilot Expansion Phase I on September 28, 2007. The activity of these 22 stocks from February 1, 2008 through July 31, 2008 is analyzed using a baseline of July 2007 to September 27, 2007. Also the additional twenty-eight issues added on March 28, 2008 in the Penny Pilot Expansion Phase II will be analyzed using data from March 28, 2008 through July 31, 2008 using a baseline of January 2008 through March 27, 2008.

The fourth and final report (“Penny Pilot Expansion Report 4”) will be issued on or before February 28, 2009 and will analyze the impacts on quality of markets and market data growth from August 1, 2008 through January 31, 2009 for the original thirteen issues, the twenty-two Expansion Phase I options and the final twenty-eight pilot Expansion Phase II options.

This report is the third report, Penny Pilot Expansion Report 3, which Phlx committed to publish in its filing.

Option Issues for Analysis

The original thirteen Penny Pilot option classes were phased in beginning on January 26, 2007 and were fully in the pilot by February 9, 2007 as follows:

- January 26, 2007

- Whole Foods Market, Inc. (WFMI)
- February 2, 2007
 - General Electric Company (GE)
 - Microsoft Corporation (MSFT)
- February 9, 2007
 - Agilent Technologies, Inc. (A)
 - Advanced Micro Devices, Inc. (AMD)
 - Caterpillar Inc. (CAT)
 - Flextronics International Ltd. (FLEX)
 - Intel Corporation (INTC)
 - Ishares Russell 2000 Index (IWM)
 - NASDAQ-100 Trust Shares (QQQQ)
 - Semiconductor HDLRs (SMH)
 - Sun Microsystems, Inc. (SUNW)
 - Texas Instruments Incorporated (TXN)

The additional twenty-two option issues were added to the Penny Pilot Expansion

Phase I on September 28, 2007 are:

- AT&T, Inc. (T)
- Altria Group, Inc. (MO)
- Amazon.com, Inc. (AMZN)
- Amgen, Inc. (AMGN)
- Apple, Inc. (AAPL)
- Bristol-Myers Squibb Co. (BMY)

- Cisco Systems, Inc. (CSCO)
- Citigroup, Inc. (C)
- ConocoPhillips (COP)
- Dendreon Corp. (DNDN)
- DIAMONDS Trust, Series I (DIA)
- Energy Select Sector (XLE)
- Financial Select Sector SPDR (XLF)
- Freeport-McMoRan Copper & Gold, Inc. (FCX)
- General Motors Corporation (GM)
- Motorola, Inc. (MOT)
- NYSE Euronext, Inc. (NYX)
- Oil Service HOLDERS (OIH)
- QUALCOMM, Inc. (QCOM)
- Research in Motion, LTD. (RIMM)
- SPDRs (SPY)
- Yahoo!, Inc. (YHOO)

The additional twenty-eight option issues that were added to the Penny Pilot Expansion Phase II on March 28, 2008 are:

- Alcoa Inc. (AA)
- American International Group Inc. (AIG)
- Bank of America Corp. (BAC)
- Bear Stearns Companies Inc. (BSC)

- Companhia Vale do Rio Doce (RIO)
- Countrywide Financial Corp. (CFC)
- Dell Inc. (DELL)
- eBay Inc. (EBAY)
- EMC Corp. (EMC)
- Exxon Mobil Corp. (XOM)
- Goldman Sachs Group Inc. (GS)
- Halliburton Co. (HAL)
- Home Depot Inc. (HD)
- iShares MSCI Emerging Markets Index Fund (EEM)
- JPMorgan Chase & Co. (JPM)
- Ford Motor Co. (F)
- Lehman Brothers Holdings Inc. (LEH)
- Merrill Lynch & Co. Inc. (MER)
- Mini-NDX Index (MNX)
- Newmont Mining Corp. (NEM)
- Pfizer Inc. (PFE)
- SanDisk Corp. (SNDK)
- Starbucks Corp. (SBUX)
- Target Corp. (TGT)
- Valero Energy Corp. (VLO)
- Verizon Communications Inc. (VZ)
- Wal-Mart Stores Inc. (WMT)

- Washington Mutual Inc. (WM)

Summary of Report Findings

The following is a summary of the data collected on the impacts to quality of markets and market data growth of the Penny Pilot covering:

1) The original thirteen option classes from February 1, 2008 through July 31, 2008 as compared to baseline data from November 1, 2006 through January 30, 2007

2) The twenty-two option classes added in the Penny Pilot Expansion-Phase I from February 1, 2008 through July 31, 2008 as compared to baseline data from July 1, 2007 through September 27, 2007

3) The twenty-eight newly added option classes included in the Penny Pilot Expansion Phase II from March 28, 2008 through July 31, 2008 as compared to baseline data from January 1, 2008 through March 27, 2008. *

** Notes: MNX data is excluded from this report because the exchange listed the symbol after it was added to the pilot, so there is no “before” data for comparison purposes*

BSC, Bear Stearns was delisted during the pilot. Data from BSC is included through the delisting date.

1. Average quote spread width at the Phlx Best/Bid Offer (“PBBO”)

- a. The original thirteen issues of the Penny Pilot
 - i. Initial report
 1. Average spread widths decreased by 36%
 - a. Data period Pilot start through 04/30/07
 - b. Baseline 11/01/06 through 01/30/07
 - ii. Penny Pilot Expansion Report 1
 1. Average spread width decreased by 32%
 - a. Slight increase in spread width from prior report
 - b. Data period 05/01/07 through 09/27/07
 - c. Baseline 11/01/06 through 01/30/07
 - iii. Penny Pilot Expansion Report 2
 1. PBBO spread width *increased* by 7%
 - a. Reversed entire gain
 - b. Spreads in options under \$3 decreased by 42%
 - c. Spreads in options over \$3 *increased* by less than 15%...concentrated in options over \$10
 - d. Data period 09/28/07 through 01/31/08
 - e. Baseline 11/01/06 through 01/30/07
 - iv. Penny Pilot Expansion Report 3 (current)
 1. PBBO spread width decreased by 19.8% from the baseline but increased 30.3% from the initial pilot period
 - a. Spreads in options under \$1 decreased by 53%
 - i. Average spread is 0.036, less than the old 0.05 minimum
 - ii. Unchanged from prior period
 - b. Spreads in options from \$1 to under \$3 decreased by 44%
 - i. Average spread is 0.054, more than the old 0.05 minimum
 - ii. Unchanged from prior period
 - c. Spreads in options over \$5 are virtually unchanged from pre-pilot levels
 - d. Data period 02/01/08 through 07/31/08
 - e. Baseline 11/01/06 through 01/30/07
 - b. The twenty-two options in the expansion of the Penny Pilot
 - i. Penny Pilot Expansion Report 2
 1. Average spread width decreased by 16%

2. Spreads in options under \$3 decreased by 34%
 3. Spreads in options over \$3 and under \$20 decreased by less than 16%
 4. Spreads in options over \$20 *increased* by 20%
 5. Data period 09/28/07 through 01/31/08
 6. Baseline 07/01/07 through 09/27/07
- ii. Penny Pilot Expansion Report 3 (current)
1. Average spread width increased by 5%
 2. Spreads in options under \$3 decreased by 34%
 3. Spreads in options over \$10 increased by more than 12%
 4. Data period 02/01/08 through 07/31/08
 5. Baseline 07/01/07 through 09/27/07
- c. The twenty-eight options in the second expansion of the Penny Pilot
- i. Penny Pilot Expansion Report 3 (current)
1. Average spread width decreased by 24%
 2. Spreads in options under \$3 decreased by 47%
 3. Spreads in options over \$10 increased by more than 15%
 4. Data period 3/28/08 through 7/31/08
 5. Baseline 01/01/07 through 3/27/08

2. Average disseminated size at the Phlx Best/Bid Offer (“PBBO”)

a. The original thirteen issues of the Penny Pilot

i. Initial Report

1. Disseminated size at the PBBO decreased by 71%

a. Data period Pilot start through 04/30/07

b. Baseline 11/01/06 through 01/30/07

ii. Penny Pilot Expansion Report 1

1. Disseminated size at the PBBO decreased by 73%

a. Slight decrease in size from prior report

b. Data period 05/01/07 through 09/27/07

c. Baseline 11/01/06 through 01/30/07

iii. Penny Pilot Expansion Report 2

1. Disseminated size at the PBBO decreased by 63%

a. Size in the front month decreased by 80%

b. Size in QQQQ decreased by 87%

c. Size in the QQQQ front month decreased by 94%

d. Data period 09/28/07 through 01/31/08

e. Baseline 11/01/06 through 01/30/07

iv. Penny Pilot Expansion Report 3 (current)

1. Disseminated size at the PBBO decreased by 78%

a. Size in the front month decreased by 84%

b. Size in QQQQ decreased by 85%

c. Size in the QQQQ front month decreased by 93%

d. Data period 02/01/08 through 07/31/08

e. Baseline 11/01/06 through 01/30/07

b. The twenty-two options in the expansion of the Penny Pilot

i. Penny Pilot Expansion Report 2

1. Disseminated size at the PBBO decreased by 64%

a. Data period 09/28/07 through 01/31/08

b. Baseline 07/01/07 through 09/27/07

ii. Penny Pilot Expansion Report 3 (current)

1. Disseminated size at the PBBO decreased by 59%

a. Size in the front month decreased by 64%

b. Data period 02/01/08 through 07/31/08

c. Baseline 07/01/07 through 09/27/07

c. The twenty-eight options in the second expansion of the Penny Pilot

i. Penny Pilot Expansion Report 3 (current)

1. Disseminated size at the PBBO decreased by 62%
 - a. Size in the front month decreased by 68%
 - b. Data period 3/28/08 through 7/31/08
 - c. Baseline 01/01/08 through 3/27/08

Avg. PBBO Quote Size Change from baseline	Penny Pilot Initial Report	Penny Pilot Expansion Report 1	Penny Pilot Expansion Report 2	Penny Pilot Expansion Report 3
Orig. 13 Options	- 71 %	- 73%	- 63%	- 78%
22 Expansion Options	n/a	n/a	- 64%	- 59%
28 second Expansion Options	n/a	n/a	n/a	- 62%

3. Average disseminated size at the National Best/Bid Offer (“NBBO”)

a. The original thirteen issues of the Penny Pilot

i. Initial Report

1. Disseminated size at the NBBO decreased by 78%

a. Data period Pilot start through 04/30/07

b. Baseline 11/01/06 through 01/30/07

ii. Penny Pilot Expansion Report 1

1. Disseminated size at the NBBO decreased by 78%

a. Data period 05/01/07 through 09/27/07

b. Baseline 11/01/06 through 01/30/07

iii. Penny Pilot Expansion Report 2

1. Disseminated size at the NBBO decreased by 66%

a. Size in the front month decreased by 82%

b. Size in QQQQ decreased by 91%

c. Size in the QQQQ front month decreased by 95%

d. Data period 09/28/07 through 01/31/08

e. Baseline 11/01/06 through 01/30/07

iv. Penny Pilot Expansion Report 3 (current)

1. Disseminated size at the NBBO decreased by 84%

a. Size in the front month decreased by 89%

b. Size in QQQQ decreased by 90%

c. Size in the QQQQ front month decreased by 95%

d. Data period 02/01/08 through 07/31/08

e. Baseline 11/01/06 through 01/30/07

b. The twenty-two options in the expansion of the Penny Pilot

i. Penny Pilot Expansion Report 2

1. Size decreased by 66%

a. Data period 09/28/07 through 01/31/08

b. Baseline 07/01/07 through 09/27/07

ii. Penny Pilot Expansion Report 3 (current)

1. Size decreased by 64%

a. Size in the front month decreased by 73%

b. Data period 02/01/08 through 07/31/08

c. Baseline 07/01/07 through 09/27/07

c. The twenty-eight options in the second expansion of the Penny Pilot

i. Penny Pilot Expansion Report 3 (current)

1. Size decreased by 66%
 - a. Size in the front month decreased by 74%
 - b. Data period 3/28/08 through 7/31/08
 - c. Baseline 01/01/08 through 3/27/08

Avg. NBBO Quote Size Change from baseline	Penny Pilot Initial Report	Penny Pilot Expansion Report 1	Penny Pilot Expansion Report 2	Penny Pilot Expansion Report 3
Orig. 13 Options	- 78 %	- 78%	- 66%	- 84%
22 Expansion Options	n/a	n/a	- 66%	- 64%
28 second Expansion Options	n/a	n/a	n/a	- 66%

4. PBBO quotes sent to OPRA and contracts traded

a. The original thirteen issues of the Penny Pilot

i. Penny Pilot Expansion Report 3 (current)

1. 13 original pilot options

- a. Outbound PBBO quotes sent to OPRA increased by 205%
- b. Outbound PBBO quotes sent to OPRA increased by 25% vs. prior reporting period

Outbound PBBO Quote change <i>Change from baseline</i>	Initial Report	Expansion Report 1	Expansion Report 2	Expansion Report 3
Orig. 13 Options	+ 72 %	+ 43%	+ 145%	+ 205%
Orig. 13 less QQQQ	+ 40 %	+ 23%	+ 89%	+ 143%

- c. PHLX pilot contract trade volume increased by 116%
- d. PHLX pilot contract trade volume excluding QQQQ increased by 44%

Electronic PBBO contract volume <i>Change from baseline</i>	Initial Report	Expansion Report 1	Expansion Report 2	Expansion Report 3
Orig. 13 Options	-9%	+ 93%	+ 115%	+ 116%
Orig. 13 less QQQQ	-11%	+ 46%	+ 55%	+ 44%

- e. Pilot options under \$1.00
 - i. 15% of all PBBO pilot quotes
 - ii. 56% of all PHLX pilot contracts traded
 - iii. 61% of all PHLX pilot orders received
- f. Pilot options under \$3.00 (inclusive of options under \$1.00)
 - i. 42% of all PBBO pilot quotes
 - ii. 92% of all PHLX pilot contracts traded
 - iii. 90% of all PHLX pilot orders received
- g. Pilot options with 2 months or less until expiration (all prices)
 - i. 27% of all PBBO pilot quotes
 - ii. 77% of all PHLX pilot contracts traded
 - iii. 77% of all PHLX pilot orders received
- h. Pilot options under \$3.00 and with 2 months or less until expiration (all prices)
 - i. 14% of all PBBO pilot quotes
 - ii. 73% of all PHLX pilot contracts traded

- iii. 73% of all PHLX pilot orders received
- i. Data period 02/01/08 through 07/31/08
- j. Baseline 11/01/06 through 01/30/07

2. Twenty-two options in the expansion of the Penny Pilot

- a. Outbound PBBO quotes sent to OPRA increased by 585% vs. baseline
- b. Outbound PBBO quotes sent to OPRA increased by 19% vs. prior reporting period

Outbound PBBO Quote change <i>Change from baseline</i>	Initial Report	Expansion Report 1	Expansion Report 2	Expansion Report 3
22 Expansion Options	n/a	n/a	+ 477%	+ 585%

- c. PHLX pilot contract trade volume increased by 7%

Electronic PBBO contract volume <i>Change from baseline</i>	Initial Report	Expansion Report 1	Expansion Report 2	Expansion Report 3
22 Expansion Options	n/a	n/a	+ 14%	+ 7%

- d. Pilot options under \$1.00
 - i. 8% of all PBBO pilot quotes
 - ii. 34% of all PHLX pilot contracts traded
 - iii. 22% of all PHLX pilot orders received
- e. Pilot options under \$3.00 (inclusive of options under \$1.00)
 - i. 23% of all PBBO pilot quotes
 - ii. 66% of all PHLX pilot contracts traded
 - iii. 50% of all PHLX pilot orders received
- f. Pilot options with 2 months or less until expiration (all prices)
 - i. 28% of all PBBO pilot quotes
 - ii. 74% of all PHLX pilot contracts traded
 - iii. 72% of all PHLX pilot orders received
- g. Pilot options under \$3.00 and with 2 months or less until expiration (all prices)
 - i. 9% of all PBBO pilot quotes
 - ii. 52% of all PHLX pilot contracts traded
 - iii. 40% of all PHLX pilot orders received
- h. Data period 02/01/08 through 07/31/08
- i. Baseline 07/01/07 through 09/27/07

3. Twenty-eight options in the second expansion of the Penny Pilot

- a. Outbound PBBO quotes sent to OPRA increased by 55%

Outbound PBBO Quote change <i>Change from baseline</i>	Initial Report	Expansion Report 1	Expansion Report 2	Expansion Report 3
28 Expansion Options	n/a	n/a	n/a	+ 55%

- b. PHLX pilot contract trade volume increased by 8%

Electronic PBBO contract volume <i>Change from baseline</i>	Initial Report	Expansion Report 1	Expansion Report 2	Expansion Report 3
28 Expansion Options	n/a	n/a	+ 14%	+ 8%

- c. Pilot options under \$1.00
- i. 14% of all PBBO pilot quotes
 - ii. 43% of all PHLX pilot contracts traded
 - iii. 36% of all PHLX pilot orders received
- d. Pilot options under \$3.00 (inclusive of options under \$1.00)
- i. 39% of all PBBO pilot quotes
 - ii. 78% of all PHLX pilot contracts traded
 - iii. 70% of all PHLX pilot orders received
- e. Pilot options with 2 months or less until expiration (all prices)
- i. 36% of all PBBO pilot quotes
 - ii. 67% of all PHLX pilot contracts traded
 - iii. 65% of all PHLX pilot orders received
- f. Pilot options under \$3.00 and with 2 months or less until expiration (all prices)
- i. 17% of all PBBO pilot quotes
 - ii. 57% of all PHLX pilot contracts traded
 - iii. 51% of all PHLX pilot orders received
- g. Data period 3/28/08 through 7/31/08
- h. Baseline 01/01/08 through 3/27/08

Findings

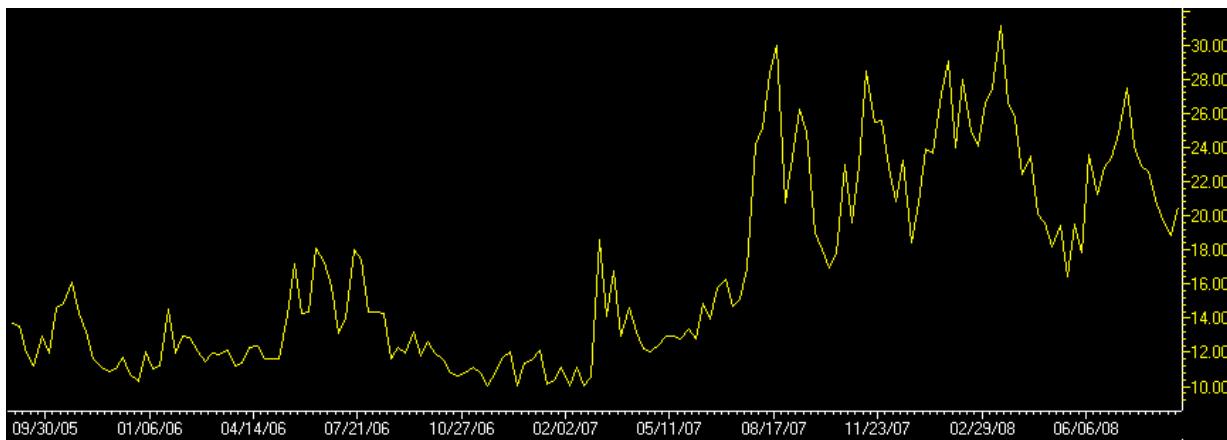
Quote volume growth continues to accelerate. The initial 13 and 22 stocks experienced quote increases of 25% and 19% respectively over the prior reporting period, while trade volume in those classes dropped slightly. Quote volume in the initial 13 and 22 stocks experienced quote increases of 205% and 585% respectively over the baseline periods.

Market forces - Volatility

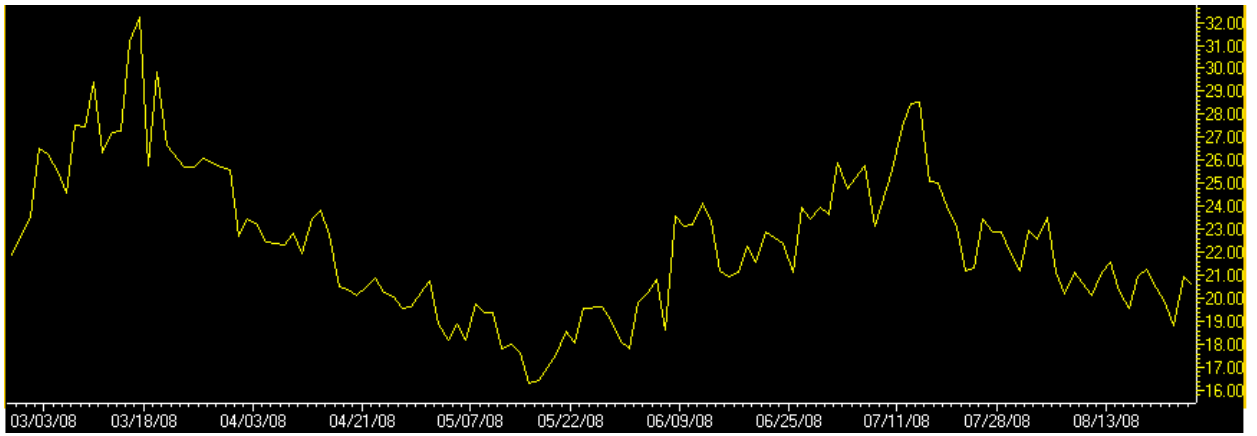
- There has been an upward shift in volatility since the pilot has started
- May impact spread widths
 - Generally higher volatility will cause wider bid-ask spread widths
- May impact quote size
 - Generally higher volatility will cause smaller quote size
- May impact volume
 - Generally higher volatility will cause increased uncertainty leading to broader hedging and speculative activity in the options markets

Volatility as measured by the VIX	11/06-02/07	03/07-04/07	05/07-09/07	10/07-01/08	01/08-08/08
	10-12%	10-18%	12-30% *	17-29%	16-32%

**high volatility concentrated in the final weeks of the period*



Weekly VIX close 9/1/05-8/22/08



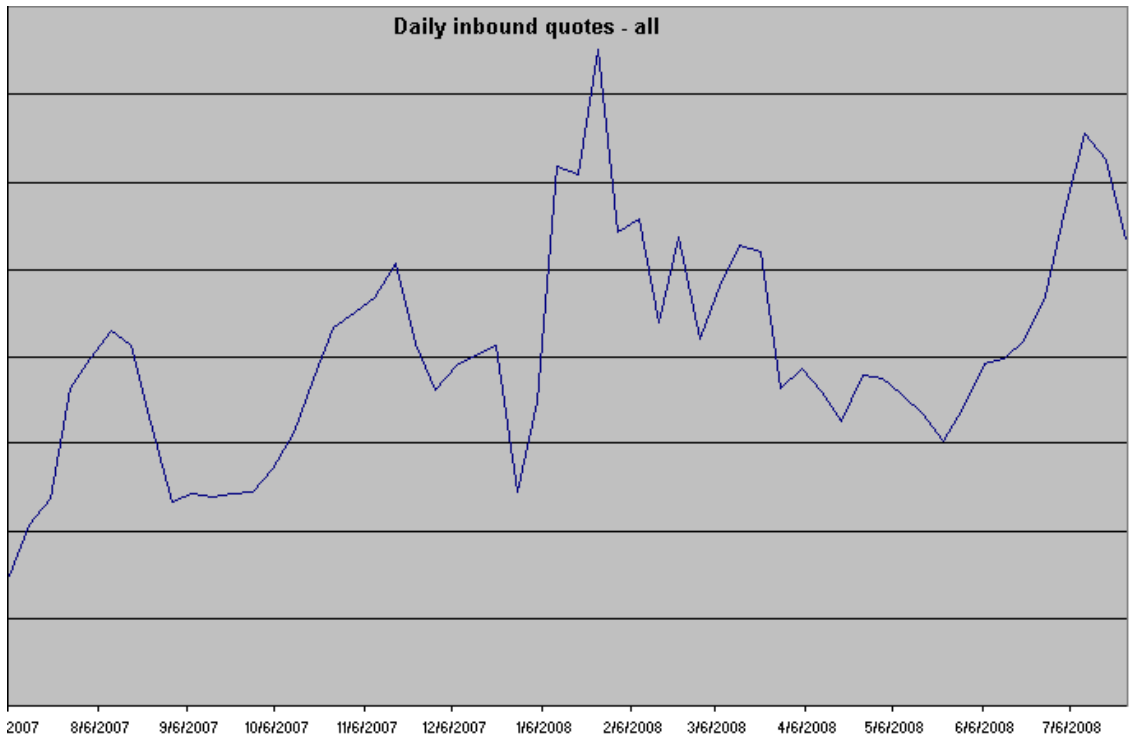
Daily VIX close 3/1/08-8/25/08

Reduced quote spread width, reduced quote size

- The average quote spread of the PBBO in the original thirteen issues of the Penny Pilot is 19.8% below the pre-pilot level but 30% higher than during the Penny Pilot's first phase
- The average quote spread of the PBBO in the twenty-two issues of the Penny Pilot Expansion Phase I is 34% below the pre-pilot level in options under \$3
 - Spreads are greater than pre-pilot levels in options over \$10
 - Spreads had already widened some during the baseline period as volatility had increased during that same baseline time period
- The average quote spread of the PBBO in the twenty-eight issues of the Penny Pilot Expansion Phase II is 24% below the pre-pilot level
 - The average quote spread of the PBBO is 47% below the pre-pilot level in options under \$3
- The average size available at the PBBO in the original thirteen issues of the Penny Pilot is 78% below the pre-pilot level
 - The average size available at the PBBO in the front month options in the original thirteen issues of the Penny Pilot is 84% below the pre-pilot level
 - The average size available at the PBBO in the QQQQ options is 85% below the pre-pilot level
- The average size available at the PBBO in the twenty-two Expansion Phase I issues of the Penny Pilot is 59% below the pre-pilot level
 - The average size available at the is 64% below the pre-pilot level in options under \$3
- The average size available at the PBBO in the twenty-eight Expansion Phase II issues of the Penny Pilot is 62% below the pre-pilot level
- There has been a significant increase in volatility as measured by the VIX since the start of the penny pilot
 - Increased volatility impacts market spread width
 - Widened bid/ask spread widths due to increased market risk
 - Increased volatility impacts market size
 - Decreased size due to increased market risk

Quote Message Traffic and Efficiency

- Quote traffic, measured by volume of PBBO quotes, sent from PHLX to OPRA
- 205% increase in PBBO quote volume in the original thirteen issues of the Penny Pilot compared to pre-pilot levels
 - This follows 72%, 43% and 145% higher rates experienced in the three prior reporting periods
- 143% increase in PBBO quote volume in the original thirteen issues of the Penny Pilot excluding the QQQQ is compared to pre-pilot level
 - This follows 40%, 23% and 89% higher rates experienced in the three prior reporting periods
- 585% increase in PBBO quote volume in the twenty-two issues of the Penny Pilot Expansion Phase I
 - This follows 477% higher rate experienced in the first reporting period
- 55% increase in PBBO quote volume in the twenty-eight issues of the Penny Pilot Expansion Phase II
- Inbound PHLX participant quote rates have increased by 54.7% in the current report period from the 7/1/07 through 9/28/07 baseline period



Conclusions

The Exchange continues to witness significant results during the Penny Pilot. Of particular note is the overall dramatic increase in quote traffic coupled with a significant decrease in quote sizes. Certainly we have experienced tighter quote spread widths, which has a direct benefit to the investing public. In comparing the recent performance to the early phases of the Penny Pilot, the Exchange found that the PBBO and NBBO spreads have widened some. This is likely as a result of an increase in market volatility. The initial benefit of narrowing of quote spreads has been reduced.

The Exchange also observed that the most promising results for the investing public is particularly pronounced in the series with 2 months or less until expiration priced under \$3.00. These tend to be the most actively traded series in the options marketplace. Thus, the Penny Pilot's impact on the quality of markets overall was most pronounced in the most active series.

By focusing on the most active series, the industry will continue to provide improvement in quote widths, thereby benefiting retail investors. The Exchange will continue to analyze data with the objective of maximizing the ratio of narrower spreads and increased volume relative to an efficient use of quoting. This focal point will allow the industry to mitigate the burden of message traffic while benefiting the investing public.

Data

In addition to the charts and other summaries of data that appear in this Report, attached in the Appendix is the methodology associated with collecting such data.

APPENDIX A

1. Data and Methodology

The methodology used to measure and compare the different data statistics for the Penny Pilot was to capture electronic data on the Penny Pilot options for the three months prior to the start of the Penny Pilot (the “baseline data”) and to any expansions to Penny Pilot issues. This electronic data was compared to electronic data gathered from the first three months, the latter portion of the Penny Pilot and Penny Pilot Expansion-Phase I. In all our reports we provided average percentage changes of the baseline data as compared to the first three months, the latter portion of the Penny Pilot and the first three months of Penny Pilot Expansion-Phase I. This report is intended to measure the short-term impact of the Penny Pilot on quoting and trading.

Resources

The primary resource used to capture data came from our trading systems database logs (trade log, quote log and order log). The required data was extracted through customized programs on our Trade Data Access System (“TDAS”) regulatory system and loaded into a PC spreadsheet application for analysis. The TDAS system is a comprehensive database that receives and archives detailed order, quote and trade information.