

QUARTERLY MARKET IMPACT / TRADING PATTERN REPORT – Q3 2019

PM-SETTLED S&P 500 INDEX OPTIONS

On September 2, 2011, the C2 Options Exchange, Incorporated (“C2”) received approval of a proposed rule change to list and trade PM-Settled S&P 500 Index Options that expire on the third Friday of the month on a 14-month pilot basis. The Chicago Board Options Exchange (“CBOE”) became the sole market for PM-Settled S&P 500 Index Options on February 19, 2013. The pilot program expires on November 4, 2019 unless otherwise extended.

As part of this pilot program, on a periodic basis CBOE will submit reports analyzing volume and open interest for Expiration Friday, PM-Settled S&P 500 Index Option Series (“SPXpm”). Pursuant to the terms of the pilot program, CBOE is submitting this interim report to the SEC.

Monthly Analysis of Volume & Open Interest:

This interim pilot report data reflects trading activity in SPXpm options during Q3 2019 (July 1, 2019 through September 30, 2019).

1. Monthly volume aggregated for all SPXpm trades

Month	Volume
Jul-19	1,461,198
Aug-19	1,761,960
Sep-19	1,862,129

2. Monthly volume for SPXpm trades aggregated by expiration date

Month	Expiration	Volume
Jul-19	July 19, 2019	945,469
Jul-19	August 16, 2019	291,852
Jul-19	September 20, 2019	134,586
Jul-19	October 18, 2019	61,189
Jul-19	November 15, 2019	11,053
Jul-19	December 20, 2019	17,049
Aug-19	January 17, 2020	41,354
Aug-19	August 16, 2019	951,235
Aug-19	September 20, 2019	521,285
Aug-19	October 18, 2019	124,497
Aug-19	November 15, 2019	71,719
Aug-19	December 20, 2019	51,870
Sep-19	January 17, 2020	90,035
Sep-19	February 21, 2020	13,875
Sep-19	September 20, 2019	1,128,380
Sep-19	October 18, 2019	383,844
Sep-19	November 15, 2019	136,182
Sep-19	December 20, 2019	109,813

3. Monthly volume for individual SPXpm series

See Attached Spreadsheet Tab “SPXpm Monthly Volume by Series”

4. Month-end open interest aggregated for all SPXpm series

Month	SPXpm Open Interest
Jul-19	400,652
Aug-19	514,641
Sep-19	600,751

5. Month-end open interest for SPXpm series aggregated by expiration date

Month	Expiration	SPXpm Open Interest
Jul-19	August 16, 2019	191,974
Jul-19	September 20, 2019	108,808
Jul-19	October 18, 2019	63,628
Jul-19	November 15, 2019	21,105
Jul-19	December 20, 2019	15,137
Aug-19	September 20, 2019	251,795
Aug-19	October 18, 2019	117,767
Aug-19	November 15, 2019	71,812
Aug-19	December 20, 2019	46,105
Aug-19	January 17, 2020	27,162
Sep-19	October 18, 2019	266,824
Sep-19	November 15, 2019	145,064
Sep-19	December 20, 2019	109,317
Sep-19	January 17, 2020	69,465
Sep-19	February 21, 2020	10,081

6. *Month-end open interest for individual SPXpm series*

See Attached Spreadsheet Tab “SPXpm Month-end OI by Series”

Monthly Analysis of XSP PM Volume & Open Interest:

7. Monthly volume aggregated for all XSP PM trades

CBOE	
Month	Volume
Jul-19	342,573
Aug-19	201,968
Sep-19	242,193
EDGX	
Month	Volume
Jul-19	2,565
Aug-19	5,799
Sep-19	3,380

8. *Monthly volume for XSP PM trades aggregated by expiration date*

CBOE		
Month	Expiration	Volume
Jul-19	July 19, 2019	108,843
Jul-19	August 16, 2019	153,804
Jul-19	September 20, 2019	72,638
Jul-19	October 18, 2019	1,256
Jul-19	November 15, 2019	16
Jul-19	December 20, 2019	3,609
Jul-19	March 20, 2020	609
Jul-19	June 19, 2020	367
Jul-19	December 18, 2020	1,431
Aug-19	August 16, 2019	33,146
Aug-19	September 20, 2019	32,835
Aug-19	October 18, 2019	84,531
Aug-19	November 15, 2019	49,506
Aug-19	December 20, 2019	301
Aug-19	March 20, 2020	291
Aug-19	June 19, 2020	662
Aug-19	December 18, 2020	696
Sep-19	September 20, 2019	77,212
Sep-19	October 18, 2019	7,112
Sep-19	November 15, 2019	82,598
Sep-19	December 20, 2019	71,454
Sep-19	January 17, 2020	216
Sep-19	March 20, 2020	2,729
Sep-19	June 19, 2020	51
Sep-19	September 18, 2020	392
Sep-19	December 18, 2020	429

EDGX		
Month	Expiration	Volume
Jul-19	July 19, 2019	1,520
Jul-19	August 16, 2019	709
Jul-19	September 20, 2019	235
Jul-19	October 18, 2019	78
Jul-19	November 15, 2019	2
Jul-19	December 20, 2019	19
Jul-19	March 20, 2020	2
Aug-19	August 16, 2019	3,402
Aug-19	September 20, 2019	1,584
Aug-19	October 18, 2019	603
Aug-19	November 15, 2019	72
Aug-19	December 20, 2019	100
Aug-19	March 20, 2020	4
Aug-19	June 19, 2020	11
Aug-19	December 18, 2020	23
Sep-19	September 20, 2019	1,365
Sep-19	October 18, 2019	795
Sep-19	November 15, 2019	417
Sep-19	December 20, 2019	231
Sep-19	January 17, 2020	77
Sep-19	March 20, 2020	460
Sep-19	June 19, 2020	9
Sep-19	December 18, 2020	26

9. Monthly volume for individual XSP PM series

See Attached Spreadsheet Tab “XSP Monthly Volume by Series”

10. Month-end open interest aggregated for all XSP PM series

Month	XSP Open Interest
Jul-19	258,579
Aug-19	281,092
Sep-19	297,983

11. Month-end open interest for XSP PM series aggregated by expiration date

Month	Expiration	XSP Open Interest
Jul-19	August 16, 2019	139,824
Jul-19	September 20, 2019	76,916
Jul-19	October 18, 2019	1,325
Jul-19	November 15, 2019	16
Jul-19	December 20, 2019	34,645
Jul-19	March 20, 2020	1,283
Jul-19	June 19, 2020	621
Jul-19	December 18, 2020	3,949
Aug-19	September 20, 2019	104,733
Aug-19	October 18, 2019	85,082
Aug-19	November 15, 2019	49,560
Aug-19	December 20, 2019	34,777
Aug-19	March 20, 2020	1,488
Aug-19	June 19, 2020	1,238
Aug-19	December 18, 2020	4,214
Sep-19	October 18, 2019	89,258
Sep-19	November 15, 2019	93,451
Sep-19	December 20, 2019	104,243
Sep-19	January 17, 2020	283
Sep-19	March 20, 2020	4,619
Sep-19	June 19, 2020	1,272
Sep-19	September 18, 2020	392
Sep-19	December 18, 2020	4,465

12. Month-end open interest for individual XSP PM series

See Attached Spreadsheet Tab “XSPPM Month-end OI by Series”