

## QUARTERLY MARKET IMPACT / TRADING PATTERN REPORT – Q4 2020

### PM-SETTLED S&P 500 INDEX OPTIONS AND MINI-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. Cboe Exchange, Inc. (formerly Chicago Board Options Exchange, Incorporated) (“Cboe Options” or the “Exchange”) became the sole market for Expiration Friday, PM-Settled S&P 500 Index Options (“SPXpm”) on February 19, 2013.<sup>1</sup> On November 5, 2013, the Exchange began listing options on Expiration Friday, PM-settled Mini-S&P 500 Index Options (“XSP PM”) under the pilot program.<sup>2</sup> The pilot program expires on May 3, 2021, unless otherwise extended.

As part of this pilot program, on a periodic basis Cboe Options will submit reports analyzing volume and open interest for SPXpm options and XSP PM options. Pursuant to the terms of the pilot program, Cboe Options 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 and XSP PM options during Q4 2020 (October 1, 2020 through December 31, 2020).

#### ***1. Monthly volume aggregated for all SPXpm trades***

Month	SPXpm Volume
Oct-20	2,728,418
Nov-20	2,740,320
Dec-20	3,644,738

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<sup>1</sup> See Securities Exchange Act Release No. 68888 (February 8, 2013), 78 FR 10668 (February 14, 2013) (SR-CBOE-2012-120) (the “SPXpm Approval Order”).

<sup>2</sup> See Securities Exchange Act Release No. 70087 (July 31, 2013), 78 FR 47809 (August 6, 2013) (SR-CBOE-2013-055) (the “XSP PM Approval Order”).

**2. Monthly volume for SPXpm trades aggregated by expiration date**

Month	Expiration Date	SPXpm Volume
Oct-20	2020-10-16	1,923,776
Oct-20	2020-11-20	337,992
Oct-20	2020-12-18	304,834
Oct-20	2021-01-15	118,882
Oct-20	2021-02-19	30,430
Oct-20	2021-03-19	12,504
Nov-20	2020-11-20	1,945,470
Nov-20	2020-12-18	512,884
Nov-20	2021-01-15	161,406
Nov-20	2021-02-19	63,814
Nov-20	2021-03-19	55,720
Nov-20	2021-04-16	1,026
Dec-20	2020-12-18	2,746,086
Dec-20	2021-01-15	605,252
Dec-20	2021-02-19	167,618
Dec-20	2021-03-19	109,952
Dec-20	2021-04-16	12,574
Dec-20	2021-05-21	3,256

**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
Oct-20	346,458
Nov-20	394,340
Dec-20	347,534

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

Month	Expiration Date	SPXpm Open Interest
Oct-20	2020-11-20	129,455
Oct-20	2020-12-18	149,400
Oct-20	2021-01-15	48,722
Oct-20	2021-02-19	12,762
Oct-20	2021-03-19	6,119
Nov-20	2020-12-18	250,101
Nov-20	2021-01-15	91,210
Nov-20	2021-02-19	28,287
Nov-20	2021-03-19	23,016
Nov-20	2021-04-16	1,726
Dec-20	2021-01-15	214,469
Dec-20	2021-02-19	69,929
Dec-20	2021-03-19	54,092
Dec-20	2021-04-16	6,570
Dec-20	2021-05-21	2,474

**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***

Month	XSP Volume		
	CBOE	EDGX	BZX
Oct-20	447,364	15,040	
Nov-20	375,306		21,350
Dec-20	184,962		37,114

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

Month	Expiration Date	CBOE	EDGX	BZX
Oct-20	10/16/2020	151,944	6,836	
Oct-20	11/20/2020	59,932	1,634	
Oct-20	12/18/2020	105,852	1,790	
Oct-20	1/15/2021	87,740	2,866	
Oct-20	2/19/2021	36,888	1,092	
Oct-20	3/19/2021	1,106	240	
Oct-20	6/18/2021	618	92	
Oct-20	9/17/2021	448	8	
Oct-20	12/17/2021	2,836	482	
Nov-20	11/20/2020	111,636		5,028
Nov-20	12/18/2020	159,262		8,708
Nov-20	1/15/2021	15,430		3,600
Nov-20	2/19/2021	50,354		1,648
Nov-20	3/19/2021	34,496		1,436
Nov-20	6/18/2021	524		82
Nov-20	9/17/2021	332		72
Nov-20	12/17/2021	3,272		776
Dec-20	12/18/2020	90,938		7,456
Dec-20	1/15/2021	40,880		16,470
Dec-20	2/19/2021	16,664		904
Dec-20	3/19/2021	27,914		2,536
Dec-20	6/18/2021	986		996
Dec-20	9/17/2021	216		30
Dec-20	12/17/2021	7,014		8,642
Dec-20	12/16/2022	350		80

**9. Monthly volume for individual XSP PM series**

*See Attached Spreadsheet Tabs “Cboe & EDGX XSP Monthly Volume by Series”*

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

Month	XSP Open Interest
Oct-20	219,162
Nov-20	231,034
Dec-20	162,276

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

Month	Expiration Date	XSP Open Interest
Oct-20	11/20/2020	54,248
Oct-20	12/18/2020	81,641
Oct-20	1/15/2021	44,965
Oct-20	2/19/2021	18,879
Oct-20	3/19/2021	3,049
Oct-20	6/18/2021	4,271
Oct-20	9/17/2021	645
Oct-20	12/17/2021	11,464
Nov-20	12/18/2020	115,068
Nov-20	1/15/2021	51,502
Nov-20	2/19/2021	43,425
Nov-20	3/19/2021	4,301
Nov-20	6/18/2021	4,445
Nov-20	9/17/2021	822
Nov-20	12/17/2021	11,471
Dec-20	1/15/2021	62,762
Dec-20	2/19/2021	50,544
Dec-20	3/19/2021	32,074
Dec-20	6/18/2021	5,175
Dec-20	9/17/2021	854
Dec-20	12/17/2021	10,658
Dec-20	12/16/2022	209

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

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