#### QUARTERLY MARKET IMPACT / TRADING PATTERN REPORT – Q1 2021

PM-SETTLED S&P 500 INDEX 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. 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. On March 1, 2021, the Exchange began listing options on Expiration Friday, PM-settled Mini-Russell 2000 Index Options ("MRUT PM") under the pilot program. 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, XSP PM options and MRUT 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 Q1 2021 (January 1, 2021 through March 31, 2021). Cboe Options notes that there was no trading activity in MRUT PM options in Q1 2021.

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

Month	SPXpm Volume
Jan-21	3,104,946
Feb-21	3,142,664
Mar-21	3,575,870

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

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

<sup>&</sup>lt;sup>3</sup> <u>See</u> Securities Exchange Act Release No. 91067 (February 5, 2021), 86 FR 9108 (SR-2020-CBOE-116) (the "MRUT PM Approval Order").

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

Month	Expiration Date	SPXpm Volume
Jan-21	2021-01-15	2,266,070
Jan-21	2021-02-19	540,012
Jan-21	2021-03-19	209,992
Jan-21	2021-04-16	57,746
Jan-21	2021-05-21	21,320
Jan-21	2021-06-18	9,806
Feb-21	2021-02-19	2,363,100
Feb-21	2021-03-19	461,052
Feb-21	2021-04-16	206,448
Feb-21	2021-05-21	49,074
Feb-21	2021-06-18	58,896
Feb-21	2021-07-16	4,094
Mar-21	2021-03-19	2,668,652
Mar-21	2021-04-16	567,190
Mar-21	2021-05-21	170,978
Mar-21	2021-06-18	129,042
Mar-21	2021-07-16	36,580
Mar-21	2021-08-20	3,428

## 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
Jan-21	338,130
Feb-21	321,809
Mar-21	321,382

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

		SPXpm
Month	Expiration Date	Open
		Interest
Jan-21	2021-02-19	198,897
Jan-21	2021-03-19	98,453
Jan-21	2021-04-16	25,322
Jan-21	2021-05-21	10,864
Jan-21	2021-06-18	4,594
Feb-21	2021-03-19	186,844
Feb-21	2021-04-16	84,997
Feb-21	2021-05-21	25,507
Feb-21	2021-06-18	22,078
Feb-21	2021-07-16	2,383
Mar-21	2021-04-16	184,652
Mar-21	2021-05-21	66,690
Mar-21	2021-06-18	55,631
Mar-21	2021-07-16	12,118
Mar-21	2021-08-20	2,291

6.	Month-end	open interest	for	individua	l 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

	XSP Volume		
Month	CBOE	BZX	
Jan-21	242,576	24,534	
Feb-21	211,632	14,732	
Mar-21	237,342	46,226	

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

	XSP Volume		olume
Month	Expiration Date	CBOE	BZX
Jan-21	1/15/2021	126,688	4,400
Jan-21	2/19/2021	31,644	6,316
Jan-21	3/19/2021	29,178	10,604
Jan-21	4/16/2021	47,598	1,108
Jan-21	5/21/2021	300	326
Jan-21	6/18/2021	1,488	608
Jan-21	9/17/2021	2,986	40
Jan-21	12/17/2021	1,006	626
Jan-21	12/16/2022	1,688	506
Feb-21	2/19/2021	110,624	3,060
Feb-21	3/19/2021	27,830	2,958
Feb-21	4/16/2021	18,566	6,266
Feb-21	5/21/2021	43,086	226
Feb-21	6/18/2021	2,272	974
Feb-21	9/17/2021	6,774	158
Feb-21	12/17/2021	648	124
Feb-21	12/16/2022	1,832	966
Mar-21	3/19/2021	75,190	5,042
Mar-21	4/16/2021	50,970	30,800
Mar-21	5/21/2021	50,772	8,426
Mar-21	6/18/2021	51,566	974
Mar-21	7/16/2021	322	8
Mar-21	9/17/2021	5,694	102
Mar-21	12/17/2021	1,122	628
Mar-21	3/18/2022	1,270	80
Mar-21	12/16/2022	436	166

## 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
Jan-21	140,723
Feb-21	126,683
Mar-21	134,024

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

Month	Expiration	XSP Open
WOTH	Date	Interest
Jan-21	2/19/2021	56,548
Jan-21	3/19/2021	41,150
Jan-21	4/16/2021	23,721
Jan-21	5/21/2021	256
Jan-21	6/18/2021	5,499
Jan-21	9/17/2021	1,737
Jan-21	12/17/2021	10,866
Jan-21	12/16/2022	946
Feb-21	3/19/2021	46,701
Feb-21	4/16/2021	34,551
Feb-21	5/21/2021	21,421
Feb-21	6/18/2021	6,313
Feb-21	9/17/2021	5,049
Feb-21	12/17/2021	10,995
Feb-21	12/16/2022	1,653
Mar-21	4/16/2021	35,771
Mar-21	5/21/2021	48,955
Mar-21	6/18/2021	29,179
Mar-21	7/16/2021	103
Mar-21	9/17/2021	6,167
Mar-21	12/17/2021	11,341
Mar-21	3/18/2022	657
Mar-21	12/16/2022	1,851

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

See Attached Spreadsheet Tab "XSPpm Month-end OI by Series"

## Monthly Analysis of MRUT PM Volume & Open Interest:

## 1. Monthly volume aggregated for all MRUT PM trades

Month	Index	Volume
Mar-21	MRUT	12,939

## 2. Monthly volume for MRUT PM trades aggregated by expiration date

Month	Index	Expiration	Volume
Mar-21	MRUT	3/19/21	179
Mar-21	MRUT	4/16/21	12,068
Mar-21	MRUT	5/21/21	48
Mar-21	MRUT	6/18/21	4
Mar-21	MRUT	9/17/21	413
Mar-21	MRUT	12/17/21	231

#### 3. Monthly volume for individual MRUT PM series

See Attached Spreadsheet Tabs "MRUT Monthly Volume by Series"

## 4. Month-end open interest aggregated for all MRUT PM series

Month	Index	OI
Mar-21	MRUT	5,279

## 5. Month-end open interest for MRUT PM series aggregated by expiration date

Month	Index	Expiration	OI
Mar-21	MRUT	4/16/21	4,840
Mar-21	MRUT	5/21/21	46
Mar-21	MRUT	6/18/21	4
Mar-21	MRUT	9/17/21	163
Mar-21	MRUT	12/17/21	230

#### 6. Month-end open interest for individual MRUT PM series

See Attached Spreadsheet Tab "MRUT Month-end OI by Series"