

**CME Exchange ADV Report - Monthly**

November 2022

Page 1 of 8

	ADV NOV 2022	ADV NOV 2021	% CHG	ADV OCT 2022	% CHG	ADV Y.T.D 2022	ADV Y.T.D 2021	% CHG
<b>Interest Rate Futures</b>								
1-MONTH EURODOLLAR	191	0	-	97.52	95.9%	338	03890304.6%	
BSBY 3-MONTH FUTURES	939	4,524.71	-79.3%	1,234.52	-24.0%	2,434	1,740	39.9%
ESTR Basis Spread Futures	78	0	-	1.95	3897.5%	7	0	-
ESTR Futures	268	0	-	0.52	51119.1%	25	0	-
EURODOLLARS	722,199	2,876,659.71	-74.9%	847,294.43	-14.8%	1,669,247	2,463,829	-32.2%
SOFR	2,330,987	304,313.95	666.0%	1,980,800.48	17.7%	1,744,200	145,949	1095.1%
SONIA	0	257.29	-100.0%	0	-	6	3,494	-99.8%
TIIE	1	1.86	-35.9%	1.67	-28.6%	5	4	24.2%
<b>Interest Rate Options</b>								
EURODOLLARS	462,432	495,341.1	-6.6%	538,836.67	-14.2%	588,701	235,859	149.6%
EURO MIDCURVE	35,679	940,430.95	-96.2%	52,420.76	-31.9%	284,375	834,197	-65.9%
SOFR	763,166	0	-	735,424.67	3.8%	317,744	38	844573.8%
SOFR MIDCURVE	199,901	0.717985500.3%		164,795.81	21.3%	85,797	03732466.7%	

**CME Exchange ADV Report - Monthly**

November 2022

Page 2 of 8

	ADV NOV 2022	ADV NOV 2021	% CHG	ADV OCT 2022	% CHG	ADV Y.T.D 2022	ADV Y.T.D 2021	% CHG
<b>Equity Index Futures</b>								
BITCOIN	13,969	9,698.52	44.0%	13,305.38	5.0%	11,035	10,241	7.8%
E-mini FTSE China 50	11	4.48	145.7%	5.52	99.1%	32	3	868.8%
E-MINI MIDCAP	12,609	13,573.95	-7.1%	13,955.1	-9.6%	15,794	12,598	25.4%
E-MINI NASDAQ 100	629,803	563,292.62	11.8%	764,370.52	-17.6%	708,470	548,426	29.2%
E-MINI RUSSELL 1000	65	321.38	-79.8%	487	-86.7%	581	505	15.0%
E-MINI RUSSELL 1000 GROWTH	268	146.57	82.6%	374.19	-28.5%	406	230	76.4%
E-MINI RUSSELL 1000 VALUE	269	703.29	-61.8%	186.24	44.3%	1,038	1,356	-23.5%
E-MINI RUSSELL 2000	193,093	207,516.1	-7.0%	249,119.43	-22.5%	241,460	199,101	21.3%
E-MINI S&P500	1,730,629	1,404,652.62	23.2%	2,292,934.1	-24.5%	2,007,440	1,561,048	28.6%
E-MINI S&P500 ESG	762	696.52	9.5%	1,350.48	-43.5%	1,461	921	58.7%
ETHER	0	0	-	0	-	0	0	-
ETHER FUTURES	8,032	5,825.81	37.9%	6,292.33	27.6%	6,495	3,469	87.2%
FT-SE 100	0	1.24	-84.6%	6.9	-97.2%	7	6	10.8%
FTSE Emerging	0	0	-	0	-	0	0	-100.0%
IBOVESPA INDEX	2	12.67	-83.5%	2.48	-15.4%	3	11	-75.0%
MICRO BITCOIN	16,365	27,613.9	-40.7%	10,426.24	57.0%	15,501	14,383	7.8%
MICRO E-MINI NASDAQ 100	1,241,292	1,015,440.1	22.2%	1,509,736.24	-17.8%	1,486,632	932,611	59.4%
MICRO E-MINI RUSSELL 2000	106,682	178,029.52	-40.1%	139,584.48	-23.6%	135,195	152,507	-11.4%
MICRO E-MINI S&P500	1,294,560	862,098.9	50.2%	1,585,755.9	-18.4%	1,382,169	855,016	61.7%
MICRO ETHER	22,588	0	-	15,695.95	43.9%	20,545	0	-
NASDAQ-100 VOLATILITY	2	0.67	157.1%	3.33	-48.6%	81	0	16616.5%
NASDAQ BIOTECH SECTOR	3	2.52	18.9%	9.62	-68.8%	10	31	-68.9%
Nearby BTIC+	2	0	-	35.71	-93.3%	33	2	1564.0%
NIKKEI 225 (\$) STOCK	4,614	4,673.9	-1.3%	4,804.48	-4.0%	5,525	6,240	-11.5%
NIKKEI 225 (YEN) STOCK	28,051	31,180.1	-10.0%	36,150.14	-22.4%	37,080	32,083	15.6%
PHLX SEMICONDUCTOR SECTO	11	0	-	39.48	-72.4%	8	0	-
S&P 500	2,395	973.76	146.0%	1,940.62	23.4%	3,521	4,951	-28.9%
S&P 500 ANNUAL DIVIDEND IND	3,714	1,932.81	92.2%	4,392.48	-15.4%	3,976	2,888	37.6%
S&P 500 QUARLY DIVIDEND IND	313	217.14	44.3%	211.38	48.2%	217	123	75.7%
S&P BIOTECHNOLOGY SECTOR	49	0	-	49.86	-2.3%	40	0	-
S&P COMMUNICATION SERVICE	121	90.52	33.4%	151.05	-20.1%	193	179	7.7%
S&P CONSUMER DISCRETIONAR	224	641.48	-65.1%	401.57	-44.2%	617	580	6.3%
S&P CONSUMER STAPLES SECT	582	563.29	3.3%	947.9	-38.6%	1,306	1,641	-20.4%
S&P ENERGY SECTOR	1,399	1,890.9	-26.0%	2,013.62	-30.5%	3,132	2,390	31.0%
S&P FINANCIAL SECTOR	692	1,592.14	-56.5%	940.1	-26.3%	1,680	2,888	-41.8%
S&P HEALTH CARE SECTOR	393	738.62	-46.8%	524.24	-25.1%	1,217	1,169	4.1%
S&P INDUSTRIAL SECTOR	1,564	367.76	325.3%	924.33	69.2%	1,416	1,115	27.0%
S&P MATERIALS SECTOR	660	512.86	28.6%	442.52	49.0%	732	649	12.7%
S&P OIL & GAS EXPLORATION A	17	0	-	23.52	-25.9%	20	0	-
S&P REAL ESTATE SECTOR	88	110.62	-20.6%	197.62	-55.5%	305	402	-24.1%
S&P REGIONAL BANKS SECTOR	15	0	-	28.05	-45.0%	11	0	-
S&P RETAIL SECTOR	14	0	-	8.57	60.6%	14	0	-
S&P TECHNOLOGY SECTOR	505	538.1	-6.2%	1,403.05	-64.0%	1,221	727	67.9%
S&P UTILITIES SECTOR	1,035	971.86	6.5%	976.05	6.0%	1,673	1,497	11.8%
S&P VALUE INDEX FUTURES	0	0	-	0	-	0	11	-100.0%
WATER INDEX FUTURES	0	0.05	200.2%	0	-	3	4	-37.2%
YEN DENOMINATED TOPIX	7	192.33	-96.4%	1.86	276.9%	87	119	-27.0%

**CME Exchange ADV Report - Monthly**

November 2022

Page 3 of 8

	ADV NOV 2022	ADV NOV 2021	% CHG	ADV OCT 2022	% CHG	ADV Y.T.D 2022	ADV Y.T.D 2021	% CHG
<b>Equity Index Options</b>								
BITCOIN OPTIONS	290	77.81	272.6%	230.62	25.7%	151	68	121.7%
E-MINI NASDAQ 100	44,496	30,650.62	45.2%	50,536.19	-12.0%	47,922	27,359	75.2%
E-mini Russell 2000	2,795	5,784.52	-51.7%	4,767.1	-41.4%	4,787	4,502	6.3%
E-MINI RUSSELL 2000	1,714	3,008.14	-43.0%	1,228.57	39.5%	1,530	1,481	3.3%
E-mini S&P 500	525,634	455,155.57	15.5%	681,567.14	-22.9%	567,021	364,487	55.6%
E-MINI S&P500	656,485	452,560.71	45.1%	714,375.24	-8.1%	580,981	314,444	84.8%
EOM S&P 500	0	0	-	0	-	0	87	-100.0%
ETHER OPTIONS	24	0	-	22.19	8.6%	5	0	-
MICRO BITCOIN	163	0	-	336.05	-51.4%	337	0	-
Micro E-mini Nasdaq-100	1,782	1,827.57	-2.5%	1,924.14	-7.4%	2,031	1,372	48.0%
MICRO E-MINI NASDAQ 100	483	532.9	-9.4%	318.29	51.6%	549	294	86.7%
Micro E-mini S&P 500	12,247	11,786.38	3.9%	10,542.19	16.2%	11,272	7,846	43.7%
MICRO ETHER	1,440	0	-	1,884.48	-23.6%	1,511	0	-
S&P 500	0	0	-	0	-	0	5,662	-100.0%
<b>FX Futures</b>								
AD/CD CROSS RATES	10	0	-	2.52	309.4%	4	1	273.0%
AD/JY CROSS RATES	124	149.48	-17.0%	173.48	-28.5%	218	115	89.8%
AD/NE CROSS RATES	85	24.14	253.3%	582.9	-85.4%	274	16	1609.4%
AUSTRALIAN DOLLAR	101,890	86,906.05	17.2%	103,967.24	-2.0%	101,979	97,732	4.3%
BP/JY CROSS RATES	130	118.95	9.0%	250.76	-48.3%	245	132	85.5%
BP/SF CROSS RATES	59	66.24	-11.5%	150.52	-61.1%	139	52	166.7%
BRAZIL REAL	17,908	10,927.29	63.9%	15,029.71	19.2%	15,616	11,923	31.0%
BRITISH POUND	113,739	97,653.86	16.5%	148,050.52	-23.2%	125,324	94,635	32.4%
CANADIAN DOLLAR	85,305	74,595	14.4%	97,353.29	-12.4%	90,731	79,159	14.6%
CD/JY CROSS RATES	1	28.62	-95.2%	3.38	-59.2%	3	14	-78.2%
CHINESE RENMINBI (CNH)	2,140	774	176.4%	2,185.62	-2.1%	1,495	788	89.8%
CZECK KORUNA (EC)	0	0	-	0	-	0	0	412.4%
CZECK KORUNA (US)	8	0.19	4049.5%	8.33	-5.1%	3	0	5422.2%
EC/AD CROSS RATES	181	179.14	1.1%	176.57	2.6%	272	239	13.6%
EC/CD CROSS RATES	207	207.52	-0.4%	222.81	-7.2%	388	326	18.9%
EC/NOK CROSS RATES	48	9.05	428.9%	20.05	138.7%	107	40	169.9%
EC/SEK CROSS RATES	72	16.9	327.3%	41.48	74.2%	153	29	420.5%
EFX/BP CROSS RATES	3,191	1,796.52	77.6%	3,835.76	-16.8%	4,567	2,704	68.9%
EFX/JY CROSS RATES	1,246	1,877.9	-33.7%	1,454.95	-14.4%	2,656	2,138	24.2%
EFX/SF CROSS RATES	676	1,225.62	-44.9%	1,382.24	-51.1%	1,910	1,219	56.7%
E-MICRO USD/CAD	4	23.33	-84.5%	0.95	280.0%	8	10	-12.8%
E-MICRO USD/CHF	1	2.33	-44.9%	1.52	-15.6%	3	1	480.3%
E-MICRO USD/JPY	57	239.67	-76.2%	39.86	43.4%	662	35	1815.5%
E-MINI EURO FX	8,894	5,191.29	71.3%	7,687.62	15.7%	7,427	5,670	31.0%
E-MINI JAPANESE YEN	474	405	17.1%	764.76	-38.0%	572	440	30.0%
EURO FX	223,204	187,656.62	18.9%	221,560.05	0.7%	240,859	191,638	25.7%
HUNGARIAN FORINT (EC)	0	1.05	-100.0%	0.05	-100.0%	0	0	-17.5%
HUNGARIAN FORINT (US)	0	0.29	0.0%	0	-	0	1	-72.9%
INDIAN RUPEE	1,587	834.52	90.2%	1,880.29	-15.6%	1,319	700	88.4%
JAPANESE YEN	144,688	118,333	22.3%	174,554.48	-17.1%	156,637	107,493	45.7%
KOREAN WON	16	48.76	-67.2%	23.43	-31.7%	24	88	-72.8%

**CME Exchange ADV Report - Monthly**

November 2022

Page 4 of 8

	ADV NOV 2022	ADV NOV 2021	% CHG	ADV OCT 2022	% CHG	ADV Y.T.D 2022	ADV Y.T.D 2021	% CHG
<b>FX Futures</b>								
MEXICAN PESO	58,177	53,139.19	9.5%	65,547.29	-11.2%	58,845	52,879	11.3%
MICRO AUD/USD	12,950	14,981.48	-13.6%	13,803.19	-6.2%	12,679	10,352	22.5%
MICRO CAD/USD	3,829	2,637.9	45.1%	4,091.95	-6.4%	3,018	2,689	12.2%
MICRO CHF/USD	754	509.1	48.2%	793.95	-5.0%	826	424	94.8%
MICRO EUR/USD	41,603	27,626.19	50.6%	43,998.33	-5.4%	38,246	23,408	63.4%
MICRO GBP/USD	6,016	6,962.24	-13.6%	11,147.95	-46.0%	5,997	3,984	50.5%
MICRO INR/USD	36	35.14	3.5%	29.57	23.0%	34	79	-57.3%
MICRO JPY/USD	0	4,106.81	-100.0%	0	-	442	1,880	-76.5%
MICRO USD/CNH	0	0	-	0	-	0	0	-94.4%
NEW ZEALND DOLLAR	29,413	23,492.14	25.2%	35,518.05	-17.2%	31,376	28,187	11.3%
NKR/USD CROSS RATE	132	183.86	-28.4%	162.86	-19.2%	170	260	-34.5%
POLISH ZLOTY (EC)	0	1.24	-76.9%	0.1	200.1%	5	6	-14.7%
POLISH ZLOTY (US)	114	38.48	195.7%	86.24	31.9%	78	44	78.9%
RMB USD	0	0	-	0	-	0	0	870.0%
RUSSIAN RUBLE	0	8,291.14	-100.0%	0	-	2,554	5,597	-54.4%
S.AFRICAN RAND	3,352	3,608.86	-7.1%	3,846.9	-12.9%	4,475	2,943	52.1%
SF/JY CROSS RATES	73	2.38	2955.9%	21.29	241.8%	53	3	1967.6%
SHEKEL	0	1.19	-76.0%	0.05	500.2%	1	0	171.2%
SKR/USD CROSS RATES	340	233.81	45.2%	234.57	44.8%	364	276	31.7%
SWISS FRANC	21,545	25,874.43	-16.7%	21,835.95	-1.3%	25,798	23,777	8.5%
TURKISH LIRA	2	0.29	716.7%	1.14	104.2%	2	4	-42.8%
USDZAR	0	57.48	-100.0%	0	-	0	6	-97.6%
<b>FX Options</b>								
AUD/USD MONDAY OPTION WEE	4	93.76	-95.5%	0.24	1680.0%	8	29	-72.1%
AUD/USD MONDAY OPTION WEE	2	7.14	-71.3%	0.86	138.9%	14	20	-28.6%
AUD/USD MONDAY OPTION WEE	20	7.29	172.5%	6.38	211.2%	12	20	-38.8%
AUD/USD MONDAY OPTION WEE	16	0.57	2783.5%	4.33	280.2%	16	20	-20.9%
AUD/USD MONDAY OPTION WEE	0	46.95	-100.0%	6.9	-100.0%	6	10	-42.1%
AUD/USD MONTHLY OPTIONS	3,077	3,932.38	-21.8%	2,516.9	22.3%	3,912	4,135	-5.4%
AUD/USD WKLY FRIDAY OPTION	43	0	-	0	-	28	31	-11.8%
AUD/USD WKLY FRIDAY OPTION	97	163.05	-40.3%	101.05	-3.7%	78	88	-11.8%
AUD/USD WKLY FRIDAY OPTION	59	118.29	-50.0%	51.05	15.9%	99	131	-24.5%
AUD/USD WKLY FRIDAY OPTION	54	200.62	-73.2%	121	-55.6%	85	148	-42.9%
AUD/USD WKLY FRIDAY OPTION	12	23.62	-49.2%	0	-	26	40	-33.8%
AUD/USD WKLY WED OPTIONS -	2	51.57	-95.4%	20.57	-88.4%	28	62	-54.8%
AUD/USD WKLY WED OPTIONS -	48	16.38	191.6%	22.71	110.3%	25	37	-33.2%
AUD/USD WKLY WED OPTIONS -	2	3.38	-53.5%	4.05	-61.2%	10	14	-30.2%
AUD/USD WKLY WED OPTIONS -	40	24.57	64.5%	6.05	568.5%	24	42	-41.7%
AUD/USD WKLY WED OPTIONS -	18	0	-	0	-	4	9	-51.7%
BRL/USD MONTHLY OPTIONS	11	33.19	-66.6%	1.05	959.1%	14	17	-17.9%
CAD/USD MONDAY OPTIONS WE	87	68.76	26.0%	32.62	165.5%	19	45	-58.1%
CAD/USD MONDAY OPTIONS WE	38	33.71	12.4%	10.29	268.5%	50	71	-29.9%
CAD/USD MONDAY OPTIONS WE	67	18	271.2%	20.19	230.9%	50	46	7.2%
CAD/USD MONDAY OPTIONS WE	9	18.38	-50.8%	0.52	1627.3%	31	100	-68.5%
CAD/USD MONDAY OPTIONS WE	0	58.29	-100.0%	59.05	-100.0%	12	19	-36.5%
CAD/USD MONTHLY OPTIONS	5,132	3,664.1	40.1%	3,477.24	47.6%	4,435	3,809	16.4%
CAD/USD WKLY FRIDAY OPTION	157	0	-	0	-	73	120	-38.9%

The information herein is taken from source believed to be reliable. However, it is intended for the purposes of information and education only and is not guaranteed by the CME Group as to accuracy, completeness, nor trading results and does not constitute advice or continue a solicitation of the purchase or sale of any futures or options. The Rules and Regulations of the CME Group should be consulted as the authoritative source on all current contract specifications and regulations. The previous year Average Daily Volume (ADV) may slightly differ for CBOT legacy products based on the way CME Group defines the number of trading days. The open interest values are based on preliminary open interest values only.

**CME Exchange ADV Report - Monthly**

November 2022

Page 5 of 8

	ADV NOV 2022	ADV NOV 2021	% CHG	ADV OCT 2022	% CHG	ADV Y.T.D 2022	ADV Y.T.D 2021	% CHG
<b>FX Options</b>								
CAD/USD WKLY FRIDAY OPTION	126	416.1	-69.8%	200.95	-37.5%	162	237	-31.5%
CAD/USD WKLY FRIDAY OPTION	191	374.71	-49.0%	142.43	34.1%	258	368	-29.9%
CAD/USD WKLY FRIDAY OPTION	147	228.86	-35.6%	174.48	-15.5%	228	438	-47.8%
CAD/USD WKLY FRIDAY OPTION	0	5.71	-95.0%	0	-	56	124	-54.6%
CAD/USD WKLY WED OPTIONS -	36	99.48	-64.3%	47.24	-24.8%	47	101	-53.1%
CAD/USD WKLY WED OPTIONS -	37	97.29	-61.7%	38.29	-2.6%	56	89	-37.3%
CAD/USD WKLY WED OPTIONS -	22	198.52	-89.0%	50.57	-56.8%	65	121	-46.0%
CAD/USD WKLY WED OPTIONS -	39	45	-14.3%	80.05	-51.8%	72	119	-39.1%
CAD/USD WKLY WED OPTIONS -	49	0	-	0	-	24	41	-42.2%
CHF/USD MONTHLY OPTIONS	226	261.57	-13.4%	155.57	45.6%	270	265	2.0%
CHF/USD WKLY FRIDAY OPTION	8	0	-	0	-	5	2	181.0%
CHF/USD WKLY FRIDAY OPTION	2	51.95	-96.7%	1.43	20.0%	4	15	-72.3%
CHF/USD WKLY FRIDAY OPTION	12	3.95	200.0%	2.19	441.3%	6	9	-34.0%
CHF/USD WKLY FRIDAY OPTION	8	17.95	-57.0%	1.43	440.0%	6	12	-50.2%
CHF/USD WKLY FRIDAY OPTION	4	0.14	2665.9%	0	-	1	1	-29.8%
EUR/GBP MONTHLY OPTIONS	0	0	-	0	-	16	0	61602.7%
EUR/GBP WKLY FRIDAY OPTION	0	4.76	-100.0%	0	-	0	0	-100.0%
EURODOLLARS	159	0	-	86.67	83.1%	30	0	-
EUR/USD MONDAY OPTION WEE	49	37.38	31.6%	135.76	-63.8%	88	97	-8.7%
EUR/USD MONDAY OPTION WEE	144	34	322.5%	121.52	18.2%	131	103	27.1%
EUR/USD MONDAY OPTION WEE	93	55.48	68.4%	36.33	157.1%	54	73	-26.1%
EUR/USD MONDAY OPTION WEE	30	263.05	-88.5%	70.05	-56.6%	135	146	-7.6%
EUR/USD MONDAY OPTION WEE	0	149.95	-100.0%	36.48	-100.0%	22	40	-44.8%
EUR/USD MONTHLY OPTIONS	19,221	10,274.05	87.1%	16,057.38	19.7%	13,755	9,800	40.4%
EUR/USD WKLY FRIDAY OPTION	641	0	-	0.14	448632.1%	294	220	33.3%
EUR/USD WKLY FRIDAY OPTION	419	1,457.76	-71.3%	750.81	-44.2%	652	694	-6.2%
EUR/USD WKLY FRIDAY OPTION	912	1,601.29	-43.0%	733.29	24.4%	801	1,026	-21.9%
EUR/USD WKLY FRIDAY OPTION	591	793.14	-25.4%	756.43	-21.8%	864	895	-3.4%
EUR/USD WKLY FRIDAY OPTION	0	7.76	-94.5%	0	-	257	374	-31.3%
EUR/USD WKLY WED OPTIONS -	155	382.24	-59.5%	435.86	-64.4%	310	327	-5.2%
EUR/USD WKLY WED OPTIONS -	243	445.38	-45.4%	346.05	-29.7%	267	347	-23.1%
EUR/USD WKLY WED OPTIONS -	284	468.29	-39.4%	271.33	4.7%	260	340	-23.7%
EUR/USD WKLY WED OPTIONS -	275	516.95	-46.9%	413.24	-33.5%	320	438	-27.0%
EUR/USD WKLY WED OPTIONS -	145	0	-	0	-	106	110	-3.6%
GBP/USD MONDAY OPTION WEE	33	11.38	187.9%	18.14	80.6%	26	24	9.9%
GBP/USD MONDAY OPTION WEE	21	34.71	-38.1%	24.24	-11.4%	49	35	39.9%
GBP/USD MONDAY OPTION WEE	31	92.76	-67.0%	13	135.5%	17	26	-36.0%
GBP/USD MONDAY OPTION WEE	23	153.95	-85.1%	39.48	-41.7%	27	46	-41.5%
GBP/USD MONDAY OPTION WEE	0	27.81	-100.0%	87.67	-100.0%	14	13	9.3%
GBP/USD MONTHLY OPTIONS	3,510	3,444.29	1.9%	5,015.86	-30.0%	4,052	3,549	14.2%
GBP/USD WKLY FRIDAY OPTION	77	0	-	0	-	47	54	-14.1%
GBP/USD WKLY FRIDAY OPTION	165	367.62	-55.0%	211.43	-21.8%	127	144	-11.6%
GBP/USD WKLY FRIDAY OPTION	335	237.81	41.0%	150.76	122.5%	175	157	11.9%
GBP/USD WKLY FRIDAY OPTION	113	178.76	-36.7%	119.81	-5.5%	144	181	-20.3%
GBP/USD WKLY FRIDAY OPTION	23	23.95	-2.2%	0	-	49	50	-3.4%
GBP/USD WKLY WED OPTIONS -	31	61.33	-48.7%	104.67	-69.9%	61	59	4.4%
GBP/USD WKLY WED OPTIONS -	24	65.86	-63.2%	25.67	-5.6%	23	37	-37.6%
GBP/USD WKLY WED OPTIONS -	50	126.48	-60.3%	50.9	-1.4%	50	41	21.1%
GBP/USD WKLY WED OPTIONS -	38	179.76	-78.7%	75.52	-49.4%	57	71	-18.8%

**CME Exchange ADV Report - Monthly**

November 2022

Page 6 of 8

	ADV NOV 2022	ADV NOV 2021	% CHG	ADV OCT 2022	% CHG	ADV Y.T.D 2022	ADV Y.T.D 2021	% CHG
<b>FX Options</b>								
GBP/USD WKLY WED OPTIONS -	31	0	-	0	-	6	11	-49.1%
JPY/USD MONDAY OPTION WEE	4	5.76	-27.3%	7.29	-42.5%	29	19	51.6%
JPY/USD MONDAY OPTION WEE	74	6.48	1049.3%	20.86	256.9%	43	27	60.7%
JPY/USD MONDAY OPTION WEE	5	9.9	-47.6%	7.43	-30.1%	13	18	-24.8%
JPY/USD MONDAY OPTION WEE	14	30.48	-54.8%	303.43	-95.5%	70	21	226.2%
JPY/USD MONDAY OPTION WEE	0	9.52	-100.0%	34.29	-100.0%	4	13	-66.6%
JPY/USD MONTHLY OPTIONS	3,884	4,403.76	-11.8%	6,756.52	-42.5%	6,800	4,230	60.8%
JPY/USD WKLY FRIDAY OPTION	296	0	-	0	-	170	126	35.1%
JPY/USD WKLY FRIDAY OPTION	318	840.33	-62.1%	507.81	-37.3%	387	306	26.5%
JPY/USD WKLY FRIDAY OPTION	547	652.71	-16.1%	743.71	-26.4%	566	491	15.3%
JPY/USD WKLY FRIDAY OPTION	186	396.9	-53.1%	607.86	-69.4%	512	440	16.3%
JPY/USD WKLY FRIDAY OPTION	1	14.76	-93.2%	0	-	169	161	4.8%
JPY/USD WKLY WED OPTIONS -	82	284.95	-71.1%	464.38	-82.3%	184	149	23.4%
JPY/USD WKLY WED OPTIONS -	151	288.24	-47.7%	278.9	-46.0%	176	189	-6.8%
JPY/USD WKLY WED OPTIONS -	142	340.1	-58.1%	169.95	-16.2%	154	182	-15.7%
JPY/USD WKLY WED OPTIONS -	100	335.67	-70.2%	331.1	-69.8%	212	169	25.2%
JPY/USD WKLY WED OPTIONS -	170	0	-	0	-	68	43	57.6%
MXN/USD MONTHLY OPTIONS	45	46.29	-1.9%	16.81	170.3%	73	68	8.1%
MXN/USD WKLY FRIDAY OPTION	0	14.29	-100.0%	0	-	0	4	-98.1%
MXN/USD WKLY FRIDAY OPTION	5	0	-	0	-	0	2	-81.9%
MXN/USD WKLY FRIDAY OPTION	0	0	-	0	-	0	3	-100.0%
NZD/USD MONTHLY OPTIONS	0	27.95	-99.3%	0.48	-60.0%	103	12	796.4%
NZD/USD WKLY FRIDAY OPTION	0	0	-	0	-	0	0	-100.0%
RUB/USD MONTHLY OPTIONS	0	0	-	0	-	0	0	-100.0%
<b>Foreign Exchange Futures</b>								
CHILEAN PESO	0	0	-	0	-	0	0	-
<b>Foreign Exchange Options</b>								
AUD/USD WKLY WED OPTIONS -	3	27.14	-88.9%	4.81	-37.6%	15	22	-33.2%

## CME Exchange ADV Report - Monthly

November 2022

Page 7 of 8

	ADV NOV 2022	ADV NOV 2021	% CHG	ADV OCT 2022	% CHG	ADV Y.T.D 2022	ADV Y.T.D 2021	% CHG
<b>Ag Products Futures</b>								
BLOCK CHEESE	9	12.86	-30.0%	15.52	-42.0%	16	35	-55.6%
BUTTER CS	180	184.81	-2.7%	196.05	-8.3%	202	196	3.3%
CASH-SETTLED CHEESE	438	727.9	-39.8%	435.05	0.7%	469	577	-18.7%
CAT ASIA WEATHER	0	0	-	0	-	0	5	-100.0%
CATTLE	57,804	60,670.67	-4.7%	50,074.52	15.4%	57,633	56,469	2.1%
CAT WEATHER EUROPEAN	0	0	-	0	-	0	2	-100.0%
CDD SEASONAL STRIP	0	0	-	0	-	32	27	17.9%
CDD WEATHER	0	0	-	0	-	103	41	153.6%
CLASS IV MILK	69	191.62	-64.1%	68.71	0.1%	119	78	52.3%
DRY WHEY	32	74.52	-57.3%	23.67	34.6%	47	93	-49.9%
FEEDER CATTLE	13,295	11,159.86	19.1%	14,631.81	-9.1%	13,502	12,305	9.7%
GOLDMAN SACHS	143	242.38	-41.1%	151.33	-5.7%	184	405	-54.5%
GSCI EXCESS RETURN FUT	25	216.29	-88.4%	42.81	-41.3%	1,765	1,643	7.5%
HDD EURO SEASONAL STRIP	0	0	-	47.62	-100.0%	15	0	-
HDD SEASONAL STRIP	0	0	-	7.14	-100.0%	17	2	680.0%
HDD WEATHER	232	157.14	47.7%	350	-33.7%	95	104	-8.6%
HDD WEATHER EUROPEAN	24	214.29	-88.9%	188.1	-87.3%	36	49	-26.7%
HOGS	45,177	46,141.14	-2.1%	42,768.86	5.6%	46,115	46,344	-0.5%
HOUSING INDEX	1	0.95	-15.0%	0.71	13.3%	1	1	13.8%
LUMBER	400	350.86	14.1%	596.24	-32.8%	429	462	-7.2%
MALAYSIAN PALM SWAP	0	90	-100.0%	0	-	0	391	-100.0%
MILK	1,257	1,531.86	-17.9%	1,032.57	21.8%	1,362	1,207	12.9%
MLK MID OPTIONS	0	0	-	0	-	0	0	-
NFD MILK	233	262.38	-11.1%	283.95	-17.8%	271	266	2.0%
PACIFIC RIM DAT SS WTHR	0	0	-	0	-	0	4	-100.0%
PORK CUTOUT	71	105.76	-33.0%	76.52	-7.3%	99	115	-13.3%
S&P GSCI ENHANCED ER SWAP	0	0	-	0	-	0	26	-100.0%
USD CRUDE PALM OIL	759	1,393.43	-45.5%	762.33	-0.5%	1,024	459	123.3%

**CME Exchange ADV Report - Monthly**

November 2022

Page 8 of 8

	ADV NOV 2022	ADV NOV 2021	% CHG	ADV OCT 2022	% CHG	ADV Y.T.D 2022	ADV Y.T.D 2021	% CHG
<b>Ag Products Options</b>								
BLOCK CHEESE	0	0	-	0.29	-100.0%	11	14	-19.6%
BUTTER CS	106	88.67	19.5%	93.48	13.3%	79	95	-17.0%
CASH-SETTLED CHEESE	236	256.9	-8.3%	301.57	-21.9%	333	303	9.9%
CATTLE	10,014	11,445.1	-12.5%	9,146.48	9.5%	10,239	9,277	10.4%
CDD SEASONAL STRIP	0	0	-	0	-	89	37	142.6%
CDD WEATHER	0	0	-	0	-	5	27	-82.4%
CLASS IV MILK	386	377.43	2.1%	312.43	23.4%	360	206	74.6%
DRY WHEY	0	10.71	-100.0%	0.24	-100.0%	14	9	63.1%
FEEDER CATTLE	1,424	1,311.24	8.6%	1,833.62	-22.3%	1,705	1,059	61.0%
HDD EURO SEASONAL STRIP	0	0	-	95.24	-100.0%	29	9	237.5%
HDD SEASONAL STRIP	0	0	-	71.43	-100.0%	17	126	-86.2%
HDD WEATHER	5	0	-	23.81	-80.0%	56	32	77.9%
HDD WEATHER EUROPEAN	0	95.24	-100.0%	47.62	-100.0%	9	105	-91.8%
HOGS	8,742	8,609.71	1.5%	10,821.9	-19.2%	10,859	9,721	11.7%
LUMBER	10	25.67	-61.8%	18.1	-45.8%	19	33	-43.6%
MILK	1,716	1,194.29	43.6%	1,121.1	53.0%	1,195	1,245	-4.0%
MLK MID OPTIONS	0	0.57	-91.7%	0	-	0	0	64.2%
NFD MILK	193	142.62	35.0%	306.38	-37.2%	212	190	11.7%
PORK CUTOUT	0	0	-	0	-	0	3	-94.0%
<b>TOTAL FUTURES GROUP</b>								
Interest Rate Futures	3,054,663	3,185,757.52	-4.1%	2,829,431.1	8.0%	3,416,262	2,615,015	30.6%
Equity Index Futures	5,317,470	4,336,819.62	22.6%	6,660,209.62	-20.2%	6,098,379	4,352,124	40.1%
FX Futures	884,281	761,075.67	16.2%	982,524.52	-10.0%	938,558	754,135	24.5%
Foreign Exchange Futures	0	0	-	0	-	0	0	-
Ag Products Futures	120,148	123,728.71	-2.9%	111,753.52	7.5%	123,537	121,306	1.8%
<b>TOTAL FUTURES</b>	<b>9,376,562</b>	<b>8,407,381.52</b>	<b>11.5%</b>	<b>10,583,918.76</b>	<b>-11.4%</b>	<b>10,576,736.41</b>	<b>7,842,580.55</b>	<b>34.9%</b>
<b>TOTAL OPTIONS GROUP</b>								
Interest Rate Options	1,461,179	1,435,772.76	1.8%	1,491,477.9	-2.0%	1,276,618	1,070,094	19.3%
Equity Index Options	1,247,554	961,384.24	29.8%	1,467,732.19	-15.0%	1,218,096	727,602	67.4%
FX Options	43,796	39,591.29	10.6%	43,796.95	0.0%	43,336	37,202	16.5%
Foreign Exchange Options	3	27.14	-88.9%	4.81	-37.6%	15	22	-33.2%
Ag Products Options	22,831	23,558.14	-3.1%	24,193.67	-5.6%	25,231	22,490	12.2%
<b>TOTAL OPTIONS</b>	<b>2,775,362</b>	<b>2,460,333.57</b>	<b>12.8%</b>	<b>3,027,205.52</b>	<b>-8.3%</b>	<b>2,563,296.24</b>	<b>1,857,410.35</b>	<b>38.0%</b>
<b>TOTAL COMBINED</b>								
Interest Rate	4,515,841	4,621,530.29	-2.3%	4,320,909	4.5%	4,692,880	3,685,109	27.3%
Equity Index	6,565,024	5,298,203.86	23.9%	8,127,941.81	-19.2%	7,316,475	5,079,726	44.0%
FX	928,077	800,666.95	15.9%	1,026,321.48	-9.6%	981,895	791,338	24.1%
Foreign Exchange	3	27.14	-88.9%	4.81	-37.6%	15	22	-32.7%
Ag Products	142,979	147,286.86	-2.9%	135,947.19	5.2%	148,769	143,796	3.5%
<b>GRAND TOTAL</b>	<b>12,151,924</b>	<b>10,867,715.1</b>	<b>11.8%</b>	<b>13,611,124.28</b>	<b>-10.7%</b>	<b>13,140,032.65</b>	<b>9,699,990.9</b>	<b>35.5%</b>