

## CME Exchange ADV Report - Monthly

November 2017

Page 1 of 6

	ADV NOV 2017	ADV NOV 2016	% CHG	ADV OCT 2017	% CHG	ADV Y.T.D 2017	ADV Y.T.D 2016	% CHG
<b>Interest Rate Futures</b>								
EURODOLLARS	2,361,894	4,037,766.24	-41.5%	2,373,360.18	-0.5%	2,567,166	2,567,700	0.0%
1-MONTH EURODOLLAR	210	103.38	103.6%	95.05	121.4%	235	56	322.1%
<b>Interest Rate Options</b>								
EURODOLLARS	490,343	774,817.48	-36.7%	533,139.91	-8.0%	617,623	686,645	-10.1%
EURO MIDCURVE	858,276	1,011,677.33	-15.2%	976,912.09	-12.1%	771,138	533,133	44.6%
<b>Equity Index Futures</b>								
E-MINI S&P500	1,317,245	1,821,426.24	-27.7%	1,111,106.64	18.6%	1,450,206	1,889,743	-23.3%
S&P 500	3,727	5,332.43	-30.1%	2,979.95	25.1%	5,691	8,448	-32.6%
E-MINI MIDCAP	13,453	16,798.67	-19.9%	10,419.14	29.1%	16,774	21,071	-20.4%
S&P 500 GROWTH	0	0.52	-90.9%	0.82	-94.2%	1	1	8.7%
S&P 500/VALUE	582	471.05	23.5%	971.64	-40.2%	912	498	83.2%
E-MINI RUSSELL 2000	107,265	0	-	78,053.45	37.4%	33,362	0	-
E-MINI RUSSELL 1000	398	3.57	11045.4%	246.05	61.8%	195	18	963.2%
E-MINI NASDAQ 100	308,653	256,986.76	20.1%	249,951.68	23.5%	272,870	265,255	2.9%
NIKKEI 225 (\$) STOCK	20,243	13,916.29	45.5%	11,156.41	81.4%	13,103	17,232	-24.0%
NIKKEI 225 (YEN) STOCK	54,794	63,052.1	-13.1%	39,673.59	38.1%	43,714	59,531	-26.6%
S&P MATERIALS SECTOR	443	645.33	-31.4%	306.73	44.4%	406	318	27.9%
S&P ENERGY SECTOR	385	827.81	-53.5%	308.14	24.9%	739	534	38.4%
S&P FINANCIAL SECTOR	699	1,014.1	-31.0%	537.05	30.2%	1,327	624	112.7%
S&P INDUSTRIAL SECTOR	357	1,282.52	-72.2%	287	24.4%	411	488	-15.6%
S&P TECHNOLOGY SECTOR	350	239.71	46.2%	229.23	52.9%	457	300	52.7%
S&P UTILITIES SECTOR	644	1,116.33	-42.3%	516.73	24.6%	1,226	1,158	5.9%
S&P HEALTH CARE SECTOR	267	946.95	-71.8%	242.41	10.1%	709	564	25.8%
S&P CONSUMER DSCRTNRY SE	188	699.43	-73.1%	301	-37.4%	338	577	-41.3%
E-MINI RUSSELL 1000 GROWTH	382	5.71	6580.0%	224.41	70.1%	172	12	1348.4%
FT-SE 100	56	28.9	93.2%	36.32	53.8%	29	30	-4.8%
E-MINI RUSSELL 1000 VALUE	762	4.29	17678.9%	550.77	38.3%	354	35	899.2%
S&P CONSUMER STAPLES SECT	323	872.62	-63.0%	514.14	-37.2%	734	1,270	-42.2%
IBOVESPA INDEX	28	34.71	-19.1%	56.95	-50.7%	31	34	-8.6%
NASDAQ BIOTECH	17	22.76	-25.1%	4.55	275.0%	16	4	315.5%
E-mini FTSE 100 (USD)	52	0.1	54571.8%	26.95	93.1%	9	2	452.5%
E-mini FTSE China 50	210	75.29	178.6%	83.73	150.5%	84	44	89.8%
FTSE Emerging	13	3	322.2%	8.5	49.0%	3	6	-51.4%
E-MINI S&P REAL ESTATE SELE	78	236.57	-67.2%	199.5	-61.1%	271	28	858.2%
NIFTY 50	684	528.48	29.5%	641.95	6.6%	569	499	14.2%

## CME Exchange ADV Report - Monthly

November 2017

Page 2 of 6

	ADV NOV 2017	ADV NOV 2016	% CHG	ADV OCT 2017	% CHG	ADV Y.T.D 2017	ADV Y.T.D 2016	% CHG
<b>Equity Index Options</b>								
E-MINI S&P500	258,703	258,793.57	0.0%	166,272.5	55.6%	202,571	234,136	-13.5%
S&P 500	20,747	17,872.38	16.1%	12,540.05	65.4%	15,475	23,400	-33.9%
E-MINI MIDCAP	0	0	-	0	-	0	0	-100.0%
E-MINI RUSSELL 2000	912	0	-	562.73	62.1%	179	0	-
E-MINI NASDAQ 100	16,742	9,547.05	75.4%	13,294.5	25.9%	11,652	10,413	11.9%
EOM S&P 500	13,238	7,646.95	73.1%	9,906.82	33.6%	9,138	8,213	11.3%
EOM EMINI S&P	110,314	105,531.62	4.5%	89,209	23.7%	96,257	80,583	19.5%
EOW1 EMINI S&P 500	59,372	49,446.9	20.1%	49,206.86	20.7%	51,106	47,603	7.4%
EOW2 EMINI S&P 500	57,854	90,841.14	-36.3%	41,645.73	38.9%	50,851	52,407	-3.0%
EOW1 S&P 500	5,143	2,106.33	144.2%	4,745.27	8.4%	4,251	2,898	46.7%
EOW2 S&P 500	11,596	6,409	80.9%	9,407.55	23.3%	8,275	6,170	34.1%
EOW4 EMINI S&P 500	42,521	35,552.95	19.6%	49,243.18	-13.7%	45,612	51,701	-11.8%
EOW1 E-MINI RUSSELL 2000 WE	84	0	-	120.45	-30.3%	29	0	-
EOW4 E-MINI RUSSELL 2000 WE	148	0	-	243.5	-39.2%	50	0	-
EOW1 E-MINI RUSSELL 2000 WE	78	0	-	111.64	-30.0%	28	0	-
EOW2 E-MINI RUSSELL 2000 WE	237	0	-	194	22.2%	50	0	-
EOM E-MINI RUSSELL 2000 END	166	0	-	76.27	118.1%	65	0	-
EOW3 E-MINI RUSSELL 2000 WE	574	0	-	917.55	-37.5%	240	0	-
EOW3 EMINI S&P 500	142,514	199,899.24	-28.7%	158,665.77	-10.2%	160,422	105,156	52.6%
EOW3 S&P 500	16,205	18,881.05	-14.2%	21,344.23	-24.1%	17,249	12,421	38.9%

## CME Exchange ADV Report - Monthly

November 2017

Page 3 of 6

	ADV NOV 2017	ADV NOV 2016	% CHG	ADV OCT 2017	% CHG	ADV Y.T.D 2017	ADV Y.T.D 2016	% CHG
<b>FX Futures</b>								
AUSTRALIAN DOLLAR	94,298	110,236.38	-14.5%	102,298.36	-7.8%	95,618	102,007	-6.3%
BRITISH POUND	140,039	127,554.19	9.8%	116,860.59	19.8%	121,568	115,230	5.5%
BRAZIL REAL	4,731	4,367.05	8.3%	6,272.23	-24.6%	4,563	4,011	13.8%
CANADIAN DOLLAR	67,638	76,868.57	-12.0%	70,869.77	-4.6%	75,676	74,823	1.1%
E-MINI EURO FX	4,274	4,340.43	-1.5%	3,682.55	16.1%	4,484	3,639	23.2%
EURO FX	218,745	218,894.52	-0.1%	213,851.05	2.3%	220,752	191,894	15.0%
E-MINI JAPANESE YEN	520	1,709.67	-69.6%	470.5	10.5%	1,340	1,567	-14.5%
JAPANESE YEN	166,489	185,208.19	-10.1%	155,698.73	6.9%	166,627	144,749	15.1%
MEXICAN PESO	48,837	69,307.24	-29.5%	53,209.09	-8.2%	50,676	56,390	-10.1%
NEW ZEALND DOLLAR	24,700	27,068.57	-8.7%	26,674.91	-7.4%	25,083	23,297	7.7%
NKR/USD CROSS RATE	77	67.33	13.7%	62.77	22.0%	98	83	17.7%
RUSSIAN RUBLE	2,654	1,557.62	70.4%	1,074.91	146.9%	2,421	1,726	40.3%
S.AFRICAN RAND	1,868	1,358.9	37.5%	2,095.82	-10.9%	2,604	897	190.4%
SWISS FRANC	25,104	28,763.1	-12.7%	25,069.18	0.1%	27,111	23,130	17.2%
AD/CD CROSS RATES	0	0.24	-100.0%	3.32	-100.0%	4	0	1320.4%
AD/JY CROSS RATES	75	176.62	-57.8%	118	-36.8%	128	190	-32.3%
AD/NE CROSS RATES	2	0.52	363.7%	5.91	-58.9%	5	3	49.5%
BP/JY CROSS RATES	201	81.48	146.6%	147.73	36.0%	155	88	76.5%
BP/SF CROSS RATES	8	2.19	280.4%	1.82	358.3%	4	2	91.2%
CD/JY CROSS RATES	0	0.19	-100.0%	0	-	6	0	9838.7%
EC/AD CROSS RATES	82	44.05	86.1%	94.86	-13.6%	150	80	87.1%
EC/CD CROSS RATES	112	116.9	-4.6%	188.32	-40.8%	209	120	73.6%
EC/NOK CROSS RATES	36	0	-	32.91	10.8%	13	0	32045.6%
EC/SEK CROSS RATES	58	7.71	656.2%	40.36	44.5%	38	12	218.9%
EFX/BP CROSS RATES	3,354	2,803.29	19.6%	2,822.5	18.8%	3,751	3,725	0.7%
EFX/JY CROSS RATES	2,682	1,846.57	45.2%	2,452.5	9.4%	3,266	2,021	61.6%
EFX/SF CROSS RATES	822	1,334.76	-38.4%	1,058.68	-22.4%	1,738	1,805	-3.7%
SF/JY CROSS RATES	0	0	-	0	-	0	0	-
SKR/USD CROSS RATES	71	47.57	50.2%	69.73	2.4%	122	89	36.8%
POLISH ZLOTY (US)	15	148.67	-90.0%	2.18	583.1%	16	74	-78.7%
POLISH ZLOTY (EC)	1	2	-54.8%	0.32	184.3%	2	86	-98.0%
SHEKEL	2	0	-	9.18	-81.8%	2	0	-
RMB USD	0	8.86	-99.5%	0.18	-73.8%	1	15	-90.9%
KOREAN WON	7	0.24	2900.0%	1.59	349.0%	2	1	169.2%
TURKISH LIRA	18	0.14	12229.6%	15	17.5%	82	0	95188.1%
E-MICRO USD/CHF	0	0	-	0	-	0	0	-100.0%
E-MICRO USD/JPY	0	0	-	0	-	0	0	-100.0%
E-MICRO AUD/USD	3,982	5,988	-33.5%	3,715.32	7.2%	4,097	4,971	-17.6%
E-MICRO EUR/USD	10,846	15,388.71	-29.5%	10,493.55	3.4%	11,991	13,281	-9.7%
E-MICRO GBP/USD	2,649	6,400.48	-58.6%	2,505.91	5.7%	2,737	4,223	-35.2%
E-MICRO USD/CAD	0	0	-	0	-	0	0	-100.0%
USDZAR	0	1.9	-100.0%	0	-	0	0	-100.0%
CHINESE RENMINBI (CNH)	100	161.19	-38.0%	75.27	32.7%	76	77	-1.7%
E-MICRO INR/USD	163	274.29	-40.6%	109.64	48.7%	126	115	9.2%
INDIAN RUPEE	3,326	1,167.33	185.0%	2,428.73	37.0%	1,852	628	195.2%
E-MICRO CAD/USD	840	989.48	-15.1%	866.95	-3.1%	965	1,006	-4.1%
E-MICRO JPY/USD	1,802	2,781	-35.2%	1,375.64	31.0%	1,851	1,497	23.6%
MICRO CHF/USD	64	81.29	-21.1%	49.82	28.7%	48	89	-46.3%
E-MICRO USD/CNH	0	0	-	0	-	0	0	-100.0%
FCXRX	0	389.81	-100.0%	0	-	27	54	-50.1%

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 2017

Page 4 of 6

	ADV NOV 2017	ADV NOV 2016	% CHG	ADV OCT 2017	% CHG	ADV Y.T.D 2017	ADV Y.T.D 2016	% CHG
<b>FX Options</b>								
AUSTRALIAN DOLLAR	0	4,373.38	-100.0%	0	-	921	6,232	-85.2%
BRITISH POUND	0	7,062.76	-100.0%	0	-	2,062	9,642	-78.6%
CANADIAN DOLLAR	0	2,470.95	-100.0%	0	-	827	6,121	-86.5%
EURO FX	0	28,709.05	-100.0%	0	-	5,712	31,442	-81.8%
JAPANESE YEN	0	13,336.43	-100.0%	0	-	2,495	14,445	-82.7%
MEXICAN PESO	99	575.76	-82.7%	627.36	-84.2%	161	216	-25.6%
RUSSIAN RUBLE	0	0	-	0	-	0	6	-100.0%
SWISS FRANC	0	321.95	-100.0%	0	-	25	298	-91.7%
JAPANESE YEN (EU)	0	1.81	-94.7%	0	-	1	26	-96.9%
EURO FX (EU)	1	5.24	-85.5%	2.09	-63.6%	2	124	-98.2%
SWISS FRANC (EU)	0	0	-	0	-	0	0	-
CANADIAN DOLLAR (EU)	1	0.33	257.2%	0	-	1	8	-92.5%
BRITISH POUND (EU)	8	0.62	1269.3%	72.95	-88.4%	19	40	-51.7%
AUSTRALIAN DLR (EU)	0	0	-	0	-	0	5	-99.8%
OTC GBPUSD SUB	408	0	-	10.45	3801.3%	38	0	-
JAPANESE YEN VOL	451	0	-	7.95	5567.9%	42	0	-
OTC AUDUSD SUB	89	0	-	6.23	1330.7%	9	0	-
EURO FX VOL	1,423	0	-	40.27	3433.2%	133	0	-
OTC CADUSD SUB	24	0	-	2.27	966.5%	2	0	-
CANADIAN DOLLAR VOL	207	0	-	13.59	1422.0%	20	0	-
CAD/USD PQO 2pm Fix	6,524	2,365.14	175.9%	8,383.55	-22.2%	6,782	460	1375.7%
JPY/USD PQO 2pm Fix	12,776	7,068.38	80.7%	11,818.09	8.1%	12,659	935	1254.2%
CHF/USD PQO 2pm Fix	119	258.1	-53.8%	552.59	-78.4%	161	34	372.6%
AUD/USD PQO 2pm Fix	4,715	3,094.29	52.4%	5,745.27	-17.9%	5,346	452	1083.0%
EUR/USD PQO 2pm Fix	38,188	11,901.1	220.9%	38,716.86	-1.4%	30,989	1,738	1682.6%
GBP/USD PQO 2pm Fix	18,337	2,859.52	541.3%	14,627.5	25.4%	10,708	614	1644.3%

## CME Exchange ADV Report - Monthly

November 2017

Page 5 of 6

	ADV NOV 2017	ADV NOV 2016	% CHG	ADV OCT 2017	% CHG	ADV Y.T.D 2017	ADV Y.T.D 2016	% CHG
<b>Commodities and Alternative Investments</b>								
<b>Futures</b>								
LIVE CATTLE	71,505	59,881.19	19.4%	55,822.55	28.1%	65,692	52,174	25.9%
FEEDER CATTLE	11,814	9,107.76	29.7%	14,947.36	-21.0%	14,143	10,116	39.8%
LEAN HOGS	52,296	43,590.05	20.0%	43,436.55	20.4%	45,501	36,196	25.7%
LUMBER	892	646.38	38.1%	986.95	-9.6%	808	702	15.2%
MILK	1,300	1,339.71	-3.0%	1,009.32	28.8%	1,275	1,231	3.6%
MLK MID	0	0	-	0	-	0	0	-
NFD MILK	187	195.9	-4.5%	315.59	-40.7%	238	225	5.8%
BUTTER CS	184	136.24	35.0%	165.27	11.3%	157	158	-0.3%
CLASS IV MILK	20	67.52	-70.6%	23.14	-14.2%	44	55	-20.4%
DRY WHEY	88	86.71	1.3%	48.55	80.9%	83	61	35.0%
GSCI EXCESS RETURN FUT	94	18.86	400.0%	15.77	497.8%	1,401	1,100	27.4%
GOLDMAN SACHS	1,598	1,829.14	-12.6%	1,568.18	1.9%	1,624	1,409	15.3%
HOUSING INDEX	0	2.19	-95.7%	0.41	-76.7%	1	1	-4.3%
HDD WEATHER	12	76.24	-84.4%	13.64	-12.7%	7	15	-51.5%
CDD WEATHER	0	0	-	0	-	114	15	677.8%
HDD SEASONAL STRIP	0	0	-	0	-	0	2	-100.0%
CDD SEASONAL STRIP	0	0	-	0	-	5	7	-30.2%
HDD WEATHER EUROPEAN	0	0	-	0	-	2	3	-38.5%
HDD EURO SEASONAL STRIP	0	0	-	0	-	0	1	-100.0%
CAT EURO SEASONAL STRIP	0	0	-	0	-	0	1	-100.0%
PALM OIL	0	0	-	0	-	0	0	-
CASH-SETTLED CHEESE	734	350.24	109.5%	503.5	45.7%	500	476	5.1%
S&P GSCI ENHANCED ER SWAP	0	0	-	91.14	-100.0%	451	357	26.5%
MALAYSIAN PALM SWAP	266	331.24	-19.8%	378	-29.7%	438	450	-2.8%
USD CRUDE PALM OIL	75	0	-	92.73	-18.9%	22	11	106.6%
<b>Commodities and Alternative Investments</b>								
<b>Options</b>								
LIVE CATTLE	11,715	12,289.86	-4.7%	12,518.09	-6.4%	11,732	16,403	-28.5%
FEEDER CATTLE	1,349	1,487.38	-9.3%	1,739.59	-22.5%	1,637	1,658	-1.3%
LEAN HOGS	10,371	7,367.48	40.8%	11,622.5	-10.8%	10,381	8,703	19.3%
LUMBER	129	53.24	142.8%	80.27	61.1%	63	50	27.1%
MILK	1,993	1,531.67	30.1%	1,534.68	29.9%	1,700	1,427	19.2%
MLK MID	7	8	-15.5%	4	69.0%	3	3	0.8%
NFD MILK	224	63.67	251.3%	320.32	-30.2%	209	145	43.5%
BUTTER CS	145	59.95	141.8%	126.95	14.2%	90	59	51.8%
CLASS IV MILK	90	51.1	76.7%	84.55	6.8%	84	52	61.2%
DRY WHEY	65	3.57	1708.0%	66.32	-2.6%	29	4	542.8%
HOUSING INDEX	0	0	-	0	-	0	0	155.6%
HDD WEATHER	0	0	-	0	-	5	4	25.0%
CDD WEATHER	0	0	-	0	-	203	4	4600.0%
HDD SEASONAL STRIP	214	47.62	350.0%	45.45	371.4%	69	84	-17.9%
CDD SEASONAL STRIP	0	0	-	0	-	12	127	-90.4%
HDD WEATHER EUROPEAN	0	0	-	0	-	6	24	-72.7%
HDD EURO SEASONAL STRIP	119	0	-	0	-	11	11	0.0%
LV CATL CSO	0	0.24	-100.0%	2.41	-100.0%	9	1	630.3%
CASH-SETTLED CHEESE	637	305.52	108.4%	813.23	-21.7%	448	355	26.0%

## CME Exchange ADV Report - Monthly

November 2017

Page 6 of 6

	ADV NOV 2017	ADV NOV 2016	% CHG	ADV OCT 2017	% CHG	ADV Y.T.D 2017	ADV Y.T.D 2016	% CHG
<b>Foreign Exchange Futures</b>								
CHILEAN PESO	181	0	-	158.32	14.3%	133	0	306529.6%
<b>Foreign Exchange Options</b>								
OTC AUDUSD SUB	30	0	-	0	-	3	0	-
<b>TOTAL FUTURES GROUP</b>								
Interest Rate Futures	2,362,105	4,037,869.62	-41.5%	2,373,455.23	-0.5%	2,567,402	2,567,756	0.0%
Equity Index Futures	1,832,296	2,186,572.24	-16.2%	1,509,635.41	21.4%	1,844,717	2,268,323	-18.7%
FX Futures	831,291	897,547.24	-7.4%	806,876.36	3.0%	832,086	777,697	7.0%
Commodities and Alternative Invest	141,066	117,659.38	19.9%	119,418.64	18.1%	132,505	104,763	26.5%
Foreign Exchange Futures	181	0	-	158.32	14.3%	133	0	306529.6%
<b>TOTAL FUTURES</b>	<b>5,166,938</b>	<b>7,239,648.48</b>	<b>-28.6%</b>	<b>4,809,543.96</b>	<b>7.4%</b>	<b>5,376,842.35</b>	<b>5,718,538.93</b>	<b>-6.0%</b>
<b>TOTAL OPTIONS GROUP</b>								
Interest Rate Options	1,348,618	1,786,494.81	-24.5%	1,510,052	-10.7%	1,388,762	1,219,779	13.9%
Equity Index Options	757,149	802,528.19	-5.7%	627,707.59	20.6%	673,500	635,101	6.0%
FX Options	83,372	84,404.81	-1.2%	80,627.05	3.4%	79,114	72,837	8.6%
Commodities and Alternative Invest	27,058	23,269.29	16.3%	28,958.36	-6.6%	26,692	29,116	-8.3%
Foreign Exchange Options	30	0	-	0	-	3	0	-
<b>TOTAL OPTIONS</b>	<b>2,216,226</b>	<b>2,696,697.1</b>	<b>-17.8%</b>	<b>2,247,345</b>	<b>-1.4%</b>	<b>2,168,069.94</b>	<b>1,956,832.64</b>	<b>10.8%</b>
<b>TOTAL COMBINED</b>								
Interest Rate	3,710,723	5,824,364.43	-36.3%	3,883,507.23	-4.4%	3,956,164	3,787,534	4.5%
Equity Index	2,589,444	2,989,100.43	-13.4%	2,137,343	21.2%	2,518,216	2,903,424	-13.3%
FX	914,663	981,952.05	-6.9%	887,503.41	3.1%	911,200	850,534	7.1%
Commodities and Alternative Invest	168,123	140,928.67	19.3%	148,377	13.3%	159,197	133,879	18.9%
Foreign Exchange	211	0	-	158.32	33.4%	136	0	312868.1%
<b>GRAND TOTAL</b>	<b>7,383,165</b>	<b>9,936,345.57</b>	<b>-25.7%</b>	<b>7,056,888.96</b>	<b>4.6%</b>	<b>7,544,912.29</b>	<b>7,675,371.56</b>	<b>-1.7%</b>