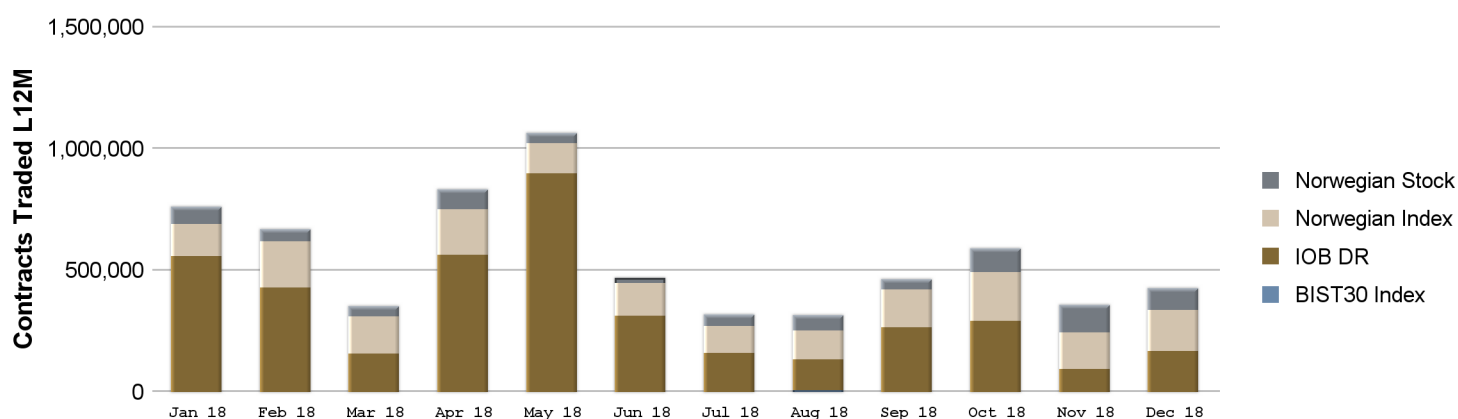


## Activity Summary - By Product Category

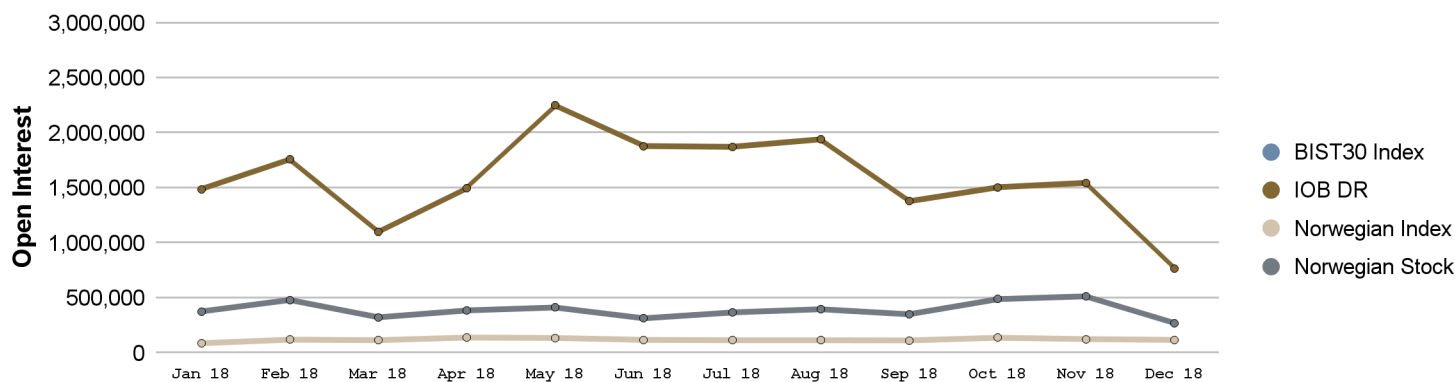
Product Category	December 2018		2018 YTD		2017 YTD		Open Interest as at 31 Dec 2018
	Volume	Notional (\$m)	Volume	Notional (\$m)	Volume	Notional (\$m)	
IOB DR Futures	66,225 +371%	\$58.0 +227%	826,154 +13%	\$1,021.1 +30%	728,935	\$786.3	137,605
Norwegian Index Futures	127,534 -1%	\$1,249.8 -6%	1,526,902 +13%	\$15,548.4 +43%	1,350,028	\$10,903.7	46,471
BIST30 Index Futures			40 -52%	\$0.1 -61%	84	\$0.3	
Norwegian Stock Futures					174,010	\$21.9	67,315
<b>Total Futures</b>	<b>193,759</b> +36%	<b>\$1,307.7</b> -3%	<b>2,353,096</b> +4%	<b>\$16,569.6</b> +41%	<b>2,253,057</b>	<b>\$11,712.1</b>	<b>251,391</b>
IOB DR Options	94,218 +30%	\$77.7 -41%	3,128,672 +10%	\$4,468.2 +31%	2,834,675	\$3,408.5	628,157
Norwegian Stock Options	89,647 -22%	\$167.5 -10%	762,586 -34%	\$1,430.9 -8%	1,163,223	\$1,555.2	202,990
Norwegian Index Options	42,559 +98%	\$416.6 +87%	301,284 +14%	\$2,996.2 +43%	263,982	\$2,095.4	72,563
BIST30 Index Options					6	\$0.0	
<b>Total Options</b>	<b>226,424</b> +8%	<b>\$661.7</b> +23%	<b>4,192,542</b> -2%	<b>\$8,895.3</b> +26%	<b>4,261,886</b>	<b>\$7,059.2</b>	<b>903,710</b>
<b>Total Derivatives</b>	<b>420,183</b> +20%	<b>\$1,969.4</b> +4%	<b>6,545,638</b> +0%	<b>\$25,464.9</b> +36%	<b>6,514,943</b>	<b>\$18,771.3</b>	<b>1,155,101</b>

All statistics include both on & off book trading. The open interest data for Norwegian products includes both LSEDM & Oslo Børs. Percentages reflect changes compared to prior period.

## Volume & Open Interest Evolution: Last 12 Months



# LSEDM Monthly Statistics Report: December 2018



## Activity Summary - Top 10 LSEDM Instruments by Notional (\$M)

Issuer Name	December 2018				2018 YTD			
	Volume	% Change (MoM)	Notional (\$m)	% Change (MoM)	Volume	% Changes (YoY)	Notional (\$m)	% Changes (YoY)
ROSNEFT OIL CO	118,900	+289%	\$73,759,000.00	+282%	734,303	+96%	\$454,840,597.64	+113%
YARA INTL	11,720	+41%	\$51,563,767.33	+35%	95,439	+58%	\$443,421,302.69	+79%
EQUINOR	19,241	+105%	\$47,849,156.08	+93%	101,854	-50%	\$262,287,649.14	-31%
SBERBANK	29,210	+421%	\$33,581,060.00	+381%	990,362	+19%	\$1,566,702,330.02	+42%
DNB ASA	10,386	+81%	\$19,835,914.67	+76%	39,538	-53%	\$77,771,811.64	-49%
PJSC LUKOIL	2,326	-66%	\$17,600,000.00	-64%	209,229	-8%	\$1,378,752,524.16	+15%
SUBSEA	11,275	-68%	\$12,460,992.31	-71%	72,126	+70%	\$91,149,184.71	+53%
NORILSK NICKEL	3,557	-89%	\$7,398,800.00	-88%	609,727	+43%	\$1,062,317,779.14	+53%
NORDIC SEMICON	15,950	+1,923%	\$6,378,825.33	+1,420%	23,407	+446%	\$11,044,414.46	+462%
MOWI ASA	2,205	+31%	\$5,506,704.79	+27%	32,291	-59%	\$71,335,379.25	-49%

All statistics include both on & off book trading. 'MoM' stands for Month-on-month and 'YoY' stands for Year-on-year

## LSEDM Trading Statistics by Underlying

Underlying Issuer Name	Underlying	Instrument Type	Number of Contracts Traded			Notional Traded (\$)			Open Interest as at 31 Dec 2018
			Dec 18	Nov 18	% Change	Dec 18	Nov 18	% Change	
AKERBP	AKERBP	Futures							1,045
AKERBP	AKERBP	Options	762	1,677	-55%	\$2,321,978	\$5,616,945	-59%	5,434
AKER SOLUTIONS	AKSO	Futures							1,125
AKER SOLUTIONS	AKSO	Options	2,960	5,677	-48%	\$1,635,832	\$3,492,887	-53%	1,093
BAKKAFROST	BAKKA	Options	681	1,531	-56%	\$3,992,507	\$8,778,082	-55%	1,303
DNB ASA	DNB	Futures							310
DNB ASA	DNB	Options	10,386	5,751	+81%	\$19,835,915	\$11,272,788	+76%	7,120
DNO INTL	DNO	Futures							5,300
DNO INTL	DNO	Options	800	1,235	-35%	\$164,150	\$237,921	-31%	5,610
EQUINOR	EQNR	Futures							2,840
EQUINOR	EQNR	Options	19,241	9,403	+105%	\$47,849,156	\$24,774,793	+93%	20,545
FRONTLINE	FRO	Futures							1,700
FRONTLINE	FRO	Options	745	2,031	-63%	\$529,656	\$1,451,740	-64%	4,240
GAZPROM	OGZD	Futures	862		+100%	\$399,968		+100%	66,666
GAZPROM	OGZD	Options	5,388	11,938	-55%	\$2,424,600	\$6,132,160	-60%	232,880
GJENSIDIGE F	GJF	Futures							816
GJENSIDIGE F	GJF	Options	323	565	-43%	\$548,855	\$974,760	-44%	4,031
JSC VTB BANK	VTBR	Options							25,500
MOWI ASA	MHG	Options	2,130	1,687	+26%	\$5,341,272	\$4,340,184	+23%	
MOWI ASA	MOWI	Options	75		+100%	\$165,433		+100%	
NORDIC SEMICON	NOD	Futures							10,950
NORDIC SEMICON	NOD	Options	15,950	789	+1,923%	\$6,378,825	\$419,618	+1,420%	18,090

## LSEDM Trading Statistics by Underlying

Underlying Issuer Name	Underlying	Instrument Type	Number of Contracts Traded			Notional Traded (\$)			Open Interest as at 31 Dec 2018
			Dec 18	Nov 18	% Change	Dec 18	Nov 18	% Change	
NORILSK NICKEL	MNOD	Futures	330	5,347	-94%	\$661,650	\$10,225,340	-94%	2,052
NORILSK NICKEL	MNOD	Options	3,227	25,868	-88%	\$6,737,150	\$50,883,200	-87%	28,958
NORSK HYDRO	NHY	Futures							9,170
NORSK HYDRO	NHY	Options	2,194	13,341	-84%	\$1,121,889	\$6,993,679	-84%	81,780
NORWEGIAN AIR	NAS	Futures							1,475
NORWEGIAN AIR	NAS	Options	1,555	1,646	-6%	\$4,941,583	\$5,280,602	-6%	1,223
NORWEGIAN FIN	NOFI	Futures							462
NORWEGIAN FIN	NOFI	Options	50	530	-91%	\$46,992	\$471,850	-90%	1,890
OA0 NOVATEK	NVTK	Options		350			\$5,575,000		750
OBX INDEX	OBX	Futures	127,534	128,654	-1%	\$1,249,762,200	\$1,335,783,621	-6%	46,471
OBX INDEX	OBX	Options	42,559	21,468	+98%	\$416,566,374	\$222,210,549	+87%	72,563
ORKLA A	ORK	Futures							50
ORKLA A	ORK	Options	405	295	+38%	\$357,846	\$273,763	+31%	526
PETROLEUM GEO	PGS	Futures							670
PETROLEUM GEO	PGS	Options	2,523	1,880	+34%	\$393,766	\$441,080	-11%	6,250
PJSC LUKOIL	LKOD	Futures	323	241	+34%	\$2,457,000	\$1,756,895	+40%	959
PJSC LUKOIL	LKOD	Options	2,003	6,505	-69%	\$15,143,000	\$46,717,400	-68%	6,113
PJSC MAGNIT	MGNT	Options		187			\$308,200		525
PJSC TATNEFT	ATAD	Options		40			\$267,000		40
RENEWABLE ENER	REC	Futures							18,500
RENEWABLE ENER	REC	Options							1,200
ROSNEFT OIL CO	ROSN	Futures	36,900	7,780	+374%	\$22,509,000	\$4,924,740	+357%	37,624
ROSNEFT OIL CO	ROSN	Options	82,000	22,820	+259%	\$51,250,000	\$14,404,500	+256%	117,845

## LSEDM Trading Statistics by Underlying

Underlying Issuer Name	Underlying	Instrument Type	Number of Contracts Traded			Notional Traded (\$)			Open Interest as at 31 Dec 2018
			Dec 18	Nov 18	% Change	Dec 18	Nov 18	% Change	
SAMSUNG ELECTR	SMSN	Options		11			\$109,600		
SBERBANK	SBER	Futures	27,810	680	+3,990%	\$31,941,060	\$841,840	+3,694%	30,304
SBERBANK	SBER	Options	1,400	4,930	-72%	\$1,640,000	\$6,136,000	-73%	215,026
SCHIBSTED A	SCHA	Options	113	103	+10%	\$410,954	\$400,718	+3%	125
STOREBRAND	STB	Futures							10,950
STOREBRAND	STB	Options	4,528	17,329	-74%	\$4,187,523	\$16,046,509	-74%	1,913
SUBSEA	SUBC	Futures							1,259
SUBSEA	SUBC	Options	11,275	34,928	-68%	\$12,460,992	\$42,327,759	-71%	19,927
TELENOR ASA	TEL	Futures							28
TELENOR ASA	TEL	Options	798	4,715	-83%	\$1,753,024	\$10,031,062	-83%	7,271
TGS NOPEC GEOP	TGS	Futures							40
TGS NOPEC GEOP	TGS	Options	438	1,271	-66%	\$1,484,750	\$4,515,694	-67%	4,179
X5 RETAIL	FIVE	Options	200		+100%	\$470,000		+100%	520
YARA INTL	YAR	Futures							625
YARA INTL	YAR	Options	11,720	8,311	+41%	\$51,563,767	\$38,185,985	+35%	9,240
<b>Grand Total</b>			<b>420,183</b>	<b>351,509</b>	<b>+20%</b>	<b>\$1,969,448,670</b>	<b>\$1,892,604,465</b>	<b>+4%</b>	<b>1,155,101</b>