Second   Column   C	Name	Ticker	Bloomberg	Unde	rlying	Exchange	Premiun Style <sup>8</sup>		Contract Size	Tick Size Ti	ick Value	Tradi	ing Hours (Ex	change)	Time Zone	Settle Style	Rule of Exercise	Daily Exercise Cutoff <sup>1</sup>	Expiry Time <sup>2</sup>	Settle Price on Bloomberg	Settlement Price
Second   Column   C				Deliverable	е Туре							Open	Close Ope	n Close							
Second Content of the Content of t	Metals:																				
Figure   Sign	Gold	OG	GC	GC	Future	COMEX	Full	USD	1 Future	0.1	10	18:00	17:00		EST	Physical	American	15:30	13:30	GC	Expiry time from underlying future
Page	Gold Weekly	OG1-OG5	XGC	GC	Future	COMEX	Full	USD	1 Future	0.1	10	18:00	17:00		EST	Physical	American	15:30	13:30	XGC	Expiry time from underlying future
The state of the control of the cont	Silver	SO	SI	SI	Future	COMEX	Full	USD	1 Future	0.1	5	18:00	17:00		EST	Physical	American	15:30	13:25	SI	Expiry time from underlying future
March   Color   Colo	Copper	HX	HG	HG	Future	COMEX	Full	USD	1 Future	0.05	12.5	18:00	17:00		EST	Physical	American	15:30	13:00	HG	Expiry time from underlying future
Jeff Sweet Clus Pool   10	Platinum	PO	PL	PL	Future	NYMEX	Full	USD	1 Future	0.1	5	18:00	17:00		EST	Physical	American	15:30	13:05	PL	Expiry time from underlying future
February   19   19   19   19   19   19   19   1	Energy:																				
Marcher (Lasso   O. N. No.	-															, ,					· ·
Ny Hashou LISO 61 10 10 10 10 10 10 10 10 10 10 10 10 10	,																American				Expiry time from underlying future
1808   1808   1808   1808   1808   1809	Natural Gas	ON	NG	NG	Future	NYMEX			1 Future						EST	Physical	American	16:30			Expiry time from underlying future
Perform   Column	NY Harbor ULSD	OH	НО		Future	NYMEX	Full		1 Future	0.01	4.2	18:00	17:00		EST	Physical	American	16:30	14:30	НО	Expiry time from underlying future
Tributes  Option 1	RBOB Gasoline	ОВ	XB	RB	Future	NYMEX	Full	USD	1 Future	0.01	4.2	18:00	17:00		EST	Physical	American	16:30	14:30	XB	Expiry time from underlying future
Separation   Color   Color   Full   Color   Full   USD   1 Future   0.005   Color   1 Full   USD   1 Future   0.005   Color   0 Full   USD   1 Future   0 Full   USD   1 Fut	Brent Crude	OLCO	СО	LCO	Future	ICE	Futures	USD	1 Future	0.01	10.0	01:00	23:00		BST	Physical	American	20:00	19:30	COY	COY Comdty after 6 AM CET @ EXP+1
Sephen Meles   Ozio   Ozio   Ozio   Ozio   Ozio   Sephen Meles   Ozio	<u>Grains:</u>																				
Second   Composition   Compo	Soybean		-								6.25					,					
Company   Comp	•				Future						3										Expiry time from underlying future
Meat   Ozw   W   Zw   Futur   CRG   Full   USD   1. Future   0.125   0.25   1. Future   0.125   1. Futur	Soybean Meal		SM		Future				1 Future		5					, ,	American				Expiry time from underlying future
Willing Wheet   BaM	Corn	OZC	С	ZC	Future				1 Future							, ,	American	17:00	13:15	С	Expiry time from underlying future
Separation   Figure	Wheat	OZW	W	ZW	Future	CBOT	Full	USD	1 Future	0.125	6.25	19:00	07:45 08:3	30 13:15	CST CST	Physical	American	17:00	13:15	W	Expiry time from underlying future
Make (COM)  OMA  OR  OK  OK  OK  OK  OK  OK  OK  OK  OK	Milling Wheat	OBM	CA	EBM	Future	EUR_PAR1	Full	EUR	1 Future	0.1	5	10:45	18:30		CET	,	American	16:00	18:30	CA	Expiry time from underlying future
Red Wheat of the W	Rapeseed	ECO	IJ	ECO	Future	EUR_PAR1	Full	EUR	1 Future	0.1	5	10:45	18:30		CET	Physical	American	18:00	18:30	IJ	Expiry time from underlying future
Medists   Live Cattle	Maize (Corn)	OMA	EP	EMA	Future	EUR_PAR1	Full	EUR	1 Future	0.1	5	10:45	18:30		CET	Physical	American	19:15	18:30	EP	Expiry time from underlying future
Figure   F	Feed Wheat	OT	QK	Т	Future	ICE_SOFT	Futures	GBP	1 Future	0.05	5	09:25	17:28		BST	Physical	American	17:00	18:30	QK	Expiry time from underlying future
Real Hogs   HE   LH   HE   Future   CME   Full   USD   1 Future   0.00025   10   0.830   13:05   CST   Physical   American   13:15   12:00   LH <sup>33</sup>   Expirytime from underlying future   CED   Consistency   Cons	Meats:																				
Exprise from underlying future of the following future											5										· ·
Confige NY   OKC   KC   KC   Future   CE_NYBOT   Full   USD   1 Future   O.01   3.75   O.15   1.330   C.   EST   Physical   American   13:00   13:30   KC   Expiry time from underlying future   Confige NY #11   OSB   SB   SB   Future   CE_NYBOT   Full   USD   1 Future   O.01   1.02   0.330   13:00   EST   Physical   American   13:00   13:30   KC   Expiry time from underlying future   Confige NY #11   Confige NY #11   Confige NY #11   CONFIGE NY #11   USD   1 Future   O.05   T.50   T.50   O.05   T.50   O.05   T.50   O.05   T.50   O.05   T.50	Lean Hogs	HE	LH	HE	Future	CME	Full	USD	1 Future	0.00025	10	08:30	13:05		CST	Physical	American	13:15	12:00	LH <sub>13</sub>	Expiry time from underlying future
Second N	Softs:																				
Cocoa NY   OCC   CC   Future   CE_NYBOT   Future   LOS   1 Future   LOS					Future	_			1 Future							,	American				· ·
Parage Juice   OOJ   JO   OJ   Future   CE_NYBOT   Full   USD   1 Future   O.05   7.50   0.80   14:00   14:00   14:00   15:01   14:00   14:0	Sugar NY #11				Future	_			1 Future								American				Expiry time from underlying future
Cotton No. 2 OCT CT CT Future ICE_NYBOT Full USD 1 Future 0.01 5.00 14:20	Cocoa NY	OCC	CC	CC	Future	ICE_NYBOT			1 Future							Physical	American	13:00			Expiry time from underlying future
Figure   Coron   Figure   Figure   Coron   Figure   Figure   Coron   Figure	Orange Juice	OOI	JO	OJ	Future	ICE_NYBOT	Full		1 Future	0.05	7.50	08:00	14:00		EST	Physical	American	13:30	14:00	JO	Expiry time from underlying future
Coco A No. 401   C   QC   C   Future   CE_SOFT   Future   CE_SOFT   Future   CE_SOFT   Future   USD   1 Future   0.05   2.50   0.845   18:00   C   BST   Physical   American   17:00   12:00   QC   Expiry time from underlying future   CE_SOFT   Future   CE_SOFT   Future   USD   1 Future   0.05   2.50   0.845   18:00   C   BST   Physical   American   17:00   12:00   QC   Expiry time from underlying future   CE_SOFT   Future   CE_SOFT   Future   USD   1 Future   0.05   2.50   0.845   18:00   C   CST   Physical   American   17:00   18:00   QW   Expiry time from underlying future   CE_SOFT   Future	Cotton No. 2	OCT	CT	CT	Future	ICE_NYBOT	Full		1 Future	0.01	5.00				EST	Physical	American	14:00	14:20	CT	Expiry time from underlying future
Explicitly Mither by QW W Future   CE_SOFT   Future   USD   1 Future   USD	Coffee (Robusta)					_			1 Future							, ,	American				Expiry time from underlying future
Equity Indices:  E-mini S&P 500  ES  ES  ES  ES  Future  CME  Full  USD  1 Future  0.05  2.5  17:00  15:15  17:00	Cocoa No. 401	С	QC	С	Future	ICE_SOFT	Futures	GBP	1 Future	1.00	10.00	09:30	16:55		BST	Physical	American	17:00	12:00	QC	Expiry time from underlying future
Es ES ES Future CME Full USD 1 Future 0.05 2.5 17:00 15:15 15:30 16:00 CST Physical European 15:00 ESF Index Weighted avg of last 30 seconds E-mini S&P 500 Wed W E1C-ESC IEW ES Future CME Full USD 1 Future 0.05 2.5 17:00 15:15 15:30 16:00 CST Physical European 15:00 ESF Index Weighted avg of last 30 seconds E-mini S&P 500 Wod W E1A-ESA IWWW ES Future CME Full USD 1 Future 0.05 2.5 17:00 15:15 15:30 16:00 CST Physical European 15:00 ESF Index Weighted avg of last 30 seconds E-mini S&P 500 Wod W E1A-ESA IWWW ES Future CME Full USD 1 Future 0.05 2.5 17:00 15:15 15:30 16:00 CST Physical European 15:00 ESF Index Weighted avg of last 30 seconds E-mini Nasdaq NQ NQ Future CME Full USD 1 Future 0.05 1 17:00 15:15 15:30 16:00 CST Physical European 15:00 ESF Index Weighted avg of last 30 seconds E-mini Nasdaq EOM QNE QNA NQ Future CME Full USD 1 Future 0.05 1 17:00 15:15 15:30 16:00 CST Physical European 15:00 ESF Index Weighted avg of last 30 seconds Physical European 15:00 ESF Index Weighted avg of last 30 seconds Physical European 15:00 ESF Index Weighted avg of last 30 seconds Physical European 15:00 ESF Index Weighted avg of last 30 seconds Physical European 15:00 ESF Index Weighted avg of last 30 seconds Physical European 15:00 ESF Index Weighted avg of last 30 seconds Physical European 15:00 ESF Index Weighted avg of last 30 seconds Physical European 15:00 ESF Index Weighted avg of last 30 seconds Physical European 15:00 ESF Index Weighted avg of last 30 seconds Physical European 15:00 ESF Index Weighted avg of last 30 seconds Physical European 15:00 ESF Index Weighted avg of last 30 seconds Physical European 15:00 ESF Index Weighted avg of last 30 seconds Physical European 15:00 ESF Index Weighted avg of last 30 seconds Physical European 15:00 ESF Index Weighted avg of last 30 seconds Physical European 15:00 ESF Index Weighted avg of last 30 seconds Physical European 15:00 ESF Index Weighted avg of last 30 seconds Physical European 15:00 ESF Index	Sugar (White)	W	QW	W	Future	ICE_SOFT	Futures	USD	1 Future	0.05	2.50	08:45	18:00		BST	Physical	American	17:00	18:00	QW	Expiry time from underlying future
E-mini S&P 500 EOM	Equity Indices:															_					
E-mini S&P 500 Weekly ESW1-4 1E-4E ES Future CME Full USD 1 Future 0.05 2.5 17:00 15:15 15:30 16:00 CST Physical European 15:00 ESF Index Weighted avg of last 30 seconds  E-mini S&P 500 Weekly ESW1-4 1E-4E ES Future CME Full USD 1 Future 0.05 2.5 17:00 15:15 15:30 16:00 CST Physical European 15:00 ESF Index Weighted avg of last 30 seconds  E-mini S&P 500 Weekly ESW1-4 1E-4E ES Future CME Full USD 1 Future 0.05 2.5 17:00 15:15 15:30 16:00 CST Physical European 15:00 ESF Index Weighted avg of last 30 seconds  E-mini Nasdaq NQ NQ NQ Future CME Full USD 1 Future 0.05 1 17:00 15:15 15:30 16:00 CST Physical European 15:00 ESF Index Weighted avg of last 30 seconds  E-mini Nasdaq EOM QNE QNA NQ Future CME Full USD 1 Future 0.05 1 17:00 15:15 15:30 16:00 CST Physical European 15:00 ESF Index Weighted avg of last 30 seconds  E-mini Nasdaq Weekly QN1-4 10-40 NQ Future CME Full USD 1 Future 0.05 1 17:00 15:15 15:30 16:00 CST Physical European 15:00 ESF Index Weighted avg of last 30 seconds  E-mini Nasdaq Weekly QN1-4 10-40 NQ Future CME Full USD 1 Future 0.05 1 17:00 15:15 15:30 16:00 CST Physical European 15:00 ESF Index Weighted avg of last 30 seconds  E-mini Nasdaq Weekly QN1-4 10-40 NQ Future CME Full USD 1 Future 0.05 1 17:00 15:15 15:30 16:00 CST Physical European 15:00 ESF Index Weighted avg of last 30 seconds  E-mini Russell 2000 RTO RTY RTY Future CME Full USD 1 Future 0.05 1 17:00 15:15 15:30 16:00 CST Physical European 15:00 NQF Index Weighted avg of last 30 seconds  E-mini Dow YM DM YM Future CME Full USD 1 Future 0.05 1 17:00 15:15 15:30 16:00 CST Physical European 15:00 NQF Index Weighted avg of last 30 seconds  E-mini Russell 2000 RTO RTY RTY Future CME Full USD 1 Future 0.05 1 17:00 15:15 15:30 16:00 CST Physical European 15:00 NQF Index Weighted avg of last 30 seconds  E-mini Nasdaq Weekly Physical European 15:00 NQF Index Weighted avg of last 30 seconds  E-mini Nasdaq Weekly Physical European 15:00 NQF Index Weighted avg of last 30 seconds  E-mini Nasdaq Weekly Physi	E-mini S&P 500				Future				1 Future			17.00					American	17:00			•
E-mini S&P 500 Wed W	E-mini S&P 500 EOM																				
E-mini S&P 500 Mon W E1A-E5A IWWW ES Future CME Full USD 1 Future 0.05 2.5 17:00 15:15 15:30 16:00 CST Physical European 15:00 ESF Index Weighted avg of last 30 seconds	E-mini S&P 500 Weekly	ESW1-4	1E-4E		Future				1 Future							, ,	European		15:00	ESF Index	
E-mini Nasdaq NQ NQ NQ Future CME Full USD 1 Future 0.05 1 17:00 15:15 15:30 16:00 CST Physical American 17:00 15:15 NQF Index Weighted avg of last 30 seconds  E-mini Nasdaq EOM QNE QNA NQ Future CME Full USD 1 Future 0.05 1 17:00 15:15 15:30 16:00 CST Physical European 15:00 NQF Index Weighted avg of last 30 seconds  E-mini Nasdaq Weekly QN1-4 10-40 NQ Future CME Full USD 1 Future 0.05 1 17:00 15:15 15:30 16:00 CST Physical European 15:00 NQF Index Weighted avg of last 30 seconds  E-mini Russell 2000 RTO RTY RTY Future CME Full USD 1 Future 0.05 1 17:00 15:15 15:30 16:00 CST Physical European 15:00 NQF Index Weighted avg of last 30 seconds  E-mini Dow YM DM YM Future CBOT Full USD 1 Future 1 5 17:00 15:15 15:30 16:00 CST Physical American 17:00 15:15 NQF Index Weighted avg of last 30 seconds  Find Nasdaq EMP NQ NQF Index Weighted avg of last 30 seconds  Find Nasdaq EMP NQ NQF Index Weighted avg of last 30 seconds  Find Nasdaq EMP NQ NQF Index Weighted avg of last 30 seconds  Find Nasdaq EMP NQ NQF Index Weighted avg of last 30 seconds  Find Nasdaq EMP NQ NQF Index Weighted avg of last 30 seconds  Find Nasdaq EMP NQ NQF Index Weighted avg of last 30 seconds  Find Nasdaq EMP NQ NQF Index Weighted avg of last 30 seconds  Find Nasdaq EMP NQ NQF Index NQF Index Weighted avg of last 30 seconds  Find Nasdaq EMP NQ NQF Index NQF Ind	E-mini S&P 500 Wed W	E1C-E5C	IEW	ES	Future	CME	Full	USD	1 Future	0.05		17:00	15:15 15:3	30 16:00	) CST	Physical	European		15:00	ESF Index	Weighted avg of last 30 seconds
E-mini Nasdaq EOM QNE QNA NQ Future CME Full USD 1 Future 0.05 1 17:00 15:15 15:30 16:00 CST Physical European 15:00 NQF Index Weighted avg of last 30 seconds  F-mini Nasdaq Weekly QN1-4 10-40 NQ Future CME Full USD 1 Future 0.05 1 17:00 15:15 15:30 16:00 CST Physical European 15:00 NQF Index Weighted avg of last 30 seconds  F-mini Russell 2000 RTO RTY RTY Future CME Full USD 1 Future 0.05 2.5 17:00 15:15 15:30 16:00 CST Physical European 15:00 NQF Index Weighted avg of last 30 seconds  F-mini Dow YM DM YM Future CBOT Full USD 1 Future 1 5 17:00 15:15 15:30 16:00 CST Physical American 17:00 15:15 RTY SOR for Quarterly and close of Underlying	E-mini S&P 500 Mon W	E1A-E5A	IWWW		Future		Full		1 Future		2.5					Physical	European				
E-mini Nasdaq Weekly QN1-4 10-40 NQ Future CME Full USD 1 Future 0.05 1 17:00 15:15 15:30 16:00 CST Physical European 15:00 NQF Index Weighted avg of last 30 seconds  F-mini Russell 2000 RTO RTY RTY Future CME Full USD 1 Future 0.05 2.5 17:00 15:15 15:30 16:00 CST Physical American 17:00 15:15 RTY SOR for Quarterly and close of Underlying  F-mini Dow YM DM YM Future CBOT Full USD 1 Future 1 5 17:00 15:15 15:30 16:00 CST Physical American 17:00 15:15 DM SOR for Quarterly and close of Underlying	E-mini Nasdaq	NQ	NQ		Future		Full	USD	1 Future	0.05	1	17:00	15:15 15:3	30 16:00	) CST	Physical <sup>3</sup>	American	17:00	15:15 <sup>4</sup>	NQ	SOR for Quarterly and close of Underlying
E-mini Russell 2000 RTO RTY RTY Future CME Full USD 1 Future 0.05 2.5 17:00 15:15 15:30 16:00 CST Physical American 17:00 15:15 RTY SOR for Quarterly and close of Underlying Physical American 17:00 15:15 DM SOR for Quarterly and close of Underlying Physical American 17:00 15:15 DM SOR for Quarterly and close of Underlying Physical American 17:00 15:15 DM SOR for Quarterly and close of Underlying Physical American 17:00 15:15 DM SOR for Quarterly and close of Underlying Physical American 17:00 15:15 DM SOR for Quarterly and close of Underlying Physical American 17:00 15:15 DM SOR for Quarterly and close of Underlying Physical American 17:00 15:15 DM SOR for Quarterly and close of Underlying Physical American 17:00 15:15 DM SOR for Quarterly and close of Underlying Physical American 17:00 15:15 DM SOR for Quarterly and close of Underlying Physical American 17:00 15:15 DM SOR for Quarterly and close of Underlying Physical American 17:00 15:15 DM SOR for Quarterly and close of Underlying Physical American 17:00 15:15 DM SOR for Quarterly and close of Underlying Physical American 17:00 15:15 DM SOR for Quarterly and close of Underlying Physical American 17:00 15:15 DM SOR for Quarterly and close of Underlying Physical American 17:00 15:15 DM SOR for Quarterly and close of Underlying Physical American 17:00 15:15 DM SOR for Quarterly and close of Underlying Physical American 17:00 15:15 DM SOR for Quarterly and close of Underlying Physical American 17:00 15:15 DM SOR for Quarterly and close of Underlying Physical American 17:00 15:15 DM SOR for Quarterly and close of Underlying Physical American 17:00 15:15 DM SOR for Quarterly and Close Of Underlying Physical American 17:00 15:15 DM SOR for Quarterly and Close Of Underlying Physical American 17:00 15:15 DM SOR for Quarterly and Close Of Underlying Physical American 17:00 15:15 DM SOR for Quarterly and Close Of Underlying Physical American 17:00 15:15 DM SOR for Quarterly and Close Of Underlying Physical American 17:00 15:15 DM SOR for Quarterly and Close Of Underlyi	E-mini Nasdaq EOM	QNE	QNA	NQ	Future	CME	Full	USD	1 Future	0.05	1	17:00	15:15 15:3	30 16:00	) CST	Physical	European		15:00	NQF Index	Weighted avg of last 30 seconds
E-mini Dow YM DM YM Future CBOT Full USD 1 Future 1 5 17:00 15:15 15:30 16:00 CST Physical <sup>3</sup> American 17:00 15:15 <sup>4</sup> DM SOR for Quarterly and close of Underlying	E-mini Nasdaq Weekly	QN1-4	10-40	NQ	Future	CME	Full	USD	1 Future	0.05	1			30 16:00	) CST	Physical	European		15:00	NQF Index	Weighted avg of last 30 seconds
111300	E-mini Russell 2000	RTO	RTY	RTY	Future	CME	Full	USD	1 Future	0.05	2.5	17:00	15:15 15:3	30 16:00	) CST	Physical	American	17:00	15:15 <sup>4</sup>	RTY	SOR for Quarterly and close of Underlying
&P500 Index SPX SPX Index OPRA Full USD 100 x Index 0.05 5 08:30 15:15 CST Cash European 15:15 <sup>9</sup> SPXSET Index Opening price of Index on LTD+1	E-mini Dow	YM	DM	YM	Future	CBOT	Full	USD	1 Future	1	5	17:00	15:15 15:3	30 16:00	CST	Physical <sup>3</sup>	American	17:00	15:15 <sup>4</sup>	DM	SOR for Quarterly and close of Underlying
	S&P500 Index	SPX	SPX	SPX	Index	OPRA	Full	USD	100 x Index	0.05	5	08:30	15:15		CST	Cash	European		15:15 <sup>9</sup>	SPXSET Index	Opening price of Index on LTD+1

Last Updated 27-09-2019 Page 1 of 4

News	Tistore	Blackhau	Under	dving	Fushers	Premiun	n S.	Combined Sir	Tial Circ	l. Vl	Tradi	ng House /Fee	change)	Time	Settle	Rule of	Daily Exercise	Expiry	Settle Price on	Call and Prince
Name	Ticker	Bloomberg	Officer	iyilig	Exchange	Style <sup>8</sup>	Ссу	Contract Size	TICK Size TIC	k value	II aui	iig nours (Exc	ciialigej	Zone	Style	Exercise	Cutoff <sup>1</sup>	Time <sup>2</sup>	Bloomberg	Settlement Price
			Deliverable	туре							Open	Close Ope	n Close				caton			
S&P500 Index Weekly	SPXW	SPXW	SPX	Index	OPRA	Full	USD	100 x Index	0.05	5	_	15:15	0.050	CST	Cash	European		15:00 <sup>10</sup>	SPX Index	Close of the Underlying Index
S&P 500 Mini Index	XSP	XSP	XSP	Index	OPRA	Full	USD	100 x Index	0.05	5	08:30	15:15		CST	Cash	European		15:00 <sup>10</sup>	XSP Index	Close of the Underlying Index
Dow Jones Index	DJX	DJX	DJX	Index	OPRA	Full	USD	100 x Index	0.05	5	08:30	15:15		CST	Cash	European		15:15 <sup>9</sup>	DJS Index	Opening price of Index on LTD+1
Nasdaq 100 Index	NDX	NDX	NDX	Index	OPRA	Full	USD	100 x Index	0.05	5	08:30	15:15		CST	Cash	European		15:15 <sup>9</sup>	NDS Index	Opening price of Index on LTD+1
Nasdaq 100 Index Weekly	NDXP	NDX	NDX	Index	OPRA	Full	USD	100 x Index	0.05	5	08:30	15:15		CST	Cash	European		15:15 <sup>9</sup>	NDS Index	Opening price of Index on LTD+1
Russell 2000 Index	RUT	RTY	RUT	Index	OPRA	Full	USD	100 x Index	0.05	5	08:30	15:15		CST	Cash	European		15:15 <sup>9</sup>	RLS Index	Opening price of Index on LTD+1
Russell 2000 Index Weekly	RUTW	RUW	RUT	Index	OPRA	Full	USD	100 x Index	0.05	5	08:30	15:15		CST	Cash	European			RLS Index	Close of the Underlying Index
VIX	VIX	VIX	VIX	Index	OPRA	Full	USD	100 x Index	0.05	5	08:30	15:15		CST	Cash	European		15:15 <sup>11</sup>	VRO Index	SOQ of VIX opening prices on LTD+1
VIX Weekly	VIXW	VIX	VIX	Index	OPRA	Full	USD	100 x Index	0.05	5	08:30	15:15		CST	Cash	European		15:15 <sup>11</sup>	VRO Index	SOQ of VIX opening prices on LTD+1
DAX	ODAX	DAX	DAX	Index	EUREX	Full	EUR	5 x Index	0.1	0.5	08:50	17:30		CET	Cash	European		13:00	DAXS Index	XETRA Intra-Day Auction at 13:00
DAX Weekly	ODX1-ODX5	WDAXA-E	DAX	Index	EUREX	Full	EUR	5 x Index	0.1	0.5	08:50	17:30		CET	Cash	European		13:00	DAXS Index	XETRA Intra-Day Auction at 13:00
MDAX	O2MX	MDAX	MDAX	Index	EUREX	Full	EUR	5 x Index	0.1	0.5	08:50	17:30		CET	Cash	European		13:00	MDAXS Index	XETRA Intra-Day Auction at 13:00
EURO STOXX 50	OESX	SX5E	STOXX50E	Index	EUREX	Full	EUR	10 x Index	0.1	1	08:50	17:30		CET	Cash	European		12:00	SX5E Index	Avgerage of Index from 11:50-12:00
EURO STOXX 50 Weekly	OES1-OES5	WSX5EA-E	STOXX50E	Index	EUREX	Full	EUR	10 x Index	0.1	1	08:50	17:30		CET	Cash	European		12:00	FSX5ES Index	Avgerage of Index from 11:50-12:00
EURO STOXX 50 DIV	OEXD	DED	DED	Index	EUREX	Full	EUR	10 x Index	0.1	1	08:50	17:30		CET	Cash	European		12:00	DEDA Index	Avgerage of Index from 11:50-12:00
Euro Stoxx Banks	OESB	SX7E	SX7E	Index	EUREX	Full	EUR	50 x Index	0.1	5	08:50	17:30		CET	Cash	European		12:00	FESBS Index	Avgerage of Index from 11:50-12:00
Stoxx Europe 600 Banks	OSTB	SXXP	SXXP	Index	EUREX	Full	EUR	50 x Index	0.1	5	08:50	17:30		CET	Cash	European		12:00	SXXP Index	Avgerage of Index from 11:50-12:00
VSTOXX Future	OVS2	FVS	FVS	Future	EUREX	Futures	EUR	100 x Index	0.05	5	08:50	17:30		CET	Physical	American	17:30	12:00	FVS1 Index	Avgerage of Index from 11:30-12:00
SMI	OSMI	SMI	SMI	Index	EUREX	Full	CHF	10 x Index	0.1	1	08:50	17:30		CET	Cash	European		17:20 <sup>9</sup>	SMISET Index	Opening price of the underlying index
SMI Mid	OSMM	S1	S1	Index	EUREX	Full	CHF	10 x Index	0.1	1	08:50	17:30		CET	Cash	European		17:20 <sup>9</sup>	SMIMSET Index	Opening price of the underlying index
CAC 40	PXA	CAC	CAC40	Index	EUR_PAR2	Full	EUR	10 x Index	0.1	1	09:00	17:30		CET	Cash	European		16:00	CACSET Index	Avg of Index from 15:40-16:00
CAC 40 Weekly	1PX-5PX	CAC	CAC40	Index	EUR_PAR2	Full	EUR	10 x Index	0.1	1	09:00	17:30		CET	Cash	European		16:00	CACSET Index	Avg of Index from 15:40-16:00
FTSE 100	ESX	UKX	FTSE100	Index	EUR_LIF	Full	GBP	10 x Index	0.5	5	08:02	16:30		BST	Cash	European		10:15	UKXSP Index	LSE EDSP intra-day auction
AEX	AEX	AEX	AEX	Index	EUR_AMS2	Full	EUR	100 x Index	0.05'12	5	09:01	17:30		CET	Cash	European		16:00	AEXSET Index	Avg of Index from 15:30-16:00
AEX Daily <sup>5</sup>	A01-A31	DAEX	AEX	Index	EUR_AMS2	Full	EUR	100 x Index	0.05'12	5	09:01	17:30		CET	Cash	European		16:00	AEXSET Index	Avg of Index from 15:30-16:00
AEX Weekly <sup>6</sup>	AX1-AX5	WAEXA-E	AEX	Index	EUR_AMS2	Full	EUR	100 x Index	0.05'12	5	09:01	17:30		CET	Cash	European		16:00	AEXSET Index	Avg of Index from 15:30-16:00
IBEX 35 Mini	IBX	ID	IB	Future	MEFF	Full	EUR	1 Future	1	1	09:00	17:35		CET	Cash	European		16:45	IDA Index	Avg of index between 16:15 and 16:45
FTSE MIB	MIBO	FTSEMIB	SPMIB.I	Index	IDEM	Full	EUR	2.5 x Index	1	2.5	09:00	17:50		CET	Cash	European		09:05	N/A	Opening price of the underlying index
FTSE MIB Weekly	MIBW1-5	FMIBA-E	SPMIB.I	Index	IDEM	Full	EUR	2.5 x Index	1	2.5	09:00	17:50		CET	Cash	European		09:05	N/A	Opening price of the underlying index
OMXS30	OMXSWE30	OMX	OMX	Index	SSE	Full	SEK	100 x Index	0.01	1	09:00	17:25		CET	Cash	European		17:25	OMX Index	N/A
OBX	OBX	OBX	OBX	Index	OSE	Full	NOK	100 x Index	0.05	5	09:00	16:20		CET	Cash	European		16:20	N/A	N/A
OMXH25	OFOX	HEX25	HEX25	Index	EUREX	Full	EUR	10 x Index	0.1	1	08:50	17:30 19:1	15 02:00	CET	Cash	European		17:30	OMXH25EX Index	VWAP of 08:40 until 17:30 CET.
S&P ASX 200	XJO	AS51	ASXSP200	Index	ASX	Full	AUD	10 x Index	0.1	1	09:50	17:00		AEST	Cash	European		12:00	OPIC200 Index	Opening price of the underlying index
Hang Seng Index	HSI	HSI	HSI	Index	HKEX	Futures	HKD	50 x Index	1	50	09:15	12:00 13:0	0 16:30	HKT	Cash	European		16:00	HSIEAS Index	Avg open/close 5 min int. & close price
Mini Hang Seng Index	МНІ	MHSI	MHSI	Index	HKEX	Full	HKD	10 x Index	1	10	09:15	12:00 13:0	0 16:30	HKT	Cash	European		16:00	HSIEAS Index	Avg open/close 5 min int. & close price
HS China Enterprice	нні	HSCEI	HSCEI	Index	HKEX	Futures	HKD	50 x Index	1	50	09:15	12:00 13:0	0 16:30	HKT	Cash	European		16:00	HSCEIEAS Index	Avg open/close 5 min int. & close price
Mini HS China Enterprise	MCH	MHC	MHC	Index	HKEX	Futures	HKD	10 x Index	1	10	09:15	12:00 13:0	0 16:30	HKT	Cash	European		16:00	HSCEIEAS Index	Avg open/close 5 min int. & close price
Nikkei 225	NKY	NKY	NKY	Index	OSA	Full	JPY	1000 x Index	1	1,000	08:45	15:15 16:3	0 05:30	JST	Cash	European		15:15	NKYSQ Index	Opening price of Index on LTD+1
Single Stock Options:																				
US				Stock	OPRA	Full	USD	100	0.01		08:30	16:00		EST	Physical	American	16:30	16:00	N/A	Expiry time from underlying future
Germany				Stock	EUREX	Full	EUR	100	0.01		09:00	17:30		CET	Physical	American	18:00	17:30	N/A	Expiry time from underlying future
Amsterdam				Stock	EUR_AMS2	Full	EUR	10 or 100	0.01		09:00	17:30		CET	Physical	American	18:00	17:30	N/A	Expiry time from underlying future
Swiss				Stock	EUREX	Full	CHF	100/10/1	0.01		09:00	17:30		CET	Physical	American	18:00	17:30	N/A	Expiry time from underlying future
France				Stock	EUR_PAR2	Full	EUR	100	0.01		09:00	17:30		CET	Physical	American	18:00	17:30	N/A	Expiry time from underlying future
UK				Stock	ICE_LIF	Full	GBP	1000	0.25		08:00	16:30		BST	Physical	American	18:00	16:30	N/A	Expiry time from underlying future
Hong Kong				Stock	HKEX	Full	HKD	Varies	0.01		09:30	12:00 13:0	0 16:00	HKT	Physical	American	17:00	16:00	N/A	Expiry time from underlying future

Last Updated 27-09-2019 Page 2 of 4

Name	Ticker	Bloomberg	Under	lying	Exchange	Premium Style <sup>8</sup>	Ccy	Contract Size	Tick Size	Tick Value	Tradi	ing Hours	s (Exchange)	Time Zone		Rule of Exercise	Daily Exercise Cutoff <sup>1</sup>	Expiry Time <sup>2</sup>	Settle Price on Bloomberg	Settlement Price
			Deliverable	Туре							Open	Close	Open Close							
<u>`urrencies:</u>																				
UR/USD 2pm	EUU	EC	EC	Future	CME	Full	USD	1 Future	0.0001	12.5	17:00	16:00		CST	Physical	European	17:00	14:00		Expiry time from underlying future
UR/USD Weekly 2pm	1EU-5EU	1XA-5XA	EC	Future	CME	Full	USD	1 Future	0.0001	12.5	17:00	16:00		CST	Physical	European	17:00	14:00		Expiry time from underlying future
GBP/USD	GBU	BP	BP	Future	CME	Full	USD	1 Future	0.0001	6.25	17:00	16:00		CST	Physical	European	17:00	14:00		Expiry time from underlying future
BP/USD Weekly 2pm	1BP-5BP	BGW	BP	Future	CME	Full	USD	1 Future	0.0001	6.25	17:00	16:00		CST	Physical	European	17:00	14:00		Expiry time from underlying future
HF/USD	CHU	SF	SF	Future	CME	Full	USD	1 Future	0.0001	12.5	17:00	16:00		CST	Physical	European	17:00	14:00		Expiry time from underlying future
UR / GBP	RP	RP	RP	Future	CME	FUII	USD	1 Future	0.00005	6.25	17:00	16:00		CST	Physical	European	17:00	14:00		Expiry time from underlying future
AD/USD	CAU	CD	CD	Future	CME	Full	USD	1 Future	0.0001	10.0	17:00	16:00		CST	Physical	European	17:00	14:00		Expiry time from underlying future
AD/USD Weekly 2pm	1CD-5CD	1CA-5CA	CD	Future	CME	Full	USD	1 Future	0.0001	10.0	17:00	16:00		CST	Physical	European	17:00	14:00		Expiry time from underlying future
UD/USD	ADU	AD	AD	Future	CME	Full	USD	1 Future	0.0001	10.0	17:00	16:00		CST	Physical	European	17:00	14:00		Expiry time from underlying future
UD/USD Weekly 2pm	1AD-5AD	1AA-5AA	AD	Future	CME	Full	USD	1 Future	0.00005	5.0	17:00	16:00		CST	Physical	European	17:00	14:00		Expiry time from underlying future
PY/USD	JPU	JY	JY	Future	0.11.2	Full	USD	1 Future	0.000001	12.5	17:00			CST	Physical	European	17:00	14:00		Expiry time from underlying future
PY/USD Weekly 2pm	1JY-5JY	JADW	JY	Future	CME	Full	USD	1 Future	0.000001	12.5	17:00	16:00		CST	Physical	European	17:00	14:00		Expiry time from underlying future
onds:																				
IS 2yr T-note (6%)	OZT	TU	ZT	Future	CME	Full	USD	1 Future	1/128	15.625	17:00	16:00		CST	Physical	American	17:00	16:00	TU	Close of the Underlying Future
S 5yr T-note (6%)	OZF	FV	ZF	Future	CME	Full	USD	1 Future		7.8125	17:00	16:00		CST	Physical	American	17:00	16:00	FV	Close of the Underlying Future
S 5yr T-note Weekly	OZF1-OZF5	FVW	ZF	Future	CME	Full	USD	1 Future		7.8125	17:00	16:00		CST	Physical	American	17:00	16:00	FV	Close of the Underlying Future
S 10yr T-note (6%)	OZN	TY	ZN	Future	CME	Full	USD	1 Future	1/64	15.625	17:00	16:00		CST	Physical	American	17:00	16:00	TY	Close of the Underlying Future
S 10yr Weekly	ZN1-ZN5	1M-5M	ZN	Future	CME	Full	USD	1 Future	1/64	15.625	17:00	16:00		CST	Physical	American	17:00	16:00	TY	Close of the Underlying Future
IS T-Bond	OZB	US	ZB	Future	CME	Full	USD	1 Future	1/64	15.625	17:00	16:00		CST	Physical	American	17:00	16:00	US	Close of the Underlying Future
S T-Bond Weekly	ZB1-ZB5	1C-5C	ZB	Future	CME	Full	USD	1 Future	1/64	15.625	17:00	16:00		CST	Physical	American	17:00	16:00	US	Close of the Underlying Future
0-Days Federal Funds	OZQ	FF	ZQ	Future	CME	Full	USD	1 Future	0.0025	10.4175	17:00	16:00		CST	Physical	American	17:00	16:00	FF	Close of the Underlying Future
S Ultra T-bond	OUB	WN	UB	Future	CME	Full	USD	1 Future	1/64	15.625	17:00	16:00		CST	Physical	American	17:00	16:00	WN	Close of the Underlying Future
OBL	OGBM	OE	FGBM	Future	EUREX	Futures	EUR	1 Future	0.005	5	08:00	17:15		CET	Physical	American	18:15	17:15	OE	Expiry time from underlying future
UND	OGBL	RX	FGBL	Future	EUREX	Futures	EUR	1 Future	0.01	10	08:00	17:15		CET	Physical	American	18:15	17:15	RX	Expiry time from underlying future
UND Weekly	OGB1-OGB5	RXW	FGBL	Future	EUREX	Futures	EUR	1 Future	0.01	10	08:00	17:15		CET	Physical	American	18:15	17:15		Expiry time from underlying future
uro-BTP	OBTP	IK	FBTP	Future	EUREX	Futures	EUR	1 Future	0.01	10	08:00	17:15		CET	Physical	American	18:15	17:15	IK	Expiry time from underlying future
CHATZ	OGBS	DU	FGBS	Future	EUREX	Futures	EUR	1 Future	0.005	5	08:00	17:15		CET	Physical	American	18:15	17:15	DU	Expiry time from underlying future
GB 10yr (6%)	OJGB	JB	JGB1	Future	OSA	Full	JPY	1 Future	0.01	10,000	08:45	15:02	15:30 05:30	JST	Physical	American	16:30	15:15		Expiry time from underlying future
<u>TIR:</u> urodollar	C.F.	ED	GE	Future	CME	Full	USD	1 Future	0.0025	6 25	17:00	16:00		CST	Physical	Amorican	17:00	16:00	rp.	Funing time from underlying fortune
	GE														,	American				Expiry time from underlying future
urodollar Mid Curves m Euribor	GE0-GE5	0EA-5EA	GE FFI	Future	CME	Full	USD	1 Future	0.0025	6.25		16:00		CST	Physical	American	17:00		0EZ-5EZ	Expiry time from underlying future
	10.15	ER ODA EDA		Future	-	Futures	EUR	1 Future	0.005			18:00		BST	Physical	American	10:15	10:00		EBF Euribor @ 10:00 GMT
m Euribor Mid Curves	10-15	0RA-5RA	FEI	Future		Futures	EUR	1 Future	0.005	12.5		18:00		BST	Physical	American	10:15	10:00		EBF Euribor @ 10:00 GMT
n Sterling	L	L	FSS	Future	ICE_LIF	Futures	GBP	1 Future	0.005			18:00		BST	Physical	American	16:45	11:00		BBA LIBOR @ 11:00 GMT
)-Day Fed Funds	OZQ	FF	ZQ	Future	CBOT	Full	USD	1 Future	0.0025	10.4175	17:00	16:00		CST	Physical	American	17:00	16:00	FF	Average of daily Fed Funds overnight ra

<sup>1</sup> The time, where we at the latest will notify the broker about exercise requests on American options. Our broker have a similar to the exchange. Any exercise requests initiated after this time will be processed the next day; if not last trading day.

Last Updated 27-09-2019 Page 3 of 4

<sup>&</sup>lt;sup>2</sup> Expiry time is the last time where an option contract can be traded on last trading day. Exchange time.

<sup>&</sup>lt;sup>3</sup> Serial options will be exercised into futures and quarterly options will cash settle.

 $<sup>^{\</sup>rm 4}$  Quarterly options expire at 08:30 CST, same time as the future, and settle in cash!

<sup>&</sup>lt;sup>5</sup> AEX daily options are listed on the business day prior to the expiry day, so the initial lifetime of daily options are two business days. There is no daily option expiring on Friday because there are already weekly or monthly options expiring. The trading symbol is directly linked to the date on which the option expires. For example, the daily option that expires on Wednesday February 6th has the trading symbol "A6" and is available for trading from Tuesday February 5th.

<sup>&</sup>lt;sup>6</sup> Weekly option symbols always start with AX, followed by the week of the expiry, so either 1, 2, 4 or 5. There is no separate AEX weekly option class expiring on the third Friday of the month, as the week leading up to that day is the last week of trading in the AEX monthly options expiring that month.

Name	Ticker	Bloomberg	Underlying	Exchange	Premium Style <sup>8</sup>	Ссу	Contract Size	Tick Size	Tick Value	Trading Hours (Exchange)	Time Zone	Settle Style	Rule of Exercise	Daily Exercise Cutoff <sup>1</sup>	Expiry Time <sup>2</sup>	Settle Price on Bloomberg	Settlement Price
			Deliverable Type							Open Close Open Close							

<sup>&</sup>lt;sup>7</sup> Japanese government bonds actually has three sessions, they are: 8:45 to 11:00, then from 12:30 to 15:00 and then from 15:30 to 23:25 JST.

#### Disclaimer - General

None of the information contained herein constitutes an offer (or solicitation of an offer) to buy or sell any currency, product or financial instrument, to make any investment, or to participate in any particular trading strategy. This material is produced for marketing and/or informational purposes only and Saxo Bank A/S and its owners, subsidiaries and affiliates whether acting directly or through branch offices ("Saxo Bank") make no representation or warranty, and assume no liability, for the accuracy or completeness of the information provided herein. In providing this material Saxo Bank has not taken into account any particular recipient's investment objectives, special investment goals, financial situation, and specific needs and demands and nothing herein is intended as a recommendation for any recipient to invest or divest in a particular manner and Saxo Bank assumes no liability for any recipient sustaining a loss from trading in accordance with a perceived recommendation. All investments and may result in both profits and losses. In particular investments in leveraged products, such as but not limited to foreign exchange, derivates and commendation and leverage products, such as but not limited both violently and rapidly. Speculative trading is not suitable for all investors and all recipients should carefully consider their financial advisor(s) in order to understand the risks involved and ensure the suitability of their situation prior to making any investment, divestment or entering into any transaction. Any mentioning herein, if any, of any risk may not be, and should not be considered to be, neither a comprehensive disclosure or risks nor a comprehensive description such risks. Any expression of opinion may be personal to the author and may not reflect the opinion of Saxo Bank and all expressions of opinion are subject to change without notice (neither prior nor subsequent).

Last Updated 27-09-2019 Page 4 of 4

There are two different ways to calculate margins on our options. The first is full premium, which means you're paying the premium up front and it will be charged to your cash balance. The second way to do this is futures style premium, which you can translate to variation margin, like on futures contracts. Saxo Bank will treat future style premium options as deferred premium. As such, other than market conventions, unrealized profit/loss is not processed in the clients cash balance on a daily basis. Instead, the original premium amount will remain on the transactions not booked until final settlement of the option or when the position is closed. For more information see the Sales Kit for Contract Options.

<sup>9</sup> Trading in Index options will ordinarily cease on the business day (usually a Thursday) preceding the day on which the exercise-settlement value is calculated.

<sup>&</sup>lt;sup>10</sup> Trading in End of Week SPX options ordinarily cease trading on the business day (usually a Friday) that the options expire.

 $<sup>^{11}</sup>$  Last trade day is the Tuesday prior to the Expiration Date of each month.

 $<sup>^{\</sup>rm 12}$  Tick size is 0.01 for prices below 1.5 and 0.05 above 1.55

<sup>13</sup> Settlement price is the CME Lean Hog Index price on the day after last trading day, as the final settlement price is calculated over two days.