Equity Style and Futures Style Option Margining Summary

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Option Margining Summary

Overview

This document gives a brief summary of the differences between the margining of equity style (premium paid up front) and futures style (premium paid on expiry/exercise) option contracts traded on ICE and cleared through LCH.Clearnet ("LCHC").

List of contracts

The following ICE cleared option contracts are futures-style:

- Brent Crude
- GasOil
- Penultimate Henry Hub

The following ICE cleared option contracts are equity-style:

- ICE-ECX Carbon Financial Instrument
- Penultimate Henry Hub (Equity)
- WTI Crude

Equity style

The premium on an equity style option is paid from buyer to seller (via the clearing house) when the option is traded.

The premium having been paid, the concept of "Net Liquidating Value" ("NLV") then allows the buyer to offset any other obligations he may have to LCH.Clearnet with the current replacement value of the option.

The buyer of the option then has a credit NLV which can be used as collateral against the following obligations:

1. Debit NLV on other equity style options positions
2. Contingent Variation Margin
3. Initial Margin requirements

Conversely the seller of the option has a debit NLV which must be covered by collateral, being either:

1. Credit NLV on other equity style options positions
2. Other collateral, e.g. Cash, Bonds, Bank Guarantee

The value of the NLV – both debit and credit – varies each day with the current fair value of the option.

If the option is exercised to a future, the final NLV becomes the Variation Margin on the resulting futures position.

Futures style

Futures style options have the premium paid on exercise/expiry, and do not have a Net Liquidating Value.

Examples

Equity style

Calculation of NLV

Date	Option price	Buyer Credit NLV	Seller Debit NLV
Trade input	2.50	0	0
EOD trade date	2.75	2750	-2750
Day *n*	2.80	2800	-2800
Expiry	2.85	0	0

Account postings

EOD Trade date

	Buyer		Seller	
	Debit	Credit	Debit	Credit
Premium	-2500			2500
Credit NLV		2750		
Debit NLV			-2750	
Initial margin	-1000		-2000	
Total	-3500	2750	-4750	2500
Total obligation/credit	-750		-2250	

Day *n*

	Buyer		Seller	
	Debit	Credit	Debit	Credit
Credit NLV		2800		
Debit NLV			-2800	
Initial margin	-1500		-2500	
Total	-1500	2800	-5300	
Total obligation/credit	1300		-5300	

Post expiry

	Buyer		Seller	
	Debit	Credit	Debit	Credit
Credit VM		2850		
Debit VM			-2850	
Initial margin	-1500		-2500	
Total	-1500	2800	-5300	
Total obligation/credit	1350		-5350	

Futures style

There is no NLV for a futures style option. All other conditions are the same as the equity-style example

Account postings

EOD Trade date

	Buyer		Seller	
	Debit	Credit	Debit	Credit
Initial margin	-1000		-2000	
Total	-1000		-2000	
Total obligation/credit	-1000		-2000	

Day *n*

	Buyer		Seller	
	Debit	Credit	Debit	Credit
Initial margin	-1500		-2500	
Total	-1500		-2500	
Total obligation/credit	-1500		-2500	

Post expiry

	Buyer		Seller	
	Debit	Credit	Debit	Credit
Premium	-2500			2500
Credit VM		2850		
Debit VM			-2850	
Initial margin	-1500		-2500	
Total	-4000	2800	-5300	2500
Total obligation/credit	-1150		-2850	

Comparison

	Buyer		Seller	
	Equity style	Futures style	Equity style	Futures style
EOD Trade date	-750	-1000	-2250	-2000
Day n	1300	-1500	-5300	-2500
Post expiry	1350	-1150	-5350	-2850