

# **Special Executive Report**

S-7160R 3 September 2014

# <u>CME Announces Launch of Futures and Options on Futures for</u> <u>Delivery of Two-Year, Three-Year, and Five-Year Eurodollar Bundles</u>

(This SER supersedes SER S-7160, dated 20 August 2014, to revise Serial Option expiry months for initial listing and to add amendments to Bundle futures terms and conditions.)

Effective <u>Sunday, 21 September 2014,</u> for first trade date of Monday, 22 September 2014, and pending all relevant Commodity Futures Trading Commission (CFTC or Commission) regulatory review periods, Chicago Mercantile Exchange Inc. (CME or Exchange) shall launch the following new interest rate products—

Two-Year Bundle futures and companion options (Clearing Code BU2)
Three-Year Bundle futures and companion options (Clearing Code BU3), and
Five-Year Bundle futures and companion options (Clearing Code BU5)

(Bundle futures, Bundle options and, collectively, Bundle futures and options).

Each Bundle futures contract is for delivery of a standardized bundle combination of CME Three-Month Eurodollar (ED) futures, enabling the user both to transact and to hold multiple years of ED futures exposure as a single accounting line item.

Bundle futures and options shall be listed for trading on the CME Globex electronic trading platform (Sun-Fri, 5pm to 4pm, Chicago time) and in open outcry (Mon-Fri, 7:20am to 2pm, Chicago time). Additionally, market participants may notify the Exchange of block transactions in Bundle futures and options via CME ClearPort (Sun-Fri, 5pm to 4:15pm, Chicago time).

For each Bundle futures product and its suite of companion options, initial contract listings shall include -

Bundle futures for delivery in December 2014 and in March 2015.

**Quarterly Bundle options** for expiry in December 2014 and March 2015, exercisable into December 2014 Bundle futures and March 2015 Bundle futures, respectively.

**Serial Bundle options** for expiry in October 2014 and November 2014, exercisable into December 2014 Bundle futures.

In the following, Section 1 discusses Bundle futures contract terms and conditions, and procedures for assignment of ED futures at Bundle futures expiration. Section 2 summarizes contract terms and conditions for Bundle options. Section 3 describes standards for block trading in Bundle futures and options. (The Exchange intends to notify the Commission separately that it shall permit block trading in these contracts, including reporting of block trades to the Exchange through CME ClearPort.) Section 4 details the applicable CME Clearing and CME Globex fees. Section 5 presents the non-reviewable ranges applicable to trading in these contracts on CME Globex. Appendixes set forth CME Rulebook Chapters for these contracts, as follows:

Appendix A 454 for Two-Year Bundle Futures
Appendix B 454A for Options on Two-Year Bundles
Appendix C 455 for Three-Year Bundle Futures

Appendix D 455A for Options on Three-Year Bundle Futures

Appendix E 456 for Five-Year Bundle Futures

Appendix F 456A for Options on Five-Year Bundle Futures

# Section 1 -- Contract Specifications for CME Bundle Futures

The Exchange introduced ED bundles in 1994. Each bundle is an intra-market combination of one each of a sequence of ED futures with consecutive March Quarterly delivery months (March, June, September, December). Like other ED intra-market spreads or combinations, each bundle immediately unbundles itself as soon as it is traded: Long (short) interest of one each of the component ED futures is booked immediately to the bundle buyer (seller).

By contrast, a Bundle futures contract is for delivery of a standardized ED bundle at one of three tenors: 2, 3, or 5 years. *The contract structure permits the buyer (seller) both to transact and to hold long (short) exposure to the contract-grade ED bundle, in unitary form, as a single accounting line item.* Only if a Bundle futures contract goes to delivery at expiration does it decompose into its constituent ED futures.

Exhibit 1 summarizes Bundle futures contract specifications. (All times of day referenced there and elsewhere in this publication are Chicago time, unless otherwise noted.)

#### **Unit of Trade**

For any Two-Year (or Three-Year, or Five-Year) Bundle futures contract, the unit of trade is:

- a notional 2-year (or 3-year, or 5-year) floating-rate Eurodollar interbank time deposit,
- with principal amount of approximately \$1,000,000,
- for spot (t+2) settlement on the 3<sup>rd</sup> Wednesday of the Bundle futures delivery month,
- paying 8 (or 12, or 20) consecutive quarterly installments of 3-month Eurodollar interbank term interest thereafter.
- with floating rate resets on IMM Monday (the Monday before the third Wednesday) of each March, June, September, and December.

The Bundle futures contract's notional unit of trade is represented, in effect, by the corresponding deliverable-grade bundle of ED futures. The delivery standard bundle comprises one each of ED futures for delivery in the nearest 8 (or 12, or 20) consecutive March Quarterly months.

*Example*: For a hypothetical March 2014 Two-Year Bundle futures contract, the delivery standard would have been the 2-year bundle comprising one each of ED contracts for all March Quarterly months from March 2014 through December 2015, inclusive. See Exhibit 2 on Page 5.

#### **Settlement Prices**

For any Bundle futures contract, any daily or final settlement price is the average of settlement prices of ED futures contracts comprised in the corresponding deliverable-grade bundle --

On any day prior to the Bundle futures contract's last day of trading, the daily settlement price is the arithmetic average of that day's daily settlement prices for all such ED contracts.

On its last day of trading, the Bundle futures contract's final settlement price is the arithmetic average of the final settlement price for the ED contract for the nearest ED delivery month, and that day's daily settlement prices for all other such ED contracts.

# Exhibit 1 - Contract Specifications for CME Bundle Futures

Trading	I Init
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One bundle of CME Three-Month Eurodollar (ED) futures, with Bundle Tenor that meets the Delivery Standard.

**Bundle:** One each of a sequence of four (4) or more ED futures with consecutive March Quarterly Delivery Months, spanning a given Bundle Tenor, for a given Bundle Month.

Bundle Month: For a given bundle, the Delivery Month of the constituent ED contract nearest to delivery.

Bundle Tenor:	Number of constituent ED contracts		
	with consecutive March Quarterly delivery months		
2-Year	8		
3-Year	12		
5-Year	20		

#### Delivery Months

March Quarterly months (March, June, September, December)

#### Price Basis and Contract Size

Price is quoted in IMM Index points, as the arithmetic average of prices of ED futures comprised in Delivery Standard bundle. *Example*: A Bundle futures price of 93.6700 points signifies an average ED contract interest rate of 6.33 percent per annum.

Bundle Futures	0.01 IMM Index Points =
Two-Year	\$200 per contract
Three-Year	\$300 per contract
Five-Year	\$500 per contract

#### Minimum Price Increment

0.005 IMM index points.

<b>Bundle Futures</b>	0.005 IMM Index Points =
Two-Year	\$100 per contract
Three-Year	\$150 per contract
Five-Year	\$250 per contract

#### Daily Settlement Prices

Average of daily settlement prices of Delivery Standard bundle's constituent ED contracts, rounded to fourth decimal place (0.0001) with tie values (i.e., unrounded values ending in 0.00005) rounded <u>down</u>.

# Termination of Trading

Last Day of Trading is 2<sup>nd</sup> London bank business day preceding 3<sup>rd</sup> Wed of Delivery Month. Trading in expiring Bundle futures terminates at time of ED futures daily settlement – typically 2pm -- on Last Day of Trading.

#### Delivery Standard

One (1) bundle of ED futures of specified Bundle Tenor (2-Year, 3-Year, or 5-Year) with Bundle Month identical to Bundle futures Delivery Month.

# Delivery

CME Clearing shall assign a long (short) position of one (1) Delivery Standard bundle per expiring Bundle futures contract to holders of all long (short) positions remaining open following Termination of Trading.

**Final Settlement Price** = Average of settlement prices of Delivery Standard bundle's constituent ED contracts on Last Day of Trading in expiring Bundle futures contract, rounded to fourth decimal place (0.0001) with tie values (i.e., unrounded values ending in 0.00005) rounded <u>down</u>.

#### ED Price Assignments in Delivery

For delivery of a bundle comprising n ED contracts, CME Clearing shall assign such constituent ED contracts at invoice prices determined as follows:

- Each ED contract, excluding ED contract for nearest delivery month, shall be assigned at its respective daily settlement price.
- (2) ED contract for nearest delivery month (i.e., for delivery in the Bundle Month) shall be assigned at invoice price equal to:

n x (Final Settlement Price of expiring Bundle futures) minus (sum of invoice prices of n-1 most remote ED contracts determined in Step (1))

Position
Accountability
and Reportability

Bundle Futures	Position Accountability (Contracts)	Position Reportability (Contracts)
Two-Year	1,250+	25+
Three-Year	800+	25+
Five-Year	500±	25+

Block Trade Thresholds	Bundle Futures	RTH: 7am to 4pm (Contracts)	ETH: 12am to 7am (Contracts)	ATH: 4pm to 12am (Contracts)
	Two-Year	500+	250+	125+
	Three-Year	330+	165+	80 <b>+</b>
	Five-Year	200+	100+	50+
Trading Hours	transactions vi	tes of transaction during a CME ClearPort (Sun- 7:20am to 2pm, Mon-Fr	Fri, 5pm to 4:15pm).	r participants may notify
and Venue		5pm to 4pm, Sun-Fri. Matching Algorithm: FIF	O (F)	
	Bundle Futures	CME Globex and Cle Product Code	aring	
	Two-Year	BU2		
	Three-Year	BU3		
	Tillee-Teal	D03		

#### **Delivery on Expiring Contracts**

Trading in an expiring Bundle futures contract terminates typically at 2pm Chicago time on the Monday before the 3<sup>rd</sup> ("IMM") Wednesday of the contract delivery month. To establish intent to make or take an expiring contract to delivery, a market participant has only to hold the position through termination of trading in the contract.

At close of business on the same day CME Clearing shall assign a long (short) position of one delivery standard bundle of ED futures per expiring Bundle futures contract to holders of all long (short) positions remaining open after termination of trade.

Within any such deliverable grade ED bundle, all but one of the ED futures exposures so assigned will be tradable contracts. The exception is the nearby ED future: Having terminated trading earlier in the day, it will expire upon its final mark-to-market at close of business.

*Example:* When the trading session commences for the Tuesday before IMM Wednesday in December, each party who has taken delivery on a freshly expired December Five-Year Bundle futures contract will own long positions in 19 ED contracts -- one of each of the ED contracts in the deliverable-grade 5-year bundle, excluding the December ED future that expired the previous day (Monday before IMM Wednesday).

# Examples of Final Settlement, Delivery, and Marks-to-Market: March 2014 Bundle Futures

Consider final settlement of hypothetical Bundle futures for March 2014 delivery. Trading would have terminated at 2pm on Monday, 17 March 2014. Final settlement prices would have been determined on the basis of that day's ED futures settlement prices. For the nearby March 2014 ED futures contract (EDH4) "ED Settlement Price" indicates the final settlement price at approximately 5:45am Chicago time upon publication of the 3-month ICE LIBOR value of the day. As shown in the second column of Exhibit 2, this was 99.7655 (equal to 100 minus 0.2345, the day's 3-month ICE LIBOR value rounded to four decimal places).

For each of the other ED contracts shown in Exhibit 2 (for delivery months from June 2014 through December 2018, inclusive) "ED Settlement Price" indicates the corresponding daily settlement price set by the Exchange at approximately 2pm Chicago time.

For each expiring Bundle future – Two-Year, Three-Year, or Five-Year – the Exchange would have computed the final settlement price as the arithmetic average of settlement prices for ED contracts in the corresponding deliverable-grade Bundle. For expiring Two-Year Bundle Futures the raw final settlement price value would have been 99.5131875, equal to:

$$(99.7655 + 99.745 + 99.720 + 99.670 + 99.570 + 99.415 + 99.225 + 98.995) / 8$$

As shown in the top row of Exhibit 2, the final settlement price would have been this raw average value rounded to four decimal places, 99.5132. In like fashion, final settlements for Three-Year and Five-Year Bundle futures would have been set as 99.1246 and 98.2760, respectively.

Exhibit 2 -- Hypothetical March 2014 Bundle Futures Final Settlement Prices and Deliveries, 17 March 2014

		Two-Year	Three-Year	Five-Year
		(BU2H4)	(BU3H4)	(BU5H4)
Bundle Futures Fin	al Settlement Price:	99.5132	99.1246	98.2760
ED Delivery Month	ED Settlement Price	Rundle Futur	es Delivery Assig	nment Drices
Mar-14	99.7655	99.7656	99.7652	99.7650
Jun-14	99.7450	99.7450	99.7450	99.7450
Sep-14	99.7200	99.7200	99.7200	99.7200
Dec-14	99.6700	99.6700	99.6700	99.6700
Mar-15	99.5700	99.5700	99.5700	99.5700
Jun-15	99.4150	99.4150	99.4150	99.4150
Sep-15	99.2250	99.2250	99.2250	99.2250
Dec-15	98.9950	98.9950	98.9950	98.9950
Mar-16	98.7400		98.7400	98.7400
Jun-16	98.4800		98.4800	98.4800
Sep-16	98.2150		98.2150	98.2150
Dec-16	97.9550		97.9550	97.9550
Mar-17	97.7200			97.7200
Jun-17	97.4850			97.4850
Sep-17	97.2700			97.2700
Dec-17	97.0600			97.0600
Mar-18	96.8750			96.8750
Jun-18	96.6950			96.6950
Sep-18	96.5350			96.5350
Dec-18	96.3850			96.3850

Data Source: CME Group

For each Bundle futures contract *all ED futures assigned in delivery, with one exception, would have been assigned at their respective settlement prices for the day*. In each case the exception was the nearby contract, EDH4. Its assignment price would have been set to ensure that the average of all ED contract assignment prices is equal to the Bundle futures final settlement price.

*Example*: As shown in the third column of Exhibit 2, a clearing member making delivery on a short position of an expiring Two-Year Bundle future would have been assigned short positions of one each of ED contracts for delivery in March 2014 through December 2015, inclusive. With the exception of EDH4, all would have been assigned at their respective 2pm daily settlement prices. The assignment price for EDH4 would have been determined as 99.7656, equal to:

(8 x 99.5132) minus (99.745 + 99.720 + 99.670 + 99.570 + 99.415 + 99.225 + 98.995)

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This mechanism ensures that for all but one of the ED futures positions assigned in any delivery, immediate marks-to-market will be zero. Because all rounding error is absorbed by the assignment price for the nearby ED contract, an immediate mark-to-market may apply to it.

Example, contd: Delivery on each March 2014 Two-Year Bundle futures contract would have resulted in assignment of one EDH4 at a price of 99.7656. Because EDH4's final settlement price was 99.7655, any clearing member firm taking delivery on long positions in expiring futures would have been immediately liable for a margin payment of 0.0001 IMM Index points, equal to 0.01 ED contract ticks, or 25 cents per contract ( (99.7655 minus 99.7656) x (\$2,500 per point) ). Conversely, any clearing member making delivery on short positions of expiring Two-Year Bundle futures would have collected variation margin of 25 cents per contract on short exposures in EDH4 assigned in delivery.

The arithmetic of ED delivery assignment price determination limits the maximum magnitude of such immediate marks-to-market: No more than \$1.00 per contract in the case Two-Year Bundle futures, \$1.50 per contract for Three-Year Bundle futures, and \$2.50 per contract for Five-Year Bundle futures.

# Section 2 - Contract Specifications for CME Options on Bundle Futures

By longstanding market convention, any currently available bundle combination of ED futures is quoted and traded in terms of the arithmetic average of net changes in prices of the bundle's constituent ED futures contracts versus their respective previous daily settlement prices.

By contrast, the Bundle futures described in Section 1 trade in terms of the IMM Index ("100 minus rate") basis familiar to users of ED futures. For this reason, they should conduce to listings of companion options. Exhibit 3 summarizes contract specifications of CME Bundle options.

Exhibit 3 - Contract Specifications for CME Bundle Options

Underlying Instrument	Each option is ex	ercisable into one (1) Cl	ME Bundle futures contr	act.	
Expiry Months		s: March Quarterly mon lon-March Quarter mont		mber, December) April, May, July, August,	October, November)
Exercise Price Array	current at-the-mo		integer multiples of 0.12		I Index points below the m 1.50 IMM Index points
	•	<b>xercise price</b> is the option derlying Bundle futures	•	t to the previous daily se	ttlement price of the
Minimum	0.005 IMM Index	points.			
Option Premium	Options on	0.005 IMM Index Poin	ts =		
Increment	BU2	\$100 per option contr			
	BU3	\$150 per option contr			
	BU5	\$250 per option contr			
Termination of Trading		<b>ding</b> is Fri preceding 3 <sup>rd</sup> typically 4pm on Last		onth. Trading in expiring	g options terminates with
Option Exercise	clearing member expiring options of Trading. In the a	firm must notify CME Cl outstanding and unexerc	earing of intention to ex ised as of Termination of	lay that option is traded. ercise no later than 7pm of Trading shall expire at options that are either at	on day of exercise. All 7pm on Last Day of
Position Accountability		Position Account	tability Posi	tion Reportability	
and Reportability	Options on	(Futures-Equivalent	•	Equivalent Contracts)	
and Neportability	BU2	1,250+	(	25+	
	BU3	800+		25+	
	BU5	500+		25+	
Block Trade		RTH: 7am to 4pm	ETH: 12am to 7am	ATH: 4pm to 12am	
Thresholds	Options on	(Contracts)	(Contracts)	(Contracts)	
	BU2	1,250+	625+	325+	
	BU3	825+	400+	200+	
	BU5	500+	250+	125+	
	within 15 minutes		ΓΗ or ATH. Market part	within 5 minutes of trans icipants may notify the E	
Trading Hours and Venue	CME Globex: 5p	20am to 2pm, Mon-Fri m to 4pm, Sun-Fri. tching Algorithm: Eurodo	ollar Option (Y)		
				o the rules of Chicago Me Commodity Futures Tra	

# Section 3 -- Block Trading Standards

Standards for block trading in Bundle futures are at parity with those that apply to the corresponding deliverable-grade bundles of ED futures.

*Example*: During CME Regular Trading Hours (RTH) any ED futures spread or combination is eligible for block trading, provided that the total number of contracts entailed in the legs of such spread or combination is at least 4,000. A 5-year bundle transaction (comprising 20 ED futures per bundle) is eligible for block execution, therefore, if the trade size is 200 or more bundles. Accordingly, the RTH minimum size threshold for block trades in Five-Year Bundle futures is 200 contracts.

The size requirement for block trading in any Bundle option shall be a multiple of 2.5x of the size requirement for block trading in the corresponding Bundle futures contract (similar to the proportionality between size requirements for block trading in options on ED futures and size requirements for block trading in ED futures). See Exhibit 4.

Any block trade in Bundle futures or Bundle options must be reported to the Exchange by the seller within 5 minutes of transaction during Regular Trading Hours, and within 15 minutes of transaction during European Trading Hours or Asian Trading Hours (where "Regular Trading Hours", "European Trading Hours", and "Asian Trading Hours" are as defined in CME & CBOT Market Regulation Advisory Notice RA1404-3 for Block Trades).

# Exhibit 4 -- Minimum Size Requirements for Block Trading in CME Bundle Futures and Options

RTH: Regular Trading Hours (7am-4pm CT) ETH: European Trading Hours (12am-7am CT) ATH: Asian Trading Hours (4pm-12am CT)

CME Products	<b>Futures</b>	Options
Two-Year Bundle (RTH)	500	1,250
Two-Year Bundle (ETH)	250	625
Two-Year Bundle (ATH)	125	325
Three-Year Bundle (RTH)	330	825
Three-Year Bundle (ETH)	165	400
Three-Year Bundle (ATH)	80	200
Five-Year Bundle (RTH)	200	500
Five-Year Bundle (ETH)	100	250
Five-Year Bundle (ATH)	50	125

# Section 4 – CME Clearing Fees and CME Globex Fees

# Fees for outright trades in Bundle futures

As shown in Exhibit 5, fees for outright trades in Bundle futures are set at parity with fees for outright trades in corresponding deliverable-grade bundles of ED futures. Fee parity shall extend to the Exchange's current CME Globex fee discount for Non-Member trading of bundles.

Example: For ED futures, the Exchange's posted all-in fee for outright trading by Customers of Member Firms (Non-Members) is \$1.19 per contract, comprising Clearing fees of \$0.64 plus the standard CME Globex fee of \$0.55. The Exchange currently allows a reduced CME Globex fee for Non-Members of \$0.10 per contract for any ED future traded outright via a bundle, making a de facto all-in fee of \$0.74 per ED contract for ED futures traded via bundles. Fees for Bundle futures shall be at parity with this reduced all-in rate. For instance, as displayed in the bottom row of Exhibit 5, \$5.92 (equal to 8 ED futures x \$0.74 per ED contract) is the all-in fee a Non-Member would pay either to trade outright a 2-year bundle combination of ED futures or to trade outright a single Two-Year Bundle futures contract.

Exhibit 5 -- Bundle Futures Fees (\$ per side (both buy side and sell side) per contract)

			All-In Fee for Bundle Futures		
CME Membership Type	CME Clearing Fee	CME Globex Fee	Two-Year	Three-Year	Five-Year
Individual Equity Members / Clearing Members / Rule 106.I Members / Rule 106.J Equity Member Firms /	0.09	0.10	1.52	2.28	3.80
Rule 106.S Member Approved Funds Rule 106.D Lessees / Rule 106.F Employees	0.27 / 0.30	0.10	2.96 / 2.40	4.44 / 3.60	7.40 / 6.00
Rule 106.R Electronic Corporate Member – Holding Member Rule 106.R Electronic Corporate Member –	0.34	0.10	3.52	5.28	8.80
Volume Incentive Program	0.49	0.10	4.72	7.08	11.80
Rule 106.H Firms / Rule 106.N Firms Asian Incentive Program (AIP) Participants	0.34 / 0.49 0.34	0.10 0.10	3.52 / 3.92 3.52	5.28 / 5.88 5.28	8.80 / 9.80 8.80
International Incentive Program (IIP) Participants and International Volume Incentive (IVIP) Program Participants	0.34	0.10	3.52	5.28	8.80
Latin American Bank Incentive Program (LABIP) Participants	0.34	0.10	3.52	5.28	8.80
Latin American Commercial Incentive Program (LACIP) Participants	0.64	0.10	5.92	8.88	14.80
Latin American Fund Manager Incentive Program (FMIP) Participants	0.34	0.41	6.00	9.00	15.00
CTA/Hedge Fund Incentive Program Participants	0.64	0.10	5.92	8.88	14.80
CBOE Members (reduced for S&P Index and E-mini/E-micro S&P only)	0.64	0.10	5.92	8.88	14.80
Customers of Member Firms (Non-Members)	0.64	0.10	5.92	8.88	14.80

# Fees for calendar spread trades in Bundle futures

The holder of a nearby bundle sequence of long (short) ED futures may transform it into a deferred bundle sequence by selling (buying) the nearby ED contract and buying (selling) the ED contract for delivery in the most remote March Quarterly month in the deferred bundle. Irrespective of the tenor of the bundle combination – whether 2-year, 3-year, or 5-year -- the fee cost of this synthetic transformation is the sum of outright fees for trading two (2) ED futures.

In view of this consideration, the all-in fee for a calendar spread trade in any Bundle futures contract shall be twice (2x) the corresponding fee for an outright trade in ED futures. Such calendar spread fees shall apply only to Bundle futures traded via bona fide intra-commodity calendar spreads. Such calendar spread fees calendar spread fees shall not apply to sequential outright trades, irrespective of whether they are made with the intent of legging into such calendar spread exposures.

Exhibit 6 exemplifies with CME Globex fees for 106.J Equity Member Firms and Customers of Member Firms (Non-Members).

Exhibit 6 -All-in Fees for CME Globex Trading in Bundle Futures Calendar Spreads
(\$ per side (both buy side and sell side) per contract or per contract combination)

	ED Futures	Two-Year Bundle Futures (~8 ED)	Three-Year Bundle Futures (~12 ED)	Five-Year Bundle Futures (~20 ED)
Outrights				
106.J Equity Member Firms	0.19	1.52 ( = 8 x 0.19 )	2.28 ( = 12 x 0.19 )	3.80 ( = 20 x 0.19 )
Customers of Member Firms (Non-Members)	0.74	5.92 ( = 8 x 0.74 )	8.88 ( = 12 x 0.74 )	14.80 ( = 20 x 0.74 )
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Calendar Spreads				
106.J Equity Member Firms		$0.38 (= 2 \times 0.19)$	0.38	0.38
Customers of Member Firms (Non-Members)		1.48 ( = 2 x 0.74 )	1.48	1.48

# Fees for outright trades in Bundle options

CME Globex fees for options on Bundle futures, as shown in the right-hand column of Exhibit 7, are identical to those for options on ED futures, e.g., 15 cents per option traded on CME Globex for Individual Equity Members, 25 cents per option traded on CME Globex for Non-Member Customers of Member Firms.

Exhibit 7 -- Fees for Options on Bundle Futures (\$ per side (both buy side and sell side) per contract)

	CME Clearing Fees			CME Globex
CME Membership Type	Two-Year	Three-Year	Five-Year	Fee
Individual Equity Members / Clearing Members / Rule 106.I Members / Rule 106.J Equity Member Firms / Rule 106.S Member Approved Funds	0.75	1.10	1.75	0.15
Rule 106.D Lessees / Rule 106.F Employees	2.21 / 2.46	3.27 / 3.63	5.38 / 5.98	0.15
Rule 106.R Electronic Corporate Member – Holding Member	2.79	4.12	6.77	0.10
Rule 106.R Electronic Corporate Member – Volume Incentive Program	4.02	5.93	9.76	0.10
Rule 106.H Firms / Rule 106.N Firms	2.79 / 4.02	4.12 / 5.93	6.77 / 9.76	0.10
Asian Incentive Program (AIP) Participants	2.79	4.12	6.77	0.10
International Incentive Program (IIP) Participants and International Volume Incentive (IVIP) Program Participants	2.79	4.12	6.77	0.10
Latin American Bank Incentive Program (LABIP) Participants	2.79	4.12	6.77	0.10
Latin American Commercial Incentive Program (LACIP) Participants	5.25	7.75	12.75	0.25
Latin American Fund Manager Incentive Program (FMIP) Participants	2.79	4.12	6.77	0.41
eFX Bank Incentive Program (BIP) Participants	5.25	7.75	12.75	0.25
CBOE Members (reduced for S&P Index and E-mini/E-micro S&P only)	5.25	7.75	12.75	0.25
Customers of Member Firms (Non-Members)*	5.25	7.75	12.75	0.25

Clearing fees displayed in Exhibit 7 are approximately at parity with Clearing fees for options on ED futures, in the sense that all are comparably proportionate to the interest rate responsiveness of the underlying futures.

Exhibit 8 illustrates this point by way of Clearing fees for Individual Equity Members and Customers of Member Firms (Non-Members). As figures in the fourth column demonstrate, Clearing fee levels for Individual Equity Members are uniformly around three eighths of one percent of a futures contract tick (i.e., approximately 0.00375 of 0.01 futures price points). Similarly, as figures in the rightmost column indicate, all Clearing fee settings for Non-Member Customers of Member Firms – both for ED futures and for Bundle futures -- reside in the neighborhood of 2.57 percent of a one futures contract tick (i.e., approximately 0.0257 of 0.01 futures price points).

Exhibit 8 -- Options on Bundle Futures and Options on ED Futures: Parity of CME Clearing Fees

Options on	\$ Value of Futures 01	Member Fees	Member Fees	Non-Member Fees	Non-Member Fees
		\$ / Option	As Pct of Futures 01	\$ / Option	As Pct of Futures 01
Two-Year Bundle Futures	200	0.75	0.38	5.25	2.63
Three-Year	300	1.10	0.37	7.75	2.58
Five-Year	500	1.75	0.35	12.75	2.55
ED Futures	25	0.09	0.36	0.64	2.56

# Bundle Contracts and the ED Clearing Fee Volume Tier Discount Program

ED contracts currently are subject to a *Clearing Fee Volume Tier Discount Program* ("Program"), whereby any market participant whose trading activity in ED futures or options meets a certain average daily volume threshold is entitled to a lower Clearing fee rate, discounted from the base rate of \$0.09 per contract, on trading volume beyond such volume threshold.

In view of this consideration, *trading activity in a Bundle futures contract (or its companion options)* shall enter into the reckoning of Program participant trading volumes, at parity with the ED futures exposure embedded in the corresponding deliverable-grade bundle. That is, trading volume in any Bundle contract shall be considered in terms of the number of ED futures in the deliverable-grade bundle.

*Example*: If a Program participant trades 10 Two-Year Bundle futures per day in a given month, then 80 contracts per day of ED-equivalent trading volume (equal to 10 Two-Year Bundle futures x 8 ED per deliverable-grade bundle) would be added to her ED trading volume in determining whether her trading volume surpasses the Program's prescribed trading volume tier threshold for the Clearing fee discount.

Moreover, the discounted Clearing fee per contract for any Bundle futures trading volume above and beyond the Program tier threshold shall be at parity with the discounted Clearing fee per ED contract.

Example: Exhibit 9 illustrates how Bundle futures trading activity would be incorporated into the Clearing Fee Volume Tier Discount Program for an Individual Equity Member who pays the baseline clearing fee of \$0.09 per contract for trading volume up to and including 30,000 ED contract-equivalents per day, and who would be entitled to a discount of \$0.02 per contract (ie, a reduced Clearing fee of \$0.07 per contract) on the incremental 30,000 ED contract-equivalents traded per day (ie, contracts 30,001 through 60,000).

Interest Rate Futures

# Exhibit 9 -- Bundle futures and the ED Clearing Fee Volume Tier Discount Program

Assume Member trades 28,000 ED and 250 Two-Year Bundle futures per day (equal to 2,000 ED equivalents) up to the discount threshold @ \$0.09 per ED (or ED equivalent),

then trades an additional 2,000 ED and 50 Two-Year Bundle futures per day (equal to 400 ED equivalents) beyond the discount threshold @ \$0.07 per ED (or ED equivalent).

	Trading Volume (Contracts)	Applicable Clearing Fee (\$ per contract)
Daily Volume at or below Threshold		
ED	28,000	0.09
Two-Year Bundle Futures	250	$0.72 = 8 \times 0.09$
Daily Volume above Threshold		
ED	2,000	0.07
Two-Year Bundle Futures	50	$0.56 = 8 \times 0.07$

# Section 5 - CME Globex Non-Reviewable Trading Ranges

Non-reviewable ranges for trading in Bundle futures and options on CME Globex are shown in Exhibit 10.

Exhibit 10 -- CME Rule 588.H. Globex Non-Reviewable Trading Ranges for CME Bundle Futures and Options

Instrument CME Globex Non-Reviewable Ranges (NRR) RR: Globex Ticks    NRR: Ticks CME Globex Symbol Ranges (NRR) Ranges (NR	interest Nate i utures					
Two-Year Bundle Futures Three-Year Bundle Futures BU2 2 1/2 basis points 2.50 5 Three-Year Bundle Futures Five-Year Bundle Futures BU3 2 1/2 basis points 2.50 5  Instrument (Options on) CME Globex Symbol Ranges (NRR)  Three-Year Bundle Futures BU2  2 minimum ticks subject to minimum range of 1 tick  Subject to minimum reasonability  Five-Year Bundle Futures BU5  2 1/2 basis points 2.50 5  Bid/Ask Reasonability  Greater of (option delta x underlying futures non-reviewable range) or (20% of fair-value premium up to underlying futures non-reviewable range) subject to minimum reasonability of 1 basis point	Instrument	Globex	Non-Reviewable	Globex		
Three-Year Bundle Futures  Five-Year Bundle Futures  BU3 2 1/2 basis points  2.50 5  Interest Rate Options  Instrument (Options on)  CME Globex Symbol  Ranges (NRR)  Two-Year Bundle Futures  BU2  Instrument (Options on)  Bu3  Instrument (Options on)  CME Globex Symbol  Ranges (NRR)  CME Globex Non-Reviewable Ranges (NRR)  Instrument (Options on)  CME Globex Non-Reviewable Ranges (NRR)  Instrument (Options on)  Instrument (Options o						
Interest Rate Options  CME Globex Symbol Ranges (NRR)  Two-Year Bundle Futures  BU2  2 minimum ticks subject to minimum range of 1 tick  Five-Year Bundle Futures  BU3  2 1/2 basis points  2.50  5   Bid/Ask Reasonability  Greater of (option delta x underlying futures non-reviewable range) or (20% of fair-value premium up to underlying futures non-reviewable range) subject to minimum reasonability of 1 basis point	Two-Year Bundle Futures	BU2	2 1/2 basis points	2.50	5	
Instrument (Options on)  CME Globex Symbol Ranges (NRR)  Two-Year Bundle Futures  BU2  Three-Year Bundle Futures  BU3  Tive-Year Bundle Futures  BU3  Subject to minimum range of 1 tick  BU5  Mon-Reviewable Ranges (NRR)  Bid/Ask Reasonability  Greater of (option delta x underlying futures non-reviewable range) or (20% of fair-value premium up to underlying futures non-reviewable range) subject to minimum reasonability of 1 basis point	Three-Year Bundle Futures	BU3	2 1/2 basis points	2.50	5	
Instrument (Options on)  CME Globex Symbol Ranges (NRR)   Two-Year Bundle Futures  BU2  Three-Year Bundle Futures  BU3  Tive-Year Bundle Futures  BU3  Subject to minimum range of 1 tick  Five-Year Bundle Futures  BU5  CME Globex Non-Reviewable Reasonability  Reasonability  Greater of (option delta x underlying futures non-reviewable range) or (20% of fair-value premium up to underlying futures non-reviewable range) subject to minimum reasonability of 1 basis point	Five-Year Bundle Futures	BU5	2 1/2 basis points	2.50	5	
Instrument (Options on)  CME Globex Symbol Ranges (NRR)   Two-Year Bundle Futures  BU2  2 minimum ticks subject to minimum range of 1 tick  Five-Year Bundle Futures  BU5  CME Globex Non-Reviewable Reasonability  Ranges (NRR)  Bid/Ask Reasonability  Greater of (option delta x underlying futures non-reviewable range) or (20% of fair-value premium up to underlying futures non-reviewable range) subject to minimum reasonability of 1 basis point	•••			•••	•••	
Instrument (Options on)  Globex Symbol  Non-Reviewable Ranges (NRR)   Two-Year Bundle Futures  BU2  Z minimum ticks subject to minimum range of 1 tick  Five-Year Bundle Futures  BU3  BU4  And Ask Reasonability  Greater of (option delta x underlying futures non-reviewable range) or (20% of fair-value premium up to underlying futures non-reviewable range) subject to minimum reasonability of 1 basis point	Interest Rate Options					
Two-Year Bundle Futures BU2  Three-Year Bundle Futures BU3  Three-Year Bundle Futures BU3  Three-Year Bundle Futures BU5  Three-Year Bundle Futures BU5  Greater of (option delta x underlying futures non-reviewable range) or (20% of fair-value premium up to underlying futures non-reviewable range) subject to minimum reasonability of 1 basis point		Globex	Non-Reviewable			
Three-Year Bundle Futures  BU3  2 minimum ticks subject to minimum range of 1 tick  Coption delta x underlying futures non-reviewable range) or (20% of fair-value premium up to underlying futures non-reviewable range) subject to minimum reasonability of 1 basis point						
Three-Year Bundle Futures BU3  Subject to minimum range of 1 tick  Five-Year Bundle Futures BU5  Subject to minimum range of 1 tick  Subject to minimum range underlying futures non-reviewable range) subject to minimum reasonability  of 1 basis point	Two-Year Bundle Futures	BU2	2 minimum ticks	(option delta x underlying futures non-reviewable range) or (20% of fair-value premium up to		
Five-Year Bundle Futures BU5 subject to minimum reasonability of 1 basis point	Three-Year Bundle Futures	BU3	subject to minimum range			
	Five-Year Bundle Futures	BU5	OI I HOK			
	•••					

# Please refer questions on CME Bundle futures and options to:

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# Appendix A: CME Rulebook Chapter 454 -- Two-Year Bundle Futures

# 45400. SCOPE OF CHAPTER

This chapter is limited in application to trading of Two-Year Bundle futures. Procedures for trading, clearing, delivery, and settlement, and any other matters not specifically covered herein shall be governed by the general rules of the Exchange ("Rules").

Capitalized terms in this Chapter that are not otherwise defined in this Chapter shall have the meanings given to such terms in other Chapters of the Rules.

Except as noted, all times referenced in this Chapter are Chicago times and are subject to change by the Exchange.

# 45401. CONTRACT SPECIFICATIONS

#### 45401.A. Contract Grade

The contract grade for an expiring futures contract made under these Rules shall be one (1) Two-Year Bundle with Bundle Month identical to the delivery month for such expiring futures contract, subject to the following definitions:

#### 1. Two-Year Bundle

A Two-Year Bundle shall be a futures combination comprising one each of eight (8) CME Three-Month Eurodollar (ED) futures (Chapter 452) for delivery in each of eight (8) consecutive months in the March-June-September-December ("March Quarterly") cycle.

#### 2. Bundle Month

The Bundle Month for a given Two-Year Bundle (Rule 45401.A.1.) shall be the delivery month of the ED futures contract, comprised within such Two-Year Bundle, that is nearest to delivery (Rule 45202.A.).

#### 45401.B. Delivery

Delivery shall apply to all positions in expiring contracts that remain open following Termination of Trading (Rule 45402.G.).

Each individual contract lot delivered shall consist of one Contract Grade Two-Year Bundle (Rule 45401.A.). To each long (short) expiring contract in delivery, CME Clearing shall assign long (short) positions of one each of the eight (8) ED futures contracts comprised within the Contract Grade. Such ED futures positions shall be assigned at prices determined as follows:

# 1. ED Futures Contracts Excluding the Nearest ED Delivery Month

ED futures contracts for the seven (7) consecutive ED delivery months following, and not including, the Bundle Month (Rule 45401.A.2.) shall be assigned at their respective Daily Settlement Prices on the Last Day of Trading in expiring futures (Rule 45402.G.).

# 2. ED Futures Contract for the Nearest ED Delivery Month

The ED futures contract for delivery in the Bundle Month shall be assigned at a price determined as:

(8 x (Final Settlement Price (Rule 45403.A.) of expiring Two-Year Bundle futures))

minus

(Sum of the 7 ED contract assignment prices determined in Rule 45401.B.1.).

# 45402. TRADING SPECIFICATIONS

The number of futures contract delivery months open for trading at any time shall be determined by the Exchange. Without limitation to the foregoing, the Exchange customarily shall list for trading futures for delivery in at least each of the two nearest months in the March Quarterly cycle.

# 45402.A. Trading Schedule

Futures contracts shall be scheduled for trading during such hours as may be determined by the Exchange.

# 45402.B. Trading Unit

The unit of trading shall be Eurodollar interbank time deposits in the amount of \$1,000,000, for notional settlement on the third Wednesday of the futures contract delivery month, for a term of two (2) years, paying eight (8) consecutive installments of three-month Eurodollar interbank term interest, with notional resets of such three-month interest rate occurring on the second London business day preceding the third Wednesday of each March, June, September, and December up to, and not including, the month of notional maturity of such Eurodollar interbank time deposits.

#### 45402.C. Price Increments

Contract price shall be quoted in terms of the IMM Index (Rule 45202.C.), as the arithmetic average of the prices of the eight (8) ED futures comprised within the Contract Grade (Rule 45401.A.). For example, a Bundle futures price of 95.670 would signify that the market consensus expectation of such average ED futures price is 95.6700, implying an arithmetic average ED contract rate of 4.33 percent per year (equal to 100.0000 minus 95.6700).

The minimum price increment shall be one half of one hundredth (0.005) of one IMM Index point, equal to \$100 per contract. Contracts shall not be made on any other price basis.

For the purpose of Rule 812 for Final Settlement Price and Rule 813 for Daily Settlement Price, the minimum price increment shall be 0.0001 IMM Index points, equal to \$2 per contract.

**45402.D.** Position Limits, Exemptions, Position Accountability and Reportable Levels
All applicable position limits, position accountability levels, and reportable position levels are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for *bona fide* commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

45402.E. [Reserved]

45402.F. [Reserved]

#### 45402.G. Termination of Trading

The Last Day of Trading in expiring futures shall be the Last Day of Trading in the ED futures contract (Rule 45202.G.) that is nearest to delivery within the Contract Grade Two-Year Bundle (Rule 45401.A.). Without limitation to the foregoing, the Last Day of Trading in expiring Two-Year Bundle futures typically shall be the second London bank business day preceding the third Wednesday of the contract delivery month (Rule 45402.).

Trading in expiring futures shall terminate at the time of daily settlement for ED futures on the Last Day of Trading. Without limitation to the foregoing, this typically shall occur at 2:00 pm.

# 45402.H. Contract Modifications

Specifications shall be fixed as of the first day of trading in a contract, *provided that* all deliveries must conform to government regulations in force at the time of delivery. If any U.S. government agency or body issues an order, ruling, directive or law pertaining to the trading or delivery of futures contracts made under these Rules, such order, ruling, directive or law shall be construed to take precedence and become part of these rules, and all open and new contracts shall be subjected to such government orders.

45402. I. [Reserved]

#### 45403. SETTLEMENT PROCEDURES

Delivery on expiring futures shall be made by delivery on the Last Day of Trading, following Termination of Trading (Rule 45402.G.), in accord with Rules 45401.

#### 45403.A. Final Settlement Price

The Final Settlement Price of an expiring futures contract shall be the arithmetic average of Settlement Prices on the Last Day of Trading (Rule 45402.G.) of the eight (8) ED futures comprised within the Contract Grade Two-Year Bundle (Rule 45401.A.). Without limitation to the foregoing, the Settlement Price for such ED contract for the nearest ED delivery month typically shall be that ED contract's Final Settlement Price, and Settlement Prices for all other such ED contracts shall be their respective Daily Settlement Prices.

Each such Final Settlement Price shall be rounded to the fourth decimal place (0.0001), with tie values (ie, unrounded values ending in 0.00005) rounded down.

#### 45403.B. Daily Settlement Price

The Daily Settlement Price of a contract on any trading day other than the Last Day of Trading (Rule 45402.G.) shall be the arithmetic average of Daily Settlement Prices of the eight (8) ED futures comprised within the Contract Grade Two-Year Bundle (Rule 45401.A.).

Each such Daily Settlement Price shall be rounded to the fourth decimal place (0.0001), with tie values (ie, unrounded values ending in 0.00005) rounded down.

# 45404.-06. [RESERVED]

# Appendix B: CME Rulebook Chapter 454A – Options on Two-Year Bundle Futures

# 454A00. SCOPE OF CHAPTER

This chapter is limited in application to options on Two-Year Bundle futures. In addition to the rules of this chapter, transactions in such options shall be subject to the general rules of the Exchange insofar as applicable.

For purposes of this chapter, unless otherwise specified, times of day shall refer to and indicate Chicago time.

#### 454A01. OPTIONS CHARACTERISTICS

#### 454A01.A. Contract Months and Trading Hours

Options shall be listed for expiration on such dates as may be determined by the Exchange, subject to Rules 454A01.I., and shall be scheduled for trading during such hours as may be determined by the Exchange.

On the last day of trading in an expiring option (Rule 454A01.I.) trading in such option shall terminate at the same time as the close of trading on that day in such option's Underlying Futures Contract (Rule 454A01.D.).

### 454A01.B. Trading Unit

The trading unit shall be an option to buy, in the case of a call, or an option to sell, in the case of a put, one (1) Two-Year Bundle futures contract for a given delivery month (Chapter 454).

#### 454A01.C. Minimum Price Increments

The price of an option shall be quoted in IMM Index points. Each 0.01 IMM Index point, signifying one (1) interest rate basis point per annum (Rule 45402.C.), shall represent \$200 per option contract. For example, a quote of 0.33 represents an option price of \$6,600 (equal to 33 basis points x \$200 per option contract).

The minimum price increment shall be one-half of one hundredth (0.005) of one IMM Index point, equal to \$100 per contract. Trade also may occur at a price of 0.0025 IMM Index points, equal to \$50 per option contract, whether or not such trade results in the liquidation of positions for both parties to such trade.

For the purpose of Rule 812 for Final Settlement Price and Rule 813 for Daily Settlement Price, the minimum price increment shall be 0.0025 IMM Index points, equal to \$50 per option contract.

Where the price of such option is quoted in volatility terms, the minimum price increment shall be 0.05 percent per annum (eg, 9.95 percent, 10.0 percent, 10.05 percent, 10.10 percent).

#### 454A01.D. Underlying Futures Contracts

#### 1. Options in the March Quarterly Cycle ("Quarterly Options")

For any option for which the month of expiration is in the March Quarterly cycle (ie, March, June, September, or December), the Underlying Futures Contract shall be Two-Year Bundle futures for delivery in such option's month of expiration. For example, for a given year, Two-Year Bundle futures for delivery in September shall be the Underlying Futures Contract for a September option.

# 2. Options Not in the March Quarterly Cycle ("Serial Options")

For any option for which the month of expiration is not in the March Quarterly cycle, (ie, January, February, April, May, July, August, October, November), the Underlying Futures Contract shall be Two-Year Bundle futures for delivery in the March Quarterly month next following such option's month of expiration. For example, for a given year, Two-Year Bundle futures for delivery in March shall be the Underlying Futures Contract for a January option or a February option.

#### 3. Weekly Options

A weekly option shall be designated to expire on a given Friday, *provided that* no weekly option shall expire on any Friday that is also the scheduled last day of trading in a Quarterly Option (Rule 454A01.D.1.) or a Serial Option (Rule 454A01.D.2.). For any weekly option, the Underlying Futures

Contract shall be Two-Year Bundle futures for delivery in a March Quarterly month following such option's date of expiration, as designated by the Exchange when such weekly option is listed for trading.

For an Underlying Futures Contract for a given delivery month, all companion Weekly Options shall expire prior to the expiration of Quarterly Options (Rule 454A01.D.1. and Rule 454A01.I.).

#### 454A01.E. Exercise Prices

#### 1. Twenty-Five Point Exercise Prices

Option exercise prices shall be stated in terms of the IMM Index for the Two-Year Bundle futures contract that is deliverable upon option exercise (Rule 45402.C.), and shall be stated in intervals whose last two digits are 00, 25, 50, and 75 ("twenty-five point exercise prices") for all IMM Index levels (eg, 88.00, 88.25, 88.50, 88.75).

At the commencement of trading in option contracts for a given expiration date, the Exchange shall list for trading put and call options at the exercise price that is nearest the previous day's settlement price of the respective Underlying Futures Contract ("at-the-money price" or "ATM price"). If the previous day's Underlying Futures Contract settlement price is midway between two eligible option exercise price levels, the ATM price shall be set as the higher of the two eligible exercise price levels. The Exchange also shall list for trading put and call options at all eligible exercise price levels in a range of 5.50 IMM Index points above and 5.50 IMM Index points below the ATM exercise price.

Thereafter, the Exchange shall add new put and call options to ensure that such options are listed for trading at all eligible exercise price levels in a range of 5.50 IMM Index points above and 5.50 IMM Index points below the ATM exercise price level that is set with reference to the most recent Underlying Futures Contract settlement price. New options may be listed for trading up to and including the Termination of Trading in such options (Rule 454A01.I.).

#### 2. Special Listings of 12.5 Point Exercise Prices

Additional option exercise prices shall be stated in terms of the IMM Index for the Two-Year Bundle futures contract that is deliverable upon option exercise (Rule 45402.C.), and shall be stated in intervals whose last three digits are 12.5, 37.5, 62.5, and 87.5 ("12.5 point exercise prices") for all IMM Index levels (eg, 93.125, 93.375, 93.625, 93.875). The Exchange shall ensure that put and call options with 12.5 point exercise prices are listed for trading at all eligible exercise price levels in a range of 1.50 IMM Index points above and 1.50 IMM Index points below the ATM exercise price (Rule 454A01.E.1.).

#### 3. Dynamically-Listed Exercise Prices

Upon demand and at the discretion of the Exchange, a new option contract with an out-of-current-range exercise price may be added, on an as-soon-as-possible basis, *provided that* the last two digits of the exercise price of such newly added option contract must be 00, 25, 50, or 75 (eg, 88.00, 88.25, 88.50, 88.75).

The Exchange may modify the provisions governing the establishment of exercise prices as it deems appropriate.

**454A01.F. Position Limits, Exemptions, Position Accountability and Reportable Levels**All applicable position limits, position accountability levels, and reportable position levels are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for *bona fide* commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

# 454A01.G. Nature of Options

The buyer of a put option may exercise such option at any time prior to expiration (subject to Rule 454A02.A.) to assume a short position in one Underlying Futures Contract (Rule 454A01.D.) at such option's exercise price (Rule 454A01.E.). Upon exercise by a put option buyer, the seller of such option shall incur the obligation to assume a long position in one Underlying Futures Contract at such option's exercise price.

The buyer of a call option may exercise such option at any time prior to expiration (subject to Rule 454A02.A.) to assume a long position in one Underlying Futures Contract at such option's exercise price. Upon exercise by a call option buyer, the seller of such option shall incur the obligation to assume a short position in one Underlying Futures Contract at such option's exercise price.

# 454A01.H. [Reserved]

#### 454A01.I. Termination of Trading

For any option contract made under these Rules, if the date for termination of trading under Rule 454A01.I.1. or Rule 454A01.I.2. is a scheduled Exchange holiday, option trading shall terminate on the immediately preceding Business Day. In the event that the market in the Underlying Futures Contract (Rule 454A01.D.) for such option does not open on the scheduled option expiration day, the option expiration shall be extended to the next day on which the market in such Underlying Futures Contract is open for trading.

#### 1. Quarterly Options and Serial Options

Subject to Rule 454A01.I., for any Quarterly Option (Rule 454A01.D.1.) or Serial Option (Rule 454A01.D.2.) trading shall terminate at the close of trading on the Friday preceding the third Wednesday of the expiration month for such option.

#### 2. Weekly Options

Subject to Rule 454A01.1., trading in any Weekly Option shall terminate at the close of trading on the Friday scheduled for option expiration (Rule 454A01.D.3.).

# 454A01.J. Contract Modification

Contract terms for any option shall be fixed when such option is initially listed for trading, *provided that* any such option must conform to government regulations that are in force at such time as such option may be exercised. If the U.S. government, or an agency or duly constituted body thereof, issues an order, ruling, directive, or law inconsistent with these rules, then such order, ruling, directive, or law shall be construed to become part of the rules, and all open and new option contracts shall be subject to such order, ruling, directive, or law.

# 454A01.K. [Reserved]

# 454A02. EXERCISE AND ASSIGNMENT

In addition to the applicable procedures and requirements of Chapter 7, the following shall apply to the exercise of options made under these Rules.

# 454A02.A. Exercise of Option by Buyer

An option may be exercised by the buyer on any Business Day that the option is traded. To exercise an option, the clearing member representing the buyer shall present an exercise notice to the Clearing House by 7:00 p.m. on the day of exercise.

An option that is in the money, and that has not been liquidated or exercised prior to its termination of trading, shall be exercised automatically, in the absence of contrary instructions. Such contrary instructions must be delivered to the Clearing House, by the clearing member representing the buyer of such option, no later than 7:00 p.m. (or such other time as may be designated by the Exchange) on the last day of trading in such option (Rule 454A01.I.).

A call option shall be in the money if the Daily Settlement Price of the Underlying Futures Contract (Rule 454A01.D.) on the last day of trading in such option lies strictly above such option's exercise price, and shall be out of the money if such Daily Settlement Price is at or below such option's exercise price.

A put option shall be in the money if the Daily Settlement Price of the Underlying Futures Contract on the last day of trading in such option lies strictly below such option's exercise price, and shall be out of the money if such Daily Settlement Price is at or above such option's exercise price.

#### 454A02.B. Assignment

For any given option contract, an exercise notice accepted by the Clearing House (in accord with Rule 454A02.A.) shall be assigned by the Clearing House through a process of random selection of clearing members carrying open short positions in such option contract. A clearing member to whom such exercise notice has been assigned shall be notified thereof as soon as practicable following such assignment.

The clearing member to whom such exercise notice has been assigned shall be assigned a short position in such option's Underlying Futures Contract (Rules 454A01.D.) if such option is a call, or a long position in such option's Underlying Futures Contract if such option is a put. The clearing member representing the option buyer making exercise shall be assigned a long position in such option's Underlying Futures Contract if such option is a call, or a short position in such option's Underlying Futures Contract if such option is a put.

Such futures positions shall be assigned at a price equal to the exercise price of such option contract, and shall be marked to market (in accordance with Rule 814) on the day on which the Clearing House accepts such exercise notice.

# 454A03. [RESERVED]

# 454A04. CORRECTIONS TO OPTIONS EXERCISES

Corrections to option exercises, including automatic exercises, may be accepted by the Clearing House after 7:00 p.m. and up to the beginning of final option expiration processing, *provided that* such corrections are necessary due to: (1) a *bona fide* clerical error, (2) un-reconciled Exchange option transaction(s), or (3) an extraordinary circumstance where the clearing firm and customer are unable to communicate final option exercise instructions prior to 7:00 p.m. The decision as to whether a correction is acceptable will be made by the President of the Clearing House, or the President's designee, and such decision will be final.

# Appendix C: CME Rulebook Chapter 455 -- Three-Year Bundle Futures

# 45500. SCOPE OF CHAPTER

This chapter is limited in application to trading of Three-Year Bundle futures. Procedures for trading, clearing, delivery, and settlement, and any other matters not specifically covered herein shall be governed by the general rules of the Exchange ("Rules").

Capitalized terms in this Chapter that are not otherwise defined in this Chapter shall have the meanings given to such terms in other Chapters of the Rules.

Except as noted, all times referenced in this Chapter are Chicago times and are subject to change by the Exchange.

# 45501. CONTRACT SPECIFICATIONS

# 45501.A. Contract Grade

The contract grade for an expiring futures contract made under these Rules shall be one (1) Three-Year Bundle with Bundle Month identical to the delivery month for such expiring futures contract, subject to the following definitions:

#### 1. Three-Year Bundle

A Three-Year Bundle shall be a futures combination comprising one each of 12 CME Three-Month Eurodollar (ED) futures (Chapter 452) for delivery in each of 12 consecutive months in the March-June-September-December ("March Quarterly") cycle.

#### 2. Bundle Month

The Bundle Month for a given Three-Year Bundle (Rule 45501.A.1.) shall be the delivery month of the ED futures contract, comprised within such Three-Year Bundle, that is nearest to delivery (Rule 45202.A.).

# 45501.B. Delivery

Delivery shall apply to all positions in expiring contracts that remain open following Termination of Trading (Rule 45502.G.).

Each individual contract lot delivered shall consist of one Contract Grade Three-Year Bundle (Rule 45501.A.). To each long (short) expiring contract in delivery, CME Clearing shall assign long (short) positions of one each of the 12 ED futures contracts comprised within the Contract Grade. Such ED futures positions shall be assigned at prices determined as follows:

# 1. ED Futures Contracts Excluding the Nearest ED Delivery Month

ED futures contracts for the 11 consecutive ED delivery months following, and not including, the Bundle Month (Rule 45501.A.2.) shall be assigned at their respective Daily Settlement Prices on the Last Day of Trading in expiring futures (Rule 45502.G.).

#### 2. ED Futures Contract for the Nearest ED Delivery Month

The ED futures contract for delivery in the Bundle Month shall be assigned at a price determined as:

(12 x (Final Settlement Price (Rule 45503.A.) of expiring Three-Year Bundle futures))

minus

(Sum of the 11 ED contract assignment prices determined in Rule 45501.B.1.).

# 45502. TRADING SPECIFICATIONS

The number of futures contract delivery months open for trading at any time shall be determined by the Exchange. Without limitation to the foregoing, the Exchange customarily shall list for trading futures for delivery in at least each of the two nearest months in the March Quarterly cycle.

#### 45502.A. Trading Schedule

Futures contracts shall be scheduled for trading during such hours as may be determined by the Exchange.

# 45502.B. Trading Unit

The unit of trading shall be Eurodollar interbank time deposits in the amount of \$1,000,000, for notional settlement on the third Wednesday of the futures contract delivery month, for a term of three (3) years, paying 12 consecutive installments of three-month Eurodollar interbank term interest, with notional resets of such three-month interest rate occurring on the second London business day preceding the third Wednesday of each March, June, September, and December up to, and not including, the month of notional maturity of such Eurodollar interbank time deposits.

#### 45502.C. Price Increments

Contract price shall be quoted in terms of the IMM Index (Rule 45202.C.), as the arithmetic average of the prices of the 12 ED futures comprised within the Contract Grade (Rule 45501.A.). For example, a Bundle futures price of 95.670 would signify that the market consensus expectation of such average ED futures price is 95.6700, implying an arithmetic average ED contract rate of 4.33 percent per year (equal to 100.0000 minus 95.6700).

The minimum price increment shall be one half of one hundredth (0.005) of one IMM Index point, equal to \$150 per contract. Contracts shall not be made on any other price basis.

For the purpose of Rule 812 for Final Settlement Price and Rule 813 for Daily Settlement Price, the minimum price increment shall be 0.0001 IMM Index points, equal to \$3 per contract.

**45502.D. Position Limits, Exemptions, Position Accountability and Reportable Levels**All applicable position limits, position accountability levels, and reportable position levels are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for *bona fide* commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

45502.E. [Reserved]

45502.F. [Reserved]

#### 45502.G. Termination of Trading

The Last Day of Trading in expiring futures shall be the Last Day of Trading in the ED futures contract (Rule 45202.G.) that is nearest to delivery within the Contract Grade Three-Year Bundle (Rule 45501.A.). Without limitation to the foregoing, the Last Day of Trading in expiring Three-Year Bundle futures typically shall be the second London bank business day preceding the third Wednesday of the contract delivery month (Rule 45502.).

Trading in expiring futures shall terminate at the time of daily settlement for ED futures on the Last Day of Trading. Without limitation to the foregoing, this typically shall occur at 2:00 pm.

# 45502.H. Contract Modifications

Specifications shall be fixed as of the first day of trading in a contract, *provided that* all deliveries must conform to government regulations in force at the time of delivery. If any U.S. government agency or body issues an order, ruling, directive or law pertaining to the trading or delivery of futures contracts made under these Rules, such order, ruling, directive or law shall be construed to take precedence and become part of these rules, and all open and new contracts shall be subjected to such government orders.

45502. I. [Reserved]

#### 45503. SETTLEMENT PROCEDURES

Delivery on expiring futures shall be made by delivery on the Last Day of Trading, following Termination of Trading (Rule 45502.G.), in accord with Rules 45501.

#### 45503.A. Final Settlement Price

The Final Settlement Price of an expiring futures contract shall be the arithmetic average of Settlement Prices on the Last Day of Trading (Rule 45502.G.) of the 12 ED futures comprised within the Contract Grade Three-Year Bundle (Rule 45501.A.). Without limitation to the foregoing, the Settlement Price for such ED contract for the nearest ED delivery month typically shall be that ED contract's Final Settlement Price, and Settlement Prices for all other such ED contracts shall be their respective Daily Settlement Prices.

Each such Final Settlement Price shall be rounded to the fourth decimal place (0.0001), with tie values (ie, unrounded values ending in 0.00005) rounded down.

#### 45503.B. Daily Settlement Price

The Daily Settlement Price of a contract on any trading day other than the Last Day of Trading (Rule 45502.G.) shall be the arithmetic average of Daily Settlement Prices of the 12 CME ED futures comprised within the Contract Grade Three-Year Bundle (Rule 45501.A.).

Each such Daily Settlement Price shall be rounded to the fourth decimal place (0.0001), with tie values (ie, unrounded values ending in 0.00005) rounded down.

# 45504.-06. [RESERVED]

# Appendix D: CME Rulebook Chapter 455A - Options on Three-Year Bundle Futures

# 455A00. SCOPE OF CHAPTER

This chapter is limited in application to options on Three-Year Bundle futures. In addition to the rules of this chapter, transactions in such options shall be subject to the general rules of the Exchange insofar as applicable.

For purposes of this chapter, unless otherwise specified, times of day shall refer to and indicate Chicago time.

#### 455A01. OPTIONS CHARACTERISTICS

# 455A01.A. Contract Months and Trading Hours

Options shall be listed for expiration on such dates as may be determined by the Exchange, subject to Rules 455A01.I., and shall be scheduled for trading during such hours as may be determined by the Exchange.

On the last day of trading in an expiring option (Rule 455A01.I.) trading in such option shall terminate at the same time as the close of trading on that day in such option's Underlying Futures Contract (Rule 455A01.D.).

#### 455A01.B. Trading Unit

The trading unit shall be an option to buy, in the case of a call, or an option to sell, in the case of a put, one (1) Three-Year Bundle futures contract for a given delivery month (Chapter 455).

#### 455A01.C. Minimum Price Increments

The price of an option shall be quoted in IMM Index points. Each 0.01 IMM Index point, signifying one (1) interest rate basis point per annum (Rule 45502.C.), shall represent \$300 per option contract. For example, a quote of 0.33 represents an option price of \$9,900 (equal to 33 basis points x \$300 per option contract).

The minimum price increment shall be one-half of one hundredth (0.005) of one IMM Index point, equal to \$150 per contract. Trade also may occur at a price of 0.0025 IMM Index points, equal to \$75 per option contract, whether or not such trade results in the liquidation of positions for both parties to such trade.

For the purpose of Rule 812 for Final Settlement Price and Rule 813 for Daily Settlement Price, the minimum price increment shall be 0.0025 IMM Index points, equal to \$75 per option contract.

Where the price of such option is quoted in volatility terms, the minimum price increment shall be 0.05 percent per annum (eg, 9.95 percent, 10.0 percent, 10.05 percent, 10.10 percent).

#### 455A01.D. Underlying Futures Contracts

# 1. Options in the March Quarterly Cycle ("Quarterly Options")

For any option for which the month of expiration is in the March Quarterly cycle (ie, March, June, September, or December), the Underlying Futures Contract shall be Three-Year Bundle futures for delivery in such option's month of expiration. For example, for a given year, Three-Year Bundle futures for delivery in September shall be the Underlying Futures Contract for a September option.

# 2. Options Not in the March Quarterly Cycle ("Serial Options")

For any option for which the month of expiration is not in the March Quarterly cycle, (ie, January, February, April, May, July, August, October, November), the Underlying Futures Contract shall be Three-Year Bundle futures for delivery in the March Quarterly month next following such option's month of expiration. For example, for a given year, Three-Year Bundle futures for delivery in March shall be the Underlying Futures Contract for a January option or a February option.

#### 3. Weekly Options

A weekly option shall be designated to expire on a given Friday, *provided that* no weekly option shall expire on any Friday that is also the scheduled last day of trading in a Quarterly Option (Rule 455A01.D.1.) or a Serial Option (Rule 455A01.D.2.). For any weekly option, the Underlying Futures

Contract shall be Three-Year Bundle futures for delivery in a March Quarterly month following such option's date of expiration, as designated by the Exchange when such weekly option is listed for trading.

For an Underlying Futures Contract for a given delivery month, all companion Weekly Options shall expire prior to the expiration of Quarterly Options (Rule 455A01.D.1. and Rule 455A01.I.).

#### 455A01.E. Exercise Prices

#### 1. Twenty-Five Point Exercise Prices

Option exercise prices shall be stated in terms of the IMM Index for the Three-Year Bundle futures contract that is deliverable upon option exercise (Rule 45502.C.), and shall be stated in intervals whose last two digits are 00, 25, 50, and 75 ("twenty-five point exercise prices") for all IMM Index levels (eg, 88.00, 88.25, 88.50, 88.75).

At the commencement of trading in option contracts for a given expiration date, the Exchange shall list for trading put and call options at the exercise price that is nearest the previous day's settlement price of the respective Underlying Futures Contract ("at-the-money price" or "ATM price"). If the previous day's Underlying Futures Contract settlement price is midway between two eligible option exercise price levels, the ATM price shall be set as the higher of the two eligible exercise price levels. The Exchange also shall list for trading put and call options at all eligible exercise price levels in a range of 5.50 IMM Index points above and 5.50 IMM Index points below the ATM exercise price.

Thereafter, the Exchange shall add new put and call options to ensure that such options are listed for trading at all eligible exercise price levels in a range of 5.50 IMM Index points above and 5.50 IMM Index points below the ATM exercise price level that is set with reference to the most recent Underlying Futures Contract settlement price. New options may be listed for trading up to and including the Termination of Trading in such options (Rule 455A01.I.).

#### 2. Special Listings of 12.5 Point Exercise Prices

Additional option exercise prices shall be stated in terms of the IMM Index for the Three-Year Bundle futures contract that is deliverable upon option exercise (Rule 45502.C.), and shall be stated in intervals whose last three digits are 12.5, 37.5, 62.5, and 87.5 ("12.5 point exercise prices") for all IMM Index levels (eg, 93.125, 93.375, 93.625, 93.875). The Exchange shall ensure that put and call options with 12.5 point exercise prices are listed for trading at all eligible exercise price levels in a range of 1.50 IMM Index points above and 1.50 IMM Index points below the ATM exercise price (Rule 455A01.E.1.).

#### 3. Dynamically-Listed Exercise Prices

Upon demand and at the discretion of the Exchange, a new option contract with an out-of-current-range exercise price may be added, on an as-soon-as-possible basis, *provided that* the last two digits of the exercise price of such newly added option contract must be 00, 25, 50, or 75 (eg, 88.00, 88.25, 88.50, 88.75).

The Exchange may modify the provisions governing the establishment of exercise prices as it deems appropriate.

**455A01.F.** Position Limits, Exemptions, Position Accountability and Reportable Levels
All applicable position limits, position accountability levels, and reportable position levels are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for *bona fide* commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

# 455A01.G. Nature of Options

The buyer of a put option may exercise such option at any time prior to expiration (subject to Rule 455A02.A.) to assume a short position in one Underlying Futures Contract (Rule 455A01.D.) at such option's exercise price (Rule 455A01.E.). Upon exercise by a put option buyer, the seller of such option shall incur the obligation to assume a long position in one Underlying Futures Contract at such option's exercise price.

The buyer of a call option may exercise such option at any time prior to expiration (subject to Rule 455A02.A.) to assume a long position in one Underlying Futures Contract at such option's exercise price. Upon exercise by a call option buyer, the seller of such option shall incur the obligation to assume a short position in one Underlying Futures Contract at such option's exercise price.

# 455A01.H. [Reserved]

#### 455A01.I. Termination of Trading

For any option contract made under these Rules, if the date for termination of trading under Rule 455A01.I.1. or Rule 455A01.I.2. is a scheduled Exchange holiday, option trading shall terminate on the immediately preceding Business Day. In the event that the market in the Underlying Futures Contract (Rule 455A01.D.) for such option does not open on the scheduled option expiration day, the option expiration shall be extended to the next day on which the market in such Underlying Futures Contract is open for trading.

#### 1. Quarterly Options and Serial Options

Subject to Rule 455A01.I., for any Quarterly Option (Rule 455A01.D.1.) or Serial Option (Rule 455A01.D.2.) trading shall terminate at the close of trading on the Friday preceding the third Wednesday of the expiration month for such option.

#### 2. Weekly Options

Subject to Rule 455A01.1., trading in any Weekly Option shall terminate at the close of trading on the Friday scheduled for option expiration (Rule 455A01.D.3.).

# 455A01.J. Contract Modification

Contract terms for any option shall be fixed when such option is initially listed for trading, *provided that* any such option must conform to government regulations that are in force at such time as such option may be exercised. If the U.S. government, or an agency or duly constituted body thereof, issues an order, ruling, directive, or law inconsistent with these rules, then such order, ruling, directive, or law shall be construed to become part of the rules, and all open and new option contracts shall be subject to such order, ruling, directive, or law.

# 455A01.K. [Reserved]

# 455A02. EXERCISE AND ASSIGNMENT

In addition to the applicable procedures and requirements of Chapter 7, the following shall apply to the exercise of options made under these Rules.

# 455A02.A. Exercise of Option by Buyer

An option may be exercised by the buyer on any Business Day that the option is traded. To exercise an option, the clearing member representing the buyer shall present an exercise notice to the Clearing House by 7:00 p.m. on the day of exercise.

An option that is in the money, and that has not been liquidated or exercised prior to its termination of trading, shall be exercised automatically, in the absence of contrary instructions. Such contrary instructions must be delivered to the Clearing House, by the clearing member representing the buyer of such option, no later than 7:00 p.m. (or such other time as may be designated by the Exchange) on the last day of trading in such option (Rule 455A01.I.).

A call option shall be in the money if the Daily Settlement Price of the Underlying Futures Contract (Rule 455A01.D.) on the last day of trading in such option lies strictly above such option's exercise price, and shall be out of the money if such Daily Settlement Price is at or below such option's exercise price.

A put option shall be in the money if the Daily Settlement Price of the Underlying Futures Contract on the last day of trading in such option lies strictly below such option's exercise price, and shall be out of the money if such Daily Settlement Price is at or above such option's exercise price.

#### 455A02.B. Assignment

For any given option contract, an exercise notice accepted by the Clearing House (in accord with Rule 455A02.A.) shall be assigned by the Clearing House through a process of random selection of clearing members carrying open short positions in such option contract. A clearing member to whom such exercise notice has been assigned shall be notified thereof as soon as practicable following such assignment.

The clearing member to whom such exercise notice has been assigned shall be assigned a short position in such option's Underlying Futures Contract (Rules 455A01.D.) if such option is a call, or a long position in such option's Underlying Futures Contract if such option is a put. The clearing member representing the option buyer making exercise shall be assigned a long position in such option's Underlying Futures Contract if such option is a call, or a short position in such option's Underlying Futures Contract if such option is a put.

Such futures positions shall be assigned at a price equal to the exercise price of such option contract, and shall be marked to market (in accordance with Rule 814) on the day on which the Clearing House accepts such exercise notice.

# 455A03. [RESERVED]

# 455A04. CORRECTIONS TO OPTIONS EXERCISES

Corrections to option exercises, including automatic exercises, may be accepted by the Clearing House after 7:00 p.m. and up to the beginning of final option expiration processing, *provided that* such corrections are necessary due to: (1) a *bona fide* clerical error, (2) un-reconciled Exchange option transaction(s), or (3) an extraordinary circumstance where the clearing firm and customer are unable to communicate final option exercise instructions prior to 7:00 p.m. The decision as to whether a correction is acceptable will be made by the President of the Clearing House, or the President's designee, and such decision will be final.

# Appendix E: CME Rulebook Chapter 456 -- Five-Year Bundle Futures

# 45600. SCOPE OF CHAPTER

This chapter is limited in application to trading of Five-Year Bundle futures. Procedures for trading, clearing, delivery, and settlement, and any other matters not specifically covered herein shall be governed by the general rules of the Exchange ("Rules").

Capitalized terms in this Chapter that are not otherwise defined in this Chapter shall have the meanings given to such terms in other Chapters of the Rules.

Except as noted, all times referenced in this Chapter are Chicago times and are subject to change by the Exchange.

# 45601. CONTRACT SPECIFICATIONS

# 45601.A. Contract Grade

The contract grade for an expiring futures contract made under these Rules shall be one (1) Five-Year Bundle with Bundle Month identical to the delivery month for such expiring futures contract, subject to the following definitions:

#### 1. Five-Year Bundle

A Five-Year Bundle shall be a futures combination comprising one each of 20 CME Three-Month Eurodollar (ED) futures (Chapter 452) for delivery in each of 20 consecutive months in the March-June-September-December ("March Quarterly") cycle.

#### 2. Bundle Month

The Bundle Month for a given Five-Year Bundle (Rule 45601.A.1.) shall be the delivery month of the ED futures contract, comprised within such Five-Year Bundle, that is nearest to delivery (Rule 45202.A.).

#### 45601.B. Delivery

Delivery shall apply to all positions in expiring contracts that remain open following Termination of Trading (Rule 45602.G.).

Each individual contract lot delivered shall consist of one Contract Grade Five-Year Bundle (Rule 45601.A.). To each long (short) expiring contract in delivery, CME Clearing shall assign long (short) positions of one each of the 20 ED futures contracts comprised within the Contract Grade. Such ED futures positions shall be assigned at prices determined as follows:

# 1. ED Futures Contracts Excluding the Nearest ED Delivery Month

ED futures contracts for the 19 consecutive ED delivery months following, and not including, the Bundle Month (Rule 45601.A.2.) shall be assigned at their respective Daily Settlement Prices on the Last Day of Trading in expiring futures (Rule 45602.G.).

# 2. ED Futures Contract for the Nearest ED Delivery Month

The ED futures contract for delivery in the Bundle Month shall be assigned at a price determined as:

(20 x (Final Settlement Price (Rule 45603.A.) of expiring Five-Year Bundle futures))

minus

(Sum of the 19 ED contract assignment prices determined in Rule 45601.B.1.).

# 45602. TRADING SPECIFICATIONS

The number of futures contract delivery months open for trading at any time shall be determined by the Exchange. Without limitation to the foregoing, the Exchange customarily shall list for trading futures for delivery in at least each of the two nearest months in the March Quarterly cycle.

# 45602.A. Trading Schedule

Futures contracts shall be scheduled for trading during such hours as may be determined by the Exchange.

# 45602.B. Trading Unit

The unit of trading shall be Eurodollar interbank time deposits in the amount of \$1,000,000, for notional settlement on the third Wednesday of the futures contract delivery month, for a term of five (5) years, paying 20 consecutive installments of three-month Eurodollar interbank term interest, with notional resets of such three-month interest rate occurring on the second London business day preceding the third Wednesday of each March, June, September, and December up to, and not including, the month of notional maturity of such Eurodollar interbank time deposits.

#### 45602.C. Price Increments

Contract price shall be quoted in terms of the IMM Index (Rule 45202.C.), as the arithmetic average of the prices of the 20 CME ED futures comprised within the Contract Grade (Rule 45601.A.). For example, a Bundle futures price of 95.670 would signify that the market consensus expectation of such average ED futures price is 95.6700, implying an arithmetic average ED contract rate of 4.33 percent per year (equal to 100.0000 minus 95.6700).

The minimum price increment shall be one half of one hundredth (0.005) of one IMM Index point, equal to \$250 per contract. Contracts shall not be made on any other price basis.

For the purpose of Rule 812 for Final Settlement Price and Rule 813 for Daily Settlement Price, the minimum price increment shall be 0.0001 IMM Index points, equal to \$5 per contract.

**45602.D.** Position Limits, Exemptions, Position Accountability and Reportable Levels
All applicable position limits, position accountability levels, and reportable position levels are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for *bona fide* commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

45602.E. [Reserved]

45602.F. [Reserved]

#### 45602.G. Termination of Trading

The Last Day of Trading in expiring futures shall be the Last Day of Trading in the ED futures contract (Rule 45202.G.) that is nearest to delivery within the Contract Grade Five-Year Bundle (Rule 45601.A.). Without limitation to the foregoing, the Last Day of Trading in expiring Five-Year Bundle futures typically shall be the second London bank business day preceding the third Wednesday of the contract delivery month (Rule 45602.).

Trading in expiring futures shall terminate at the time of daily settlement for ED futures on the Last Day of Trading. Without limitation to the foregoing, this typically shall occur at 2:00 pm.

# 45602.H. Contract Modifications

Specifications shall be fixed as of the first day of trading in a contract, *provided that* all deliveries must conform to government regulations in force at the time of delivery. If any U.S. government agency or body issues an order, ruling, directive or law pertaining to the trading or delivery of futures contracts made under these Rules, such order, ruling, directive or law shall be construed to take precedence and become part of these rules, and all open and new contracts shall be subjected to such government orders.

45602. I. [Reserved]

#### 45603. SETTLEMENT PROCEDURES

Delivery on expiring futures shall be made by delivery on the Last Day of Trading, following Termination of Trading (Rule 45602.G.), in accord with Rules 45601.

#### 45603.A. Final Settlement Price

The Final Settlement Price of an expiring futures contract shall be the arithmetic average of Settlement Prices on the Last Day of Trading (Rule 45602.G.) of the 20 ED futures comprised within the Contract Grade Five-Year Bundle (Rule 45601.A.). Without limitation to the foregoing, the Settlement Price for such ED contract for the nearest ED delivery month typically shall be that ED contract's Final Settlement Price, and Settlement Prices for all other such ED contracts shall be their respective Daily Settlement Prices.

Each such Final Settlement Price shall be rounded to the fourth decimal place (0.0001), with tie values (ie, unrounded values ending in 0.00005) rounded down.

#### 45603.B. Daily Settlement Price

The Daily Settlement Price of a contract on any trading day other than the Last Day of Trading (Rule 45602.G.) shall be the arithmetic average of Daily Settlement Prices of the 20 CME ED futures comprised within the Contract Grade Five-Year Bundle (Rule 45601.A.).

Each such Daily Settlement Price shall be rounded to the fourth decimal place (0.0001), with tie values (ie, unrounded values ending in 0.00005) rounded down.

# 45604.-06. [RESERVED]

# Appendix F: CME Rulebook Chapter 456A – Options on Five-Year Bundle Futures

# 456A00. SCOPE OF CHAPTER

This chapter is limited in application to options on Five-Year Bundle futures. In addition to the rules of this chapter, transactions in such options shall be subject to the general rules of the Exchange insofar as applicable.

For purposes of this chapter, unless otherwise specified, times of day shall refer to and indicate Chicago time.

#### 456A01. OPTIONS CHARACTERISTICS

#### 456A01.A. Contract Months and Trading Hours

Options shall be listed for expiration on such dates as may be determined by the Exchange, subject to Rules 456A01.I., and shall be scheduled for trading during such hours as may be determined by the Exchange.

On the last day of trading in an expiring option (Rule 456A01.I.) trading in such option shall terminate at the same time as the close of trading on that day in such option's Underlying Futures Contract (Rule 456A01.D.).

#### 456A01.B. Trading Unit

The trading unit shall be an option to buy, in the case of a call, or an option to sell, in the case of a put, one (1) Five-Year Bundle futures contract for a given delivery month (Chapter 456).

#### 456A01.C. Minimum Price Increments

The price of an option shall be quoted in IMM Index points. Each 0.01 IMM Index point, signifying one (1) interest rate basis point per annum (Rule 45602.C.), shall represent \$500 per option contract. For example, a quote of 0.33 represents an option price of \$16,500 (equal to 33 basis points x \$500 per option contract).

The minimum price increment shall be one-half of one hundredth (0.005) of one IMM Index point, equal to \$250 per contract. Trade also may occur at a price of 0.0025 IMM Index points, equal to \$125 per option contract, whether or not such trade results in the liquidation of positions for both parties to such trade.

For the purpose of Rule 812 for Final Settlement Price and Rule 813 for Daily Settlement Price, the minimum price increment shall be 0.0025 IMM Index points, equal to \$125 per option contract.

Where the price of such option is quoted in volatility terms, the minimum price increment shall be 0.05 percent per annum (eg, 9.95 percent, 10.0 percent, 10.05 percent, 10.10 percent).

#### 456A01.D. Underlying Futures Contracts

#### 1. Options in the March Quarterly Cycle ("Quarterly Options")

For any option for which the month of expiration is in the March Quarterly cycle (ie, March, June, September, or December), the Underlying Futures Contract shall be Five-Year Bundle futures for delivery in such option's month of expiration. For example, for a given year, Five-Year Bundle futures for delivery in September shall be the Underlying Futures Contract for a September option.

# 2. Options Not in the March Quarterly Cycle ("Serial Options")

For any option for which the month of expiration is not in the March Quarterly cycle, (ie, January, February, April, May, July, August, October, November), the Underlying Futures Contract shall be Five-Year Bundle futures for delivery in the March Quarterly month next following such option's month of expiration. For example, for a given year, Five-Year Bundle futures for delivery in March shall be the Underlying Futures Contract for a January option or a February option.

#### 3. Weekly Options

A weekly option shall be designated to expire on a given Friday, *provided that* no weekly option shall expire on any Friday that is also the scheduled last day of trading in a Quarterly Option (Rule 456A01.D.1.) or a Serial Option (Rule 456A01.D.2.). For any weekly option, the Underlying Futures

Contract shall be Five-Year Bundle futures for delivery in a March Quarterly month following such option's date of expiration, as designated by the Exchange when such weekly option is listed for trading.

For an Underlying Futures Contract for a given delivery month, all companion Weekly Options shall expire prior to the expiration of Quarterly Options (Rule 456A01.D.1. and Rule 456A01.I.).

#### 456A01.E. Exercise Prices

#### 1. Twenty-Five Point Exercise Prices

Option exercise prices shall be stated in terms of the IMM Index for the Five-Year Bundle futures contract that is deliverable upon option exercise (Rule 45602.C.), and shall be stated in intervals whose last two digits are 00, 25, 50, and 75 ("twenty-five point exercise prices") for all IMM Index levels (eg, 88.00, 88.25, 88.50, 88.75).

At the commencement of trading in option contracts for a given expiration date, the Exchange shall list for trading put and call options at the exercise price that is nearest the previous day's settlement price of the respective Underlying Futures Contract ("at-the-money price" or "ATM price"). If the previous day's Underlying Futures Contract settlement price is midway between two eligible option exercise price levels, the ATM price shall be set as the higher of the two eligible exercise price levels. The Exchange also shall list for trading put and call options at all eligible exercise price levels in a range of 5.50 IMM Index points above and 5.50 IMM Index points below the ATM exercise price.

Thereafter, the Exchange shall add new put and call options to ensure that such options are listed for trading at all eligible exercise price levels in a range of 5.50 IMM Index points above and 5.50 IMM Index points below the ATM exercise price level that is set with reference to the most recent Underlying Futures Contract settlement price. New options may be listed for trading up to and including the Termination of Trading in such options (Rule 456A01.I.).

#### 2. Special Listings of 12.5 Point Exercise Prices

Additional option exercise prices shall be stated in terms of the IMM Index for the Five-Year Bundle futures contract that is deliverable upon option exercise (Rule 45602.C.), and shall be stated in intervals whose last three digits are 12.5, 37.5, 62.5, and 87.5 ("12.5 point exercise prices") for all IMM Index levels (eg, 93.125, 93.375, 93.625, 93.875). The Exchange shall ensure that put and call options with 12.5 point exercise prices are listed for trading at all eligible exercise price levels in a range of 1.50 IMM Index points above and 1.50 IMM Index points below the ATM exercise price (Rule 456A01.E.1.).

#### 3. Dynamically-Listed Exercise Prices

Upon demand and at the discretion of the Exchange, a new option contract with an out-of-current-range exercise price may be added, on an as-soon-as-possible basis, *provided that* the last two digits of the exercise price of such newly added option contract must be 00, 25, 50, or 75 (eg, 88.00, 88.25, 88.50, 88.75).

The Exchange may modify the provisions governing the establishment of exercise prices as it deems appropriate.

**456A01.F.** Position Limits, Exemptions, Position Accountability and Reportable Levels
All applicable position limits, position accountability levels, and reportable position levels are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for *bona fide* commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

# 456A01.G. Nature of Options

The buyer of a put option may exercise such option at any time prior to expiration (subject to Rule 456A02.A.) to assume a short position in one Underlying Futures Contract (Rule 456A01.D.) at such option's exercise price (Rule 456A01.E.). Upon exercise by a put option buyer, the seller of such option shall incur the obligation to assume a long position in one Underlying Futures Contract at such option's exercise price.

The buyer of a call option may exercise such option at any time prior to expiration (subject to Rule 456A02.A.) to assume a long position in one Underlying Futures Contract at such option's exercise price. Upon exercise by a call option buyer, the seller of such option shall incur the obligation to assume a short position in one Underlying Futures Contract at such option's exercise price.

# 456A01.H. [Reserved]

#### 456A01.I. Termination of Trading

For any option contract made under these Rules, if the date for termination of trading under Rule 456A01.I.1. or Rule 456A01.I.2. is a scheduled Exchange holiday, option trading shall terminate on the immediately preceding Business Day. In the event that the market in the Underlying Futures Contract (Rule 456A01.D.) for such option does not open on the scheduled option expiration day, the option expiration shall be extended to the next day on which the market in such Underlying Futures Contract is open for trading.

#### 1. Quarterly Options and Serial Options

Subject to Rule 456A01.I., for any Quarterly Option (Rule 456A01.D.1.) or Serial Option (Rule 456A01.D.2.) trading shall terminate at the close of trading on the Friday preceding the third Wednesday of the expiration month for such option.

#### 2. Weekly Options

Subject to Rule 456A01.1., trading in any Weekly Option shall terminate at the close of trading on the Friday scheduled for option expiration (Rule 456A01.D.3.).

# 456A01.J. Contract Modification

Contract terms for any option shall be fixed when such option is initially listed for trading, *provided that* any such option must conform to government regulations that are in force at such time as such option may be exercised. If the U.S. government, or an agency or duly constituted body thereof, issues an order, ruling, directive, or law inconsistent with these rules, then such order, ruling, directive, or law shall be construed to become part of the rules, and all open and new option contracts shall be subject to such order, ruling, directive, or law.

# 456A01.K. [Reserved]

# 456A02. EXERCISE AND ASSIGNMENT

In addition to the applicable procedures and requirements of Chapter 7, the following shall apply to the exercise of options made under these Rules.

# 456A02.A. Exercise of Option by Buyer

An option may be exercised by the buyer on any Business Day that the option is traded. To exercise an option, the clearing member representing the buyer shall present an exercise notice to the Clearing House by 7:00 p.m. on the day of exercise.

An option that is in the money, and that has not been liquidated or exercised prior to its termination of trading, shall be exercised automatically, in the absence of contrary instructions. Such contrary instructions must be delivered to the Clearing House, by the clearing member representing the buyer of such option, no later than 7:00 p.m. (or such other time as may be designated by the Exchange) on the last day of trading in such option (Rule 456A01.I.).

A call option shall be in the money if the Daily Settlement Price of the Underlying Futures Contract (Rule 456A01.D.) on the last day of trading in such option lies strictly above such option's exercise price, and shall be out of the money if such Daily Settlement Price is at or below such option's exercise price.

A put option shall be in the money if the Daily Settlement Price of the Underlying Futures Contract on the last day of trading in such option lies strictly below such option's exercise price, and shall be out of the money if such Daily Settlement Price is at or above such option's exercise price.

#### 456A02.B. Assignment

For any given option contract, an exercise notice accepted by the Clearing House (in accord with Rule 456A02.A.) shall be assigned by the Clearing House through a process of random selection of clearing members carrying open short positions in such option contract. A clearing member to whom such exercise notice has been assigned shall be notified thereof as soon as practicable following such assignment.

The clearing member to whom such exercise notice has been assigned shall be assigned a short position in such option's Underlying Futures Contract (Rules 456A01.D.) if such option is a call, or a long position in such option's Underlying Futures Contract if such option is a put. The clearing member representing the option buyer making exercise shall be assigned a long position in such option's Underlying Futures Contract if such option is a call, or a short position in such option's Underlying Futures Contract if such option is a put.

Such futures positions shall be assigned at a price equal to the exercise price of such option contract, and shall be marked to market (in accordance with Rule 814) on the day on which the Clearing House accepts such exercise notice.

# 456A03. [RESERVED]

# 456A04. CORRECTIONS TO OPTIONS EXERCISES

Corrections to option exercises, including automatic exercises, may be accepted by the Clearing House after 7:00 p.m. and up to the beginning of final option expiration processing,-provided that such corrections are necessary due to: (1) a bona fide clerical error, (2) un-reconciled Exchange option transaction(s), or (3) an extraordinary circumstance where the clearing firm and customer are unable to communicate final option exercise instructions prior to 7:00 p.m. The decision as to whether a correction is acceptable will be made by the President of the Clearing House, or the President's designee, and such decision will be final.