

# 3 and 10 Year Bond Roll

Reduction to Minimum Tick Increment Supporting Documentation | Version 1.0– 30 June 2020

## Introduction

ASX will introduce a change to the minimum tradeable increment during the Roll period for the 3 and 10 Year Bond Futures contracts. The new tick increments will commence with the September 2020 expiry.

The purpose of this document is to provide market participants with examples of the prices that will be tradeable under the new tick increments as well as the rounding rules for the determination of the Futures Reference Price for the One Session Options and further information on order management when the tick increments are changed.

### Roll Period

The Roll period, for the purpose of the tick increment changes, is defined at the 8<sup>th</sup> of the expiry month (Trade Date 9<sup>th</sup>) to the 15<sup>th</sup> of the expiry month), or next business day, if the 15<sup>th</sup> is not a business day.

## Overview of Impact on 3 and 10 Year Bond Futures Prices

### Bond Roll Tick Increments

The following tick increments will be applied to the outright and roll (calendar spreads) for the 3 and 10 Year Bond Futures contract:

#### **3 Year Bond Futures**

Multiples of 0.002 per cent during the period 5:10 pm on 8<sup>th</sup> of the expiry month, or the next business day if the 8<sup>th</sup> is not a business day, to 4:30 pm on the day of expiry. All the other times the minimum price increment will be 0.005 per cent.

#### **10 Year Bond Futures**

Multiples of 0.001 per cent during the period 5:10 pm on 8<sup>th</sup> of the expiry month, or the next business day if the 8<sup>th</sup> is not a business day, to 4:30 pm on the day of expiry. All the other times the minimum price increment will be 0.005 per cent.

### Price Examples

The following table provides examples of outright futures and roll prices when the new bond roll tick increments are implemented for the Roll period:

Bond Futures Outright Contract and Roll	3 Year Bond Futures Price Examples	10 Year Bond Futures Price Examples
Outright prices	99.740	99.0500
	99.742	99.0510
	99.744	99.0520
	99.746	99.0530
Roll prices (positive)	0.020	0.0110
	0.022	0.0120
	0.024	0.0130
	0.026	0.0140

Bond Futures Outright Contract and Roll	3 Year Bond Futures Price Examples	10 Year Bond Futures Price Examples
Roll prices (negative)	- 0.046	- 0.0310
	- 0.048	- 0.0320
	-0.050	- 0.0330
	-0.052	- 0.0340

### Inter-commodity Spreads

The following inter-commodity spreads will also adopt the narrower tradeable tick increments during the Roll period.

- 3 and 10 Year Bond Future inter-commodity spread (YTXT). During the Roll period the spread will trade at a minimum increment of 0.001.
- 10 and 20 Year Bond Future inter-commodity spread (XTLT). During the Roll period the spread will trade at a minimum increment of 0.001.
- 90 Day Bank Bill and 3 Year Bond Future inter-commodity spread (IRYT). During the Roll period the spread will trade at a minimum increment of 0.002.

### Order Management and Purging

The ASX 24 Trading Platform will purge any orders from the order book that are considered “off-tick”, that is, have a non-tradeable price for the relevant Trading Date. This will impact on the 3 and 10 Year outright orders differently.

#### 3 Year Bond Futures

In the 3 Year Bond Future, some orders will be purged during the transition into the Roll, and some orders will be purged during the transition out of the Roll. That is, orders at a 0.005 price will be purged during the transition from the non-Roll period into the Roll as these increments will not be supported, therefore non-tradeable, during the Roll (at a 0.002 price increment).

Similarly, any orders that have a non-tradeable price (i.e. a price ending in 0.002, 0.004, 0.006 or 0.008) will be purged during the transition from the Roll period to the non-Roll period. For example, an order with a price of 99.742 will be deleted while an order with a price of 99.740 will remain in the order book.

3 Year Bond tick size	Pre-Roll 0.005		Roll Period 0.002		Post-Roll 0.005
	99.740	➔	99.740	➔	99.740
			99.742	➔	purge
			99.744	➔	purge
	99.745	➔	purge		
			99.746	➔	purge
			99.748	➔	purge
	99.750	➔	99.750	➔	99.750

### 10 Year Bond Futures

In the 10 Year Bond Future, some orders will be purged during the transition out of the Roll only. That is, orders at increments other than 0.005 and 0.010 will be purged during the transition from the Roll period to the non-Roll period, as these increments will not be supported, therefore non-tradeable, during the non-Roll period (i.e. a price ending in 0.001 – 0.004, 0.006 – 0.009). For example, an order with a price of 99.0510 will be deleted while an order with a price of 99.0550 will remain in the order book.

10 Year Bond tick size	Pre-Roll		Roll Period		Post-Roll
	<b>0.0050</b>		<b>0.0010</b>		<b>0.0050</b>
	99.0500	➔	99.0500	➔	99.0500
			99.0510	➔	purge
			99.0520	➔	purge
			99.0530	➔	purge
			99.0540	➔	purge
	99.0550	➔	99.0550	➔	99.0550
			99.0560	➔	purge
			99.0570	➔	purge
			99.0580	➔	purge
			99.0590	➔	purge
	99.0600	➔	99.0600	➔	99.0600

### One Session Options VWAP rounding rules

The One Session Options (Intra-day and Overnight Options) are European options that expire at the end of the relevant trading session on a daily basis. The Futures Reference Price is used to determine whether these options are exercised into the underlying futures contract. All In-The-Money options are automatically exercised, while At-The-Money and Out-Of-The-Money Options are automatically abandoned. The Futures Reference Price is calculated as the weighted average price of transactions in the underlying futures contract over a 10 minute window. The following rounding rules are applied when calculating the Futures Reference Price:

#### 3 Year Treasury Bond Futures Reference Price

Where the underlying futures contract minimum price increment is set to 0.005 per cent, the weighted average of trade prices shall be calculated to 4 decimal places and rounded to the nearest multiple of 0.005; if the 3<sup>rd</sup> and 4<sup>th</sup> decimal places are 2 and 5 or 7 and 5 respectively, the weighted average shall be rounded to the next highest multiple of 0.005.

Where the underlying futures contract minimum price increment is set to 0.002 per cent, the weighted average of trade prices shall be calculated to 4 decimal places and rounded 3 decimal places; if the 3<sup>rd</sup> decimal place is an odd number and the 4<sup>th</sup> decimal place is 0, the weighted average shall be rounded to the next highest multiple of 0.002.

#### 10 Year Treasury Bond Futures Reference Price

Where the underlying futures contract minimum price increment is set to 0.005 per cent the weighted average of trade prices shall be calculated to 4 decimal places and rounded to the nearest multiple of 0.005 per cent per annum; if the 3<sup>rd</sup> and 4<sup>th</sup> decimal places are 2 and 5 or 7 and 5 respectively, the weighted average shall be rounded to the next highest multiple of 0.005 per cent per annum.

Where the underlying futures contract minimum price increment is set to 0.001 per cent the weighted average of trade prices shall be calculated to 4 decimal places and rounded to the nearest multiple of 0.001 per cent per annum; if the 4<sup>th</sup> decimal place is 5, the weighted average shall be rounded to the next highest multiple of 0.001 per cent per annum.



### Expiry Settlement Price Rounding Rules

The Expiry Settlement Price for the 3 and 10 Year Bond Futures is calculated by taking physical bond yields for the basket bonds at 3 times on the Last Trading Day from both ICAP and Yieldbroker. For each snapshot the best bid and best offer is selected for each bond in the bond basket. These yields are then averaged, rounded to the nearest tradeable increment and subtracted from 100.

For the 3 Year Treasury Bond Futures the average yield will be rounded to the nearest 0.002. The 10 Year Treasury Bond Futures average yield will be rounded to the nearest 0.001.

### Off-market Transactions (EFP and Block Trades)

During the Roll period, bond and swap Exchange For Physical (EFP) transactions and 3 and 10 Year Treasury Bond Futures block trades<sup>1</sup> will permit futures prices to be registered at the finer price increments.

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#### Further enquiries:

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<sup>1</sup> Block trades apply to the spot month only. Change of the spot month occurs 5 trading days prior to expiry (including expiry day).

