ASX’s Packs and Bundles on 90 Day Bank Bill Futures provide participants with an exchange alternative to OTC Swaps and enables hedging activity for FRA and Swap traders. Packs and Bundles allow participants to gain access to the most actively traded short-term interest rate derivatives product in the Asian region with the ease of a single transaction and greater capital efficiency.

Packs and Bundles are an efficient way to trade an OTC equivalent 1, 2 or 3 year swap, with the added benefits offered by exchange traded markets.

**Packs**

A Pack is a strip of four successive Bank Bill Futures products that allow participants to trade segments of the yield curve in a single transaction, without the legging risk inherent with trading each Bank Bill Futures contract separately. ASX offers three Australian Bank Bill Futures Packs:

- White Pack on 90 Day Bank Bill Futures (1st to 4th quarterly expiry months)
- Red Pack on 90 Day Bank Bill Futures (5th to 8th quarterly expiry months)
- Green Pack on 90 Day Bank Bill Futures (9th to 12th quarterly expiry months)

**Bundles**

A Bundle is a strip of successive Bank Bill Futures products covering more than four successive futures contracts. The first contract in a Bundle is the 1st quarterly contract in the respective Bank Bill Futures contracts. ASX offers two Australian Bank Bill Futures Bundles:

- 2nd Year Bundle on 90 Day Bank Bill Futures (1st to 8th quarterly expiry months)
- 3rd Year Bundle on 90 Day Bank Bill Futures (1st to 12th quarterly expiry months)

**Providing Trading Flexibility**

Packs and Bundles provide trading flexibility in managing interest rate exposure and allows you to execute additional trading strategies. Packs and Bundles:

- Allow participants to trade segments of the yield curve in a single transaction.
- Are traded as an average price of the constituent Bank Bill Futures contracts, providing a transparent mechanism for participants to match an executed Pack or Bundle price with allocated leg prices.
- Are available to trade at a narrower tick increment of 0.005 compared to outright Bank Bill Futures that trade at 0.01 increments. Allocated Bank Bill Futures will clear at the narrower tick increment.

Upon execution of a Pack or Bundle on ASX 24 NTP, underlying Bank Bill Futures positions are allocated through to ASX Clear (Futures). The allocated Bank Bill Futures will be marked-to-market together with Bank Bill Futures created from outright futures trades. Allocated Bank Bill Futures contracts benefit from the same margin offsets available when trading outright Bank Bill Futures contracts.

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1 WFE/IOMA Derivatives Market Survey 2016
90 Day Bank Bill Futures

Underlying 90 Day Bank Bill Futures are actively traded on ASX’s NTP and are ranked amongst the top 10 short-term interest rate futures contracts in the world by turnover. In 2016, 30 million Bank Bill Futures contracts were traded.

Execution and Cost Efficiency

- Packs and Bundles provide users with the benefit of trading a single product in order to gain multiple Bank Bill Future contract exposure, thereby reducing legging risk inherent with trading individual futures contracts.
- Tighter bid-ask spreads for Packs and Bundles - 0.5 basis point increments - allows for Bank Bill Futures positions to be established at a finer price than through trading the individual contract months.

Trading ASX Packs and Bundles 90 Day Bank Bill Futures

- Trading of Packs and Bundles is conducted on-market via ASX’s electronic platform NTP, and off-market through block trade and exchange for physical (EFP) transactions.
- Implied in pricing functionality draws pricing and liquidity into the packs and bundles from the underlying 90 Day Bank Bill Futures providing price transparency against executable volume.
- Spread trading functionality is available for inter-commodity spreads for the 3 Year Treasury Bond Futures and respective Pack and Bundle Futures. These include:
  - 3 Year Treasury Bond Futures vs. White Pack on 90 Day Bank Bill Futures
  - 3 Year Treasury Bond Futures vs. 2nd Year Bundle on 90 Day Bank Bill Futures
  - 3 Year Treasury Bond Futures vs. 3rd Year Bundle on 90 Day Bank Bill Futures

Leg Price Allocation Process

Upon execution of a Pack or Bundle, underlying Bank Bill Futures prices will be determined by the matching engine. The underlying Bank Bill futures leg prices can be determined in 1 of 2 ways:

1) Where an outright pack or bundle order is executed against another pack or bundle order the previous Daily Settlement Prices (DSPs) of the underlying futures contract will be used as a starting point and adjusted by a price adjustment factor to achieve an implied Pack or Bundle price which equates to the price of the executed underlying futures contracts.

Price adjustments will be made via a consistent proportional price movement from the DSPs with the exception that the underlying futures contract with the longest dated expiry will be further adjusted up or down in increments of 0.005 to the extent that such adjustment will achieve a more accurate implied Pack or Bundle price.

A working example of the leg price allocation process is outlined in the Packs and Bundles Strip Leg Allocation Process presentation. Participants can also estimate leg prices by the Packs and Bundles Leg Allocation calculator.

2) Where a pack or bundle order is executed against implied price and volume, the allocated legs will be determined by the underlying Bank Bill futures.

Trade Confirmation Messages

Trade messages will be supported via the ASX NTP protocols:

- FIX order entry
- FIX market data
- FIX drop copy
- ASX MDP (multicast)

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2 asx.com.au/packs-bundles/strip-leg-allocation
3 asx.com.au/prices/calculators
The specifications for these interfaces are available in the [NTP Document Library](https://asx.com.au/ntp).

### Contract Specifications

<table>
<thead>
<tr>
<th>Packs</th>
<th>Bundles</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Commodity Codes</strong></td>
<td><strong>RP:</strong> Red Pack on 90 Day Bank Bill Futures</td>
</tr>
<tr>
<td><strong>WP:</strong> White Pack on 90 Day Bank Bill Futures</td>
<td><strong>GB:</strong> 3rd Year Bundle on 90 Day Bank Bill Futures</td>
</tr>
<tr>
<td><strong>Contract Unit</strong></td>
<td>Each underlying leg of a Pack product translates to a 90 Day Bank Bill Futures contract</td>
</tr>
<tr>
<td><strong>Contract Months</strong></td>
<td>One listed quarterly</td>
</tr>
<tr>
<td>March/June/September/December product for each respective Pack</td>
<td>March/June/September/December product for each respective Bundle</td>
</tr>
<tr>
<td><strong>Underlying Futures Months</strong></td>
<td><strong>WP:</strong> First four consecutive listed underlying 90 Day Bank Bill Futures (IR) contracts, i.e. Spot, Spot + 1, Spot + 2 and Spot + 3</td>
</tr>
<tr>
<td><strong>RP:</strong> Four consecutive listed underlying 90 Day Bank Bill Futures (IR) contracts with the first commencing from Spot + 4, i.e. Spot + 4, Spot + 5, Spot + 6 and Spot + 7</td>
<td><strong>GB:</strong> First twelve consecutive listed underlying 90 Day Bank Bill Futures (IR) contracts, i.e. Spot, Spot + 1, Spot + 2, Spot + 3, Spot + 4, Spot + 5, Spot + 6, Spot + 7, Spot + 8, Spot + 9, Spot + 10 and Spot + 11</td>
</tr>
<tr>
<td><strong>GP:</strong> Four consecutive listed underlying 90 Day Bank Bill Futures (IR) contracts with the first commencing from Spot + 8, i.e. Spot + 8, Spot + 9, Spot + 10 and Spot + 11</td>
<td></td>
</tr>
</tbody>
</table>

| Minimum Price Movement | Prices are quoted in yield per cent (%) per annum in multiples of 0.005 per cent. |
| Last Trading Day | One trading day prior to the last day of trading of the underlying Bank Bill Futures contract. All trading ceases at the end of trading on the prior days’ day session. |
| Trading Hours | 5.08pm – 7.00am and 8.28am – 4.30pm (for the period from the second Sunday in March to the first Sunday in November) |
| | 5.08pm – 7.30am and 8.28am – 4.30pm (for the period from the first Sunday in November to the second Sunday in March) |
| Clearing | Individual underlying 90 Day Bank Bill Futures legs are calculated and allocated into ASX Clear (Futures) once a Pack or Bundle is executed on ASX 24 NTP. Underlying legs will be cleared at 0.005 per cent increments |
| Leg Price Allocation | For pack and bundle orders the previous daily settlement prices (DSP) of the underlying futures market contract will be used as a starting point and adjusted by a price adjustment factor to achieve an interim Pack or Bundle price which approximates the price of the executed underlying futures contracts. Price adjustments will be made via a consistent proportional price movement from DSPs with the exception that the underlying futures market contract with the longest dated expiry will be further adjusted up or down in increments of 0.005 to the extent that such adjustment will achieve an accurate final Pack or Bundle price. Where a pack or bundle order is executed against implied price and volume, the allocated legs will be determined by the underlying Bank Bill futures. |

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Packs and Bundles 3/5
### Data Vendor Codes

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<th>PACKS AND BUNDLES ON 90 DAY BANK BILL FUTURES&lt;sup&gt;5&lt;/sup&gt;</th>
<th>WHITE PACK</th>
<th>RED PACK</th>
<th>GREEN PACK</th>
<th>2ND YEAR BUNDLE</th>
<th>3RD YEAR BUNDLE</th>
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<sup>5</sup> Data vendor codes are current as at November 2017. The most recent vendor codes are available at [asx.com.au/prices/asx24-data_vendor_codes.htm](http://asx.com.au/prices/asx24-data_vendor_codes.htm)
Further information:

For further information on Packs and Bundles, or any ASX Interest Rate Derivatives products, please contact:

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