

MARKET NOTICE

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SUBJECT: PROPOSED IMPROVEMENTS TO THE CURRENT FUTURES AND OPTIONS MTM
METHODOLOGY APPLICABLE TO THE COMMODITY MARKET



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Dear JSE Stakeholder

Futures MTM and impact of referencing the VWAP from Spot Months

At the recent Advisory Committee held on 08 May 2014, the JSE presented the impact on the current futures MTM methodology that resulted from trading activity in the spot month that was not subject to price limits and the resulting Volume Weighted Average Price (VWAP) for the spot month triggering an adjustment to all resulting expiry months. In some instances the change was so substantial the MTM for some expiries was outside either the high or low trade for the day.

The Agricultural Advisory Committee acknowledged the challenge and supported that going forward the VWAP on the spot month be ignored for any futures MTM values.

The proposed futures MTM methodology is therefore proposed as follows:

Futures MTM methodology

- *MTM for the day, which is also referred to as the settlement price, will rely on a random sample selected any time in the last 5 minutes of trading at the discretion of the exchange.*
- *Based on the random snapshot selected, the MTM price is a function of referencing the last traded price **unless** there is a better bid or lower offer. If the closing bid is above the last traded price this will then be used MTM, alternatively if the offer is lower than the last traded price then the offer will be used as the MTM.*

- Following this the spread relationship per product is determined across all expiries based on the sample set that was randomly selected.
- Then to recognize the liquid expiries within the MTM process, the most liquid expiry per product meeting the Volume Weighted Average Price (VWAP) criteria is selected as the reference from which all other expiries are adjusted by the spread difference, the following applies:
 - An expiry will be considered liquid on the trading day for the purpose of determining the MTM if 50 or more contracts trade during the last 15 minutes of a trading session
 - **The spot month will not be included in the VWAP calculations and therefore never eligible to be considered liquid**
 - Should multiple expiries per product meet this criteria, only the most liquid **non spot** month will be selected as the reference expiry month
 - Only on screen traded activity will be taken into account when determining the VWAP
 - Please note the VWAP will not be taken into consideration on the day should the following occur, in which case the random snapshots will prevail:
 1. where at least one expiry of the contract series is MTM at the daily price limit,
or
 2. when the VWAP has resulted in the MTM for any of the expiries of the contract series to be outside of the daily price limits.
- Once the reference VWAP value is determined, it becomes the reference price from which all the other expiries are adjusted by the spread difference. This is done in order to maintain the same spread relationship amongst the contract expiries before and after the VWAP is recognized. In the event that no product has any expiries meeting the VWAP criteria, the random snapshot as selected will prevail without any further adjustments.

Calculation of the Option MtM Volatility

Another concern raised by market participants is specific to the manner in which the option MTM volatility is calculated. The qualification criteria for liquid and illiquid trading sessions have remain the same over time however during periods of lower trading volumes within the eligible strikes, this results in the option MTM volatility not responding quick enough to trading activity. The JSE has also considered simplifying the process to avoid the confusion specific to the classification of liquid vs illiquid instruments.

The JSE proposed to the Agricultural Advisory Committee that we do away with liquid and illiquid criteria and rather consider one of the following:

1. Consider all contracts for the day that fall within seven (7) strikes of the settlement (mtm) price.
2. Consider a minimum of twenty (20) contracts for the entire trading session that fall within seven (7) strikes of the settlement (mtm) price.
3. Consider a minimum of forty (40) contracts for the entire trading session that fall within seven (7) strikes of the settlement (mtm) price.

Option 2 was supported by the Agricultural Advisory Committee with the suggestion to consult further with the option market participants. The above 3 proposals where trialed using data during the month of April where it was found that proposal 1 and 2 were certainly more responsive to adjusting the MTM volatilities an additional 10 times during the month of April.

The proposed option MTM methodology is therefore proposed as follows:

Options MTM Methodology

- Options traded over **the entire last hour** trading session will be considered for the MTM process.

- Three strike prices either side of the option at the money will be considered eg if at the money strike is 1600, then 1540, 1560, 1580 and 1620, 1640 and 1660 strikes will be considered in the process.
- Should the Futures MTM be 1590, then an additional strike is included in the calculation process namely: 1520, 1540, 1560, 1580 and 1600, 1620, 1640, 1660
- **Provided there are 20 or more contracts traded across the strike range as described above, a volume weighted average price will be calculated to determine the option MTM volatility for the specific expiry month**
- **In the event less than 20 contracts traded across the strike range as described, the option MTM volatility will remain unchanged**
- ~~If 60 or more contracts have traded across all available strikes for the entire day, the contract will be considered liquid.~~
- ~~The opposite applies to illiquid contracts, if less than 60 contracts across all available strikes have traded for the entire day then the contract is classified illiquid.~~
- ~~If classified as liquid, then a volume weighted average of 40 or more contracts across the selected strikes will be required in the last hour of trade as the m-t-m volatility, if this quantity does not trade then the volatility will remain unchanged.~~
- ~~If classified as illiquid, then a volume weighted average of 20 or more contracts across the selected strikes will be required in the last hour of trade for the MTM volatility, if this quantity does not trade then the volatility will remain unchanged.~~
- In the event that the underlying future expiry month is priced limit up or down for a majority of the **trading** period ~~between 11h15 and 11h45~~, only options traded on the delta option window will be considered for MTM volatility purposes,
 - No options traded on price through the naked option window will be considered in this instance since the system generated volatility does not reflect the underlying futures price at which the option was matched,
 - Due to the price limits, should delta options only be considered for MTM volatility purposes then the same classification rules will apply **regarding a minimum of 20 or more contracts to calculate the VWAP**. If the criteria are not met the volatility will remain unchanged.
- The exchange reserves the right to make the final decision regarding the MTM volatility and may exercise its discretion as need be.

Please could market participants carefully consider the above proposed changes and should there be any concerns regarding their application to the MtM process, or any proposed changes to the description of the methodology above, please email these to commodities@jse.co.za **no later than Friday 30 May 2014**. We will then publish a final market notice confirming the application and implementation date considering the responses received.