



Investors' and Exporters' FX Window Spot Rate Methodology

July 2023

Contents

1. Introduction	2
2. Coverage	2
3. Data Sourcing, Observation Windows and Publication Times.....	2
4. Exercise of Expert Judgement.....	2
5. Calculation Methodology.....	2
6. Contingency Plan	3

1. Introduction

The following document presents a summary of the methodology that FMDQ Securities Exchange Limited (“FMDQ Exchange” or the “Exchange”) applies to compute the daily Opening and Closing Rates (“Spot Rates”) in the Investors’ and Exporters’ Foreign Exchange Window (“I&E FX Window”).

2. Coverage

The methodology outlined in this document pertains to the calculation of FMDQ Spot FX Rates for the USD/NGN (\$/₦) currency pair, as well as any other currency pairs traded and reported on the FMDQ-designated FX Trading System.

3. Data Sourcing, Observation Windows and Publication Times

The FMDQ I&E FX Window Spot Rates shall be based primarily on data inputs collected from the FMDQ-designated FX Trading System or any other data portal during relevant observation windows for publication as follows:

S/N	I&E Spot Rates	Data Input	Observation Window	Publication Time
1.	Opening Rate	<ul style="list-style-type: none"> ▪ Firm Orders ▪ Indicative Quotes 	8:00 AM – 9:00 AM	9:05 AM
2.	Closing Rate	<ul style="list-style-type: none"> ▪ Executed Transactions ▪ Firm Orders 	9:00 AM – 4:00 PM	5:00 PM

4. Exercise of Expert Judgement

FMDQ Exchange may exercise discretion with respect to the use of data in determining the Spot FX Rates. Calculation of the I&E FX Window Spot Rates includes a validation process whereby FMDQ reviews data and selects rates pursuant to certain pre-determined tolerance checks. When applying tolerance checks, FMDQ Exchange has the discretion (subject to internal policies and procedures) to include or reject certain data from the calculation of the I&E FX Window Spot Rates. Based on FMDQ Exchange’s experience in interpreting market data, FMDQ Exchange will apply expert judgment where necessary, with the intent of ensuring the quality and integrity of the Spot FX Rates.

5. Calculation Methodology

5.1. The FMDQ I&E FX Window Spot Rates shall be computed as the Volume-Weighted Average Price (“VWAP”) of the rates collected for the relevant data input as stipulated in section 3 above, to two (2) decimal places using the below formula:

$$\frac{\sum(\text{Price}_i \times \text{Value}_i)}{\sum_{i=0}^n \text{Value}}$$

Where: $Price_i$ is the executed prices and $Value_i$ is the value of the transaction in USD or any other foreign currency

5.2. Computation of the FMDQ I&E FX Window Opening Rate

The daily FMDQ I&E FX Window Opening Rate shall be computed as the VWAP of firm orders and/or indicative quotes obtained during the designated observation window in section 3 using a waterfall methodology as follows:

- 5.2.1.** Level I – All firm orders¹ in the market at 9:00 AM
- 5.2.2.** Level II – All indicative quotes between 8:00 AM – 9:00 AM (subject to a minimum of five (5) indicative quotes)
- 5.2.3.** Level III – Maintain previous day's Closing Rate

5.3. Computation of the FMDQ I&E FX Window Closing Rate

The daily FMDQ I&E FX Window Closing Rate shall be computed as the VWAP of firm orders obtained during the designated observation window in section 3 using a waterfall methodology as follows:

- 5.3.1.** Level I – Last ten (10) trades of the current trading day
- 5.3.2.** Level II – Ten (10) data points comprising all trades and most recent firm orders
- 5.3.3.** Level III – Most recent firm orders between 9:00 AM – 4:00 PM (subject to a minimum of ten (10) firm orders)
- 5.3.4.** Level IV – Maintain current trading day's Opening Rate

6. Contingency Plan

- 6.1.** Where there is inadequate data for the computation of the FMDQ I&E FX Window Spot Rates as stipulated in sections 5.2 and 5.3 above, the previous day's FMDQ I&E FX Window Closing Rate shall be published as the Opening and Closing Rates for the current day.
- 6.2.** Any republished rates from the previous business day will be identified as such on the FMDQ Exchange website and e-Markets Portal.
- 6.3.** After five (5) consecutive business days of republishing the same previous day's I&E FX Window Closing Rate (in this case, Closing Rate of five (5) business days prior), an FMDQ Market Review Committee meeting shall be convened in a special session to devise a strategy for the appropriate determination of future I&E FX Window Spot Rates towards preserving the continuity of the Spot Rates.

¹ Mid-rate of firm orders upon activation of 2WQ