



Nigerian Autonomous Foreign Exchange Fixing Methodology

July 2023

Contents

1. INTRODUCTION.....	2
2. BACKGROUND.....	2
2.1. Uses of NAFEX.....	2
2.2. Key Considerations.....	3
2.2.1. Benchmark Administrator.....	3
2.2.2. Active Market.....	3
2.2.3. Data Sourcing.....	3
2.2.4. Governance and Transparency.....	3
2.2.5. Exercise of Expert Judgment.....	3
2.2.6. Frequency of Reviews.....	4
3. BENCHMARK DYNAMICS.....	4
3.1. Benchmark Methodology.....	4
3.2. Contingency Plan.....	4
4. PUBLICATION.....	4

1. INTRODUCTION

This document provides a summary of the methodology that FMDQ Securities Exchange Limited (“**FMDQ Exchange**” or the “**Exchange**”) applies to compute the Nigerian Autonomous Foreign Exchange Fixing (“**NAFEX**”).

2. BACKGROUND

FMDQ Exchange is a securities exchange with a mission to empower markets for economic progress towards delivering prosperity. This mission is achieved by providing the secondary market with a world-class market governance and development service to the benefit of market participants and in support of the objectives of the financial services regulators. Consequently, FMDQ Exchange is committed to publishing independent and transparent benchmark rates which, based on its methodology, are reasonably designed to be reflective of the market at the time of the fix, and to promote market transparency.

FMDQ Exchange Benchmarks meet the requirements of domestic regulations as well as the International Organisation of Securities Commissions (“**IOSCO**”) Principles for Financial Benchmarks (“**PFB**”) on governance, quality of the methodology and accountability mechanisms.

NAFEX is the reference rate for Spot Foreign Exchange (“**FX**”) transactions in the Nigerian Autonomous Foreign Exchange Market and any such approved and recognised market venue as may be defined from time to time by the Exchange. NAFEX is designed and generated independently and objectively and is published every business day at a specific time.

2.1. Uses of NAFEX

As an FX Benchmark, NAFEX is an essential to the smooth functioning of the Nigerian financial market due to the need for participants across all sectors of the economy to assess and measure FX exposures arising from changes in the exchange rate of the Nigerian Naira to foreign currencies such as the United States Dollars (USD).

NAFEX will benefit the Nigerian economy in general, and the financial industry, in several ways, including:

- Serving as a Benchmark for the settlement of FX derivatives
- Promoting transparency and awareness of USD/NGN rates
- Enabling foreign and local investors benefit from a market-driven independent reference rate
- Developing hedge products and derivatives, thus improving the standard of the Nigerian FX markets
- Providing growth and income potentials for market players through the trading of hedging products
- Serving as a benchmark for portfolio valuations, conversions, performance measurement and audits

2.2. Key Considerations

2.2.1. Benchmark Administrator

FMDQ Exchange is the benchmark administrator for NAFEX and thus has primary responsibility for all aspects of the benchmark determination process. This process includes the development, determination, dissemination, operation, and governance of NAFEX.

2.2.2. Active Market

FMDQ Exchange recognises that to enable the publication of a meaningful benchmark, a market in the currency pair represented by the benchmark must genuinely exist and that market must be active. However, the economic realities will dictate the relative meaning of what 'active' means, as market liquidity can vary significantly at particular times of the day. FMDQ Exchange applies the IOSCO Principles for Financial Benchmarks 7 & 8 – "Data Sufficiency" & "Hierarchy of Data Inputs" in determining thresholds for an "active market."

2.2.3. Data Sourcing

All FX transactions traded or reported on the FMDQ-designated FX Trading System, as well as any other data sources (deemed representative) designated by the Benchmark Administrator.

2.2.4. Governance and Transparency

FMDQ Exchange is subject to a corporate risk framework which is based on three (3) lines of risk management:

- i. Business procedures and controls are designed to promote consistency throughout the process.
- ii. The application of independent governance, reporting and risk management. The Board of Directors and relevant Board Committees are responsible for oversight of FMDQ Exchange Benchmark, including reviewing and advising on the policies and methodologies by which FMDQ Exchange calculates, administers, and publishes the Benchmark.
- iii. FMDQ Exchange Benchmarks are discussed and adopted by an Oversight Committee i.e., the Market Review Committee, consisting of members of the FMDQ Exchange Management Team who perform the required due diligence on the proprietary Benchmarks.

2.2.5. Exercise of Expert Judgment

FMDQ Exchange may exercise discretion on the use of data in determining a Benchmark. The calculation of a Benchmark includes a validation process whereby, among other steps, FMDQ Exchange reviews data and fixes rates under 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 for the calculation of the Benchmark. Based on FMDQ Exchange's experience in interpreting market data, FMDQ Exchange shall apply expert judgment, when necessary, with the intent of ensuring the quality and integrity of the Benchmark. Consequently, FMDQ Exchange has put in place internal guidelines and quality control procedures that govern the application of "Expert Judgment" and are intended to provide consistency and oversight to the process.

2.2.6. Frequency of Reviews

FMDQ Exchange shall conduct an annual review of the Benchmarks methodology to ensure that the approach adopted towards calibrating the fix considers market trends and observations.

3. BENCHMARK DYNAMICS

3.1. Benchmark Methodology

NAFEX shall be computed daily as the Volume-Weighted Average Price (“**VWAP**”) of transactions executed during the designated observation window using the formula below and waterfall methodology:

$$\frac{\sum (Price_i \times Value_i)}{\sum_{i=0}^n Volume}$$

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

3.1.1. **Level I** – All trades between 9:00 AM – 12:25 PM of the current trading day subject to a minimum of ten (10) transactions

3.1.2. **Level II** – All trades between 12:30 PM prior day - 12:25 PM the current trading day subject to a minimum of ten (10) transactions

3.1.5. **Level III**– Maintain previous day’s NAFEX

3.2. Contingency Plan

3.2.1. Where there are no trades in the Nigerian Autonomous Foreign Exchange Market, the previous day’s NAFEX shall be maintained and published as the current NAFEX for a maximum of five (5) consecutive business days.

3.2.2. Any republished rates from the previous business day will be identified as such on the FMDQ Exchange website and e-Markets Portal.

3.2.3. After five (5) consecutive business days of republishing the same previous day’s NAFEX (in this case, NAFEX of five (5) business days prior), the Exchange at its discretion, will defer to alternative approaches (such as model prices and other options for obtaining relevant data inputs for the computation of the Benchmark) to ensure its representativeness of transactions in the FX markets.

4. PUBLICATION

NAFEX Spot Rate shall be published by 12:30 PM daily via relevant channels.