

NITTY

The Nigerian Inter-Bank Treasury Bills' True Yields Fixing Methodology

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Contents

1.	INT	RODUCTION	2		
2.	KEY	CONSIDERATIONS	2		
ź	2.1.	Benchmark Administrator	2		
ź	2.2.	Active Market	2		
ź	2.3.	Data Source	2		
ź	2.4.	Governance and Transparency	2		
ź	2.5.	Exercise of Expert Judgment	3		
2	2.6.	Frequency of Reviews	3		
3. FIXI		NG DYNAMICS	3		
Ĵ	8.1.	Fixing Methodology	3		
Ĵ	8.2.	Contingency Plan	4		
4.	4. PUBLICATION				



1. INTRODUCTION

FMDQ Securities Exchange Limited ("FMDQ Exchange") is a securities exchange with a mission to empower the financial markets to be innovative and credible, in support of the Nigerian economy. 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.

Since its launch in 2013, FMDQ Exchange has remained 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.

The Nigerian Inter-Bank Treasury Bills' True Yields Fixing ("**NITTY**") is the FMDQ Exchange benchmark riskfree rate which is derived from the conversion of Nigerian Treasury Bills ("**T.bills**") discount rates for benchmark tenors to money market yields i.e. true yields.

As part of its standard governance practices, FMDQ Exchange periodically reviews its policies and practices in accordance with appropriate international benchmark regulations and guidance, particularly the International Organisation of Securities Commissions ("**IOSCO**") Principles for Financial Benchmarks.

2. KEY CONSIDERATIONS

2.1. Benchmark Administrator

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

2.2. Active Market

FMDQ Exchange recognises that to enable the publication of a meaningful benchmark, a market in the securities represented by the benchmark must genuinely exist and that market must be active. However, the economic realities will dictate the relative meaning of 'active', as market liquidity can vary significantly at different 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".

2.3. Data Source

NITTY shall be based entirely on polled rates. Each NITTY benchmark shall be derived from the discount rate of the closest (in DTM¹) of the on-the-run T.bills corresponding to the NITTY benchmark. NITTY data inputs shall not include rates for Open Market Operations ("OMO") bills.

2.4. Governance and Transparency

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

¹ Days-to-maturity



- i. Business procedures and controls are designed to promote consistency throughout the process The application of independent governance, reporting and risk management. The FMDQ Exchange Board of Directors (Board) and relevant Board Committee are responsible for oversight of the benchmark rates, including reviewing and advising on the policies and methodologies by which FMDQ Exchange calculates, administers and publishes the benchmarks
- ii. The FMDQ Exchange Board has established a Benchmark Oversight Committee (the "Market Review Committee" consisting of Management Staff of FMDQ Exchange) to perform an oversight function over the benchmarks and FMDQ Exchange in its role as the Benchmark Administrator

2.5. Exercise of Expert Judgment

FMDQ Exchange may exercise discretion with respect to the use of data in determining a benchmark. The calculation of the benchmark rate includes a validation process whereby, among other steps, FMDQ Exchange reviews data and fix 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 benchmark rate. Based on FMDQ Exchange's experience in interpreting market data, FMDQ Exchange will apply expert judgment, when necessary, with the intent of ensuring the quality and integrity of the benchmark rate. FMDQ Exchange has put in place internal guidelines and quality control procedures that govern the application of "Expert Judgment" to provide consistency and oversight to this process.

2.6. Frequency of Reviews

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

3. FIXING DYNAMICS

3.1. Fixing Methodology

NITTY quotes shall be determined as detailed below and FMDQ Reference Banks shall contribute only 'professional spot quotes on T.bills only' i.e. spread between bid and offer must be standardised and shall not include quotes on OMO bills. Where a Reference Bank contributes an unprofessional quote, such a quote will automatically be disqualified from the NITTY computation. Reference Banks shall quote bid and offer rates for benchmark tenors of one (1), three (3), six (6), nine (9) and twelve (12) months at the time of the poll.

NITTY shall be polled, calculated and published every business day at 12:00 noon using a trimmed arithmetic mean from the submission of ten (10) quotes. Upon receipt of quotes from the Reference banks (T.bills discount rates), each quote is converted to a money market yield equivalent. The mid-rate of the individual Reference banks' converted submission is then calculated and ranked in descending order. The highest and lowest 20.00% are eliminated from the ranked mid-rates leaving only the middle 60.00%. The trimming of the top and bottom 20.00% allows for the exclusion of outliers from the final calculation. The arithmetic mean of the remaining mid-rates shall then be calculated to four (4) decimal places and disseminated as the NITTY rate.



In the event that FMDQ Exchange receives fewer than the required number of submissions by the time NITTY is due to be published, the reduced submissions methodology detailed below shall apply:

- i. NITTY will be published provided that two (2) or more quotes are obtained on a daily basis
- ii. The calculation methodology shall remain the same irrespective of the number of submissions received. However, under the reduced submissions methodology, the number of submissions excluded on the high and low sides ('topped and tailed') shall apply as detailed in the table below:

No of Quotes Received	Number of Highest Rates Excluded	Number of Lowest Rates Excluded
6 - 9	1	1
2 - 5	0	0
1 or less NITTY not calculat		calculated

If data remains insufficient by 12:00 noon, FMDQ Exchange shall activate the NITTY Contingency Plan as detailed below.

3.2. Contingency Plan

In instances where there are quotes below the documented threshold, the previous day's NITTY shall be maintained and published as the current NITTY. In circumstances of an extreme market condition or force majeure event, leading to the unavailability of quotes in the market, the previous day's NITTY will be maintained and published as the current NITTY.

Any republished rates from the previous business day will be identified as such on the FMDQ Exchange website and e-Markets Portal. After three (3) consecutive business days of republishing the previous day's NITTY (in this case, the NITTY of three (3) business days prior), an FMDQ Exchange Market Review Committee meeting shall be convened in a special session to devise a strategy for the appropriate determination of future NITTY during the extreme market condition, towards preserving the continuity of the NITTY publication.

4. PUBLICATION

NITTY is available in three (3) packages - Live Fix, Delayed and Historical:

- Live Fix: Available at 12:00 noon daily via the FMDQ Exchange e-markets portal²
- Delayed (24hrs): Published via the FMDQ Exchange website³
- NITTY Historical: Available via the FMDQ Exchange e-markets portal

² Please contact the FMDQ Exchange Business Origination Team – <u>bog@fmdqgroup.com</u> for further details ³ www.fmdqgroup.com