

FMDQ Exchange Benchmarks Control Framework

FMDQ Securities Exchange Limited

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DEFINITIONS

"Administrator" or	a natural or legal person that has control over the provision of a Penchmark, and
"Administrator" or "Benchmark	a natural or legal person that has control over the provision of a Benchmark, and
Administrator"	in particular, administers the arrangements for determining the Benchmark, collects and analyses the input data, determines the Benchmark, and either directly publishes or outsources the publication or the calculation of the Benchmark to a third-party so designated by FMDQ Securities Exchange Limited from time to time.
"Benchmark"	is an index, value and reference rate used for the purpose of pricing, settlement and valuation of various financial assets/contracts.
"Benchmark Contributor"	means an entity whose activities result in the provision of data or information to an Administrator for the determination or administration of a Benchmark.
"Benchmark Oversight Committee"	a committee established for the purpose of providing governance and internal oversight in respect of all aspects of FMDQ Securities Exchange Limited's Benchmark Administration activities.
"Benchmark Reference Banks"	Dealing Member (Banks) (DMBs) which have been selected by the Benchmark Administrator based on specific criteria outlined herein for the calculation of Benchmarks.
"Calculation Agent"	a legal entity with delegated responsibility for determining a Benchmark through the application of a formula or other method of calculating the information or expressions of opinions provided for that purpose, in accordance with the Methodology set out by the Benchmark Administrator.
"Expert Judgment"	a technique in which judgment is made based upon requisite market experience in Benchmark administration/determination which should only be applied after an exhaustive process, as defined by internal procedures, has been undertaken.
"FMDQ Exchange"	
or the "Exchange"	means FMDQ Securities Exchange Limited.
"Methodologies"	a set of procedures applied by the Exchange to derive and calculate daily Benchmark
"Submitter"	designated personnel within a Benchmark Reference Bank responsible for submitting data to the Benchmark Administrator via FMDQ Exchange-advised media.
"Submissions"	Prices, estimates, values, rates or other information that is provided by the Submitter to an Administrator for the purpose of determining a Benchmark



1. FINANCIAL BENCHMARK REGULATION

Financial Benchmarks play a very critical role in promoting efficient and transparent financial markets. The Benchmark determination process has been subject to considerable scrutiny in several jurisdictions over previous years. On a global basis, the International Organisation of Securities Commissions ("**IOSCO**") published its final report on the Principles for Financial Benchmarks (the "**Principles**" or "**PFB**") in July 2013. These Principles cover:

- Governance principles aimed at protecting the integrity of the Benchmark determination process and dealing with conflicts of interest
- Benchmark quality principles aimed at promoting the quality and integrity of Benchmark determination through the application of design factors
- Methodology principles aimed at promoting the quality and integrity of Methodologies by setting out minimum information that should be addressed within a Methodology
- Accountability mechanisms such as a complaints process, documentation requirements and audit reviews

The IOSCO Principles state that "the Administrator should retain primary responsibility for all aspects of the Benchmark determination process including:

- Development: the definition of the Benchmark and Benchmark Methodology
- Determination and Dissemination: accurate and timely compilation, publication and distribution of the Benchmark
- Operation: ensuring appropriate transparency over significant decisions affecting the compilation of the Benchmark and any related determination process, including contingency measures in the event of absence of data inputs or insufficient inputs, market stress or disruption, failure of critical infrastructure or other relevant factors
- Governance: establishing credible and transparent governance, oversight and accountability procedures for the Benchmark determination process, including an identifiable oversight function accountable for the development, issuance and operation of a Benchmark

2. ABOUT THE ADMINISTRATOR

FMDQ Exchange is Nigeria's foremost debt capital, foreign exchange ("**FX**") and derivatives securities exchange, offering, amongst other world-class services, an efficient platform for the registration, listing, quotation, noting, trading, order execution, and trade reporting of fixed income, currency and derivative products.

FMDQ Exchange uniquely combines the functions of a securities exchange (providing a platform for businesses and governments to seamlessly raise capital while spearheading the development of new products and supporting market structures), and a self-regulatory organisation (providing governance to ensure market conduct, fostering integrity and credibility of the markets' dealings, and regulating the activities of its Members in the markets under its governance).

The Exchange is positioned to drive global competitiveness by deepening its markets through product innovation and institutionalising robust market architecture. Whilst complementing other existing securities exchanges and



providing world-class market governance for capital transfer, FMDQ Exchange's current primary focus is on the fixed income (money, repo, commercial papers, treasury bills and bonds), currency and derivatives markets.

In the Nigerian financial markets, Benchmarks are widely used as the basis for determining the value of a variety of financial instruments. Therefore, the Exchange is charged with the governance and overall responsibility of ensuring the integrity of the Benchmarks it administers which play a critical role in the effective functioning of the Nigerian financial markets and in sustaining investor confidence.

The Exchange is regarded as an Administrator within the meaning of the Principles and currently administers three (3) Benchmarks (the "**FMDQ Exchange Benchmarks**" or the "**Benchmarks**") in the Nigerian financial markets:

- (i) The Nigerian Inter-Bank Offered Rate ("NIBOR").
- (ii) The Nigerian Inter-Bank Treasury Bills' True Yields Fixing ("NITTY").
- (iii) The Nigerian Autonomous Foreign Exchange Fixing ("NAFEX").

3. THE BENCHMARK CONTROL FRAMEWORK

As an Administrator, the Exchange is required to demonstrate that there are appropriate governance arrangements in place to protect the integrity of the FMDQ Exchange Benchmarks and to address any potential conflicts of interest. To achieve this, in line with Principle 4 of the PFB, the Exchange has established an independent, robust, accountable and transparent governance structure to oversee and challenge the development, determination and operation of its Benchmarks.

This Benchmark Control Framework (the "**Framework**") aims to provide transparency on the Exchange's practices providing the necessary governance and control to administer the FMDQ Exchange Benchmarks in line with the relevant Principles. The Framework describes processes and control activities relating to:

- (i) The integrity and quality of the design, calculation, maintenance and distribution of the Benchmarks.
- (ii) The calculation and distribution of the Benchmarks.
- (iii) How conflicts of interest are managed and resolved in the business.
- (iv) Whistleblowing reporting and resolution channels.
- (v) Employee screening, training, performance reviews and attestations.

4. GOVERNANCE

4.1. Overall Responsibility

As Administrator, FMDQ Exchange retains primary responsibility over the development, determination, dissemination, operation and governance of the Benchmark Administration process.

- (i) Development: The Exchange develops Benchmarks which enable investors and market participants to gain exposure to investment allocation strategies and is solely responsible for establishing and maintaining accurate definitions of each FMDQ Exchange Benchmark, launching each Benchmark subject to the Exchange's approval process.
- (ii) **Determination and Dissemination**: Ensuring the accurate and timely compilation, publication and/or distribution of each FMDQ Exchange Benchmark. In respect of certain Benchmarks, third parties may be licenced



to disseminate the Benchmarks in accordance with defined standards. Notwithstanding any such appointment, FMDQ Exchange, as Administrator, shall retain the intellectual property of the FMDQ Exchange Benchmarks.

- (iii) Operation: The Exchange provides appropriate transparency over significant decisions affecting the compilation of the FMDQ Exchange Benchmarks and any related determination process, including contingency measures in the event of absence of or insufficient inputs, market stress or disruption, or other relevant factors. Any contingency measures that are not directly addressed in the Methodology for the respective FMDQ Exchange Benchmark shall be subject to the Exchange's governance processes as detailed in section 4.4 of this Framework.
- (iv) Governance: The Exchange has instituted transparent governance, oversight and accountability procedures for its Benchmark determination process. The Exchange has established the Market Review Committee ("MRC") for the purpose of providing governance and internal oversight in respect to all aspects of its Benchmark administration activities. The roles and responsibilities of the MRC are further described in section 4.4 of this Framework.

4.2. Oversight of Third Parties

Where activities relating to the FMDQ Exchange Benchmark determination process are undertaken by a thirdparty(e.g. collection of data inputs, publication or where a third-party acts as Calculation Agent), such relationship is governed by a written agreement which clearly defines and substantiates the roles and obligations of the third party, as well as the standards that the Exchange expects the third-party to comply with. Notwithstanding the appointment of third parties, the Exchange shall retain the intellectual property of the FMDQ Exchange Benchmarks.

FMDQ Exchange currently does not employ a third-party in its Benchmark determination process.

4.3. Conflicts of Interest

The Exchange recognises that in the normal course of business and owing to the multiple roles the Exchange performs in the Nigerian financial markets, potential conflicts of interest may arise and is therefore committed to identifying such conflicts of interest and effectively managing them in an appropriate manner in order to protect the integrity and independence of the FMDQ Exchange Benchmarks determination. To this end, the Exchange has established a Conflicts of Interest Policy and attendant Procedures for all its staff.

The Conflict of Interest Policy has been designed in line with Principle 3 of the IOSCO Principles to address any potential vulnerabilities that may create incentives for Benchmark manipulation and outlines the procedures for the identification, mitigation and monitoring of material conflicts of interest. For the purpose of identifying the types of conflicts of interest that arise, or may arise, the following were considered:

- Personal account dealing
- The possibility of making a financial gain or financial loss at the expense of the firm or its clients
- Existence of an incentive to favour the interest of one (1) or a group of clients over the interests of other clients
- Promoting other products and services that may be in direct competition with FMDQ Exchange
- Overlapping roles and responsibilities (including Directorships) such that priorities become unclear
- The failure to implement measures to ensure the confidentiality of Benchmark submissions and other information from Benchmark Contributors (to the extent that such submissions and information have not been made public)



In particular, the Conflicts of Interest Policy puts the following requirements/restrictions on the Exchange and its employees:

- (i) The Exchange does not enter Benchmark-linked financial instruments.
- (ii) The goals, rewards and incentives for FMDQ Exchange personnel is not directly or indirectly tied to the levels or performance of the Benchmarks (*other than being tied to the overall success of the Exchange from a service provider perspective*).
- (iii) The Methodologies must be rules based, enabling stakeholders to check the calculation of the Benchmarks.
- (iv) The ongoing disclosure of any material conflicts of interest.
- (v) Any determination with regards to a Benchmark which is not handled by the Methodology shall be overseen by the MRC.

Therefore, the Exchange has implemented the following controls to manage/mitigate existing and potential conflicts of interest:

- (i) Information barriers that are designed to prevent/control the exchange of information between opposing sides of a conflict of interest. Also, all data, information and other inputs submitted to, received by or produced by the Exchange are confidential subject to the legal/regulatory disclosure obligations of the Administrator.
- (ii) Segregation of reporting lines within the Exchange, where appropriate, to clearly define responsibilities.
- (iii) Adequate supervision and sign-off by authorised or qualified staff prior to releasing any FMDQ Exchange Benchmark determination.
- (iv) *Removal of remuneration links* that may influence staff to favour a product or service. Consequently, adequate remuneration policies that ensure all staff who participate in the FMDQ Exchange Benchmarks determination process are not directly or indirectly rewarded or incentivised by the levels of the FMDQ Exchange Benchmarks.

4.4. Internal Oversight

In its capacity as a Benchmark Administrator and recognising the importance and significance of the FMDQ Exchange Benchmarks to the strength and stability of the financial system, FMDQ Exchange has established transparent governance, oversight and accountability procedures for the FMDQ Exchange Benchmark determination process with distributed levels of responsibility:

- (i) The Exchange Board Listings, Markets and Technology Committee ("**BLMTC**") has overall responsibility for the regular review of the Benchmark Control Framework and its effectiveness.
- (ii) The Exchange has established a Benchmark Oversite Committee ("BOC") The MRC for the purpose of providing governance and internal oversight in respect of all aspects of the Exchange's Benchmark Administration activities. The MRC is constituted of Management staff of FMDQ Exchange with requisite knowledge and experience to administer the daily oversight function of the FMDQ Exchange Benchmarks. Each individual member of the MRC has the appropriate, level of seniority and experience to participate, and knowledge/expertise relating to the activities of the FMDQ Exchange Benchmarks service. To allow for time-sensitive decisions, an MRC meeting may take place without a physical gathering and the MRC shall meet at least once a year.



Information about changes to Benchmarks and related matters are considered to be potentially market impacting and material, therefore, all MRC discussions are confidential until any specific outcome is announced. The MRC members are also required to execute the FMDQ Exchange Conflicts of Interest Policy annually.

5. QUALITY OF THE BENCHMARK

5.1. Benchmark Design

FMDQ Exchange Benchmark designs are developed by the FMDQ Exchange Market Development Group and seek to result in an accurate and reliable representation of the economic realities of the interest each Benchmark seeks to measure, while eliminating factors that might result in a distortion of the price, rate or value of the Benchmark. To this end, the design of each FMDQ Exchange Benchmark must satisfy the following parameters:

- (i) Have a clearly defined objective.
- (ii) Have a clear and robust Methodology in the light of the objective.

(iii) Be sufficiently rules based, not allowing the administration personnel to exercise undue discretion.

Therefore, in the assessment of these design considerations, the underlying components of the proposed Benchmark shall be considered, where appropriate, by reference to the adequacy of the components used to represent the relevant interest; the size and liquidity of the relevant market (e.g. whether there is sufficient trading to provide observable, transparent pricing); the relative size of the underlying market in relation to the anticipated volume of trading in the market that references the Benchmark; the distribution of trading among market participants (i.e. market concentration); and market dynamics.

5.2. Data Sufficiency

The Exchange recognises that to enable the publication of meaningful Benchmarks, a market for the instrument represented by the Benchmark must genuinely exist and the 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 PFB in determining the threshold of an 'active market'. FMDQ Exchange's data inputs include:

- (i) **Exchange prices:** These include the published prices for all forms of exchange traded instruments including foreign exchange rates, exchange traded funds, futures, options and other derivatives traded on a variety of underlying assets across asset classes and other exchange traded products.
- (ii) **Other market data and reference rates:** These include interest rates, foreign exchange rates and other market prices, levels and values published by other administrators or third-party data providers. Examples include, but are not limited to, other benchmark interest rates and foreign exchange rates.

The Exchange may use closing prices/rates, intraday snapshot prices/rates, contributed prices/rates or other derived prices/rates such as volume-weighted average prices/rates, as may be defined in the Methodology of each Benchmark. Where appropriate, FMDQ Exchange may also use interpolated prices/rates or executable bid or ask quotes provided that these are sourced from an active market.



5.3. Hierarchy of Data Inputs

Each FMDQ Exchange Benchmark typically uses data inputs as part of its determination. Section 5.2 specifies the typical type of data inputs used by FMDQ Exchange Benchmarks, with each case specified in the relevant FMDQ Exchange Benchmark Methodology. While most FMDQ Exchange Benchmarks specify a single data input rather than a hierarchy of inputs, each Methodology document shall also contain the corresponding consequences for specific market disruptive events that may impact the underlying input data. To the extent that a market event is not fully anticipated or addressed in the Methodology, or any necessary data input is unavailable or considered by the Exchange to be unreliable for any reason, then Expert Judgment may be used in performing the relevant determination.

The Exchange in its capacity as the Benchmark Administrator may exercise discretion on the use of data in determining a Benchmark. The calculation of a Benchmark includes a validation process where data and Benchmark rates are set under certain pre-determined tolerance checks. When applying tolerance checks, the Exchange has the discretion (subject to internal policies and procedures) to include or reject certain data from the calculation of the Benchmark. Based on the Exchange's experience in interpreting market data, the Exchange shall apply Expert Judgment, when necessary, with the intent of ensuring the quality and integrity of the Benchmark rate. Consequently, the 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.

5.4. Transparency of Benchmark Determinations

FMDQ Exchange Benchmarks follow the process and set of rules defined in the Methodologies. The Methodologies are transparent rules-based documents subject to a corporate risk framework based on three (3) lines of risk management and designed to help improve transparency and reduce the level of risk:

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

5.5. Periodic Review

The Exchange as the Benchmark Administrator shall undertake periodic reviews of the appropriateness of using specific Benchmark Contributors to provide the data used in the calculation and validation of all its Benchmarks. This review is intended to, amongst others, ensure that:

- (i) FMDQ Exchange Benchmarks are based on reliable and observable market data that reflect the economic realities of the underlying markets.
- (ii) FMDQ Exchange Benchmarks are reliable representations of the underlying markets which they track/measure.



(iii) All contributions to the FMDQ Exchange Benchmark determination process remain sufficient, appropriate and true to the Benchmark determination process.

Further, the MRC periodically reviews the conditions in the underlying interest that the Benchmarks measure to determine whether the interests have diminished or are non-functioning such that they can no longer serve as the basis for credible Benchmarks. If such reviews lead to a material revision to a Benchmark(s), FMDQ Exchange will publish or make available a summary of such reviews, including the rationale for such revision(s) through the Benchmark Transition and Stakeholder Engagement policies.

6. QUALITY OF THE METHODOLOGY

6.1. Content of Methodology

FMDQ Exchange Methodologies are a set of procedures applied by the Exchange to derive and calculate daily reference rates/prices. The determination and calculation of FMDQ Exchange Benchmarks include a validation process whereby, among other steps, the Exchange reviews data submissions and fixes rates/prices pursuant to certain pre-determined tolerance checks.

FMDQ Exchange has put in place internal guidelines and quality control procedures that govern the application and calculation of all FMDQ Exchange Benchmarks. These controls are intended to provide consistency and oversight to this process. All Methodologies are subject to periodic reviews and amendments, keeping in line with best practices. The FMDQ Exchange Benchmarks Methodologies are available to all stakeholders via the FMDQ Exchange website.

6.2. Errors to the Methodology

Although the Methodologies are intended to be comprehensive and accurate, ambiguities may arise, and errors or omissions may have been made. FMDQ Exchange has formulated the FMDQ Exchange Benchmark Error Policy (the "**Error Policy**") to address error reports as well as possible revisions to Benchmark rates after initial publication. (Click <u>here</u> to view).

6.3. Changes to the Methodologies

Where a proposed change to a Methodology is considered material, the matter must be brought before the MRC for consideration to ensure the continued integrity of the Benchmark determinations. When determining if a proposed Benchmark Methodology change is material, the Exchange shall consider:

- (i) Any economic and/or financial impact of the proposed change in Benchmark Methodology to investors in Benchmark-linked products.
- (ii) Whether the proposed change to the Benchmark Methodology is related to Submissions.
- (iii) If the proposed change to the Benchmark Methodology impacts the original intent and/or function of the Benchmark is retained.
- (iv) The extent to which the change in the Benchmark Methodology is consistent with the design objective of the Benchmark.

The following amendments to a Benchmark Methodology are examples of non-material changes:

(i) Correction of typos.



(ii) Clarifications.

- (iii) Adding or removing language not impacting how the Methodology is normally applied, including disclaimers, regulatory statements, governance procedures and examples.
- (iv) Amending the structure of the Methodology document with no change to the content of the document.

FMDQ Exchange has developed stakeholder consultation procedures in relation to changes to a Methodology that are deemed material. Any such decision to survey stakeholders shall be taken by the MRC. Following such consultation, the Exchange shall notify stakeholders of any change of Methodology, through a notice on its website.

6.4. Transition Policy

In line with *Principle 13 (Transition)* of the IOSCO PFB, the Exchange has an established Benchmark Transition Policy to address circumstances in which it becomes necessary to either temporarily or permanently discharge the calculation and publication of any of the Benchmarks or Benchmark tenors it administers due to circumstances within the purview of the conditions stated in Principle 13. (Click <u>here</u> to view).

Prior to the external communication of its intention to activate the cessation procedure of a Benchmark, the MRC, shall evaluate the shortcomings of the Benchmark in representing its intended function and FMDQ Exchange shall communicate accordingly to the market on its intention to cease (temporarily or permanently) the publication of the Benchmark in question.

In furtherance of the above, the MRC shall proffer credible alternatives which seek to match the existing Benchmark's characteristics as representative of its intended function if such alternative is available.

The Exchange shall engage stakeholders, including regulators or national authorities, whilst extending a notice period to provide feedback on the cessation and the alternative Benchmark proposed to replace the existing Benchmark (if applicable). Feedback may also include assessments of the impact of the cessation of the selected Benchmark, the proposed timeline of the transition period, the proposed alternative Benchmark and provisions for the maintenance of the Benchmark during any interim transition period. After which, the Exchange shall collate the views of stakeholders and any relevant regulatory and national authorities in determining what actions to take in relation to the transition of the Benchmark.

7. ACCOUNTABILITY

7.1. Complaints Policy

FMDQ Exchange has established the FMDQ Exchange Benchmark Administration Complaints Policy with a view to enabling any stakeholder to submit to the Exchange complaints about any aspects of the FMDQ Exchange Benchmarks determination, calculation, publication and distribution.

7.2. Whistleblowing Mechanism

The Exchange has an established Whistleblowing Policy providing an avenue for stakeholders (members, employees, regulators, investors, industry professionals, issuers and the general public) to report/submit tips regarding any activities/issues (*unlawful, unfair and/or unauthorised activities and practices, abusive conduct, incomplete and/or inaccurate reporting, violations of FMDQ* Exchange *Rules, inter alia*) with regards to the FMDQ Exchange Benchmarks determination/dissemination process. (Click <u>here</u> to view). Any stakeholder (internal or external) can submit a



whistleblowing report if the stakeholder is aware of any suspicious and/or potentially manipulative activity that could affect the integrity of any aspects of the FMDQ Exchange Benchmarks Administration.

7.3. Business Continuity Plan

FMDQ Exchange, being a critical financial market infrastructure, is aware that disruption in its Benchmarks Administration service will create difficulty for the stakeholders in pricing and valuation of financial contracts and instruments. The Exchange has therefore put in place a business continuity plan/contingency plan to manage contingencies arising out of disruptions in services involving the Exchange.

7.4. Record Keeping

FMDQ Exchange shall keep records of the following for a minimum period of seven (7) years in readily accessible media:

- (i) All input data.
- (ii) The derived FMDQ Exchange Benchmarks rates/prices and the Methodologies utilised.
- (iii) Any record of exercise of Expert Judgment or discretion by the Exchange in the Benchmarks determination process including the full reasoning for the judgment or discretion and any record of disregarded input data and the rationale for its disregard.
- (iv) All documents relating to any complaint, including those submitted by the complainant as well as the Exchange's records.