FMDQ

Understanding FMDQ FGN Bond Futures

FMDQ

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Introducing the FMDQ FGN Bond Futures

In recognition of the important role the derivatives market plays in the development of economies globally, and in line with the vision of FMDQ Securities Exchange Limited ("**FMDQ Exchange**" or the "**Exchange**") to be the most attractive Exchange in Africa by 2025", the Exchange is launching the FMDQ Federal Government of Nigeria (FGN) Bond Futures to boost the depth and diversity of product offerings in the Nigerian financial markets.

What are FMDQ FGN Bond Futures?

FMDQ FGN Bond Futures are financial derivatives that create an obligation for the contract holder to purchase or sell an FGN bond on a specified date at a predetermined price. FMDQ FGN Bond Futures are standardised derivatives contracts created by FMDQ Exchange. They are a type of interest rate derivatives which are useful in managing interest rate risk, enhancing portfolio performance, and gaining exposure to FGN bonds for investment purposes.

FMDQ FGN Bond Futures Contract Specification

Contract Name	2Y FGN Bond Futures	5Y FGN Bond Futures	10Y FGN Bond Futures	15Y FGN Bond Futures	20Y FGN Bond Futures	30Y FGN Bond Futures
Underlying	Sovereign bonds of the Federal Government of Nigeria					
Underlying Tenor(s)/TTM[1]	1Y - 3Y	4Y - 7Y	8Y - 12Y	13Y - 17Y	18Y - 23Y	24Y - 30Y
Contract Codes	FBF2 MAR[YY] FBF2 JUN[YY] FBF2 SEP[YY] FBF2 DEC[YY]	FBF5 MAR[YY] FBF5 JUN[YY] FBF5 SEP[YY] FBF5 DEC[YY]	FBF10 MAR[YY] FBF10 JUN[YY] FBF10 SEP[YY] FBF10 DEC[YY]	FBF15 MAR[YY] FBF15 JUN[YY] FBF15 SEP[YY] FBF15 DEC[YY]	FBF20 MAR[YY] FBF20 JUN[YY] FBF20 SEP[YY] FBF20 DEC[YY]	FBF30 MAR[YY] FBF30 JUN[YY] FBF30 SEP[YY] FBF30 DEC[YY]
Central Counterparty	FMDQ Clear Limited					
Trading, Clearing, and Surveillance System	FMDQ Proprietary Market ("**Q-ex**") System					
Trading Hour	9:00 AM – 3:00 PM					
Last Trading Date	Two (2) business days before the Expiry Date of each respective contract (subject to *business day* convention rules of FMDQ Exchange)					
Settlement Method	Cash-settled in Nigerian Naira					
Contract Size (₦)	50,000,000.00					
Multiplier	500,000					
Listing Date	As communicated by the Exchange					
Expiry Date	Penultimate Thursday in the Contract Expiration Month					
Contract Expiration Months	Quarterly - March (M), June (J), September (S), and December (D)					
Contract Tenors	Three (3), Six (6), Nine (9), and Twelve (12) Months Contracts					
Mark-to-Market Methodology	Mark-to-market ("MTM") is carried out daily by comparing the initial contract price (on trade day) or previous MTM price (for open positions) with the daily settlement price					
Daily Settlement Price	Volume Weighted Average Futures Price of available transactions or Theoretical Futures Price of eligible FGN Bond(s)[2] as detailed in the FMDQ Exchange Futures Settlement Price Methodology					
Final Settlement Price	Volume Weighted Average Price of eligible FGN Bond(s) based on FMDQ Closing Price Methodology on Expiry date[3]					
Quote Convention	Futures Price in Percentage Points to two (2) decimal places					
Eligible Margin Collateral	Initial Margin - Cash and Eligible Securities[4]; Variation Margin - Cash only					

[1] Term to Maturity
[2] Where theoretical futures price is required for daily settlement, the eligible FGN Bond(s) refers to all Benchmark FGN Bonds outstanding whose term to maturity ("TTM") matches the "Underlying Tenor" (as it appears on the contract specification) on that day.
[3] In computing Final Settlement Price, eligible FGN Bond(s) refers to all Benchmark FGN Bonds outstanding whose TTM matches the "Underlying Tenor" on the last trading day of the contract.
[4] List of eligible securities will be advised by FMDQ Clear Limited

How the FMDQ FGN Bond Futures Work

FMDQ FGN Bond Futures contracts approved by the Securities and Exchange Commission, Nigeria (SEC) will be listed for trading and clearing on the FMDQ Q-ex System, or any other system designated by FMDQ Exchange. The FMDQ Q-ex System, which will facilitate transparency, competitive pricing and seamless execution of trades in FMDQ FGN Bond Futures, will be accessible to Derivatives Trading Members of the Exchange for the initiation, execution and management of trades for all users of the FMDQ FGN Bond Futures.

To further promote transparency and price discovery, FMDQ Exchange shall also publish relevant price information for the FMDQ FGN Bond Futures via channels accessible to market participants.

Derivatives Trading Members of FMDQ Exchange will initiate and execute trades in FMDQ FGN Bond Futures for themselves and their clients on the FMDQ Q-ex System. Upon execution of trades in FMDQ FGN Bond Futures, transactions will be centrally cleared by FMDQ Clear Limited ("FMDQ Clear") via novation (i.e., becoming the buyer to every seller and the seller to every buyer).

Hence, to protect against counterparty risk associated with derivatives transactions, users of FMDQ FGN Bond Futures will be required to provide "good-faith-deposit" or Initial Margin to FMDQ Clear for trades executed in FMDQ FGN Bond Futures.

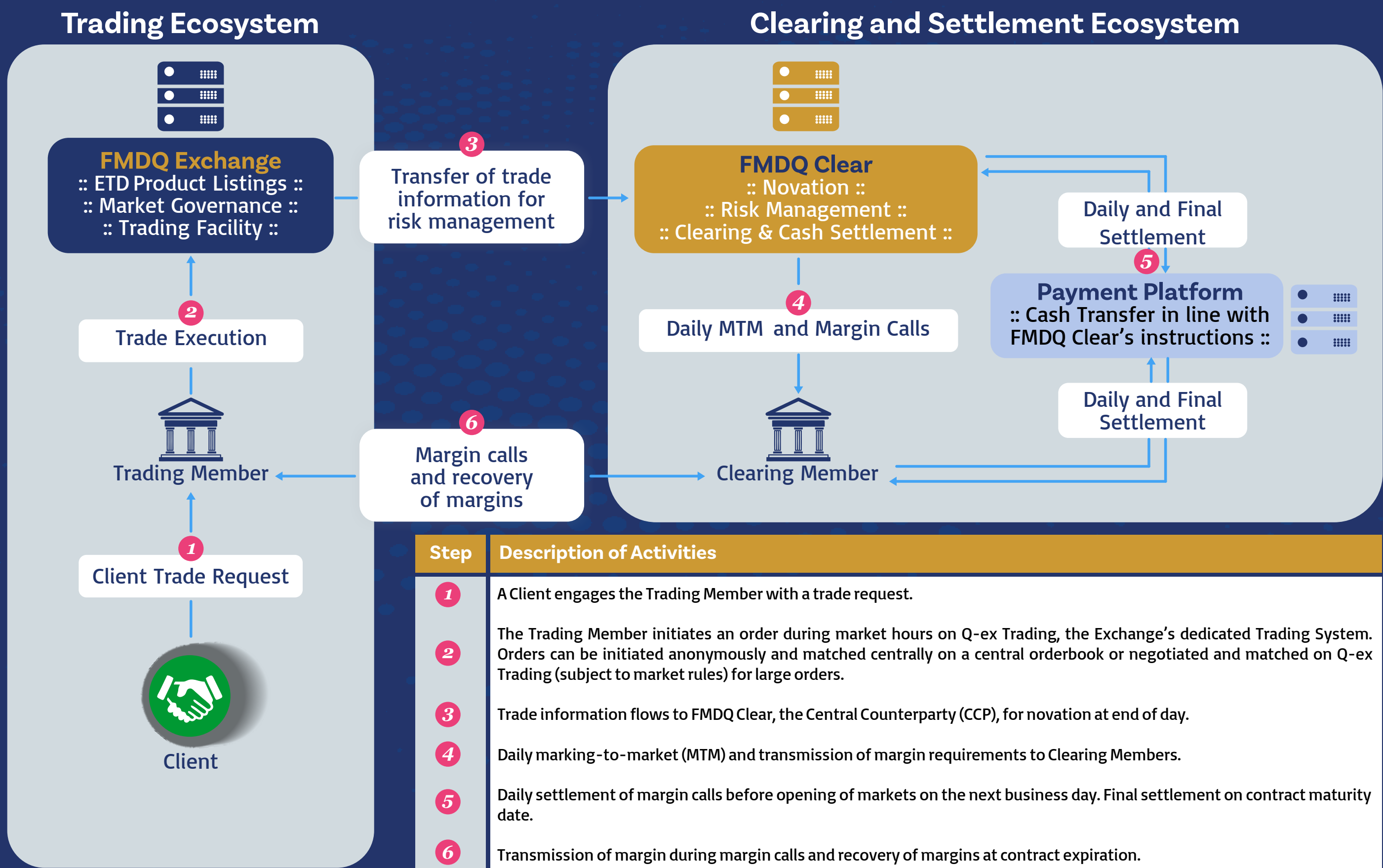
The required amount of Initial Margin for each FMDQ FGN Bond Futures contract will be determined by FMDQ Clear and displayed as a percentage of the notional value of the contract on the contract specification published on the FMDQ Exchange website.

In addition to the Initial Margin, to further minimise the risk of default in the market, all open positions in FMDQ FGN Bond Futures contracts will be valued (marked-to-market) daily by FMDQ Clear, and the resultant daily gains/losses from such valuation will be received/paid as Variation Margins by the holders of such open positions from/to FMDQ Clear through their designated Clearing Members.

The settlement of all Variation Margin obligations must occur before the opening of the market on the next business day.

Valuation of open positions to determine Variation Margins will be calculated based on the mark-to-market approach stipulated on the contract specification.

Life Cycle of an FMDQ FGN Bond Futures Transaction



Step	Description of Activities
1	A Client engages the Trading Member with a trade request.
2	The Trading Member initiates an order during market hours on Q-ex Trading, the Exchange's dedicated Trading System. Orders can be initiated anonymously and matched centrally on a central orderbook or negotiated and matched on Q-ex Trading (subject to market rules) for large orders.
3	Trade information flows to FMDQ Clear, the Central Counterparty (CCP), for novation at end of day.
4	Daily marking-to-market (MTM) and transmission of margin requirements to Clearing Members.
5	Daily settlement of margin calls before opening of markets on the next business day. Final settlement on contract maturity date.
6	Transmission of margin during margin calls and recovery of margins at contract expiration.

Target Users & Uses of the FMDQ FGN Bond Futures

BANKS

Banks are the biggest players in the Nigerian fixed income and money markets, and they are exposed to interest rate risks due to their significant investment and trading in FGN Bonds as part of their banking activities. Hence, they bear financial losses arising from the fluctuations in interest rates and yields of FGN Bonds. Consequently, banks need the FMDQ FGN Bond Futures to hedge their interest rate risks, as well as enhance the returns on their FGN Bonds and other fixed income securities.

Non-Bank Financial Institutions (NBFIs) such as Pension Funds Administrators (PFAs), Insurance Companies, Asset Managers, etc., also face interest rate risk and potential financial losses due to their investment activities. As a result, they also need the FMDQ FGN Bond Futures contracts to manage their risks and possibly guarantee/enhance return levels on their portfolios.

NON-BANK FINANCIAL INSTITUTIONS

CORPORATES

Corporate entities may utilise the FMDQ FGN Bond Futures to hedge interest rate risk on their FGN Bonds and other fixed income investments, gain exposure to FGN Bond returns in their portfolios, and hedge against interest rate risk on liabilities such as credit facilities and securities issuances (e.g., corporate bonds), amongst others.

Summary of Users and Uses of the FMDQ FGN Bond Futures

Uses	Users: Banks	Users: NBFIs	Users: Corporates
Hedging of Market Risk Factor on Bond Portfolio	✓	✓	✓
Taking Positions and Gaining Synthetic Exposure to Bonds	✓	✓	✓
Generating Trading Income from Activities in the FMDQ FGN Bond Futures Market	✓	✓	✗
Modifying Portfolio Allocation and Weightings (Fixed Income vs. Other Asset Classes)	✗	✓	✗

✓ Applicable ✗ Not Applicable

Practical Example of the Use of FMDQ FGN Bond Futures

Case Study - Hedging Positions in a Bond Portfolio

An investor who seeks to purchase ₦100.00mm worth of 10Y[5] FGN Bond in twelve (12) months' time is wary of prices rising (i.e., interest rates falling), and is looking to lock-in a price for future purchase of the 10Y FGN Bond, currently priced at 101.00.

To hedge against the anticipated interest rate risk in his future position, the investor decides to buy 2 units of the 12M 10Y FMDQ FGN Bond Futures contract (₦50.00mm {Contract Size} * 2 units = ₦100.00mm) at 102.00 to hedge against the anticipated rise in FGN Bond prices.

It is expected that the pay-off in the FMDQ FGN Bond Futures position, should prices rise as predicted by the investor, will enable the investor to purchase the 10Y FGN Bond worth ₦100.00mm in twelve (12) months' time irrespective of the increase in the 10Y FGN Bond price in the Spot market.

[5] Year

Practical Example of the Use of FMDQ FGN Bond Futures

Case Study - Hedging of Loan Portfolio

A corporate has a loan portfolio of ₦250.00mm with an average interest rate of 11.50% as at January 2022, but the corporate treasurer is wary of interest rates rising over the next nine (9) months, which would result in an increase to the company's finance cost at the end of the financial year.

To hedge against this anticipated interest rate risk, the corporate treasurer decides to hedge the loan portfolio using FMDQ FGN Bond Futures, ***as a proxy hedge***, by selling 5 units (₦50.00mm {Contract Size} * 5 units = ₦250.00mm) of the 9-month FMDQ 2Y FGN Bond Futures contract at 106.00. It is worthy to note that the current 2Y FGN Bond Spot market price is 105.00.

As customary, the resulting gains/losses on the position in the FMDQ FGN Bond Futures contract will offset the losses/gains on the loan portfolio.

Case Study – Break-Even Analysis

Practical Example I – Hedging Position in a Bond Portfolio

The table below analyses the break-even point in the Futures transaction, i.e., estimation of the pay-off in the Futures position and how it offsets the gains/losses in the Spot market.

Parameter	Value
Futures Price at Trade Date	102.00
Number of Purchased Contracts	2
Multiplier	500,000.00
Futures Settlement Price at Maturity	103.00
Futures Position Profit/(Loss) (₦'mm)	**1.00**
10Y FGN Bond Price at Futures Trade Date (Spot Market)	101.00
10Y FGN Bond Price in 12 months	102.00
Mark-to-Market Profit/(Loss) in Spot Market Position (₦'mm)	**(1.00)**

Practical Example II – Hedging of Loan Portfolio

The table below analyses the break-even point in the Futures transaction, i.e., estimation of the pay-off in the Futures position and how it offsets the gains/losses in the loan portfolio.

Parameter	Value
Futures Price at Trade Date	106.00
Number of Purchased Contracts	5
Multiplier	500,000.00
Futures Settlement Price at Maturity	101.00
Futures Position Profit/(Loss) (₦'mm)	**12.50**
2Y FGN Bond Price at Futures Trade Date (Spot Market)	105.00
2Y FGN Bond Price in 6 months	100.00
Mark-to-Market Profit/(Loss) in Spot Market Position (₦’mm)	**12.50**

Case Study – Estimation of Cost of Hedge

Practical Example I – Hedging Position in a Bond Portfolio

The estimated Cost of Hedge expected to be incurred for the sale of 2 units of the 12-month FMDQ 10Y FGN Bond Futures contract at 102.00 is illustrated in the table below.

Summary of Applicable Cost for Selling a 10Y FMDQ FGN Bond Futures Contract	
Parameter	
Multiplier	500,000.00
Futures Price	102.00
Number of Contract(s)	2
Tenor	12-month
Cost of Hedge Simulation	
Fee Type	**Amount (₦)**
Transaction	18,360.00
Clearing	102,000.00
Maintenance	185,640.00
Total Cost of Hedge	**306,000.00**

Practical Example II – Hedging of Loan Portfolio

The total Cost of Hedge expected to be incurred for the sale of 5 units of the 9-month FMDQ 2Y FGN Bond Futures contract at 104.00 is illustrated in the table below.

Summary of Applicable Cost for Selling a 10Y FMDQ FGN Bond Futures Contract	
Parameter	
Multiplier	500,000.00
Futures Price	106.00
Number of Contract(s)	5
Tenor	9-month
Cost of Hedge Simulation	
Fee Type	**Amount (₦)**
Transaction	47,700.00
Clearing	265,000.00
Maintenance	361,725.00
Total Cost of Hedge	**674,425.00**

Assuming the average interest rate on the loan portfolio increased by 500bps (i.e., to 16.50%), in line with the Monetary Policy Rate (MPR) as of December 2022, the loan portfolio is then exposed to an additional finance cost of ₦12.50mm. However, with the use of FMDQ FGN Bond Futures, the corporate treasurer has only incurred a total sum of ₦0.67mm, being the Cost of Hedge, saving his company about ₦11.83mm of additional finance cost.

Kindly be informed that FMDQ Exchange has launched its flagship automated calculator for the estimation of Cost of Hedge and Profit/Loss on FMDQ derivatives transactions – FMDQ Q-Estimator. Please visit the FMDQ Exchange website at www.fmdqgroup.com/exchange/Q-Estimator/ to access same.

Key Takeaways

1. FMDQ FGN Bond Futures are standardised derivatives contracts that create an obligation for the contract holder to purchase or sell an FGN bond on a specified date at a predetermined price.

2. FMDQ FGN Bond Futures are cash-settled contracts traded on the Q-ex Trading System or any other system designated by FMDQ Exchange.

3. FMDQ FGN Bond Futures can be used by Banks, Non-Bank Financial Institutions, and other Corporates to hedge interest rate risk on their FGN bonds and other fixed-income investments.

About FMDQ Group

FMDQ Group PLC ("FMDQ Group") is Africa's first vertically integrated financial market infrastructure group, strategically positioned to provide registration, listing, quotation and noting services; integrated trading, clearing & central counterparty, settlement, and risk management for financial market transactions; depository of securities, as well as data and information services, across the debt capital, foreign exchange, derivatives and equity markets, through its wholly owned subsidiaries – FMDQ Exchange (Nigeria's Largest Exchange by Market Turnover), FMDQ Clear Limited (Nigeria's Foremost Central Counterparty), FMDQ Depository Limited (Nigeria's Integrated Securities Depository) and FMDQ Private Markets Limited (Nigeria's Private Capital Information Repository).

About FMDQ Exchange

FMDQ Exchange is a wholly owned subsidiary of FMDQ Group, registered by the Securities and Exchange Commission (SEC), Nigeria, as an over-the-counter Market (2012) and subsequently as a Securities Exchange (2019), to focus on organising the markets within its purview and creating an efficient platform for the registration, listing, quotation, trading and reporting of securities and financial products.

To learn more about the FMDQ FGN Bond Futures and other hedging opportunities provided by FMDQ Exchange, contact our Derivatives Business Group via:

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