The Naira Yield Curve, 2022–2026: Construction, Dynamics and Policy Anticipation

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Abstract

Nigeria has no official, published zero-coupon curve for its naira government bonds. This paper builds one from public sources, a daily Nelson–Siegel curve for FGN bonds from FMDQ closing marks (March 2022 – October 2026, 1,133 trading days) and a matching curve for the Federal Government's dollar Eurobonds from Debt Management Office (DMO) price sheets, and uses them for two things. First, the shape of the curves' movements. A single level factor explains 91% of weekly Eurobond moves but only 67% of naira moves, where slope and curvature carry a third of the variance. Second, an event study around 23 Monetary Policy Committee (MPC) decisions. The size of the policy-rate change is strongly correlated with the move in the two-year naira yield in the **week before** the meeting ($r = +0.84$, permutation $p < 0.001$), weakly in the event week (+0.30) and not at all afterwards. The correlation is concentrated in the two large hikes of February and March 2024 but survives without them ($r = +0.54$, $p = 0.01$, bootstrap interval +0.27 to +0.78), and once pre-meeting FX moves, the latest inflation print and the real policy rate are controlled for. It is also new: the same weekly test on 2010–2017, from the DMO's weekly reports and 36 meetings, finds the reaction in the meeting week ($r = +0.60$, $p = 0.002$) and none before it. The CBN's own bill auctions led its largest decision, raising the 364-day rate three weeks before the February 2024 hike, and explain part of the bond market's anticipation (0.84 falls to 0.72 once they are allowed for); for other meetings they explain little, and the secondary bill market (OMO bills, Treasury bills, the NITTY fixing) does not move ahead of decisions at all. Against analysts' published previews, the pre-meeting bond move tracks the part of each decision the previews missed ($r = +0.61$, without the two largest hikes), not the part they expected. That move arrives on scheduled event days, chiefly the CBN's bill auctions and the DMO's bond auctions, and not on the other days. These last two results survive a false-discovery-rate correction across the 87 tests the paper reports but not the stricter Holm correction, and are best read as well-founded hypotheses; from November 2026 they are being tested on dated predictions made before each meeting. Dollar Eurobond yields do not respond to MPC decisions at all. The June 2023 FX unification, by contrast, was priced first in dollars: the 10-year Eurobond yield fell about 210bp in the month around it while naira yields barely moved. The January 2024 devaluation did the reverse, lifting naira yields by about 140bp in a week and leaving Eurobonds unchanged. The data have hard limits, which the paper sets out: no domestic bond prices for April 2017 – February 2022, sticky FMDQ marks until June 2026, and small event samples.

1. Introduction

A government yield curve is the reference price for every other naira asset, and the place where expectations about policy rates, inflation and the exchange rate show up first. For Nigeria the inputs exist but the curve does not: the DMO publishes bond prices, FMDQ marks the secondary market daily and the Central Bank of Nigeria (CBN) publishes auction results, yet there is no public, consistently fitted curve, and no public record of how it moves around policy events.

The period studied is unusually eventful. Between March 2022 and October 2026 the CBN raised the Monetary Policy Rate (MPR) from 11.5% to 27.5%, including a single 400bp hike in February 2024, then cut and reset it to 23% in September 2026. The official exchange rate was unified in June 2023 and the naira lost about a third of its value against the dollar in a week. In September 2026 J.P. Morgan announced, according to press reports, Nigeria's inclusion in its new GBI-EM Edge frontier-market index.

The paper makes three contributions. It documents what can and cannot be built from public Nigerian sources (Section 2). It fits and characterises daily naira and dollar curves (Sections 3 and 4). And it

measures how those curves moved around dated policy events (Section 5). The code is a reproducible pipeline: one command scrapes, parses, fits and produces every number and figure here.

2. Data

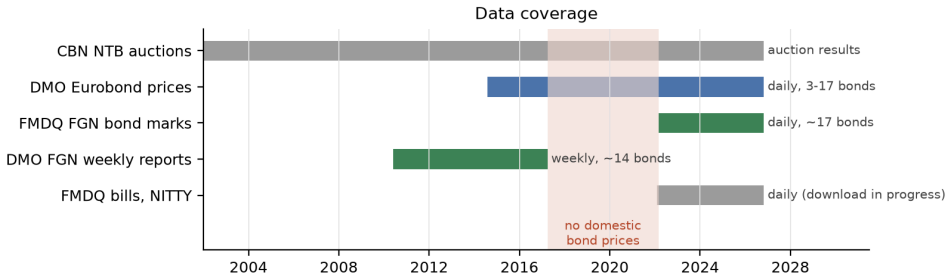


Figure 1. Data coverage. No public source has domestic FGN bond prices for April 2017 – February 2022.

FGN bonds. From March 2022, FMDQ (Nigeria's fixed-income exchange) publishes a daily closing-price sheet for every listed bond. The sample has 1,133 trading days and 26 FGN bonds, a median of 17 quoted per day. FMDQ licenses this data, so raw quotes are not redistributed; only fitted curves and statistics derived from them appear here. Prices are clean prices and yields are semi-annual yields to maturity; recomputing the yield from the price reproduces FMDQ's figure to within 0.2bp.

Before 2022 the only public source is the DMO's weekly FGN bond reports, which run from June 2010 to March 2017 and stop. All 330 are parsed: 5,062 bond prices and yields over 306 weeks, with 14 bonds in a typical week. Yields recomputed from DMO's prices match its published yields to a median of 0.2–0.4bp. There are gaps, notably in 2014, when DMO posted only 25 reports. Neither FMDQ's site nor web archives hold anything for April 2017 – February 2022. This gap is the main limit on the study: no result here says anything about that period.

Eurobonds. The DMO publishes daily closing prices and yields (sourced from Bloomberg) for Nigeria's dollar Eurobonds: 3,076 daily PDFs from August 2014 and cumulative spreadsheets from 2023. Where both exist they agree exactly. There are only three bonds until 2017 and seven by 2018, so a weekly curve can be fitted from late 2017 (at least six bonds), which covers most of the gap in naira data. The comparisons with the naira curve use the same period, March 2022 – October 2026 (1,190 days, a median of 13 bonds). A handful of published values are impossible (a yield of 12356.0 in the 8 April 2020 sheet, a lost decimal point) and are dropped rather than corrected.

Bills and policy data. The CBN publishes every Nigerian Treasury Bill (NTB) primary auction since 2002 (835 auction dates), the official USD/NGN rate, CPI and money-market rates through JSON endpoints behind its website. MPC decision dates come from a registry verified against the CBN's communiqué index (24 meetings, March 2022 – September 2026), plus four other events: the 29 May 2023 inauguration speech, the June 2023 FX unification, FMDQ's January 2024 revision of the official closing-rate method, and the GBI-EM Edge announcement, each with its primary or secondary source. FMDQ also publishes daily secondary-market quotes for every Treasury and Open Market Operation (OMO) bill and the NITTY Treasury-bill yield fixing; those are partly downloaded (Section 5.3).

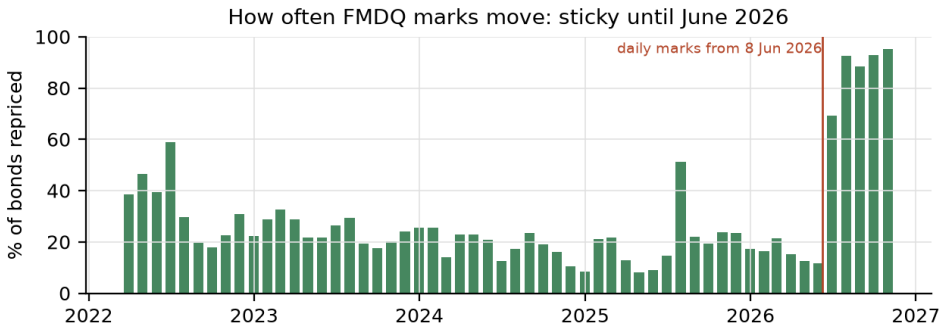


Figure 2. Share of FGN bonds whose FMDQ mark changed from the previous trading day, monthly average.

Sticky marks. Until mid-2026 most FMDQ marks do not change from one day to the next: on an average day 18–32% of bonds reprice, depending on the year, and on about one day in eight no bond reprices at all (Figure 2). Marks were frozen entirely from 29 May to 5 June 2026, and from 8 June about 94% of bonds reprice every day, which looks like a change in FMDQ's marking method. Stale marks matter for an event study: a reaction that the market priced on day one may appear in the data days later. Section 5 uses week-long windows for this reason and treats the June 2026 break explicitly.

3. Curve construction

Each day's curve is a Nelson–Siegel (NS) fit to bond yields,

$$y(m) = \beta_0 + \beta_1 \cdot (1 - e^{-m/\tau})/(m/\tau) + \beta_2 \cdot [(1 - e^{-m/\tau})/(m/\tau) - e^{-m/\tau}],$$

with τ found by grid search and the betas by least squares. Three choices matter.

Bonds under one year are excluded. Very short bonds trade on bill-market liquidity, not the term structure, and their yields are erratic near maturity. The curve's short end (below two years) is therefore an extrapolation and is read with care.

τ is bounded to [max(0.25, shortest maturity), 10] years. Unbounded, the fit ran to the edge of the grid in 35% of weeks (66% for the six-parameter Svensson model), with betas of ±10⁶ cancelling each other. With bounds the parameters stay interpretable.

The fit is robust. Individual naira bonds often sit 50–100bp away from their neighbours: off-market or stale marks. The primary model weights bonds by Huber iteratively reweighted least squares, which leaves a typical curve within 1–3bp of plain NS but moves it 10–25bp in the worst tenth of weeks, and down-weights about 7% of bond-weeks below half weight. Svensson's extra hump reduces the in-sample fit error by only 4bp and, in weeks with few bonds, returns parameters that make no economic sense (in October 2022, a long-run level of 4.9% for a curve near 14%).

In-sample error flatters flexible models, so each one was also tested out of sample. On every one of the 242 weekly naira snapshots each bond was left out in turn, the curve refitted to the rest and the missing bond priced from it (3,891 bond-weeks):

Model	In-sample RMSE	Held-out RMSE	Median held-out error	90th percentile
Nelson–Siegel	41	55	23	84
Nelson–Siegel, robust (used here)	42	54	22	85
Svensson	38	55	22	82
Svensson, robust	39	54	20	82
Smoothing spline (residuals ~30bp)	27	220	24	105
Linear between neighbouring bonds	0	64	17	89

Basis points, pooled over all bond-weeks (the 32bp quoted above is the median of weekly RMSEs). Bonds at the ends of the maturity range are extrapolations for every model; on interior bonds only the ranking is the same.

Out of sample the four parametric models are indistinguishable: Svensson's extra parameters neither help nor hurt the pricing of a bond the curve has not seen. The choice of Nelson–Siegel therefore rests on stable, interpretable parameters, not on accuracy. The smoothing spline prices most bonds about as well, but now and then swings wildly between bonds. Linear interpolation between a bond's two neighbours has the smallest typical error, since neighbouring naira bonds share liquidity and history, but larger misses in the tail. A smooth curve is the better reference for the level and slope of the market, not for quoting a single bond. For that, its neighbours are better.

On the dollar curve (414 weekly snapshots from 2018, 4,791 bond-weeks) the same test separates the models a little: Nelson–Siegel prices held-out Eurobonds with an RMSE of 31bp (22bp on interior bonds), Svensson 33bp (24bp), linear interpolation 45bp (25bp). There Svensson's extra flexibility does overfit, if only slightly.

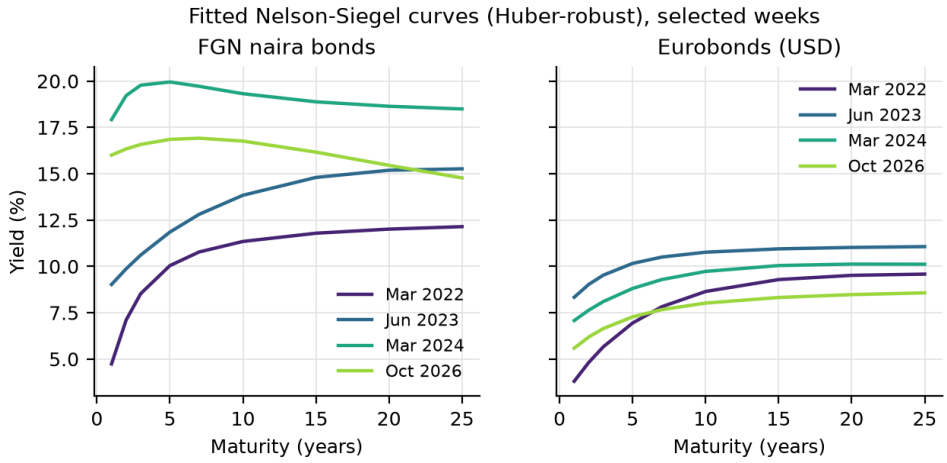


Figure 3. Fitted curves on selected weeks. The naira curve went from steep (March 2022) to humped and inverted beyond five years at the 2024 policy-rate peak. The dollar curve stayed upward- sloping as its level fell.

The difference between the two markets is visible in the fit error alone. Across 242 weekly naira fits the median root-mean-square error is 32bp (90th percentile 62bp). Across the 244 weekly Eurobond fits over the same period it is 10bp. Part of the naira error is noise in the marks, but much is genuine: bonds of similar maturity trade at different yields because liquidity, coupon and investor base differ, and a smooth curve cannot price them all.

Treasury bills cannot anchor the short end. Adding the CBN's 364-day stop rate to the fit should pin down the one-year point. From mid-2023 it does the opposite: the bill yield sits 2–7.6 percentage points above the bond curve's one-year point, peaking in late 2024, and adding bills more than doubles the fit

error. Primary bill auctions and the bond market price different things in this period (bills were the CBN's main tightening instrument), so bills are kept as a separate market, not a curve input.

4. Curve dynamics

Weekly changes in the fitted yields at 1, 2, 3, 5, 7, 10, 15, 20 and 25 years are decomposed by principal components (PCA). Weekly changes that span a data gap are dropped.

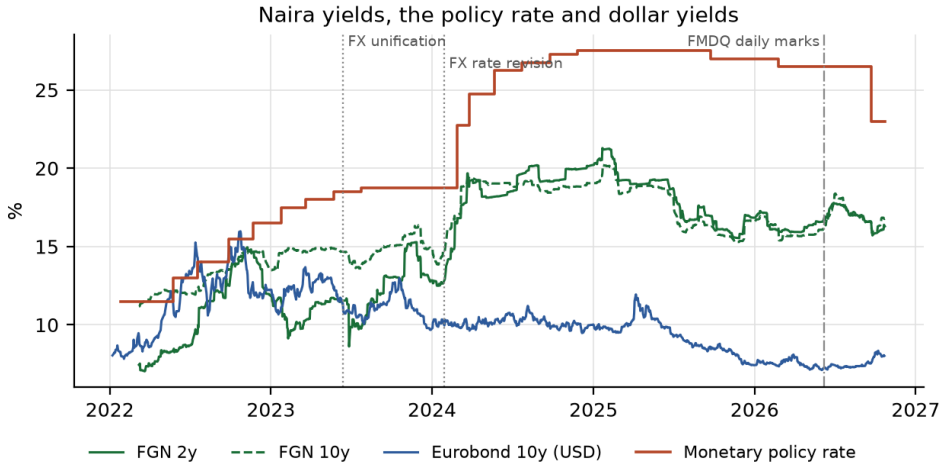


Figure 4. Fitted naira 2- and 10-year yields, the MPR and the Eurobond 10-year yield.

Naira yields are volatile and most volatile at the short end: the standard deviation of weekly changes is 66bp at one year, 43bp at two, 31bp at ten and 24bp at 25 years. On the covariance matrix the first component explains 65% of variance but loads most heavily on the short end, because that is where the variance is. On the correlation matrix, which weights maturities equally, the usual three factors appear: a level factor (67%), a slope factor (18%) and a curvature factor (12%).

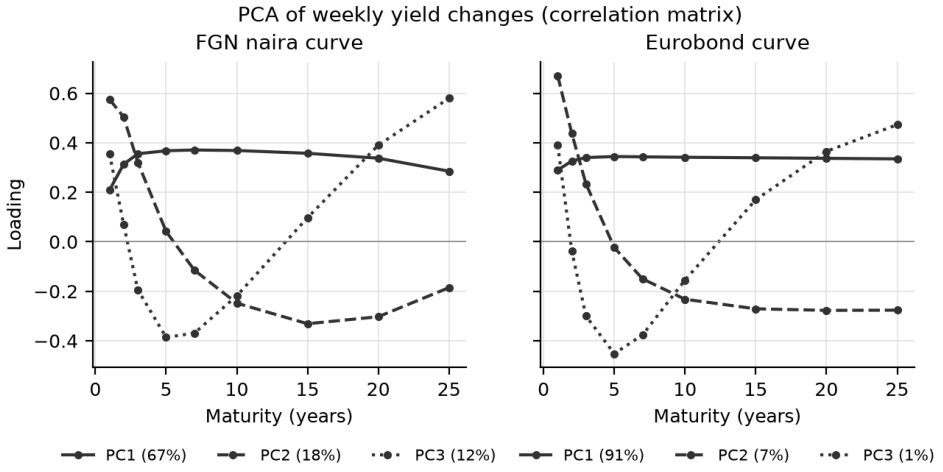


Figure 5. Correlation-PCA loadings of weekly yield changes, with the share of variance each component explains.

The Eurobond curve behaves like a pure credit curve. Over the same period (244 weeks) its level factor explains 91% of weekly variance, slope 7% and curvature 1% (Figure 5). Weekly volatility is flatter across maturities, 65bp at one year and 41bp at 25. When Nigeria's credit risk is repriced, the whole dollar curve moves together. The naira curve has a second and third dimension because monetary policy, bill-market liquidity and inflation expectations hit different maturities differently.

5. Event study

5.1 Method

For each event, to is the first trading day on or after the event date. Changes in the fitted curve are measured over three windows, in trading days:

Window	From	To	Purpose
Week before	to − 6	to − 1	anticipation
Event week	to − 1	to + 5	the reaction, with time for stale marks to catch up
Following three weeks	to + 5	to + 20	drift or reversal

Windows are a week long because only about 26% of naira bond quotes reprice even in event windows; a one-day window would mostly measure stale marks. Each change is also scaled by the standard deviation of same-length changes in event-free windows (no event within 10 trading days before or 25 after), giving a z-score. That baseline is measured separately before and after FMDQ's June 2026 pricing change, because daily volatility differs between the two regimes (Section 5.7).

The main test asks whether the size of the MPR change predicts the yield change, across the 23 MPC decisions that were hikes, holds or cuts (the September 2026 operational reset is excluded). Significance comes from a two-sided permutation test (10,000 shuffles of the rate changes), with Spearman rank correlation as a check against outliers.

5.2 MPC decisions are priced before the meeting

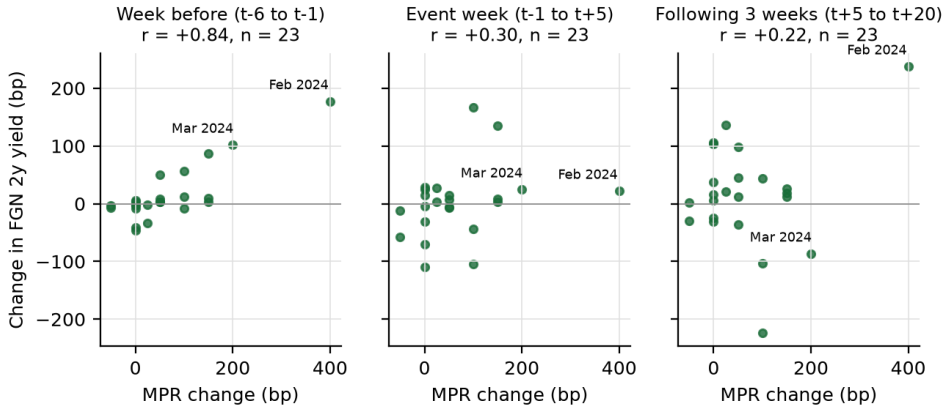


Figure 6. MPR change against the change in the fitted naira two-year yield, one point per MPC decision, March 2022 – July 2026.

Window	Pearson r	Permutation p	Spearman
Week before	**+0.84**	< 0.001	+0.72
Event week	+0.30	0.17	+0.35
Following three weeks	+0.22	0.28	+0.03
Week before, without Feb and Mar 2024	*+0.54*	*0.011*	*+0.63*

The relationship sits in the week **before** the meeting (Figure 6). In February 2024 the two-year yield rose 177bp in the six trading days before the 400bp hike and 22bp in the week of it; in March 2024 it rose 102bp before the 200bp hike. Those two meetings drive much of the Pearson correlation, and the typical hike is far quieter: the median pre-meeting move across 14 hikes is 9bp (mean 33bp), against a mean of –13bp before holds. Without the two largest hikes the correlation falls to +0.54 but stays significant, and the rank correlation (+0.63) shows it is not just two points.

The February 2024 case also needs a caveat of its own. Its pre-meeting week (19–26 February) falls inside the three weeks after FMDQ's revision of the official closing-rate method (Section 5.6), during which the two-year yield rose 258bp. Part of the 177bp move before the hike is that devaluation sell-off continuing; the devaluation is also a likely reason for the size of the hike. Anticipation and a common FX shock cannot be separated for this meeting, which is one more reason to weight the result without it.

Stale marks cannot produce this pattern: sticky prices delay a reaction, they do not advance it. The more natural reading is that the market knew, or correctly guessed, the size of large moves in advance.

There is a rival story. Bond yields and the CBN may both be reacting to the same FX or inflation stress, or the CBN may be reacting to the bond market itself. Then the pre-meeting move would predict the decision without anyone anticipating anything. The first version can be tested. For each meeting the regression of the MPR change on the pre-meeting two-year move adds the stress as it stood before the meeting: the USD/NGN move in the same week and in the four weeks before it, the latest CPI print published before the meeting (by NBS release date, not reference month), its change on the month before (undefined across the January 2025 rebasing), and the real policy rate. Standard errors are HC3, the heteroskedasticity-robust variant suited to small samples with a few high-leverage points.

Controls added	All 23: partial r	Without Feb/Mar 2024: partial r	HC3 p (without)	R^2 of the controls alone (without)
None	+0.84	+0.54	< 0.001	—
USD/NGN, same week	+0.87	+0.62	< 0.001	0.17
USD/NGN, four weeks before	+0.77	+0.62	0.001	0.15
CPI, latest print	+0.84	+0.58	< 0.001	0.02
CPI, change in the latest print	+0.79	+0.46	0.001	0.29
Real policy rate	+0.81	+0.49	0.003	0.51
All of the above but CPI level	+0.75	+0.50	0.03	0.66

OLS of the MPR change on the pre-meeting two-year move plus the controls. Partial r is the correlation of the two after both are regressed on the controls. The CPI change is missing for February 2025 (rebasing), so those rows have one meeting fewer.

The controls explain a good deal of the decisions on their own, as they should: the real policy rate alone accounts for half the variance outside the two big hikes. But the bond move keeps its link to the decision under every set: the partial correlation stays between +0.46 and +0.62 without February and March 2024. The market moved ahead of the part of each decision that FX and inflation did not already explain. The second version, the CBN reacting to the bond market, cannot be ruled out with this design. Section 5.5 makes it less likely for most meetings, since the moves arrive on the days the CBN's own auctions clear, but for February 2024 it is a live alternative.

Sections 5.3 and 5.4 test where the anticipation could come from.

5.3 The bill market

If the CBN signalled hikes through its own bill auctions, the 364-day NTB stop rate should rise before hiking meetings. Auctions run every one to two weeks, so the test compares the last auction at least four weeks before each meeting with the last auction before it, and that auction with the first one after.

The four-week span matters. Before the February 2024 hike the CBN lifted the 364-day stop rate from 11.54% (24 January) to 19.00% (7 February) and then held it, so the last two auctions before the meeting

show no change at all. An earlier draft of this paper used only those two auctions and concluded that auctions follow the MPC rather than lead it. For the largest decision that was wrong.

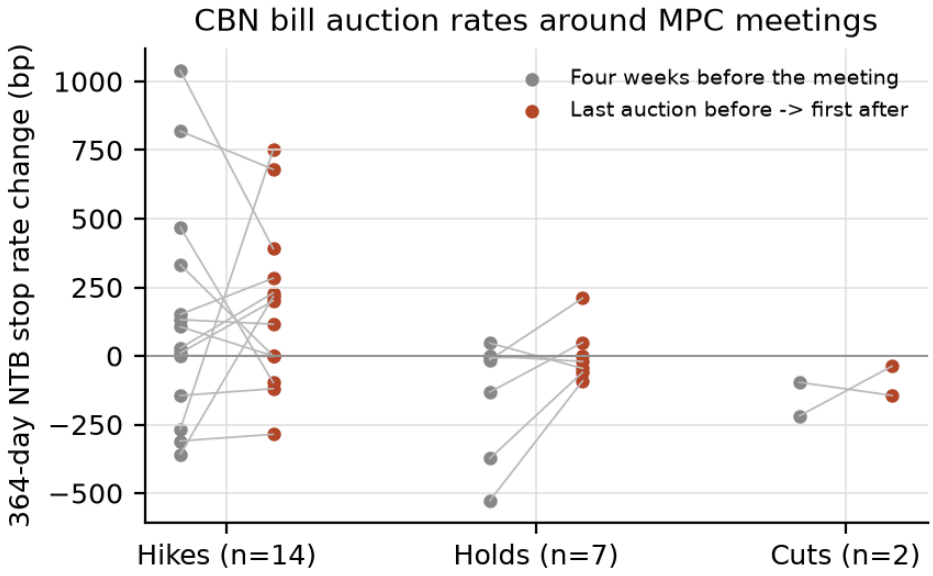


Figure 7. Change in the 364-day NTB stop rate over the four weeks before each meeting (grey) and from the last auction before to the first after (red).

Over the four weeks before a meeting the stop rate rises 144bp on average ahead of hikes (median 67bp) and falls 144bp ahead of holds (median 14bp). Its correlation with the coming MPR change is +0.62 (permutation p = 0.004, Spearman +0.53, n = 23), but without February and March 2024 it is +0.24 (p = 0.31). Controlling for it lowers the bond correlation from 0.84 to 0.72, and from 0.54 to 0.51 without those two meetings. Over 2010–2022 (70 decisions) auction rates also tended to move ahead of decisions (+0.35, p = 0.005).

So the CBN's own auctions led its largest decision: in February 2024 the auction rate rose on 7 February and the bond market repriced in a single day on 22 February (two-year +158bp), five days before the hike. For the other meetings the auctions explain little of the bond market's anticipation. Stop rates in 2022–23 were set far from market levels and swing by several percentage points between auctions, which weakens the test for those years.

The secondary bill market does not lead at all. FMDQ's daily sheets quote every Treasury bill and every CBN OMO bill, the CBN's main liquidity tool in 2024, and publish the NITTY fixing of bill yields (1,542 bill sheets and 1,421 NITTY sheets, February 2022 – October 2026). Bills are tracked with a matched index, the average daily change of the bills quoted on both days, so new issues joining the list do not move it. In the same pre-meeting window as the bonds:

Bill measure, week before the meeting	Meetings	r with MPR change	Permutation p
NITTY 12-month fixing	22	+0.30	0.17
OMO bills (secondary)	21	+0.31	0.16
Treasury bills (secondary)	23	+0.21	0.29
NITTY 12-month minus the bond 1-year point	22	−0.41	0.06

None predicts the coming decision with any confidence, and controlling for all three at once leaves the bond correlation at 0.87. The one borderline result points the same way: the gap between secondary bill yields and the bond curve's short end narrows before hikes, because the bonds move and the bills do not. So the secondary bill market is not where the bond market's anticipation comes from. Section 5.5 shows it arrives

mostly on primary auction days. (The CBN's own publications offer little: speeches are rare, two to six a year since 2022, and the notice of each meeting appears only 4–16 days before it.)

5.4 What analysts expected

Nigeria has no futures market to read rate expectations from, so they come from what analysts published before each meeting. For 21 of the 23 decisions a dated preview exists (BusinessDay, Nairametrics, New Telegraph, ThisDay and others; March and May 2022 have none). Each is coded mechanically: the direction is the source's stated majority view, and the size the median of the stated sizes for that direction, with a hold counting as zero. Each decision then splits into an expected part and a surprise, the actual change minus the expected one.

The published consensus missed often. Analysts expected a hold before the 100bp hike of July 2022, the 150bp hike of September 2022, the 100bp hike of November 2022 and the 50bp hike of March 2023, and a cut before the November 2025 hold.

Two-year move vs…	**Week before**	**Meeting week**
Expected part, all 21	+0.66 (p 0.004)	+0.04
Surprise, all 21	+0.66 (p 0.002)	+0.48 (p 0.04)
Expected part, without Feb and Mar 2024	+0.07 (p 0.75)	−0.09
Surprise, without Feb and Mar 2024	**+0.61** (p 0.007)	**+0.57** (p 0.01)

With the two largest hikes, both parts matter. Without them the expected part explains nothing, and the pre-meeting move tracks the surprise instead. The two-year rose 56bp in the week before the unexpected July 2022 hike, 86bp before September 2022 and 50bp before March 2023. The bond market was not simply pricing the published consensus early. It moved ahead of the part of each decision that the published consensus missed.

So the bond market had information the previews did not. Section 5.5 finds where it came from. The result is also the most exposed to the method: some previews quote one forecaster, two were published on the decision day itself, and n is 19 to 21.

Nor were the surprises close calls. Members' votes, from the communiques to July 2023 and from their personal statements after (communiques since 2024 say only "unanimous"), are known for 22 of the 23 decisions. Every member voted to hike in July, September and November 2022, and eleven of twelve in March 2023: the committee disagreed only on size, while the previews expected a hold. The votes add nothing to the decision itself. The mean vote tracks the pre-meeting move as closely as the decision does (+0.84 against +0.85), and neither dissent nor the gap between the decision and the average member correlates with it once the decision is controlled for ($|r| \le 0.13$). The surprise still does (partial r +0.45 without February and March 2024).

5.5 Where in the week the move happens

If the bond market moved ahead of what analysts missed, the next question is on which days. Three kinds of scheduled public event fall in many pre-meeting weeks:

- the CBN's Treasury-bill auctions, every one to two weeks;
- the DMO's monthly FGN bond auction, which the CBN runs as issuing agent;
- the NBS inflation release, around the 15th of each month.

The bond auctions are dated from the DMO's 58 result sheets since January 2022. They settle two days later, and FMDQ marks on the bonds auctioned often move on or just after settlement, so their window runs from the auction to the day after settlement. CPI release dates come from the NBS e-library to October 2024

and from same-day press reports after. The release day and the next count, because a release can come after the close. Each pre-meeting move is split into the part on these days and the rest.

Part of the week-before two-year move	vs MPR change	vs analyst surprise
Scheduled-event days, all meetings	+0.79 (p < 0.001)	+0.55 (p 0.01)
Other days, all meetings	−0.27	−0.00
Scheduled-event days, without Feb and Mar 2024	+0.53 (p 0.01)	**+0.66** (p 0.003)
Other days, without Feb and Mar 2024	−0.12	−0.29

Scheduled-event days are 43% of trading days. n = 23 decisions (21 without February and March 2024), 21 and 19 with an analyst surprise. Permutation p-values.

The event days carry the whole link, and the other days carry none. The inflation release contributes nothing on its own: release-day moves correlate +0.12 with the surprise and −0.06 with the change in inflation. In July and September 2022 the two-year *fell* on the release, by about 30 and 25bp over the release day and the next. The signal comes from the auctions:

- **July 2022.** The largest single step, +51bp, came on 13 July, the day the CBN's 364-day bill auction cleared at 7.53%, up from 6.46%.
- **September 2022.** The two-year fell 38bp between 12 and 20 September, then rose 108bp on the 21st, the day that month's bond auction settled. Overnight NIBOR rose from 8% to 15% in the same days.
- **February and March 2024.** Almost the whole move came between the bond auctions and their settlement. These moves were catch-up as well: the 12-month NITTY bill yield had already risen 13 percentage points in the month before February.

A larger set of days catches more of any move by chance. Shifting the event calendar by a random number of days 1,000 times gives an average correlation of +0.29 with the surprise; 3.8% of the shifts reach +0.66. The auction days hold more of the signal than their share of days, though with 19 meetings the evidence is moderate, not strong.

Two checks rule out stale prices. Bonds reprice no more often in the week before a meeting than at other times (26% of bonds a day against 29%). In 2022–23 the short bonds had last repriced a median of 0–6 days before each window opened. The surprise result also holds when the bill market's move over the previous four weeks is controlled for (partial r +0.61), and when staleness is (+0.64). One case fits none of this. In March 2023 the two-year rose on 17 March, a day with no auction or release, while overnight NIBOR climbed from 10.8% to 15.2% over the last three days before the meeting.

The previews missed the 2022–23 hikes, but the government's own auctions did not. The CBN sets Treasury-bill stop rates directly and runs the bond auctions for the DMO. "The market knew what the analysts didn't" therefore comes down mostly to this: the bond market read the auctions, and the previews did not.

5.6 Eurobonds and the two FX steps

Dollar Eurobond yields do not respond to MPC decisions. Across all 23 decisions since March 2022, including the 2022 hikes, the correlation of the MPR change with five- and ten-year Eurobond moves lies between −0.01 and +0.10 in every window (all p > 0.6). The naira market's anticipation is about naira rates, not Nigeria's credit risk.

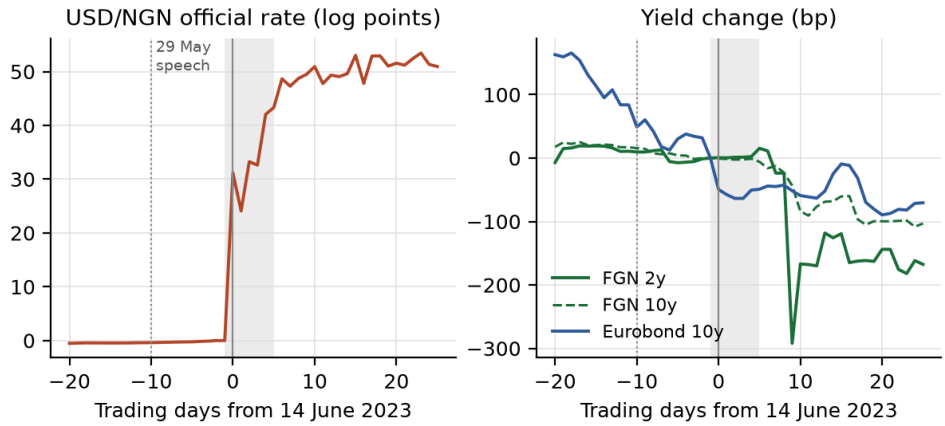


Figure 8. Cumulative moves around the 14 June 2023 FX unification, relative to the day before. Shaded: event window. Dotted: the 29 May inauguration speech.

The FX unification is the opposite case. On 14 June 2023 the official rate was allowed to move and USD/NGN rose 43 log points in the event week, five times a normal week's move. Naira yields barely changed that week (two-year +15bp). The dollar market had moved first: the ten-year Eurobond yield fell 82bp in the fortnight before the 29 May inauguration speech that flagged the reforms, another 83bp between the speech and unification, and 46bp on the day itself, about 210bp in a month (Figure 8). The naira two-year yield then fell 159bp in the three weeks after unification. Investors in dollars priced the reform programme as credit-positive before the FX step happened.

The speech is therefore registered as an event in its own right (State House transcript: "The Central Bank must work towards a unified exchange rate"). The ten-year Eurobond yield fell 47bp in the week before it and 54bp in its event week (z −1.1 and −1.2), while the naira two-year moved −8bp and −18bp. The speech moved the dollar curve and left the naira curve alone. Its own following three weeks contain the unification, so they are not used.

The second FX step went the other way. FMDQ revised the method behind the official NAFEM closing rate in a market notice issued after the close on Friday 26 January 2024, effective Monday 29 January (MN-44); the CBN's official rate rose 29% in its next print and USD/NGN 46 log points over the event week (z 9.2). This time the naira curve sold off: the two-year rose 138bp and the ten-year 142bp in the event week (z 2.4 and 4.1), and the two-year a further 258bp over the following three weeks. The ten-year Eurobond yield barely moved (+7bp). Where the 2023 unification read as a credit-positive reform, the 2024 devaluation read as a naira inflation and interest-rate shock.

5.7 Events in 2026

Three 2026 events fall after FMDQ's switch to daily marks, where there is not yet enough event-free history to estimate a baseline: the post-break period has about 95 trading days, nearly all within the exclusion zone of one of the events. These have no z-scores yet, so they are reported as raw moves only. A pooled baseline would mislead: daily volatility after the break is lower at the short end (one-year 14bp a day, against 36bp before) and slightly higher at ten years (15bp against 12bp), because stale marks used to catch up in lumps.

- **MPC reset, 22 September 2026.** The MPR moved from 26.5% to 23% alongside the adoption of a new overnight reference rate, presented as operational rather than easing. The market partly treated it as easing: in the event week the two-year fell 75bp and the ten-year 68bp, while the ten-year Eurobond rose 43bp.
- **GBI-EM Edge announcement, 14 September 2026.** The two-year yield fell 37bp in the week before the announcement and was flat in the event week. The following three weeks contain the reset, so they say nothing about inclusion on its own. The index go-live date and any earlier signal are still to be verified.

5.8 An earlier period: 2010–2017

Is pricing rate decisions in advance a lasting feature of this market? The DMO's weekly reports allow the same test on 2010–2017, a period with its own tightening cycle (seven hikes in 2010–11, including 275bp on 10 October 2011), a 200bp cut in November 2015 and two hikes in 2016. The registry adds every MPC meeting from July 2010, built from the CBN's communiqué index and monthly MPR series and verified the same way as the 2022–2026 rows. Before 2022 the index often lists a later posting date than the meeting (the October 2011 communiqué was posted on the 25th), so decision dates are taken from the communiqué titles.

With weekly data the windows become weeks: the week before the meeting week, the meeting week, and the three weeks after. To compare like with like, the same weekly design is run on 2022–2026 from FMDQ's week-end curves. Two safeguards matter for weekly data with gaps: a meeting whose first data point is more than a week later is dropped (the early-2014 meetings fall in a gap), and so is any window spanning a missing week.

Weekly design	Week before	Meeting week	Three weeks after
2010–2017 (36 meetings)	+0.11 (p 0.37)	**+0.60** (p 0.002)	−0.08
2010–2017 without October 2011	+0.01	**+0.45** (p 0.03)	+0.05
2022–2026 (23 meetings)	**+0.77** (p < 0.001)	+0.07	+0.42
2022–2026 without February and March 2024	**+0.48** (p 0.03)	+0.10	+0.07

The timing is reversed. In 2010–2017 the market moved with the announcement: the two-year rose 355bp in the week of the October 2011 hike, against 76bp the week before; it fell 285bp in the week of the November 2015 cut and rose 156bp in the week of the July 2016 hike. The median hike moved the two-year 39bp in its meeting week and nothing the week before. In 2022–2026 the same weekly test puts the move in the week before.

Both periods rest mostly on their large decisions. Without both October 2011 and November 2015, the 2010–2017 meeting-week correlation falls to +0.24 (p 0.15), though the rank correlation stays at +0.42. What survives is the contrast in timing, not a precise estimate. Why anticipation appeared is a question this data cannot settle: candidates include clearer forward signals from the CBN since 2023, market pricing of the CBN's reaction to inflation and the exchange rate, and the much larger moves of the recent cycle.

5.9 How much to trust the MPC results

The MPC findings rest on 23 decisions (19 to 21 for most splits), and they were not found with one test. The paper tried three windows, two pre-meeting lookbacks for the auctions, samples with and without the two largest hikes, the analyst expectations split, four kinds of event day, and two periods. The event-study outputs report 87 permutation tests in all. Thirty have $p < 0.05$. If every one were noise, about four would.

Two adjustments put a number on this. Holm's method controls the chance of any false positive across all 87; Benjamini–Hochberg controls the expected share of false positives among the results called significant. Under Holm 8 tests survive, all of them full-sample results: the pre-meeting correlation (+0.84, and +0.86 on the 21 meetings with a preview), its weekly version (+0.77), the pre-meeting move on bond-auction days, on any scheduled-event day and on days without a CPI release, and the two stop-rate tests over 2010–2026. Under Benjamini–Hochberg 21 survive, including the result without February and March 2024 (p 0.048 adjusted), the analyst-surprise result (0.041), the scheduled-event-day split against the surprise (0.022) and

the 2010–2017 meeting-week result (0.017). None of the results without the two largest hikes survives Holm.

Bootstrap intervals (10,000 resamples of meetings) say the same thing in another way:

Correlation	n	r	95% interval	Spearman
MPR change vs two-year, week before	23	+0.84	+0.43 to +0.94	+0.72
same, without Feb/Mar 2024	21	+0.54	+0.27 to +0.78	+0.63
Analyst surprise vs two-year, week before, without Feb/Mar 2024	19	+0.61	+0.09 to +0.84	+0.33
Analyst surprise vs two-year on scheduled-event days, without Feb/Mar 2024	19	+0.66	+0.18 to +0.86	+0.47
2010–2017 weekly, meeting week	36	+0.60	+0.09 to +0.92	+0.53
2022–2026 weekly, week before	23	+0.77	+0.38 to +0.91	+0.64

So the existence of pre-meeting pricing is well supported. The finding that it tracks the analysts' surprise (Section 5.4) and arrives on auction days (Section 5.5) is consistent with the data and survives a false-discovery-rate correction, but its interval runs from barely positive to strong, and its rank correlation is lower. It should be read as a well-founded hypothesis, not a measurement.

The correlation is also not, by itself, a forecasting rule. A rule fixed in advance (a two-year move of more than +25bp on scheduled-event days in the week before the meeting reads hawkish against the published consensus, below −25bp dovish, otherwise in line) gets the direction of the surprise right in 7 of the 21 meetings with a preview. Its hawkish calls were right four times out of five; its two dovish calls, before the holds of February and July 2025, were both wrong; and it called most surprises "in line". That is in sample, so it flatters the rule. From the November 2026 meeting on, the rule is applied before each meeting and logged with a date (`nairacurve preview`, `docs/predictions.csv`), then scored against the decision. That is the out-of-sample test this paper cannot yet offer.

6. Limitations

- **Coverage.** No domestic bond prices exist for April 2017 – February 2022. The 2010–2017 data are weekly, with gaps (2014 especially), so they support only the coarser weekly test. Eurobond curves start in late 2017: before that there are too few bonds.
- **Sample sizes.** 23 MPC decisions, with two dominating the correlation, and two FX steps. Permutation tests and rank correlations guard against outliers but cannot create power, and many specifications were tried on the same meetings (Section 5.9 adjusts for this). Controls for FX and inflation cannot rule out the CBN reacting to the bond market itself. Several windows also contain a second event (the event-study output lists them), so those moves cannot be attributed to one event alone.
- **Expectations.** There is no formal survey or futures-implied expectation of MPC decisions. Section 5.4 codes one published preview per meeting instead: secondary sources of uneven depth, a few quoting a single forecaster.
- **Event days.** Auction and release days are 43% of trading days, so they pick up part of any move by chance: shifted calendars reach the observed correlation 3.8% of the time. CPI release dates to October 2024 are the NBS e-library's listing dates, spot-checked against same-day press reports.

- **Marks, not trades.** FMDQ marks are an exchange's assessment, sticky until June 2026 and of a different character after. Huber fitting and week-long windows reduce the damage; they do not remove it.
- **Fitted short end.** Below two years the naira curve is an extrapolation from bonds over one year, and bills cannot anchor it.

7. Conclusion

From public sources one can build a daily naira yield curve for 2022–2026 and a dollar curve beside it, at an accuracy of about 30bp and 10bp respectively. The two curves move differently: one factor for the dollar curve, three for the naira curve. Around monetary policy the naira curve moves before the decision, in proportion to its size. The CBN's own auctions explain part of that for its largest hikes, the secondary bill market none of it, and the dollar curve does not move at all. What the bond market moved ahead of was mostly the part of each decision that analysts' published previews did not expect, and it arrived mostly on the days the government's own bill and bond auctions cleared. That anticipation is recent: in 2010–2017 the same market reacted in the week of the announcement. Around the 2023 FX unification it was the dollar curve that moved first, from the inauguration speech onward; around the January 2024 devaluation it was the naira curve that moved, and hard.

The next steps are in order of how much they change the answer: test whether auction stop rates, rather than the bond market's reading of them, carry the information, using overnight NIBOR and the CBN's OMO sales over the same days; use the dollar curve, which now runs from late 2017, to study how Nigeria's credit was priced through the years with no naira data; and re-estimate 2026 results once enough post-June-2026 history exists.

Code, data sources and the full event registry: the `nairacurve` pipeline, available on request from the author. Every figure and number in this paper is regenerated by `nairacurve reproduce` followed by `nairacurve figures`. FMDQ data are licensed; only derived series are shown.