

Retrospective Tax Enforcement and Perceived Revenue-Generation Effectiveness of Back-Duty Audits in Southwest Nigeria

Grace O. Wale-Ajayi^{1*}, Gideon T. Akinleye²

Department of Accounting, Ekiti State University, Ado-Ekiti, Nigeria

*Corresponding Author

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ABSTRACT

This study examines the perceived revenue-generation effectiveness of back-duty audit as a retrospective enforcement mechanism in Southwest Nigeria. It draws on a 2025 cross-sectional survey of 374 employees of federal and state revenue authorities across Lagos, Ogun, Ondo, Osun, Oyo and Ekiti States. The dependent construct reflects respondents' reported revenue-generation effectiveness; the study does not observe audited tax liabilities, actual cash collections, audit costs or post-audit taxpayer behaviour. Item-level descriptive statistics show the strongest support for organising random back-duty assessments (mean = 3.2326, SD = .8425) and regular assessments (mean = 3.0963, SD = .8390), while auditing doubtful exclusion from the tax base records the lowest mean (2.4759, SD = 1.1500). Back-duty audit has the largest bivariate association with reported revenue-generation effectiveness among the three audit modes ($r = .373$, $p < .001$). In a multiple regression controlling for desk and field audits, it retains the largest partial association ($B = .313$, $SE = .046$, standardised beta = .346, $t = 6.839$, $p < .001$). The internally reconciled model is significant, $F(3, 370) = 23.125$, $p < .001$, with $R^2 = .158$ and adjusted $R^2 = .151$. These estimates describe associations in a perception-based survey and do not quantify the naira revenue recovered from an additional back-duty audit or establish a causal return to audit activity. The findings highlight the relevance of risk targeting, digital information, collection processes and audit governance for retrospective enforcement. The results remain relevant to Nigeria's current tax-reform transition under the Nigeria Tax Administration Act 2025 and the 2026 transition guidelines (Federal Republic of Nigeria, 2025; Federal Ministry of Finance, 2026).

Keywords: Back-Duty Audit; Retrospective Enforcement; Tax Compliance; Perceived Revenue-Generation Effectiveness; Deterrence; Tax Administration; Nigeria

INTRODUCTION

Tax administrations must address both current-period compliance and liabilities arising from earlier periods. Retrospective audit can revisit prior tax periods to identify under-assessment, omission or misstatement and, where permitted by law, support additional assessment and recovery of previously unpaid liabilities (Federal Republic of Nigeria, 2025; OECD et al., 2025). The potential fiscal value of retrospective audit includes both immediate adjustments to past liabilities and subsequent behavioural effects where audited taxpayers alter future reporting (Advani et al., 2023; Løyland et al., 2024).

The distinction matters because the value of an audit can extend beyond its immediate adjustment when the intervention changes taxpayers' subsequent reporting behaviour (Advani et al., 2023; Løyland et al., 2024). Advani et al. (2023) find that audits can increase reported tax liabilities for years after the intervention, and Løyland et al. (2024) separate immediate audit corrections from behavioural gains in subsequent filings. Kotsogiannis et al. (2024) similarly show that the dynamic impact of corporate tax audits depends on audit scope: comprehensive audits in Rwanda generate positive compliance effects, whereas narrow-scope audits can be counterproductive. More recent evidence reinforces the dynamic nature of enforcement: Costa et al. (2026) show that audit-related reductions in corporate tax avoidance can weaken over time in Brazil, while Lediga et al. (2026) document positive reporting spillovers from business tax audits to unaudited firms in South Africa. These

studies make retrospective enforcement a question of audit depth, persistence and wider behavioural responses, not simply arrears collection.

The issue is particularly important in tax administrations facing information and capacity constraints because audit, verification and investigation require substantial administrative resources, while effective compliance-risk management increasingly depends on reliable taxpayer information and risk-based prioritisation (Mackenzie et al., 2023; OECD, 2024). Basri et al. (2021) show that strengthened tax administration can produce substantial revenue gains, but authorities still need to decide where to deploy scarce investigative resources. A risk-based retrospective audit programme can prioritise taxpayers and periods where identified compliance risks, materiality and expected enforcement benefits justify deeper review (OECD, 2024; OECD et al., 2025; Løyland et al., 2024). Recent administrative-data evidence strengthens this case: Battaglini et al. (2025) show that machine-learning-assisted audit selection can materially improve detected evasion and realised recovery, while Shah (2026) finds that computerised real-time risk analysis can sharply reduce fraudulent VAT claims in a low-capacity setting. The approach is compatible with the deterrence model of tax evasion, although information, trust, service quality and third-party reporting also influence outcomes (Slemrod, 2019; Mascagni & Nell, 2022).

In Nigeria, tax-audit research has generally pooled several audit modes or treated audit and investigation as broad enforcement constructs. Recent studies report positive associations between audit activity and tax revenue or compliance (Ezekiel et al., 2022; Inegbedion & Okoye-Uzu, 2024). Pitan et al. (2025) provide newer Nigerian evidence that both desk and field audit are significantly associated with tax compliance among federal revenue authority personnel, while Abdulrasaq and Babatunde (2024) show that enforcement strategies such as penalties, clearance requirements and amnesty also matter for SMEs. Pooling audit modes may obscure differences in enforcement intensity and scope because recent evidence shows that comprehensive and narrow-scope audits can generate materially different compliance responses (Kotsogiannis et al., 2024).

The empirical analysis draws on a 374-person survey across Southwest Nigeria in which back-duty audit was measured separately from desk and field audit. The dependent construct captures employees' perceptions of revenue-generation effectiveness rather than observed tax assessments or cash recovery. Internal consistency checks identified discrepancies in the original significance reporting and model fit; the internally coherent SPSS coefficient and ANOVA outputs are therefore used for the statistical analysis.

The study contributes in four ways. First, it isolates back-duty audit as a distinct enforcement technology rather than treating it as one item in a generic audit index. Second, it links item-level evidence on random and regular retrospective assessment to deterrence and risk-selection theory. Third, it distinguishes recovery from causal claims: because the data are cross-sectional perceptions, the regression is interpreted as an association with reported revenue-generation effectiveness, while causal mechanisms are evaluated against external experimental and administrative-data evidence. Fourth, it places the results in Nigeria's current legal context. The Nigeria Tax Administration Act 2025 commenced on 26 June 2025 and provides uniform procedures intended to facilitate tax compliance and optimise tax revenue. The Federal Ministry of Finance's 2026 transition guidelines separately provide that tax liabilities, assessments, audits, investigations, disputes and enforcement actions relating to periods before 1 January 2026 are to be treated under the repealed tax laws, subject to the applicable savings and continuity provisions of the new legislation (Federal Republic of Nigeria, 2025; Federal Ministry of Finance, 2026).

LITERATURE REVIEW AND THEORETICAL FRAMING

Back-duty audit as retrospective enforcement

For this study, back-duty audit is conceptualised as retrospective verification of the integrity of tax reporting across earlier periods, including the correctness of previously reported income, deductions, allowances and tax bases, subject to the statutory rules governing additional assessments (Federal Republic of Nigeria, 2025). A multi-period audit can provide additional information about recurring reporting patterns and potential understatement that may not be observable from a single-period review, particularly where audit scope is sufficiently comprehensive (Advani et al., 2023; Kotsogiannis et al., 2024). Retrospective review may involve more comprehensive verification than routine document checking, but the periods that can be reassessed remain

subject to statutory limitation rules and procedural safeguards. Under the Nigeria Tax Administration Act 2025, additional assessments are generally subject to six years, with specified continuation and deliberate-misstatement provisions (Federal Republic of Nigeria, 2025).

The economic rationale follows the deterrence framework. In the Allingham and Sandmo (1972) model, expected penalties and detection probability affect the attractiveness of evasion. Within deterrence theory, the possibility of subsequent verification can increase the expected cost of under-reporting by increasing perceived detection and enforcement risk, although actual reopening of a prior period remains governed by applicable statutory rules (Allingham & Sandmo, 1972; Slemrod, 2019; Federal Republic of Nigeria, 2025). Modern enforcement research, however, shows that the mechanism is richer than fear of penalties alone. Audits can reveal information to tax authorities and taxpayers and can influence subsequent reporting through changes in perceived detection and enforcement risk (Slemrod, 2019; Advani et al., 2023). Consequently, a back-duty audit may affect both the stock of past liabilities and the flow of future reporting.

Comprehensiveness is central to this mechanism. Kotsogiannis et al. (2024) find strong dynamic gains from comprehensive audits but not from narrow-scope audits, while Løyland et al. (2024) show that behavioural effects can be of similar magnitude to direct adjustments over a multi-year horizon. Recent evidence adds two important dimensions. Costa et al. (2026) find that the compliance effect of corporate tax audits can attenuate over time when audits are not repeated, and Lediga et al. (2026) show that enforcement can spill over to unaudited firms through geographic and tax-preparer networks in South Africa. These findings indicate that audit scope, frequency and network exposure can influence post-audit behaviour and the wider deterrence value of enforcement.

Risk selection, randomness and audit credibility

Because audit resources are finite, case selection and prioritisation are central components of compliance-risk management and audit-program efficiency (OECD, 2024; OECD et al., 2025). Risk-based selection concentrates audit resources on identified compliance risks, while random audit programmes can complement targeting by improving understanding of non-compliance, validating risk profiles, supporting tax-gap analysis and contributing to deterrence (OECD, 2024; OECD et al., 2025). Battaglini et al. (2025) provide direct evidence that machine-learning methods can improve taxpayer selection for audit and increase both detected evasion and amounts actually recovered.

The source survey is noteworthy because 'organising random assessments' is the highest-rated back-duty item. This does not prove that random selection is more cost-effective than risk-based selection, but it suggests that practitioners associate unpredictability with revenue recovery. The result can be understood alongside Balán et al. (2022), who demonstrate that better local information improves tax targeting, and Løyland et al. (2024), who show how risk thresholds can guide enforcement expansion. A combined audit design can use risk-based selection for operational case targeting while retaining a calibrated random-audit component to test risk criteria, identify otherwise unobserved non-compliance and improve future risk profiling (OECD, 2024; OECD et al., 2025).

Third-party information and digital systems can strengthen retrospective case selection by expanding the information available for cross-checking, automated validation and compliance-risk assessment (Bjørneby et al., 2021; OECD, 2024). Bjørneby et al. (2021) show that even strong third-party reporting may leave room for collusive evasion that on-site audit can address. Clifford and Mavrokonstantis (2021) show how documentary corroboration changes reporting incentives, while Konda et al. (2022) demonstrate that expanded information disclosure can generate both compliance and strategic adaptation. Shah (2026) further shows that combining electronic filing with computerised risk analysis and real-time scrutiny can materially reduce fraudulent VAT claims. Retrospective audit is therefore more informative where tax authorities can integrate taxpayer and third-party data across periods rather than rely on isolated returns (OECD, 2024; Anjarwi, 2026).

Institutional capacity, trust and African tax administration

Retrospective enforcement can require substantial administrative resources, including appropriate legal powers, skilled personnel, reliable records, evidence management, audit-quality controls and effective collection processes (Mersha et al., 2022; OECD et al., 2025). Mersha et al. (2022) find that audit inputs, process and context jointly determine audit quality in Ethiopia, while Mackenzie et al. (2023) document efficiency differences across African tax administrations. Kogueda (2026), using evidence from 40 sub-Saharan African countries, further shows that de facto tax-administration independence is positively associated with both direct and indirect revenue mobilisation. Nurebo et al. (2021) identify detection capability and audit probability as significant compliance factors. Statutory authority to reassess historical periods does not by itself ensure effective recovery because audit outcomes also depend on institutional capacity, administrative design and implementation quality.

Compliance legitimacy also matters. Ayoola et al. (2023) find that trust in tax authorities interacts with tax administration in shaping personal income-tax compliance in Nigeria. Adegboye and Adekanla (2023) similarly show that governance and tax-system effectiveness are associated with compliance attitudes across Africa. Because trust, perceived fairness and administrative quality are relevant to voluntary compliance, retrospective enforcement should be supported by documented procedures, transparent communication, professional conduct and accessible dispute-resolution mechanisms (Ayoola et al., 2023; OECD et al., 2024).

The wider reporting environment can amplify or constrain audit effectiveness. Kurauone et al. (2021) show that auditing, legal enforcement and financial reporting institutions matter for tax evasion across African countries. Electronic filing and other digital systems can increase the availability and standardisation of information for compliance analysis, while Nigerian evidence reports positive associations between electronic-filing attributes and SME tax compliance in Lagos State (OECD, 2024; Salawu et al., 2025). Kotsogiannis et al. (2025) go further by showing that e-invoicing can improve the efficiency of tax audits. These studies indicate that digitalisation can strengthen retrospective enforcement where transaction and filing information is retained, linkable across periods and available for analytical cross-checking and audit selection (Kotsogiannis et al., 2025; OECD, 2024; Anjarwi, 2026).

Nigerian evidence and research proposition

Nigerian empirical work generally supports the relevance of audit and investigation, but many studies combine enforcement modes. Ezekiel et al. (2022) report positive contributions from desk/office audit, field audit and audit investigation to revenue generation. Isimoya (2022) associates tax audit, investigation and electronic filing with revenue-related compliance in Lagos State, while Inegbedion and Okoye-Uzu (2024) link tax audit to SME tax revenue. More recently, Pitan et al. (2025) report significant positive relationships between desk and field audit and tax compliance in Nigeria. These studies establish the broad importance of enforcement but leave room for a more granular question: whether retrospective back-duty audit is especially associated with reported revenue-generation effectiveness after controlling for other audit modes.

The focal proposition is therefore stated conservatively: back-duty audit will exhibit a positive independent association with reported revenue generation after controlling for desk and field audit. This expectation is evaluated using the internally consistent statistical output. Because the dataset is cross-sectional and non-experimental, rejection of the null is not interpreted as proof that increasing back-duty audits by one unit causally raises cash revenue by a fixed amount. The coefficient instead identifies the strongest partial relationship among the audit constructs in this sample.

METHOD

Design and sample

The study uses a cross-sectional survey dataset drawn from an estimated population of approximately 5,800 employees of federal and state revenue authorities across Lagos, Ogun, Ondo, Osun, Oyo and Ekiti States. A cluster-sampling approach was reported, and Yamane's (1967) formula produced a target sample of 374 at a 5%

margin of error. The statistical output contains 374 valid observations for the principal analyses. State-by-state response allocation, cluster-selection probabilities, unit-level response rates and sampling weights were not available; consequently, the achieved sample is treated as a Southwest-wide revenue-authority employee sample rather than as a set of state-representative estimates.

Respondents were 51.9% female and 48.1% male; the largest age group was 31-40 years, and educational attainment ranged from SSCE to postgraduate level. Overall internal consistency for the 28-item questionnaire was Cronbach's $\alpha = .774$. Construct-specific reliability coefficients, factor loadings, item-total diagnostics and respondent-level data required for independent psychometric re-estimation were not available. Accordingly, the five back-duty indicators are reported at item level and the composite coefficient is interpreted cautiously rather than as evidence of a fully validated latent construct.

Back-duty measure and analytical strategy

Back-duty audit was operationalised with five questionnaire items: assessing possible false declaration of tax; addressing doubtful claims of allowance; conducting regular assessments; organising random assessments; and auditing doubtful exclusion from the tax base. Conceptually, the items cover detection of historical misstatement, review of questionable deductions or allowances, routine retrospective assessment, random selection and tax-base completeness. The analysis therefore treats them as operational indicators of retrospective enforcement without making an independent scale-development claim.

At the construct level, Pearson correlation measures the bivariate association between back-duty audit and the survey's reported revenue-generation construct. Multiple OLS regression then estimates reported revenue generation as a function of desk, field and back-duty audit. Desk and field audit are included as controls to isolate the partial association of retrospective audit within the original model. The dependent variable is perception-based and should not be interpreted as audited cash collections, additional assessed liabilities or the monetary return to an additional audit. The inferential threshold is 5%, with exact p-values reported where available; standardised beta is used only to compare relative predictor strength within this model.

Internal consistency checks of the reported statistical output identified three discrepancies. First, the model-summary table reports $R = .397$ together with $R^2 = .890$, which is arithmetically inconsistent. Second, the coefficient table reports field audit $B = .080$, $t = 2.188$ and $p = .029$, whereas a later narrative statement repeats $p = .190$. Third, later summary prose describes back-duty audit inconsistently despite the coefficient table reporting $B = .313$, $SE = .046$, $\beta = .346$, $t = 6.839$ and $p < .001$. The coefficient and ANOVA outputs are mutually coherent and are therefore used. From the ANOVA sums of squares, $R^2 = 14.697/93.080 = .1579$, $R = \sqrt{.1579} = .3974$, adjusted $R^2 = .1511$ and the standard error of estimate = $\sqrt{78.383/370} = .460$. No respondent-level observations were re-estimated or altered.

RESULTS

Descriptive evidence on retrospective audit practices

Random assessment is the highest-rated back-duty practice (mean = 3.2326), closely followed by regular assessment (mean = 3.0963). Both have relatively lower dispersion than the remaining items. This pattern suggests that respondents associate regular and random retrospective assessment with stronger revenue-generation potential. A deterrence interpretation remains plausible but should be treated cautiously because the survey does not measure taxpayers' behavioural responses directly; international evidence nevertheless indicates that random audit programmes can contribute to deterrence while improving understanding of compliance risks (OECD, 2024).

The item on possible false declarations has a mean of 2.8075, while doubtful allowance claims record 2.6711. These activities involve reconstructing the accuracy of previously reported tax bases and deductions. Their intermediate ranking may reflect evidential difficulty, although the present survey does not directly establish the reason for the lower ratings. More generally, audit effectiveness depends on record availability, information quality and audit-process capability (Mersha et al., 2022; OECD et al., 2025). The lowest-rated item is auditing

doubtful exclusion from the tax base (2.4759), and it also has the largest standard deviation (1.1500), indicating more heterogeneous experience among respondents.

Table 1. Back-duty audit item statistics (N = 374)

Back-duty audit item	Mean	SD	Rank
Organising random assessments	3.2326	.8425	1
Regular assessment	3.0963	.8390	2
Assessing possible false declaration of tax	2.8075	1.0095	3
Addressing doubtful claims of allowance	2.6711	1.0542	4
Auditing doubtful exclusion from the tax base	2.4759	1.1500	5

Source: Authors' SPSS descriptive output; ranking is based on mean score.

The ranking has a practical implication. Within this survey, the higher mean scores for regular and random assessment suggest that respondents viewed these programme-based practices more favourably than the other back-duty items examined. International tax-administration evidence likewise recognises complementary roles for risk-based and random audit programmes in enforcement and compliance-risk learning (OECD, 2024; OECD et al., 2025). That pattern supports a programme-level view of retrospective enforcement: the authority needs a continuing portfolio of cases that both recovers revenue and generates information about the distribution of historical non-compliance.

Correlation and regression evidence

Back-duty audit is positively associated with reported revenue-generation effectiveness ($r = .373$, $p < .001$), the largest bivariate audit-mode association in this dataset. It is also positively correlated with field audit ($r = .297$, $p < .001$), while its correlation with desk audit is smaller ($r = .100$) and narrowly misses conventional significance ($p = .053$). These are associations among survey constructs and should not be interpreted as observed revenue recovery.

After controlling for desk and field audit, back-duty audit retains the largest partial association with reported revenue-generation effectiveness ($B = .313$, standardised beta = $.346$, $p < .001$). Its standardised coefficient exceeds the field-audit beta (.112), while desk audit is statistically insignificant. The focal proposition is therefore supported within this perception-based sample; the result does not estimate the causal or monetary return to back-duty auditing.

Table 2. Pearson correlations among audit modes and revenue generation

Variable	Desk audit	Field audit	Back-duty audit	Revenue generation
Desk audit	1.000	-0.180**	0.100	-0.050
Field audit	-0.180**	1.000	0.297**	0.227**
Back-duty audit	0.100	0.297**	1.000	0.373**
Revenue generation	-0.050	0.227**	0.373**	1.000

Source: Authors' Analysis

Note. ** $p < .01$ (two-tailed). Desk-back-duty $p = .053$; desk-revenue $p = .335$; all other starred relationships $p < .001$.

The overall regression is significant, $F(3, 370) = 23.125$, $p < .001$, and the reconciled model explains 15.8% of variation in reported revenue-generation effectiveness. Thus, back-duty audit has the largest coefficient among the included audit modes, but most variation remains outside the model. The unexplained component may reflect

taxpayer and tax-base characteristics, filing and payment compliance, administrative capacity, institutional arrangements and broader economic conditions (Slemrod, 2019; Mackenzie et al., 2023; OECD, 2024).

Table 3. OLS regression of reported revenue generation

Predictor	B	SE	Std. beta	t	p
Constant	1.733	.178	-	9.756	<.001
Desk audit	-0.046	.035	-0.065	-1.313	.190
Field audit	0.080	.036	0.112	2.188	.029
Back-duty audit	0.313	.046	0.346	6.839	<.001

Source: Authors' Analysis

Note. N = 374. $F(3, 370) = 23.125$, $p < .001$; $R = .397$; $R^2 = .158$; adjusted $R^2 = .151$; standard error of estimate = .460. R^2 and adjusted R^2 are reconciled from the ANOVA output.

DISCUSSION

Why back-duty audit has the strongest association

Within the present survey, back-duty audit has the largest partial association with reported revenue-generation effectiveness. One plausible explanation is its multi-period scope, which may allow retrospective procedures to identify issues extending beyond a single-period review. However, the survey does not observe actual adjustments, cash collections, audit costs or case selection, so this mechanism is not directly tested.

External administrative-data studies show that comprehensive audits can affect subsequent reporting and that audit scope matters (Advani et al., 2023; Kotsogiannis et al., 2024). Recent evidence extends this perspective: Costa et al. (2026) show that audit effects on corporate tax avoidance can change over time, while Lediga et al. (2026) identify positive enforcement spillovers to unaudited firms in South Africa. These studies support the plausibility of a recovery-and-deterrence mechanism, but they do not convert the present cross-sectional association into a causal estimate. Non-random selection of higher-risk taxpayers may also contribute to the larger back-duty coefficient (Slemrod, 2019; Løyland et al., 2024).

Randomness, regularity and deterrence

Random and regular retrospective assessment received the two highest item means. This indicates favourable respondent perceptions of programme-based back-duty practices; it does not establish that randomness itself increases recovery or is more cost-effective than risk-based selection. International evidence suggests that calibrated random auditing can complement risk targeting by testing risk criteria, identifying otherwise unobserved non-compliance and supporting deterrence (OECD, 2024; OECD et al., 2025).

Because enforcement legitimacy also matters, any use of random or risk-based selection should remain procedurally consistent, documented and subject to accessible dispute processes; this implication is supported by wider evidence on trust and taxpayer communication rather than by the survey coefficients themselves (Ayoola et al., 2023; Mascagni & Nell, 2022).

Digital records and the future of retrospective enforcement

The survey does not directly test digital tax systems. Evidence from recent peer-reviewed studies nevertheless shows that technology can materially strengthen enforcement when it improves risk selection and the use of transaction data. Kotsogiannis et al. (2025) find that e-invoicing improves VAT-audit efficiency; Battaglini et al. (2025) show that machine-learning-assisted selection can increase detected evasion and realised recovery; Shah (2026) demonstrates the effectiveness of computerised real-time VAT risk analysis; and Wu et al. (2026)

associate big-data-driven tax enforcement with lower tax avoidance and improved information transparency. Anjarwi (2026) further identifies data governance, digital capability and institutional readiness as central conditions for technology-enabled auditing. For retrospective enforcement, these findings emphasise the value of historical records that are retained, linkable and auditable across periods.

Implications for Nigeria's 2026 tax-administration transition

Nigeria's current tax-reform transition gives the study contemporary policy relevance but is not evaluated by the 2025 survey. The Nigeria Tax Administration Act 2025 commenced on 26 June 2025, while the Federal Ministry of Finance's 2026 transition guidelines address liabilities and enforcement actions relating to periods before 1 January 2026 (Federal Republic of Nigeria, 2025; Federal Ministry of Finance, 2026). Back-duty capability may assist administrative continuity across legal periods, subject to the substantive law, limitation rules and procedures applicable to each period.

Accordingly, the findings provide pre-reform evidence on officials' perceptions. The implications for risk selection, digital integration and current-period compliance are informed jointly by the survey evidence and the cited administrative literature.

Policy Implications and Recommendations

- i. Prioritise historical cases through a retrospective compliance-risk framework using materiality, identified risk, evidence availability, legal viability and expected collectability, supported where feasible by empirically validated risk-selection tools (Battaglini et al., 2025; OECD, 2024; OECD et al., 2025).
- ii. Retain a calibrated random-audit component alongside risk-based selection to test risk criteria, identify non-compliance outside existing profiles and support tax-gap learning rather than replace targeted enforcement (OECD, 2024; OECD et al., 2025).
- iii. Integrate legally available historical taxpayer and third-party information across filing systems for cross-period checking, risk analysis and case development; recent evidence shows that computerised information can strengthen real-time enforcement where administrative capacity is constrained (Shah, 2026; OECD, 2024).
- iv. Separate audit assessments from realised collections and, where feasible, monitor subsequent filing behaviour so that immediate and post-audit outcomes are not conflated (Advani et al., 2023; Løyland et al., 2024; OECD et al., 2025).
- v. Strengthen specialist tax, accounting, data-analysis and evidence-management capability, supported by supervisory review, audit-quality controls and integrity safeguards (Mersha et al., 2022; OECD et al., 2025).
- vi. Protect procedural fairness through clear audit periods, documented evidence, written reasons, taxpayer response opportunities and accessible dispute-resolution procedures (Ayoola et al., 2023; OECD et al., 2024).

Designing and Governing a Back-Duty Audit Portfolio

A back-duty audit portfolio should coordinate case selection, audit scope, evidence management, collection and feedback across historical cases.

Portfolio prioritisation should consider compliance risk, materiality, case age, legal viability, evidence availability and expected collectability. A controlled random component may be retained to test risk criteria and identify otherwise unobserved non-compliance, while validated predictive tools can improve the efficiency of risk-based audit selection (Battaglini et al., 2025; OECD, 2024; OECD et al., 2025).

Audit scope should be proportionate to unresolved risk, ranging from historical desk review to field or comprehensive verification. Planning should also distinguish proposed assessment, final liability, dispute outcome and realised collection, with subsequent filing behaviour monitored where feasible (Advani et al., 2023; Kotsogiannis et al., 2024; OECD et al., 2025).

Governance should combine documented case assignment, evidence indexing, independent quality review and official payment channels. Historical files should also identify the substantive law, limitation rules and procedures applicable to each tax period, while longitudinal digital records can support cross-period analysis (Federal Republic of Nigeria, 2025; Federal Ministry of Finance, 2026; OECD, 2024; Anjarwi, 2026).

Completed cases should feed back into current compliance-risk criteria, with documented stopping rules and formal referral criteria for suspected fraud. Aggregate programme reporting should, where legally permissible, distinguish cases, assessments, collections, disputes and duration so that administrative activity is not mistaken for realised fiscal recovery (OECD, 2024; OECD et al., 2025).

Table 4. Suggested management framework for retrospective tax enforcement

Dimension	Illustrative indicators	Purpose
Risk and materiality	Estimated historical tax gap; recurrence; sector risk	Prioritise high-value cases
Legal viability	Applicable law; limitation period; evidence sufficiency	Avoid unenforceable assessments
Collectability	Current solvency; payment history; asset visibility	Focus on realisable revenue
Audit depth	Desk historical review; field verification; comprehensive audit	Match intensity to unresolved risk
Random programme	Probability sample outside top risk band	Measure hidden non-compliance and validate model
Case outcome	Proposed, agreed and final assessment; dispute result	Separate audit production from defensible liability
Cash outcome	Amount collected; collection lag; write-off	Measure realised fiscal benefit
Post-audit behaviour	Subsequent filing, tax paid and repeated risk flags	Estimate persistence of compliance response
Feedback	New risk rules, sector guidance and control changes	Reduce future accumulation of back-duty cases

Source: Authors' synthesis of the study findings and cited audit-management literature.

Limitations and Future Research

The principal limitation is measurement. The study records revenue-authority employees' perceptions rather than actual assessments, additional tax liabilities, cash collections, audit costs, taxpayer records or post-audit compliance. The dependent variable should therefore be understood as reported revenue-generation effectiveness, not objectively observed revenue recovery. Self-reporting may introduce common-method and response bias, and the cross-sectional design precludes causal inference.

A second limitation concerns construct and sampling validity. The back-duty measure comprises five operational items, while only overall questionnaire reliability (Cronbach's $\alpha = .774$) is available; construct-specific reliability, factor loadings and respondent-level data for independent psychometric assessment are unavailable. The cluster-sampling description also lacks state-level response allocation and selection probabilities. Because the study is confined to Southwest Nigeria, its findings should not be generalised automatically to other Nigerian geopolitical zones or tax systems.

Future research should combine audit-selection records with longitudinal administrative data on assessments, collections, appeals, audit costs and subsequent filing or payment behaviour. Panel or quasi-experimental designs around audit-risk thresholds, random audit assignment or phased digital reforms would strengthen causal identification (Advani et al., 2023; Løyland et al., 2024; Costa et al., 2026; Shah, 2026). Network-based designs could also test whether audit effects spill over to unaudited taxpayers, as recent South African evidence suggests (Lediga et al., 2026). Extending the design to other geopolitical zones would permit regional comparison and test whether the observed Southwest associations persist under different institutional and taxpayer conditions.

CONCLUSION

Back-duty audit is the strongest audit-mode predictor of reported revenue-generation effectiveness in the verified Southwest Nigeria survey ($r = .373$; standardised beta = $.346$). This is a perception-based association, not an estimate of actual tax recovered or the causal return to an additional back-duty audit. The study does not observe assessments, cash collections, audit costs, appeal outcomes or subsequent taxpayer behaviour. The higher ratings for random and regular retrospective assessment therefore describe how revenue-authority employees perceive these practices. At the same time, explanations concerning deterrence, risk targeting, digital information and audit governance are informed by the wider literature. Subject to these limitations, the findings justify further administrative-data research linking back-duty case selection to assessments, collections and later compliance. The proposed risk-based and digitally supported framework provides a basis for subsequent validation with administrative data.

Data Availability

The analysis uses questionnaire information and summary statistical outputs from the underlying survey. Respondent-level SPSS data are not available for secondary re-estimation.

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