From Desk Review to Field Verification and the Tax Audit Modality Revenue Paradox in Southwest Nigeria

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ABSTRACT

This study examines why desk audits can be perceived as operationally useful while showing little independent association with revenue generation, and whether field verification supplies the missing enforcement intensity. It develops a distinct empirical analysis from a 2025 survey of 374 employees of federal and state revenue authorities across the six states of Southwest Nigeria. Item-level descriptive statistics, Pearson correlations and multiple ordinary least-squares regression are re-examined with the appendix/SPSS outputs treated as the authoritative statistical record. Desk-audit items show comparatively strong support for return comparison and office-based record assessment, but the weakest desk-audit rating concerns the availability of technical tools. Field-audit responses are more uneven: validating desk-audit reports records the strongest field-audit rating, whereas direct verification activities receive lower scores. At the construct level, desk audit is weakly and negatively correlated with reported revenue generation ($r = -0.050$, $p = .335$) and remains statistically insignificant in the multivariate model ($B = -0.046$, beta $= -0.065$, $p = .190$). Field audit is positively correlated with revenue generation ($r = 0.227$, $p < .001$) and retains a positive independent association after controlling for desk and back-duty audits ($B = 0.080$, beta $= 0.112$, $p = .029$). Recalculation from the ANOVA sums of squares gives $R^2 = .158$ and adjusted $R^2 = .151$. Because the outcome is perception-based and cross-sectional, the estimates are associational rather than direct measures of realised collections or causal audit effects. The pattern is consistent with desk review as a screening and information-production stage and targeted field verification as selective escalation. The paper concludes that digital desk analytics, risk scoring, case escalation and field capacity should be designed as one integrated audit architecture rather than as competing audit modes.

Keywords: tax audit; desk audit; field audit; tax enforcement; revenue mobilisation; digital tax administration; Southwest Nigeria

INTRODUCTION

Domestic revenue mobilisation depends not only on statutory tax rates but also on the administrative capacity to identify liabilities, verify declarations and enforce payment (Basri et al., 2021; Mackenzie et al., 2023). Evidence from developing and developed tax systems increasingly shows that administrative intensity, information quality and audit design can materially affect reported liabilities and subsequent compliance. Basri et al. (2021), for example, show that stronger tax administration can generate large revenue gains even without changing statutory rates, while Advani et al. (2023) demonstrate that the value of an audit extends beyond the immediate adjustment because audited taxpayers may alter reporting for several subsequent years. The policy question is therefore no longer whether audits matter in the abstract. It is which audit modes should be used, in what sequence, with what information, and at what level of intensity.

That question is particularly important in low-capacity environments where audit resources are scarce. Desk-based review is comparatively scalable because it relies primarily on returns, supporting schedules and information already available to the revenue authority. In contrast, more intensive audit procedures generally require additional administrative resources and deeper verification (OECD, 2024). Resource constraints can encourage tax administrations to use lower-cost screening extensively while concentrating more intensive audit resources on higher-risk cases (OECD, 2024). The fiscal value of screening depends on the quality of available

information, the effectiveness of risk selection and escalation, and the ability to convert detected non-compliance into enforceable assessments and collections (OECD, 2024; Kotsogiannis et al., 2025). In other words, the relevant unit of analysis may be an audit pathway rather than a stand-alone audit type.

Recent empirical work reinforces this process perspective. Bjørneby et al. (2021) show that even where third-party reporting exists, unannounced on-site audits can change subsequent wage reporting, illustrating that documentary systems may not eliminate the value of physical verification. Clifford and Mavrokonstantis (2021) likewise show how documentation requirements alter tax reporting, whereas Konda et al. (2022) warn that additional disclosure can generate both intended compliance effects and strategic reporting responses. These findings suggest that information, verification and taxpayer behavioural responses are jointly produced by the design of enforcement rather than by the nominal label attached to an audit.

Digitalisation further complicates the desk-versus-field distinction. Electronic filing, e-invoicing, data matching and advanced analytics can strengthen office-based verification by expanding the information available for risk assessment, cross-checking and enforcement (OECD, 2024; Kotsogiannis et al., 2025). In Rwanda, Kotsogiannis et al. (2025) find that e-invoicing improves audit efficiency, especially when digital information is coupled with enforcement. In China, big-data-driven tax enforcement has been associated with lower tax avoidance and improved information transparency, including reductions in earnings management and analyst forecast errors (Wu et al., 2026), while Anjarwi (2026) synthesises a broader shift toward AI-supported anomaly detection and risk-based audit selection. Nigerian evidence also points toward the importance of electronic systems: Salawu et al. (2025) report that electronic filing attributes are associated with SME compliance in Lagos State.

The present study addresses a narrower but practically important issue: whether the Nigerian survey evidence is consistent with an integrated escalation architecture in which desk audit generates screening information and field audit provides selective verification. The source thesis was designed to assess desk, field and back-duty audits in relation to revenue generation across Southwest Nigeria. A disaggregated analysis is warranted because combining every audit type would obscure the distinct operational question raised by the results. The analysis therefore focuses on the desk-field interface. Back-duty audit is retained only as a control in the multivariate model because omitting it would change the meaning of the desk and field coefficients.

The paper makes three contributions. First, it separates item-level perceptions from construct-level multivariate associations. This is important because respondents can rate specific desk-audit tasks as useful while the aggregate desk-audit construct has little independent association with revenue once other audit modes are considered. Second, the article statistically reconciles internal transcription inconsistencies in the thesis by relying on the SPSS appendix and ANOVA/coefficient outputs; this yields a coherent model fit of $R = .397$, $R^2 = .158$ and adjusted $R^2 = .151$, rather than the impossible combination of $R = .397$ and $R^2 = .890$ reported in one thesis table. Third, it links the Nigerian evidence to recent international work on audit intensity, risk targeting and digital information, producing a policy framework that treats desk and field audits as sequential components of one enforcement system.

The analysis is also timely. The Nigeria Tax Administration Act 2025 establishes uniform procedures for the consistent and efficient administration of tax laws, with the stated objectives of facilitating taxpayer compliance and optimising tax revenue (Federal Republic of Nigeria, 2025). Although the survey predates the 2025 statutory reform, its findings remain relevant to implementation because the Act's objective of consistent and efficient tax administration requires operational decisions concerning taxpayer information, case selection, verification and enforcement (Federal Republic of Nigeria, 2025). The article therefore offers evidence from the pre-reform administrative environment while framing its recommendations for the current reform era (Federal Republic of Nigeria, 2025).

LITERATURE REVIEW AND ANALYTICAL FRAMEWORK

Audit intensity, information and deterrence

The economic logic of tax enforcement begins with deterrence: taxpayers compare the gains from under-reporting with the probability and consequences of detection. The foundational model of Allingham and Sandmo (1972) formalises this trade-off, while Slemrod (2019) shows that modern enforcement analysis must also account for information reporting, administrative technology, taxpayer heterogeneity and behavioural responses. Audit probability is only one dimension of enforcement effectiveness; audit scope, quality, information obtained and post-audit behavioural responses also influence current and subsequent tax reporting (Slemrod, 2019; Advani et al., 2023; Kotsogiannis et al., 2024).

Recent administrative-data studies sharpen this distinction. Kotsogiannis et al. (2024) show that comprehensive corporate income-tax audits in Rwanda generate sustained pro-compliance effects, whereas narrow-scope audits can produce a net counter-deterrence effect. Løyland et al. (2024) similarly distinguish direct audit corrections from behavioural effects in later filings and show that the post-audit reporting response can be economically important. These findings challenge the assumption that increasing audit numbers alone necessarily improves compliance, because audit scope and intensity can generate materially different post-audit responses (Kotsogiannis et al., 2024; Løyland et al., 2024). Enforcement effectiveness depends partly on whether audit intensity, scope and targeting generate sufficient information to identify non-compliance and support credible adjustments (Kotsogiannis et al., 2024; OECD, 2024).

This perspective is consistent with African evidence on administrative quality. Mackenzie et al. (2023) document substantial differences in the efficiency of African tax administrations, while Mersha et al. (2022) find that audit inputs, the audit process and contextual factors jointly shape audit quality in Ethiopia. Nurebo et al. (2021) further report that detection of non-compliance, audit probability and taxpayer awareness are significant determinants of compliance. Taken together, the evidence suggests that desk-audit performance should not be evaluated solely by the volume of files reviewed but also by the quality of risk identification, case resolution and subsequent compliance outcomes (Mackenzie et al., 2023; Mersha et al., 2022; OECD, 2024). It should be evaluated by the quality of risk signals produced, the speed and accuracy of case resolution, and the strength of escalation when documentary review cannot resolve material risk.

Desk audit as screening and information production

Desk audit permits tax authorities to examine returns and supporting information without immediately undertaking more resource-intensive verification procedures, making it suitable for broad initial screening (OECD, 2024). In a modern tax administration, office-based compliance work can incorporate automated checks, third-party information matching, administrative filing and payment data, risk assessment and taxpayer communication (OECD, 2024). The principal strength of desk-based review lies in scalable, standardised screening, whereas its effectiveness remains dependent on the completeness, quality and cross-verifiability of available taxpayer and third-party information (OECD, 2024; Konda et al., 2022). Where concealed income or transactions are not observable through taxpayer records or third-party information, documentary review alone may fail to detect the underlying non-compliance (Bjørneby et al., 2021; Konda et al., 2022).

The information environment therefore determines desk-audit productivity. Kurauone et al. (2021), using evidence from 37 African countries, show that auditing and legal enforcement interact with the financial reporting environment in ways relevant to tax evasion. Clifford and Mavrokonstantis (2021) demonstrate that documentation rules can constrain reporting behaviour, and Konda et al. (2022) show that disclosure rules can also induce strategic responses. The implication is that desk review becomes more powerful when it is embedded in a dense information network rather than treated as the manual reading of taxpayer-submitted returns.

Nigeria has increasingly adopted electronic tax-filing arrangements, while recent Nigerian evidence indicates that perceived e-filing attributes are associated with tax compliance among SMEs in Lagos State (Salawu et al., 2025). Salawu et al. (2025) find positive compliance associations for electronic filing among SMEs in

Lagos State. OECD, the African Union Commission and the African Tax Administration Forum (2024) document the continuing development of digital tax-administration systems and taxpayer-service mechanisms across African jurisdictions. However, technology does not automatically produce enforceable revenue. Kotsogiannis et al. (2025) show that digital information is particularly valuable when paired with audits, and Anjarwi (2026) emphasises data governance, digital competencies and institutional readiness as conditions for effective technology-enabled auditing. Accordingly, weak technical tools can limit desk-audit productivity even where staff perceive documentary comparison itself as useful.

Field audit as verification and escalation

Field audit can expand the authority's information set through direct examination of source records, business activities and other evidence that may not be fully observable from filed returns or third-party information alone (Bjørneby et al., 2021; OECD, 2024). Because intensive audit procedures consume additional administrative resources, their expected value is greatest when directed towards cases in which available information indicates material unresolved risk (OECD, 2024; Balán et al., 2022). Bjørneby et al. (2021) provide experimental evidence that on-site audits can uncover and deter reporting behaviour not fully controlled by third-party systems. On-site enforcement can strengthen deterrence by demonstrating that documentary reporting may be subjected to direct verification against underlying economic activity (Bjørneby et al., 2021).

The case for field audit is nevertheless not a case for indiscriminate physical inspection. Basri et al. (2021) show the revenue importance of administrative intensity, but scarce enforcement capacity makes targeting essential. Balán et al. (2022) demonstrate that local information can improve targeting and tax collection in a low-capacity setting, while Løyland et al. (2024) show the usefulness of risk thresholds for allocating enforcement resources. More intensive audit resources should therefore be concentrated on cases with sufficiently high expected compliance and revenue gains relative to enforcement costs (OECD, 2024; Løyland et al., 2024).

Nigerian evidence generally reports positive associations between tax audit or compliance mechanisms and revenue or compliance outcomes, although findings vary across study design, taxpayer category and location. Inegbedion and Okoye-Uzu (2024) examine tax audit and SME tax revenue; Isimoya (2022) reports a significant relationship between tax-compliance mechanisms and revenue generation in Lagos State, while Abdulrasaq and Babatunde (2024) examine enforcement strategies and SME tax compliance in North-West Nigeria. Earlier evidence from Ekiti State also associates tax audit with tax compliance and remittance (Olaoye & Ekundayo, 2019). The present article advances this literature by asking not merely whether audit is beneficial, but why desk and field modes display different patterns within the same regional dataset.

Analytical expectations

The empirical analysis is organised around three research questions rather than post-hoc causal hypotheses. RQ1 asks which desk- and field-audit activities tax officials perceive as most and least supportive of revenue generation. RQ2 asks whether desk and field audit constructs are associated with reported revenue generation in bivariate and multivariate analysis. RQ3 asks whether the combined pattern is consistent with an escalation architecture in which desk review produces risk information, and targeted field audit validates higher-risk cases. Because the data are cross-sectional perceptions rather than randomised audit assignments, the interpretation is associational. The external experimental and administrative-data literature is used to evaluate plausibility, not to convert the survey coefficients into causal effects.

METHOD

Research design, population and sample

The source study used a cross-sectional survey design. Its target population comprised approximately 5,800 employees of the Federal Inland Revenue Service and State Internal Revenue Services operating across Lagos, Ogun, Ondo, Osun, Oyo and Ekiti States. The population included personnel involved in tax collection, audit

and enforcement. Cluster sampling was reported in the source study as the sampling approach for officials across federal and state revenue-authority units. Using the stated population of approximately 5,800 employees, the thesis reported a sample of 374 based on Yamane's (1967) formula at a 5% margin of error. All 374 cases appearing in the SPSS output were valid for the principal analysis.

Table 1. Respondent profile (N = 374)

Characteristic	Category	n	%
Sex	Female	194	51.9
Sex	Male	180	48.1
Age	21-30	72	19.3
Age	31-40	193	51.6
Age	41-50	96	25.7
Age	51 and above	13	3.5
Education	SSCE	38	10.2
Education	ND	63	16.8
Education	HND	76	20.3
Education	BSc	122	32.6
Education	MSc and above	75	20.1

Source: Authors' Calculation from the SPSS frequency output.

The demographic profile indicates a broadly balanced gender distribution: 194 respondents (51.9%) were female and 180 (48.1%) male. The largest age group was 31-40 years (51.6%), followed by 41-50 years (25.7%), 21-30 years (19.3%) and 51 years or above (3.5%). Educational attainment ranged from SSCE to postgraduate level; BSc holders formed the largest category (32.6%). These characteristics do not establish representativeness of every specialised audit function. However, they indicate that the dataset captures a sizeable cross-section of revenue-authority employees rather than a small single-office sample.

The questionnaire contained multiple items on desk audit, field audit, back-duty audit and revenue-generation/audit-investigation outcomes. The source document reports an overall Cronbach's alpha of .774 for the 28-item instrument based on 374 valid cases; this value was treated as evidence of acceptable overall internal consistency in the present analysis. Because construct-specific reliability coefficients and item-level raw responses were not available in the supplied thesis file, they were not estimated, and no new factor analysis was undertaken. This is an important limitation and is reflected in the cautious interpretation of the regression constructs.

Measures and statistical procedure

Desk audit was measured with seven items covering filing/return comparison, office assessment of tax records, examination of compliance, audit-period specification, documentary provision, staffing and technical tools. Field audit was measured with five items covering on-site compliance assessment, validation of records, advance audit notice, direct collection of documents and validation of desk-audit reports. Back-duty audit was retained in the regression as a control because it was included in the original model. Revenue generation was the dependent construct and reflects officials' perceptions rather than administrative assessment, collection or filing records, which were unavailable in the source dataset. The substantive items were scored on an agreement scale in the questionnaire; the appendix output confirms N = 374 for all analysed items.

The statistical procedure has two stages. First, item means and standard deviations are used to identify operational strengths and bottlenecks within desk and field audit. Second, Pearson correlations and multiple OLS regression are used to examine construct-level associations with revenue generation. The reported model

is REVGEN = beta0 + beta1(DEKAUD) + beta2(FIAUD) + beta3(BAKAUD) + error. The coefficients are interpreted as partial associations conditional on the other two audit modes.

A statistical verification step was necessary because the thesis narrative contains transcription inconsistencies. The coefficient table and SPSS appendix report field audit B = .080 with p = .029, whereas later prose incorrectly repeats p = .190. Likewise, one model-summary table reports R = .397 together with R^2 = .890 and adjusted R^2 = .898, which is arithmetically impossible. Using the ANOVA output, R^2 is recalculated as regression sum of squares / total sum of squares = 14.697 / 93.080 = .158; R = sqrt(.158) = .397; adjusted R^2 = .151; and the standard error of estimate is sqrt(78.383/370) = .460. These internally coherent values are used throughout the article. No raw observations were re-estimated or altered.

RESULTS

Item-level desk and field audit pattern

Table 2. Desk- and field-audit item statistics

Audit mode and item	Mean	SD
Desk: Comparing tax filing and returns	3.5963	0.7175
Desk: Assessing tax records within the tax office	3.4011	0.86
Desk: Examining tax compliance within the tax office	3.1497	0.9199
Desk: Non-specification of audit period	3.0053	0.8055
Desk: Provision of relevant tax documents	3.1551	0.7698
Desk: Staff adequacy	3.2674	1.0827
Desk: Availability of technical tools	2.7139	0.9747
Field: Assessing compliance at taxpayer premises	2.2567	1.0191
Field: Verifying validity of tax records	1.8075	1.0253
Field: Announcing audit time	2.5615	1.0738
Field: Direct collection of tax documents	2.1631	1.0498
Field: Validating desk-audit reports	3.2299	0.8637

Source: Authors' SPSS Analysis.

The desk-audit items reveal a clear information-processing pattern. Comparing tax filing and returns has the highest mean (3.5963), followed by office assessment of tax records (3.4011). These activities are the core of documentary screening: they use information already in the authority's possession to identify inconsistencies. Staff adequacy also receives a relatively high mean (3.2674). By contrast, the availability of technical tools is the weakest desk-audit item (2.7139). The difference is operationally important because contemporary risk-based tax administration increasingly relies on integrated taxpayer data, third-party information and analytical tools (OECD, 2024; Kotsogiannis et al., 2025). Respondents appear more confident in the basic logic of documentary comparison than in the technical infrastructure supporting that comparison.

Field-audit ratings are more polarised. The strongest item by a wide margin is validation of desk-audit reports (mean = 3.2299), whereas verification of the validity of tax records records the lowest mean (1.8075). This pattern is consistent with an escalation role: officials may see field work as most valuable when it follows a desk-generated signal rather than when it begins as a broad, open-ended inspection. Advance notice of audit records a mid-range mean (2.5615), while direct collection of documents and general on-site compliance assessment are lower. The results therefore do not support a simple claim that respondents prefer one audit mode over another; instead, they identify particular tasks within each mode that appear to generate value.

Taken together, the item statistics answer RQ1 by showing that desk review is perceived as strongest in documentary comparison, while fieldwork is perceived as strongest in validating prior desk findings. This pattern is consistent with a risk-based compliance architecture in which broad screening identifies risk and more intensive verification is concentrated on higher-risk cases (OECD, 2024). However, item means alone cannot show whether either construct is independently associated with revenue generation. That question requires the correlation and regression results.

Correlation and multivariate results

Table 3. Correlations with revenue generation and multivariate coefficients

Audit mode	r with revenue	p (r)	B	SE	Std. beta	t	p (OLS)
Desk audit	-0.05	0.335	-0.046	0.035	-0.065	-1.313	0.19
Field audit	0.227	<.001	0.08	0.036	0.112	2.188	0.029
Back-duty audit (control)	0.373	<.001	0.313	0.046	0.346	6.839	<.001

Source: Authors' Analysis

Desk audit has a correlation of -0.050 with revenue generation ($p = .335$), indicating essentially no linear bivariate relationship in this dataset. Conditional on field and back-duty audits, its unstandardised coefficient is -0.046, with a standardised beta of -0.065 and $p = .190$. The coefficient is therefore statistically indistinguishable from zero at conventional levels. This result should not be read as proof that desk review reduces revenue. Rather, it indicates that variation in the desk-audit construct, as measured in this survey, does not independently explain reported revenue-generation variation once the other audit modes are considered.

Field audit shows a different pattern. Its bivariate correlation with revenue generation is 0.227 ($p < .001$). In the multivariate model, $B = 0.080$, beta = 0.112 and $p = .029$. The effect size is modest but statistically distinguishable from zero. Thus, officials' reported field-audit conditions are positively associated with reported revenue-generation outcomes even when back-duty and desk-audit measures are controlled. The result answers RQ2 by showing that field audit has the more robust of the two focal associations.

The model as a whole is statistically significant, $F(3, 370) = 23.125$, $p < .001$, and explains approximately 15.8% of variation in the dependent construct. The corrected R^2 is important substantively: the audit modes matter, but most variation in reported revenue generation remains outside the model. The unexplained variation may reflect factors not included in the model, including administrative capacity, taxpayer characteristics, case selection, information quality, institutional conditions and broader economic influences (Slemrod, 2019; Mackenzie et al., 2023). A defensible interpretation therefore rejects the thesis table's erroneous 89% explanatory claim and treats the model as informative but partial.

DISCUSSION

Resolving the desk-audit paradox

At first sight, the findings appear contradictory. Respondents rate several desk-audit tasks favourably, particularly filing comparison and office record assessment, yet the desk-audit construct is not positively associated with revenue generation. The contradiction disappears once task usefulness is separated from revenue realisation. A desk review may identify reporting anomalies without necessarily generating a collectible assessment where the information available is insufficient for verification or enforcement follow-up (OECD, 2024; Kotsogiannis et al., 2025). Where detected discrepancies are immaterial, information is incomplete or uncorroborated, or follow-up enforcement is weak, documentary screening may identify risk without producing a corresponding revenue outcome (OECD, 2024).

This interpretation aligns with evidence that information reporting is powerful but imperfect. Clifford and Mavrokonstantis (2021) show that documentation requirements constrain reporting, but Bjørneby et al. (2021) demonstrate that on-site audits can still uncover behaviour that third-party systems do not eliminate. Konda et al. (2022) further show that taxpayers can adapt strategically to disclosure rules. Greater information availability does not automatically translate into additional revenue unless the information improves risk detection, audit targeting and enforceable compliance interventions (Konda et al., 2022; Kotsogiannis et al., 2025). Authorities need mechanisms for validating anomalous data and distinguishing innocent discrepancies from deliberate under-reporting.

The Nigerian item pattern offers an internal clue: 'availability of technical tools' is the weakest desk-audit item. That result is consistent with an information-processing bottleneck. Manual document review is comparatively limited in identifying complex relationships across multiple administrative and third-party datasets, whereas integrated analytics can strengthen cross-matching and anomaly detection (OECD, 2024; Anjarwi, 2026). Kotsogiannis et al. (2025) show that digitalisation improves audit efficiency when it strengthens the information available for enforcement. Wu et al. (2026) and Anjarwi (2026) similarly show why modern enforcement increasingly depends on integrated data and analytics rather than isolated document review.

The finding also complements Nigerian evidence on electronic tax systems. Salawu et al. (2025) report positive compliance effects associated with e-filing attributes among Lagos SMEs. The relevant policy implication is not simply to digitise forms. Digital filing should feed an audit-risk engine capable of cross-validation, anomaly detection, materiality scoring and automated case routing. Electronic filing alone is unlikely to realise the full compliance benefits of digitalisation unless filed information is integrated into risk assessment, data matching and enforcement processes (OECD, 2024; Kotsogiannis et al., 2025).

Why field verification retains value

Field audit's positive coefficient is consistent with the idea that direct verification adds information beyond desk review. Field verification can enable tax authorities to compare reported transactions with source documentation and observable business activity that may not be fully verifiable through filed information alone (Bjørneby et al., 2021). The survey's strongest field item - validating desk-audit reports - suggests that respondents recognise this verification role. In an integrated architecture, field audit is not the opposite of desk audit; it is a selective extension of desk audit when unresolved risk justifies deeper inspection.

This interpretation is consistent with recent enforcement evidence. Kotsogiannis et al. (2024) find that comprehensive audits create more durable compliance effects than narrow-scope audits. Advani et al. (2023) show that audits can alter future reporting for several years, while Løyland et al. (2024) quantify behavioural gains after audit. Although the present cross-sectional survey cannot identify such dynamic effects, the positive field coefficient is directionally consistent with the proposition that more intensive verification may have value beyond the immediate inspection.

The field result should not be exaggerated. Its standardised beta is .112, indicating a modest independent association within the model rather than a large revenue effect, and several field items are rated relatively low. Field-audit effectiveness may be constrained by resource demands, information limitations, audit-process quality, staff capability and institutional conditions (Mersha et al., 2022; Mackenzie et al., 2023). Mersha et al. (2022) show that audit quality depends on both process and inputs; Mackenzie et al. (2023) similarly emphasise administrative efficiency. A policy that expands field visits without risk targeting could consume scarce resources without proportionate recovery.

An integrated escalation architecture for Southwest Nigeria

Drawing on the study findings and contemporary risk-based compliance literature, a four-stage audit architecture is proposed. Stage 1 involves desk screening and information matching; Stage 2 classifies cases according to documented risk indicators; Stage 3 applies proportionate escalation from remote resolution to targeted field verification; and Stage 4 feeds completed-case outcomes back into future risk-selection rules (OECD, 2024; Balán et al., 2022; Kotsogiannis et al., 2025).

This architecture reconciles cost and enforcement intensity. Basri et al. (2021) demonstrate the value of stronger administration, but authorities still face budget constraints. Balán et al. (2022) show the value of local information for targeting; Løyland et al. (2024) show that risk thresholds can be used to think explicitly about the marginal gains from enforcement. A risk-based approach should prioritise the expected compliance and revenue value of enforcement resources rather than the absolute number of desk or field audits completed, while maintaining appropriate procedural safeguards (OECD, 2024; Løyland et al., 2024).

Trust and service quality also matter. Ayoola et al. (2023) show that trust in tax authorities is relevant to personal income-tax compliance in Nigeria, while Mascagni and Nell (2022) demonstrate that taxpayer communication can affect compliance and that deterrence messages may not always work uniformly. Occhiali and Kalyango (2023) show that tax agents can improve the quality of filings in a low-income setting. A transparent escalation model should provide taxpayers with clear information about documentation requirements, resolution procedures and available channels of engagement, thereby supporting facilitation alongside credible enforcement (Mascagni & Nell, 2022; OECD/AUC/ATAF, 2024).

The broader African evidence also cautions against viewing enforcement in isolation from institutions. Adegboye and Adekanla (2023) link tax-compliance attitudes to governance and tax-system effectiveness, while Kurauone et al. (2021) emphasise auditing and legal enforcement within the financial reporting environment. Nigeria's current tax-administration reforms provide an opportunity to align legal uniformity with operational integration. The 2025 Act's objectives of facilitating compliance and optimising revenue are more likely to be achieved if audit modes are linked by common data, case-management standards and escalation rules rather than managed as separate silos.

POLICY AND MANAGERIAL IMPLICATIONS

For revenue authorities, five priorities follow from the evidence. First, desk-audit productivity should be measured by risk detection, resolution quality and downstream recovery rather than by file counts. Second, investment in technical tools should focus on data matching, case prioritisation and audit trails; this directly addresses the weakest desk-audit item in the dataset. Third, field-audit resources should be reserved for cases with unresolved material risk and should explicitly document the desk signals that triggered escalation. Fourth, audit outcomes should be captured in a feedback database so risk rules improve over time. Fifth, performance dashboards should distinguish direct assessment, cash collection, subsequent voluntary reporting and taxpayer service outcomes. These changes would make the audit system more consistent with the evidence that enforcement generates both immediate and behavioural effects (Advani et al., 2023; Løyland et al., 2024).

For professional practice, the results also imply a change in auditor skill mix. Traditional knowledge of tax law and accounting remains necessary, but it is insufficient for modern desk screening. As tax administration becomes more data-intensive, auditor capability increasingly needs to include data literacy, evaluation of digital evidence, analytical risk assessment and documentation of case-selection decisions alongside traditional tax and accounting expertise (Anjarwi, 2026; OECD, 2024). Mersha et al. (2022) emphasise the importance of audit inputs and processes, while Anjarwi (2026) identifies digital competence and data governance as key conditions for technology-enabled auditing. Training should integrate tax technical competence with data analysis, digital evidence, and investigation capabilities because effective technology-enabled auditing depends on both institutional systems and human capability (Mersha et al., 2022; Anjarwi, 2026).

Operationalising the Desk-Field Escalation Model

The desk-field pattern also illustrates why substantive interpretation should separate the level of measurement from the mechanism being inferred. The item statistics describe specific operational beliefs, whereas the regression coefficients summarise variation in broader constructs. A respondent may strongly agree that comparing filed returns is useful and still work in an authority where desk review rarely produces additional collectible liability because the comparison is not linked to third-party data, materiality thresholds or enforcement follow-up. Conversely, a field-audit construct may have a positive coefficient even though some field tasks are rated weakly because the subset of field activity that validates high-risk desk findings is

disproportionately important for revenue. The apparent paradox is therefore a reminder that average construct scores are not substitutes for process tracing.

A useful implementation test is to follow each material discrepancy through an audit funnel. The authority should be able to report how many returns were screened, how many generated risk flags, how many flags were resolved automatically, how many taxpayers supplied satisfactory explanations, how many cases escalated to field verification, how many field cases produced adjustments, how much of those adjustments survived objection or appeal, and how much was actually collected. Without end-to-end case metrics linking screening, escalation, assessment and collection, audit activity measures may provide an incomplete indication of enforcement performance (OECD, 2024). High audit volumes do not necessarily imply high fiscal yield where risk selection is weak or where assessed liabilities are not ultimately collected; performance measurement should therefore distinguish audit activity, assessment and realised collection (OECD, 2024).

Tracking cases through the audit funnel provides a basis for evaluating the relative administrative cost and realised compliance yield of different enforcement interventions (OECD, 2024; Løyland et al., 2024). Desk review has low marginal cost and should therefore carry a high volume of low- and medium-risk cases. However, its performance measure should be expected value rather than the number of reviews completed. A simple internal metric is expected collectible yield: the probability that a flagged discrepancy survives verification and dispute multiplied by the amount likely to be collected, net of staff and taxpayer-compliance costs. As a managerial decision rule, field verification may be prioritised where the expected incremental compliance or revenue gain justifies the additional enforcement resources required (OECD, 2024; Løyland et al., 2024). Such a rule makes the field decision transparent and reduces incentives for unnecessary visits.

Digital transformation can strengthen every stage of this funnel. At intake, structured electronic returns can reduce manual data-entry requirements and improve the availability of standardised information for automated processing and compliance analysis (OECD, 2024). At screening, integrated administrative data can support cross-checking across tax filings and third-party records to identify inconsistencies requiring further review (OECD, 2024). At prioritisation, historical compliance and industry benchmarks can help distinguish high-value anomalies from benign variance. At field stage, mobile access to the case history can focus the auditor on unresolved risks rather than repeating the desk review. At closure, the final adjustment and collection result can be returned to the risk engine. This feedback loop is the practical mechanism behind the broader international finding that digital information becomes more valuable when paired with enforcement (Kotsogiannis et al., 2025).

A further implication concerns organisational incentives. Where desk and field functions are evaluated primarily through separate activity indicators, organisational incentives may become misaligned with end-to-end compliance and collection outcomes; shared case-level performance measures can help mitigate this risk. Desk teams may close difficult files to protect turnaround targets, while field teams may prefer cases that are easy to complete rather than those with the highest expected revenue. Shared case-level metrics can reduce this fragmentation. The desk officer should receive credit when a well-documented risk signal produces a successful field adjustment; the field team should be evaluated on evidence quality, collection outcome and timeliness rather than gross assessment alone. This turns audit mode from an organisational boundary into a common workflow.

Integrity safeguards are particularly important in enforcement activities involving direct officer-taxpayer interaction because such interactions can create greater scope for discretionary case handling. The source thesis recommended auditor rotation and greater use of technology to limit conflicts between taxpayers and officers. That recommendation is consistent with the present escalation model. Digital case assignment, auditable case logs, supervisory review, staff rotation and electronic payment channels may strengthen traceability and reduce opportunities for undocumented discretionary settlement. At the same time, taxpayers should have secure channels to upload documents and respond to queries so field visits are reserved for evidence that cannot be satisfactorily resolved remotely.

The proposed architecture also clarifies how current reform should be evaluated. Under Nigeria's current tax-administration framework, audit-system performance should be evaluated through operational and revenue

outcomes rather than by whether any single audit modality expands in isolation (Federal Republic of Nigeria, 2025; OECD, 2024). It should be judged by whether the conversion from risk signal to final collection improves, whether unnecessary field visits fall, whether material cases are resolved faster, and whether subsequent voluntary reporting improves. Those outcomes can be tracked longitudinally and compared across states or taxpayer segments. They also create data suitable for stronger causal research than the cross-sectional perceptions available here.

Finally, the desk-field distinction has a taxpayer-service dimension. Efficient desk resolution can reduce compliance costs because taxpayers do not need to host officers or interrupt business operations for issues that can be resolved electronically. Targeted field verification, on the other hand, protects horizontal equity by demonstrating that taxpayers who conceal material liabilities are not insulated by incomplete paperwork. An integrated system therefore combines facilitation for low-risk taxpayers with credible enforcement for high-risk cases. This balance is consistent with evidence that trust, communication and enforcement all matter for compliance (Ayoola et al., 2023; Mascagni & Nell, 2022).

Table 4. Suggested performance metrics for an integrated desk-field audit pipeline

Stage	Illustrative metric	Management purpose
Screening	Returns screened; automated matches completed	Coverage with low processing cost
Risk detection	Material flags per 1,000 returns; false-positive rate	Quality of desk analytics
Resolution	Share resolved without field visit; median days	Efficient taxpayer interaction
Escalation	Share of material unresolved cases sent to field	Proportionate enforcement
Field verification	Adjustment rate; evidence-confirmation rate	Incremental value of field work
Collection	Cash collected / final assessment; time to collection	Fiscal realisation, not paper assessment
Feedback	Risk rules updated from closed cases; repeat-compliance change	Learning and dynamic deterrence

Source: Authors' implementation synthesis derived from the study findings and recent audit literature.

A state-level implementation strategy should also recognise heterogeneity within Southwest Nigeria. The six Southwest states differ in the scale and composition of their tax bases, implying that a common audit architecture may still require locally calibrated risk thresholds and enforcement priorities. A common audit architecture need not impose identical operational risk thresholds where taxpayer composition, administrative capacity and compliance risks differ across jurisdictions (OECD, 2024). The common elements should be data standards, documented escalation logic and outcome metrics; thresholds can then be calibrated to local tax-base characteristics and staff capacity. This is one reason the absence of state identifiers in the supplied dataset is important: future research should estimate whether the desk-field conversion rate differs materially by state, taxpayer segment and tax type.

For policy interpretation, the principal contribution is therefore the mechanism rather than the coefficient magnitude. The small positive field coefficient should not be used to justify indiscriminate field expansion, and the non-significant desk coefficient should not be used to dismantle office-based review. The evidence instead identifies where the chain appears weak: technical support for desk audit and the conversion of documentary signals into verified liability. Strengthening that chain offers a more defensible route to revenue mobilisation than maximising any single audit category.

LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

The study has five principal limitations. First, it relies on self-reported responses from tax officials rather than objective administrative records of assessments, collections or compliance outcomes, creating potential

response bias; the dependent variable therefore captures perceived revenue-generation effectiveness, not independently verified fiscal outcomes. Second, the cross-sectional design cannot establish causal effects or dynamic post-audit behaviour. Third, the supplied thesis does not provide construct-specific reliability coefficients or the raw respondent-level dataset needed for confirmatory factor analysis, measurement-invariance testing or alternative estimators. Fourth, the cluster-sampling description does not provide a state-by-state response allocation, preventing multilevel analysis. Fifth, the study is confined to Southwest Nigeria, limiting generalisability to other geopolitical zones and tax systems.

Future research should link survey responses to objective administrative records of assessments, collections, payments and subsequent filing compliance. A longitudinal or panel design could follow desk-generated risk signals through field escalation, assessment, appeal, collection and later compliance, allowing direct estimation of conversion rates, dynamic outcomes and cost-effectiveness. Causal inference could be strengthened further through randomised or quasi-experimental variation in audit selection or enforcement thresholds, consistent with recent administrative-data and experimental approaches to tax enforcement (Advani et al., 2023; Løyland et al., 2024; Kotsogiannis et al., 2024).

A second research direction concerns geographical extension and digitalisation. A harmonised multi-zone or national study should include other Nigerian geopolitical zones and test whether desk-field relationships vary across regional tax bases and administrative settings. Within such a design, Nigeria's new tax administration framework creates an opportunity to evaluate whether integrated data systems change the marginal value of desk versus field audit. Improved third-party information could make desk review more productive by resolving more discrepancies remotely, while richer data may also improve field-audit targeting. Panel or multilevel analysis would provide a stronger test of the integrated architecture proposed in this article.

CONCLUSION

This article reframes the desk-versus-field audit question as a sequencing problem. The Southwest Nigeria survey shows that officials value core desk-review activities, especially return comparison and office assessment of tax records. However, the desk-audit construct has no statistically significant association with reported revenue generation after controlling for other audit modes. Field audit, by contrast, has a positive but modest independent association, and its strongest operational item is the validation of desk-audit reports. The coherent interpretation is not that desk audit is ineffective and field audit should replace it, but that desk audit creates its greatest potential fiscal value when technologically enabled, risk-focused and connected to credible escalation. Because the evidence is cross-sectional, perception-based and limited to Southwest Nigeria, the findings are regional associations rather than causal estimates of realised collections. Within those limits, the findings support an integrated audit pipeline combining digital screening, documented risk classification, proportionate field verification and feedback from completed cases into future case selection, consistent with contemporary risk-based tax-administration practice and Nigeria's current objective of efficient, uniform tax administration.

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