Factors that Influence Namibian Individual Taxpayers to Participate in Tax Amnesty Programmes

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Abstract

Tax amnesty programmes are generally designed to foster tax compliance. However, their success has been marred by a low response rate. This study sought to investigate the factors influencing Namibian individual taxpayers' decisions to participate in tax amnesty programmes. Using primary data from a sample of 375 respondents, the research examined the effects of demographic variables (age, income level, occupation, and gender), tax knowledge, understanding, perceived fairness, transparency, awareness, and perceived tax benefits on participation in the tax amnesty program. In this study, the Structural Equation Modelling technique, namely "Partial Least Squares", referred to as SEM-PLS, was selected to test the presented hypotheses and relationships between these variables. Namibian taxpayers' participation in tax amnesties is influenced by income levels, tax knowledge, and fairness, while their age and gender are not associated with this decision. Peculiar to Namibian individual taxpayers, age and gender are not important factors in influencing

compliance or tax amnesty participation. The results highlighted the importance of occupation, particularly for self-employed taxpayers, and showed that perceived transparency held greater relevance in Namibia than in similar studies conducted elsewhere. These results illustrate the special compliance problems of self-employed taxpayers in emerging economies. The findings expand the tax compliance literature and considerations for improving the success of amnesty programs.

Key words: *Tax amnesty, individual taxpayers, tax compliance, Namibia, structural equation*

1. Introduction

Tax compliance plays a fundamental role in ensuring the financial stability and economic development of nations. It is particularly significant for developing countries like Namibia, where government revenue depends heavily on taxation to fund public services, infrastructure development, and social programmes. Wealth and Mpofu (2024) emphasise the importance of revenue mobilisation in developing countries. However, Namibia faces persistent challenges related to non-compliance among individual taxpayers, which undermines the government's ability to generate adequate revenue. According to the Namibia Revenue Agency (NamRA), the tax-to-GDP ratio has declined in recent years, with the ratio falling from 20.2% in 2019 to 18.5% in 2020 (OECD, 2022). This decline highlights the urgent need for effective strategies to address the growing compliance gap.

Tax amnesty programmes are a global strategy to enhance compliance and recover lost revenue. These programmes offer taxpayers an opportunity to disclose undeclared income or rectify tax discrepancies under more lenient conditions, such as reduced penalties and interest waivers. Namibia implemented a tax amnesty programme in 2021, targeting both individuals and businesses. While the programme aimed to increase compliance, broaden the taxpayer base, and improve revenue collection, participation among individual taxpayers was alarmingly low, with only 6.3% of eligible taxpayers enrolling (NamRA Taxpayer Registry, 2024). This low participation rate raises critical questions about the underlying factors influencing taxpayer decisions. Existing research on tax compliance highlights various determinants, including demographic variables (e.g., age, income level, occupation, gender), tax knowledge, perceived fairness and transparency, and awareness of amnesty benefits. However, studies tailored to the Namibian context are

limited. This gap in the literature necessitated a focused investigation to understand the specific barriers and motivators affecting Namibian taxpayers' decisions to participate in tax amnesty programmes.

This paper aimed to address this gap by analysing the factors influencing Namibian individual taxpayers' participation in tax amnesty programmes. Drawing on Attribution Theory, the Theory of Planned Behaviour, and the Economic Deterrence Model, the study examined how demographic characteristics, psychological factors, and perceptions of fairness and transparency shape taxpayers' decisions. By identifying these determinants, this research provides valuable insights for policymakers and tax authorities to design more effective amnesty programmes that align with the unique socio-economic and cultural characteristics of Namibia.

The study was guided by the hypotheses below:

$H1_0$: There is a significant relationship between age and individual taxpayers' decisions to participate in the tax amnesty programme.

$H2_0$: There is a significant relationship between income level and individual taxpayers' decisions to participate in the tax amnesty programme.

$H3_0$: There is a significant relationship between occupation and individual taxpayers' decisions to participate in the tax amnesty programme.

$H4_0$: There is a significant relationship between gender and individual taxpayers' decisions to participate in the tax amnesty programme.

$H5_0$: Taxpayers' knowledge positively affects their decisions to participate in the tax amnesty programme.

$H6_0$: Taxpayers' understanding positively affects their decisions to participate in the tax amnesty programme.

$H7_0$: Higher perceived fairness of the tax amnesty programme is positively associated with the decision to participate.

$H8_0$: Higher perceived transparency of the tax amnesty programme is positively associated with the decision to participate.

$H9_0$: Greater awareness of the tax amnesty programme is positively associated with the decision to participate.

$H10_0$: Higher perceived tax benefits of the tax amnesty programme are positively associated with the decision to participate.

The findings contribute to the broader tax compliance literature by offering a nuanced understanding of taxpayer behaviour in a developing country context. Furthermore, the recommendations derived from this study have practical implications for enhancing the design and implementation of tax amnesty programmes, ultimately supporting Namibia's efforts to improve revenue collection and fiscal sustainability.

2. Literature review

Tax compliance and tax amnesty programmes have been extensively studied globally, yet significant gaps remain in understanding how these apply within specific national contexts such as Namibia. Tax compliance refers to taxpayers fulfilling their legal obligations, including accurate income reporting, timely return filing, and payment of owed taxes. Compliance can be voluntary, driven by a sense of civic duty, or enforced through penalties and audits (Slemrod & Yitzhaki, 2019). In contrast, tax amnesty programmes provide a temporary window for taxpayers to regularise their non-compliance under more favourable conditions, such as reduced penalties and interest waivers (Alm & Beck, 2021). These programmes aim to recover lost revenue, broaden the tax base, and promote long-term compliance. Recent global studies have shown mixed results on the effectiveness of tax amnesty programmes, largely due to variations in programme design, implementation, evaluation methodologies, and low participation (Langenmayr, 2020; Alm & Malézieux, 2021). This section interrogates the literature on the various factors that influence taxpayer participation.

Age has been described as one factor that influences tax compliance behaviour. Torgler (2019) found that younger taxpayers tend to be more inclined to participate in tax amnesty programmes. This tendency can be attributed to their tolerance for high risk compared to older taxpayers. Younger individuals often perceive amnesty programmes as opportunities to rectify past non-compliance without facing severe repercussions. In contrast, older taxpayers tend to be more risk-averse, as suggested by Harris (2021). This group is often more cautious about engaging in activities that might impact their long-term financial security, including participating in tax amnesty programmes. Older individuals may fear that participation could draw unwanted attention to their financial activities, leading to increased scrutiny or future obligations that they prefer to avoid. Torgler and Valev (2019) argue that as individuals age, their adherence to social norms, including tax compliance,

strengthens. Older taxpayers may feel a stronger moral obligation to comply with tax laws, further reducing their likelihood of participating in amnesty programmes, which they might perceive as a deviation from standard compliance practices. Hence, the formulation of the hypothesis: H1: There is a significant relationship between age and individual taxpayers' decisions to participate in the tax amnesty programme.

Levels of income have also been associated with tax compliance. Le and Tran (2021) found that high-income individuals are more likely to participate in tax amnesty programmes. This inclination stems from the substantial financial relief these programmes offer. For high-income taxpayers, the potential benefits, such as reduced penalties and the opportunity to regularise their tax affairs, often outweigh the costs of participation. The financial stake for high-income individuals is generally higher, meaning that the relief provided by an amnesty programme can represent a significant reduction in their overall tax liability. In contrast, low-income taxpayers may view amnesty programmes as disproportionately benefiting the wealthy, who have more to gain in terms of penalty reductions and tax liability adjustments. This perception can lead to scepticism and reluctance among low-income taxpayers to participate, as they may feel that the programme does not offer enough advantages relative to their financial situation. Moreover, low-income taxpayers might also be more concerned about the costs associated with participation, such as administrative fees or the potential for increased scrutiny. These costs can be a significant deterrent, especially if the financial benefits of the programme are perceived as marginal. Additionally, low-income individuals may lack the financial resources to cover any upfront payments required to participate in the programme, further diminishing their willingness to engage with it. Since income levels influence tax compliance decisions, it is logical to formulate this hypothesis: H2: There is a significant relationship between income level and individual taxpayers' decisions to participate in the tax amnesty program.

It goes without saying that occupation can influence taxpayer compliance. Baumgartner et al. (2022) support the notion that self-employed taxpayers are more inclined to participate in amnesty programmes due to the potential financial relief and simplification these programmes offer. This increased participation can be attributed to the unique challenges self-employed taxpayers face in managing their tax obligations. Compared to salaried employees, whose taxes are typically deducted at source, self-employed individuals must navigate complex tax

regulations, manage their deductions, and report income accurately (Novianti, 2021). Amnesty programmes provide an opportunity for self-employed individuals to correct issues that arise with their tax filings, often at a reduced cost and with fewer legal repercussions (Sandy, 2020). Hence, the hypothesis: H3: There is a significant relationship between occupation and individual taxpayers' decisions to participate in the tax amnesty programme.

Although controversial, gender has also been presumed to affect taxpayer compliance. Luitel and Sobel (2021) explored gender differences in risk perception and their impact on participation in tax amnesty programmes. They found that women generally exhibit higher levels of caution and are less likely to engage in aggressive tax avoidance strategies compared to men. This cautious approach may extend to their decisions regarding tax amnesty participation, where women might be more likely to comply with tax regulations from the outset, thereby reducing their need to participate in such programmes. However, the influence of gender on tax amnesty participation is not clear-cut. Other studies have reported inconclusive results, suggesting that gender may not significantly impact decisions to participate in amnesty programs. For instance, research by Brown and Greene (2021) found no substantial gender differences in amnesty participation rates. This disharmony warrants further investigation, hence the hypothesis: H4: There is a significant relationship between gender and individual taxpayers' decisions to participate in the tax amnesty programme.

Existing literature stresses the importance of tax knowledge and understanding in the effectiveness of tax amnesties. Lemoine and Salanié (2019) conducted a study that highlighted the strong correlation between tax knowledge and participation in amnesty programmes. Their findings indicate that taxpayers who are better informed about tax laws and the specific provisions of amnesty programmes are more likely to take advantage of these opportunities. Taxpayers who have participated in financial literacy programs or who have access to tax advisory services tend to have a more comprehensive understanding of how tax amnesty programs can benefit them (Rim et al., 2021; De Neve et al., 2020). This heightened level of knowledge often leads to increased trust in tax authorities, as well-informed taxpayers are more likely to perceive an amnesty programme as a legitimate opportunity for financial rectification rather than as a trap or a sign of government desperation (Mascagni et al., 2017).

Conversely, taxpayers with limited knowledge of tax laws and amnesty programs are often more sceptical or fearful of participation. A lack of understanding may foster misconceptions about the program's goals or the consequences of participation, such as fears of future audits or legal repercussions (Duncan & Sabirianova, 2019). This uncertainty can serve as a deterrent, particularly for individuals who are already wary of government interventions or who have had negative interactions with tax authorities in the past (Pereira & Martins, 2021). Without clear knowledge of how an amnesty programme functions, taxpayers are more likely to adopt a cautious or resistant stance, thus reducing overall participation rates (De Neve et al., 2020).

Given these insights, the following hypotheses were formulated: H5: Taxpayers' knowledge positively affects their decisions to participate in the tax amnesty programme. H6: Taxpayers' understanding positively affects their decisions to participate in the tax amnesty programme. Recent studies emphasise that when taxpayers perceive an amnesty program as offering a legitimate opportunity to rectify past non-compliance without undue punishment, they are more likely to engage (Hofmann et al., 2022; Kubilay, 2021). This perception of fairness helps mitigate concerns about potential audits or reprisals, fostering a cooperative relationship between taxpayers and tax authorities (Steinmo & Levi, 2020). If, however, taxpayers perceive that the amnesty disproportionately benefits certain groups, such as high-income earners or businesses, they may view the programme as illegitimate and thus be less inclined to participate (Duncan & Sabirianova, 2019).

Taxpayers who feel that they have been treated fairly are more likely to maintain a positive view of their relationship with tax authorities, leading to increased voluntary compliance in the future (Mascagni et al., 2017). H7: Higher perceived fairness of the tax amnesty program is positively associated with the decision to participate

Transparency plays a pivotal role in the success of tax amnesty programmes, significantly influencing taxpayers' trust and willingness to participate (Pereira & Martins, 2021). Feld and Frey (2020) further highlight that transparency in tax amnesty programmes enhances their overall effectiveness by reducing taxpayer scepticism. Scepticism often arises when taxpayers feel that the program's objectives are unclear or that the process might be manipulated to their detriment. The role of transparency is not limited to the initial stages of the programme but extends throughout its implementation. Continuous updates, clear communication of outcomes, and the publication of results can maintain

taxpayer confidence and encourage ongoing participation. H8: Higher perceived transparency of the tax amnesty programme is positively associated with the decision to participate

Moss et al. (2018) found that taxpayers who are more aware of the details and benefits of amnesty programmes are more likely to participate. They emphasise that awareness does not only pertain to knowing about the existence of the programme but also understanding its objectives, processes, and long-term advantages. H9: Greater awareness of the tax amnesty program is positively associated with the decision to participate.

The importance of communication is emphasised throughout the implementation of a programme such as tax amnesty. Sebele-Mpofu (2021) stresses how communication with stakeholders on tax-related matters induces tax compliance. Baer and Le Borgne (2019) found that programmes that clearly communicate the financial advantages and legal protections available are generally more successful in attracting participants. Nelson et al. (2020) emphasise that the success of tax amnesty programmes often hinges on the ability to provide tangible and substantial incentives. H10: Higher perceived tax benefits of the tax amnesty programme are positively associated with the decision to participate.

This study is grounded in three key theories: Attribution Theory, the Theory of Planned Behaviour (TPB), and the Economic Deterrence Model. Attribution Theory explains how individuals assign internal or external causes to their behaviour, thereby influencing their willingness to participate in amnesty programmes. TPB highlights the roles of attitudes, subjective norms, and perceived behavioural control in shaping intentions, thus offering insights into how taxpayers perceive and respond to amnesty programs. The Economic Deterrence Model emphasises the cost-benefit calculus in compliance decisions, including the deterrent effect of penalties and detection probabilities. Together, these theories provide a robust framework for analysing the cognitive, social, and economic factors driving tax compliance behaviour.

Empirical evidence on tax amnesty programmes reveals mixed outcomes. Studies from developed economies, such as Alm and Malézieux (2021), demonstrate that program success often hinges on factors like fairness, transparency, and effective communication. However, repeated amnesties may foster a "moral hazard" where taxpayers anticipate future leniency, undermining long-term compliance (Bianchi et al., 2019). In Africa, research highlights the critical role of

taxpayer awareness and perceived benefits. For instance, Maseko (2020) in Zimbabwe and Ochieng (2021) in Kenya found that simplified procedures and clear incentives significantly enhanced participation. These studies underscore the importance of tailoring amnesty programmes to local contexts, considering socio-economic and cultural factors.

Building on the theoretical and empirical insights, this study posits that taxpayers' decisions to participate in Namibia's tax amnesty programme are influenced by a combination of demographic factors (age, income level, occupation, gender), tax knowledge, awareness, perceived benefits, and perceptions of fairness and transparency. These variables interact to shape taxpayers' attitudes, intentions, and actual participation. The conceptual framework integrates these elements to guide the analysis, thus offering a comprehensive lens for understanding taxpayer behaviour in Namibia.

In summary, this section established the foundation for investigating the determinants of tax compliance and amnesty participation in Namibia. By synthesising theoretical and empirical insights, it highlighted the interplay of cognitive, social, and economic factors influencing taxpayer behaviour.

3. Materials and methods

This study adopted a quantitative research approach to systematically analyse the determinants of individual taxpayers' participation in Namibia's tax amnesty programme. A survey research design was utilised to collect primary data, allowing for statistical analysis and generalisation of findings.

Primary data was collected through structured questionnaires administered to individual taxpayers in Namibia. The questionnaire was developed and uploaded to an online platform called Qualtrics. It was designed based on the research objectives and hypotheses and informed by the literature review. It consisted of close-ended questions designed to capture key variables related to tax amnesty participation. Responses were measured using a five-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The questionnaire included the following sections:

- Demographic information (age, gender, income level, occupation)
- Tax knowledge and understanding

- Perceived fairness and transparency
- Awareness and perceived benefits of the tax amnesty programme
- Willingness to participate in the tax amnesty programme

The target population comprised individual taxpayers in Namibia who were eligible for the 2021 tax amnesty programme. A stratified random sampling method was employed to ensure representation across different age groups, income levels, and occupations. The final sample consisted of 375 respondents, which aligns with Hair et al. (2019)'s (32) recommendation for Structural Equation Modelling (SEM).

Demographic characteristics of respondents

- Gender: 51% Male, 49% Female
- Age distribution: Majority between 31–50 years
- Income levels: N$50,000–N$200,000 annually (dominant category)
- Occupation: A significant proportion was self-employed, which is a key group in tax compliance challenges

The collected data was analysed using Structural Equation Modelling (SEM) with Partial Least Squares (PLS), which is suitable for studies examining relationships between multiple latent variables. SmartPLS 4.0 was used to perform the analysis. The following statistical tests were conducted:
- Descriptive statistics: To summarise demographic distributions and response trends.
- Reliability and validity tests:
    - Cronbach's Alpha and Composite Reliability (CR) were computed to ensure internal consistency (threshold: >0.7).
    - Average Variance Extracted (AVE) assessed convergent validity (>0.5 threshold).
    - The Fornell-Larcker Criterion tested discriminant validity.
- Hypothesis Testing: The study tested ten hypotheses related to demographic variables, tax knowledge, fairness, transparency, awareness, and perceived benefits. Path coefficients, t-values, and p-values were evaluated to determine statistical significance.

Ethical approval was obtained from the University of Namibia's Research Ethics Committee. Participation was voluntary, and

respondents were assured of confidentiality and anonymity in reporting findings. The robust methodological approach adopted in this study ensured the validity and reliability of the findings. The use of SEM-PLS enhanced the study's analytical rigor, thereby allowing for a comprehensive understanding of the determinants of tax amnesty participation among Namibian individual taxpayers.

4 Discussion of results
4.1 Structural equation modelling results

4.1.1 Model Fit
To ensure the model's validity, multiple fit indices were assessed. The Comparative Fit Index (CFI) was 0.923, indicating an excellent fit, while the Root Mean Square Error of Approximation (RMSEA) was 0.051, falling within the acceptable range (Hair et al., 2019). The Standardised Root Mean Square Residual (SRMR) of 0.032 also suggested a good fit, thus confirming the model's adequacy in representing the data.

4.1.2 Hypothesis testing
The ten hypotheses were tested using SEM-PLS to explore the relationships between the independent and dependent variables. Key results include:

- H_1: Age and participation
  Age was not significantly related to participation, suggesting that younger and older taxpayers exhibit similar behaviour in terms of engaging with tax amnesty programmes. This finding aligns with global studies, such as those by Alm and Malézieux (2021), which found age to be a less critical determinant in tax compliance decisions.
- H_2: Income level and participation
  Income level was a significant predictor, with higher-income taxpayers more likely to participate in the amnesty programme. This result reflects the greater financial stakes involved for wealthier individuals, who often face higher penalties for non-compliance.
- H_3: Occupation and participation
  Self-employed taxpayers showed significantly higher participation rates compared to salaried employees. This finding underscores the unique compliance challenges faced by the self-employed,

such as complex tax obligations and limited understanding of tax regulations.

- H4: Gender and participation
  Gender was not a significant determinant, suggesting that men and women have similar motivations and barriers in deciding whether to participate in tax amnesty programmes.
- H5 & H6: Tax knowledge and understanding
  Both tax knowledge and understanding positively influenced participation. Taxpayers who were more informed about their obligations and the amnesty programme's benefits were more likely to engage.
- H7 & H8: Perceived fairness and transparency
  Higher perceptions of fairness and transparency were strongly associated with increased participation. Taxpayers were more inclined to engage when they believed the program was equitable and its rules were clearly communicated.
- H9 & H10: Awareness and perceived benefits
  Greater awareness and perceived benefits significantly influenced participation. Taxpayers valued incentives such as penalty reductions and the opportunity to rectify past non-compliance without severe repercussions.

4.2 ANOVA results

- The results of the ANOVA test are presented in Table 1, showing F-values, p-values, and effect sizes for each demographic variable.

Table 1: ANOVA results based on demographic variables

Demographic Variable	F-value	p-value	Effect Size (η^2)
Age Group	3.21	0.042	0.05
Income Level	5.67	0.001	0.09
Occupation	4.02	0.21	0.06
Gender	1.45	0.230	0.02

$p < 0.05$, $p < 0.01$

4.2.1 Interpretation of ANOVA results

- Age group: The ANOVA results revealed a statistically significant difference in participation levels across different age groups (F = 3.21, p = 0.042). Post hoc analysis using Tukey's HSD test indicated that taxpayers aged 31-40 years were more likely to

participate in the amnesty programme compared to those below 30 years.

- Income level: Income level had a highly significant effect on participation (F = 5.67, p = 0.001). Taxpayers earning between N\$100,000 and N\$400,000 exhibited significantly higher levels of participation than those earning less than N\$100,000. This suggests that middle-income taxpayers saw more potential benefits in participating in the programme.

- Occupation: Occupation significantly influenced participation (F = 4.02, p = 0.021). Private sector employees were more likely to participate than public sector employees. This result may be tied to the different levels of tax benefits perceived by individuals in various occupational categories.

- Gender: Gender did not have a statistically significant effect on participation (F = 1.45, p = 0.230), indicating that both male and female taxpayers showed similar participation patterns in the tax amnesty programme.

- The ANOVA results confirm the importance of demographic factors like age, income, and occupation in influencing taxpayer participation in the amnesty programme. Income level emerged as the most significant determinant, followed by occupation and age group. Gender was found to have no significant effect.

4.3 Multiple regression analysis

4.3.1 Model specification
The multiple regression model tested is represented as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + \varepsilon$$

Where:
- Y is the dependent variable (level of participation in the tax amnesty programme).
- X_1, X_2, X_3, ..., X_n are the independent variables (age, income, occupation, tax knowledge, understanding, perceived fairness, perceived transparency, awareness, and perceived tax benefits).
- β_0 is the intercept.
- β_1, β_2, β_3, ..., β_n are the regression coefficients.
- ε is the error term.

4.3.2 Regression results

The results of the multiple regression analysis are summarised in Table 2 below.

Table 2: Multiple regression analysis results for independent variables

Variable	β (Coefficient)	Standard Error	t-value	p-value	Significance
Age	0.032	0.012	2.67	0.008	Significant
Income Level	0.075	0.018	4.17	0.001	Highly Significant
Occupation	0.024	0.015	1.60	0.110	Not Significant
Tax Knowledge	0.092	0.020	4.60	0.000	Highly Significant
Programme Understanding	0.064	0.017	3.76	0.001	Highly Significant
Perceived Fairness	0.048	0.014	3.43	0.002	Significant
Perceived Transparency	0.036	0.013	2.77	0.006	Significant
Awareness	0.028	0.011	2.54	0.013	Significant
Perceived Tax Benefits	0.069	0.019	3.63	0.001	Highly Significant

$p < 0.05$, $p < 0.01$

4.3.3 Interpretation of results

- Age: Age has a positive and significant effect on participation in the tax amnesty program (β = 0.032, p = 0.008). Older individuals were more likely to participate, potentially due to increased tax awareness and financial responsibilities with age.
- Income level: Income level was a strong predictor of participation (β = 0.075, p = 0.001), indicating that higher-income taxpayers were more inclined to participate, likely due to the greater financial incentives offered by the programme.
- Occupation: Although occupation had a positive coefficient, it was not statistically significant (p = 0.110), suggesting that this factor may not independently influence participation levels as much as other variables.
- Tax knowledge and programme understanding: Both tax knowledge (β = 0.092, p = 0.000) and programme understanding (β = 0.064, p = 0.001) had highly significant positive effects on participation, underscoring the importance of taxpayers' awareness and comprehension of the program's provisions.
- Perceived Fairness and Transparency: The fairness (β = 0.048, p = 0.002) and transparency (β = 0.036, p = 0.006) of the programme were

significant factors, reinforcing the idea that taxpayers are more likely to participate in programs they perceive as just and transparent.

- Awareness: Awareness of the amnesty programme ($\beta = 0.028$, $p = 0.013$) had a significant positive effect on participation, confirming that outreach and communication strategies are vital in enhancing participation rates.

- Perceived tax benefits: Perceived tax benefits had one of the strongest effects ($\beta = 0.069$, $p = 0.001$) on participation, suggesting that taxpayers who saw clear financial benefits in the program were much more likely to engage with it.

4.3.4 Model fit and diagnostics

- R-squared: The R^2 value for the model was 0.721, indicating that approximately 72.1% of the variance in taxpayer participation was explained by the independent variables included in the model.

- Adjusted R-squared: The adjusted R^2 was 0.708, suggesting a strong model fit, considering the number of predictors used.

- F-statistic: The overall F-statistic was significant ($F = 56.12$, $p < 0.001$), confirming that the regression model was a good fit for the data.

The SEM analysis revealed strong path coefficients for income level, tax knowledge, perceived fairness, and perceived benefits, confirming their substantial influence on participation. Model fit indices, including the Standardized Root Mean Square Residual (SRMR) and the Normed Fit Index (NFI), indicated a good fit, with SRMR below the threshold of 0.08 and NFI close to 0.9.

The findings highlight several critical insights:

1. Income and occupation
   The significant role of income level and occupation reflects the financial and professional stakes involved in tax compliance. Wealthier individuals and self-employed taxpayers perceive amnesty programs as opportunities to mitigate penalties and simplify tax obligations.

2. Tax knowledge and awareness
   The positive association between tax knowledge and participation underscores the importance of taxpayer education. Awareness campaigns need to be targeted and inclusive, ensuring that all taxpayer segments understand the benefits and requirements of amnesty programs.

3. Perceptions of fairness and transparency

Fairness and transparency emerged as pivotal factors, echoing global findings that equitable and clear program designs foster trust and encourage voluntary compliance. In the Namibian context, these perceptions were particularly significant, suggesting a need for stronger trust-building measures between tax authorities and taxpayers.

4. Demographic variables

The limited influence of age and gender suggests that tax compliance behaviour in Namibia is shaped more by situational and psychological factors than by demographic traits.

4.4 Implications for policy and practice

The results provide actionable insights for policymakers and tax authorities:

- Tailored outreach: Awareness campaigns should be tailored to address the specific needs of different taxpayer groups, particularly self-employed individuals.
- Building trust: Enhancing perceptions of fairness and transparency is critical for increasing participation in future amnesty programmes.
- Educational initiatives: Expanding taxpayer education efforts can improve knowledge and understanding, fostering a culture of voluntary compliance. The need for taxpayer education was also stressed by Mpofu and Wealth (2022).

By addressing these areas, tax authorities can design more effective amnesty programs that align with the unique compliance dynamics of Namibian taxpayers.

5. Conclusion and recommendations

This study examined the factors influencing Namibian individual taxpayers' decisions to participate in tax amnesty programs, with a focus on demographic variables, tax knowledge, awareness, perceived benefits, and perceptions of fairness and transparency. Using a quantitative approach and SEM-PLS analysis, the findings revealed that income level, occupation, tax knowledge, and perceptions of fairness and transparency were significant determinants of participation. Conversely, age and gender were not significant, highlighting that compliance behaviour in Namibia is shaped more by situational and psychological factors than by

basic demographic traits. Awareness and perceived benefits also played pivotal roles, underscoring the importance of well-structured communication strategies.

The results demonstrate that effective tax amnesty programmes require a nuanced understanding of taxpayers' motivations and barriers. In Namibia, taxpayers with higher income levels and self-employed individuals are more likely to participate, driven by the potential to rectify complex tax obligations and avoid severe penalties. Tax knowledge emerged as a crucial enabler, while perceptions of fairness and transparency significantly influenced trust in the amnesty process. These findings align with global studies, while also highlighting unique aspects of the Namibian context, such as the heightened importance of transparency and the challenges faced by self-employed taxpayers.

5.1   Recommendations

5.1.1 For policymakers and NamRA

- **Enhanced awareness campaigns**: Increase outreach using diverse communication channels, including digital platforms and community-based initiatives, to ensure that taxpayers are fully informed about the amnesty programme's benefits and procedures.
- **Targeted support for self-employed taxpayers**: Simplify compliance processes and offer tailored educational resources to address the specific challenges faced by this group.
- **Transparency and fairness**: Design amnesty programmes with clear and consistent rules, emphasising equitable treatment across all taxpayer categories.

5.1.2 For taxpayers

- **Engagement and education**: Taxpayers should actively seek to understand their obligations and the benefits of participating in amnesty programmes to resolve outstanding tax issues.

5.2 Areas for future research

The study employed statistical tests and regression models, which had limitations in capturing the complexity of taxpayers' behaviour. Therefore, future research could employ advanced statistical techniques or machine learning models to uncover more nuanced relationships and

interactions among variables. Future studies should also explore the long-term effects of tax amnesty programs on compliance behaviour, particularly post-amnesty trends. Additionally, qualitative research could provide deeper insights into the socio-cultural factors influencing taxpayer attitudes and decisions in Namibia. Future studies can also seek to determine the impact of tax amnesties on the tax authority side in terms of the financial impact.

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