



African Journal of Commercial Studies

Publisher's Home Page: <https://ijcsacademia.com/>



Research Paper

Open Access

A study of the effect of Mobile Money Services on Tax Compliance in Zambia. A case of MFEZ and CBD Lusaka

Exildah Namangulu Nsangu^{1*}, Lubinda Haabazoka¹

¹ Graduate School of Business, University of Zambia, Lusaka, Zambia

*Corresponding author

Article Info

Volume 4, Issue 2, March 2024

Accepted : 7 March 2024

Published : 9 March 2024

doi: [10.59413/ajocs/v4.i2.1](https://doi.org/10.59413/ajocs/v4.i2.1)

Ark: ark:/69431/AJoCS.v4i2.1

Abstract

The aim of this study was to assess the effect of mobile money services on tax compliance in Zambia, in the case of the Multi-Facility Economic Zone (MFEZ) and Central Business District (CBD) of Lusaka. The study objectives were first to establish the extent to which mobile money is used to pay tax to the Zambia Revenue Authority (ZRA) in Zambia. Secondly, it aimed to find out the challenges of using mobile money for tax compliance in Zambia and, lastly, explore potential measures and strategies that could be implemented to harness the potential of mobile money in augmenting tax compliance. Drawing upon both quantitative and qualitative research methodologies, this study employed surveys, interviews, and data analysis techniques to elucidate the intricate dynamics at play. Through rigorous data collection and analysis, the research aimed to provide insights into the utilization patterns, benefits, and challenges associated with mobile money in tax compliance. The findings of this study were expected to contribute significantly to the existing body of knowledge concerning mobile money adoption and its implications for tax compliance in developing economies. By shedding light on the specific nuances of the Zambian context, this research endeavored to offer actionable recommendations aimed at fostering an environment conducive to leveraging mobile money for enhanced tax compliance. From a broader perspective, this thesis aspires to not only deepen academic understanding but also offer practical implications for policymakers, tax authorities, financial institutions, and mobile money service providers in Zambia and beyond. The study established that, to a good extent, mobile money is used by taxpayers to pay presumption tax. It was also established in the study that mobile money can reduce the prevalence of cash transactions and can provide a digital trail of transactions, making it easier for governments to track and collect taxes. Using mobile money can also improve tax compliance.

Keywords: Tax compliance, Mobile money, Payment solutions, Zambia Revenue Authority

1. Introduction

The advent and proliferation of mobile money services have significantly changed the landscape of financial transactions worldwide. Because of the considerable interest among scholars in the benefits of mobile money services, this researcher thought it important to explore the relationship between mobile money services and tax compliance, a critical component of fiscal policy and revenue generation for governments.

In the Zambian context, where mobile money services have gained significant traction over recent years, understanding the dynamics between these services and tax compliance is of paramount importance. The MFEZ and CBD in Lusaka serve as pivotal locations for this study, offering a wide range of business players through which to examine the intricate interplay between mobile money services and tax compliance within an urban setting.

Small to medium enterprises (SMEs) largely operate in the informal sector and create significant employment in addition to generating significant output. Because they operate in the informal sector, tax compliance among SMEs has been low. Developing countries continue to face challenges of tax evasion and non-compliance in the informal sector (Masarirambi, 2013).

This paper aims to delve into the nuanced relationship between mobile money services and tax compliance in Zambia, with a particular focus on the MFEZ and CBD in Lusaka. By exploring this relationship, the study seeks to contribute to both academic discourse and policy formulation by shedding light on the potential mechanisms through which mobile money services can either facilitate or hinder tax compliance efforts.

To achieve this objective, through a combination of quantitative analysis, qualitative research methods, and empirical evidence, the study endeavors to elucidate the factors influencing tax compliance behavior in the context of mobile money services while also identifying potential avenues for enhancing tax compliance within the Zambian context.

The Government of the Republic of Zambia, like many other governments in the world, significantly relies on tax revenue to finance both its key infrastructure development and social services. Zambia's tax revenue declined from 30% of Gross Domestic Product (GDP) in the 1970s to only an average of 13% of GDP in the 1990s, mainly due to the decline in mining revenue and weak tax administration. To address the decline, significant tax reforms were undertaken that included the creation of the Zambia Revenue Authority (ZRA). Despite these reforms, tax revenue collection has to a large extent been unsatisfactory, with an average tax revenue-to-GDP of 17% (Mubanga, 2020).

1.2. Problem Statement

Even though there has been rapid growth and adoption of mobile money services in Zambia over the past decade, the relationship between these services and tax compliance remains inadequately understood. While mobile money platforms offer the potential to enhance transparency, reduce informal economic activities, and improve revenue collection mechanisms (Jack & Suri, 2014), empirical evidence on their actual impact on tax compliance within the Zambian context is limited. Furthermore, existing studies predominantly draw upon theoretical frameworks and empirical evidence from other contexts, leaving a gap in understanding the nuanced dynamics at play in Zambia. This study aims to address this gap by investigating the effect of mobile money services on tax compliance in Zambia, with a particular focus on the MFEZ and CBD in Lusaka. By exploring this intersection, the research seeks to provide empirical evidence and actionable insights into the factors influencing tax compliance behavior within the context of mobile money adoption.

1.3. Hypothesis

The study sought to test the following hypothesis

Ho: Mobile Money has no effect on tax compliance.

Ha: Mobile Money has a positive effect on tax Compliance

2. Empirical Literature review

According to Bernard et al. (2023), a tax is a mandatory financial charge imposed by the government on individuals or businesses to finance public spending. It is levied on income, assets, goods, and services, and the amount of tax payable is determined by the government based on various factors such as income level, asset value, and consumption.

In the public finance literature, taxes have been classified in many different ways and according to many different criteria. Depending on how the tax is paid, who ultimately bears the burden, and the extent to which the burden can be shifted, taxes are generally classified into two types, as illustrated below.

A direct tax is a tax paid directly by the taxpayer to the applicable agency.

It is also defined as a tax where the obligation as well as the burden of paying tax belong to the same taxpayer (Resnick, 2019). Direct taxes are collected by the central government as well as state governments, depending on the type of tax levied.

Indirect tax is a tax levied by tax authorities on the production or consumption of goods, services, or transactions where the burden can be transferred in whole or in part to another individual. According to Silue (2022), some indirect taxes are:

Excise duty: Manufacturers must pay and transfer the tax burden to retailers and wholesalers.

Customs Duties: Import duties levied on goods from foreign countries, ultimately paid by consumers and retailers.

2.1. Overview of Tax Compliance

Tax compliance in this study refers to the extent to which a taxpayer adheres (or fails to adhere) to the tax regulations of their nation, such as the declaration of income, the submission of tax returns, and the prompt payment of taxes. It has been previously stated that in Zambia, the responsibility of administering and collecting tax revenue falls upon the ZRA. In this paper, tax compliance pertains to the accurate filing of tax returns and the timely remittance of tax payments to the ZRA.

The issue of tax compliance characterizes the realm of public finance. Nevertheless, a high level of tax compliance can sustain sound public finance without imposing a tax burden. Taxation plays a crucial role in financing public expenditures through income distribution. In order to ensure stable funding for the production and provision of public services, different tax policies should be adopted. Tax enforcement serves as a type of fiscal policy that enables governments to finance public programs. Ideally, tax revenue serves as a legitimate source of government expenditure. As tax payments enable the government to redistribute wealth among citizens by providing improved public goods and services, effective approaches for enhancing tax collection and tax compliance should be considered (Youde & Lim, 2019).

Taxpayer compliance is an essential component of any tax system, as the absence thereof can undermine the integrity of the tax system. A comprehensive study conducted by Jackson and Milliron previously reviewed and synthesized the findings of tax compliance studies carried out prior to 1986, examining the variables, methodologies, and theories employed. Building upon this research, Richardson and Sawyer synthesized the work from 1986 to 1997. Similarly, the present research aims to expand upon these two significant studies and advance our understanding by analyzing tax compliance studies in terms of the "variables" identified from January 1998 to December 2017. This analysis was facilitated through the use of text mining software, Leximancer, to visualize the frequency and co-occurrence of concepts and themes pertaining to tax compliance factors. Data was sourced from 713 articles obtained from 15 research databases. Given the size of the data, this article marks the first in a series, focusing on the "variables" that have been investigated over the 20-year period. Subsequent articles will examine the methodologies and theories utilized in the literature during this 20-year timeframe (Yong, et al., 2019).

It is essential to acknowledge that in order for governments to fulfill their obligations, taxpayers must

accurately declare their taxable income and promptly pay their taxes in their entirety. However, it is not always feasible to maintain this process as intended. The hindrances to this process are the tax avoidance and tax evasion behaviors exhibited by taxpayers, as well as occasional failures in the design of effective tax systems by governments. Extensive research has been conducted and continues to be conducted to identify and eliminate these issues since the inception of taxation. The pioneering studies of Allingham and Sandmo (1972) and Friedland, Maital, and Rutenberg (1978) were the first to theoretically investigate individuals' decisions to evade taxes using economic models and to explore tax compliance through applied methods such as experimental approaches, respectively (Sağbaş & Çelik, 2022).

The objective of this literature review was to assess the influence of tax knowledge on tax compliance among small and medium enterprises (SMEs) in a developing country. The review examined existing literature to determine if SMEs in the studied developing country possessed tax knowledge and to identify the components that constitute tax knowledge among SMEs. Additionally, other factors that could potentially impact noncompliance among SMEs were identified, as well as methods that tax authorities could employ to enhance awareness and compliance among SMEs. The findings of the study revealed that SMEs in this particular developing country did not adhere to tax laws and had only basic tax knowledge, lacking a comprehensive understanding of tax issues. Furthermore, it became evident that solely improving tax knowledge without addressing high tax rates and corruption would not have a positive effect on tax compliance behavior among SMEs. Therefore, the study suggests the implementation of an introductory tax course, possibly as an elective subject at the onset of higher education, to ensure that students are aware of their responsibilities as future taxpayers. This educational approach is expected to foster responsible taxpayers (Wadesango et al., 2018).

2.2. Mobile Money Services and Tax Compliance

Many entrepreneurs feel safer and more secure using mobile money services. Other than the security, they also find it convenient to settle bills without having to go to their respective banks (World Coin, 2022).

For the previous 15 years, the use of mobile money has facilitated individuals to transfer and save money on their mobile devices through a network of agents, thereby reducing the costs involved in transactions (Suri et al 2021). In certain nations, mobile money has assisted households in smoothing out their consumption in the face of unexpected events by means of increased remittances and risk sharing (Blumenstock, Eagle and Fafchamps 2016; Jack, Ray, and Suri 2013; Jack and Suri 2014; Riley 2018). Furthermore, it has contributed to an increase in consumption and savings, as well as a decrease in poverty in the long term (Suri and Jack 2016; Munyegera and Matsumoto 2016). Mobile money has made financial services accessible to millions of

individuals who were previously underserved, which has also captured the attention of governments as a potential means of collecting tax revenue. This article emphasizes the potential dangers of imposing sector-specific taxes on mobile money, as this could potentially reverse the benefits derived from broader financial inclusion. The author calls for caution on the part of governments when utilizing mobile money as a tool for tax collection. Although taxing mobile money transactions may eventually promote formalization and expand the tax base, it is crucial to raise awareness of the possible unintended consequences when designing fiscal policies and revenue administration (Global Dev, 2023). A study conducted in Kenya by Lashitew et al. (2019) revealed that mobile money has become an essential component of the Kenyan economy and is widely utilized for various purposes such as national and international money transfers, payment of education fees, utility bills, and point-of-sale transactions. However, this phenomenon is not limited to Kenya alone, but is also applicable to most countries where mobile money services have been adopted. Donovan (2012) argued that mobile money services contribute to the promotion of financial inclusion and financial development, which subsequently impact economies. Several studies have demonstrated a positive correlation between financial inclusion, financial development, and tax revenue (Maherali, 2017; Oz-Yalaman, 2019; Bayar & Karamelikli, 2017; Nnyanzi et al., 2018). Mobile money is in a favorable position to address the issue of informality that plagues many developing economies and hampers efforts to mobilize domestic resources. All transactions made through mobile money are electronically recorded, which enhances the security and transparency of payments. A greater level of transparency in terms of earnings, transactions, and remittances could widen the tax base and improve the efficiency of revenue collection.

3. Theoretical Literature review

3.1. The Classical Economic Theory of Tax Compliance

The classical economic theory of tax compliance posits that individuals who are "rational" deliberately assess the anticipated financial costs and benefits of evading taxes. It suggests that compliance can be increased by intensifying audits, enhancing penalties, or employing a combination of both (CRS, 2020). This theory is relevant to the present study because it offers insights into the reasons why certain individuals or companies choose to evade taxes and how such behavior can be deterred, thereby improving the efficiency of tax collections.

3.2. The Behavioral Theory of Tax Compliance

The behavioral theory of tax compliance challenges the assumption made by the classical theory that individuals are rational beings. It suggests that individuals also take into account the psychological and moral costs of non-compliance with the tax code, in addition to the monetary costs (CRS, 2020). Moreover, researchers have observed that individuals are prone to making

honest mistakes when dealing with complex tasks, such as completing a tax return. In this context, the use of mobile money services can facilitate the process and contribute to enhancing compliance payments, as it simplifies the procedure.

3.3. Public Enforcement of Law Theory

The topic of law enforcement gained significant attention during the eighteenth century, with notable contributions from Montesquieu (1748), Baccaria (1767), and particularly Bentham (1789), whose analysis was comprehensive and sophisticated. After Bentham, interest in enforcement waned until the late 1960s, when Gary Becker (1968) published a highly influential article. Subsequently, numerous studies on the economics of enforcement have been conducted. The public enforcement of law theory encompasses the use of public agents, such as law inspectors, tax auditors, police officers, and prosecutors, to identify and punish violators of the law. This theory suggests that enforcement policies have an impact on various factors, such as the level of pollution generated by businesses, compliance with the income tax code, and the prevalence of theft, robbery, and other criminal activities in a country (Shavell, 1998). Considering the differences in behavior between individuals and companies, it is imperative to consider this theory in order to enhance tax revenue collection. To achieve this objective, the state must establish corporate liability measures that incentivize both optimal corporate policing and prevention.

4. Research Methodology

4.1. Research Design

This study employed a descriptive methodology, as outlined by Naidoo et al. (2012), to examine the MFEZ and CBD areas in Lusaka, Zambia. The descriptive research design, as defined by Saunders and Thornhill (2000), is a scientific approach that entails observing and describing the behavior of a subject without exerting any influence. A questionnaire, consisting of both anonymous close-ended and open-ended questions, was utilized in this study.

4.2. Study Population of the study

The research was conducted in the Central Business District, Industrial Area, and Multi-Facility Economic Zone in Lusaka, Zambia. The geographical focus on the MFEZ and CBD in Lusaka offers a unique opportunity to examine the localized dynamics of mobile money adoption and tax compliance within urban settings, thereby generating insights that are both contextually relevant and generalizable to other urban centers in Zambia. A total of 80 respondents from private companies were drawn from CBD and MFEZ.

4.3. Sample and Sampling procedure

The study applied two sampling techniques, namely simple and purposive stratified random sampling techniques. The first sampling technique divides the population into groups. The overall sample consists of

private companies selected for the study. This is done to avoid obtaining information from organizations that could negatively impact data quality.

Stratified sampling is a probability sampling technique in which the researcher divides the entire population into different subgroups or strata and then randomly selects the final subjects proportionally from the different strata.

The Slovin formula was used to determine an adequate sample size for the investigation. According to Ryan (2013), the minimal sample size for a population using Slovin's formula is provided by:

$$N$$

$$n = 1 + Na^2$$

n = sample size required N = size of the population

a = accuracy degree expressed as a proportion (.05)

$$100$$

$$n = 1 + 100(0.05)^2$$

$$n = 80$$

4.4. Data Collection

Secondary data was collected from the Zambia Revenue Authority's various sources, such as published books, journals, corporate reports, and the internet, by desk review, while primary data was obtained through the use of survey questionnaires targeted at private companies.

4.5. Data Analysis

Descriptive statistics with SPSS Version 22.0 and Excel were used in data analysis with regard to the hypothesis and the problem at hand. This method facilitated the control of individual heterogeneity factors. The strength of the linear association between the variables under study was established using correlational analysis.

5. Results and Discussions

5.1. Extent of using mobile money to pay tax

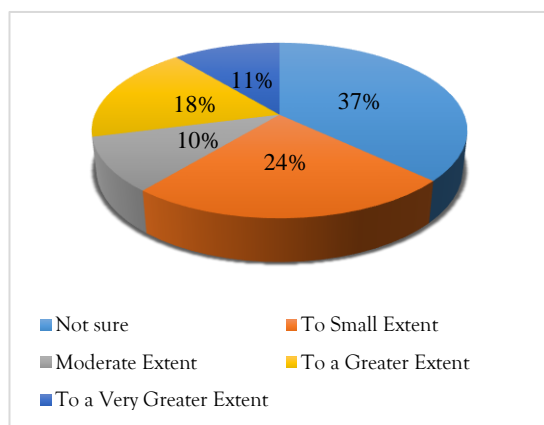


Figure 1: Extent of using mobile money

The study findings reveal that 37% of the respondents were not sure while the other remaining 63% agreed that from small to great extent mobile money is used to pay taxes and therefore has an effect on tax compliance.

5.2. Effect of mobile money on tax compliance

The second objective of study sought to assess the effect of mobile money on tax compliance and the findings are as follows:

Table 1. Effect of mobile money on compliance

Statement	Frequency rating					Mean	Std. Dev
	5	4	3	2	1		
Reduce the prevalence of cash transactions	2	2	15	40	21	3.33	1.146
Provide a digital trail of transactions	3	1	4	43	29	3.34	1.184
Identify potential tax evasion and enforce compliance	4	2	24	36	15	3.37	1.120
Makes it easier for governments to track and collect taxes	3	3	13	43	18	3.36	1.047
Using mobile money improves tax compliance by increasing the formalization of the economy	2	1	12	32	33	3.23	1.098

Source: Research data

According to the study findings mobile money reduces the prevalence of cash transactions and had a mean of 3.33 and standard deviation of 1.146, provide a digital trail of transactions had a mean of 3.34 and standard deviation of 1.184, identify potential tax evasion and enforce compliance had a mean 3.37 and standard deviation of 1.120. On the other makes it easier for governments to track and collect taxes had a mean of 3.59 and standard deviation of 1.052. Using mobile money improves tax compliance by increasing the formalization of the economy had a mean of 3.23 and a standard deviation of 1.098. Generally, the metrics of the effect of use of mobile money services had means between 3.23 and 3.37 and standard deviation values between 1.047 and 1.84. This implies that on average the respondents tended to think that the measured metrics affected tax compliance. In this context, the use of mobile money services ensures that clients return tax to the government.

5.3. Challenges of using mobile money on tax compliance

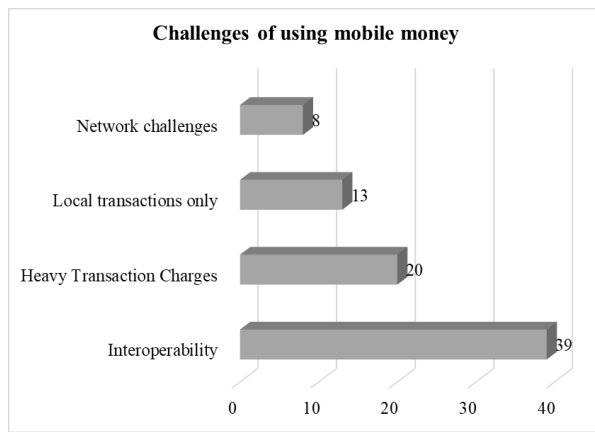


Figure 2: Challenges of using mobile money

When using mobile money to pay tax, the research findings revealed that challenges such as Interoperability (39%), Heavy Transaction Charges (20%), Local transactions only (13%) and Network challenges (8%) are faced. This can complicate tax compliance.

5.4. Measures to enhance tax compliance when using mobile money

Table 2: measures

	Freq uency	Perce ntage
Strengthen mobile money access and use	10	12.5
Minimize or remove sector-specific levies on mobile transactions	30	37.5
Simplify and stabilize taxes and fees in the mobile money sector	25	31.25
Reduce the overall tax burden on mobile money users	15	18.75
Total	80	100

According to the study findings, strengthening mobile money access and use (12.5%), Minimizing or removing sector-specific levies on mobile transactions (37.5%), Simplifying and stabilizing taxes and fees in the mobile money sector (31.25%) and reducing the overall tax burden on mobile money users (18.75%) were the measures suggested by respondents.

5.5. Model Specification

Table 3: Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.252 ^a	.636	.026	.264

a. Predictors: (Constant), Money transfer, Buying airtime, Savings and loans, Paying Bills

According to the table above, the study shows a linear regression correlation R of 0.252, which shows that there was, indeed, a statistically strong relationship between the study autonomous factors and the subordinate variable. The R square, which is represented by the coefficient of determination of 0.636, shows that the four independent variables are equal to 63.6% of the variation as far as the

dependent variable is concerned. The remaining 36.4% in the variation in the independent variable reflected other factors which are not represented in this model.

5.6. ANOVA

Table 4: Anova

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.470	4	.117	1.680	.0161 ^b
	Residual	6.915	99	.070		
	Total	7.385	103			

a. Dependent Variable: Tax Compliance
b. Predictors: (Constant), Money transfer, Buying airtime, Savings and loans, Paying Bills

According to the table above, the p value of the ANOVA stood at 0.0161 (0.01%), which, by all means was below 0.05 (5%) level of significance, it was concluded that the regression model could be said to be a good fit for data, which justified undertaking the regression analysis.

5.7. Regression

Table 5: Regression coefficients

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.671	.031		21.502	.000
	Money transfer	.306	.047	.805	6.570	.000
	Buying airtime	.041	.032	.115	1.269	.208
	Savings and loans	.381	.025	.606	7.153	.000
	Paying Bills	.439	.018	.551	7.898	.000

a. Dependent Variable: Implementation of IPSAS

The regression coefficient of 0.306, -0.041, 0.381 and 0.439 for Money transfer, Buying airtime, Savings and loans and Paying Bills implied that the independent variables had a positive relationship with the independent variable. These findings are in Tandem with Ogundele and Ogundele (2017) whose findings revealed that a positive regression coefficient means that as the independent variable increases, the dependent variable also increases.

6. Summary, Conclusions and Recommendations

6.1. Summary of findings

The overall objective of this study was to determine the effect of mobile money payments on tax compliance in Zambia, in the case of MFEZ and CBD Lusaka. The study was restricted to eighty (80) businesses that operated in the named locations. The analysis of the data was based on responses to the questionnaires collected from the 80 respondents.

The extent of using mobile money to pay tax has an

effect on tax compliance.

According to the study findings, the majority of the respondents agreed that, from a small to a great extent, mobile money is used to pay taxes and therefore has an effect on tax compliance. These findings mean that the use of mobile money payment options in Zambia is an important innovation in the effort to modernize tax collection procedures. The researcher compared revenue collections before and after the adoption of mobile money payment options in order to evaluate the impact of this innovation. The results of our study support earlier studies conducted in other nations, showing that the use of mobile money has increased the effectiveness of revenue collection. Studies like that by Fehling (2019), which discovered that mobile money solutions considerably increased tax revenue collection in Kenya, support this claim. In a comprehensive analysis of mobile money's impact on revenue collection, Fehling's study revealed that the use of mobile money provided a more convenient and secure means for taxpayers to fulfill their obligations, resulting in increased compliance.

Furthermore, a study conducted in Tanzania by Fjeldstad (2017) found that the use of mobile money for tax payments was common among respondents. According to Fjeldstad's research in Tanzania, the availability of mobile money payment choices made it easier for citizens to pay their taxes, which increased compliance. These results are in line with the findings of the study conducted in Zambia, highlighting the wider regional importance of mobile money solutions for enhancing tax collection. According to a study by Silue (2021), using mobile money solutions for financial transactions, such as paying taxes, not only increased transparency and tracking but also broadened financial inclusion.

According to the study's findings, using mobile money can reduce the prevalence of cash transactions. This entails that all the transactions can be tracked, making it easier to identify suspicious activities and flag them immediately. And the customers do not carry cash due to these payment options, so the risk of money theft also reduces. Mobile money can also help provide a digital trail of transactions. The study by Rofas (2022) stipulates that using mobile money when paying taxes can identify and mitigate fraudulent activities, safeguarding both the business and its customers. Mobile money services are becoming an essential part of digital security strategies, particularly in the e-commerce sector, helping to detect and prevent fraud before it occurs. Additionally, the study by Mpofu (2022), carried out in Uganda, serves as a notable illustration of the transformative potential of these solutions. This study showed that adding mobile money payment options dramatically increased revenue receipts because payments could be tracked. Giving taxpayers access to a quick and secure payment method was a major factor in this achievement. This is completely consistent with the results of our investigation, which revealed a parallel pattern in

Zambia. Due to the extreme simplicity and effectiveness of mobile money solutions, our research revealed that Zambian taxpayers have widely used them for their tax payments.

Making it easier for governments to track and collect taxes, identifying potential tax evasion, and enforcing compliance is one of the uses of mobile money in tax compliance. This is because Beck et al. (2014) argue that as mobile money offers the possibility of paying taxes digitally, it simplifies tax payment procedures, thus helping to increase tax revenue, as the literature identifies heavy tax payment procedures as one of the determinants of tax evasion. Furthermore, the outcomes of this study agree with the investigation carried out by Santoro et al. (2022). Using mobile money improves tax compliance by increasing the formalization of the economy. This study demonstrated how the adoption of mobile payment options increased taxpayer compliance. This outcome was made possible in large part by the openness and usability of mobile money payment alternatives. These results show the consistency of mobile money's beneficial influence on tax compliance and revenue collection and do not only apply to Zambia but also to a wider regional context.

The study emphasizes the value of public education and awareness initiatives in the widespread acceptance of mobile money for tax payments. Other nations have reported on the success of similar efforts. This study showed how widespread adoption of mobile money for tax payments was influenced by successful public awareness and education initiatives. According to our research, comparable initiatives to inform the public about the advantages and simplicity of mobile money tax payment choices were essential to obtaining high levels of taxpayer uptake in the Zambian environment. The effectiveness of these campaigns resonates with global best practices, as outlined by Schneider (2014), who emphasized the paramount importance of taxpayer education and awareness in enhancing compliance.

Challenges of using mobile money for tax compliance

When using mobile money to pay tax, the research findings revealed that challenges such as interoperability, heavy transaction charges, local transactions only, and network challenges can affect tax compliance. These findings are similar to the study findings done in Rwanda, where Hexon (2019) reports that heavy transaction charges on mobile money usage affect tax compliance. The introduction of mobile money is revolutionizing the financial sector of many developing countries. However, there are many challenges faced in the use of mobile money services, such as tax compliance.

Measures to enhance tax compliance when using mobile money

The study findings revealed that strengthening mobile money access and use, minimizing or removing sector-specific levies on mobile transactions, simplifying and

stabilizing taxes and fees in the mobile money sector, and reducing the overall tax burden on mobile money users can be used to enhance tax compliance when using mobile money. These findings are in tandem with the findings in Kenya. The study established that this is essential for fostering broader adoption and increasing taxpayer trust. To do this, it is essential to create strong regulatory frameworks and collaborations with mobile money service providers.

Therefore, from the study findings, it can be noted that the ZRA needs to keep investing proactively in public awareness programs. These ads ought to be created to inform taxpayers of the benefits and simplicity of using mobile money to pay their taxes. The study got ideas from the achievements seen in other nations, particularly as described in the paper by Kafusha (2022). The ZRA ought to build on these achievements abroad and apply them to the Zambian situation. The ZRA can considerably expand taxpayer acceptance of mobile money tax payment alternatives by successfully educating the general public about their benefits and simplicity.

Furthermore, the researcher notes that ZRA and other tax administrations in Zambia have the responsibility to prioritize maintaining the security and accountability of mobile money tax payment channels. The ZRA can ensure that the mobile money tax payment ecosystem runs with integrity and accountability by establishing clear laws and working closely with mobile money service providers, further boosting taxpayer confidence. In addition, the study supports an ongoing, thorough assessment of how well the mobile money system facilitates tax compliance. Regular evaluations of the taxpayer experience with mobile money tax payments should be done by the ZRA. These assessments will make it possible to find any systemic flaws or potential improvement areas. The ZRA can make sure that mobile money continues to be a dependable and effective tool for tax compliance by taking proactive measures to address these problems.

6.2. Conclusions

The extent of using mobile money to pay tax and its effect on tax compliance

According to the study findings, the majority of the respondents agreed that, from a small to a great extent, mobile money is used to pay taxes and therefore has an effect on tax compliance. These findings mean that the use of mobile money payment options in Zambia is an important innovation in the effort to modernize tax collection procedures. The researcher compared revenue collections before and after the adoption of mobile money payment options in order to evaluate the impact of this innovation. The results of our study support earlier studies conducted in other nations, showing that the use of mobile money has increased the effectiveness of revenue collection. Studies like that by Fehling (2019), which discovered that mobile money solutions considerably increased tax revenue collection in Kenya, support this claim. In a comprehensive

analysis of mobile money's impact on revenue collection, Fehling's study revealed that the use of mobile money provided a more convenient and secure means for taxpayers to fulfill their obligations, resulting in increased compliance.

Furthermore, a study conducted in Tanzania by Fjeldstad (2017) found that the use of mobile money for tax payments was common among respondents. According to Fjeldstad's research in Tanzania, the availability of mobile money payment choices made it easier for citizens to pay their taxes, which increased compliance. These results are in line with the findings of the study conducted in Zambia, highlighting the wider regional importance of mobile money solutions for enhancing tax collection. According to a study by Silue (2021), using mobile money solutions for financial transactions, such as paying taxes, not only increased transparency and tracking but also broadened financial inclusion.

According to the study's findings, using mobile money can reduce the prevalence of cash transactions. This entails that all the transactions can be tracked, making it easier to identify suspicious activities and flag them immediately. And the customers do not carry cash due to these payment options, so the risk of money theft also reduces. Mobile money can also help provide a digital trail of transactions. The study by Rofas (2022) stipulates that using mobile money when paying taxes can identify and mitigate fraudulent activities, safeguarding both the business and its customers. Mobile money services are becoming an essential part of digital security strategies, particularly in the e-commerce sector, helping to detect and prevent fraud before it occurs. Additionally, the study by Mpofo (2022), carried out in Uganda, serves as a notable illustration of the transformative potential of these solutions. This study showed that adding mobile money payment options dramatically increased revenue receipts because payments could be tracked. Giving taxpayers access to a quick and secure payment method was a major factor in this achievement. This is completely consistent with the results of our investigation, which revealed a parallel pattern in Zambia. Due to the extreme simplicity and effectiveness of mobile money solutions, our research revealed that Zambian taxpayers have widely used them for their tax payments.

Making it easier for governments to track and collect taxes, identifying potential tax evasion, and enforcing compliance is one of the uses of mobile money in tax compliance. This is because Beck et al. (2014) argue that as mobile money offers the possibility of paying taxes digitally, it simplifies tax payment procedures, thus helping to increase tax revenue, as the literature identifies heavy tax payment procedures as one of the determinants of tax evasion. Furthermore, the outcomes of this study agree with the investigation carried out by Santoro et al. (2022). Using mobile money improves tax compliance by increasing the formalization of the economy. This study demonstrated

how the adoption of mobile payment options increased taxpayer compliance. This outcome was made possible in large part by the openness and usability of mobile money payment alternatives. These results show the consistency of mobile money's beneficial influence on tax compliance and revenue collection and do not only apply to Zambia but also to a wider regional context.

The study emphasizes the value of public education and awareness initiatives in the widespread acceptance of mobile money for tax payments. Other nations have reported on the success of similar efforts. This study showed how widespread adoption of mobile money for tax payments was influenced by successful public awareness and education initiatives. According to our research, comparable initiatives to inform the public about the advantages and simplicity of mobile money tax payment choices were essential to obtaining high levels of taxpayer uptake in the Zambian environment. The effectiveness of these campaigns resonates with global best practices, as outlined by Schneider (2014), who emphasized the paramount importance of taxpayer education and awareness in enhancing compliance.

Challenges of using mobile money for tax compliance

When using mobile money to pay tax, the research findings revealed that challenges such as interoperability, heavy transaction charges, local transactions only, and network challenges can affect tax compliance. These findings are similar to the study findings done in Rwanda, where Hexon (2019) reports that heavy transaction charges on mobile money usage affect tax compliance. The introduction of mobile money is revolutionizing the financial sector of many developing countries. However, there are many challenges faced in the use of mobile money services, such as tax compliance.

Measures to enhance tax compliance when using mobile money

The study findings revealed that strengthening mobile money access and use, minimizing or removing sector-specific levies on mobile transactions, simplifying and stabilizing taxes and fees in the mobile money sector, and reducing the overall tax burden on mobile money users can be used to enhance tax compliance when using mobile money. These findings are in tandem with the findings in Kenya. The study established that this is essential for fostering broader adoption and increasing taxpayer trust. To do this, it is essential to create strong regulatory frameworks and collaborations with mobile money service providers.

Therefore, based on the study findings, it can be noted that the ZRA needs to keep investing proactively in public awareness programs. These ads ought to be created to inform taxpayers of the benefits and simplicity of using mobile money to pay their taxes. The study got ideas from the achievements seen in other nations, particularly as described in the paper by Kafusha (2022). The ZRA ought to build on these achievements abroad and apply them to the Zambian situation. The ZRA can considerably expand taxpayer acceptance of mobile money tax payment alternatives by successfully educating the general public about their benefits and simplicity.

Furthermore, the researcher notes that ZRA and other tax administrations in Zambia have the responsibility to prioritize maintaining the security and accountability of mobile money tax payment channels. The ZRA can ensure that the mobile money tax payment ecosystem runs with integrity and accountability by establishing clear laws and working closely with mobile money service providers, further boosting taxpayer confidence. In addition, the study supports an ongoing, thorough assessment of how well the mobile money system facilitates tax compliance. Regular evaluations of the taxpayer experience with mobile money tax payments should be done by the ZRA. These assessments will make it possible to find any systemic flaws or potential improvement areas. The ZRA can make sure that mobile money continues to be a dependable and effective tool for tax compliance by taking proactive measures to address these problems.

6.3. Recommendations

To ensure that tax compliance is improved through the use of mobile money, the following recommendations are made:

- There is a need to invest in public awareness campaigns for mobile money tax payments.
- The Zambian government, through the Zambia Revenue Authority, should prioritize security and transparency in mobile money tax channels.
- There is a need for the Zambia Revenue Authority to continuously evaluate the mobile money system's performance.
- The Zambia Revenue Authority should embrace digital transformation in tax collection processes.
- The Zambia Revenue Authority and taxpayers should collaborate closely with mobile money service providers.

Acknowledgment

We would like to express our gratitude to the journal editor and the anonymous reviewers for their valuable comments and suggestions that significantly improved the quality of this manuscript.

References

- Abor J. Y., & Amidu M. (2018). Mobile Telephony, Financial Inclusion and Tax Revenue in Africa. *Telecommunications Policy*, 42(9), 753-764.
- Abugre J. B., & Akudugu M. A. (2019). Mobile Money Usage and Tax Compliance in Ghana: The Mediating Role of Financial Inclusion. *International Journal of Economics and Financial Issues*, 9(2), 38-48.
- ActionAid, 2022. What is Personal Income Tax?. *Personal Income Tax*, pp. 1-3.
- Adam, A., & Kuada, J. (2019). Mobile Money, Tax Compliance, and Firm Performance in Ghana. *Journal of African Business*, 20(4), 430-451.
- Akitoby, B. et al., 2019. Case Studies in Tax Revenue Mobilization in Low-Income, Washington DC: International Monetary Fund.
- Alm, J., & Martinez-Vazquez, J. (2018). Tax Compliance and Enforcement in the Pampas: Evidence from a Field Experiment. *Journal of Economic Behavior & Organization*, 150, 114-140.
- Andreoni, J., Errard, B. & Feinstein, J., 1998. Tax Compliance. *Journal of Economic Literature*, Volume 36, pp. 818-860.
- Banchayehu Tesfaw Ayalew, Zemzem Shigute Zerihun, & Melese Alemu Sori (2020). The Role of Mobile Money Services on Tax Compliance: Evidence from Developing Countries. *African Journal of Economic Review*, 8(2), 176-186.
- BCA Properties, 2017. *bcaproperties.com*. Available at: [https://bcaproperties.com/blog/property-transfer-tax-obligations-on-property-for-sell/#:~:text=Property%20Transfer%20Tax%20\(PTT\)%20is,value%20and%20the%20contract%20price.](https://bcaproperties.com/blog/property-transfer-tax-obligations-on-property-for-sell/#:~:text=Property%20Transfer%20Tax%20(PTT)%20is,value%20and%20the%20contract%20price.) [Accessed 08 November 2023].
- Bernad, L., Nsengiyumva, Y., Byinshi, B., Hakizimana, N., & Santoro, F. (2023). Digital Merchant Payments as a Medium of Tax Compliance.
- Besley, T., & Persson, T. (2014). Why Do Developing Countries Tax So Little? *Journal of Economic Perspectives*, 28(4), 99-120.
- Bird, R. M. (2008). Taxation and Development. *Journal of International Cooperation Studies*, 16(3), 55-80.
- Charter, Z. T. (2012). Lusaka.
- Chikwede, K., (2022). An assessment of Tax Revenue Performance Using Tax Capacity and Tax Effort: The Case of Southern African Development Community (2000-2020) , s.l.: KDI School of Public Policy and Management .
- Collins, M., 2023. Value Added Tax (VAT). pp. 1-2.
- CRS, 2020. *www.everycrsreport.com*. Available at: https://www.everycrsreport.com/files/20190801_IN11151_f00491fb564f88f9c46064a144584d7ce8b16758.html#:~:text=The%20classical%20economic%20theory%20of,a%20combination%20of%20the%20two. [Accessed 9 November 2023].
- Cummings, R. G., Martinez-Vazquez, J., McKee, M., & Torgler, B. (2009). Tax Morale affects Tax Compliance: Evidence from Surveys and an Artefactual Field Experiment. *Journal of Economic Behavior & Organization*, 70(3), 447-457.
- Danielle Resnick. (2018) Tax Compliance and Representation in Zambia's Informal Economy S-41418-ZMB-1.
- Descartes, 2023. *www.descartes.com*. Available at: <https://www.descartes.com/resources/knowledge-center/what-is-customs-duty#:~:text=A%20duty%20is%20a%20kind,revenue%20generation%20for%20the%20government.> [Accessed 9 October 2023].
- Fehling, J., 2019. How did the introduction of a mobile money tax in Kenya influence the usage of mobile money? s.l.: Lund University.
- Fjeldstad, O. H. (2017). Mobile Phones, Taxation, and Development in Tanzania. *The European Journal of Development Research*, 29(5), 1077-1094.

- Global Dev, 2023. globaldev.blog. Available at: <https://globaldev.blog/re-evaluating-the-taxation-of-mobile-money/> [Accessed 9 November 2023].
- Gordon, R. H., & Li, W. (2009). Tax Structures in Developing Countries: Many Puzzles and a Possible Explanation. *Journal of Public Economics*, 93(7-8), 855-866.
- Gorton, D., 2023. Taxes. Taxes definition: Types, Who Pays and Why?, p. 1.
- Hayes, A., 2023. Pay As You Earn (PAYE). Pay As You Earn (PAYE): Definition and Examples, p. 1.
- Janine A. (2018) Mobile Money and the Economy: A Review of the Evidence , The World Bank Research Observer, Volume 33, Issue 2, August 2018, Pages 135-188, <https://doi.org/10.1093/wbro/lky001>
- Kabala, E. et al., 2018. An Ethnological Analysis of the Influence of Mobile Money on Financial Inclusion: The Case of Urban Zambia. *Zambia Social Science Journal*, 7(1).
- Keen, M., & Simone, A. (2004). Tax Policy in Developing Countries: Some Lessons from the 1990s and Some Challenges Ahead. *Fiscal Studies*, 25(3), 279-319.
- Kleven, H. J., Knudsen, M. B., Kreiner, C. T., Pedersen, S., & Saez, E. (2011). Unwilling or Unable to Cheat? Evidence from a Tax Audit Experiment in Denmark. *Econometrica*, 79(3), 651-692.
- Liuhong, C., 2022. Research on Tax Collection and Administration Application and Legal Issues Based on Big Data Analysis, Guangzhou: Guangzhou Huashang Vocational College.
- Makina Daniel (2018). The Impact of Mobile Money on Tax Compliance in Zimbabwe. *International Journal of Academic Research in Business and Social Sciences*, 8(4), 647-661.
- Masarirambi, C. (2013) An Investigation into the Factors Associated with Tax Evasion in the Zimbabwe Informal Sector. ZOU, Harare.
- McLure Jr, C. E. (2006). Tax Compliance Costs: A Review of Cost Burdens and Cost Structures. *National Tax Journal*, 59(4), 1103-1134
- Mpofu, F. Y., 2022. Industry 4.0 in Financial Services: Mobile Money Taxes, Revenue Mobilisation, Financial Inclusion, and the Realisation of Sustainable Development Goals (SDGs) in Africa. *Sustainability*, 14(14).
- Mubanga, C. K., 2020. Tax Compliance: A case study on how Zambian Taxlaws affect Tax payers, Lusaka: Cavendish University.
- Mukuwa, V. and Phiri, J. (2020) The Effects of E-Services on Revenue Collection and Tax Compliance among SMEs in Developing Countries: A Case Study of Zambia. *Open Journal of Social Sciences*, 8, 98-108. <https://doi.org/10.4236/jss.2020.81008>.
- Muthiora S. C. & Namusonge G. S. (2019). Mobile Money and Tax Compliance in Kenya: The Mediating Role of Financial Inclusion. *International Journal of Economics, Commerce and Management*, 7(12), 424-438.
- Nalishebo, S. and Halwampa, A. (2014) Uncovering the Unknown: An Analysis of Tax Evasion in Zambia
- Namoju C. A. (2019). Mobile Money, Tax Revenue and Compliance in Nigeria. *Journal of Economics and Finance*, 10(5), 23-30.
- Pomeranz, D. (2015). No Taxation without Information: Deterrence and Self-Enforcement in the Value Added Tax. *American Economic Review*, 105(8), 2539-2569.
- Resnick, D. (2019). Tax compliance and representation in Zambia's informal economy (Vol. 1794). Intl Food Policy Res Inst.
- Sağbaşı, I. & Çelik, E., 2022. A Brief Overview of the Tax Compliance Literature Specific to Experimental Studies, Istanbul: Istanbul University Press.
- Santoro, F.; Munoz, L.; Wilson, P. and Mascagni, G. (2022) Digital Financial Services and Digital IDs: What Potential do They Have for Better Taxation in Africa? ICTD Working Paper 137, Brighton: Institute of Development Studies,
- Schneider, F. (2014). The Shadow Economy and Shadow Labor Force: A Survey of Recent Developments. In *Research on Economic Inequality* (Vol. 22, pp. 165-195). Emerald Group Publishing Limited.

- Silue, T. (2021). E-money, financial inclusion and mobile money tax in Sub-Saharan African mobile networks.
- Slemrod, J. (2007). Cheating Ourselves: The Economics of Tax Evasion. *Journal of Economic Perspectives*, 21(1), 25-48.
- Slemrod, J., & Weber, C. (2012). The Economics of Tax Compliance. In *Handbook of Public Economics* (Vol. 5, pp. 817-947). North-Holland.
- Tait, A. A. (2003). Taxation, Development, and the Role of International Institutions. *National Tax Journal*, 56(3), 621-640.
- Țibulcă, L.-L., 2021. The impact of the COVID-19 pandemic on tax revenues in the EU, s.l.: EU.
- Torgler, B. (2003). To Evade Taxes or Not to Evade: That is the Question. *Journal of Socio-Economics*, 32(3), 283-302.
- Torgler, B., & Schneider, F. (2009). The Impact of Tax Morale on Tax Compliance: Evidence from a Unique Natural Experiment in Switzerland. *Economics of Governance*, 10(2), 171-186.
- Trivedi, V. U. (2016). Tax Compliance and Human Capital. *The Journal of the American Taxation Association*, 38(2), 1-24.
- Wadesango, N., Mwandambira, N., Mhaka, C. & Wadesango, O., 2018. Literature Review on the Impact Of Tax Knowledge on Tax Compliance among Small Medium Enterprises in a Developing Country, Midlands: Midlands State University.
- Willis, R., 2021. A brief history of taxation. pp. 1-2.
- World Coin, 2022. worldcoin.org. Available at: <https://worldcoin.org/articles/what-is-mobile-money> [Accessed 9 November 2023].
- Yong, S., Lo, K. A. & Freudenberg, B., 2019. Tax Compliance in the New Millennium: Understanding the variables , s.l.: AUT University .
- Youde, S. & Lim, S., 2019. Tax Compliance. *Global Encyclopedia of Public Administration, Public Policy, and Governance.*, pp. 1-5.
- Zhou, G. and Madhikeni, A. (2013) Systems, Processes and Challenges of Public Revenue Collection in Zimbabwe. *American International Journal of Contemporary Research*, 3, 49-60
- ZRA, Z. R. A., 2023. www.zra.org.zm. [Online] Available at: chrome-extension://efaidnbnmnnibpcajpcglclefindmkaj/<https://www.zra.org.zm/wp-content/uploads/2020/01/Excise-Duty.pdf> [Accessed 9 November 2023].
- Zucman, G. (2013). The Missing Wealth of Nations: Are Europe and the U.S. Net Debtors or Net Creditors? *Quarterly Journal of Economics*, 128(3), 1321-1364

Cite this article as: Nsangu & Haabazoka (2024). [A study of the effect of Mobile Money Services on Tax Compliance in Zambia: A case of MFEZ and CBD Lusaka](https://doi.org/10.59413/ajocs/v4.i2.1). *African Journal of Commercial Studies*. 4(2),81-92. doi: 10.59413/ajocs/v4.i2.1