Adoption of E-Levy as a Broad Aggregate Tax Policy on "MoMo" in Ghana: A Paper Review

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Abstract

The evolution of digital payment platform especially Mobile Money (MoMo) has promoted economy growth and entrepreneurship in Ghana specifically on-line trading. The Central Bank in its effort to promote a cashless economy is in jeopardy through the introduction of E-levy as an aggregated tax in its attempt to widen the tax net for the informal sector (SMEs and the poor). This paper reviews the adoption of E-Levy as an aggregated tax to answer the following questions; Firstly, what is the effect of the E-Levy as an aggregate tax on MoMo transactions? Secondly, what is the penetration level of the E-Levy among the untaxed? Finally, is the E-Levy tax a political tool to generate revenue? The study was based on the Technology Acceptance Model (TAM) theoretical framework which also draws in some aspects of societal acceptance with data from BoG and ISSER. The findings indicated that inherent attitude, social construct, social compliance and acceptance of subscribers (taxpayers) plays a pivotal role to determine subscribers' intention to pay the E-Levy. This review paper finding indicates that, policy makers should drive the taxation agenda based on; 1. The E-Levy policy should be reformed based on empirical evidence; 2. Alternative innovative approach should be employed to generate revenue from the high earners in the informal sector without adversely affecting the pro-poor; 3. The threshold of E-Levy should be adjusted to incorporate inflation going forward. The study offers policy makers valuable insight into the acceptance and sustainability of E-Levy as an aggregate tax.

Keywords: E-Levy; MoMo; Satisfaction; Technology Acceptance Model; Aggregated Tax; Telcos

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1. 1ntroduction

1.1 Background and context of the research

Over the decades Ghana as a country has not been able to adequately collected aggregated taxes for its expenditure as well as balance its annual budget. Before Ghana attained lower middle income status in 2010 (World Bank, 2017), its annual budget was being supported by development partners in order to meet its budget expenditure and consolidate its fiscal deficit. In 2022, the Ghanaian economy experienced a full-blown macroeconomic crisis as a result of pre-existing imbalances and external shocks to include COVID-19 (World Bank, 2023). To make matters worse, Ghana was shut-out from the international capital market due to unsustainable and growing debt concerns. Huge capital outflows coupled with monetary policy tightening in advanced economies put significant pressure on the exchange rate, together with monetary financing of the budget deficit (World Bank, 2024) pushed Ghana's debt to GDP from 79.6% in 2021 to over 90% of GDP in 2022 (BoG, 2022), with debt service-to-revenue reaching 117.6% (World Bank, 2024).

Destabilizing the macroeconomic outlook, there was the need for the government of Ghana to improve on its local revenue collection to reduce its fiscal deficit. To help restore the deficit, the government leveraged on the digital platform (MoMo) and introduced the E-levy tax policy as an all-inclusive aggregate tax regime on a broader scale that will enable it realize its tax obligations (Ofosu-Ampong, 2024). According to World Bank, Ghana's tax-to-GDP ratio is barely 13%, well below the average of 18% per GDP average threshold (World Bank, 2022). Contrary, the average tax-to-GDP ratio for OECD countries in 2022 was 34%, a 0.15 percentage point decrease from 2021.

IMF indicated that a tax-to-GDP ratio of at least 12% is linked to accelerated economic growth, but due to the full-blown macroeconomic crisis. The electronic transfer levy Act 2022 (Act 1075) imposed a levy of 1.5% on electronic transfers (Ghana Revenue Authority, 2022). The E-levy tax collection was specifically targeted at the mobile money transactions because of its wide penetration (Jazeera, 2022).

"MoMo" was introduced in Ghana as a way of financial inclusion for all Ghanaians who find it difficult to

operate in the formal banking system. Likewise, it was also introduced as the next step towards a cashless economy as well as reduce the cost burden on government for the printing of physical cash. The successes of M-Pesa in Kenya as a driver of financial inclusion popularized mobile money use in Africa (Quartey and Nyarko, 2022) has interest other Africa countries as an easy avenue to collect taxes. Lees and Mader (2022), indicated that the mobile money tax system in countries like Cameroon, Uganda and Zimbabwe was not only regressive but also posed a burden on poor people than the rich. Globally, the MoMo industry has grown more than ten times its value in the last decade (GMSA, 2022). Valued at $68 billion in 2012, the annual transaction value reached $1.2 trillion at the end of 2021 (GSMA, 2022), see figure 1. The evolution of MoMo in Africa is traced to Vodafone Group and Safaricom's introduction of M-PESA in Kenya on March 6, 2007 (Akologo, 2023).

Figure 1. Global value of money transacted
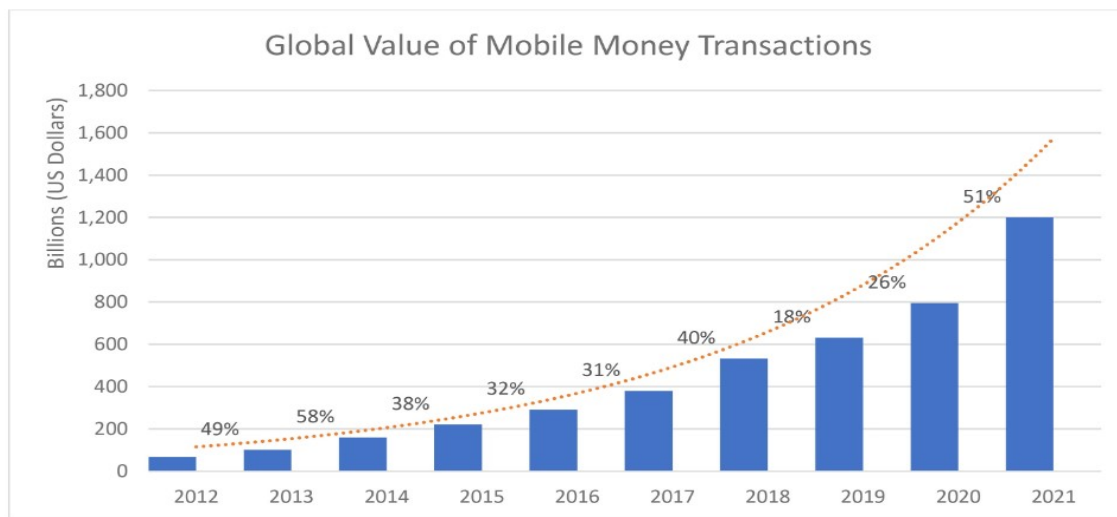
Source: Adapted from (Akologo, 2023). Based on GSMA data (GSMA, 2021, 2022).

In Ghana MoMo officially became the most-widely used platform for payment of goods and services by 2019 via mobile banking interoperability platform (Ghana Web, 2019).

1.2 Objectives of the Study

This paper review looks at the effects of the tax policy on "MoMo" to explore three (3) basic questions; *1. What is the effect of the E-Levy as an aggregated tax on MoMo transactions? 2. What is the penetration level of the E-Levy among the untaxed? 3. Is the E-Levy tax a political tool to generate revenue?* This study then draws on the various empirical studies and identify research gaps related to the above questions relative to the adoption of the E-Levy tax as an aggregate tax to raise revenue from the present 13% to 16% of GDP (Nutassey et al., 2023) as stated by the Minister of Finance on November 2021, for the 2022 Budget Statement and Economic Policy of Ghana. The study also identified factors needed for the government of Ghana through Ghana Revenue Authority (GRA) and Ministry of Finance to improve on its revenue mobilization.

1.3 Importance and relevance of study

Even though the emergent and use of MoMo as a means of tax mobilization in developing countries, has been an insightful contribution of literature in this subject area. Other studies have emphasis on technological advancement and its readiness (Narteh et al., 2017; Rahman et al., 2017) to support tax mobilization to include user behavior, performance expectancy, effort expectancy, self-efficacy, structural assurance, optimism, system quality, personal innovativeness, availability of mobile and educational infrastructure as key determinants of the successful adoption of MoMo services (Kabengele and Hahn, 2021; Malinga and Maiga, 2020). Another import study by (Ofosu-Ampong, 2024) examined the inherent innovativeness of the government as a factor influencing digital taxation on service platform users. Although some seminar works has been done by Senyo and Osabutey (2020) focusing on sociocultural determinant factors, few has based their studies on Technology Acceptance

Model (TAM). Some underpinned theories used as a basis for such studies stems on Task-Technology Fit (TTF), Diffusion of Innovation (DOI), often analyzed using regression analysis (Ofosu-Ampong, 2024). This study will discuss and review its findings based on the TAM Theoretical framework and how it impacts on the policy.

2. Literature Review

2.1 Background of E-Levy as an aggregate tax

The wide penetration of mobile phones has ignited policy makers among developing countries to take advantage of the growing data (see table 1) as an innovative approach to enhance service provision (Ofosu-Ampong, 2024) as well as increase revenue mobilization as a means of widening its tax net to include the informal sector. In Ghana, the Central Bank and the telecommunications (telcos) continue to improve mobile money services by introducing interoperability platform that enables mobile user (potential taxpayers) to send money directly into their bank accounts and vice-versa. It also allows them to send money to subscribers on different networks. This innovative platform plays a critical role in the use of electronic transfer levies (Ofosu-Ampong, 2024).

The wake of COVID-19 left Ghana with serious macro-economic challenges with growing debt concerns. Hence, the Government of Ghana has no option but to find innovative ways to raise revenue through Ghana Revenue Authority (GRA) for its expenditure for the 2021 Budget Statement and Economic Policy of Ghana. Initially, the E-levy rate was pegged at 1.75% but due to public protest the rate was revised to 1.5% (Exemption of GHS 100 = $ 9 daily threshold) and was implemented in May 2022. After failing to raise the intended revenue, it was later revised to its current rate of 1% (2023) by removing the daily threshold. (Electronic Transfer Levy Act, 2022 Act 1075). Table 1 gives a break-down of year-on-year MoMo transaction as provided by the Central Bank of Ghana on their website. The MoMo tax was introduced to raise venue towards the governments' expenditure in the following areas; 1. Support entrepreneurship drive to create more jobs for the youth in Ghana (U-Start program); 2. Support infrastructure and capital expenditure; 3. To capture the informal sector in tax collection. Based on the transaction breakdown (see table 1), the Ministry of Finance proposed a target of GH ₵4.9 billion in its first year of implementation. Following delays in parliamentary approval, the E-Levy tax only generated GH ₵93.7 million after its approval in May 2022.

In less than ten (10) years of the introduction of MoMo, the volume of transaction has grown from less than GH ₵1 billion in 2012 to GH ₵158 billion at the end of 2021 (Table 1). In the same period years, the transaction volume also saw a 200% growth making MoMo an area of interest to the government of Ghana to introduce an E-Levy tax.

Table 1. **Mobile Money Statistics in Ghana (2012–2022) transactions year-on-year.**

Year	Registered Accounts	Active Accounts	Transaction Volume	Transaction Value (GH ₵)*
2012	3,778,374	345,434	18,042,241	330,000,000
2013	4,393,721	991,780	40,853,559	1,300,000,000
2014	7,167,542	2,526,588	113,179,738	4,181,000,000
2015	13,120,367	4,868,569	266,246,537	9,580,000,000
2016	19,735,098	8,313,283	550,218,427	20,130,000,000
2017	23,947,437	11,119,376	981,564,563	35,420,000,000
2018	32,554,346	13,056,978	1,454,470,801	48,520,000,000
2019	32,470,793	14,459,352	2,009,989,300	59,490,000,000
2020	38,473,734	17,142,677	2,859,624,191	100,742,000,000
2021	48,300,000	17,900,000	3,578,000,000	157,999,363,200

Source: Bank of Ghana, 2022, *Transaction values are converted to $ by the end of year exchange rate.

Comparative to other African countries, (see table 2) the tax rate relative to the type of transaction carried out. In Kenya, the tax impose on MoMo transaction is one of the highest in Africa. First introduced in 2012 at 10%, then 12% in 2018 and currently at 15% on all chargeable transactions on M-PESA. A look across the African continent, Côte d'Ivoire has the highest with a transactional tax fee of 18% as compared to Ghana's 1%. Uganda introduced its MoMo tax in 2013 at 0.5% with Cameroon starting relatively low tax levy of 2% of transaction value.

Table 2. Comparative rates in other African countries

Country	Introduced	Rate (%)	Current rate (%)	Current Incidence
Cameroon	January 2022	0.2	0.2	Mobile money, Electronic and Bank Transfers
Côte d'Ivoire	January 2018	7.2	18.0	Payment and cash transfers
Ghana	May 2022	1.5	1.0	Mobile money, Electronic and Bank Transfers
Kenya	January 2013	10.0	15.0	On transaction fees
Tanzania	July 2021	3.0	10.0	Sending, Transfer, Withdrawal
Uganda	June 2018	1.0	0.5	Withdrawal Only
Zimbabwe	October 2018	2.0	2.0	Mobile money, Electronic and Bank Transfers

Source: Author compilation based on GSMA 2023 data set

2.2 Tax system in Ghana

Tax mobilization in developing countries has encounter various obstacles, including the enforcement of tax laws, financial leakage due to manual tax collection, dysfunctional e-payment systems (Ofosu-Ampong, 2024). Ghana over that years have employed various reforms in its tax system. Especially moving away from paper-based filing of taxes at the GRA to avoid leakage of funds with a manual tax collection system (Mansor and Tayib, 2010). Hence the transition from traditional to digital platforms, and the deliberate avoidance of payment by taxpayer. The Ghana Revenue Authority (GRA Act 2009; Act 791), is the agency responsible for the implementation and collection of taxes in Ghana. Until 1995, Ghana had relied heavily on petroleum tax and sales tax. In March 1995, Value Added Tax (VAT) was passed at a flat rate of 17.5% to replace sales tax which was 15%. This was to increase revenue mobilization for the government, but was withdrawn after mass demonstrations in the country and the sales tax was re-introduced at a rate of 15%. However, in 1998 VAT was reintroduced at a rate of 10% in the same year Taxpayer Identification Numbers (TIN) was introduced to make assessment and collection of taxes from the informal sector easier.

The VAT was espoused for two reasons. First, to bring Ghana in line with ECOWAS protocol that makes it mandatory for member state to adopt the VAT system by the end of 1999 (Osei, 2000). Second, this system of taxation brings about efficiency, less burdensome in terms of its incidence, and its overall impact more equitable than the sales tax (GOG, 1994). All these efforts failed to widen the tax net. Though there are other electronic payment system in Ghana for the payment of taxes for both retail and wholesale through the National Switch (Debit card, gh-link) and E-Zwich payment, but MoMo E-Levy is by far the single most penetrated taxes payment system introduced through the telcos. Hence, the introduction of the E-Levy Act 2022 Act 1075 by GRA is an innovative way for subscribers on the MoMo platform to pay direct taxes to the government to generate specific amount for developmental projects (Ofosu-Ampong, 2024).

2.3 The Mobile Money; Digital Platform

The use and evolution of electronic platforms as a mode of payment system has been on the rise among developing economies. As of 2018, Ghana had five (5) different payment methods, Cash, Bank Account Transfers, Mobile Momey, PayPal and Debit Card (Statista, 2019). By August 2023 MoMo transactions has exceeded GH¢ 1.19 trillion (BoG, 2023) making MoMo the most widely used mode of payment in Ghana. This has been possible because of the investment in the Fintech space by the telcos and the Central Bank of Ghana to drive and provide financial products and services for its citizens (Suri, 2017). MoMo has empowered citizens who were previously unable to access banking products and services due to regulatory and procedural barriers imposed by traditional banks (World Bank, 2018). Global System for Mobile Association (GMSA) in 2022 reported that, there were more than 1.35 billion registered mobile money account worldwide, a tenfold increase from 134 million in 2012 and continues to grow year-on-year challenging all expectations.

Through the MoMo platform, individuals who otherwise do not have bank accounts can conveniently use their mobile phones to effect payment and receive monies into their account. This is possible because of the provision of the digital payment platform. The key actors in the MoMo business ecosystem include the user (subscriber), agents and service providers, banks, regulators, and merchants (Mugambi et al., 2014). The introduction of this digital platform offered the Government of Ghana a unique opportunity to explore and streamlined governance

processes (Ofosu-Ampong, 2024) so that they can become a significant determinant in the provision and use of MoMo platform services (Ofosu-Ampong, 2024). The MoMo transactions over the year has seen a steady growth until the Government of Ghana decided to introduce the E-levy on all MoMo transactions to enhance revenue mobilization and broaden the tax base, which was the panacea to the abolish of all road tolls in Ghana in the late 2021 (Ofosu-Ampong, 2024). Figure 2 illustrates the relationship among primary actors on the digital platform. The taxpayer (subscriber), the telcos (service provider) and Central Bank (regulator), all play a significant role in shaping the digital landscape. The policy maker (government) plays a critical role in providing the infrastructure for the smooth running of the platform. As the government together with the telcos provide the necessary infrastructure, the telcos serves as an intermediary, bringing together the policy maker (GRA) and the subscriber. These two actors on the platform ensures that all transactions are carried out smoothly (Ofosu-Ampong, 2024).

Figure 2
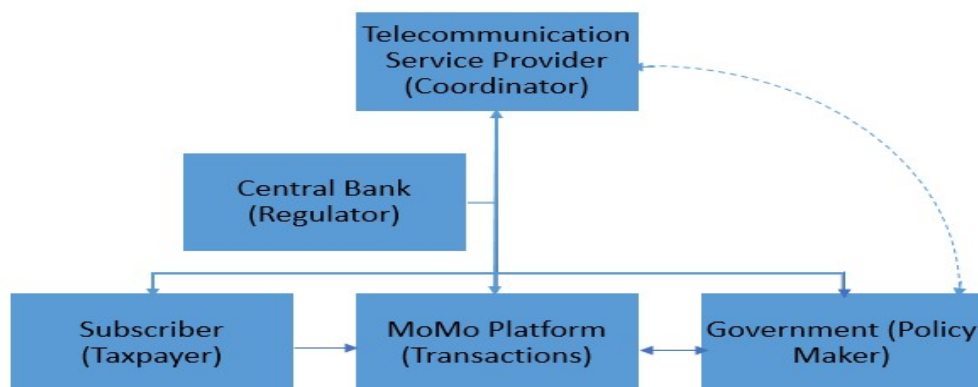
Source: adopted from Ofosu-Ampong (2024). Telecommunication platform-based MoMo service.

2.4 Theoretically Based Framework

Since the inception of mobile money as a means of payment, various models and theories have tried to explain its acceptance. Fishbein and Ajzen (1975) used the Theory of Reasoned Action (TRA) while Davis (1989) employed the Technology Acceptance Model (TAM). Subsequently, Ajzen (2005, 1991) explained it with the Theory of Planned Behaviour (TPB), while Rogers (1995) espoused the Innovation Diffusion Theory (IDT). Venkatesh et al. (2003) with his seminar work tried to explain the acceptance and use of electronic payments with the Unified Theory of Acceptance and Use of Technology (UTAUT).

On the other hand, few studies have focused their attention on sociocultural factors such as studies done by Senyo and Osabutey (2020) though not specifically in the context of compliance (Ofosu-Ampong, 2024). Additional researchers such as Ofosu-Ampong (2024) has also espouse the concept of inherent innovativeness of the government as a factor influencing digital taxation on service platform users. Again, limited studies have looked at attitudes of MoMo users' intentions and the actual use of MoMo services with the introduction of a digital tax component by the government. Giving the existing theories, this study will employ an interrogative approach based on the Technology Acceptance Model (TAM) which also draws in some aspects of societal acceptance of MoMo as a means of revenue generation for the government.

2.5 Technology Acceptance Model (TAM)

The acceptance and the use of technologies can bring direct and long-term benefits at the macro and micro levels, such as improved performance, financial and time efficiency and convenience (Foley Curley, 1984; Sharda, Barr & McDonnell, 1988). The Technology Acceptance Model (Davis, 1989), or TAM, espouses two factors that determine whether a new technology system will be accepted by its potential users; (1) perceived usefulness, and (2) perceived ease of use. The objective of TAM is to explain the concept acceptance of technology and to predict the behavior of the user and provide a theoretical explanation for the successful implementation of the

technology. The practical objective of TAM is to inform practitioners about measures that they might take prior to the implementation of systems Marikyan and Papagiannidis (2023). The framework based on the Theory of Reasoned Action, which provided a psychological perspective on human behavior (Marikyan and Papagiannidis, 2023) that perceive the acceptance and adoption of the introduction of a new technology (Davis, 1989; Davis, 1993). This study adopts this model in attempt to examine MoMo subscribers' adoption of digital tax, focusing on the Ghana government imposing E-Levy on electronic transfers as an aggregated tax for revenue mobilization.

3.0 Research Methodology

3.1 Data analysis techniques

The review paper research methodology was based on secondary data. The data for this study were obtained from multiple data source, academic studies done on E-Levy, Ghana Revenue Authority (GRA) website, BoG, ISSER and Ghana Statistical Services. Even though the emergent and use of MoMo as a means of tax mobilization in developing countries, has been an insightful contribution of literature in this subject area. Other studies have emphasis on technological advancement and its readiness (Narteh et al., 2017; Rahman et al., 2017) to support tax mobilization to include user behavior, performance expectancy, effort expectancy, self-efficacy, structural assurance, optimism, system quality, personal innovativeness, availability of mobile and educational infrastructure as key determinants of the successful adoption of MoMo services (Kabengele and Hahn, 2021; Malinga and Maiga, 2020). Another import study by (Ofosu-Ampong, 2024) examined the inherent innovativeness of the government as a factor influencing digital taxation on service platform users. Although some seminar works has been done by Senyo and Osabutey (2020) focusing on sociocultural determinant factors, few has based their studies on Technology Acceptance Model (TAM). Some underpinned theories used as a basis for such studies stems on Task-Technology Fit (TTF), Diffusion of Innovation (DOI), often analyzed using regression analysis (Ofosu-Ampong, 2024). This study will discuss and review its findings based on the TAM Theoretical framework and how it impacts on the policy. Referring to Bryman (2012) research guidelines all data source were appropriately cited for ethical consideration.

4.0 Results

4.1 Findings

Ghana's banking survey in 2019 indicated that, while some users of MoMo identified low transaction costs as a benefit of using the electronic system, others revealed high transaction cost as a challenge (PwCIL, 2019).

4.1.1 Impact of MoMo Tax as a policy

A crucial aspect of digital tax fairness is the citizens' willingness to pay their fair share of taxes (Ofosu-Ampong, 2024), as stipulated by the laws of a country. In the case of Ghana, as of August 2023, Bank of Ghana indicated that active mobile money accounts stood at 21.6 million with mobile agents standing at 556,000 nation-wide respectively (BoG, 2024). The E-levy as an aggregated tax policy (Electronic Transfer Levy Act, 2022 Act 1075) covers mobile money transfers between wallets on the same electronic money issuer, transfer from a wallet on one electronic money issuer to a recipient on another electronic money issuer, transfer from bank accounts to mobile money wallets, transfer from mobile money wallets to bank accounts and bank transfers on an instant pay digital platform or application which originates from a bank account which belongs to an individual (Ghana Revenue Authority, 2022). In all these transactions an agent could be involved but they are exempted under the Levy Act to reduce the tax burden on subscribers. Figure 3 gives the share of Ghana population with active mobile account from 2018 to 2023. As of January 2023, 59.7% of the population aged 15 years and older had a mobile money account in Ghana meaning that MoMo has a 60% penetration of subscribers above 15years of the total population (see figure 3). As indicated by Lyrio et al., (2018) electronic systems and e-government systems promote accountable governance and ensure that the public purse is secured with less manipulation.

Figure 3. Penetration of subscribers above 15years of the total population
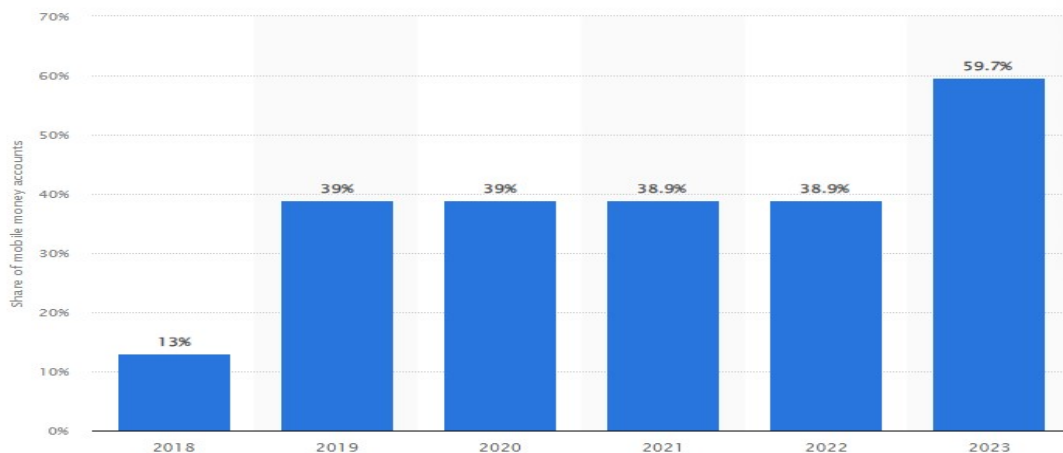
Source: Statista 2024

Ofosu-Ampong K. (2023) also found that consumers interested in something new is likely to change their behavior towards the adoption of an innovative digital tax such as E-Levy. Furthermore, users of these platform services enjoy a certain level of satisfaction due to the convenience of transactions, which enhances productivity (Upadhyay et al., 2021). The platform ecosystem created by the subscribers, the telcos and the government highlights greater stakeholder inclusiveness (Ofosu-Ampong, 2024).

Figure 4. Aggregated amount of MoMo transaction
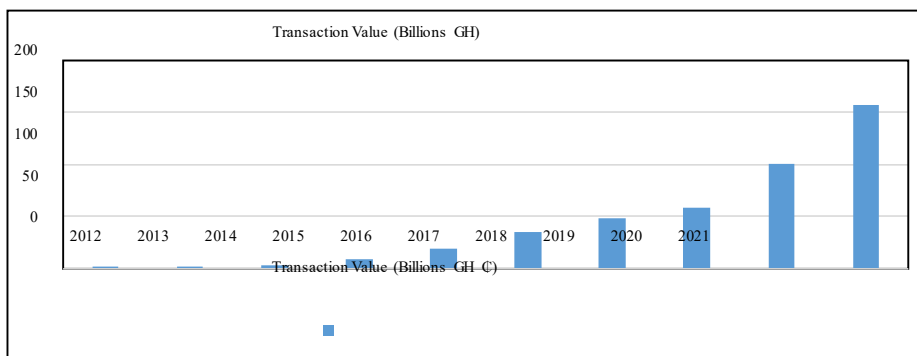
Source: Bank of Ghana, 2022

The government then leveraged on the growing active numbers of subscribers and decided to employ an innovative means of raising taxes. Figure 4 clearly shows that the aggregated amount of MoMo transaction year-on-year in the same month continues to grow with the biggest transaction of GH ₵158 billion (see table 1) occurring in 2021.

5.0 Discussion

5.1 The effect of E-Levy as an aggregate tax on MoMo transactions

Based on the Ministry of Finance projections and targets, the introduction of E-Levy tax (MoMo tax) is to widen the tax net to cover the high earners in the informal sector (Anyidoho et. al., 2022) as well as protect the poor at the lower end in the economy. Though the use of MoMo is more efficient than the traditional banking system

where customers has to be physically present at the bank to transact business. While data from the Central Bank indicates a high volume of transaction from 2012 until 2022 the perceived amount of revenue intended was not realized. Studies carried out by (Anyidoho et. al., 2022) indicated that though the threshold of GH 100 (Equivalent of $9) and below shielded about 41% of MoMo users in the informal sector within the lower earning group (Anyidoho et. al., 2022). Subsequently, when the MoMo transaction amounts over the threshold are calculated as a share of earnings, they were paying more in taxes and transaction fees imposed by the telcos than the high earners. In the application and the introduction of E-Levy, the policy makers did not consider the underpinning theoretical concept for the buy-in of the intended taxpayers.

Also, policy makers did not introduce the E-Levy as a possible inclusive tax policy based on empirical data as analyzed throughout this study. Karombo, (2022) indicated that the levy introduced is seen as a "lazy" and punitive tax collection. Clearly, the high volume of transaction as recorded by the Central Bank does not mean a percentage could be converted into immediate tax (revenue). Again, the cost on burden on users is evident that, while paying for the E-Levy tax they also pay for transaction fees imposed by the telcos, making transactions costlier especially for the poor (Anyanzwa, 2019).

The importance of social norms and behavioral change literature as a key factor influencing human behavior (Bobek et. al., 2013) in the acceptance of TAM is important to the introduction of such important levy. Clearly, the effect of introducing of E-levy as an aggregated tax is not equitable, rather the levy is seen as a regressive tax (Anyidoho et. al., 2022) on the poor and vulnerable in the society. The intended purpose of MoMo was to ensure that the 60% (BoG) of the "unbanked" population of Ghana are included in the financial space hence the introduction of the interoperability (GhIPSS, 2022) payment platform (where MoMo accounts are linked to bank accounts and MoMo accounts on different telco platforms together). The E-levy tax over the period has seen high volumes of transactions (Figure 4), it has also seen more MoMo accounts being inactive (Figure 5) as subscribers are finding different alternatives to transact financial business as sending huge or big transactions at 1.5% and/or 1% will not be cost-effective. This has worsened the welfare of poor earners. In effect, the government should find other alternatives to widen the tax net to include the informal sector (the high earners).

5.2 Penetration level of E-Levy among the untaxed

Prior to the implementation of the e-levy, the government assumed that it was an innovative and efficient way of targeting the high earned informal sector. These high earn (MSMEs) sectors were perceived to be under-taxed (Anyidoho et. al., 2022) but were also perceived to be using MoMo for huge transactions. An important question which the government failed to answer, is whether mobile money usage was concentrated among higher income earners? (Anyidoho et. al., 2022). The answer is no because there was no empirical data to support that assertion.

Suri and Jack (2016) suggested that holding MoMo accounts means the low earners and/or the poor can also access financial support from their social networks conveniently and with ease without a bank account. With the total MoMo transactions hitting GH ¢1.190 trillion by August 2023 (BoG, 2024) with active mobile money accounts standing at 21.6 million and mobile agents standing at 556,000 nation-wide (BoG, 2024) it can be inferred that MoMo inclusion has been largely successful. Just like the Kenyan M-PESA, Ghana has also achieved financial inclusion for the "unbanked" population especially in the rural areas of Ghana (Ofosu-Ampong, 2024). With the expansion of MoMo accounts the services offered by the telcos has gone beyond sending and receiving money through several other services including accessing microcredit and bank accounts (Akolgo, 2023). Hence, measuring the application of E-Levy through TAM and social norms construct as part of the theoretical underpinning of this study and considering the impact of the E-Levy as an aggregate tax, it can be concluded that, the government should have considered the societal expectations, human behavior and one's judgment of expectations regarding the appropriate rate on the levy (Cialdini and Trost, 1998).

Figure 5. Registered versus active MoMo account users
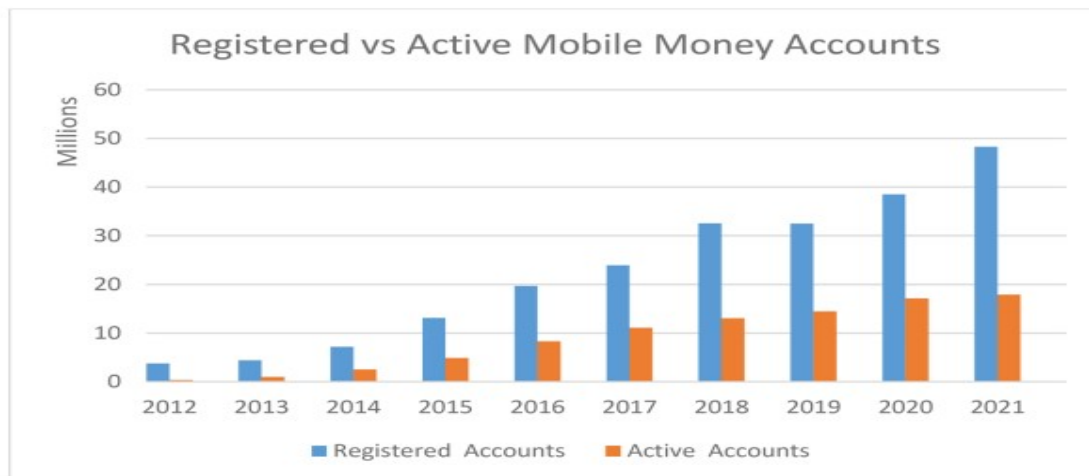
Source: Bank of Ghana (2022)

The innovation of MoMo through this study can be said to be widely accepted, but the negative impact and penetration of the tax rate was received with a lot of apprehension. It was first introduced in 2021 after the wake of COVID-19 economic crisis at the rate of 1.75% which was fiercely resisted in Parliament of Ghana by the opposition party. Subsequently, it was passed in May 2022 at a reduced rate of 1.5% (currently 1% in 2023) which still did not have a positive penetration outcome. It resulted in inactive or dormant MoMo (see figure 5) accounts as subscribers refused to pay. As much as subscribers appreciated the innovativeness of government initiative with the E-Levy, they were of the view that the rate would have been further reduced to 0.5% to have the positive impact and satisfaction needed which was echoed throughout the limited town hall engagement by the Finance Minister and his team for the citizens' acceptance.

5.3 E-Levy tax a political tool to generate revenue

MoMo payment platform, allowed the unbanked and underserved across most Africa countries to experience flexible and convenient payment services (Akolgo, 2023). Subsequently, the Banks recorded a significant growth in the adoption of digital financial services (interoperability) among the banks, in spite of the negative impact of the COVID-19 pandemic on the Ghanaian economy. Before the passing of the E-Levy Act, members of the Parliament of Ghana subjected themselves to verbal and physical (both majority and minority) abuse because of the percentage rate. The E-Levy as an aggregated tax is targeted to support entrepreneurship drive initiated by the government; to support and finance capital expenditure as well as infrastructure development. It was also linked with the governments agenda of "Ghana Beyond Aid" which the Senior Minister and Chairman of the Ghana Beyond Aid Committee put it:

"Prosperous and self-confident Ghana that is in charge of her economic destiny; a transformed Ghana that is prosperous enough to be beyond needing aid, and that engages competitively with the rest of the world through trade and investment."

Critics have pointed out, however, that informal workers (who make up 89% of total employment in Ghana) already pay a range of fees and taxes (Anyidoho et. al., 2022) and some of them earns well below national income tax thresholds (Rogan, 2019). Therefore, in an attempt to focus attention on issues of fairness and equity in taxation (Keen 2008, 2012; Sampere 2018) the government pushed the E-Levy Act intended to widen the tax net. While other researchers are worried about the proliferation of tax havens or tax breaks granted to large multinational companies who are far removed from the realities of their daily experiences with taxation (Sampere, 2018), the government is busy imposing E-Levy as an aggregated tax on low earners. In effect, for the low earners, monies (wages) that hit their MoMo wallets are already taxed because it serves as their bank account.

Anyidoho et. al., (2022), in their seminar studies indicated that 32% of their respondent who were inclined with the governing New Patriotic Party (NPP) supported the introduction of E-Levy. This shows a low approval of the

tax policy, hence the overall taxpayer perceptions and attitude towards the MoMo tax is low. This striking evidence highlights the ultimate political hindsight in the introduction of the levy. Again, the importance of tax compliance attitude in digital taxation such as E-Levy is inherent with the behavior and evaluation of the subscribers (taxpayer) satisfaction and post-adoption behavior relating to the application of TAM. From the literature review, the implementation of E-Levy as an aggregate tax in this case can clearly be perceived as a political tool to raise revenue for the government but not necessary to widen the tax net and protect the poor.

6.0 Conclusion

The introduction of MoMo in Ghana has widely being successful and continue to grow as an inclusive cashless economy. E-levy was designed by policy makers to protect the vulnerable and widen the tax net to capture the high earners within the informal sector (mostly the SMEs), but its impact has rather worsen the lower earners welfare. This means that the equity and fairness drive is not being achieved by the introduction of E-Levy as an aggregated tax. It is rather eroding the macro-economy gains achieved over the years through the introduction of MoMo. Evidence from the study also suggest that if the E-levy is maintained at its current rate (1%) without any threshold, then periodically the government should inform the citizen about the revenue generated as well as the progress of projects the revenue was intended pursue. With this transparency, attitude of citizen towards the E-Levy tax will change because taxation is a deeply political process (Rogan, 2019) and the main features of tax compliance, accountability and the shaping of the social contract depends on the broader state of politics, the strength of civil society, and the precise nature of the tax regime in question (Prichard 2009). Based on the growing needs of digital technologies and innovation among developing countries, Ghana government should design the E-Levy based on social construct of tax compliance (Ofosu-Ampong, 2024) to ensure perceived acceptance.

Penetration level of E-Levy among the untaxed

1. Introduction of electronic tax policy such as E-Levy should be based on empirical evidence such as user satisfaction and effective attitudinal acceptance based on the theory of TAM. This will ensure smooth implementation devoid of inherent dissatisfactions among citizens.
2. Evidence from the study also suggests that the government should be innovative to design an alternative revenue generation that will be able to capture the higher earners in the informal sector to reduce the financial burden on low earners. For instance, the idea of property tax could be introduced on an electronic platform to raise more revenue for its developmental and capital expenditure.
3. Again, if the E-levy tax is to be maintained as a form of aggregate tax, then threshold should be adjusted to incorporate rising inflation periodically.
4. If Government of Ghana needs to raise more revenue for its expenditure, they should stop granting tax exemptions to big multinational corporations and introduce more supportive pro-poor policies not E-Levy taxes.

Suggestions for future research

Further research on stakeholder engagement between the Telcos, Bank of Ghana, Ministry of Finance, the taxpayers and GRA is needed to address concerns of the E-Levy as an aggregated tax to include the low earners so as not to threaten the gains made in the financial inclusion.

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