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## Article

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Cogent Business & Management

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*Suggested Citation:* Asamoah, Moses Kumi; Nketiah-Amponsah, Edward; Ansong, Joseph Danquah; Agyekum, Boadi (2023) : Education dimensions relevant to successful electronic levy mobilization in resource-rich yet poor countries in Africa, Cogent Business & Management, ISSN 2331-1975, Taylor & Francis, Abingdon, Vol. 10, Iss. 3, pp. 1-22, <https://doi.org/10.1080/23311975.2023.2276540>

This Version is available at:

<https://hdl.handle.net/10419/294715>

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**To cite this article:** Moses Kumi Asamoah, Edward Nketiah-Amponsah, Joseph Danquah Ansong & Boadi Agyekum (2023) Education dimensions relevant to successful electronic levy mobilization in resource-rich yet poor countries in Africa, Cogent Business & Management, 10:3, 2276540, DOI: [10.1080/23311975.2023.2276540](https://doi.org/10.1080/23311975.2023.2276540)

**To link to this article:** <https://doi.org/10.1080/23311975.2023.2276540>



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Published online: 21 Nov 2023.



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Received: 15 August 2023  
Accepted: 24 October 2023

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## MANAGEMENT | RESEARCH ARTICLE

# Education dimensions relevant to successful electronic levy mobilization in resource-rich yet poor countries in Africa

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**Abstract:** First and foremost, the study explored why countries in Africa are rich in natural resources yet resort to e-levy legislation for more revenues. In addition, the study investigated dimensions of education needed to facilitate successful mobilization of e-levy revenue in resource-rich yet poor countries in Africa. Qualitative exploratory design, semi-structured interviews, judgmental and snowball sampling techniques were used for the study. Twelve (12) scholars from US ( $N = 3$ ), Uganda ( $N = 3$ ) Canada ( $N = 3$ ), Ghana ( $N = 3$ ) were interrogated. The paper was guided by the natural resource-cursed and social learning theories. Thematic analyses were used to analyse the data. It was found that although African countries are rich in natural resources yet they face challenges generating revenue from natural resources due to mismanagement, poor leadership and weak governance. They also find it difficult to mobilize revenues from e-levy too because of the informal nature of the economy, lack of financial inclusion, corruption, the disinterest of the public in the e-levy legislation as well as inadequate education on the e-levy concept. But the advanced economies are successful in generating revenue from e-levy. Proactive leadership and governance in managing natural resources, addressing mismanagement, and dealing with corruption and its negative effects are required to make things happen in Africa. African economies need to be more formalised and financial inclusion deepened. Proper accounting of state revenues to the citizenry must be enforced. E-levy education, civic education, digital literacy, ethics and legal education, can significantly contribute to the success of e-levy revenue generation in Africa.

**Subjects:** Sustainability Education, Training & Leadership; Education Policy & Politics; Educational Research

**Keywords:** natural resource-rich; poor countries in Africa; E-levy; dimensions of education

## 1. Introduction

The digital economy has grown substantially over the last decade because of its potential to improve global quality of life and economic well-being (Mpofu, 2022; Munoz et al., 2022). The United Nations Conference on Trade and Development (United Nations Conference for Trade and Development, 2018), indicates that approximately 21 million Africans frequently engage in online purchases and use formal financial services to meet their demands. Additionally, the COVID-19

pandemic boosted the usage of the digital economy by altering how individuals connected and how businesses operated, leading to the digitalization of most processes. This resulted in an increased usage of digital financial services, particularly mobile money and money transfers, which gained popularity in low-income nations, including countries in Africa (Bunn et al., 2020).

As of 2019, 469 million mobile money accounts (about 40% of the region's population) had been registered in Sub-Saharan Africa, with over 181 million accounts active on monthly basis. In 2020, 47% of the population (548 million) had registered mobile money accounts, with 29% of those accounts being active users (Andersson-Manjang & Naghavi, 2021; Clifford, 2020). The average number of mobile money accounts in low-income nations more than doubled as compared to the number of commercial bank accounts while mobile money usage was equal to or greater than commercial bank usage in many lower-middle-income countries (Anyidoho et al., 2022; Bazarbash et al., 2020).

The COVID-19 pandemic had a significant deleterious impact on numerous sectors of the economy, including manufacturing, tourism, and mining, leading to financial losses, employment losses, and decreased economic activity (Agur et al., 2020). This resulted in lower taxation income for countries, forcing governments to seek alternate revenue sources to pay public expenditures (Becker, 2021; Megersa, 2020). Faced with falling commodity prices globally, rising debts, budget deficits, and a low tax-to-GDP ratio, most developing countries, including Uganda, Congo, Côte d'Ivoire, Malawi, Zimbabwe, and Ghana, were under external and internal pressure to explore innovative ways to increase domestic resource mobilization and broaden the tax base (Clifford, 2020; Djokoto et al., 2022).

Consequently, several African countries implemented specific taxes on digital financial services due to its rapid expansion and potential as a source of untapped revenue for African states (Mpofu, 2022; Munoz et al., 2022). Hence, tax legislation was required to harness the prospects of the digital economy which led to the increasing interest in taxing money transfers and mobile money transactions through mechanisms such as the Electronic Levy (E-levy) (Berger, 2020; Mullins et al., 2020; Penteriani, 2023). These taxes provide tax authorities with an opportunity to broaden the tax base, capture the informal economy, and supplement traditional taxes (ATAF, 2020a; Clifford, 2020; Mpofu, 2022). Towards this end, the ATAF (2020b) suggested ways to implement digital services tax legislation to guide African countries on the structure and framework for implementing these taxes in a report. Also, Deloitte (2020) advocated a 1% to 3% tax on gross annual revenue from digital transactions occurring in market jurisdictions to provide a fair balance among stakeholders.

In the implementation of these electronic levies, the Ugandan government approved a proposed law in 2018 that imposed a 1% levy on all mobile money transactions, including cash-in, transfer and cash-out (CSBAG, 2018; URA, 2019). Due to public outrage, the tax law was amended to a 0.5% tax only on the value of withdrawals. Similarly, the Republic of Congo implemented a 1% levy solely on cash-out transactions for mobile money payments (Clifford, 2020). Malawi's government suggested a 1% withholding tax on all mobile money transactions (Clifford, 2020; IMF, 2019b). The government of Côte d'Ivoire also sought to impose a 0.5% mobile money transaction tax in 2018, but it was immediately repealed due to public protests. Following that, in 2019, the government imposed new mobile money sector-specific levies totaling 7.2% (Ayemoba, 2018; Clifford, 2020).

In response to fiscal pressures, worsening debt dynamics, and the need for a fiscal adjustment program to restore debt sustainability, the government of Ghana imposed an E-levy of 1.5% on electronic transfers exceeding 100 GHS (Anyidoho et al., 2022; Clifford, 2020; Djokoto et al., 2022; Penteriani, 2023). The government, however, reduced the rate to 1% and eliminated the 100-GHS threshold. The abolition of the 100 GHS threshold, on the other hand, was rejected by Parliament (Anyidoho et al., 2022).

Despite the controversies in the implementation of the electronic tax in enhancing domestic revenue mobilization, tax revenue increased marginally in developing countries due to ineffectiveness of some of their tax policies. In contrast, revenue mobilization in developed countries increased significantly (Ahmed & Gillwald, 2020). Many of these were visible in industrialized countries such as Australia, which anticipated an increase in revenue by \$5 billion, including \$242 million mobilized through digital service taxation (Ahmed and Gilwald, 2020; Bunn et al., 2020; OECD, 2015).

Though limited, studies on e-levy in Africa provide us the requisite knowledge of the views of the public regarding e-levy legislation (Agyeiwaa-Afrane et al., 2023; Amoah et al., 2023; Djokoto et al., 2022; Mbilla et al., 2020; Nutassey et al., 2023). It is worth noting that none of these studies examined the education dimensions relevant to successful electronic levy mobilization in Africa. Again, largely, all the earlier studies adopted a quantitative approach, while this study employed a qualitative approach. The barriers facing African countries in generating revenue from their natural resources as well as e-levy, as against advanced economies have been discussed in the literature section (ATAF, 2020b; Bunn et al., 2020; Clavey et al., 2019; Clifford, 2020; IMF, 2015, 2019a; Mahadea & Zogli, 2018; OECD, 2019; Rukundo, 2020).

The extent to which education dimensions can contribute to the successful mobilization of natural resources and e-levy revenues has also been investigated. For example, in ensuring mass awareness of the significance of taxation, tax authorities provide tax education to increase tax revenues (Hanapi, 2022, Janouková & Sobotoviová, 2013; Rasmussen & Nørgaard, 2018). Hence, tax knowledge, legal and ethical education, civic education, financial education, digital literacy are all critical in improving citizens' tax compliance, effective financial resource management, and governance (Agnieszka, 2015; Ashby et al., 2009; Blechová & Sobotovičová, 2016; Bornman & Wassermann, 2020; Das, 2021; Hastuti, 2014; Kasyoka et al., 2022; Koretskaya-Garmash, 2017; Lai et al., 2013; Martinov-Bennie & Mladenovic, 2015; Mbithi & Yiega, 2019; Wiquar et al., 2022). The literature review section provides broader extension to the above citations. It is also worth noting that the natural resource-cursed and social learning theories (Bandura & Walters, 1977; Bazarbash et al., 2020; Shroder, 2014) have been employed to undergird the current study.

### **1.1. The purpose, objectives, and research questions**

The purpose of the study was to find out the influence that dimensions of education can have on African countries to champion the strategies required to successfully generate sufficient e-levy revenue to help resolve structural and fiscal challenges of countries in Africa. The objectives of the study are set out as follows:

- a. To find out the reasons why countries in Africa are much endowed with natural resources yet they fall on e-levy for revenue generation.
- b. To investigate why African countries, fail in generating adequate revenues from e-levy.
- c. To explore why the advanced countries, have successful e-levy revenue generation practice.
- d. To find out the dimensions of education that can enhance success in e-levy revenue mobilization.

Based on the objectives of the study the following research questions were asked:

- a. Why is it that countries in Africa are much endowed with natural resources yet they fall on e-levy for revenue generation?
- b. Why do African countries fail in generating targeted revenues from e-levy?
- c. Why do advanced countries have successful e-levy revenue generation practice?

- d. What are the dimensions of education that can enhance success in e-levy revenue mobilization?

The data collected from the field provides answers to the above research questions, as well as attempt to achieve the objectives of the current study.

## 2. Theoretical and related literature review

### 2.1. *The natural resource-cursed theory*

Natural resource curse refers to the paradox that countries with abundant natural resources tend to have lower economic growth and poorer development results than those with fewer natural resources (Badeeb et al., 2017; Frankel, 2010; Henri, 2019; Shroder, 2014). The theory suggests that countries with abundant natural resources fail to translate that advantage into favourable development outcomes. However, we still have exceptions of countries endowed with natural resources and are still developed or managing their natural resources well, such as Canada, Chile and Botswana. Natural resource curse can be defined as an economic event that occurs when a country has a quick increase in revenue generated from natural resources, causing a decline in other sectors of the economy (Liang et al., 2023; Liu & Chen, 2022).

Natural resource curse is classified into two categories: the Dutch disease effect and the rent-seeking theory (Tian & Feng, 2023). The term “Dutch disease” refers to a situation in which the natural resource boom sector causes the exchange rate to appreciate, crowds out the manufacturing sector, and harms the economy (Alssadek & Benhin, 2023).

The export of natural gas, which created a quick flood of capital from the natural resource industry, caused the Dutch currency to appreciate in the Netherlands, reducing the competitiveness of other commodity exports (Liang et al., 2023). This increase in value also reduced the cost of imports. Consequently, the country’s overall export market declined, imports surged, and the balance of trade became unfavourable. Also, the appreciation of the currency decreased income from industries other than natural resources. As a result, it led to unemployment and a recession in the country (Chen et al., 2023). Furthermore, increased wealth from the natural resource sector attracts foreign investment and labour while increasing delivery and capital costs in other industries, thus lowering their competitiveness (Liang et al., 2023; Long et al., 2017).

Thus, when a country becomes overly reliant on its natural resource industry, there is tendency for its economy to suffer.

Also, the natural resource curse assumes that growing oil-rich countries are prone to rent-seeking behaviour (Frankel, 2010; Henri, 2019). Capturing the rent created by the sale of natural resources causes power conflicts, which destabilise the economic activities of resource-rich countries (Kouotou & Ondo, 2023). This is due to activities such as corruption, mishandling of petroleum money, bad governance, socio-economic and political crises, and regional conflicts, all of which can undermine democratic processes, stability, growth, and development (Adams et al., 2019; Arezki & Gylfason, 2011). While the natural resource curse theory provides a theoretical underpinning for examining the performance of non-resource tax revenues amidst natural resource discovery such as oil, previous studies do not support the hypothesis in Ghana (Chachu & Nketiah-Amponsah, 2022; Kopiński et al., 2013) partly due to its small oil production volumes (approximately 120,000 barrels per day). It is against this backdrop that Ghana continues to explore other innovative revenue sources such as the e-levy to complement revenues from other taxes.

### 2.2. *Social learning theory*

Bandura and Walters (1977) outlines the key components of social learning in the form of attention, retention, motor reproduction, and motivation. The attention process involves the

individual's ability to acquire knowledge from others by actively paying attention to their actions. Retention refers to the individual's capacity to remember the observed behaviour of another person even after the person is no longer present. The motor reproduction entails the individual's ability to translate observed actions into their own. In compliance with e-levy or tax revenue generation, the theory argues that individuals are more likely to fulfil their tax or e-levy obligations when they perceive that their acquaintances, friends, and other members of the community also fulfil their tax obligations. Hence, it is pertinent to elucidate the conduct of a taxpayer with respect to tax compliance, wherein taxpayers exhibit obedience when they directly perceive and encounter the tax system, particularly upon recognising the tangible impact of taxes on economic advancement (Kusuma & Azzakhusna, 2019).

## 2.3. Related literature review

### 2.3.1. The perception of the public on e-levy

A number of studies have brought into light the perspective of the general public concerning e-levy legislation in Africa. Djokoto et al. (2022) conducted a pre-implementation survey to evaluate the perspectives of individuals in Ghana regarding the prospect of taxing electronic transactions. The researchers employed a Google Form questionnaire to gather data from a sample of 460 participants. The survey was disseminated via WhatsApp and Twitter. Using bivariate analysis, it was found that the respondents exhibited a significant inclination towards rejecting the proposed 1.75% E-levy rate fixed by the Government of Ghana. The authors also found that if the government proceeded with the implementation of the levy, a significant majority of consumers would discontinue their utilization of tax-eligible electronic services.

Amoah et al. (2023) also conducted a survey with 2,810 participants to assess the extent of individuals' inclination to financially contribute towards the implementation of the E-levy in Ghana. They evaluated a multivariate logit model and computed the corresponding marginal effects. Additionally, a robustness check was conducted utilizing the linear probability model to corroborate the findings. It was found that majority (46%) of the participants expressed their reluctance to pay any amount of E-levy irrespective of the transaction, whilst 21% indicated their willingness to pay a rate of 0.5% per transaction.

Also, Agyeiwaa-Afrane et al. (2023) conducted a quantitative study to examine the factors that influence the approval of the e-levy among Ghanaians. The purpose of their study was to enhance revenue generation considering limited borrowing opportunities. The researchers employed a sample of 600 respondents and adopted a complementary log log model, which was selected based on a series of tests. The study revealed that there was a higher likelihood of approval for the E-levy among older individuals and those who were linked with the ruling political party compared to the majority who did not express approval.

Nutassey et al. (2023) applied PLS-SEM to investigate the perception of 782 Ghanaians regarding e-levy and the effect on their intention to use the e-levy transaction that attracts the levy, their financial inclusion and financial well-being. The authors found that Ghanaians have inadequate education on e-levy. Additionally, the study revealed that Ghanaians have a negative perception of e-levy, they saw it as a curse. Consequently, Ghanaians intended to reduce their use of e-levy transaction. From the reviews above, it is clear that the general public has no interest in the e-levy concept. This might be more likely due to lack of knowledge of the relevance for the e-levy or the intentions for the e-levy.

Anyidoho et al. (2022) noted that in many lower-middle-income countries, the use of mobile money equates or is higher than commercial bank usage (Bazarbash et al., 2020). In connection with this development, governments, including the government of Ghana, have increasingly sought to tax digital financial services (mobile money taxes in particular), rooted in deeper discussions about the role that technology can play in increasing tax revenue and strengthening



overall state capacity. Educating the public on e-levy will bring a point of convergence between the behaviour of the public and the objectives of the governments for imposing e-levy.

### *2.3.2. Challenges confronting e-levy mobilization in Africa*

The challenges that developing countries encounter in mobilizing e-levy revenue differ from developed countries. These include poor leadership and management direction, the low digitalized tax administrative system, dominance of informal nature of African economies, and a lack of efficient and sustainable tax policy, to list just a few. But well-established financial reporting systems in industrialized economies have permitted the creation of private databases of commercial transactions on firm profitability, commodity, and service prices (Bunn et al., 2020). Access to this information comes at a cost that is manageable for tax administrations in wealthy economies but difficult for those in developing ones. The ability to meet international data confidentiality standards, can sometimes be a hurdle for tax administrations of developing economies (Clavey et al., 2019).

Furthermore, the predominance of an informal economy in most emerging countries is worrying when compared to developed economies. The informal economy employs more than 60% of the world's workforce, and more than 85% in Africa (Clifford, 2020). For example, the informal sector in Ghana contributes about 80% of the workforce and about half of the country's GDP. Ironically, the sector contributes just 5% to total tax revenues (Mahadea & Zogli, 2018), suggesting that the tax revenue potential of this sector has not been effectively explored. Thus, improving government revenues through the taxation of the informal sector is seen as a way not only to broaden the tax base but also to solve tax equity concerns (ATAF, 2020a), and address informality rather than modify existing tax regulations (Rukundo, 2020). Additionally, little effort is made to address the administrative challenges faced by developing countries due to resource barriers including shortage of tax experts, lack of goodwill and the intuition to implement the needed tax reforms (ATAF, 2020a; IMF, 2015; OECD, 2019).

Also, despite the importance of tax income, developing countries continue to have difficulties disseminating tax policies, information, and processes to taxpayers (Nimer et al., 2022). Furthermore, revenue authorities in poor countries face political intervention and corruption (IMF, 2015). As a result, rather than building rational, contemporary, and effective tax systems, governments frequently pursue the path of developing least resistance tax systems that allow them to maximize whatever limited options are available (Clifford, 2020). The unethical behaviours of some leaders, politicians, other government officials, and the accompanying vices are opposed to studies on ethical and servant leadership (Aristotle, 2004; Blau, 1964; Cropanzano & Mitchell, 2005; Dogru, 2018; Huang et al., 2016; Liden et al., 2015; Musenze & Mayende, 2023; Sison & Fontrodona; Sison & Fontrodona, 2011; Wang & Hackett, 2016).

Ethical and servant leadership have been found to have positive outcomes on the following: employees' innovative work behaviours (Musenze & Mayende, 2023); strongest positive influence on the ethical conduct of employees with both high moral identity and high self-control (Al Halbusi et al., 2023); internal motivation, and virtuous behaviour (Aristotle, 2004; Wang & Hackett, 2016); dignity, well-being, and participatory decision-making (Dogru, 2018); bonding and bridging (Zoghbi-Manrique de Lara & Ruiz-Palomino, 2019); team performance, as well as meeting the needs of leaders and employees (Blau, 1964; Cropanzano & Mitchell, 2005; Ruiz-Palomino et al., 2021); well-being, work performance, and collective gains (Liden et al., 2015; Ruiz-Palomino et al., 2021; Sison & Fontrodona, 2011); the adoption and successful implementation of strategic service differentiation (Huang et al., 2016). Also, Servant and ethical leader encourage virtuous individual-level organizational citizenship behavior to help strengthen task-focused community, in which leaders, followers, and teams can flourish for the common good (Ruiz-Palomino et al., 2021).

### *2.3.3. Education as necessary factor to the successful mobilization of e-levy revenue*

While countries, organizations and scholars have recognized the importance of tax education in improving tax compliance and increasing tax revenues, they have also complained that tax



education has not been adequate in informing taxpayers of their tax duties (Mbilla et al., 2020), thus warranting more studies in the area. Also, to promote responsible citizens' behavior towards national development, basic knowledge of the tax system and the role of taxes in a civil society must be understood (Janouková & Sobotoviová, 2013). As a result, establishing high-quality dimensions of education system would raise knowledge of the importance of taxation, its critical role in sustaining national prosperity, and the painful effects of tax evasion (Hanapi, 2022; Rasmussen & Nørgaard, 2018). Hence, education in the form of legal, ethical, financial, and digital literacy, to mention just a few, is critical to improving citizens' tax compliance (Hastuti, 2014) and financial resource mismanagement.

According to Lai et al. (2013) legal knowledge in taxation is an element of tax knowledge that is based on an understanding of legal concepts and regulations of the tax system as well as the capacity to apply legal information to specific scenarios to compute the tax effect. Electronic transactions, such as the provision of digital financial goods and services in the form of remittances and mobile money, necessitate the application of certain legal laws and processes (Mbithi & Yiega, 2019). In terms of the requirements for deductibility of costs and allowances, these laws vary from nation to nation. In addition, the individual should be made aware of the sort of transaction that will be taxed, as well as the penalties and other sanctions for failing to pay tax (Bornman & Wassermann, 2020). Even if the individual is knowledgeable about taxes in his country of residence, there may be tax implications if he/she engages in tax avoidance, evasion, or mismanagement of tax revenue since such acts deprive the government of the resources needed to offer services to the people of the country (Bornman & Wassermann, 2020; Mbithi & Yiega, 2019).

Furthermore, to promote income tax compliance, ethical literacy in taxation is a key tool for tax authorities in countries where taxes pay the majority of government expenses (Yasa et al., 2021). Ethics reflects the pragmatic exercise of morals that impresses tax laws as a requirement of the national constitution. The concept of taxes presents ethical concerns about the nature of government, the objectives of taxation, the use of state authority in enforcing tax laws, the distribution of tax burdens, and the utilization of tax proceeds. As a result, tax policy should be based on principles, such as a lawful and equitable tax system (Das, 2021). Taxpayers frequently comply if they believe they will gain from paying taxes and that tax revenues will be used judiciously to improve societal welfare. However, if tax compliance does not deliver benefits and instead punishes them, people will not comply. Hence, taxpayers use utility as an ethical value in evaluating their taxing behaviors (Ho & Wong, 2008). A study by Ashby et al. (2009) on ethical norms and tax compliance found that taxpayers' ethical literacy significantly influenced their compliance behavior. Similarly, Martinov-Bennie and Mladenovic (2015) showed that including ethical education in tax studies could boost students' sensitivity when reacting to ethical issues in taxes.

In addition to the role of civic education in the implementation of electronic levy, financial literacy is an essential subject that plays a vital role in the domain of taxes. Tax knowledge or understanding is strongly linked to financial literacy (Blechová & Sobotovičová, 2016; Brackin, 2007). Wiquar et al. (2022) emphasized that the lack of financial education is a barrier to participation in the financial system. Koretskaya-Garmash (2017) asserts that increasing tax awareness improves financial literacy. Also, Wiquar et al. (2022) investigated investors' understanding of financial knowledge in the context of tax literacy and the role of government in this regard and discovered that there was the need for further development in the context of financial education and tax literacy.

While improving revenue and achieving tax compliance is not straightforward, digital literacy and tax education can be employed to mitigate the problem. According to Agnieszka (2015), digital literacy refers to the fundamental and necessary communication abilities required for managing ICT resources and services. These include the ability to use search engines to find information, participate in online conversations, groups and discussion forums, and use the internet to

disseminate knowledge. In improving digital literacy on electronic tax system, government's investment in technology and taxpayers' adoption of electronic tax administration systems is critical for revenue generation and potential for cost saving. Hence, in a study by Kasyoka et al. (2022) on how digital literacy affects the implementation of electronic tax administration systems among Small and Medium Enterprises in Nairobi City County, it was discovered that digital literacy is important in raising tax revenue through the adoption of e-services.

### **3. Methodology of the study**

#### **3.1. Qualitative exploratory design and research participants**

The current study employed qualitative exploratory design. The design is suitable for research questions that have not been adequately addressed in particular human settings, to proffer suggestions to improve that geographical setting. The research participants for the current study constituted lecturers who are PhD holders in the Department of Adult Education and Human Resources Studies, Department of Economics, Institute of African Studies, and the Department of Psychology. The respondents are resident in Ghana, Canada, US and Uganda. The research participants were perceived to be vested with the needed knowledge as well as able and willing to share in-depth knowledge on e-levy. The total research respondents contacted were 16 but 12 responded (3 from Ghana, 3 from Canada, 3 from United States, 3 from Uganda). Each participant was aged over 38 years old. They comprised 4 females and 8 males. All the research participants have worked in the university for at least 6 years and were at least senior lecturers in rank.

#### **3.2. Sampling technique and interview process**

Judgmental sampling was employed for the study because some of the participants were chosen because they were perceived to possess the information needed for the study. The study also used snowballing because some of the research participants were reached out to for the interviews by referral. The researchers introduced themselves and sought the consent of the participants before gathering the data from them. The interviews were conducted online due to the choice of the interviewees. There were probes into the responses to create room for more information. For others, due to their choice, the interview questions were asked in written words and responses were given accordingly. The interviews generated adequate data for the study until saturation was achieved. A total of 12 interviews were conducted. Each interview spanned between twenty to thirty minutes and was guided by the interview plan as well as the willingness of the interviewees to continue during the process. Those who responded to the interview questions by writing took three weeks to respond. The interview questions were:

- a. Tell me about your views regarding why countries in Africa are much endowed with natural resources yet they consider e-levy for revenue generation.
- b. What do you think are the reasons why African countries fail in generating revenues from e-levy?
- c. Can you share your thoughts on the reasons why advanced countries have successful e-levy revenue generation practice?
- d. What do you think are the relevant dimensions of education that will help in successful mobilization of e-levy revenue?

#### **3.3. Ethical consideration**

In terms of ethics, the respondents were given the maximum respect before, during and after the exercise. The interviewees were involved in determining the day, time, duration, and venue for the interviews. Their identity was anonymized. They were informed that they could decide to skip some questions which they were not interested in and could withdraw from the exercise if they so wish. The answers provided by the respondents were recorded digitally, transcribed, and analysed after receiving approval from the research participants that what they said was what was captured in the transcript.

### **3.4. Data credibility**

To ensure validity and objectivity of the study, the researchers did not interfere with the responses of the participants. Also, peer reviewers were considered in sharing their views on the paper to enhance the quality. Furthermore, respondents' feedback was recorded verbatim. Member-check principles were applied to allow the respondents check the transcript to confirm their narratives. Finally, data triangulation, and thick description of the methodology and transcripts were used.

### **3.5. Data analysis**

Thematic analysis was used to analyze the data. The analysis followed the process developed by Braun & Clarke (2006) as well as the principles of interpretive philosophy. Data were integrated, synthesized, and categorized based on specific themes that emerged. The respective narratives of the research participants were placed under the corresponding themes. Interpretations of the research participant narrative were done following hermeneutical principles. Co-construction of knowledge was established based on the verbatim narratives of the interviewees as well the meaning attributed to them by the researchers.

## **4. Results and analysis**

This section addresses the findings from the field data. In responding to the interview question: "What do you think are the reasons why countries in Africa are not able to benefit fully from their abundant natural resources thus exploring e-levy revenue too?" It emerged that the key factors are (i.) Poor managerial-leadership, weak governance and corruption; (ii.) Poor technical and technological skills; and (iii.) lack of effective strategic policy for managing natural resources.

### **4.1. Poor managerial-leadership, weak governance, and corruption**

Almost all the research participants reported that poor managerial leadership and weak governance are the reasons for low revenue generation from natural resources.

A participant remarked:

This question is consistent with the "Resource Curse Theory," which describes a paradoxical situation in which a country underperforms economically despite having valuable natural resources. It becomes a curse when countries with abundant natural resources fail to capitalize on the opportunity to develop. Some of the causes of the curse include incompetence and poor leadership and governance in managing abundant resources.' (Participant 1)

A participant illustrated:

"There is poor governance which leads to the financial resource going into individual pockets instead of the national coffers". (Participant 3)

Another participant maintained:

The natural resources of most African countries are controlled by foreigners who in turn give a paltry sum to the host countries. Even where African countries control the natural resources, they lack the ability to add value to the natural resources, hence most of Africa's natural resources are exported into the commodity market in their raw state and therefore we are unable to get much foreign exchange from our exports. (Participant 4)

A participant also lamented:

"Even when revenue is generated from those raw materials, a good percentage may end up in the pockets of corrupt politicians, thus depriving the nation the much-needed funds to run the nation". (Participant 7)

From research participants 1, 3, 4 and 7, we sum up that incompetence, poor managerial-leadership, weak governance, and corruption are the factors accounting for the failure of African countries in generating adequate revenue from their natural resources. The little revenue generated from the natural resources too are also embezzled or misapplied. Exporting the natural resources without processing keeps Africa at a disadvantaged position. While these incompetence

and vices are attributable to several government officials in Africa, it will be difficult if not impossible for many African countries to benefit fully from its natural resources. The current paper provides the solution to these challenges.

#### **4.2. Poor technical and technological skills**

Many participants also had concerns about lack of technical and technological know-how to process the raw materials in Africa to generate enough revenues from natural resource activities, hence a loss of a large proportion of the revenue that should have been generated. A respondent commented:

Most African countries could not make much from these resources because their extractions are led by transnational companies that repatriate most of the profits away. Also, the resources are mostly exported in their raw form to Europe and America, meaning the resources have limited linkages to the local economies. (Participant 2)

#### **4.3. Lack of effective strategic policy**

A participant illustrated:

Most African countries do not have a strategic policy on how to extract, process, and sell their natural resources to raise revenue for development purposes. Therefore, levying people via electronic means has become a lazy way to raise revenue by governments in these African countries. (Participant 6)

From the narratives of 'participants 2, and 6, we find that most resource-rich countries in Africa are facing the resource curse challenge. The dependence on foreign expatriates to extract the natural resources, and the lack of policy for converting the natural resources into finished products so as to add value to them imposes a lot of costs on the African countries. These monies paid to expatriates in the form of salaries and allowances would be retained on the continent if we had local competences. In addition, there are weak institutional structures, lack of economic diversification in the natural resources sector indicating poor leadership direction, poor management, and inadequate revenue mobilization from such abundant resources. The natural resources sector in African countries is not effectively exploited to benefit Africans economically. Consequently, e-levy revenue is explored because of revenue shortfalls from these natural resources to address the large infrastructure gaps.

Regarding interview question two: What do you think are the reasons accounting for low e-levy revenue yield in African countries? The following themes emerged: (i.) Informal economy; and (ii) lack of financial inclusion. Participants in this study revealed several factors that hampered African countries' ability to generate revenue from E-levy.

#### **4.4. The informal economy**

Many people in the informal economy work in precarious jobs and do not earn enough to warrant E-levy. Because of the informal nature of the economy, many people are impoverished and rely on cash transfers; they do not accept the e-levy concept, and the tax system lacks robustness. Participants in this study remarked that the nature of the economy and the characteristics of the job market had an impact on the public's ability to contribute to e-levy revenue mobilization. A participant narrated:

Majority of the people are poor; they do not earn enough to attract e-levy. Besides, many people are unwilling to pay any taxes on their earnings, forcing them to rely on cash transfers. This is the main reason why the E-levy is not yielding the expected outcome. (Participant 1)

One more participant expressed:

"Majority of the population work in the informal sector and carry out financial transactions with cash instead of going through the banking system. This is the exact opposite in the advanced countries ". (Participant 3)

Another participant revealed:

“The lack of acceptance of the e-levy, and the feeling that ‘we are being over-taxed’ have accounted for the failure in generating revenue through e-levy”. (Participant 6)

The full use of cash transactions, and the view that the e-levy rate is too high explains the poor patronage of e-levy transactions. The lack of robust technology to mop up the data of the workforce in the informal jurisdiction equally accounts for the failure in the e-levy revenue mobilization.

A participant also stated:

“The tax system targeting the informal sector is not robust, thus leaving many (both individuals and corporate bodies) to evade tax, leading to poor or low revenue generation in Africa”. (Participant 8)

#### **4.5. Lack of financial inclusion**

Some participants mentioned ways to avoid E-levy deductions, which are made possible by the fact that few people have bank accounts or few people have signed up for electronic transactions to enable deductions to be made.

A participant said:

Few people have bank accounts or have signed up for electronic money transfers. Many people still prefer cash transactions due to illiteracy. As a result, financial inclusion covers a few people and the tax base is not broad enough to rope in majority of the citizens. (Participant 2)

A participant also maintained:

The consensus amongst consumers would be that the e-levy scheme does not promote financial inclusion and discriminates against the poor and as such consumers are more likely to no longer use mobile money transfers ultimately leading to a decline in mobile money agents. (Participant 5)

One participant stated:

“I am very dissatisfied with the entire concept of the E-levy and thus I make every effort to avoid it”. (Participant 3)

Yet another remarked:

Taxes are supposed to be imposed on production, but e-levy is taking money from people's pockets. Also, most of the money transactions involving e-levy are monies people are using to carry out their transactions with, so if the state decides to intercept the flow, the people will stop patronizing e-transactions and this will negatively affect e-levy collection. (Participant 7)

From the statements above, we see that African countries have a large informal sector as well as poor or low financial inclusion. The informal sector simply cannot be effectively taxed because the cost of taxing some of such units far outweighs the benefits. Also, there is limited digital infrastructure to prevent resistance or other compliance issues. Furthermore, there are implementation challenges. More so, the citizens do not trust that the monies collected will be used to do the right thing. Finally, some people are not interested in the e-levy legislation thus they deliberately avoid patronizing e-transaction, and payment of e-levy.

Regarding the interview question: How are the developed countries able to generate adequate revenue from e-levy? Participants noted that people in most advanced countries understand the importance of e-levy, though their emphasis on why most advanced economies have successful E-levy revenue generation differed. Participants identified a high literacy rate and accurate population data, advanced technologies for revenue mobilisation, a formal economy in which people received fixed and regular income that could be taxed, and people's willingness to contribute taxes

to the economy. Furthermore, in the advanced countries, there is policy consistency, effective laws and regulations, and proper planning as well as effective mobilization of taxes. Also, trust is relatively higher in institutions and not necessarily in individuals. Advanced countries have more fertile ground in terms of generating revenue from e-levy than African countries due to their structured and formalized system.

See the voice below:

“In advanced economies, the share of the informal economy tends to be much lower compared to that of developing economies, and where they do exist, laws and regulations and at times penalties are in place to deter tax evasion”. (Participant 9)

Participants also mentioned that e-levy awareness is affected by the level of education, technology use, and illiteracy.

“The advanced countries have the technology, and financial transactions go through the banking and electronic systems. These countries have a high literacy rate and accurate population data”. (Participant 10)

Yet another indicated:

“Developed countries have a well-developed and severe e-system for revenue generation. Robust digital infrastructure and high financial inclusion”. (Participant 11)

A participants said:

“Electronic taxation, such as the e-levy, is financially unsuitable for many people. E-levy deductions on all transfers, such as deductions on already-taxed savings, caused many of us to refuse to use electronic transactions. This is not the case in advanced countries. (Participant 12)

The advanced countries collect their levies on purchases, not when the poor citizens move or transfer monies around. Their infrastructure has also been developed over a long period of time. E-levy is paid on services, not direct deduction from the people’s savings. (Participant 12)

A participant also mentioned:

“In developed countries, there is proper accountability for revenue generated, therefore, citizens are willing and do pay e-levy for more developmental projects. In developed countries, there is clarity on what the levy is on, that is, what is being taxed. (Participant 9)

The responses of participants 9, 10,11, and 12 are summed and explained as follows: Advanced countries have a more formalized system, a robust technology, a very efficient system of tracking their citizens. For example, social security numbers are given to every citizen of the USA even from birth. This allows the government to tax citizens once they start making money, thus promoting financial inclusion. Where e-levy is used as a way of generating revenue its chances of being successful is high in the advanced economies due to the effective system of tracking every citizen. The developed countries also have timely and proper accounting of state revenues. All these together motivate tax payers in the advanced economies to pay taxes willfully as opposed to the developing economies where the characteristics of the economy are the reverse.

Regarding the education factor in the e-levy subject matter, several issues emerged. Participants raised the need to learn more about e-levy transactions, not only their economic contributions, but also their negative effects on people’s well-being, as many have never been exposed to electronic transactions before.

One participant maintained:

“People should be educated on the e-levy’s contribution to the country’s socio-economic development, such as supporting entrepreneurship, road infrastructure, and job creation.



Electronic transactions have security issues, which discourage people from accepting e-transfers, thus the need for security education". (Participant 8)

Another illustration:

'People should be educated on the advantage of formal banking and the use of the electronic payment system. They should be sensitised on how going through the banking and electronic systems will help the government to generate the needed revenue for developmental projects in their communities. The education should start in basic schools. (Participant 1)

Participants contend that if people should be educated to understand the e-levy system and have the means to pay, then they will. When another participant was asked, "How can education help African countries generate more revenue from e-levy, he narrated:

"Thinking about it, any form of education surrounding entrepreneurship will do" (Participant 2).

Another person stated:

"Education on why levies should be paid; and proper utilization of revenues generated through e-levy is critical." (Participant 4). Other participants mentioned: "digital literacy is needed", and that must be linked to a robust national identity system. (Participant 6)

One more participant maintained:

"Financial literacy for people to clearly know what the e-levy revenue is going to be used for is very important." (Participant 8). Yet another remarked: "Education on financial accountability and transparency in tax and revenue administration will go a long way to boost confidence in the citizens to willfully pay e-levy". (Participant 10)

A participant also commented:

"In discussing education as a contributory factor to the successful implementation of e-levy in Africa, I will suggest pursuing civic education for all". (Participant 12)

From the perspectives of participants 1,2,8,10, and 12 regarding the education factor, we observe that education is relevant in contributing to the success of e-levy revenue generation. The specific kinds of education from the current data are civic education, education on financial accountability and transparency, education on e-levy transaction, education on the advantage of formal banking and the use of the electronic payment system. Furthermore, entrepreneurship education, education on financial accountability and transparency, digital literacy, ethics and legal education, as well as financial transaction literacy are proposed. Such dimensions of education should be routinized in every fiber of society. That means we must educate our children about the importance of paying taxes using cartoons or some images. We should provide education to our youth and adults with relevant user-friendly tools that will easily drive home the point and make understanding easy. We authors assert that the various kinds and levels of education should be collectively harnessed to achieve a broad-based impact on e-levy revenue mobilization.

On the contrary, some of the participants think failure in e-levy mobilization is not about education as expressed below:

"It is not about education; it is about taxing through the right mechanisms. Levy services, not savings". (Participant 11)

It can be deduced from the responses above that e-levy revenue mobilization fails in Africa because it also indirectly targets the pocket of the poor, and the vulnerable instead of taxing services. It means education is still necessary to update the public on the subject. The kind of education required here is institutional education, tax revenue mobilization education. This education aims at throwing light on shifting taxes to services, not imposing levy on the little income of

the poor person who is giving part of his income to his wife in another region or paying school fees of his children in the village.

Another participant illustrated:

“The problem of e-levy in Africa is not the lack of education, though some education may help. The problem is the lack of an effective system to make the introduction of any tax including e-levy to succeed”. (Participant 8)

There is inconsistency in the response above. The respondent maintains that e-levy revenue generation is futile in Africa due to other factors outside the purview of education, yet paradoxically mentions that education will help. The fact is that education is necessary although there are other factors that determine e-levy acceptance and use of e-transaction such as e-levy rate per transaction, the economic situation, proper accounting for e-levy revenue uses, trust in tax agencies, technological advancement, formalizing the economic system, to mention just a few.

Yet another participant stated:

“It is not about education. Rather, every tax needs a platform or well instituted system to work and where such a system is lacking, no tax will succeed including e-levy”. (Participant 5)

The above responses also indicate that it is not about education but other factors such as putting an effective system in place for e-levy revenue mobilization. This system may imply robust technological system that captures data on all the workforce and mops them up to pay their tax, or a realistic tax design and coverage, and exemption system that is appropriate, fair and consistent. That system may also include a sound probity and accountability system of tax revenue officials. While the position of research participant 5 is meaningful, the factor of using multiples of education to enhance understanding and acceptance of e-transaction and payment of e-levy is very necessary and a core factor.

## 5. Discussion

The current study investigated the factors causing several African countries who are rich in natural resources, yet have financial challenges so they resort to e-levy legislation to mop up additional revenue from the informal sector. This behaviour is consistent with the resource curse theory (Henri, 2019; Kouotou & Ondoa, 2023; Shroder, 2014). Normally, the revenue expected from other sources (e-levy in this case) is meant to help fix the economic crisis and structural challenges. Factors accounting for the natural resource-cursed behaviour include poor managerial-leadership, weak governance, and corruption (Adams et al., 2019; Arezki & Gylfason, 2011). Additionally, there are records of administrative challenges facing African leaders in managing natural resources (ATAF, 2020a2020a; OECD, 2019; Rukundo, 2020). As a result, not much revenue is realized from natural resources.

Natural resources are abundant in African countries yet there is lack of effective and efficient leadership to make things happen. There is lack of leadership with clear-cut direction, there is lack of loyal, patriotic and selfless leadership; there is lack of leadership with generational thinking mindset; there is lack of leadership with technological and negotiating skills to lead the processing of raw material resources into finished products to add value to them, attesting to literature (Clavey et al., 2019).

More disappointing is the fact that most of the leaders are corrupt and engage in self-aggrandizement to the detriment of the citizenry they claim to serve as reiterated by the International Monetary Fund (IMF, 2015).

Thus, natural resources are abundant, but leaders do not have the know-how, the will power, the commitment as well as the requisite disposition to transform them for the benefit of current and future generations, as attested to by other studies (Auty & Warhurst, 1993; Frankel, 2012).

The lack of leadership direction of public officials shows in their inability to acquire or prudently negotiate for equipment for natural resource extraction, as well as train selected Ghanaians to acquire various technological and technical skills to be able to extract the natural resources or process the raw materials to add value to them. Subsequently, the option available to African leaders is exporting the natural resources in their raw state to the commodity market, thus invariably and unquestionably yielding inadequate revenue.

Furthermore, African countries depend on foreign investors to man their natural resources leading to high production cost and repatriation of profits to advanced economies to their detriment (Liang et al., 2023; Long et al., 2017). Regrettably, the little revenue left to be used prudently is rather embezzled, misappropriated and misapplied by public officials and corrupt politicians ((IMF, 2015). The next thought of action of these African leaders is finding another avenue of generating revenue, specifically, e-levy, targeting the informal sector; that revenue raised will be used to address the downturn of the economy (Anyidoho et al., 2022; Berger, 2020; Clifford, 2020; Djokoto et al., 2022, GSMA, 2023; Mpofu, 2022; Munoz et al., 2022; Mullins et al., 2020). Unfortunately, the e-levy legislation is not based on stakeholders' engagement, not evidence-based, and not preceded by comprehensive public education to adequately inform the general public about the rationale of the tax. Consequently, the objectives for imposing the e-levy have failed.

It also emerged from the current study that African countries are characterized by an informal economy (Mahadea & Zogli, 2018) that has huge labour force that contributes significantly to GDP but unfortunately, lacks the technological and human resource skills as well as financial inclusion policy to maximise revenue generation (ATAF, 2020b; Clifford, 2020). More so, the observation that the cultures and systems of the African countries are not structured to facilitate revenue generation is an issue. Availability of accurate population data as well as confidentiality of information remain a challenge (Clavey et al., 2019). A cross section of the populace has no national identification card tied to their socio-economic activities and income to allow effective tracking. The very low digitization of the tax system also creates room for tax resistance or compliance issues as well as tax implementation barriers (Nimer et al., 2022). Furthermore, the cost of taxing some units is more than the gains expected. E-levy revenue realized is therefore abysmal.

Additionally, high interest rates on loans, lack of initial capital for entrepreneurship and apprenticeship activities as well as the generally inefficient market system have resulted in high rate of unemployment, denying such people of the ability to participate in e-transaction for the payment of e-levy. Meanwhile those working are not adequately compensated, leading to evasion of taxes, including e-levy. More so, the preference for cash transactions has culminated into the inability of the governments to mop up workers in the informal system to pay their taxes, including e-levy. Generally, the workforce in the informal sector are opposed to the e-levy model because they feel overburdened by the e-levy tax rate. Consequently, they avoid patronizing e-levy transactions, so as to avoid paying e-levy. It is implied from the findings that e-levy should not deplete the little income of the poor, instead such a tax should be imposed on production activities. All these factors raised above underpin the failure in generating e-levy revenue in African countries.

Research participants also indicated that the form of e-levy system and its design do not facilitate financial inclusion. The effects are avoiding the use of mobile money transfers and reduction of mobile money agents among others (Apiors & Suzuki, 2018). Participants' lack of confidence in the tax agencies and officials is due to the corruption associated with state revenues agencies and government officials. For instance, the Auditor General's report for 2021 indicated

financial irregularities amounting to GHS3.0 billion, GHS 2.05 billion and a little over GHS1b in 2019, 2020 and 2021 respectively (Ghana Audit Service, 2021).

The fact that advanced economies can generate adequate revenue from e-levy as revealed by the current study is not coincidental. The advanced countries understand the reasons for e-levy, that, it must be used to address socio-economic challenges. Ghana's intention to use e-levy to close budget deficits, create employment, and augment revenue from other taxes (Agur et al., 2020, Megersa, 2020; Becker, 2021) failed. The formality of the advanced economies allows effective tax design and collection. This is consciously and thoughtfully done to rake in all potential taxpayers. The revenue generated is used wisely and accounted for, to the satisfaction of the public; a practice which is lacking in African countries.

The formalization of the advanced economies reflects in their technological robustness in keeping accurate population data to promote the facilitation of financial and banking transactions as well as mobilizing tax revenue. Advanced countries are very literate and educated on the tax system and design as well as the uses and benefits thereof, and for that matter motivating tax compliance. The tax policy consistency and sustainability cause the citizens to repose trust in the tax system, the tax agencies, and the tax administration. Additionally, in the advanced countries, e-levy deductions are based on services or production, thus not focused on taxing the little transactions of the poor which normally implies double taxation as pertains in Africa. Finally, transparently accounting for e-levy revenue and uses in the developed countries triggers more trust in the tax system for effective tax compliance.

While there are mixed findings regarding the relevance of education to understanding and contributing to a successful mobilization of e-levy revenue, it is evidently clear from the participants' responses that education is necessary for e-levy revenue generation as found in previous studies (Hastuti, 2014, Janokova & Sobotoviora, 2013; Mbilla et al., 2020). Individual citizens want to be educated financially, digitally, ethically, and legally on the economic contributions of e-levy revenue in fixing structural challenges, supporting developmental projects as well as knowing the adverse side of e-levy imposition; in line with existing literature (Bornman & Wassermann, 2020; Hastuti, 2014; Lai et al., 2013; Mbithi & Yiega, 2019). It is emphasized that insufficient education on e-levy, results in a weak tax compliance, with the accompanying repercussions on the country (Bornman & Wassermann, 2020; Mbithi & Yiega, 2019).

Individuals want education on security issues about e-levy, they want to be educated on the benefits of banking and electronic payment system (Hanapi, 2022). Additionally, entrepreneurship education, digital literacy, accounting education proposed by the research participants as necessary to the success in e-levy revenue generation support previous studies (Ashby et al., 2009; Ho & Wong, 2008; Kasyoka et al., 2022; Martinov-Bennie & Mladenovic, 2015). Furthermore, civic education to all and sundry in the country to appreciate taxation found in the current study aligns with previous studies (Janouková & Sobotoviová, 2013; Mbilla et al., 2020). Furthermore, financial literacy for tax awareness is necessary for e-levy revenue generation (Blechová & Sobotovičová, 2016; Koretskaya-Garmash, 2017; Wiquar et al., 2022). Some of the participants however maintain that it is not about education on e-levy per se, although inconsistently they also maintain education plays a role. However, those asserting the need to levy services, and not the savings of the poor is in order. Aside, some participants think that the failure of using e-levy as a revenue generation alternative is fundamentally due to the lack of effective and efficient systems as well as lack of structured system to ensure that e-levy succeeds. Institutional education is therefore added to the dimensions of education needed to enhance success in e-levy education.

## 6. Limitations of the study

Inasmuch as the study advances our knowledge on how education could be deployed to enhance the acceptability of e-levy in Africa and thus gravitate towards the policy's revenue targets, there are few limitations worth acknowledging. First, the respondents are drawn from four countries with

different socio-economic and development statuses. It is envisaged that the differences in the levels of economic development and efficiency of public institutions including that of tax authorities could introduce biases in participants' responses. Secondly, personal idiosyncrasies such as political affiliations and schools of thought either in support of or against social democracy or libertarianism, for instance, could influence participants' perspectives. Finally, the unfavorable economic conditions prevailing in most African countries post-Covid have made most governments and their policies unpopular, and these have the tendency to affect participants' views on the questions asked. However, we anticipate that these limitations were minimized by carefully selecting highly educated research participants who are well-versed in research ethics.

## 7. Conclusion and recommendations

In this paper, we argue that Ghana like other African countries endowed with vast natural resources have failed to effectively harness these resources to improve the infrastructure and livelihoods of the people. Although few countries on the continent such as Botswana have been able to exploit their natural resources for the betterment of their citizens; for the vast majority, natural-resource endowment has been a "curse". The problem of low revenues from natural resources has engendered alternative and innovative revenue sources including E-levy which have been explored in more recent times. This paper examined the rationale for e-levy legislation and why advanced countries have been successful in raising revenues via e-levy and related taxes relative to poor countries. The study also explored the extent and dimension of e-levy education to enhance the acceptance of the levy as an innovative revenue mobilization source.

It is evident from this study that e-levy was introduced in several African countries to address budget deficits that had worsened in more recent times largely due to the COVID-19 pandemic. The levy has also been earmarked to address investment and infrastructural deficits to boost economic activities and to help arrest the incessant youth unemployment problem on the continent. For most countries, the alternative to imposing e-levy and related taxes was to seek bailout from the IMF, with its concomitant conditionalities.

One of the conspicuous reasons for the abysmal performance of e-levy in terms of revenue generation is poor leadership and governance. This manifests in the form of poor tax administration and governance occasioned by leadership deficit as well as perceived corruption and misappropriation of tax revenues for private benefit relative to common good. These perceptions by the respondents largely explain the low acceptance of the levy and the propensity of the citizenry to evade it. There is general lack of trust in political leadership and tax administration regarding the judicious use of tax revenues. Addressing these bottlenecks by improving accountability of public funds and demonstrating transparency in the conduct of public officers is key to enhancing the acceptability of the e-levy and future taxes.

The high level of informality of African economies has narrowed the tax base to the extent that people who work in the private and public formal sectors are overburdened with taxes. Though, e-levy could be regressive in terms of equity, it is seen as a strategy to rope in workers in the informal sector whose activities contribute significantly to the GDP, and yet remain untaxed, be it income or corporate taxes. The imposition of e-levy, however, undermines the efforts of most governments to improve financial inclusion since it has the tendency to promote cash transactions. The relevance of comprehensive public education on the rationale for and the benefits of e-levy is incontestable. However, the issues of corruption and self-aggrandizing tendencies of public officers among others undermine the acceptance and compliance of such taxes.

Moreover, stakeholder engagements and comprehensive public education on the e-levy were considered prerequisites for the successful implementation of the e-levy. While some stakeholder engagements were undertaken in Ghana, the views and suggestions of the stakeholders were hardly considered in the finalization and ensuing implementation of the levy. Evidence from other countries such as Uganda, Cameroon, and Cote D'Ivoire has proven that effective stakeholder

engagements and public education is key to the acceptability of electronic transaction levies. It is envisaged that revenues from Ghana's e-levy will improve over time as politicians demonstrate good will, accountability and transparency in the management and disbursement of public funds.

Finally, this paper contributes to the discourse on e-levy in Africa. Previous studies on the e-levy had investigated the determinants of willingness to pay, acceptability and the views of the public on same from largely quantitative perspectives without regard to the qualitative factors that promote e-levy acceptance or otherwise. This study uses a unique qualitative data drawn from experts from four countries: two developed (Canada and USA) and two least developed (Ghana and Uganda) countries. In this paper, we have argued that Africa's vast natural resources notwithstanding, bad leadership, corruption and low investment in physical and human capital *inter alia* needed for the exploration of these resources leave us with negligible natural resource revenues. Our novel findings reveal that different dimensions of education encompassing public, institutional and financial literacy are crucial in eliciting approval and acceptance of the e-levy to deliver its revenue targets. However, comprehensive education will only bring the desired change in accepting and making requisite e-levy payments when government officials exercise transparency accountability and prudence in the management of tax revenues. Whenever citizens lose trust in their governments, the payment of taxes such as e-levy becomes burdensome.

African countries need managerial leadership and effective governance in managing their natural resources to make things happen, and to break away from the resource curse. There is the need for loyal, patriotic and selfless leaders who are generational thinkers with a clear-cut direction. Africa needs leaders who can go the extra mile to process raw material resources into finished products, to add value to them. It is important that corrupt, dishonest and selfish leaders who lack the character required to lead African countries be rooted out completely from the system.

African countries must strive hard to ensure a largely formalized and structured sector of their economies. With the deployment of technology to facilitate data collection and management, financial inclusion will be more possible and validated. More tax revenue can be mopped up from the informal sector without any difficulty. Formalizing the informal sector can foster growth, a healthier business environment and the development of a tax compliance culture. For effective implementation of tax measures which aimed at the digital economy, there would certainly be the need for the establishment of new infrastructure and capacity building by revenue authorities and other key government organizations.

Accounting to the public regarding how e-levy revenues are prudently used should be practiced as a means of gaining the trust and confidence of the users of e-transaction to enable them to continue patronizing. It should be understandable that different kinds of education as discussed earlier is an important ingredient in successful e-levy revenue generation. Financial, digital, ethical, legal, online security, entrepreneurship, accounting, civic and institutional education should be embarked upon rigorously for successful e-levy revenue mobilization. From children to old adult levels, relevant education should be provided to ensure success in e-levy revenue mobilization, management, and accounting.

Finally, lessons from the reviewed literature on ethical and servant leadership (Al Halbusi et al., 2023; Liden et al., 2015; Musenze & Mayende, 2023; Sison & Fontrodona; Sison & Fontrodona, 2011; Wang & Hackett, 2016; Zoghbi-Manrique de Lara & Ruiz-Palomino, 2019) not only have implications on firm level performance or productivity but also the conduct of political office holders and bureaucrats whose behaviour have serious ramifications on the economic performance of African countries. No doubt, the pervasiveness and magnitude of corruption in Africa are largely influenced by the quality of institutions of governance (Mbaku, 2004). Although African countries boast of several anti-corruption institutions and policies including code of conducts for public office holders, these institutions are dormant and ineffective in delivering their mandates. For instance, Ghana



has five public anti-corruption institutions including the Office of the Special Prosecutor (OSP), Commission on Human Rights and Administrative Justice (CHRAG) and the Economic and Organized Crime Office (EOCO) but the administrative heads of these institutions are appointed by the President of the Republic often guided by partisan affiliation and loyalty, making them indebted to the appointing authorities. These institutions therefore lack the gravitas and capacity to prosecute incumbent government officials who are caught in the web of corruption and often become tools for witch-hunting political opponents.

The anti-corruption institutions in other African countries face similar challenges such as partisan appointments, inadequate funding and weak human capital capacity often due to poor remuneration. In such weak governance systems, perpetrators of heinous corruption go unpunished even when the evidence is overly compelling. In few cases where corrupt politicians or civil servants are punished, the punishment is often not deterring enough, and thus creating the incentive for others to engage in corruption. It is obvious from the literature that Africa's under-development is partly blamed on sub-optimal supply of ethical leaders. On account of the reviewed literature and anecdotal evidence on unethical conduct of public officers entrusted with the mobilization and deployment of scarce resources for the development of the continent, we propose the following ethical considerations to help arrest the corruption menace:

- Public office holders should be made to undertake a compulsory short-course on ethics and the implications of corruption on economic development, to be organized by the requisite state institution or designated university in the country. This could be done prior to the appointment of these state officers and the course repeated periodically to remind them of their mandate to the public. In countries where this intervention already exists, efforts should be intensified to ensure their effective implementation.
- Respective governments should strictly enforce asset declaration laws to ensure that public office holders declare their assets within the stipulated time when they take office. Where feasible and permitted by the law, these assets could be published in a national repository and another declaration made when leaving office to help gauge additional assets acquired over the period.
- The appointment of administrative heads of public anti-corruption institutions should be divorced from partisan politics. In this case, this role should be taken from the president and ceded to an independent panel of experts constituted by the parliament.
- The state should adequately resource these institutions by providing them with the requisite funding, human resource and regulatory framework to enable them perform their roles effectively.
- The need to develop integrative thinking and the incorporation of value-based leadership in the resource sector.
- Leaders should help their followers to grow and make decisions in a way that advances the common good, rather than taking advantage of them.

On the strength of the positive ethical outcomes within the findings of the literature especially with recourse to the positive relationship between ethical and servant leadership on one hand, and performance or productivity on the other, we propose the following topics for future studies:

- Servant Leadership Behaviour at Workplace: A comparative Analysis of the Public and Private Sectors: The Mediating Role of Employee Performance Appraisal
- Gender and Ethical Conduct in the Public Sector: The role of Religiosity
- To what extent does the humility and transparency of Servant Leaders in Revenue mobilization institutions in sub-Saharan Africa influence their subordinates? Multiple Case Studies from Selected Countries.

It is envisaged that the findings from the proposed studies will strengthen available evidence on ethics and servant leadership to make informed decisions.

## Acknowledgments

All interviewees who granted us (authors) audience and all the sources of literature reviewed are acknowledged.

## Funding

It was financed by the authors.

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## Disclosure statement

No potential conflict of interest was reported by the author(s).

## Declaration

Author declares no conflicting interest

## Correction

This article has been corrected with minor changes. These changes do not impact the academic content of the article.

## Citation information

Cite this article as: Education dimensions relevant to successful electronic levy mobilization in resource-rich yet poor countries in Africa, Moses Kumi Asamoah, Edward Nketiah-Amponsah, Joseph Danquah Ansong & Boadi Agyekum, *Cogent Business & Management* (2023), 10: 2276540.

## References

- Adams, D., Ullah, S., Akhtar, P., Adams, K., & Saidi, S. (2019). The role of country-level institutional factors in escaping the natural resource curse: Insights from Ghana. *Resources Policy*, 61, 433–440. <https://doi.org/10.1016/j.resourpol.2018.03.005>
- Agnieszka, A. (2015). The impact of digital literacy on e-government development. *Online Journal of Applied Knowledge Management*, 3(2), 45–53.
- Agur, I., Peria, S. M., & Rochon, C. (2020). Digital financial services and the pandemic: Opportunities and risks for emerging and developing economies. *International Monetary Fund Special Series on COVID-19, Transactions*, 1, 2–1. [https://www.imf.org/~media/Files/Publications/covid19-special-notes/en-special-series-on-covid-19-digital-financial-services-and-the-pandemic.ashx?la=en&utm\\_medium=email&utm\\_source=govdelivery](https://www.imf.org/~media/Files/Publications/covid19-special-notes/en-special-series-on-covid-19-digital-financial-services-and-the-pandemic.ashx?la=en&utm_medium=email&utm_source=govdelivery)
- Agyeiwaa-Afrane, A., Agyei-Henaku, K. A. A., Badu-Prah, C., Srofenyoh, F., Gidiglo, F. K., Amezi, J. K. A., & Djokoto, J. G. (2023). Drivers of Ghanaians' approval of the electronic levy. *SN Business & Economics*, 3(1), 19. <https://doi.org/10.1007/s43546-022-00367-3>
- Ahmed, S., & Gillwald, A. (2020). *Multifaceted challenges of digital taxation in Africa*. Africa Portal. Retrieved from [https://www.africaportal.org/documents/20840/Final-Tax-PB\\_30112020.pdf](https://www.africaportal.org/documents/20840/Final-Tax-PB_30112020.pdf)
- Al Halbusi, H., Ruiz-Palomino, P., & Williams, K. A. (2023). Ethical leadership, subordinates' moral identity and self-control: Two- and three-way interaction effect on subordinates' ethical behavior. *Journal of Business Research*, 165, 114044 ISSN 0148-2963. <https://doi.org/10.1016/j.jbusres.2023.114044>
- Alssadek, M., & Benhin, J. (2023). Natural resource curse: A literature survey and comparative assessment of regional groupings of oil-rich countries. *Resources Policy. Resources Policy*, 84, 103741. <https://doi.org/10.1016/j.resourpol.2023.103741>
- Amoah, A., Kwablah, E., Amoah, B., & Adjei-Mantey, K. (2023). Willingness to pay for electronic transaction levy: Empirical evidence from Ghana. *African Journal of Economic and Management Studies*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/AJEMS-09-2022-0359>
- Andersson-Manjang, S. K., & Naghavi, N. (2021). State of the industry report on mobile money 2021. *GSMA Mobile Money Programme*. <https://perma.cc/DPG4-TYCE>
- Anyidoho, N. A., Gallien, M., Rogan, M., & van den Boogaard, V. (2022). 'Mobile money taxation and informal workers: Evidence from Ghana's E-Levy', ICTD Working Paper 146, Institute of Development Studies, <https://doi.org/10.19088/ICTD.2022.012>
- Apriy, E. K., & Suzuki, A. (2018). Mobile money, individuals' payments, remittances, and investments: Evidence from the ashanti region. *Ghana Sustainability*, 10(5), 1409. <https://doi.org/10.3390/su10051409>
- Arezki, R., & Gylfason, T. (2011). Chapter 2 commodity price volatility, democracy, and economic growth. In de La Grandville, O. (Ed.) *Economic growth and development* (pp. 9–24). Emerald Group Publishing Limited. [https://doi.org/10.1108/S1574-8715\(2011\)0000011007](https://doi.org/10.1108/S1574-8715(2011)0000011007)
- Aristotle. (2004). *Nicomachean ethics*, R. Crisp. Eds. Cambridge University Press
- Ashby, J. S., Haslam, S. A., & Webley, P. (2009). The distinct role of group-central and group-peripheral norms in taxpaying behaviour. *The Journal of Socio-Economics*, 38(2), 230–237. <https://doi.org/10.1016/j.socsc.2008.11.001>
- ATAF. (2020a). *Domestic resource Mobilisation-digital services taxation*.
- ATAF. (2020a). *Domestic resource mobilisation: Digital Services Taxation in Africa*. African tax administration forum publication. Pretoria.
- ATAF (2020b, March 25). Global economic havoc underlines urgency of broadening the tax base in African countries. African Tax Administration Forum, Retrieved from <https://www.ataftax.org/global-economic-havoc-underlines-urgency-of-broadening-the-tax-base-in-african-countries>
- Auty, R., & Warhurst, A. (1993). Sustainable development in mineral exporting economies. *Resources Policy. Resources Policy*, 19(1), 14–29. [https://doi.org/10.1016/0301-4207\(93\)90049-S](https://doi.org/10.1016/0301-4207(93)90049-S)
- Ayemoba, A. (2018). Côte d'Ivoire unveils mobile money tax. *Africa Business Communities*. <https://africabusinesscommunities.com/news/cote-d-ivoire-unveils-mobile-money-tax/>
- Badeeb, R. A., Hooi Lean, H., & Clark, J. (2017). The evolution of the curse thesis: A critical literature survey. *Resources Policy*, 51(December 2016), 123–134. <https://doi.org/10.1016/j.resourpol.2016.10.015>
- Bandura, A., & Walters, R. H. (1977). *Social learning theory* (Vol. 1). Englewood cliffs.
- Bazarbash, M., Moeller, J., Griffin, N. N., Villanova, H. C., Chhabra, E., Fan, Y., & Shirono, K. (2020). Mobile money in the COVID-19 pandemic. *Special Series on Fiscal Policies to Respond to COVID*, 19. <https://www.>

- imf.org/-/media/Files/Publications/covid19-special-notes/en-special-series-on-covid-19-mobile-money-in-the-covid-19-pandemic.ashx
- Becker, C. (2021). *Taxing the digital economy in sub-Saharan Africa*. ENSAfrica.
- Berger, M. (2020). *The coronavirus is upending cash economies. Mobile money could emerge as the winner*. Washington Post.
- Blau, P. M. (1964). *Exchange and power in social life*. Wiley.
- Blechová, B., & Sobotovičová, Š. (2016). Analysis of tax education in a business school: A case study. *Periodica Polytechnica: Social & Management Sciences*, 24(2), 113–118. <https://doi.org/10.3311/PPSo.8486>
- Bornman, M., & Wassermann, M. (2020). Tax knowledge for the digital economy. *Journal of economic and financial Sciences. Journal of Economic and Financial Sciences*, 13(1), 1–11. <https://doi.org/10.4102/jef.v13i1.461>
- Brackin, T. (2007, January). Overcoming tax complexity through tax literacy—an analysis of financial literacy research in the context of the taxation system. *Proceedings of the 2007 Australasian Taxation Teachers Association Conference*, Brisbane, Australia.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Bunn, D., Elkse Asen, E., & Enache, C. (2020). Digital taxation around the World.
- Chachu, D. O., & Nketiah-Amponsah, E. (2022). The fiscal resource curse: What's China's natural resource appetite got to do with it? *International Review of Applied Economics*, 36(1), 129–146. <https://doi.org/10.1080/02692171.2021.1942438>
- Chen, S., Hassan, M. S., Latif, A., Rafay, A., Mahmood, H., & Xu, X. (2023). Investigating resource curse/blessing hypothesis: An empirical insight from Luxembourg, the Netherlands, and Portugal economies. *Resources Policy*, 83, 103647. <https://doi.org/10.1016/j.resourpol.2023.103647>
- Clavey, C., Pemberton, J. L., Loeprick, J., & Verhoeven, M. (2019) *International tax Reform, digitalization and developing economies*, MTI Global Practice Discussion Paper 16, World Bank
- Clifford, K. (2020). *The causes and consequences of mobile money taxation an examination of mobile money transaction taxes in sub-Saharan Africa*.
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, 31(6), 874–900. <https://doi.org/10.1177/0149206305279602>
- CSBAG. (2018). *8 reasons why taxing transaction value on mobile money is a bad idea*. Civil Society Budget Advocacy group, Kampala, Uganda. <https://www.csbag.org/download/8-reasons-why-taxing-transaction-value-on-mobile-money-is-a-bad-idea/>
- Das, P. K. (2021). Ethics and taxation-A study. *Ethics*, 2(12), 357–365. <http://www.ijess.org/wp-content/uploads/2022/01/IJESSP24510099.pdf>
- Deloitte. (2020). Digital services tax in Africa—the journey so far. Implementation of digital taxes Across Africa.
- Djokoto, J., Afrane, A. A., Agyei-Henaku, K. A. A., Badu-Prah, C., Srofenyoh, F. Y., & Gidiglo, F. (2022). Electronic Levy in Ghana – evidence from a pre-implementation survey. *Academia Letters*, Article 4906. <https://doi.org/10.20935/AL4906>
- Dogru, Ç. (2018). The relationship between perceived support and innovative behavior: Analyzing the mediating role of work engagement. *Journal of Business Research – Turk*, 10(2), 384–402. <https://doi.org/10.20491/isarder.2018.435>
- Frankel, J. A. (2010). The natural resource curse: A survey (NBER Working Paper No. w15836). National Bureau of Economic Research. <https://doi.org/10.3386/w15836>
- Frankel, J. A. (2012). The natural resource curse: A survey of diagnoses and some prescriptions. *Commodity Price Volatility and Inclusive Growth in Low-Income Countries*, 7–34.
- Hanapi, A. M. (2022). Determinant of tax non-compliance among Taxpayer. *Asian. Journal of Accounting and Finance*, 4(1), 13–25.
- Hastuti, R. (2014). Tax awareness and tax education: A perception of potential taxpayers. *Tax Awareness and Tax Education: A Perception of Potential Taxpayers*, 5(1), 83–91. <http://repository.unika.ac.id/id/eprint/24153>
- Henri, P. A. O. (2019). Natural resources curse: A reality in Africa. *Resources policy. Resources Policy*, 63, 101406. <https://doi.org/10.1016/j.resourpol.2019.101406>
- Ho, D., & Wong, B. (2008). Issues on compliance and ethics in taxation: What do we know?. *Journal of financial Crime. Journal of Financial Crime*, 15(4), 369–382. <https://doi.org/10.1108/13590790810907218>
- Huang, J., Li, W., Qiu, C., Yim, F. H.-K., & Wan, J. (2016). The impact of CEO servant leadership on firm performance in the hospitality industry. *International Journal of Contemporary Hospitality Management*, 28(5), 945–968. <https://doi.org/10.1108/IJCHM-08-2014-0388>
- IMF. (2015). *Current challenges in revenue mobilization: Improving tax compliance*. <https://www.imf.org/external/np/pp/eng/2015/020215a.pdf>
- IMF. (2019a) *Corporate taxation in the Global economy*, IMF Policy Paper No. 19/007
- IMF. (2019b). Malawi: Second and third reviews under the three-year extended credit facility arrangement and requests for waivers of nonobservance of performance criteria and augmentation of access-Press Release; staff report; and statement by the Executive Director for Malawi
- Janoušková, J., & Sobotovičová, Š. (2013). Distortion in taxation of wages. Finance and the performance of firms in science, education, and practice. 290–301.
- Kasyoka, E. M., Yusuf, M., & Senelwa, A. (2022). Digital literacy and successful implementation of electronic tax administration system in Nairobi County. *International Academic Journal of Information Systems and Technology*, 2(1), 311–320.
- Kopiński, D., Kopiski, D., Polus, A., & Tycholiz, W. (2013). Resource curse or resource disease? Oil in Ghana. *African Affairs*, 112(449), 583–601. <https://doi.org/10.1093/afraf/adt056>
- Koretskaya-Garmash, V. A. (2017). Taxation awareness and its impact on financial literacy. *Journal of Tax Reform*, 3(2), 131–142. 2017. T. 3. № 2. <https://doi.org/10.15826/jtr.2017.3.2.036>
- Kouotou, H. L., & Ondoa, H. A. (2023). Africa's natural resource curse: Does the arrival of new heads of state break the spell? *Resources Policy*, 81, 103356. <https://doi.org/10.1016/j.resourpol.2023.103356>
- Kusuma, H., & Azzakhusna, F. (2019). Tax awareness and compliance: An empirical study on small and medium-sized enterprises (SMEs). *International Journal of Managerial Studies and Research*, 7(10), 8–17. <https://doi.org/10.20431/2349-0349.0710002>
- Lai, M. L., Zalilawati, Y., Amran, M. M., & Choong, K. F. (2013). Quest for tax education in non-accounting curriculum: A Malaysian study. *Asian Social Science*, 9(2), 154. <https://doi.org/10.5539/ass.v9n2p154>
- Liang, H., Shi, C., Abid, N., & Yu, Y. (2023). Are digitalization and human development discarding the resource

- curse in emerging economies? *Resources Policy*. *Resources Policy*, 85, 103844. <https://doi.org/10.1016/j.resourpol.2023.103844>
- Liden, R. C., Wayne, S. J., Meuser, J. D., Hu, J., Wu, J., & Liao, C. (2015). Servant leadership: Validation of a short form of the SL-28. *The Leadership Quarterly*, 26(2), 254–269. Lin, C. C., & Peng, T. K. (2010). <https://doi.org/10.1016/j.leaqua.2014.12.002>
- Liu, W., & Chen, X. (2022). Natural resources commodity prices volatility and economic uncertainty: Evaluating the role of oil and gas rents in COVID-19. *Resources Policy*. *Resources Policy*, 76, 102581. <https://doi.org/10.1016/j.resourpol.2022.102581>
- Long, M. A., Stretesky, P. B., & Lynch, M. J. (2017). Foreign direct investment, ecological withdrawals, and natural resource-dependent economies. *Society & natural resources*. *Society & Natural Resources*, 30(10), 1261–1276. <https://doi.org/10.1080/08941920.2017.1331483>
- Mahadea, D., & Zogli, L.-K. J. (2018). Constraints to growth in informal sector activities and formalisation: A case study of Ghanaian slums. *The Southern African Journal of Entrepreneurship and Small Business Management*, 10(1), 1–9. <https://doi.org/10.4102/sajesbm.v10i1.130>
- Martinov-Bennie, N., & Mladenovic, R. (2015). Investigation of the impact of an ethical framework and an integrated ethics education on accounting students' ethical sensitivity and judgment. *Journal of Business Ethics*, 127(1), 189–203. <https://doi.org/10.1007/s10551-013-2007-5>
- Mbaku, J. M. (2004). *Institutions and development in Africa*. Trenton. Africa World Press.
- Mbilla, S. A. E., Abiire, M. A., Atindaana, P. A., & Ayimpoya, R. N. (2020). Tax education and tax compliance in Ghana. *Research Journal's Journal of Accounting*, 8(1), 1–21.
- Mbithi, K., & Yiege, V. (2019). Enhancing tax literacy to mobilize revenue in a digital economy. Available at SSRN 4258262 *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4258262>
- Megersa, K. (2020). *Tax reforms after COVID-19 and financial crises*. Institute of Development Studies.
- Mpofu, F. Y. (2022). Taxation of the digital economy and direct digital service taxes: Opportunities, challenges, and implications for African countries. *Economies*, 10(9), 219. <https://doi.org/10.3390/economies10090219>
- Mullins, P., Gupta, S., & Liu, J. (2020). Domestic revenue mobilization in low-income countries: Where to from here. *Center for Global Development Policy Paper*, 195.
- Munoz, L., Mascagni, G., Prichard, W., & Fabrizio, S. (2022). Should governments tax digital financial services? A research agenda to understand sector-specific taxes on DFS.
- Musenze, I. A., & Mayende, T. S. (2023). Ethical leadership (EL) and innovative work behavior (IWB) in public universities: Examining the moderating role of perceived organizational support (POS). *Management Research Review*, 46(5), 682–701. <https://doi.org/10.1108/MRR-12-2021-0858>
- Nimer, K., Uyar, A., Kuzey, C., & Schneider, F. (2022). E-government, education quality, internet access in schools, and tax evasion. *Cogent Economics & Finance*, 10(1), 2044587. <https://doi.org/10.1080/23322039.2022.2044587>
- Nutassey, V., Agyei, S., Frimpong, S., & Nkoe, K. (2023). Introducing electronic transaction levy in Ghana: A possible curse or a blessing? The public's perception. *Cogent Economics & Finance*, 11(1), 2167361. <https://doi.org/10.1080/23322039.2023.2167361>
- OECD. (2015). "Addressing the tax challenges of the digital economy, action 1 - 2015 final report," Oct. 5, 2015, <https://doi.org/10.1787/9789264241046-en>.
- OECD. (2019). Program of work to develop a consensus solution to the tax challenges arising from digitalisation of the economy. In *OECD/G20 inclusive framework on BEPS*. Available online. [www.oecd.org/tax/beps/programme-of-work-to-develop-a-consensus-solution-to-the-tax-challenges-arising-from-the-digitalisation-of-the-economy](http://www.oecd.org/tax/beps/programme-of-work-to-develop-a-consensus-solution-to-the-tax-challenges-arising-from-the-digitalisation-of-the-economy)
- Penteriani, G. (2023). *The E-levy in Ghana: Economic impact assessment*. GSMA.
- Penteriani, G. (2023). *The E-levy in Ghana: Economic impact assessment*. GSMA.
- Rasmussen, S. H. R., & Nørgaard, A. S. (2018). When and why does education matter? Motivation and resource effects in political efficacy. *European Journal of Political Research*, 57(1), 24–46. <https://doi.org/10.1111/1475-6765.12213>
- Ruiz-Palomino, P., Linuesa-Langreo, J., & Elche, D. (2021). Team-level servant leadership and team performance: The mediating roles of organizational citizenship behavior and internal social capital. *Business Ethics, the Environment & Responsibility*, 32(5), 127–144. <https://doi.org/10.1111/beer.12390>
- Rukundo, S. (2020). *Addressing the challenges of taxation of the digital*. Lessons for African Countries.
- Shroder, J. F. (2014). *Natural resources in Afghanistan: Geographic and geologic perspectives on centuries of conflict*. Elsevier.
- Sison, A. J. G., & Fontrodona, J. (2011). The common good of Business: Addressing a challenge Posed by «Caritas in Veritate». *Journal of Business Ethics*, 100(S1), 99–107. <https://doi.org/10.1007/s10551-011-1181-6>
- Tian, Y., & Feng, C. (2023). Breaking "resource curse" through green technological innovations: Evidence from 286 cities in China. *Resources Policy*, 85, 103816.
- United Nations Conference for Trade and Development. (2018). *UNCTAD B2C. E-Commerce index 2018. Focus on Africa*. Technical Note on Information Communication Technology Information for Development.
- URA. (2019). Revenue Performance Report FY 2018/19.
- Wang, Q., & Hackett, R. D. (2016). Conceptualization and measurement of virtuous leadership: Doing well by doing good. *Journal of Business Ethics*, 137(2), 321–345. <https://doi.org/10.1007/s10551-015-2560-1>
- Wiquar, M. R., Wiquar, M. S., & Burney, T. (2022). Tax literacy and the role of financial knowledge: A study of government initiatives and individual investors from Delhi NCR. *Epra. International Journal of Economic and Business Review (JEBR)*, 10(5), 6–11. <https://doi.org/10.36713/epra10268>
- Yasa, I. N. P., Dharmawan, N. A. S., Adiputra, I. M. P., Martadinata, I. P. H., & Herawati, N. T. (2021). Tax comprehension and Ethics Education Integration in improving tax compliance among accounting students: An experimental study. *International Journal of Finance & Banking Studies* (2147-4486), 10(1), 96–108.
- Zoghbi-Manrique de Lara, P., & Ruiz-Palomino, P. (2019). How servant leadership creates and accumulate social capital personally owned in hotel firms. *International Journal of Contemporary Hospitality Management*, 31(8), 3192–3211. © Emerald Publishing Limited 0959-6119. <https://doi.org/10.1108/IJCHM-09-2018-0748>