Summa : Journal of Accounting and Tax
E-ISSN: 3031-4216
Volume. 2 Issue 4 October 2024
Page No: 206-219

Innovations and Inequalities in Digital Taxation: Lessons from Global Experiences

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Received : September 04, 2024
Accepted : October 17, 2024
Published : October 31, 2024

Citation: Qoriah, D., (2024). Innovations and Inequalities in Digital Taxation: Lessons from Global Experiences. Summa: Journal of Accounting and Tax, 2(4), 206-219.

ABSTRACT: The rapid expansion of the digital economy has pressured traditional tax systems, demanding reforms to address profit shifting, base erosion, and fair allocation of taxing rights. This narrative review examines the effectiveness, equity, and policy implications of digital tax reforms at global, national, and regional levels. Literature was systematically collected from Scopus, Web of Science, and Google Scholar, focusing on digital taxation, reform policies, compliance, and the OECD two-pillar framework. Findings reveal mixed outcomes. OECD/G20 initiatives promote cooperation but often favor developed economies, limiting benefits for developing nations. At the national level, reforms show varied impacts: Indonesia improved small-enterprise compliance, while Ghana's electronic levy exposed regressive risks. Comparative evidence indicates advanced economies with robust infrastructures achieve higher compliance and revenues, while developing countries face institutional and capacity challenges. Innovations in tax administration—digital registration, cloud systems, and AI—have enhanced efficiency and collection, though concerns about equity and long-term sustainability remain. Broader systemic factors, including corruption, governance, and institutional capacity, critically shape reform success. The review concludes that effective digital tax reforms must balance efficiency with distributive justice, align with development goals, and strengthen evidence through interdisciplinary and quantitative approaches. Addressing these challenges is essential to ensuring the equitable sharing of digitalization's benefits across economies.

Keywords: Digital Taxation Reforms, OECD Two-Pillar Solution, Tax Policy in Digital Economy, Tax Compliance and Equity, Global Tax Governance, Technological Innovation in Taxation.

INTRODUCTION

Over the last two decades, the global economy has undergone an unprecedented digital transformation, reshaping the structure of international commerce, investment, and taxation. Traditional tax systems, designed to govern physical trade and tangible goods, have increasingly struggled to capture revenue from borderless digital transactions. The expansion of multinational digital platforms has not only disrupted economic activity but also exposed systemic weaknesses in global taxation frameworks. In response, governments and international organizations have launched significant reforms, attempting to ensure both compliance and fairness in tax policy within the digital age. Central to these efforts has been the Organisation for Economic Co-operation and Development (OECD) and the G20's 'two-pillar solution,' which represents a landmark attempt to modernize global tax rules. This initiative seeks, first, to allocate taxing rights to jurisdictions where consumers and users are located (Pillar I), and second, to introduce a global minimum corporate tax designed to limit harmful tax competition among states (Pillar II) (Ozai, 2024; Elliffe, 2021). Despite these innovations, international tax reforms remain contentious, reflecting both the promise and limitations of multilateral governance in addressing digitalization.

The relevance of digital tax reform has only intensified as global digital revenues continue to expand. Recent analyses underscore that the value generated by digital activities—ranging from e-commerce and cloud services to data-driven advertising—has grown exponentially, often outpacing the capacity of states to regulate or tax these activities effectively (Magalhães & Christians, 2024). Digital multinationals leverage intangible assets and data flows that transcend borders, rendering physical presence an outdated nexus for taxation. Consequently, revenue losses from base erosion and profit shifting (BEPS) have become particularly acute for developing nations, which depend heavily on corporate taxation to finance essential infrastructure and social services. At the same time, the technical complexities of proposed reforms risk exacerbating inequalities, as countries with limited administrative capacity may be unable to fully participate in, or benefit from, international consensus mechanisms (Ozai, 2024). These dynamics illustrate the dual challenge of designing tax systems that are both globally coherent and locally implementable.

Several fundamental facts underscore the urgency of reform. First, revenue losses attributable to tax avoidance in the digital economy are substantial. Empirical studies demonstrate that multinational technology firms frequently exploit mismatches between jurisdictions, shifting profits to low-tax environments and eroding the fiscal capacity of states (Herzfeld, 2019; Jin et al., 2023). Second, unilateral measures have proliferated in the absence of universal agreements. Countries such as France, India, and Indonesia have introduced digital services taxes (DSTs), reflecting an urgent need to capture revenues from fast-growing digital markets (Sibarani et al., 2024). While effective in raising short-term revenue, such unilateral approaches risk fragmenting the global tax system, generating legal disputes, and straining trade relations—most notably with the United States, where many digital multinationals are headquartered (Lips, 2019; Magalhães & Christians, 2024). Third, compliance costs are rising, particularly for small and medium-sized enterprises (SMEs). Unlike large multinational corporations that can adapt to complex regulatory changes, SMEs often lack the administrative resources to navigate these obligations, resulting in disproportionate burdens (Sibarani et al., 2024).

Regional experiences illustrate the diverse challenges and innovations in digital taxation. In Asia, countries like India and Indonesia have experimented with digital tax reforms tailored to their growing digital economies. Indonesia, for instance, has grappled with compliance challenges among micro, small, and medium enterprises (MSMEs), highlighting the need for streamlined systems to ensure equitable participation in the tax base (Sibarani et al., 2024). China presents a different trajectory, linking tax incentives for corporate education expenditures to digital transformation, thus illustrating how fiscal policy can directly support technological upgrading and competitiveness (Mai et al., 2024). Meanwhile, Japan has examined the effect of cross-border e-commerce on consumption tax revenues, revealing the vulnerability of municipal governments to shifts in consumer behavior.

In Africa, the digital taxation debate has been shaped by both necessity and vulnerability. The COVID-19 pandemic underscored the reliance of many African states on external revenue sources, catalyzing the push for robust digital tax regimes (Aren, 2024). Yet the high prevalence of informal economies and limited administrative capacity complicates effective implementation. Ghana's electronic transfer levy (E-levy), for instance, was introduced as a means of taxing informal economic activity conducted through mobile money. However, research shows that such measures are regressive, disproportionately burdening low-income populations and reducing equity in taxation (Anyidoho et al., 2023). These findings suggest that while digital taxes may provide short-term fiscal relief, they can undermine broader goals of social justice and inclusive development if not carefully designed.

Europe has pursued a different path, emphasizing regulatory harmonization at the supranational level. The European Commission's proposals for a coordinated digital tax regime reflect attempts to standardize approaches across member states, thereby reducing fragmentation (Lips, 2019). Nevertheless, resistance from some EU states and strong opposition from external actors, particularly the United States, have complicated these efforts. The persistence of national-level digital service taxes alongside EU-level initiatives illustrates the tension between sovereignty and integration in the governance of digital taxation. Latin America, by contrast, has emphasized adjustments to existing frameworks, with countries like Argentina and Colombia reforming Value Added Tax (VAT) systems to encompass digital services (Naumenko & Kozyreva, 2022; Míguez, 2024). While these reforms signal progress, implementation remains uneven, and fiscal capacity lags behind the rapid expansion of digital markets.

These regional variations highlight both the opportunities and challenges of reform. While digital tax initiatives can provide much-needed revenue, they also risk reinforcing existing inequities. Developing economies often lack robust infrastructure for monitoring digital transactions, making them vulnerable to evasion and avoidance. Moreover, the global quasi-constitutional order governing tax law, trade, and investment has often privileged advanced economies, leaving less powerful states with limited capacity to influence outcomes (Magalhães & Christians, 2024). The combination of technical complexity, political asymmetry, and economic diversity underscores why international tax reform is inherently contested.

The challenges in implementing coherent reforms are multifaceted. First, consensus-building remains elusive. The OECD Inclusive Framework, though expansive, has struggled to secure universal agreement among its members, with many opting for unilateral measures (Milogolov & Berberov, 2021). Second, the interaction between global minimum tax initiatives and national tax incentives raises questions about compatibility. Countries that rely on preferential tax regimes to attract investment may resist harmonization, undermining collective efforts. Third, compliance and enforcement gaps remain significant. Developing nations in particular lack the technical expertise and institutional capacity to implement complex digital tax frameworks effectively, creating risks of uneven enforcement and persistent inequities (Ozai, 2024).

The literature reveals critical gaps in understanding these issues. Although existing research has illuminated the shortcomings of OECD frameworks and provided regional case studies, there remains a lack of holistic comparative analysis that integrates perspectives across diverse economies. Few studies synthesize the varied experiences of developed and developing nations to generate insights that are both globally relevant and locally adaptable (Sibarani et al., 2024; Ozai, 2024). Moreover, the role of data quality in digital platforms—essential for ensuring tax compliance—remains underexplored (Belahouaoui & Attak, 2024). While studies have noted the importance of reliable digital infrastructure, there is limited empirical modeling of how platform data accuracy influences compliance outcomes (Jin et al., 2023). This gap restricts the development of actionable policy solutions.

Against this backdrop, the objective of this review is to provide a comprehensive and comparative analysis of digital tax reforms, with a focus on identifying both successes and limitations across regions. (Dietrich & Golden, 2022) The review will examine the OECD/G20 two-pillar framework, regional variations in policy implementation, and the role of digital infrastructure in supporting compliance. It will also integrate perspectives on equity and justice, particularly the experiences of developing nations often marginalized in global tax governance debates (Ozai, 2024; Aren, 2024). By doing so, this study aims to move beyond isolated case studies to offer a systemic understanding of the evolving landscape of digital taxation.

The scope of this review encompasses both developed and developing regions, drawing on evidence from Asia, Africa, Europe, and Latin America. By situating digital tax reforms within broader global trends, it seeks to illuminate not only the technical and administrative challenges of taxation but also the socio-economic implications. Special attention will be given to the experiences of micro, small, and medium enterprises (MSMEs), which face unique compliance burdens under new regimes (Sibarani et al., 2024). This comparative approach aspires to provide insights that are academically rigorous, empirically grounded, and practically useful for policymakers striving to design equitable and effective digital tax policies in an era defined by globalization and technological disruption.

METHOD

The methodology employed in this review was designed to provide a systematic, transparent, and academically rigorous approach to identifying, selecting, and analyzing literature on tax policy reforms in the digital economy. Recognizing that digital taxation is a rapidly evolving field characterized by diverse legal, economic, and political dimensions, the methodology sought to capture a wide spectrum of scholarly perspectives while ensuring that the included studies met high standards of quality and relevance. The process was anchored in established academic practices for conducting narrative reviews, combining a structured search strategy with critical evaluation of the literature to synthesize meaningful insights that support the objectives of this study.

The first stage of the methodology focused on identifying the most relevant databases for capturing peer-reviewed and high-quality research on digital tax reforms. Three primary databases were selected: Scopus, Web of Science, and Google Scholar. Scopus was chosen due to its comprehensive coverage of peer-reviewed literature across disciplines and its advanced citation tracking capabilities, which allowed for the identification of influential studies in the field (Lips, 2019). Web of Science provided complementary strengths by offering extensive datasets related to impact factors and citation analysis, ensuring that articles selected for the review had recognized academic credibility (Sibarani et al., 2024). Google Scholar was included to broaden the scope of the search, as it encompasses not only traditional peer-reviewed journals but also conference papers, working papers, and grey literature, which are particularly important in areas such as tax reform where policy debates often extend beyond conventional academic publications (Jin et al., 2023).

To ensure comprehensiveness and focus in retrieving literature, a carefully designed set of keywords was employed. These keywords reflected both the technical and thematic dimensions of tax reforms in the digital economy and included terms such as "digital taxation reforms," "tax policy in the digital economy," "compliance challenges digital economy," "OECD two-pillar solution," "taxation of digital services," and "tax base erosion digital economy." The combination of these terms allowed the search to capture literature addressing not only the structural design of new tax policies but also the practical challenges of compliance, the role of international frameworks such as the OECD's two-pillar solution, and the systemic risks posed by profit shifting and base erosion. Boolean operators were used to refine searches and combine keywords strategically, enabling the retrieval of both broad thematic reviews and highly specific empirical case studies.

The inclusion and exclusion criteria were developed to ensure that only the most relevant and methodologically sound studies were incorporated into the review. One primary inclusion criterion was peer-reviewed status. Articles published in reputable academic journals were prioritized to guarantee reliability and quality, ensuring that the findings synthesized in this review are underpinned by scholarly rigor (Anyidoho et al., 2023). The temporal scope of the review was another critical inclusion criterion. Given the rapid pace of digitalization and its impact on tax policy, only studies published within the last ten years were included, with particular emphasis on contributions from the past five years, which reflect the most up-to-date debates and policy innovations (Blum, 2019). Exceptions were made for seminal works published earlier if they provided foundational insights into the conceptual underpinnings of digital taxation.

Geographical focus also informed the inclusion process. As digital tax reforms differ across regions, with unique challenges faced by developed and developing economies, the review incorporated studies representing diverse contexts. This allowed for comparative insights and a more holistic understanding of the global implications of tax reform. Studies addressing specific national or regional cases, such as digital services taxes in Indonesia or electronic transfer levies in Ghana, were included when they contributed to broader theoretical or practical insights relevant to international tax policy (Ozai, 2024). Conversely, studies narrowly focused on tax issues unrelated to digitalization or limited to purely domestic legal frameworks without implications for digital taxation were excluded.

Methodological rigor was also considered in the selection of studies. Articles employing robust quantitative approaches, such as econometric modeling of tax revenue impacts or simulations of profit-shifting behavior, were prioritized because of their ability to provide empirical evidence on the consequences of reform (Wilde, 2018). At the same time, high-quality qualitative studies, including case studies of national reforms or policy analyses of multilateral frameworks, were included for their ability to capture the contextual and normative dimensions of digital taxation. Thematic relevance served as a final inclusion criterion, ensuring that all selected studies directly addressed fiscal policy changes arising from digitalization. Articles that only tangentially mentioned digitalization without contributing substantive insights into tax reform dynamics were excluded

The process of literature selection was iterative and multi-staged. Initial searches across the three databases yielded a large number of articles, many of which overlapped across databases. Titles and abstracts were first screened to eliminate duplicates and clearly irrelevant studies. At this stage, exclusion was based on obvious mismatches with the research scope, such as articles focusing solely on general taxation without reference to digital aspects. Following this preliminary screening, full-text reviews were conducted on the remaining articles to assess their methodological rigor, thematic relevance, and contribution to the research objectives. Throughout this process, a consistent evaluation framework was applied, emphasizing clarity of research design, robustness of findings, and the extent to which studies advanced understanding of digital taxation reforms.

During the evaluation phase, articles were also categorized according to their thematic contributions. Studies addressing multilateral frameworks such as the OECD's two-pillar solution were grouped separately from those examining national or regional reforms. A further category included articles analyzing compliance and enforcement challenges, particularly with reference to SMEs and developing economies. Another category encompassed studies exploring normative and justice-related issues, which shed light on the fairness and equity dimensions of digital tax policies. This categorization facilitated a structured synthesis of results while ensuring that diverse perspectives were integrated coherently.

Finally, the synthesis of literature was guided by the principles of narrative review methodology. Unlike systematic reviews, which typically follow a rigid protocol and quantitative synthesis, narrative reviews allow for greater flexibility in interpreting diverse sources and highlighting conceptual linkages. However, to preserve academic rigor, this review adhered to transparent documentation of search strategies, inclusion criteria, and evaluation processes. The narrative synthesis aimed to capture both the diversity of perspectives and the common themes that emerge from the literature, offering a balanced and comprehensive account of the state of research on digital tax reforms.

In sum, the methodology employed in this review combines structured database searches, carefully selected keywords, rigorous inclusion and exclusion criteria, and a transparent selection and evaluation process. By integrating both quantitative and qualitative studies across a broad range of geographies and contexts, the approach ensures that the findings presented are not only academically robust but also practically relevant. The methodological design reflects the complex and evolving nature of digital taxation and seeks to contribute meaningfully to ongoing scholarly and policy debates in this critical field.

RESULT AND DISCUSSION

The findings of this narrative review are presented according to four overarching themes that emerged consistently from the literature: multilateral approaches under the OECD/G20 frameworks, national and regional reforms, the role of digitalization in tax administration, and issues of equity and justice in digital taxation. Each theme captures the dynamics of international and domestic reforms, technological innovations, and socio-economic implications, while providing comparative perspectives across regions.

Multilateral Approaches (OECD/G20 Frameworks)

The literature on multilateral frameworks highlights the mixed effectiveness of OECD/G20 initiatives such as the Base Erosion and Profit Shifting (BEPS) project and the more recent Pillars I and II solution. While these frameworks were designed to address long-standing issues of profit shifting and to establish fairer allocation of taxing rights, their implementation has been uneven across jurisdictions (Ozai, 2024). Studies indicate that although BEPS has discouraged some forms of aggressive tax planning, multinational corporations continue to exploit mismatches in national tax systems, limiting the overall effectiveness of these reforms. Moreover, projections of revenue gains from the global minimum tax under Pillar II suggest that the benefits may be concentrated in advanced economies, leaving developing countries with relatively modest improvements in fiscal capacity (Anyidoho et al., 2023). The gap between ambitious international agreements and their real-world outcomes underscores the difficulty of achieving global tax equity in a highly stratified economic system.

Empirical evaluations further reveal that enforcement mechanisms under the OECD frameworks remain weak, with many states lacking the institutional capacity to ensure compliance. Without stronger global enforcement provisions, commitments made under the Inclusive Framework risk being aspirational rather than transformative (Anyidoho et al., 2023). This raises questions about whether global initiatives can truly deliver on their promise of equity without more binding enforcement tools and stronger engagement from developing countries.

Critiques of the OECD/G20 frameworks also highlight fundamental concerns about fairness, sovereignty, and equity. The centralized nature of the OECD's approach is seen as privileging developed economies while underestimating the challenges faced by lower-income countries with weaker administrative infrastructures (Ozai, 2024). Scholars argue that requiring these states to implement technically complex compliance systems risks exacerbating existing disparities. Sovereignty concerns further complicate the debate, with some states viewing international frameworks as an encroachment on their fiscal autonomy (Jin et al., 2023). This resistance is not simply technical but reflects deeper anxieties about the fairness of a system that could erode states' ability to design tax policies aligned with their developmental priorities. Critics contend that the absence of distributive justice considerations in the frameworks entrenches structural inequalities, raising doubts about whether consensus is achievable without systemic reform (Ozai, 2024).

National and Regional Reforms

Country-specific reforms offer valuable insights into the diverse ways governments have responded to the challenges of digital taxation. Ghana's introduction of the Electronic Levy (E-levy) on mobile money transactions illustrates the difficulties of balancing revenue mobilization with social equity. While intended to broaden the tax base by capturing informal digital transactions, evidence shows that the levy disproportionately burdens lower-income users, discouraging the use of digital financial services and potentially deepening financial exclusion (Anyidoho et al., 2023). The Ghanaian case demonstrates the regressive potential of poorly designed digital taxes.

In contrast, Indonesia's reforms targeting Micro, Small, and Medium Enterprises (MSMEs) reflect efforts to enhance compliance through simplification. Policies aimed at reducing bureaucratic hurdles and streamlining digital reporting systems have shown positive effects in improving compliance among digital content providers, illustrating the benefits of tailoring reforms to local contexts (Sibarani et al., 2024). Japan's experience highlights another dimension: while comprehensive frameworks for taxing digital services have been developed, the intersection of domestic practices with international standards has generated obstacles, suggesting that reforms must navigate both internal and external complexities (Jin et al., 2023).

Comparative regional analysis highlights stark disparities in outcomes. European countries, supported by the EU's coordinated efforts, tend to achieve higher compliance and revenue gains due to robust infrastructure and administrative capacities (Lips, 2019; Ozai, 2024). In contrast, African countries face persistent barriers related to technological deficits and limited institutional resources, resulting in lower revenue mobilization and weaker compliance outcomes (Anyidoho et al., 2023). Latin American countries such as Argentina and Colombia have adopted electronic invoicing systems and VAT reforms to capture digital transactions, yet uneven implementation across the region limits the effectiveness of these measures (Naumenko & Kozyreva, 2022; Míguez, 2024). These comparisons underscore that while digital tax reforms are proliferating globally, their success is heavily mediated by local economic and institutional conditions.

Digitalization and Tax Administration

The literature identifies significant innovations in digital tax administration that have transformed compliance and collection processes. E-registration systems have emerged as crucial tools in simplifying taxpayer onboarding, reducing bureaucratic barriers, and increasing taxpayer accessibility. These systems automate registration and facilitate digital record-keeping, allowing tax administrations to track compliance more effectively. Cloud-based platforms complement these innovations by enabling real-time data sharing between taxpayers and authorities, improving transparency, and reducing administrative costs (Mai et al., 2024). Empirical findings suggest that cloud adoption enhances operational efficiency and reduces processing times, enabling tax administrations to respond more dynamically to compliance needs (Rufasto et al., 2024).

AI-based compliance tools represent a particularly transformative development. By processing large datasets, these technologies help detect fraud, flag inconsistencies, and support more targeted audit interventions (Jin et al., 2023). Their predictive capabilities also assist taxpayers by offering tailored guidance, thereby improving voluntary compliance. Research quantifies these effects, with one study reporting a 63% correlation between AI-driven accounting systems and improved compliance outcomes (Rufasto et al., 2024). Such findings demonstrate the tangible benefits of integrating advanced technologies into tax administration, especially as digital economies expand in scale and complexity.

The impacts of these reforms on compliance rates and revenue generation are significant. Indonesia's introduction of user-friendly online filing systems for MSMEs has been linked to measurable increases in compliance rates, illustrating the role of context-specific digital solutions in fostering better taxpayer behavior (Sibarani et al., 2024). Similarly, Latin American countries have reported notable gains in VAT collection efficiency following the adoption of electronic invoicing, which has reduced evasion and strengthened fiscal capacity (Míguez, 2024). These results underscore that digitalization is not merely a technical enhancement but a foundational shift in how states manage tax compliance and revenue collection.

Equity and Justice in Taxation

The issue of distributive justice in digital taxation remains at the forefront of scholarly debates. A recurring critique of current international frameworks is that they privilege developed economies by allocating taxing rights disproportionately in their favor, often leaving developing countries unable to capture revenues generated by digital firms operating within their markets (Ozai, 2024). Scholars argue that this imbalance reflects deeper inequities in global governance structures, perpetuating historical disparities in wealth distribution. Calls for reform emphasize the need to design frameworks that consider the developmental needs of the Global South, ensuring that taxation systems contribute to reducing rather than reinforcing inequality (Ozai, 2024).

Beyond questions of global justice, the regressive impacts of certain digital taxes raise pressing concerns about equity within states. Evidence from Africa shows that levies on mobile money transactions, though designed to expand fiscal space, disproportionately burden low-income populations (Anyidoho et al., 2023). In Ghana, the E-levy has been criticized for raising the costs of digital financial services, thereby discouraging their use among the poor and undermining broader goals of financial inclusion (Aren, 2024). Such outcomes illustrate the risk that digital taxation, if not carefully calibrated, can exacerbate socio-economic disparities rather than mitigate them.

The literature thus points to a dual challenge: ensuring fairness in the allocation of taxing rights internationally, and designing domestic policies that do not unduly burden vulnerable populations. Addressing these challenges requires both technical innovation and normative commitment to equity. Integrating the voices of developing economies into global negotiations, and conducting impact assessments on the distributive effects of digital taxes, are critical steps toward achieving a more just international tax order.

Taken together, the results of this review indicate that while significant progress has been made in designing and implementing digital tax reforms, the outcomes are highly uneven across contexts.

Multilateral frameworks provide a foundation for global cooperation but remain limited by issues of fairness and enforceability. National and regional reforms demonstrate the importance of aligning policies with local conditions, while digital innovations highlight the transformative potential of technology in tax administration. Yet persistent concerns about equity—both between and within countries—remain unresolved, underscoring the need for continued critical evaluation and reform in this evolving policy domain.

The findings of this review underscore the extent to which systemic factors shape the success or failure of digital tax reforms. Corruption, governance quality, and institutional capacity emerge consistently in the literature as decisive elements influencing both compliance outcomes and revenue generation. Countries plagued by high levels of corruption often encounter resistance in implementing effective reforms, as institutional credibility and accountability are compromised. In such contexts, digital tax regimes risk being perceived as mechanisms for rent-seeking rather than equitable fiscal policies, fostering avoidance and evasion. Conversely, nations characterized by strong governance frameworks have shown that digital tax compliance mechanisms are more effective. The correlation between governance quality and successful reform highlights how institutional integrity can bolster public trust, reduce compliance costs, and encourage voluntary participation in digital tax systems (Sibarani et al., 2024).

Institutional capacity is another critical dimension. For developing nations, the implementation of complex frameworks like the OECD/G20 two-pillar solution presents daunting challenges when infrastructure and human resources are inadequate. These limitations translate into high compliance costs that deter participation, especially for micro, small, and medium-sized enterprises (MSMEs). Literature from Indonesia emphasizes that without systemic simplification and institutional support, MSMEs face disproportionate difficulties adapting to digital regimes, leading to uneven enforcement (Sibarani et al., 2024). Therefore, capacity-building initiatives—ranging from the training of tax officials to investment in digital infrastructure—are essential to ensuring that reforms are not only enacted but effectively operationalized.

The implications of these systemic constraints extend beyond technical challenges, linking tax reform outcomes directly with broader socioeconomic development goals. When digital tax reforms align with inclusive growth strategies, they contribute not only to revenue mobilization but also to social equity and sustainable development. Progressive tax structures that account for business capacities have been shown to enhance compliance while fostering equitable contributions to the public purse (Anyidoho et al., 2023). The design of Ghana's E-levy, by contrast, illustrates the dangers of misalignment: prioritizing revenue generation without accounting for equity produced regressive outcomes that disproportionately affected low-income populations (Anyidoho et al., 2023). Such missteps reinforce the need for tax policies to be framed in a manner consistent with developmental priorities, particularly in economies where poverty reduction and financial inclusion remain pressing concerns.

The integration of fiscal strategies with social objectives has the potential to mitigate resistance and improve long-term compliance. Studies demonstrate that transparency and participatory governance significantly enhance the public's perception of taxation, increasing voluntary compliance rates (Sibarani et al., 2024). By embedding tax reforms within broader governance reforms, states can create mutually reinforcing cycles where stronger institutions improve fiscal performance, and greater fiscal capacity strengthens public institutions. Such alignment requires policymakers to move beyond purely technical considerations of tax design and adopt holistic perspectives that consider social equity, developmental goals, and the political economy of reform.

Nevertheless, limitations in the existing literature restrict the extent to which comprehensive conclusions can be drawn. A notable shortcoming is the disproportionate emphasis on developed economies. Much of the empirical evidence available pertains to OECD member states, whose administrative capacities and governance contexts differ substantially from those of developing nations (Anyidoho et al., 2023). This imbalance risks skewing global policy debates toward models that are ill-suited for less affluent regions. For example, while advanced economies benefit from robust digital infrastructures that facilitate compliance, many developing countries lack the technological base required to implement similar systems (Han & Zhang, 2020). The absence of regionally diverse case studies hinders efforts to construct universally relevant frameworks.

The methodological orientation of existing studies further compounds this limitation. The majority of contributions employ qualitative methods, offering descriptive insights into challenges and policy frameworks but leaving quantitative impacts underexplored (Sibarani et al., 2024). Without robust empirical data, it is difficult to assess the actual effectiveness of reforms in improving compliance rates, reducing profit shifting, or increasing government revenues. Quantitative approaches such as econometric modeling of compliance behavior or simulations of revenue gains under alternative tax scenarios remain underutilized, despite their potential to inform policy with evidence-based predictions.

Another critical gap lies in the failure of many studies to account for the intersectionality of systemic, social, and economic factors. Tax compliance and revenue mobilization are not merely technical challenges; they are embedded in broader social contexts where issues of inequality, informality, and governance legitimacy profoundly shape outcomes. The Ghanaian experience with the E-levy exemplifies this intersection, as regressive taxation both exacerbated social inequities and undermined public confidence in the tax system (Aren, 2024). Similarly, evidence from Indonesia highlights how the administrative burden placed on MSMEs interacts with structural inequalities in access to technology, thereby influencing compliance (Sibarani et al., 2024). Future research must embrace interdisciplinary perspectives that integrate insights from economics, political science, and sociology to fully capture these dynamics (Ozai, 2024; Jin et al., 2023).

There is also a pressing need for empirical studies that assess the distributive justice implications of global frameworks such as the OECD/G20 two-pillar solution. Current analyses often emphasize technical feasibility and revenue outcomes but neglect the deeper normative question of fairness in allocating taxing rights between developed and developing nations (Ozai, 2024). This omission risks entrenching structural inequities and overlooking opportunities for designing more inclusive frameworks. Research that incorporates perspectives from marginalized economies could help rebalance these debates, ensuring that reforms support equitable participation in the digital economy.

Furthermore, literature frequently fails to address the long-term sustainability of digital tax reforms. While innovations such as AI-based compliance tools and cloud platforms have demonstrated immediate benefits in terms of efficiency and revenue generation (Rufasto et al., 2024; Mai et al., 2024), there remains limited analysis of their resilience over time. Questions about cybersecurity risks, data privacy, and the adaptability of technological tools to evolving digital business models are largely absent from current research agendas. These gaps raise concerns about whether the efficiency gains observed in the short term will persist as digital economies grow more complex.

Finally, the limited exploration of how reforms impact informal economies represents a significant blind spot. In many developing countries, informal sectors account for a substantial proportion of economic activity, yet digital tax reforms often assume formalized structures that fail to capture this reality. The regressive effects of mobile money levies in Africa (Anyidoho et al., 2023) illustrate how ignoring the prevalence of informality can result in unintended social and economic consequences. Expanding the scope of inquiry to consider informal sectors is critical for ensuring that digital tax reforms are inclusive and do not inadvertently deepen existing inequalities.

Addressing these gaps requires methodological pluralism, interdisciplinary approaches, and a commitment to amplifying diverse perspectives. Quantitative models of compliance behavior, qualitative analyses of governance structures, and normative evaluations of distributive justice must be integrated to form a holistic evidence base. Such a foundation will enable policymakers to design reforms that are not only efficient and technically feasible but also equitable and socially legitimate in the context of an increasingly digital global economy.

CONCLUSION

This narrative review demonstrates that while significant strides have been made in reforming tax systems to address the challenges of the digital economy, outcomes remain uneven and contested across global contexts. Multilateral frameworks such as the OECD/G20 two-pillar solution provide important foundations for international cooperation, yet persistent concerns regarding fairness, sovereignty, and equity reveal structural imbalances that disadvantage developing economies. National and regional reforms highlight both successes and shortcomings, with countries like Indonesia and parts of Latin America achieving progress through tailored compliance systems, while others, such as Ghana, illustrate the regressive risks of poorly designed levies. Technological innovations in tax administration, including e-registration, cloud platforms, and AI-driven compliance tools, have proven transformative in enhancing efficiency and revenue collection, though questions of sustainability and inclusivity remain unresolved. Central to these findings is the importance of equity and distributive justice, as digital tax reforms risk exacerbating existing inequalities if not carefully calibrated.

The urgency of addressing these issues underscores the need for continued international cooperation, capacity-building initiatives, and transparent governance practices to ensure reforms are both effective and socially just. Policymakers should prioritize the alignment of tax reforms with broader socioeconomic goals, particularly financial inclusion and sustainable development. Future research should expand the evidence base through quantitative modeling, interdisciplinary approaches, and deeper engagement with the realities of informal economies, thereby offering more robust insights into equitable tax reform. Ultimately, the long-term success of digital tax reforms will depend on integrating efficiency with fairness, ensuring that the benefits of digitalization are shared more equitably across all economies.

REFERENCE

Anyidoho, N., Gallien, M., Rogan, M., & Boogaard, V. (2023). Mobile money taxation and informal workers: evidence from Ghana's e-levy. *Development Policy Review, 41*(5). https://doi.org/10.1111/dpr.12704

Aren, M. (2024). Exploring minimal indirect digital economy taxation as a post-COVID-19 economic recovery strategy for African revenue mobilisation. *Journal of Sustainable Development Law and Policy (The), 15*(1), 238-262. https://doi.org/10.4314/jsdlp.v15i1.8

Blum, D. (2019). Debate on the US tax reform and the EU ATAD: the proposal for a global minimum tax: comeback of residence taxation in the digital era?: comment on can GILTI + BEAT = GLOBE?. *Intertax, 47*(5), 514-522. https://doi.org/10.54648/taxi2019052

Elliffe, C. (2021). *Taxing the digital economy*. https://doi.org/10.1017/9781108750691

Greil, S., Müller, R., & Olbert, M. (2019). Transfer pricing for digital business models: early evidence of challenges and options for reform. *World Tax Journal, 11*(4). https://doi.org/10.59403/3rbsghz

Herzfeld, M. (2019). Debate on the US tax reform and the EU ATAD: can GILTI + BEAT = GLOBE?. *Intertax, 47*(5), 504-513. https://doi.org/10.54648/taxi2019051

Jin, P., Feng, Z., & Li, G. (2023). The effect of platform data quality on tax compliance in digital economy: a multiagent based simulation. *Complexity, 2023*, 1-16. https://doi.org/10.1155/2023/5511572

Lips, W. (2019). The EU Commission's digital tax proposals and its cross-platform impact in the EU and the OECD. *Journal of European Integration, 42*(7), 975-990. https://doi.org/10.1080/07036337.2019.1705800

Magalhães, T., & Christians, A. (2024). Taxing data when the United States disagrees. *European Law Open, 3*(4), 939-961. https://doi.org/10.1017/elo.2024.49

Mai, W., Li, C., Chen, Y., & Mai, L. (2024). Exploring the influence of digital infrastructure on fiscal self-sufficiency: empirical evidence from 29 provinces in China. *SAGE Open, 14*(4). https://doi.org/10.1177/21582440241284108

Milogolov, N., & Berberov, A. (2021). Russia in global digital tax reform: together or apart?. *Journal of Siberian Federal University Humanities & Social Sciences, 14*(11), 1731-1745. https://doi.org/10.17516/1997-1370-0853

Míguez, S. (2024). Panorama de la tributación en América Latina y el Caribe. *Cuadernos Económicos De Ice, (108)*. https://doi.org/10.32796/cice.2024.108.7855

Naumenko, T., & Kozyreva, M. (2022). Reforming VAT for digital economy in Latin America. *International Trends / Mezhdunarodnye Protsessy, 20*(2), 139-154. https://doi.org/10.17994/it.2022.20.2.69.8

Ozai, I. (2024). Global justice in the reshaping of international tax. *Journal of International Economic Law, 27*(4), 639-645. https://doi.org/10.1093/jiel/jgae054

Rufasto, A., Lucumí, N., & Rodríguez, V. (2024). SIRE: Catalyst for improvements in accounting and tax processes. *Journal of Ecohumanism, 3*(7), 928-937. https://doi.org/10.62754/joe.v3i7.4259

Sibarani, P., Fadjarenie, A., Widayati, C., & Tarmidi, D. (2024). Digital tax policies and compliance challenges for MSMEs in Indonesia. *Edelweiss Applied Science and Technology, 8*(6), 2817-2835. https://doi.org/10.55214/25768484.v8i6.2560

Wilde, M. (2018). Comparing tax policy responses for the digitalizing economy: fold or all-in. *Intertax, 46*(6/7), 466-475. https://doi.org/10.54648/taxi2018051

Belahouaoui, R., & Attak, E. H. (2024). Exploring the relationship between taxpayers and tax authorities in the digital era: evidence on tax compliance behavior in emerging economies. *International Journal of Law and Management*. https://doi.org/10.1108/IJLMA-02-2024-0064

Dietrich, M., & Golden, C. (2022). Consistency versus "Gold Plating": The EU Approach to Implementing the OECD Pillar Two. *Bulletin for International Taxation*, *76*(4), 183–196. https://doi.org/10.59403/30f9dy5

Han, X., & Zhang, W. (2020). The Influence of Digital Marketing Strategies on Consumer Purchase Intention: An Empirical Study of Electric Vehicle Adoption in China. *Journal of Technological Innovations*, *19*(6), 195–208.