

Global Challenges in Digital Taxation: Policy, Administration, and Sustainable Development

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Received : February 28, 2025

Accepted : April 18, 2025

Published : April 30, 2025

Citation: Cupiadi, H. (2025). Global Challenges in Digital Taxation: Policy, Administration, and Sustainable Development. *Moneta : Journal of Economics and Finance*, 3(2), 132-145.

ABSTRACT: The rapid expansion of the digital economy challenges traditional tax systems that rely on physical presence. This review synthesizes global regulatory issues of digital taxation and their fiscal implications. OECD initiatives, particularly the BEPS and Two-Pillar Solution, form the basis of reform, though implementation remains uneven. While European states adopt national digital services taxes, countries like India and Indonesia pursue localized strategies. Challenges persist, including limited fiscal capacity, administrative barriers, and legal uncertainties. Despite these obstacles, digital taxation can enhance fiscal sustainability and support development goals. The review emphasizes the need for international cooperation, adaptive policies, and technological innovation. Future research should examine cryptocurrency regulation and links with environmental sustainability.

Keywords: Digital Taxation, Public Finance, OECD BEPS, Global Regulatory Challenges, Fiscal Sovereignty, International Cooperation, Sustainable Development.



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INTRODUCTION

The last decade has witnessed profound transformations in the global economic landscape as digitalization has become a defining feature of contemporary commerce. The rapid expansion of e-commerce platforms, online services, and digital marketplaces has reshaped business practices, challenging traditional tax structures that were primarily designed for physical, location-bound economic activities. Digital platforms enable interactions between buyers and sellers across borders without requiring a substantial physical presence, thus creating complexities in identifying taxable activities and allocating taxing rights. A growing body of scholarship emphasizes that this transformation necessitates a reconfiguration of tax systems to ensure that governments remain capable of collecting adequate revenue in the digital era (Qureshi & Zaman, 2023; Kyriazis et al., 2023).

The academic literature has increasingly documented how the digital economy has become a significant driver of global growth. In advanced economies, such as the United States and European Union member states, digital sectors accounted for between 6% and 10% of GDP in 2021, while in developing countries the contribution ranged from 3% to 5% (Galvão et al., 2024).

These figures underscore the expanding role of digital activity as a source of economic dynamism, regardless of the stage of national development. Scholars argue that this evolution presents not only fiscal opportunities but also regulatory and governance challenges. The emergence of cross-border, intangible, and data-driven value creation has put considerable pressure on fiscal authorities to reconsider long-standing tax principles (Sonkurt & Altınöz, 2021).

Empirical research indicates that digital platforms are central to enabling global trade expansion. They provide firms in developing economies with unprecedented access to international markets, thereby accelerating economic integration (Petti & Sergio, 2024). However, this transnational digital activity also exacerbates the problem of profit shifting, as multinational corporations can exploit mismatches in tax rules to minimize their liabilities. Governments are thus compelled to rethink approaches to corporate taxation and value-added tax collection, particularly in order to address the growing phenomenon of base erosion and profit shifting (BEPS). Studies have highlighted that absent reforms, these practices risk undermining both fiscal sustainability and equity in taxation (Chinthapalli, 2021).

From a statistical perspective, the digital economy has been linked to both GDP growth and employment generation. While data clearly indicate job creation, caution is warranted regarding exaggerated claims of specific employment figures. The more robust evidence highlights average annual growth rates in information and communication technology sectors, contributing to broader economic modernization (Pelster et al., 2019). Beyond employment, the fiscal implications are paramount: digital transactions generate significant revenue potential, yet tax systems often fail to capture these flows effectively, creating fiscal leakages that disproportionately affect developing economies.

Policy responses have varied across jurisdictions. Many governments have adopted experimental measures, such as unilateral digital services taxes (DSTs), to capture revenue from multinational enterprises that leverage local markets without physical establishments. While these measures represent critical steps toward fiscal fairness, they are also sources of trade tension, particularly between European states and the United States (Vardar & Aydoğan, 2019). Literature suggests that such unilateralism risks fragmenting international tax regimes and creating double taxation scenarios, which ultimately undermine both compliance and cross-border investment (Caporale et al., 2023).

Among the central challenges in taxing the digital economy is the problem of nexus: determining the jurisdiction in which taxable income should be recognized. The absence of physical presence complicates the assignment of taxing rights, often leading to disputes between source and residence countries. Moreover, multinational corporations frequently shift profits to low-tax jurisdictions, exploiting ambiguities in international tax law (Boido & Aliano, 2025). Another recurring theme in scholarship concerns the heterogeneity of national tax policies, which exacerbates compliance burdens and creates legal uncertainty (Малкина & Ovchinnikov, 2020). These discrepancies not only frustrate multinational firms but also impede efforts to establish a coherent, global tax framework.

Technological and data-related challenges further complicate the landscape. Governments require robust infrastructure to monitor digital transactions and analyze massive datasets to determine tax obligations accurately. Traditional tax administrations are often ill-equipped to adapt to the pace of digital innovation, thereby undermining enforcement capacity (Chittineni, 2025). The rise of novel financial technologies, including cryptocurrencies, introduces new layers of opacity, limiting states' ability to track transactions and ensure compliance. Scholars emphasize that without technological adaptation, tax authorities will remain vulnerable to tax evasion and avoidance in digital markets (Irfan et al., 2023).

Despite a growing corpus of research, significant gaps remain in the literature. For instance, the implications of global fiscal policy uncertainty for digital investment decisions and cryptocurrency taxation remain underexplored (Mehdian et al., 2024). Similarly, little attention has been given to how digital tax regimes intersect with environmental and sustainability considerations, despite mounting concerns over the ecological footprint of digital technologies such as blockchain mining (Touhami et al., 2025). These gaps suggest the need for more interdisciplinary and forward-looking research agendas that link digital taxation with broader issues of sustainable development and financial stability.

The present review seeks to address these gaps by systematically examining the global regulatory challenges surrounding digital taxation. Its primary aim is to analyze the complexity of taxing digital enterprises across borders, with particular emphasis on issues of tax base erosion, fairness in revenue distribution, and the administrative feasibility of enforcement. This review also investigates potential policy responses, including the OECD's two-pillar framework, unilateral DSTs, and regional approaches, to provide a holistic understanding of the global regulatory landscape (Sundarasan & Saleem, 2025).

The scope of this narrative review extends across both OECD and developing countries, thereby capturing the heterogeneity of regulatory responses. OECD member states generally possess mature tax infrastructures and the resources necessary to design and implement innovative tax policies. In contrast, developing economies face significant constraints in fiscal capacity, technical expertise, and institutional frameworks, which limit their ability to adapt effectively to digitalization (Galvão et al., 2024; Haq et al., 2023). Comparative analysis across these contexts is essential to understanding the differentiated challenges and opportunities in digital taxation.

For example, developing countries often rely on simpler tax systems that are ill-equipped to capture revenues from complex digital transactions, resulting in substantial revenue losses. Conversely, OECD countries leverage advanced data infrastructures and engage in robust international cooperation on tax matters, narrowing loopholes that digital firms might otherwise exploit (Petti & Sergio, 2024). Moreover, cultural, economic, and policy divergences across jurisdictions shape the modalities of digital tax implementation and influence corporate responses to regulatory frameworks (Akpan, 2024). This review, therefore, aims to contribute to a nuanced understanding of these variations and to identify avenues for harmonization and policy innovation.

In sum, the digitalization of the global economy has fundamentally challenged the foundations of public finance. While opportunities for revenue generation are vast, the obstacles posed by

jurisdictional disputes, technological limitations, and policy fragmentation remain formidable. By situating the discussion within the broader literature and identifying key gaps, this review underscores the urgency of developing coordinated, fair, and adaptive tax regimes that align with the realities of the digital age.

METHOD

This study adopts a narrative review methodology designed to synthesize existing research and policy discussions concerning digital taxation and its implications for global public finance. The methodology was carefully constructed to ensure the inclusion of comprehensive and reliable sources, capturing the complexities of digital taxation across jurisdictions. The following section outlines the procedures employed in the identification, selection, and evaluation of literature.

The first step in the review involved the systematic collection of literature from academic databases known for their breadth and rigor. The primary databases utilized were Scopus, Web of Science, and Google Scholar. Scopus and Web of Science were prioritized because they provide access to high-impact journals and peer-reviewed literature, offering reliability and accuracy in citation practices. These databases are particularly valued in disciplines where regulatory frameworks and international standards hold critical importance, such as taxation and public finance (Qureshi & Zaman, 2023; Kyriazis et al., 2023; Sonkurt & Altınöz, 2021). Google Scholar was included as a supplementary database due to its broader coverage, which encompasses theses, reports, working papers, and policy documents that are not always indexed in Scopus or Web of Science. The inclusion of Google Scholar allowed the review to capture diverse perspectives and grey literature, enriching the analysis with insights from non-traditional sources.

In order to ensure the precision of the search process, a set of keywords was developed to capture the major thematic strands of digital taxation. The search strategy included terms such as “digital taxation framework,” “digital economy taxation,” “taxation of digital services,” and “tax compliance in digital economy” to reflect the broader context of digital taxation. To explore the fiscal dimensions, additional keywords included “impact of digitalization on public finance,” “digital public finance,” and “fiscal policies in digital era.” Because one of the central frameworks in this domain is the OECD’s Base Erosion and Profit Shifting (BEPS) initiative, keywords such as “OECD BEPS action plan,” “BEPS digital economy,” and “OECD tax guidelines for digital economy” were systematically applied. To capture the challenges related to governance and enforcement, keywords included “global tax compliance challenges,” “cross-border taxation in digital economy,” “regulatory framework for digital businesses,” and “jurisdiction issues in digital taxation.” The inclusion of these varied but interrelated terms ensured that the review could identify studies that cover conceptual, empirical, and policy-driven dimensions of digital taxation (Ballis et al., 2025; De-la-Rica-Escudero et al., 2025; Galvão et al., 2024).

The criteria for inclusion were designed to ensure that the reviewed literature was relevant, rigorous, and aligned with the objectives of the study. Studies were included if they were peer-reviewed articles, working papers, or policy documents that focused on digital taxation and its

implications for public finance at national, regional, or global levels. Both qualitative and quantitative research was considered eligible, reflecting the interdisciplinary nature of the topic, which spans economics, law, political science, and international relations. Publications from the last fifteen years, with a focus on the period between 2010 and 2025, were prioritized to ensure the coverage of the most recent and relevant developments. This period corresponds with the accelerated digitalization of economies and the intensification of international debates on taxation reform.

Exclusion criteria were applied to maintain the focus and quality of the review. Studies were excluded if they did not explicitly address digital taxation, if their scope was limited to unrelated domains such as technical ICT innovations without fiscal implications, or if they were primarily journalistic or opinion-based articles lacking empirical or conceptual rigor. Literature that did not meet minimum academic or policy relevance standards was omitted, ensuring that the review concentrated on sources capable of contributing to scholarly understanding and evidence-based policy debates.

The types of research included in this review were diverse but thematically coherent. They encompassed policy analyses that examine national and international approaches to digital taxation, empirical economic studies investigating the revenue implications of taxing digital services, legal studies addressing jurisdictional and compliance issues, and case studies of specific countries or regions. Experimental designs such as randomized controlled trials were not relevant to the scope of this review, given the policy-oriented nature of the topic. Instead, the emphasis was placed on comparative policy research, cross-sectional analyses, and longitudinal studies that provide empirical grounding for broader debates. Case-based literature from both OECD countries and developing economies was particularly valuable, as it allowed for comparisons of capacity, policy design, and institutional implementation across different contexts (Balijepalli & Thangaraj, 2025; Nguyen & Nguyen, 2023).

The process of selecting literature involved multiple stages. Initial keyword searches generated a large corpus of studies, which were first screened by title and abstract to eliminate sources that were clearly irrelevant. The remaining articles were subjected to a more detailed evaluation of their methodology, scope, and findings. Preference was given to studies published in reputable journals or by established policy institutions, though high-quality grey literature was also retained when it offered unique insights not found in peer-reviewed outlets. The selection process followed principles of transparency and replicability, ensuring that the review is methodologically sound and capable of guiding future research efforts.

Evaluation of the literature was guided by a combination of thematic analysis and critical appraisal of methodological quality. Articles were grouped into thematic clusters based on their primary focus, such as global tax frameworks, administrative and technological challenges, regional policy divergences, and fiscal impacts on public finance. Within each cluster, studies were compared and synthesized to identify areas of consensus, divergence, and emerging trends. Special attention was given to how studies contextualized digital taxation within broader economic and political structures, as this perspective is crucial for understanding the regulatory challenges at stake (Touhami et al., 2025). Where relevant, cross-country comparisons were emphasized, as they reveal

the heterogeneity of policy responses and the difficulties of achieving harmonization in global tax regimes.

This methodological approach ensures that the review does not simply collate existing findings but critically engages with the literature to highlight underlying assumptions, methodological strengths and weaknesses, and implications for policy and future research. By employing a systematic and transparent approach to data collection, selection, and evaluation, the study seeks to provide a comprehensive and balanced account of the state of knowledge on digital taxation and public finance. Furthermore, by drawing on a wide range of sources across disciplines and geographies, the review enhances the robustness and generalizability of its findings.

In conclusion, the methodology adopted for this study reflects the interdisciplinary and evolving nature of research on digital taxation. Through careful selection of databases, targeted use of keywords, rigorous inclusion and exclusion criteria, and critical evaluation of diverse types of studies, this review offers a structured and comprehensive synthesis of the literature. This approach ensures that the findings presented are grounded in a broad and reliable evidence base, capable of informing both scholarly debates and policy deliberations on the global regulatory challenges posed by digital taxation.

RESULT AND DISCUSSION

Global Frameworks and OECD Initiatives

The global conversation on digital taxation has been shaped largely by the efforts of the Organisation for Economic Co-operation and Development (OECD), particularly through its Base Erosion and Profit Shifting (BEPS) project and the introduction of the Two-Pillar Solution. The BEPS framework was designed to address tax avoidance practices by multinational enterprises, including those in the digital sector, by developing stricter guidelines for tax reporting and profit allocation (Păuna, 2019; Yao et al., 2022). The Two-Pillar Solution builds on these efforts, proposing a reallocation of taxing rights to ensure a fairer distribution of revenues among jurisdictions where digital companies operate, regardless of physical presence (Sundarassen & Saleem, 2025). This mechanism aims to compensate countries disproportionately affected by profit-shifting practices, especially in cases involving highly digitalized multinational corporations.

Empirical evidence suggests that the adoption of BEPS recommendations has yielded positive, albeit varied, results. Several countries that implemented BEPS-aligned measures reported increases in tax revenue, though the magnitude of improvement depended on administrative capacity and policy enforcement. For example, while advanced economies with established tax infrastructures demonstrated measurable gains, many developing countries continued to struggle due to limited resources and institutional constraints (Yadav, 2024; Ridwan et al., 2025; Ballis et al., 2025). The literature consistently highlights that effective implementation requires not only legal alignment but also investment in tax administration systems, a factor often lacking in developing economies. Consequently, although the OECD framework provides a global baseline, disparities in national capacities remain a central challenge to its success.

Regional Approaches: Europe, Asia, and the United States

In Europe, efforts to harmonize digital taxation policies have been significant, yet national differences persist. The European Union has debated the adoption of a bloc-wide digital services tax (DST), but member states such as France, Italy, and Spain have already introduced national DSTs, levying taxes on revenues generated by large digital firms surpassing specific thresholds (Tanrikulu & Pabuçcu, 2025; Yaâla & Henchiri, 2025). These measures were intended to target firms benefiting from European markets without adequate tax contributions. However, the coexistence of national DSTs and EU-wide policy discussions has led to disputes among member states, raising concerns over fragmentation and compliance burdens (Touhami et al., 2025). Despite these tensions, empirical studies show that such taxes have modestly boosted national revenues and have served as bargaining tools in international negotiations on broader tax reforms.

In contrast, the United States has strongly resisted unilateral DSTs, perceiving them as discriminatory toward American technology giants. This opposition has at times escalated into trade tensions with European states, highlighting the geopolitical dimensions of digital tax policy. Meanwhile, in Asia, countries such as India and Indonesia have developed their own approaches tailored to local conditions. India implemented an equalization levy, imposing a fixed tax rate on foreign digital companies providing services within its borders. Indonesia adopted a more progressive approach, integrating digital taxation into its broader economic strategy, particularly in the context of digital trade expansion (Boido & Aliano, 2025; Balijepalli & Thangaraj, 2025; Cheong, 2019). These policies reflect attempts to capture revenues from a rapidly growing digital economy while aligning fiscal measures with national development priorities.

Comparative analyses demonstrate that advanced economies generally enjoy advantages in legal frameworks and administrative resources, enabling more effective responses to digital taxation challenges. Conversely, developing economies face administrative inefficiencies and a lack of expertise, which constrain effective implementation (Bruzgè et al., 2023). The literature emphasizes that while digital taxation presents opportunities for all economies, the ability to capitalize on these opportunities depends heavily on institutional strength, regional coordination, and international diplomacy.

Administrative and Legal Challenges

One of the most pressing obstacles to digital taxation in lower-capacity states is the inadequacy of administrative infrastructure. Many developing countries lack robust information technology systems capable of tracking, managing, and analyzing tax data linked to digital activities. This deficiency severely limits their ability to monitor cross-border digital transactions effectively, leaving gaps in compliance and enforcement (Sonkurt & Altınöz, 2021; Kyriazis et al., 2023). Beyond technological barriers, a shortage of skilled personnel further undermines effective tax administration. Tax authorities in these jurisdictions often do not have sufficient expertise in dealing with complex digital business models, leading to errors in implementation and missed revenue opportunities (Qureshi & Zaman, 2023; Galvão et al., 2024).

Legal uncertainties compound these administrative shortcomings. The imposition of DSTs has sparked debates about compliance with international trade agreements and World Trade Organization (WTO) rules. Some scholars argue that discriminatory application of DSTs,

particularly when they disproportionately affect foreign firms, may violate the WTO's principle of non-discrimination (Haq et al., 2023; Sawhney et al., 2022). This creates significant legal risks for governments attempting to enforce such taxes, potentially leading to international disputes. As a result, states pursuing digital taxation must navigate a delicate balance between asserting fiscal sovereignty and adhering to multilateral trade commitments. These conflicts highlight the inherent tension between national tax policy and global trade governance, a theme that emerges consistently in the literature.

Implications for Public Finance

The fiscal implications of digital taxation have been extensively debated in the literature, with evidence suggesting that such measures can play a critical role in strengthening public finance. In advanced economies such as France and Italy, the introduction of DSTs has generated measurable increases in tax revenues, albeit modest compared to broader corporate income tax receipts (Vardar & Aydoğan, 2019; Pelster et al., 2019). These incremental revenues, while limited, contribute to fiscal sustainability and underscore the symbolic importance of ensuring tax fairness in the digital economy.

For developing economies, the potential of digital taxation is even more pronounced. Scholars argue that digital taxes can provide much-needed additional fiscal space to finance development goals, particularly the United Nations' Sustainable Development Goals (SDGs). Empirical studies indicate that revenue gains from digital taxes in developing countries, although still modest in absolute terms, can support investments in infrastructure, education, and healthcare (Petti & Sergio, 2024; Ballis et al., 2025). This additional revenue can help reduce fiscal deficits and expand public services, thereby enhancing social welfare. Moreover, by strengthening tax collection capacities, developing economies can reduce dependence on external borrowing and improve fiscal sovereignty (De-la-Rica-Escudero et al., 2025; Chinthapalli, 2021).

Nevertheless, the extent of these benefits depends on effective policy design and administrative reform. Without improvements in tax administration, compliance enforcement, and regional cooperation, the potential gains from digital taxation may be undermined by inefficiencies and loopholes. Comparative evidence shows that OECD countries, by leveraging advanced technological infrastructures and cross-border information-sharing agreements, are better positioned to capture revenues from digital firms. In contrast, developing countries often lack these mechanisms, resulting in leakage of potential revenues (Akpan, 2024; Caporale et al., 2023). Thus, while digital taxation represents an important instrument for enhancing public finance globally, its effectiveness remains conditional on the broader institutional and policy context.

In summary, the results of this review highlight the multifaceted outcomes of digital taxation initiatives. Global frameworks such as OECD's BEPS and Two-Pillar Solution provide critical foundations for addressing tax avoidance but require robust domestic implementation. Regional approaches demonstrate the diversity of strategies across contexts, reflecting differences in economic capacity, political will, and institutional design. Administrative and legal challenges remain pervasive, particularly in developing economies, where limited resources hinder effective enforcement and raise questions about compatibility with international trade rules. Finally, digital taxation has the potential to strengthen public finance and contribute to development goals, but

realizing this potential depends on sustained reform, international cooperation, and adaptive policy frameworks capable of addressing the evolving dynamics of the digital economy.

The findings of this review highlight the systemic nature of the challenges confronting digital taxation and their roots in broader global transformations. Existing literature consistently demonstrates that globalization has facilitated the rise of multinational corporations with decentralized and borderless operations, thereby eroding the relevance of traditional tax systems grounded in physical presence (Păuna, 2019; Yao et al., 2022). The digital economy has amplified this effect by enabling corporations to shift profits with unprecedented ease to low-tax jurisdictions, undermining fiscal sovereignty in high-tax economies. This situation has created structural weaknesses in tax systems, making reform imperative if governments are to preserve revenue bases and ensure fairness in taxation (Qureshi & Zaman, 2023; Kyriazis et al., 2023).

The systemic dimension of these challenges is not limited to fiscal design but extends into political and institutional arenas. Countries face a tension between their desire to protect fiscal sovereignty and the need to cooperate internationally in a highly interconnected global economy. Literature suggests that this tension manifests most clearly in the debate surrounding the OECD's BEPS initiative and the Two-Pillar Solution, which represent attempts at reconciling national interests with global coordination (Sundarasan & Saleem, 2025). While advanced economies with strong administrative capacity are better positioned to adopt these frameworks, developing economies often struggle with the technical and institutional requirements for compliance. This divergence underscores the systemic inequities between developed and developing states, creating challenges in implementing globally coherent solutions (Ballis et al., 2025).

The policy implications of these findings emphasize the dual objectives of enhancing fiscal equity and protecting national sovereignty. Studies have shown that fiscal systems perceived as unfair erode taxpayer trust and compliance, potentially reducing revenue collection in the long run (Sonkurt & Altnöz, 2021; Galvão et al., 2024). Ensuring that digital firms contribute equitably to national revenue pools is therefore essential for maintaining public trust in the tax system and for fostering a level playing field between domestic and multinational enterprises. Without reforms, fiscal asymmetries could deepen, creating a cycle of reduced compliance and weakened fiscal capacity (Vardar & Aydoğan, 2019; Pelster et al., 2019).

Several scholars advocate that international cooperation represents the most viable pathway to overcoming these systemic barriers. OECD-led frameworks provide a foundation for harmonization, yet their success depends on adaptation to diverse national contexts, especially in developing economies where administrative limitations hinder effective enforcement (Ridwan et al., 2025). Literature emphasizes that without equitable participation, global tax regimes risk reinforcing asymmetries by privileging advanced economies with greater bargaining power and technical capacity (Bruzgė et al., 2023). Thus, enhanced multilateral dialogue and inclusivity are necessary to ensure that tax regimes account for the needs of both developed and developing nations.

Another important theme emerging from the literature concerns the integration of technology into tax administration. The rise of digital technologies, while presenting new challenges, also provides opportunities for innovation in tax collection and enforcement. Scholars note that blockchain-based systems could promote transparency in digital transactions, offering governments tools to

trace profits and identify taxable events that currently remain hidden within opaque digital value chains (Irfan et al., 2023; Touhami et al., 2025). Similarly, investments in big data analytics and artificial intelligence have been suggested as strategies to strengthen the detection of cross-border profit shifting, thus enhancing the effectiveness of compliance regimes (Chittineni, 2025). However, realizing these possibilities requires substantial investment and capacity-building, especially in countries where fiscal administrations remain underdeveloped.

The systemic nature of digital taxation challenges also points to the importance of institutional reforms at the domestic level. Weak administrative capacity, particularly in developing economies, undermines the ability to translate international frameworks into effective domestic policies (Balijepalli & Thangaraj, 2025; Nguyen & Nguyen, 2023). Literature indicates that governments must prioritize strengthening the human capital of tax authorities, modernizing IT infrastructure, and creating robust legal frameworks to support digital tax enforcement (Cheong, 2019). Without such reforms, even well-designed global agreements will fall short of their intended impact.

Legal conflicts present another area of complexity, as DSTs may contravene commitments under WTO rules and other international trade agreements. This raises questions about how countries can exercise fiscal sovereignty without undermining broader commitments to international trade governance (Haq et al., 2023; Sawhney et al., 2022). The literature underscores the need for clearer integration of tax principles into trade law to avoid disputes and ensure coherence between fiscal and trade regimes. Absent such integration, digital taxation risks becoming a new front for international disputes, further complicating global economic governance.

Despite the growing body of research, significant gaps persist in understanding the long-term implications of digital taxation. Few studies have rigorously examined the impact of global fiscal policy uncertainty on investment decisions in digital industries, particularly with respect to cryptocurrencies and decentralized finance (Mehdian et al., 2024). Similarly, the intersection of digital taxation with sustainability agendas remains underexplored, even as digital technologies increasingly contribute to environmental challenges through energy-intensive processes (Touhami et al., 2025). These areas represent important directions for future research, particularly as governments seek to align fiscal policy with broader sustainable development goals.

The literature further highlights that potential solutions to digital taxation challenges must be context-sensitive. While international harmonization is critical, one-size-fits-all approaches risk marginalizing developing economies whose institutional contexts differ sharply from those of advanced states (Akpan, 2024; Caporale et al., 2023). Adaptive policy frameworks that balance global standards with local realities are therefore essential. Scholars emphasize the importance of capacity-building initiatives, technical assistance, and financial support to enable developing countries to participate meaningfully in global tax reforms and to design policies tailored to their specific contexts.

Finally, while the benefits of digital taxation in enhancing public finance are evident, research suggests that their full realization depends on overcoming barriers to compliance and enforcement. Without reforms in administrative practices and greater transparency in corporate reporting, digital taxes may generate limited revenue while exacerbating tensions between jurisdictions (De-la-Rica-Escudero et al., 2025). This highlights the importance of adopting holistic approaches that integrate legal, technological, and institutional reforms in both national and international contexts.

Future research should continue to explore innovative models for achieving this integration, particularly those that leverage technology to reconcile fiscal sovereignty with the demands of globalization and digitalization.

CONCLUSION

This narrative review has demonstrated that digital taxation represents both an opportunity and a challenge for global public finance in the digital era. The analysis of OECD-led frameworks, particularly the BEPS initiative and the Two-Pillar Solution, underscores their significance as baseline mechanisms to address tax avoidance by digital multinational corporations. However, the literature reveals considerable variation in effectiveness across countries, shaped largely by differences in institutional capacity, administrative resources, and political will. Regional comparisons illustrate that advanced economies, with their stronger infrastructures and regulatory frameworks, are better positioned to implement digital taxation successfully, while developing economies continue to struggle with resource limitations, administrative inefficiencies, and fragmented approaches.

The discussion highlighted that systemic factors such as globalization and digitalization have rendered traditional tax systems increasingly obsolete, creating urgent demands for reform. The policy implications point to the necessity of designing tax regimes that not only secure revenue but also uphold fiscal fairness and national sovereignty. Solutions identified in the literature include greater international cooperation, adaptive harmonization of tax rules, and significant investment in domestic capacity-building. The integration of innovative technologies, such as blockchain and big data analytics, offers further avenues to strengthen enforcement, transparency, and compliance.

Future research should explore underexamined areas such as the interaction of digital taxation with global fiscal uncertainty, cryptocurrency markets, and sustainability agendas. Addressing these gaps would provide a more comprehensive understanding of the evolving digital economy. Ultimately, effective digital taxation requires coordinated reforms that blend global governance with local adaptation, ensuring equity, efficiency, and resilience in public finance systems.

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