

The Development of Germany's Digital Taxation Regime in the Context of the Digital Economy and Its Implications for China

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ABSTRACT

This paper aims to explore the challenges and opportunities of digital taxation in the context of the digital economy, drawing insights from Germany's experience to offer guidance for China. The paper first outlines the unequal standing of digital enterprises and traditional enterprises in the digital economy era. Second, it analyzes the barriers to international trade posed by the digital economy and their impact on international competitiveness, while also examining tax issues at the institutional support level. Third, the paper discusses whether digital taxes can resolve the current imbalances. Finally, the paper addresses the provisions for levying digital services taxes and their implications for the expansion of China's digital trade rules within the context of the Belt and Road Initiative.

KEYWORDS

Digital taxation; German; China

1 Introduction

The digital economy's growth has significantly impacted international trade and global competitiveness. Digital trade barriers, such as data localization and digital taxes, are often subtle. Digital infrastructure and policies, including tax measures, play a key role in boosting competitiveness and reducing trade barriers. As digital services taxes gain attention, this study aims to explore the challenges and opportunities of digital taxation in the digital economy, with insights for China.

This paper will examine digital taxation's challenges and opportunities, drawing from Germany's experience to inform China's digital tax policies. Key research questions include: Has the digital tax been effective in addressing the challenges between digital and traditional businesses? How does digital taxation impact international trade and global competitiveness in the digital economy? What role do digital services tax provisions play in global trade rules, particularly for China's Belt and Road Initiative? How can Germany's experience serve as a reference for China?

2 Literature Review

2.1 The Point of Departure for Research on Taxation in the Digital Economy

With the rapid development of the digital economy, traditional tax rules based on physical presence and the location of transactions face serious challenges. While traditional tax laws are attempting to regulate new business models, current international tax laws and their underlying principles "may not have kept pace with changes in global business practices" (OECD, 2013). The digital economy is characterized by de-physicalization, the monetization of data, and platformization, enabling enterprises to generate substantial revenues in market countries without a physical presence, thereby complicating the application of the permanent establishment principle and source-based taxation rules (Sose & Adnan, 2023). The prevailing view, led by the OECD, holds that this shift has exacerbated the issues of tax base erosion and profit shifting (OECD, 2016), created an imbalance between traditional and digital enterprises (Joshi & Amit, 2025), and undermined the fairness and effectiveness of the current international tax order (Harpaz & Assaf, 2021). Against this backdrop, the digital tax, as an institutional tool to address tax failures in the digital economy, has gradually entered academic discourse and the policy agenda.

2.2 Key Perspectives on International and Extraterritorial Digital Taxation

International research on digital economy taxation mainly focuses on OECD-led reform proposals. Some scholars highlight the value of multilateral coordination in resolving tax jurisdiction conflicts and maintaining international tax stability (Bunn et al., 2020; Bassey & Edidiong, 2022). They argue that restructuring taxing rights through unified rules (Reside & Renato, 2022) reduces the risk of fragmentation from unilateral actions. However, others note challenges in negotiation, interest coordination, and implementation, which hinder multilateral proposals from addressing the digital economy's taxing needs in the short term (Conde et al., 2025).

Alongside multilateral efforts, some countries have experimented with unilateral measures like digital services taxes. While these taxes address gaps in traditional systems (Magwape & Mbakiso, 2022), concerns over their legal basis, compatibility with tax treaties (Geringer & Stefanie, 2021), and trade friction (Sultan et al., 2025) limit their long-term viability. The academic consensus is that digital taxes are "necessary but require caution."

2.3 The State of Research on Germany's Digital Taxation Regime

Research on Germany's digital taxation system shows that instead of implementing a standalone digital services tax, Germany integrates digital economic activities into its existing tax framework, adjusting corporate tax and VAT rules within a multilateral coordination framework (Sultan et al., 2025). The consensus is that Germany prioritizes international coordination mechanisms to tax the digital economy (Greil et al., 2021), emphasizing stability in the international tax order and legal certainty.

Academically, some studies highlight the positive aspects of Germany's model in avoiding unilateral actions and reducing international friction, supporting global tax rule coordination (Ault & Hugh, 1991). However, others argue that it has limited effectiveness in addressing tax base erosion by digital giants (Herzfeld & Mindy, 2017) and may undermine national tax sovereignty (Schon & Wolfgang, 2009). Overall, most research focuses on Germany's policy stance, with little exploration of the tax structural logic and normative foundations behind its digital tax system.

2.4 Research on Digital Taxation in China and Discussions of German Experience

The domestic academic community has engaged in extensive discussions regarding the challenges facing China's tax system in the context of the digital economy. Key research areas include tax base erosion in the platform economy (Peng & Wei, 2016), difficulties in tax administration for digital enterprises (Terada-Hagiwara et al., 2019), and normative debates over whether to introduce a digital tax (Liu, 2025). Current research has conducted relatively in-depth analyses of the legitimacy of digital taxes at the theoretical level, but remains insufficient in terms of institutional design.

Regarding the adoption of international experiences, some studies have begun to focus on Germany's relevant tax system (Cui & Wei, 2019), but most have remained at the level of general introductions, lacking in-depth comparative analyses centered on Germany. In particular, there has been no systematic evaluation of Germany's approach of absorbing the digital economy through existing tax systems rather than establishing a separate digital tax.

2.5 Literature Assessment

In summary, existing research provides a solid theoretical foundation and rich institutional context for the taxation of the digital economy. However, studies on Germany's digital tax system have been limited by practical constraints and have not been able to proceed in depth, and the argument regarding how its experience can be adapted to China's institutional context requires further elaboration. Based on this, this paper intends to examine the development of Germany's digital tax system, analyze its institutional logic and policy choices, and explore the implications for the improvement of China's digital tax system within the framework of international coordination.

3 Tax Neutrality between Digital Enterprises and Traditional Enterprises: a Fair Competition Perspective

3.1 Reconsidering Traditional Tax Principles in the Digital Economy

The digital economy has significantly disrupted traditional tax principles, necessitating a reassessment of existing tax frameworks. Features such as data localization policies and digital taxes constitute implicit digital trade barriers (Kersan-Skabic, 2021). The numerous obstacles and uncertainties in global digital services trade, together with uneven digital infrastructure development, pose challenges to traditional tax models. At the institutional level, tax policy plays a decisive role in enhancing international competitiveness while also identifying structural bottlenecks in the digital economy.

3.2 Causes of Tax Burden Disparities between Digital and Traditional Enterprises

In the digital economy, disparities in tax burdens between digital and traditional enterprises stem from multiple factors, including digital trade barriers (Duan, 2025), digital infrastructure gaps (Alm & James, 2021), and institutional support mechanisms (Zhang & She, 2024). Digital trade barriers—often implicit—such as data localization requirements and digital taxes, affect global digital services trade (Hao et al., 2023) and increase uncertainty. As a result, digital enterprises frequently face lower effective tax rates than traditional firms (Olbert, 2017). Addressing these disparities requires policy interventions that optimize tax incentives and simplify tax systems to reduce trade barriers and support fair competition.

3.3 Tax Policy Recommendations for Building a Fair Competitive Environment

To foster a level playing field between digital and traditional enterprises, tax policy should focus on eliminating digital trade barriers, enhancing international competitiveness, and optimizing tax systems. Given the uncertainties and obstacles in global digital services trade, tax policy serves as a key institutional tool to support digital economic integration. Simplified tax regimes and carefully designed digital tax measures can reduce trade frictions and promote sustainable development.

4 The Effectiveness and Challenges of Digital Taxation in Addressing Taxation Issues in the Digital

Economy

4.1 The Concept, Characteristics, and International Practice Models of Digital Tax

Digital taxes refer to tax measures targeting digital economic activities, particularly large multinational digital enterprises generating substantial profits from digital services (Lowry & Sean, 2019). International practices vary, but typically involve levying taxes on revenues derived from digital services. The introduction of digital taxes aims to address uncertainties and implicit trade barriers in global digital services trade, enhance international competitiveness, and strengthen institutional support through tax system reform.

4.2 Effectiveness of Digital Tax in Addressing BEPS

Digital taxes are intended to address base erosion and profit shifting associated with the digital economy. However, their effectiveness must be assessed in light of their impact on international competitiveness and potential to create new trade barriers. Given the multidimensional and structural nature of tax burden imbalances between digital and traditional enterprises, digital taxes alone cannot fully rectify these disparities. Their design and implementation therefore entail significant normative and administrative complexity.

5 The Current Status, Challenges, and Exploration of Digital Taxation in Germany

5.1 Overview of the Development of Germany's Digital Economy and its Taxation Challenges

Germany's digital economy faces significant challenges in enhancing international competitiveness, optimizing digital infrastructure, and strengthening institutional support. Taxation constitutes a key element of this institutional framework. In particular, the design of digital services taxation raises concerns regarding implicit trade barriers and rule-making in global digital services trade. Germany seeks to integrate digital economy development with international trade while minimizing trade barriers through streamlined systems.

5.2 Motivations and Necessity for Introducing Digital Tax in Germany

Although Germany has not yet introduced a nationwide digital tax, the Ministry of Culture is drafting a "platform tax" bill, which would impose a 10% tax on large digital platforms using media content (Nette Nöstlinger, 2025). Germany's motivations for this tax are multifaceted. First, as a countermeasure to political tensions, Germany aims to defend its identity and status as the EU's largest economy and export-driven nation. Second, studies reveal significant tax rate disparities between digital and traditional businesses, with tech giants exploiting low tax rates. Introducing a digital tax would address gaps in the BEPS framework and align with the EU's 2018 proposal (EU, 2018). Third, the tax seeks to protect the domestic digital media industry, as Weimer highlighted that monopolistic platforms like Google and Meta have restricted competition and limited media diversity in Germany (Matthews, 2025).

6 Insights and Policy Recommendations from Germany's Experience for China

6.1 Current Status of China's Digital Economy Development and Tax Challenges

China's digital economy has entered a stage of comprehensive expansion characterized by both scale and quality growth. By 2024, its digital economy reached RMB 59.2 trillion, accounting for 43.8% of GDP. Digital services have become a major growth engine, supported by rapid advances in infrastructure, artificial intelligence, platform economies, and data governance. This structural transformation places higher demands on digital economy-related institutional arrangements, including taxation. (National Bureau of Statistics of China, 2026).

The digital economy's contribution to total factor productivity has risen from 16.30% in 2013 to 23.75% in 2024. In 2025, China's GDP is projected to grow by 5.0%, with information transmission and IT services growing by 11.1% (Zhao Yuan, 2026), highlighting the increasing importance of digital services.

The digital and traditional industries are advancing in parallel, with digital infrastructure like 5G, AI, and computing power networks accelerating. By 2025, the AI sector is expected to exceed 1.2 trillion yuan, and small and medium-sized enterprises are key to digital transformation. The data market is steadily advancing, balancing security and efficiency in cross-border data flow. China maintains global leadership in platform economies and digital consumption, with its digital payment system exerting significant influence on global digital services trade.

In summary, China's digital economy is among the largest globally, with a shift from scale expansion to structural optimization, raising higher demands for digital economy governance.

6.2 Lessons from Germany's Digital Taxation Experience for China's Policy Formulation

Germany's experience offers valuable lessons for China. Reasonable digital tax policies can address implicit digital trade barriers and reduce trade frictions while enhancing international competitiveness. Germany's integration of digital taxation with international trade rules provides a reference for China's efforts to optimize its tax system and expand digital trade rules under the Belt and Road Initiative.

7 Conclusion

7.1 Main Findings

In the digital economy, digital taxation presents both challenges and opportunities. Subtle digital trade barriers require new solutions to align digital economy growth with international trade. Digital infrastructure and tax policies are crucial for boosting competitiveness and addressing uncertainties in global digital services trade. Efficient tax systems and well-designed digital services tax provisions are key elements of institutional support.

7.2 Future Outlook

Future research should complement normative analysis with empirical methods to enhance explanatory power and policy evaluation accuracy. By integrating firm-level microdata, tax revenue changes, and market structure indicators, scholars can quantitatively assess the real-world effects of digital taxes.

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