POLAC MANAGEMENT REVIEW (PMR)
DEPARTMENT OF MANAGEMENT SCIENCE
NIGERIA POLICE ACADEMY, WUDIL-KANO

DIGITAL TAXATION AND THE FINANCIAL PERFORMANCE OF LISTED E-COMMERCE COMPANIES: A CONCEPTUAL ANALYSIS AND TESTABLE FRAMEWORK

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Abstract

Governments increasingly tax digital activity through digital services taxes (DSTs), significant economic presence (SEP) rules and related levies, yet little is known about how these measures affect the financial performance of the e-commerce firms that bear them. This conceptual article draws on tax incidence theory, normative tax principles and the available empirical evidence to analyse the likely effects of digital taxation on the profitability, growth and returns of listed e-commerce companies. A simple illustration shows that a 3% tax on revenue removes 30% of the profit of a firm with a 10% margin and 60% of the profit of a firm with a 5% margin if none of it is passed on to customers, and that the burden disappears only under full pass-through. The review finds that existing evidence is concentrated on investor reactions, that accounting-based evidence is scarce, and that African studies are largely policy and legal analyses. The article proposes five testable propositions, a measure of firm-level digital tax exposure that does not depend on firms reporting digital tax paid, and a panel model for future empirical testing. It suggests that the design of a digital tax, including its base, thresholds and stability, is likely to matter more for firm performance than the existence of the tax as such.

Keywords: Digital Services Tax; E-Commerce; Financial Performance; Tax Incidence; Significant Economic Presence

JEL Classification: H25; H26; L81; M41

1. Introduction

E-commerce firms can serve customers in many countries without a shop, warehouse or employee in each one. Corporate tax systems, however, allocate taxing rights largely by physical presence, so a country in which a platform earns revenue but has no taxable presence collects little corporate income tax on that activity (OECD, 2015). Digital taxation policies are governments' response to this gap.

The responses are varied and unstable. France enacted a 3% DST in 2019, applied retroactively from 1 January of that year (Klein et al., 2022). The United Kingdom introduced a 2% DST from April 2020 (HM Revenue & Customs, n.d.). Nigeria relies on SEP rules introduced through the Finance Act 2019 and the 2020 SEP Order (PwC Nigeria, 2020), later reaffirmed in the Nigeria Tax Act 2025 (KPMG, 2026). Canada legislated a 3% DST but announced on 29 June 2025 that it would rescind it before the first payments were due (Department of Finance Canada, 2025). Internationally, the OECD has pursued a two-pillar solution that includes global minimum tax rules (OECD, 2021).

Whether these measures reduce the profitability of the firms concerned is largely unanswered. Many DSTs tax gross revenue rather than profit, so their burden relative to profit rises as margins fall, and e-commerce firms often have thin or negative margins. The most prominent evidence concerns investor expectations: Klein et al. (2022) found a negative abnormal return of 0.692% among 222 large digital firms when the European Commission published its 2018 digital tax proposals. That shows what investors expected, not what happened to reported profit, returns and growth.
This article addresses that gap conceptually. It asks how digital taxation is likely to affect the financial performance of listed e-commerce companies, through which channels, and how the question should be tested empirically given that firms rarely report digital taxes separately. The contributions are threefold: a synthesis of theory and evidence relevant to listed e-commerce

firms; an illustration of how tax design and pass-through determine the burden on profit; and a set of testable propositions, a firm-level exposure measure and a panel model for future empirical work. The article is organised as follows: Section 2 reviews the literature, Section 3 explains the approach, Section 4 presents the analysis and discussion, and Section 5 concludes with recommendations.

2. Literature Review

2.1 Conceptual Review

Digital Taxation and Financial Performance

Digital taxation covers tax rules aimed at digital activity that conventional rules reach poorly. A **digital services tax** is usually a percentage of gross revenue from specified digital services earned from local users. A **significant economic presence rule** lets a country tax the profit of a non-resident firm that has substantial digital engagement with its market. **VAT on digital supplies** taxes consumption and is collected through the supplier. Table 1 summarises selected responses and shows that the instruments differ in what they tax (turnover, attributed profit or consumption) and that their legal status changes over time.

Table 1: Selected digital tax responses

Jurisdiction	Instrument and status	Source
France	3% DST enacted July 2019, retroactive to 1 January 2019.	Klein et al. (2022)
United Kingdom	2% DST on revenues of search engines, social media and online marketplaces from UK users, from April 2020.	HM Revenue & Customs (n.d.)
Canada	3% DST legislated in 2024, retroactive to 2022; collection halted and rescission announced 29 June 2025.	Department of Finance Canada (2025)
Kenya	DST introduced in 2021, later complemented by a move towards an SEP tax.	Taabu (2025)
Nigeria	SEP rules for non-resident digital providers (Finance Act 2019; SEP Order 2020), reaffirmed in the Nigeria Tax Act 2025; VAT rules also apply to non-resident suppliers.	PwC Nigeria (2020); KPMG (2026)
OECD / G20	Two-pillar solution, including global minimum tax model rules.	OECD (2021)

Financial performance is a firm's ability to generate profit and use its resources efficiently to create value for shareholders (Brigham & Ehrhardt, 2019). It is conventionally measured with ratios from published statements: net profit margin, revenue growth, return on assets (ROA) and return on equity (ROE) (Ross, Westerfield & Jordan, 2022).

2.2 Theoretical perspectives

Tax incidence theory distinguishes who is legally required to pay a tax from who bears its economic cost, which depends mainly on how responsive demand and supply are to price (Harberger, 1962; Fullerton & Metcalf, 2002). A DST is legally paid by the firm, but its economic burden on shareholders falls as pass-through to customers rises. Evidence on online sales taxes indicates that demand for online purchases is relatively price-sensitive (Einav, Knoepfle, Levin & Sundaresan, 2014; Baugh, Ben-David & Park, 2018), which implies that e-commerce firms are likely to bear part of the burden.

The **benefit** and **ability-to-pay** principles justify taxing firms that rely on a country's infrastructure and legal system, and that are large and profitable (Musgrave & Musgrave, 1989). They explain why governments tax digital firms but do not predict the

effect on margins. **Stakeholder theory** (Freeman, 1984) adds that tax compliance may strengthen legitimacy and investor confidence, so that the sign of the net effect on performance cannot be assumed.

2.3 Empirical Review

Table 2 summarises the main studies. Capital-market evidence is the most developed. Klein et al. (2022) found negative abnormal returns around the 2018 EU proposals, larger for firms with more revenue in the EU and higher revenue overall, and a further negative reaction of 0.28% when France enacted its DST. This is consistent with evidence that corporate taxes reduce firm value (Doidge & Dyck, 2015). Accounting-based evidence is thinner. Graßl (2022) studies how firms affected by EU DSTs account for them and the effect on effective tax rates. Sokolovska and Belozyorov (2019) report that the tax expense of digital corporations can influence after-tax profit margin, depending on design features such as incentives, exemptions and progressivity. Taabu (2025) finds that DST practices are significantly related to the financial performance of multinational technology firms in Kenya. African studies otherwise examine policy design rather than firm outcomes (Mpofu, 2022a, 2022b; Loffstadt, Ndlovu & Padia, 2023).

Table 2: Summary of empirical studies

Study	Context	Method	Main finding
Klein et al. (2022)	222 large listed digital firms; EU proposals 2018; French DST 2019	Event study	Abnormal return of −0.692%; stronger for higher EU exposure and revenue; −0.28% on French enactment.
Einav et al. (2014); Baugh et al. (2018)	Online sales taxes on e-retailers	Demand-response analysis	Online demand relatively price-sensitive (as summarised by Klein et al., 2022).
Graßl (2022)	Firms affected by EU DSTs	Financial-statement analysis	Examines DST reporting and effect on effective tax rates.
Sokolovska & Belozyorov (2019)	Digital corporations	Correlation analysis	Effect on after-tax margin depends on tax design.
Taabu (2025)	Multinational technology firms, Kenya	Mixed methods (Master's dissertation)	DST practices significantly related to financial performance ($p < 0.01$).
Mpofu (2022a, 2022b); Loffstadt et al. (2023)	African countries; South Africa	Policy and legal analysis	Opportunities and constraints of VAT and DSTs; mixed findings.

2.4 Research gap

Capital-market studies measure expectations, not accounting outcomes. The accounting-based studies reviewed cover effective tax rates, a small group of digital corporations or one country, and none uses a cross-jurisdiction panel of listed e-commerce firms. African evidence is mainly policy and legal analysis. This article does not fill the empirical gap but sets out the reasoning, measurement and design needed to do so.

3. Methodology

The article is a conceptual and critique-based study, using analytical synthesis rather than primary data. Sources were identified through targeted searches of journal databases, working-paper repositories and official government and professional-body

publications, in 2026, using terms such as digital services tax, significant economic presence, e-commerce taxation, tax incidence and firm performance. Studies were retained if they examined digital taxation or e-commerce taxation and either firm-level outcomes (market value, tax rates, profitability) or the design of the tax instruments. Legal facts were checked against official or professional-advisory sources.

The analysis proceeds in three steps. First, a stylised calculation shows how the base of a tax (revenue or profit) and the share passed on to customers determine the burden on profit. Second, the evidence reviewed is used to derive propositions. Third, a measure of firm-level exposure and a panel model are specified so that the propositions can be tested. The calculation is an illustration, not an estimate from firm data, and the propositions are not tested here. The search was targeted rather than exhaustive, so relevant studies may have been missed.

4. Results and Discussion

4.1 Tax Base, Margin and Pass-Through

A tax on revenue takes the same amount from a firm whether or not it is profitable, so its burden relative to profit rises sharply as margins fall (Klein et al., 2022). Table 3 illustrates this for a 3% levy on revenue under three pass-through assumptions. The calculation is simplified: sales volume is held constant, the tax is not deducted from corporate income tax, and the effect of price increases on the revenue base is ignored.

Table 3: Illustrative net profit margin after a 3% revenue tax (share of pre-tax profit lost in brackets)

Margin before tax	No pass-through	50% passed on	Fully passed on
10%	7.0% (30%)	8.5% (15%)	10.0% (0%)
5%	2.0% (60%)	3.5% (30%)	5.0% (0%)
0% (break-even)	−3.0% (not defined)	−1.5% (not defined)	0.0%

Three points follow. First, a firm at break-even becomes loss-making immediately, which matters for e-commerce firms that run on thin or negative margins. Second, full pass-through protects the margin but not necessarily revenue: if online demand is price-sensitive (Einav et al., 2014), raising prices reduces sales, so the burden shifts from margin to growth. Third, because the tax is paid on revenue, firms that avoid corporate income tax through profit shifting cannot avoid it in the same way, a mechanism that Klein et al. (2022) found to be reflected in larger investor reactions among low-tax firms. By contrast, an SEP tax, which applies to profit attributed to the taxing country, is far less sensitive to margin, although it raises compliance and attribution questions (Taabu, 2025).

4.2 Measurement: Firms Rarely Report Digital Tax Paid

A major obstacle to empirical work is that digital taxes are not usually reported as a separate line item, and the instruments differ across countries. Graßl's (2022) focus on how firms report DSTs indicates that reporting practice is itself a research question. A workable alternative is a revenue-weighted exposure measure:

$$DTE_{it} = \Sigma_j \left(REVSHARE_{ij,t-1} \times RATE_{j,t} \right)$$

where $REVSHARE_{ij,t-1}$ is the share of firm *i*'s revenue earned in jurisdiction *j* in the previous year and $RATE_{j,t}$ is the statutory digital tax rate collectible in *j* in year *t*. The rate is set to zero where a tax was legislated but not collected, as in Canada, and where the firm falls below the statutory thresholds. Using prior-year revenue shares makes exposure depend mainly on legislation and past business mix, reducing the risk that more profitable firms simply appear more exposed. Where firms disclose revenue only by region, country shares must be estimated and the sensitivity of results checked, for example with a binary indicator of any exposure.

4.3 Policy Instability and Uncertainty

Digital tax policy has changed quickly and sometimes retroactively. France applied its DST from the start of the year in which it was enacted, and Canada legislated

a tax retroactive to 2022 and then withdrew it before the first payment (Department of Finance Canada, 2025). Such changes create compliance cost and planning uncertainty that is independent of the statutory rate, and they mean that a firm's exposure in one year may differ from what its managers expected. A study that codes only rates in force and collectible captures the direct burden but not this uncertainty channel, which is a limitation of any exposure-based design.

4.4 Propositions

The analysis supports five propositions for empirical testing:

i. **P1.** Digital tax exposure is negatively associated with net profit margin, and the association is stronger for low-margin firms.

ii. **P2.** Digital tax exposure is negatively associated with ROA and ROE, with weaker associations where pass-through is higher.

iii. **P3.** Digital tax exposure is negatively associated with revenue growth where online demand is price-sensitive.

iv. **P4.** The association with margin and returns is stronger for revenue-based taxes (DSTs) than for profit-based regimes (SEP).

v. **P5.** The association is stronger for firms with larger revenue and a larger share of revenue in jurisdictions that collect a DST, consistent with the investor-reaction pattern in Klein et al. (2022).

4.5 Proposed Empirical Design

The propositions can be tested on an unbalanced panel of listed firms that earn at least half of their revenue from e-commerce and publish revenue by country or region, using the following model:

$$FP^{k}_{it} = \beta_0 + \beta_1 DTE_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \beta_4 AGE_{it} + \mu_i + \lambda_t + \varepsilon_{it}$$

where FP^k is net profit margin, revenue growth, ROA or ROE, SIZE is the logarithm of total assets, LEV is total liabilities divided by total assets, AGE is the logarithm of one plus years since listing, μ_i is a firm effect and λ_t a year effect. Firm and year effects absorb stable firm differences and shocks common to all firms, such as the pandemic-era surge in online shopping. Because the number of firms is likely to be small, standard errors should be clustered by firm (Petersen, 2009) and checked with wild cluster bootstrap procedures (Cameron, Gelbach & Miller, 2008). Firm-years with non-positive equity should be excluded from ROE models, and all variables winsorised to limit outliers.

5. Conclusion and Recommendations

This article analysed how digital taxation is likely to affect the financial performance of listed e-commerce companies. The analysis suggests that the burden on profit depends less on whether a digital tax exists than on its base, thresholds, stability and the extent to which firms can pass it on. A revenue-based tax can remove a large share of the profit of a low-margin firm, whereas a profit-based regime is far less sensitive to margin. The evidence reviewed shows that investors expect digital taxes to reduce firm value, but it does not show what happened to reported profitability, and measurement problems have held back accounting-based research.

Recommendations for policymakers. (1) Consider the margin sensitivity of revenue-based taxes when setting rates and thresholds, and give attention to design features such as exemptions and progressivity that the literature associates with differences in effects (Sokolovska & Belozyorov, 2019). (2) Avoid retroactive application and abrupt reversals, which add uncertainty independent of the statutory rate. (3) Require or encourage separate disclosure of digital taxes paid so that effects can be monitored. (4) Authorities in Nigeria and other African countries should monitor the effects of SEP and VAT rules on the performance of the firms concerned, and coordinate with the OECD process to limit overlapping claims.

Recommendations for firms and investors. Managers should assess exposure by jurisdiction and test pricing scenarios, since the split between margin and sales effects depends on pass-through. Investors should treat digital tax exposure as a margin risk that varies with a firm's margin level and revenue mix.

Recommendations for researchers. Future studies should test P1–P5 on a panel of listed e-commerce firms using the exposure measure and model above,

and should report sample construction and exclusions transparently. The main limitation of this article is that it is conceptual: the illustration is not an estimate from firm data and the propositions remain untested. The search for sources was also targeted rather than exhaustive.

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