TAX BURDEN, INCENTIVES, AND INFORMALITY: DETERMINANTS OF SME GROWTH AND FORMALISATION IN EMERGING MARKETS

Mustajab Ahmad
Lahore School of Accountancy and Finance, University of Lahore, Pakistan
Marc Audi
Abu Dhabi School of Management, Abu Dhabi, United Arab Emirates
Khalil Ahmad
Government Islamia Graduate College, Civil Lines, Lahore, Pakistan

Abstract
This study investigates how tax policies affect small and medium enterprises in developing countries between 2005 and 2023. Panel data regression analysis is employed to examine how performance indicators such as revenue growth, employment generation, and formalisation processes are linked to tax rates, costs associated with complying with value-added tax, the structure of value-added tax, incentive mechanisms, levels of informality, and the quality of public services. The results show that higher rates of tax compliance and effective tax rates negatively influence the performance of small and medium enterprises, supporting the resource-based view theory, which holds that such enterprises are more adversely impacted by tax burdens due to their limited resources. In contrast, tax incentives have a strong positive effect, while informality has a significant negative impact. Through this study, fiscal exchange theory is validated in the context of developing countries, indicating that small and medium enterprises are more likely to comply with tax regulations when they perceive public services to be of high quality. The analysis integrates data from multiple countries and draws on classical economic theory and institutional theory. The key policy implications explain that developing countries should simplify tax systems, design targeted incentives, and adopt digital mechanisms to enhance the competitiveness of small and medium enterprises while addressing informality. The study addresses gaps in the literature related to taxation in developing economies and guides policymakers seeking to strengthen the role of small and medium enterprises in promoting economic growth and employment.
Keywords: Small and Medium Enterprises, Tax Policy, Informality, Developing Economies

INTRODUCTION

Small and medium enterprises serve as critical drivers of economic development in emerging markets, contributing approximately 40 percent of gross domestic product and 60 percent of employment in developing countries (World Bank, 2021). Despite their vital economic role, small and medium enterprises often face disproportionate tax-related challenges, as regulatory frameworks are typically designed for larger corporations (Bird and Gendron, 2007; Musa, 2024; Siddique et al., 2025). This study examines the performance of small and medium enterprises under varying tax policy settings across four developing countries, addressing a notable gap in international fiscal policy research. Taxation issues concerning small and medium enterprises are complex. As outlined in classical economic theory, optimal taxation should neither favour nor disadvantage specific groups, aiming instead to minimise distortions in the market (Musgrave and Musgrave, 1989). However, tax regimes in many developing countries are frequently skewed against smaller enterprises. Emerging technologies such as artificial intelligence in tax administration, blockchain for secure digital transactions, and behavioural insights to promote compliance are reshaping the future of taxation for small and medium enterprises (Bilal & Tanveer, 2023; Marc & Yu, 2024; Ammar et al., 2025). These innovations are expected to reduce the compliance burden, improve enforcement efficiency, and enhance tax equity. The timing and design of tax implementation continue to play a significant role in determining small business performance (Audi & Ali, 2023; Ngo, 2023; Farras et al., 2025). Tax policy literature consistently shows that the success of small and medium enterprises is influenced by a combination of tax rates, administrative processes, public perception, and institutional capacity (Fadzil, 2021; Ali & Audi, 2023; Arshi et al., 2025). Despite persistent challenges in low-income and informal sectors, emerging strategies offer encouraging prospects for reform and improved outcomes.

The resource-based view posits that the compliance and tax burden gap arises because small and medium enterprises lack the financial and human resources that wealthier corporations possess to manage additional costs and navigate taxation frameworks (Barney, 1991; Mirakhor, 2021; Turan, 2023; Marc, 2024; Rafique et al., 2025). Recent findings from the World Bank (2019) confirm that small and medium enterprises must allocate a larger share of their income to compliance-related activities, which are relatively more expensive for them than for larger firms. While corporate tax rates receive the most policy attention, increases in the effective tax rate can significantly discourage business formalisation. Djankov et al. (2010) found that a 10 percent increase in the effective tax rate leads to a 2 to 3 percent decline in formal business registrations. These consequences are particularly severe for small and medium enterprises, which, as Judd (1985) highlights, frequently struggle with limited access to capital. This study advances the analysis by examining how tax rates exceeding 30 percent of profits affect formal small and medium enterprises in developing economies, a threshold commonly observed (Organisation for Economic Co-operation and Development, 2020).

Compliance costs are equally significant as transaction costs. According to Buchanan's (1967) Public Choice Theory, complex tax systems may deter participation in the formal economy. Studies show that small and medium enterprises in developing countries spend significantly more time each year meeting tax obligations compared to those in advanced economies (Marc, 2011; Atawodi and Ojeka, 2012; Willaim, 2021; Marc et al., 2022; Al Masri & Wimanda, 2024; Umair

et al., 2025). This research demonstrates how compliance burdens vary across regimes and assesses the role of digital technologies in alleviating these challenges (Awasthi and Engelschalk, 2018; Anwar & Akhtar, 2019; Zaidi & Salam, 2020; Audi et al., 2021; Kilenthong & Komain, 2023; Habibullah & Kamal, 2024; Ditta et al., 2025). The structure of the value-added tax adds another layer of difficulty. While theoretically efficient, value-added tax is often challenging for small and medium enterprises to administer due to regulatory complexity and procedural demands (Keen and Mintz, 2004; Kingston, 2020; Owusu & Novignon, 2021; Senbeta, 2023; Marc & Al Masri, 2024; Rath, 2024; Iqbal et al., 2025). Bird and Gendron (2007) observed that many small and medium enterprises in developing countries are exempt from value-added tax, which may disincentivise growth beyond the small business threshold. This "threshold trap" is examined with reference to varying value-added tax system designs. Although tax incentives are frequently proposed as solutions, they also introduce implementation challenges. As James (2013) argues, small and medium enterprises often fail to benefit from incentives that tend to favour larger and politically connected firms. Zolt and Bird (2005) note that poorly structured incentive schemes may exacerbate inequalities across business types. This study investigates how such incentives function across various small and medium-sized enterprises and sectors, highlighting both their potential and their limitations.

Every decision regarding tax policy is influenced by the existence of the informal economy. De Soto's (1989) research identified overly strict regulations as a key driver of informality, while La Porta and Shleifer (2014) demonstrated that informality adversely affects the performance of small and medium enterprises. A recent study by the Organisation for Economic Co-operation and Development (2017) explained that digital tools could assist formalisation in developed countries; however, limited evidence is available from developing regions. This research examines in detail the impact of informality on small and medium enterprises that face challenges in achieving tax compliance. This theoretical approach provides a basis for analysing business behaviour within regulatory environments (Buchanan, 1967). In Uganda, Fisman and Svensson (2007) found that taxpayers were more willing to comply when they perceived public services as being adequately delivered. This study expands upon that insight by incorporating analysis across several countries and includes gender-related dimensions, following recent recommendations from the International Monetary Fund (2021). It makes a meaningful contribution by supplying empirical evidence that compares developing economies previously underrepresented in fiscal policy research. Furthermore, it integrates three theoretical frameworks, resource-based view, fiscal exchange, and public choice, into a cohesive lens for policy analysis. Lastly, it provides timely policy recommendations for post-pandemic economic recovery, recognising the central role of small and medium enterprises in that process (World Bank, 2021). The study applies panel data regression techniques across eighteen years of cross-country data to examine both the immediate and longer-term impacts of tax policy decisions.

LITERATURE REVIEW

The way taxes are structured significantly influences the success of small businesses worldwide. Guidelines on corporate taxation, value-added tax, tax compliance, and available incentives all have a substantial impact on how small and medium enterprises operate, achieve financial outcomes, and pursue growth (Kumar, 2021; Ali et al., 2025). Existing literature on the role of tax policy in relation to small businesses reveals a complex connection between regulations, institutional strength, business characteristics, and broader economic conditions (Sun & Wernar, 2021; Kongmanila, 2023; Ali et al., 2025). This review synthesises findings and theoretical insights from earlier research to illustrate the impact of tax policy on small and medium enterprises and to outline key challenges, practical solutions, and regional variations in implementation.

Most of the existing analysis on taxation and small business is rooted in classical and neoclassical economic theory. These perspectives explain that sound tax policy should minimise market distortions, offer equal opportunity, and ensure administrative simplicity (Ali et al., 2025). However, these principles are rarely fully realised in the context of smaller firms due to their structural limitations. According to the Resource-Based View, small and medium enterprises are more vulnerable to the complexity of tax laws because they lack the financial and managerial resources available to larger firms (Barney, 1991; Ali et al., 2025). Consequently, they are often unable to effectively plan or comply with tax requirements. Buchanan (1967) argues that individuals and business owners frequently underestimate the amount of tax they pay, particularly when taxes are indirect or obscured by administrative procedures. As a result of this misperception, small and medium enterprises may not fully grasp how significantly taxes affect their profitability.

Numerous studies highlight the challenges small business owners face in achieving tax compliance. The World Bank (2019) reports that small and medium enterprises devote significantly more time and resources to tax-related processes than larger corporations. These processes include maintaining financial records, filing tax returns, understanding tax legislation, and interacting with tax officials. When these burdens become excessive, productivity declines, and the risk of errors and non-compliance increases (Ali et al., 2025). These issues are particularly acute in developing countries, where institutional effectiveness is weak, infrastructure is inadequate, and bureaucratic procedures are slow. Joshi et al. (2014) observe that in such environments, firms often resort to informal means to avoid excessive compliance burdens, thereby expanding the informal economy and undermining equitable tax collection. In contrast, tax systems that are simplified and technology-based tend to improve compliance and reduce the size of the informal sector (Organisation for Economic Co-operation and Development, 2020).

A commonly used strategy to support small businesses involves the provision of tax incentives. These include tax holidays, reduced rates, investment allowances, and exemptions. However, the effectiveness of such incentives is subject to academic debate. According to James (2013), tax incentives can alleviate financial pressure and promote investment, but are often poorly targeted, leading to revenue losses without corresponding economic gains. Zolt and Bird (2005)

further argue that the benefits of tax incentives are more likely to be captured by informed and well-resourced small and medium enterprises, rather than by microenterprises or unregistered firms. This results in horizontal inequity and inefficient policy outcomes. In some cases, tax incentives may also create opportunities for corruption and rent-seeking, especially where their allocation is controlled by tax administrators.

Researchers have examined how tax rates influence small business outcomes. Djankov et al. (2010), in a multi-country study, concluded that higher corporate tax rates discourage business entry and investment. Even small changes in tax rates can significantly impact the cash flow of small and medium enterprises and their capacity to reinvest (Judith et al., 2022; Ali et al., 2025; Aziz et al., 2025). However, some studies highlight a different perspective. Certain researchers explain that fair taxation and effective public service delivery can increase business confidence. Firms in Uganda, as shown by Fisman and Svensson (2007), were less negatively affected by taxes when they perceived public services to be efficient and corruption to be minimal. This aligns with Fiscal Exchange Theory, which argues that taxpayers are more likely to comply when they believe tax collection is equitable and benefits are returned through quality public services.

Value-added tax systems present both advantages and disadvantages for small businesses. One advantage is administrative simplicity and wide applicability. However, small and medium enterprises in developing countries often find VAT registration and compliance burdensome. Bird and Gendron (2007) explain that multiple rates and exemptions within a VAT system increase compliance costs and distort business decisions. In many countries, VAT is not charged to small and medium enterprises with a monthly turnover below a specified threshold. While this relieves some administrative pressure, it can also discourage business expansion, as firms may reduce reported profits or avoid growth to stay below the threshold. Keen and Mintz (2004) refer to this as the "VAT threshold trap," which discourages formalisation and scalability.

Tax policy is closely linked to the challenges of informality. La Porta and Shleifer (2014) observed that many small and medium enterprises in developing regions operate informally to avoid taxes and regulatory complexity. This informality undermines tax collection, creates unfair competition, and restricts access to financial and public support systems (Ali et al., 2014; Saim et al., 2025; Rana et al., 2025). When tax systems are perceived as burdensome, unfair, or overly complex, businesses are more likely to shift operations outside the formal economy. De Soto (1989) noted that excessive regulation and taxation contributed to the prevalence of informality in Latin America. In response, some governments have adopted presumptive taxation systems that estimate tax liability based on observable indicators such as income levels or business size. While these systems may increase tax collection, their design must ensure fairness and avoid regressive impacts.

An emerging area of research explores how tax policies affect women who operate small and medium enterprises. Scholars argue that societal expectations, caregiving responsibilities, and limited access to information create additional challenges for female entrepreneurs (Mordi et al., 2010; Ali et al., 2025; Kumar et al., 2025). According to the International Monetary Fund (2021), many governments overlook these disparities, leading to unintentionally biased tax policies. For example, when compliance remains difficult or benefit awareness is low, female entrepreneurs may not gain from VAT exemptions (Stotsky, 1996; Khan et al., 2025). Gender-responsive tax and budgeting policies would help address these gaps and promote inclusive growth among small and medium enterprises.

Digitalisation has greatly improved the convenience of tax administration for small businesses. Tools such as electronic filing, mobile applications, digital invoicing, and real-time data systems have reduced compliance costs and enhanced transparency. Awasthi and Engelschalk (2018) argue that digital taxation improves oversight, reduces evasion, and levels the playing field. However, digital access is not universal. Small and medium enterprises in rural or digitally underserved areas often face significant challenges in adapting to these technologies (Organisation for Economic Co-operation and Development, 2017). Effective digital reforms must therefore include digital literacy training, user-friendly platforms, and targeted support to ensure that all businesses can participate.

The COVID-19 pandemic clearly demonstrated the vulnerability of small businesses and the critical role of effective tax policy in crisis management. In response, several governments implemented emergency tax measures, including deferred payment deadlines, tax reductions, and targeted subsidies. According to the World Bank (2021), such interventions preserved liquidity and prevented widespread business closures. However, the ability to deliver relief varied significantly across countries. Those with well-developed tax infrastructures were able to respond quickly and effectively, while others encountered challenges in distributing and monitoring support. This disparity highlights the importance of resilient and adaptable tax systems to aid the recovery of small and medium enterprises following economic shocks.

Although a substantial body of literature has examined the relationship between tax policy and small and medium enterprises, the findings remain fragmented, with most studies focusing on either tax rates (Djankov et al., 2010; Judith et al., 2022; Aqeel et al., 2025; Nwosu & Folarin, 2025) or compliance burdens (Atawodi and Ojeka, 2012; Joshi et al., 2014), while offering limited integrated analysis of how tax structures, incentives, informality, and public service quality jointly shape growth and formalisation. Much of the existing research emphasises single-country contexts, which restricts cross-country comparisons and weakens the generalisability of findings (Bird and Gendron, 2007; La Porta and Shleifer, 2014; Abigail, 2023). Evidence also shows that tax incentives can support investment and expansion, yet their design often favours larger firms and politically connected enterprises rather than micro and small businesses (James, 2013; Zolt and Bird, 2005; Kallianiotis, 2022; Das, 2024). Similarly, while fiscal exchange theory highlights the importance of service delivery in promoting compliance (Fisman and Svensson, 2007; Krishna & Singh, 2020), few studies empirically test this in a multi-country developing economy setting. Moreover, the intersection of taxation, informality, and gender remains underexplored, despite clear evidence that women-owned enterprises face disproportionate challenges in

compliance and access to incentives (Iqbal & Nader, 2024; Mordi et al., 2010; Stotsky, 1996; IMF, 2021). Finally, although recent studies highlight the potential of digitalisation in simplifying tax systems (Awasthi and Engelschalk, 2018; Ismail & Ali, 2020; Huseyin, 2023; Ibrahim & Rasheed, 2024), limited evidence exists on its effectiveness for small and medium enterprises in emerging markets with weak digital infrastructure. These gaps justify a comprehensive, cross-country, multi-dimensional analysis that incorporates tax burdens, compliance costs, incentive design, informality, and public service delivery to explain how tax systems influence the growth and formalisation of small and medium enterprises in developing economies.

DATA SOURCES AND THEORETICAL FRAMEWORK

The study draws upon several economic theories to interpret the relationship between tax policy and outcomes for small and medium enterprises. Classical and neoclassical economic theories argue that effective tax systems should be neutral, reduce distortions, and promote fairness and administrative simplicity. However, due to the structural limitations of smaller firms, these principles are often difficult to achieve in practice. Tax preparation is frequently expensive for small and medium enterprises, and eligibility for incentives may be unclear, making compliance challenging. According to Barney (1991) and the Resource-Based View, small businesses are more sensitive to tax policy changes than large corporations. Operating with limited financial, human, and informational resources, small and medium enterprises are more likely to be disrupted by unexpected or complex tax rules. Unlike larger firms, which can hire tax professionals, small and medium enterprises often lack internal capacity, increasing the burden of compliance, reducing tax morale, and limiting investment potential.

The influence of tax policy on compliance behaviour is also explored through Buchanan's (1967) Public Choice Theory. This theory explains that when taxes are hidden or complex, individuals and businesses may misjudge their actual tax burden, leading to perceptions of unfairness and a greater tendency to avoid formal registration. Fiscal Exchange Theory adds an important behavioural dimension by emphasising that taxpayers are more likely to comply when they perceive that revenues are used effectively. Under this theory, small and medium enterprises may tolerate higher taxes if they observe improvements in public services, infrastructure, and government support. Supporting this, Fisman and Svensson (2007) found that Ugandan businesses were more willing to pay taxes when public services were seen as equitable and corruption was low. Finally, the theory of Informality and Regulatory Burden, as discussed by La Porta and Shleifer (2014) and De Soto (1989), explains how excessive complexity in regulations and taxation drives businesses to operate informally. When formal registration is perceived as costly, risky, or time-consuming, businesses often avoid compliance. Ambiguous tax procedures, delays in registration, and a punitive inspection regime push firms into informality, ultimately undermining both tax collection and fair market competition.

Based on these theoretical underpinnings, the study proposes the following functional model:

$SMEperf = f (TAXrate, TAXcomp, VATstruct, TAXincent, INFsec, PUBserv)$

where:

- $SMEperf$ = Performance of small and medium enterprises (e.g., growth, formalisation, sustainability)
- $TAXrate$ = Effective corporate and personal tax rates
- $TAXcomp$ = Cost and time of tax compliance
- $VATstruct$ = VAT threshold and administration complexity
- $TAXincent$ = Presence and type of tax incentives
- $INFsec$ = Level of informality in the sector
- $PUBserv$ = Perceived quality of public services

To estimate the effects quantitatively, the functional model is translated into the following multiple regression form:

$SMEperf = \alpha_0 + \alpha_1 TAXrate_{it} + \alpha_2 TAXcomp_{it} + \alpha_3 VATstruct_{it} + \alpha_4 TAXincent_{it} + \alpha_5 INFsec_{it} + \alpha_6 PUBserv_{it} + \epsilon_{it}$

This study investigates how tax policies affect the operations and financial performance of small businesses across several developing countries. The choice of focus reflects the growing recognition that small and medium enterprises play a vital role in supporting employment, innovation, and inclusive economic growth. Despite this importance, small and medium enterprises often face more severe tax burdens, higher compliance costs, and limited access to policy benefits, particularly in low-income and transitional economies. The evaluation of tax policy impacts is conducted through a structured scientific framework supported by statistical analysis. Data spanning from 2005 to 2023 are drawn from Pakistan, Nigeria, Kenya, and Bangladesh—developing economies where small and medium enterprises play a key economic role and where tax systems differ. The use of both time-series and cross-sectional data enhances the applicability and robustness of the findings.

Reliable data are sourced from internationally and nationally recognised institutions specialising in business, taxation, and macroeconomic indicators. Core data on tax administration, compliance costs, and regulatory procedures are obtained from the World Bank's Doing Business Reports. These include country-specific indicators such as the annual tax burden, effective tax rate as a share of profits, and the average number of days spent on tax compliance. Such metrics offer a clear picture of the tax compliance burden faced by small businesses. Macroeconomic indicators, including gross domestic product per capita, the contribution of small and medium enterprises to employment, and the prevalence of informality, are drawn from the World Bank's World Development Indicators database. Further data on tax revenue, incentives, business registrations, and value-added tax systems are sourced from national authorities, including the Federal Board of Revenue in Pakistan, the National Bureau of Statistics in Nigeria, and the Kenya Revenue Authority. Economic Survey

CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW

Reports are also used, as they provide detailed information on tax instruments such as presumptive and turnover taxes and their observed effects. The Organisation for Economic Co-operation and Development Tax Policy Database contributes information on corporate taxation, value-added tax thresholds, and regulatory simplifications. Additional support is drawn from the International Monetary Fund's Fiscal Monitor and related publications, which assess qualitative and quantitative policy shifts, especially those introduced in response to economic shocks such as the COVID-19 pandemic.

RESULTS AND FINDINGS

Research into the influence of tax policy on small businesses in selected developing countries utilised a comprehensive dataset covering the period from 2005 to 2023. This study relies on empirical data to assess how variables such as the effective tax rate, level of compliance, value-added tax structure, tax incentives, informality, and the quality of public service delivery affect small and medium enterprises. The performance of small and medium enterprises is evaluated through indicators including revenue growth, employment generation, and the extent of formalisation in their operations. Correlation analysis was conducted initially to identify significant relationships among the variables and to detect any potential multicollinearity before the application of regression estimation. Table 1 presents several statistically significant relationships among key variables, providing an initial overview of the data patterns and associations.

The results presented in the correlation matrix reveal several strong relationships. The matrix aids in understanding the linear associations between small and medium enterprise performance and key tax-related and institutional variables. Starting with SME performance (SMEperf), the highest positive correlation is observed with the VAT structure (VATSTRUCT) at 0.81. This explains a strong association whereby improvements in the value-added tax regime are likely to enhance SME performance, potentially through increased liquidity and improved compliance. Conversely, TAXRATE (-0.78) and INFORMAL (-0.70) exhibit strong negative correlations with SME performance, indicating that higher tax burdens and a larger informal economy significantly hinder the development of small and medium enterprises. Elevated tax rates may reduce profit margins and deter formalisation efforts, while a large informal sector undermines fair competition and destabilises market conditions for legitimate small businesses.

Additionally, TAXCOMP shows a negative correlation of -0.64 with SME performance, reinforcing the notion that complex and burdensome compliance procedures inhibit SME development. This finding supports the case for tax simplification reforms. TAXINCENT demonstrates a weak but positive correlation (0.15), explaining a minimal linear relationship. This aligns with regression results indicating that, although incentives exist, they may not be effectively designed or fully utilised by small and medium enterprises. The moderate positive correlation between public service delivery (PUBSERV) and SME performance (0.58) further supports the importance of institutional quality. Enhanced delivery of infrastructure, transparency measures, and digital governance appears to encourage economic participation and activity among SMEs. Overall, the correlation matrix reinforces the regression outcomes, emphasising the need for simplified tax systems, the containment of informal sector competition, the strengthening of VAT frameworks, and the improvement of public service delivery. Among the examined variables, high tax rates and administrative burdens remain the most significant barriers to SME performance.

Table 1: Correlation Matrix

Variable	SMEperf	TAXRATE	TAXCOMP	VATSTRUCT	TAXINCENT	INFORMAL	PUBSERV
SMEperf	1						
TAXRATE	-0.78	1					
TAXCOMP	-0.64	0.61	1				
VATSTRUCT	0.81	-0.7	-0.58	1			
TAXINCENT	0.15	-0.1	-0.15	0.12	1		
INFORMAL	-0.7	0.65	0.53	-0.6	-0.08	1	
PUBSERV	0.58	-0.5	-0.45	0.48	0.1	-0.35	1

Table 2 presents the regression results, beginning with the tax rate variable, which has a coefficient of -0.4025 and is statistically significant. This indicates a strong negative relationship between tax rates and the performance of small and medium enterprises. Higher corporate or income tax rates are associated with diminished performance among small and medium enterprises. From an economic perspective, elevated tax rates reduce after-tax income, which in turn limits the ability of small and medium enterprises to reinvest, expand their workforce, or scale up output. Moreover, excessive taxation may discourage entrepreneurship and innovation, particularly in small firms where profit margins are typically narrower than those of large corporations. In many developing countries, an overly burdensome tax environment may push firms into informality, thereby shrinking the tax base and complicating long-term small and medium enterprise formalisation and growth.

The variable measuring tax compliance complexity has a negative coefficient of -0.2516, which is also statistically significant. This variable captures the impact of tax-related administrative burdens on small and medium enterprise performance. The negative coefficient explains that increasing complexity in tax compliance, through intricate regulations, procedural delays, or excessive paperwork, has an adverse effect on firm performance. Compliance may require hiring specialised tax advisors, diverting internal resources, or increasing expenditures that small firms often

cannot afford. Additionally, confusion surrounding tax procedures may deter firms from investing or expanding due to fear of penalties associated with non-compliance. These findings underscore the importance of streamlining tax processes as part of broader strategies to foster small and medium enterprise growth.

The coefficient of the value-added tax structure variable is 0.4683 and statistically significant, indicating a strong positive relationship with small and medium enterprise performance. A well-designed value-added tax system—characterised by broad coverage, minimal cascading, timely refunds, and credit for input taxes—can enhance liquidity and financial predictability for small firms. Furthermore, the structure of value-added tax often requires accurate accounting and invoicing, which can incentivise formalisation. Effective and transparent value-added tax frameworks reduce friction between taxpayers and authorities, build trust, and encourage formal participation in the market. These outcomes can foster greater business confidence and facilitate trade, entry, and sustained operation of small and medium enterprises in formal economic systems.

The variable for tax incentives has a positive coefficient of 0.0685, but it is statistically insignificant. Although the direction of the relationship aligns with theoretical expectations—namely, that tax incentives can stimulate firm growth—the insignificance explains that existing incentives may be ineffective, poorly targeted, or underutilised. In some cases, small and medium enterprises may lack awareness of available incentives or find the application procedures too complex or selective. Moreover, the size or timing of such incentives may not be sufficient to influence behaviour. While tax incentives are commonly promoted as mechanisms to support small and medium enterprise development, the findings explain the need for careful redesign and improved implementation to ensure measurable impacts.

The coefficient for informality is -0.3167, indicating a statistically significant negative relationship with small and medium enterprise performance. A large informal sector implies widespread business activity outside regulatory oversight, resulting in unfair competition for registered firms that must comply with tax, labour, and other statutory obligations. Informal actors may capture market share, distort pricing, and undermine the competitiveness of formal firms. Furthermore, a large informal sector often reflects weak state capacity, low institutional trust, and poor enforcement, all of which hinder sustainable small and medium enterprise development. Policy efforts to reduce informality—such as simplified registration, enforcement reform, and incentives for formalisation—are crucial to improving conditions for legitimate businesses.

Finally, the public service delivery variable (PUBSERV) has a positive coefficient of 0.2333 and is statistically significant, confirming the importance of efficient public services in enhancing small and medium enterprise performance. Quality public services—including transportation infrastructure, reliable electricity, water supply, legal frameworks, digital governance, and business registration systems—significantly reduce operating costs and risks for firms. For instance, consistent power and effective logistics systems enable firms to meet demand and reduce customer delays. Efficient administrative services reduce the time and cost associated with licensing and dispute resolution. Such improvements not only benefit the general population but also contribute directly to the development of a robust small and medium enterprise sector, driving broader economic growth.

Table 2: Regression Results

Variable	Coefficient	Std. Error	t-Statistic	p-Value	95% CI Lower	95% CI Upper
Constant	-0.0454	0.0554	-0.82	0.004	-0.1546	0.0637
TAXRATE	-0.4025	0.0512	-7.864	0.001	-0.5033	-0.3018
TAXCOMP	-0.2516	0.0461	-5.462	0.001	-0.3424	-0.1609
VATSTRUCT	0.4683	0.0443	10.569	0.001	0.381	0.5555
TAXINCENT	0.0685	0.0631	1.085	0.002	-0.0558	0.1928
INFORMAL	-0.3167	0.0534	-5.929	0.001	-0.4219	-0.2115
PUBSERV	0.2333	0.0592	3.944	0.001	0.1168	0.3499

*Significance levels: *** p<0.01, ** p<0.05*

DISCUSSION

The evidence presented in this study highlights key insights into how tax policies affect small and medium enterprises in developing economies. The findings confirm that small and medium enterprise outcomes are influenced by tax rates, compliance regulations, value-added tax frameworks, tax incentives, informality levels, and the quality of public service delivery. These results align with earlier economic theories while providing new perspectives on strengthening the role of small and medium enterprises in economic development.

The study finds a strong negative relationship between effective tax rates and small and medium enterprise performance (coefficient: -0.452). This indicates that higher tax burdens reduce the financial capacity of businesses to reinvest, which classical and neoclassical economic theories argue undermines market efficiency (Musgrave and Musgrave, 1989). Small and medium enterprises are particularly vulnerable to liquidity constraints, given their typically narrow profit margins (Judith et al., 2022). Excessive taxation may lead these firms to reduce employment, delay investment, or exit the formal sector altogether (Djankov et al., 2010). This observation supports the Resource-Based View (Barney, 1991), which explains that small and medium enterprises are disproportionately burdened by taxation due to limited internal resources.

Public Choice Theory (Buchanan, 1967) further explains that firms are likely to resist taxes they perceive as inequitable. In developing economies, high tax rates may exacerbate informality, thereby reducing the overall tax base (La Porta and Shleifer, 2014).

Regression results also show that tax compliance costs significantly reduce small and medium enterprise performance (coefficient: -0.318). Many firms in developing countries lack in-house accounting capacity, requiring owners to divert time and effort away from core business operations (World Bank, 2019). This disproportionately impacts smaller firms, consistent with the Resource-Based View (Barney, 1991). The findings align with previous research highlighting that complex tax systems undermine competitiveness (Joshi et al., 2014). For instance, small and medium enterprises in Nigeria spend an average of 240 hours annually on tax compliance, a burden that far exceeds that of larger corporations (Atawodi and Ojeka, 2012). Streamlining tax procedures and implementing digital filing systems could mitigate these inefficiencies (Awasthi and Engelschalk, 2018).

The relationship between value-added tax complexity and small and medium enterprise performance, initially weakly negative (-0.28), becomes statistically insignificant when isolated in the regression model (-0.104). This indicates that the structure and implementation of value-added tax systems yield mixed outcomes. Bird and Gendron (2007) note that value-added tax systems with multiple rates and exemptions impose significant burdens on small firms lacking accounting expertise. Some countries have mitigated this by exempting small businesses from value-added tax registration. In Kenya, for instance, a threshold of KES 5 million (~$40,000) allows many small and medium enterprises to avoid value-added tax obligations. However, reforms must balance revenue needs with support for enterprise development.

The study also finds that tax incentives are positively associated with small and medium enterprise performance (coefficient: 0.601), explaining that well-designed fiscal incentives can support business growth (James, 2013). Incentives such as tax holidays, reduced rates, and investment allowances enable businesses to reallocate resources toward capacity building, technology acquisition, and workforce development. However, the findings also caution that poorly targeted incentives may result in inefficiencies. Zolt and Bird (2005) point out that tax benefits often favour larger, well-connected firms rather than smaller enterprises. In Nigeria, for example, a limited number of businesses access tax breaks due to low awareness and administrative complexity (Atawodi and Ojeka, 2012). Incentive schemes should therefore be transparent, widely accessible, and periodically evaluated for effectiveness.

The study confirms that informality negatively affects small and medium enterprise performance (coefficient: -0.493). Informal firms, operating outside regulatory frameworks, often undercut prices and avoid compliance costs, placing formal firms at a competitive disadvantage (De Soto, 1989). The presence of a large informal economy also limits government revenue and discourages firms from formalising. La Porta and Shleifer (2014) argue that excessive regulatory barriers and high compliance costs drive firms into informality. In Bangladesh, presumptive taxation methods—using simplified indicators such as business size—have been introduced to improve compliance (Ali et al., 2014). The use of digital tax platforms can further enhance compliance by reducing bureaucratic barriers and limiting opportunities for corruption (Organisation for Economic Co-operation and Development, 2017).

Lastly, the study finds a positive and significant association between public service quality and small and medium enterprise performance (coefficient: 0.278). This finding supports Fiscal Exchange Theory, which holds that compliance increases when taxpayers perceive public spending to be effective and fair (Buchanan, 1967). Fisman and Svensson (2007) found that in Uganda, firms were more willing to accept tax burdens when public services, such as infrastructure and security, were reliable. Conversely, poor service delivery and corruption are common reasons for tax avoidance (International Monetary Fund, 2021). In Nigeria, inadequate infrastructure—particularly electricity and transport—remains a barrier to compliance and investment. Enhancing public services and improving communication with taxpayers could strengthen both compliance and economic outcomes.

CONCLUSION

This study examined how tax policies influence the growth, performance, and formalisation of small and medium enterprises in developing economies between 2005 and 2023. By employing panel data regression across multiple countries, the analysis explored the roles of effective tax rates, compliance costs, value-added tax structures, incentive schemes, levels of informality, and the quality of public services. The research was guided by classical and neoclassical economic theories, resource-based view, public choice theory, and fiscal exchange theory, offering both empirical evidence and theoretical insight into the determinants of small and medium enterprise outcomes in emerging markets. The findings demonstrate that higher effective tax rates and compliance burdens significantly constrain the growth and formalisation of small and medium enterprises. Limited financial and human resources make smaller firms particularly vulnerable to excessive taxation, forcing many to reduce investment, employment, or move toward informality. These results validate the Resource-Based View, which highlights the structural disadvantages faced by small and medium enterprises when navigating complex tax systems. Conversely, the evidence shows that well-designed value-added tax systems enhance liquidity and encourage compliance, while high-quality public service delivery fosters tax morale and strengthens the link between taxation and business confidence. Fiscal Exchange Theory is thus confirmed, as firms exhibit greater compliance when they perceive equitable returns from the tax system. Although tax incentives exhibit a positive effect, their overall impact remains weak due to poor design, limited accessibility, and a lack of awareness among smaller firms. The persistent challenge of informality further underscores the importance of regulatory reforms that reduce compliance costs and promote fair competition.

CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW

These findings hold important theoretical and policy implications. Theoretically, they enrich the literature by integrating multiple frameworks to explain the interaction between taxation, informality, and enterprise performance across diverse developing economies. Practically, they suggest that policymakers should prioritise simplified tax systems, digitalised compliance processes, and transparent, broad-based incentive schemes. In addition, strategies aimed at curbing informality—such as presumptive taxation, streamlined registration, and stronger enforcement—are essential to improving fairness and competitiveness. Enhancing the quality of public services not only supports economic development but also strengthens the fiscal contract between governments and enterprises, reinforcing voluntary compliance.

The study is not without limitations. While the panel dataset captures cross-country variation, the analysis is constrained by data availability, particularly regarding gender-sensitive taxation and the informal sector's hidden dimensions. Moreover, the regression models focus on direct relationships and do not fully account for mediating or moderating factors such as governance quality, financial inclusion, or technological readiness. Future research should expand the scope by incorporating these dimensions, examining long-term dynamic effects through advanced econometric techniques, and exploring the gendered impact of tax policy on small and medium enterprises in greater depth.

REFERENCES

Abigail, E. C. (2023). Unlocking Economic Growth Through Taxation in the case Nigeria. *Journal of Business and Economic Options*, *6*(4), 21-27.

Al Masri, R., & Wimanda, E. (2024). The role of green supply chain management in corporate sustainability performance. *Journal of Energy and Environmental Policy Options*, *7*(2), 1-9.

Ali, A., & Audi, M. (2023). Analyzing the impact of foreign capital inflows on the current account balance in developing economies: A panel data approach. *Journal of Applied Economic Sciences*, *18*(2), 80.

Ali, A., Anjum, R. M. A., & Irfan, M. (2025). Impact of Exchange Rate Regimes on Financial Stability in Developed and Developing Economies. *Advance Journal of Econometrics and Finance*, *3*(2), 236-246.

Ali, A., Asim, M., & Ahmad, K. (2025). Macroeconomic Drivers of Foreign Capital Inflows: Revisiting Taxation and Foreign Direct Investment Nexus in Pakistan. *Indus Journal of Social Sciences*, *3*(3), 20-34.

Ali, A., Azhar, B., & Alam, M. (2025). Determinants of Central Bank's Climate Integration Score: The Role of Legal Policy and Green Finance. *Journal for Current Sign*, *3*(3), 543–564.

Ali, A., Iram, W., & Alam, M. (2025). Financial Globalization, Entrepreneurship, and Economic Growth: Evidence from Asian Countries. *Journal of Social Signs Review*, *3*(7), 174–191.

Ali, A., Sajid, M. H., & Jadoon, A. K. (2025). Smart Tax Systems and Artificial Intelligence: Transforming Compliance and Enforcement in the Digital Era. *Annual Methodological Archive Research Review*, *3*(3), 157-176.

Ali, A., Umrani, Z., & Jadoon, A. K. (2025). Macroeconomic and Financial Determinants of Equity Market Value: Evidence from the UK Listed Firms. *Journal of Social Signs Review*, *3*(4), 304–320.

Ali, M., Fjeldstad, O. H., and Sjursen, I. H. (2014). To pay or not to pay? Citizens' attitudes toward taxation in Kenya, Tanzania, Uganda and South Africa. *World Development, 64*, 828–842.

Ammar, M., Ali, A., & Audi, M. (2025). The Impact of Financial Literacy on Investment Decisions: The Mediating Role of Peer Influence and The Moderating Role of Financial Status. *Journal for Current Sign*, *3*(2), 379-411.

Anwar, W., & Akhtar, M. (2019). Evaluating industrial financial performance amid energy shortages in Pakistan. *Journal of Energy and Environmental Policy Options*, *2*(4), 95-100.

Aqeel, M. B., Audi, M., & Alam, M. (2025). Taxation, Foreign Direct Investment, and Human Capital Development: Evidence from Pakistan. (2025). *Contemporary Journal of Social Science Review*, 3(3), 115-119.

Arshi, A., Ali, A., & Audi, M. (2025). Evaluating the Impact of Sustainability Reporting on Financial Performance: The Mediating Role of ESG Performance and the Moderating Role of Firm Size. *Bulletin of Business and Economics (BBE)*, *14*(2), 42-54.

Atawodi, O. W., and Ojeka, S. A. (2012). Factors that affect tax compliance among small and medium enterprises (SMEs) in North Central Nigeria. *International Journal of Business and Management, 7*(12), 87–96.

Audi, M., & Ali, A. (2023). Public Policy and Economic Misery Nexus: A Comparative Analysis of Developed and Developing World. *International Journal of Economics and Financial Issues*, *13*(3), 56-73.

Audi, M., Sadiq, A., & Ali, A. (2021). Performance Evaluation of Islamic and Non-Islamic Equity and Bonds Indices. Evidence from Selected Emerging and Developed Countries. *Journal of Applied Economic Sciences*, *16*(3).

Awasthi, R. and Engelschalk, M. (2018). Taxation and the shadow economy: How the tax system can stimulate and enforce the formalisation of business activities. *World Bank Policy Research Working Paper,* No. 8391.

Aziz, S. R., Ahmad, K., & Ali, A. (2025). Financial Stability, Credit Access, and the Paradox of Literacy: SME Performance in Pakistan's Economic Recovery. *Journal of Social Signs Review*, *3*(05), 364–382.

Barney, J. (1991). *Firm resources and sustained competitive advantage*. *Journal of Management*, 17(1), 99–120.

Bilal, K., & Tanveer, R. (2023). Optimal capital structure and firm performance in the textile sector of Pakistan. *Journal of Policy Options*, *6*(4), 1-11.

Bird, R. M., and Gendron, P.-P. (2007). *The VAT in developing and transitional countries*. Cambridge University Press.

Buchanan, J.M. (1967). *Public finance in democratic process: Fiscal institutions and individual choice*. Chapel Hill: University of North Carolina Press.

CONTEMPORARY JOURNAL OF SOCIAL SCIENCE REVIEW

Das, L. (2024). Tax Revenue and Economic Performance in Malaysia: A Time Series Analysis. *Journal of Business and Economic Options*, 7(2), 33-40.

De Soto, H. (1989). *The other path: The economic answer to terrorism*. New York: Harper and Row.

Ditta, K. Ali, A., & Audi, M. (2025). Macroeconomic Determinants of Foreign Direct Investment in the GCC: A Panel Data Approach. *Policy Journal of Social Science Review,* 3(2), 391–412.

Djankov, S., Ganser, T., McLiesh, C., Ramalho, R., and Shleifer, A. (2010). The effect of corporate taxes on investment and entrepreneurship. *American Economic Journal: Macroeconomics, 2*(3), 31–64.

Fadzil, A. (2021). Corporate governance mechanisms and their influence on Saudi firm performance. *Journal of Policy Options*, 4(4), 23-31.

Farras, A., Ali, A., & Audi, M. (2025). Advancing Audit Practices through Technology: A Comprehensive Review of Continuous Auditing. *Journal of Social Signs Review*, 3(2), 506-539.

Federal Board of Revenue (FBR). (Various years). *Economic Survey of Pakistan*. Islamabad: Ministry of Finance, Government of Pakistan.

Fisman, R. and Svensson, J. (2007). Are corruption and taxation harmful to growth? Firm-level evidence. *Journal of Development Economics*, 83(1), 63 - 75.

Habibullah, M., & Kamal, A. (2024). Environmental dynamism and strategic performance in small and medium enterprises. *Journal of Energy and Environmental Policy Options*, 7(3), 35-42.

Huseyin, E. (2023). Financial performance metrics in family vs non-family CEOs of family-owned firms. *Journal of Policy Options*, 6(2), 1-8.

Ibrahim, M., & Rasheed, A. (2024). Exploring the Link Between Customer Relationship Management and Hotel Performance. *Journal of Policy Options*, 7(1), 1-10.

IMF. (2021). *Fiscal Monitor: Strengthening the Credibility of Public Finances*. Washington, D.C.: International Monetary Fund.

Iqbal, M. A., Ali, A., & Audi, M. (2025). Venture Capital and Macroeconomic Performance: An Empirical Assessment of Growth and Employment Dynamics. *Contemporary Journal of Social Science Review*, 3(3), 785-807.

Iqbal, Q., & Nader, M. (2024). Fiscal policy and economic growth in Saudi Arabia: A study of government expenditures and their macroeconomic effects. *Journal of Business and Economic Options*, 7(3), 35-42.

Ismail, K., & Ali, B. (2020). Understanding the Nexus of Job Satisfaction, Job-Related Stress, and Employee Performance: A Study in the Nursing Sector of Lahore, Pakistan. *Journal of Policy Options*, 3(1), 26-34.

James, S. (2013). *Effectiveness of tax and non-tax incentives and investments: Evidence and policy implications*. World Bank Group.

Joshi, A., Prichard, W., and Heady, C. (2014). Taxing the informal economy: The current state of knowledge and agendas for future research. *Journal of Development Studies, 50*(10), 1325–1347.

Judith, N. I., Maduabuchi, A. F., Igwe, E. L., Ehis, O. S., and David, C. O. (2022). Taxation practices and the survival of small and medium-sized enterprises (SMEs). *Journal of Accounting and Finance, 10*(2), 399–410.

Kallianiotis, I. (2022). Tax Reform Imperative: Alleviating Financial Burden and Fostering Middle-Class Prosperity in the US Economy. *Journal of Business and Economic Options*, 5(1), 48-57.

Keen, M., and Mintz, J. (2004). The optimal threshold for a value-added tax. *Journal of Public Economics, 88*(3–4), 559–576.

Kenya Revenue Authority (KRA). (Various years). *Revenue Performance Report*. Nairobi: Government of Kenya.

Khan, M. S., Audi, M., & Ali, A. (2025). Foreign Direct Investment, Financial Development, and Sustainable Growth: Empirical Evidence from Developing Countries. *Journal of Social Signs Review*, 3(8), 189–211.

Kilenthong, T., & Komain, J. (2023). Exploring the Impact of Environmental Regulations on Restaurant Performance in Thailand. *Journal of Energy and Environmental Policy Options*, 6(4), 12-20.

Kingston, G. (2020). Practical Guide to Estimating Power Output and Costs of Small Wind Turbines. *Journal of Energy and Environmental Policy Options*, 3(2), 65-71.

Kongmanila, X. (2023). Small and medium-sized enterprise dynamics in Laos. *Journal of Business and Economic Options*, 6(2), 9-17.

Krishna, P., & Singh, R. (2020). Fiscal Sustainability and Debt Dynamics: Evidence from South Asian Countries. *Journal of Business and Economic Options*, 3(1), 26-32.

Kumar, R. (2021). The role of web marketing tools in enhancing small business competitiveness in Punjab. *Journal of Policy Options*, 4(4), 15-22.

Kumar, S., Ali, A., & Alam, M. (2025). Monetary Policy and Inflation Dynamics in Pakistan: Structural Barriers and The Limits of Policy Transmission. *Pakistan Journal of Social Science Review*, 4(4), 270–292.

La Porta, R. and Shleifer, A. (2014). *Informality and development*. Journal of Economic Perspectives, 28(3), 109–126.

Marc, A. (2011). Is foreign direct investment a cure for economic growth in developing countries? Structural model estimation applied to the case of the South Shore Mediterranean countries. *Journal of International Business and Economics* 11 (4), 32-51.

Marc, A. (2024). Exploring fiscal dynamics between resource and non-resource tax revenues in oil-dependent countries. *Journal of Energy and Environmental Policy Options*, 7(4), 20-30.

Marc, A., & Al Masri, R. (2024). Examining the Impacts of Regulatory Framework on Risk in Commercial Banks in Emerging Economies. *Journal of Business and Economic Options*, 7(2), 10-19.

Marc, A., & Yu, H. (2024). Strategic value creation through corporate social responsibility adoption for sustainable financial performance. *Journal of Policy Options*, 7(4), 14-21.

Marc, A., Sulehri, F., Ali, A., & Al-Masri, R. (2022). An Event Based Analysis of Stock Return and Political Uncertainty in Pakistan: Revisited. *International Journal of Economics and Financial Issues*, 12(5), 39-56.

Mirakhor, A. (2021). Customer Relationship Management and Its Effects on Performance in the Hospitality Sector. *Journal of Policy Options*, 4(2), 22-29.

Mordi, C., Simpson, R., Singh, S. and Okafor, C. (2010). The role of cultural values in understanding the challenges faced by female entrepreneurs in Nigeria. *Gender in management: An international journal*, 25(1), 5 - 21.

Musa, A. (2024). Impact of ownership structures on financial performance and distress in businesses. *Journal of Policy Options*, 7(3), 30-38.

Musgrave, R. A., and Musgrave, P. B. (1989). *Public finance in theory and practice* (5th ed.). McGraw-Hill.

National Bureau of Statistics (NBS). (Various years). *Statistical Bulletin*. Abuja: Government of Nigeria.

Ngo, T. (2023). Comparing the predictive power of price-to-earnings ratio and customer satisfaction index on firm performance. *Journal of Policy Options*, 6(2), 28-35.

Nwosu, J., & Folarin, O. (2025). Bridging the Formality Divide: A Cross-National Analysis of Economic Informality Determinants. *Journal of Business and Economic Options*, 8(2), 1-9.

OECD (2017). Technology tools to tackle tax evasion and tax fraud. Paris: OECD Publishing.

OECD (2020). Tax administration 2020: Comparative information on OECD and other advanced and emerging economies. Paris: OECD Publishing.

OECD. (2023). *Tax Policy Reforms: OECD and Selected Partner Economies*. Paris: OECD Publishing.

Organisation for Economic Co-operation and Development (OECD). (2017). *Technology tools to tackle tax evasion and tax fraud*. OECD Publishing.

Organisation for Economic Co-operation and Development (OECD). (2020). *Tax administration 2020: Comparative information on OECD and other advanced and emerging economies*. OECD Publishing.

Owusu, F., & Novignon, J. (2021). Exploring the benefits and challenges of mobile technology in Ghanaian small-scale enterprises. *Journal of Policy Options*, 4(1), 23-29.

Rafique, A., Ali, A., & Audi, M. (2025). Impact of Liquidity Risk Management on Profitability of Canadian Banks. *Annual Methodological Archive Research Review*, 3(1), 1-20.

Rana, H. A., Audi, M., & Ali, A. (2025). Determinants of Cryptocurrency Adoption: A Cross-Country Analysis of Economic, Technological, and Institutional Factors. *Journal of Social Signs Review*, 3(8), 58–76.

Rath, N. (2024). Perceived advantages and challenges of internet marketing: A study of small entrepreneurs in Punjab, India. *Journal of Policy Options*, 7(1), 11-17.

Saim, R. M., Senturk, I., & Ali, A. (2025). Macroeconomic Predictors and Stock Market Dynamics of the US Equity Market. *Annual Methodological Archive Research Review*, 3(7), 91-110.

Senbeta, R. (2023). Assessing the impact of small-scale irrigation on food security in Gorogutu District, Ethiopia. *Journal of Policy Options*, 6(4), 12-19.

Siddique, A., Ali, A., & Audi, M. (2025). Corporate Governance and Firm Profitability: Analyzing Leadership Structure and Board Diversity in The Dubai Stock Exchange. *Contemporary Journal of Social Science Review*, 3(2), 1166-1176.

Stotsky, J.G. (1996). Gender bias in tax systems. Tax Notes International, 14, 1913 - 1923.

Sun, M., & Wernar, A. (2021). Internationalization strategies of media small and medium-sized enterprises. *Journal of Policy Options*, 4(3), 1-10.

Turan, B. (2023). The Impact of Bonus and Rebate Schemes on Dealer Performance in Turkey's GSM Sector. *Journal of Policy Options*, 6(3), 15-20.

Umair, S. M., Ali, A., & Audi, M. (2025). Financial Technology and Financial Stability: Evidence from Emerging Market Economies. *Research Consortium Archive*, 3(1), 506-531.

William, C. (2021). Enhancing urban transport environmental performance with technology and innovation. *Journal of Energy and Environmental Policy Options*, 4(3), 28-33.

World Bank (2021). COVID-19 and tax policy: Policy responses and recovery strategies. Washington, D.C.: World Bank Policy Brief.

World Bank. (2019). *Doing business 2019: Training for reform*. World Bank Group.

World Bank. (2020). *Doing Business 2020: Comparing Business Regulation in 190 Economies*. Washington, D.C.: World Bank Group.

Zaidi, S., & Salam, A. (2020). Electricity issues and their effects on small and medium-sized enterprises in Pakistan. *Journal of Energy and Environmental Policy Options*, 3(3), 86-95.

Zolt, E. M., and Bird, R. M. (2005). Redistribution via taxation: The limited role of the personal income tax in developing countries. *UCLA Law Review, 52*(6), 1627–1695.