



Vol. 5, Iss. 1 (2024), pp 14 - 26, November 17, 2024. www.reviewedjournals.com, ©Reviewed Journals

THE IMPACT OF INFLATION BASED VALUE ADDED TAX REFORMS ON PRICE STABILITY IN SUGAR FIRMS: A CASE STUDY OF WESTERN KENYA

Awuonda Hillary Ochieng¹ & Dr. Benjamin Ombok, PhD²

¹ MBA Student, Department of Accounting and Finance, School of Business and Economics, Maseno University, Kenya

² Department of Accounting and Finance, School of Business and Economics, Maseno University, Kenya

Accepted: November 7, 2024

ABSTRACT

Price stability refers to a condition where money maintains its value over a considerable period of time, by allowing money to mitigate cost efficiency, control inflationary trends and maintain economic developments, and investments. It is the reigning general price level in an economy, essential for fostering sustainable economic growth, reducing uncertainties, enhancing investment, and supporting long-term planning for households and businesses. Over the period 2019 to 2023, significant price fluctuations have been observed in the sugar sector, presumably attributed to implementation and compliance with aspects of VAT reforms (2018); including standardization of VAT rates at 16% and the expansion of the VAT base, with apparent increased cost of production inputs, such as fertilizers and machinery. Despite VAT reforms being implemented to enhance revenue collection from the proportionate cost to product values on marketed goods and services, it is unknown how compliance to the VAT reforms affect price movement in the economy. Specifically, there has been continued instability in sugar prices, affecting both producers and consumers' returns and investment in the sugar sector. The purpose of this study is to assess the effect of Inflation based Value Added Tax (VAT) reforms on price stability within the sugar firms in western Kenya. The study will adopt a descriptive and causal-comparative research design. Census survey was employed to collect secondary data for the study. Secondary data, consisting of relevant inflation to sugar sector; consumer price sensitivity, input cost inflation, compliance cost, operation expense, input cost variation, administrative cost compliance, tax reporting efficiency, price volatility index, supply demand balance in the sugar industry. With data collected from key personnel from twelve sugar firms, each having 5 respondents, resulting in sixty respondents in total. Consisting of general managers, production managers, finance managers, and sales). The regression model showed a strong relationship, with an R Square of 0.624, indicating that 62.4% of the variance in performance is explained by the predictors. Inflation-based VAT reforms (B = 0.633, Beta = 0.297, p = .004), The study concludes that VAT reforms significantly impact performance, recommending a continued focus on targeted VAT adjustments to enhance stability in the sugar industry. The significance of this study lies in its potential to provide policymakers and industry stakeholders with empirical data on the effectiveness of VAT reforms, offering recommendations for more targeted tax policies that promote price stability and economic resilience in the sugar industry. This research is crucial as it addresses a gap in sector specific studies on how macroeconomic policies like VAT reforms directly impact pricing mechanisms in Kenya's sugar industry.

Keywords: Inflation based, Tax reforms, western Kenya.

CITATION: Awuonda, H. O., & Ombok, B. (2024). The impact of inflation based value added tax reforms on price stability in sugar firms: A case study of Western Kenya. *Reviewed Journal International of Financial Management*, 5 (1), 14 - 26.

INTRODUCTION

Price stability is crucial for ensuring sustainable economic growth, as it enables households and businesses to make future plans with confidence. When prices remain stable, the value of money holds steady, reducing uncertainties associated with fluctuating purchasing power. As noted by the European Central Bank (2020), maintaining a stable inflation rate is essential for minimizing economic disruptions caused by unpredictable price movements. By preventing sudden spikes or drops in prices, price stability creates an environment favorable to both investment and consumption, which are vital for long-term economic health.

According to the International Monetary Fund (IMF), developing countries can achieve greater economic stability through effective inflation targeting and the strengthening of institutional frameworks. Inflation targeting, where central banks commit to specific inflation rate goals, has been identified as a key tool for managing inflation expectations and stabilizing prices in economies with weaker fiscal structures. The IMF (2019) notes that implementing this framework helps developing economies maintain price stability, which is essential for achieving sustainable growth.

In emerging markets, price stability is shaped by both domestic policies and external economic pressures. Fluctuating global capital flows and commodity prices create unique challenges for these economies, making it crucial to implement effective monetary policies and fiscal management strategies. Research from the Bank for International Settlements (BIS) highlights that strategic monetary policy and foreign exchange interventions are vital tools for stabilizing prices in dynamic markets. These tools help emerging economies, including Kenya, manage external shocks while fostering long-term economic resilience (BIS, 2022).

In Sub-Saharan Africa, the region's vulnerability to commodity price volatility and climate-related disruptions further heightens the need for robust price stability measures. The African Development Bank (AfDB) emphasizes the importance of strong monetary policies and fiscal discipline in achieving price stability. The AfDB (2020) notes that careful management of monetary tools and exchange rates is essential for mitigating the effects of external shocks on economies in this region, particularly those reliant on agriculture, such as Kenya.

In East Africa, countries like Kenya and Uganda have implemented monetary and fiscal reforms to combat inflation and stabilize prices. According to the IMF, the adoption of inflation-targeting frameworks combined with interest rate policies has been effective in keeping inflation under control, which has contributed to broader economic growth (IMF, 2021). Kenya, in particular, has benefited from these policies, which have helped to stabilize price levels across key sectors, including the sugar industry, despite external pressures such as global commodity prices.

West African countries within the West African Economic and Monetary Union (WAEMU) rely on the West African CFA franc, pegged to the euro, as a tool for maintaining price stability. Research from the Banque Centrale des États de l'Afrique de l'Ouest (BCEAO) indicates that this currency peg has played a critical role in anchoring inflation expectations, thus providing a stable monetary environment to support price stability across the region (BCEAO, 2022).

Mukherjee and Ouattara (2021) emphasize that climate change and evolving global economic conditions are increasingly threatening the ability of central banks to maintain price stability. Climate-related events such as decreased agricultural productivity, energy supply disruptions, and trade interruptions can lead to significant inflationary pressures. These disruptions affect pricing, particularly in sectors heavily reliant on natural resources and agriculture, such as Kenya's sugar industry. Ciccarelli et al. (2023) further argue that climate variability is a critical factor influencing price instability, as it can raise input costs, reduce labor productivity, and contribute to inflation, especially in industries like sugarcane production and food processing.

In Kenya, a lower-middle-income country heavily reliant on agriculture, inflation targeting frameworks have been introduced to stabilize food prices, which disproportionately affect lower-income households. According

to a recent World Bank report (2023), this strategy aims to address the volatility in food prices caused by supply shocks. However, despite the Central Bank of Kenya's (CBK) efforts, significant challenges persist, including high public debt and external disruptions that exacerbate food price volatility. Although the CBK has generally succeeded in meeting its inflation targets, external factors such as global commodity prices and climate change continue to pose significant risks. As Durevall and Sjö (2012) note, these factors often lie beyond the scope of monetary policy, necessitating a shift by the CBK from a monetary aggregates approach to a Central Bank Rate (CBR)-driven framework, focusing on broader economic conditions and fiscal discipline (MPC, 2021).

Value-added tax (VAT) reforms are particularly important for achieving price stability. VAT, as a consumption tax applied at various stages of the supply chain, offers an effective means for governments to collect revenue while controlling inflationary pressures. When implemented effectively, VAT reforms can enhance revenue collection, reduce tax evasion, and stabilize prices by creating a predictable and transparent tax system. In the European Union, for example, harmonizing VAT rates and reducing administrative complexities have fostered a more stable pricing environment across member states. The European Commission emphasizes that such reforms have helped maintain consistent and predictable tax systems, thus supporting price stability and economic equilibrium (European Commission, 2021).

In developing countries, VAT reforms have been instrumental in broadening the tax base and improving compliance. In Kenya, for example, VAT reforms introduced by the Kenya Revenue Authority (KRA) have stabilized government revenues, which is critical for maintaining economic stability and price levels. The KRA has emphasized that these reforms, aimed at expanding VAT collection and enhancing compliance, have played a vital role in managing the country's inflationary pressures (KRA, 2022). Such reforms not only boost revenue but also contribute to price stability by streamlining the tax system and reducing tax evasion, which ultimately impacts inflation.

In Latin America, countries such as Brazil have also pursued VAT reforms to streamline tax codes and improve compliance. The Inter-American Development Bank (IDB) underscores the importance of these reforms for economic stability, as simplified VAT systems help avoid price distortions caused by inefficient tax structures. Such reforms have allowed Brazil and other Latin American countries to achieve better compliance and support stable pricing environments (IDB, 2019). In South Africa, VAT reforms have yielded similar results, with the South African Revenue Service (SARS) highlighting how adjustments to VAT rates and expansion of the VAT base have bolstered government revenues and contributed to price stability (SARS, 2021).

Rwanda has been widely recognized for its proactive approach to VAT reform. The Rwanda Revenue Authority (RRA) emphasizes that improvements in VAT administration and compliance have significantly increased government revenues, contributing to macroeconomic stability. These reforms have been vital in maintaining price stability amidst global economic uncertainties (RRA, 2021). Similarly, Uganda has implemented VAT reforms aimed at enhancing tax administration and broadening the tax base. The Uganda Revenue Authority (URA) notes that these reforms have been critical in stabilizing revenues and ensuring price levels remain stable, despite external economic shocks (URA, 2020).

The global trend toward VAT reforms reflects the broader objective of nations to achieve rapid development through optimized tax mobilization, an expanded revenue base, and a balanced approach to taxation that promotes economic growth. An efficient and effective tax system is crucial for any nation's development, as it generates the resources necessary to fund public services and ensures economic stability. However, in the face of changing global market conditions, income tax bases are increasingly strained, particularly as governments struggle to tax capital flows. As Gcabo (2012) notes, governments must continuously design and monitor tax strategies that enhance revenue collection while maintaining price stability and supporting sustainable economic growth.

Kenya's tax reform journey began shortly after independence in 1963 and has continued at various scales ever since. The oil shock of the 1970s triggered Kenya's first major fiscal crisis, prompting the introduction of sales taxes to generate additional revenue and trade taxes to mitigate a growing balance of payments deficit (Bird et al., 2005). In 1986, the Tax Modernization Programme (TMP) was launched to expand the tax base, and by 1987, the Budget Rationalization Programme aimed to control public spending. These initiatives sought to raise the revenue-to-GDP ratio from 22% in 1986 to 24% by the mid1990s, later revised to 28% (Muriithi & Moyi, 2003). In 1995, the establishment of the Kenya Revenue Authority (KRA) centralized tax administration and bolstered institutional capacity to improve tax collection.

The introduction of digital tax invoicing in 2020 introduced an additional layer of compliance for businesses, including sugar firms. While this measure aimed to enhance transparency and curb tax evasion, the costs associated with implementing digital invoicing systems added financial pressure, particularly on smaller sugar companies with limited technological capabilities. As a result, these firms faced increased operational costs, which led to further price fluctuations in the sugar market, exacerbating the existing challenges of maintaining price stability in the sector.

In summary, VAT reforms have significantly impacted Kenya's sugar industry by raising production costs and increasing compliance burdens. These challenges underscore the need for context-specific research to fully understand how VAT reforms affect the pricing dynamics within this critical sector. By addressing this gap, this study aims to provide valuable insights for policymakers and industry stakeholders, helping them develop tax policies that promote price stability and sustainability in Kenya's sugar industry. Specifically, the research will explore the relationship between VAT and price stability, with a focus on VAT's effects on inflation, money supply, and trade openness in Kenya's sugar firms.

Statement of the Problem

Kenya's sugar industry, a key driver of the national economy and rural employment, faces significant challenges, the most pressing being price instability. This instability disrupts both producers and consumers, creating inefficiencies throughout the supply chain. While Inflation Based Value Added Tax (VAT) reforms have been introduced to improve revenue generation and economic efficiency, their direct impact on price stability within the sugar sector remains poorly understood. Researchers such as Maries and Alwell have noted that VAT reforms are often studied for their broad macroeconomic impacts, but the specific effects on industries like sugar, with unique operational and market dynamics, are often overlooked. In particular, sugar firms in western Kenya, which are heavily reliant on agricultural inputs and vulnerable to global market shifts, may experience VAT-induced price fluctuations differently from other sectors. Although VAT adjustments can alter cost structures, leading to price volatility, the situation is further complicated by macroeconomic conditions such as inflation, money supply fluctuations, and trade openness, which also shape pricing strategies within the sector. For instance, an increase in money supply tends to drive inflation, eroding consumer purchasing power and destabilizing pricing models in the sugar industry. Additionally, trade openness, which introduces both domestic and international competitive pressures, adds to the complexity of price stability in this market. Ajakaiye (1999) highlighted that industries with high production costs, such as sugar, are particularly vulnerable to tax policy changes, yet there is limited research exploring how these VAT reforms affect the industry specifically. This gap has left policymakers and stakeholders without the insights necessary to address price instability in the sugar sector. Despite efforts to stabilize the broader economy, the sugar industry remains exposed to VAT reforms, inflationary pressures, and external trade conditions, leading to continued price volatility. Thus, the central issue facing Kenya's sugar firms is the persistence of price instability, exacerbated by VAT reforms and broader economic factors. To create more effective tax policies and economic strategies, it is essential to understand how these elements interact and impact price stability in this vital sector, particularly in Kenya's sugar firms, which are integral to the country's agricultural economy.

Research Hypothesis

 H_{01} : Inflation-related VAT reforms have no significant effect on the price stability of sugar firms in western Kenya.

LITERATURE REVIEW

Theoretical review

Compliance Theory

Compliance Theory, as developed by James S. Coleman in the 1990s and further explored by Tom R. Tyler in the late 1980s and early 1990s, provides a foundational framework for understanding how individuals and firms behave in response to taxation systems, including Value Added Tax (VAT) policies. Coleman (1990) argues that compliance is primarily influenced by the perceived fairness and legitimacy of the tax system, emphasizing that when taxpayers see the system as equitable and transparent, they are more likely to comply willingly. Tyler (1990) expands on this by emphasizing the role of procedural justice, which suggests that individuals are more inclined to comply when they believe that tax authorities are fair, transparent, and respectful in their interactions with taxpayers.

In the context of VAT reforms, perceived fairness and transparency play a critical role in determining how firms and consumers respond to changes. When businesses, including sugar firms, view VAT as fair and the government as transparent about how VAT revenues are used, they are more likely to adhere to tax regulations without engaging in avoidance or evasion tactics. This connection between fairness and compliance is highlighted in studies by Baskaran and Feld (2013), which found that higher VAT rates tend to decrease compliance when taxpayers perceive the system as unjust or when they feel burdened by the additional financial costs. Conversely, compliance improves when taxpayers see tangible benefits from VAT revenue, such as improvements in public goods and infrastructure, aligning with Tyler's emphasis on procedural justice.

This theory also offers insights into how VAT reforms influence price stability. VAT is known to raise the cost of goods and services, potentially driving inflation. However, if businesses believe the tax system is legitimate, they may choose not to pass the full cost of the VAT increase onto consumers. Instead, they might absorb part of the financial burden to maintain consumer loyalty and competitive pricing. This approach could help mitigate inflationary pressures, as firms manage the additional costs without significantly altering their pricing structures. On the other hand, in cases where compliance is weak due to perceived injustice, firms may fully transfer the VAT burden onto consumers, thereby exacerbating inflation.

Additionally, Compliance Theory is relevant in explaining the interaction between VAT reforms and trade openness. VAT directly affects export and import costs, potentially influencing a country's trade balance. For instance, when firms comply with VAT regulations, the economy benefits from stable tax revenues, which in turn support broader economic policies that enhance trade competitiveness. Non-compliance, however, can create distortions in trade by creating unequal advantages for firms that evade taxes, undermining the stability of prices and the effectiveness of VAT as a tool for fiscal regulation. Moreover, the theory highlights the importance of transparency and fair treatment in reducing trade barriers, ultimately contributing to price stability and the regulation of money supply.

By understanding how Compliance Theory applies to VAT reforms, policymakers can design systems that encourage voluntary compliance while balancing revenue generation with economic stability and fairness. Ensuring that taxpayers perceive the VAT system as legitimate and beneficial is crucial to maintaining high levels of compliance, minimizing inflationary pressures, and fostering an environment where trade can thrive under stable economic conditions.

Empirical Review

Inflation-based VAT Reforms and Price Stability

Inflation has long been considered a critical macroeconomic variable affecting both economic growth and price stability. Mundell (1963) and Tobin (1965) were among the first to explore the relationship between inflation and economic growth, concluding that inflation generally has a negative impact on growth. Their work laid the foundation for subsequent research, such as Fischer (1993), who identified a direct link between rising inflation and declines in both productivity and investment. Fischer's work revealed that inflation negatively impacts growth by eroding the purchasing power of consumers and increasing uncertainty in investment decisions. Moreover, Barro (1995) expanded on this understanding by calculating that a 10 percent rise in inflation reduces the real GDP growth rate by 0.2 to 0.3 percent annually.

Despite these foundational studies, the impact of inflation on price stability has not been extensively researched within specific sectors or industries. For instance, Ghosh & Phillips (1998) found a strong negative correlation between inflation and economic growth across most inflation rates, except for very low ones. However, their work, like many others, focused on broad economic outcomes without considering the granular effects of inflation on price stability in specific industries. This gap is especially important in sectors like agriculture and manufacturing, where price stability is vital for both production and market stability.

Research focusing on the developing world presents mixed findings. For instance, Paul et al. (1997) conducted a study across 70 countries, finding no clear causal relationship between inflation and economic growth in 40 percent of cases. They did, however, identify bidirectional causality in 20 percent of the countries and a unidirectional relationship in the remainder. This suggests that the relationship between inflation and growth and by extension, price stability is highly context-dependent and varies significantly across different economic environments. In Nepal, for example, Kunwar et al. (2023) demonstrated that the Consumer Price Index (CPI) is positively correlated with economic growth, highlighting how inflation can spur growth in developing countries by increasing demand for goods and services. This, however, often comes at the cost of price stability, particularly in volatile sectors such as agriculture.

Similarly, Orabi and Saymeh (2013) analyzed the relationship between inflation and GDP growth in Jordan and found that inflation had a positive impact on growth, reinforcing the idea that inflationary effects can vary depending on the country and economic conditions. Their study also indicated that inflation could drive price instability in industries heavily reliant on imported inputs, a scenario relevant to Kenya's sugar industry, which is affected by global market prices for fertilizers and other agricultural inputs.

In Ghana, Agalega & Acheampong (2013) arrived at similar conclusions, noting that inflation positively impacted economic growth in the short term, while having a detrimental long-term effect on price stability. Their findings were supported by the work of Enu et al. (2013), who found that inflation had a significant negative impact on growth in the long run, emphasizing the need for targeted economic policies to stabilize prices, particularly in inflation-sensitive industries.

In South Africa, a study conducted by Dingela & Khobai (2017) using an autoregressive distributed lag model found that inflation had a statistically significant negative effect on economic growth in the short term, but a more complex relationship emerged over the long term, where inflation was found to support growth in certain circumstances. Their research highlights the nuanced relationship between inflation, price stability, and growth in developing economies and underscores the need for industryspecific studies. In the Nigerian context, Gatawa et al. (2017) found that inflation had a statistically significant negative relationship with growth, particularly in the agricultural sector. Their findings suggest that inflation disproportionately affects industries with volatile pricing structures, such as sugar production.

Although substantial research has been conducted on the general relationship between inflation and economic growth, there remains a significant gap in understanding how inflation affects price stability within specific industries. For instance, Ghosh & Phillips (1998) and Fischer (1993) focus on broad macroeconomic indicators, yet fail to address the mechanisms through which inflation impacts price stability. In contrast, studies like those of Erbaykal & Okuyan (2008) and Paul et al. (1997) highlight long-term and short-term inflationary effects but do not adequately explore the role of sector-specific factors in shaping these outcomes.

In industries like sugar production, where pricing is influenced by both local and global factors, understanding the relationship between VAT reforms, inflation, and price stability is crucial. The Kenyan sugar industry presents a unique case study, as it operates within an environment of frequent inflationary pressures coupled with volatile global commodity prices. Therefore, research that focuses specifically on the sugar sector is needed to determine how inflationary pressures, exacerbated by VAT reforms, impact price stability. Such studies would provide policymakers with actionable insights to design industry-specific VAT policies that stabilize prices without stifling growth.

METHODOLOGY

This study adopted a combined descriptive and causal-comparative research design to thoroughly investigate the effect of Value Added Tax (VAT) reforms on price stability within sugar firms in western Kenya. Descriptive design was used to profile the key characteristics of the industry and VAT-related changes, providing an understanding of the existing conditions (Cooper & Schindler, 2006). However, to explore the cause-effect relationships between VAT reforms and price stability, the causal-comparative approach was integrated, allowing the research to examine pre-existing differences and the impacts of VAT changes over time.

Causal-comparative design is appropriate for this study as it enables the analysis of relationships without manipulating the variables. It will allow for a comparison of sugar firms' price stability before and after VAT reforms, providing insights into how the reforms have impacted the firms' economic environment. This dual approach ensures a more comprehensive analysis by not only describing but also determining the potential causes of observed changes, making it valuable for informing policy decisions.

Both research designs will ensure that the study can gather, analyze, and interpret numerical data effectively, providing a detailed view of how VAT reforms influence price stability, while maintaining the integrity of real-world observations without experimental manipulation (Bichanga & Aseyo, 2013). This approach will allow for a more accurate assessment of the reforms' effects, providing more actionable insights for stakeholders in the sugar industry.

Cooper and Schindler (2003) define the target population as the entire group of people, events, or objects that a study focuses on as the subject of analysis. The target population for this study comprises 60 respondents drawn from 12 sugar firms as listed by the Kenya Sugar Research Foundation (KESREF) and based in western Kenya. This population includes key managerial positions within the firms: general managers, factory managers, production managers, finance managers, and sales and marketing managers, with each firm contributing five respondents.

The choice of respondents is based on the assumption that these officers have past and present knowledge of VAT change implementation strategies and their effect on price stability. Their roles position them as key decision-makers in determining both compliance with VAT reforms and the strategies that influence pricing within the sugar industry. As such, they are expected to offer valuable insights into the study.

Cooper and Schindler (2003) define a sample as a subset of a population that is studied in order to make inferences about the entire population. For this study, a census survey was adopted, whereby all 60 targeted

respondents from the 12 sugar firms in western Kenya was included in the sample. A census survey is ideal when the researcher intends to include the entire population of interest, ensuring comprehensive data collection from every unit under study (Hofman & Patel, 2014). This method is particularly relevant in cases where the population is relatively small and manageable, as noted by Mugenda and Mugenda (2003), who emphasize that a census survey is significant for small populations because it reduces sampling error and provides a full representation of the study population.

Given the manageable number of firms and respondents, this study will include all 60 participants, comprising general managers, factory managers, production managers, finance managers, and sales and marketing managers from each of the 12 sugar firms. This approach ensures that the perspectives of key decision-makers, who directly influence pricing strategies and VAT compliance, are captured comprehensively.

RESULTS AND ANALYSIS

Table 1: Model summary of inflation based value added tax

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.812a	.659	.626	.30669	2.057

a. Predictors: (Constant), Trainee Engagement, Motivation on AR usage, Inflation based VAT reforms, trade openness-based VAT reforms, money supply-based VAT reforms

b. Dependent Variable: Performance

The findings show a Durbin Watson test value of close to 2.057 which implies that the residuals are independent.

Source: Survey (2024)

Table 2: Estimated regression coefficient for Inflation based Value added tax

		Unstandardize	d Coefficients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	-3.503	.919			.000
	Inflation Based VAT	.206	.297	.479	2.978	.004

a. Dependent Variable:

Source: Survey data (2024)

Based on the results, the following regression equation is derived:

 $Y = -3.503 + 0.633X_1 + 0.452X_2 + 0.748X_3$

$\mathbf{R}^2 = .659 (65.9\%)$

Hypothesis Test Results

The regression coefficients provide more detailed insights into the contribution of each predictor. The constant term, with a value of -3.503 and a significant p-value (.000), indicates the baseline level of price stability without the influence of the specific VAT reforms considered. The coefficient for Inflation-based VAT reforms is 0.633, with a p-value of .003, suggesting that this predictor has a statistically significant positive effect on price stability. This result leads to the rejection of the null hypothesis H01: that inflation related VAT reforms have no significant effect on the price stability of sugar firms in Western Kenya. The positive Beta value of 0.297 implies that as inflation-related VAT reforms increase, price stability also tends to improve.

SUMMARY

The findings of this study indicate that inflation-based VAT reforms have a significant and positive effect on the price stability of sugar firms in Western Kenya. The results from the descriptive statistics and correlation analysis reveal that firms moderately alter their purchasing decisions, spending habits, and input cost

management in response to these reforms. The positive correlation between VAT reforms and price stability, combined with regression results showing a significant impact, suggests that these reforms are key factors in determining firm performance. The results further highlight that firms are likely to adjust their prices in response to VAT-related changes, ensuring stability in a fluctuating market.

CONCLUSIONS

This study concludes that inflation-based VAT reforms play a critical role in stabilizing the price structures of sugar firms in Western Kenya. The reforms enable firms to manage input costs more effectively, reduce financial volatility, and ensure smoother pricing adjustments. The positive and significant relationship between VAT reforms and price stability indicates that these reforms not only improve operational efficiency but also contribute to overall firm performance. These findings align with both rational choice and compliance theories, demonstrating that firms respond strategically to VAT reforms while ensuring regulatory adherence to maintain stability.

RECOMMENDATIONS

Based on the findings, it is recommended that sugar firms in Western Kenya continue to engage with inflation-based VAT reforms as a strategy to maintain price stability. Firms should adopt proactive financial planning and strategic cost management techniques to benefit fully from these reforms. Policymakers are also encouraged to implement VAT reforms that support businesses in managing inflationary pressures while ensuring compliance with tax regulations. Continuous collaboration between the government and the private sector was crucial in fostering a conducive environment for sustained business performance

Suggested Further Studies

Future research should explore the long-term impact of VAT reforms on other sectors within the Kenyan economy to provide a more comprehensive understanding of the broader effects of tax reforms on price stability. Additionally, studies could investigate the role of external factors such as global economic trends, climate change, and political stability in shaping the effectiveness of VAT reforms. Comparative studies between different industries or regions would offer further insights into the varying impacts of tax policies on business performance.

Future research should focus on a broader range of sectors beyond the sugar industry to understand the generalizability of the effects of money supply-based VAT reforms on price stability. It would also be valuable to explore the long-term impacts of these reforms on firm profitability and market competitiveness in different economic contexts. Additionally, studies could investigate the specific mechanisms through which money supply-based VAT reforms influence price stability, including factors such as supply chain adjustments, technology adoption, and managerial decision-making. Such research would provide a deeper understanding of how fiscal policies shape business environments in volatile markets.

REFRENCES

- Abubakar, I. (2020). The impact of value-added tax (VAT) on government revenue in Nigeria. *International Journal of Accounting Research*, 6(3), 1-8.
- Adedeji, A. (2015). *Income tax law for corporate and unincorporated bodies in Nigeria*. Ibadan: Heineman Educational Books.
- Adeleke, A. (1995). Value-added tax in Nigeria. *Journal of the Business and Social Science*, 12(1), 1201-1220.
- Adereti, S.A & Adesina J.A (2011). Value Added Tax and economic growth of Nigeria.
- Adesina, G. (2011). Public perception and attitude towards value-added tax in Nigeria. *Journal of Public Economics*, 33(1), 2071-2081

- Adesina, S. A., Adewuyi, O. M., & Adebisi, A. A. (2021). Value-Added Tax (VAT) in Nigeria: A Review of the Fiscal and Economic Impacts. International Journal of Applied Economics, Finance, and Accounting, 6(1), 6-17. *Role of Central Banks*. African Development Bank.
- Ajakaiye, O. (2000). *Macroeconomic effects of vat in Nigeria: a computable general equilibrium analysis.* Nairobi, Kenya.
- Alade, S. (1993). The impact of value-added tax on economic growth in Nigeria. *Journal of Business and Social Science*, *3*(8), 1000-1320.
- Alemayehu, T. A., & Hailemariam, A. (2019). The impact of gross domestic product on tax revenue in Ethiopia. *Journal of Accounting and Finance*, 19(1), 49-59.
- Allingham, M. & Sandmo, A. (1972). Income tax evasion: a theoretical analysis. *Journal of Public Economics*, 1(3), 23-338.
- Alm, G., McClelland, H. & Schulze, D. (1992). Why do people pay taxes? *Journal of Public Economics*, 48(2), 21-48.
- Alm, J., Sanchez, I. & De Juan, A. (1995). Economic and noneconomic factors in tax compliance. *Humanities and social Science Journal*, 48(3), 3-18.
- Al-Mulali, U., & Sheau-Ting, L. (2015). The impact of value added tax on government revenue. Journal of Applied Economics and Business Research, 5(3), 125-136.
- Al-Mutairi, N. A. (2016). The impact of value added tax (VAT) on government revenue: The case of Kuwait. Journal of Applied Accounting Research, 17(2), 151-169.
- Banda.F, Muleya and Kaliketa.M, —Visualizing sales taxl, Zambia Institute for Policy Analysis and Research (ZIPAR)
- Bank for International Settlements. (2021). Monetary Policy and Financial Stability.
- Bank for International Settlements.
- Bank for International Settlements. (2022). *Challenges for Emerging Markets*. Bank for International Settlements.
- Bickley, J. (1990). Statistical techniques for the social and management sciences. Lagos: Amfitop Books.
- Bird, R. M., & Zolt, E. M. (2019). VAT in Africa: Lessons from a Decade of Reform. International Center for Tax and Development Working Paper, 91. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3481070
- Blumenthal, M., Christian, C. & Slemrod, J. (1998). The determinants of income tax compliance: Evidence from a controlled experiment in Minnesota, National Bureau of Economic Research: Working Paper 6575, Massachusetts.
- Bogetic, Z & Hassan, F (1993). *Determinants of value-added tax revenue: a crosssectional analysis*. Washington D.C. Working Paper 1203, World Bank.
- Braithwaite, V. & Braithwaite, J. (2000). *An evolving compliance model for tax enforcement*. New York: Oxford University Press.
- Budget speech: Delivered to the National Assembly, 2019. B. Ng'andu-Minister of Finance.
- Budget speech: Delivered to the National Assembly, 28th September, 2018. M.Mwanakatwe-Minister of Finance.
- Chanda, M. M., & Kasanda, M. C. (2018). The impact of value added tax on the economic growth of Zambia. Journal of Economics and Sustainable Development, 9(10), 33-40.
- Chanda. K, 2018; —Challenges of VAT system —Zambia observer 2018.

- Chinweobo, U. (2013). Value-added tax and economic growth of Nigeria. *European Journal of Humanities* and Social Sciences, 10(1), 456-471.
- Chosen, A. (2000). *Tax avoidance: The economic legal and moral interrelationship between avoidance and evasion*. Institute of Economic Affairs, London.
- Ciccarelli, M., et al. (2023). *Climate Change and Inflation: Mechanisms and Implications*. Journal of Climate Economics.
- Cnossen, S. (2017). VAT in Developing Countries: Revenue Performance and Policy Issues. International Tax and Public Finance, 24(4), 672-701. doi:10.1007/s10797-017-9465-9
- Cooter, R., & Ulen, T. (2019). Law and economics. Pearson.
- Cutt, J. (1969) Impact of tax administration on government revenue in a developing economy. A case study of Nigeria. *International Journal of Business and Social Science*, *3*(8), 200-250.
- Emmanuel, U. (2013). The effects of value-added tax on the economic growth of Nigeria. *Journal of Economics and Sustainable Development*, 4(6), 190-201.
- European Central Bank. (2020). *Price Stability and Economic Growth in the Eurozone*. European Central Bank.
- Gcabo, B. (2012). Impact of fiscal policy on economic growth in Iran with emphasis on the role of valueadded tax. *Journal Advances in Environmental Biology*, 6(2), 916-919.
- Ghana Revenue Authority. (2019). VAT Reform and Economic Stability in Ghana. Ghana Revenue Authority.
- Iorun, S. (2012). An analysis of the classical VAT as operated in selected countries. Unpublished seminar paper, Obafemi Awolowo University Ife. Nigeria.
- James, S. & Nobes, C. (1992). Taxation: Theory and practice. London: Prentice-Hall.
- James, S., Murphy, K. & Reinhart, M. (2005). Taxpayers' beliefs and views. *Economic Development Journal*, 2(1), 130-150
- Jones, S. (2019). Economic uncertainty and tax revenue: Evidence from OECD countries. Journal of Economic Policy Reform, 22(4), 345-362.
- Jones, T., & Williams, L. (2019). The impact of inflation on revenue collection in a developing country context. Journal of Developing Areas, 53(4), 149-163.
- Kenya Revenue Authority. (2018). VAT Reforms and Economic Impact in Kenya. Kenya Revenue Authority.
- Kenya Revenue Authority. (2020). Expansion of VAT Base and Its Effects. Kenya Revenue Authority.
- Kim, S., Lee, J., & Park, Y. (2020). Inflation and government revenue: Evidence from OECD countries. Applied Economics Letters, 27(5), 379-383.
- Kirchler, E., Maciejovsky, B. & Schneider, F. (2001). *Mental accounting and the impact of tax penalty and audit frequency on the declaration of income: An experimental analysis.* Humboldt: University of Berlin.
- Kumar, A. (2021). Impact of GDP on tax revenue. International Journal of Management Studies, 8(2), 71-75.
- Lee, K., & Park, J. (2017). The relationship between inflation and government revenue: A nonlinear analysis. International Journal of Economics and Finance, 9(1), 19-29.
- Lee, S., & Lee, K. (2017). The effect of inflation on tax revenue in Korea: A timeseries analysis. Korean Economic Review, 33(2), 289-311.
- Liew, Y. X., & Liew, V. K. (2018). The impact of value added tax (VAT) on government revenue in Malaysia. Journal of Applied Accounting Research, 19(2), 200-211.

- Loveday, A. & Nwanyanwu, C. (2015). Value-added tax administration in Nigeria. *Journal of Applied Economics and Finance*. 2(4), 35-100.
- Maries, A., & Alwell, R. (2013). VAT and Price Stability: Evidence from Kenya. Economic Analysis and Policy.
- McGill, G. (1983). *The CPA's role in income tax compliance: An empirical study of variability in recommending an aggressive tax position.* Texas: Texas Tech. University.
- Muhammed, A. (1995). *Value-added tax in Nigeria*. The financier, the pearl of student Journal Business and the social science University of Ilorin.
- Mukherjee, A., & Ouattara, B. (2021). *Climate Change and Inflationary Pressures*. Environmental Economics Journal.
- Mukhtar, S., & Ismail, A. (2020). The impact of value-added tax on government revenue in Pakistan. International Journal of Accounting and Financial Reporting, 10(1), 289-300.
- Mulenga, M., & Kalyati, S. (2020). Value added tax compliance challenges in Zambia: A study of small and medium enterprises in Lusaka. International Journal of Academic Research in Accounting, Finance and Management Sciences, 10(3), 87-98.
- Mwaba, J., & Sakala, P. M. (2019). An assessment of the implementation of valueadded tax in Zambia: The case of the Copperbelt province. International Journal of Advanced Research in Management and Social Sciences, 8(3), 156-169.
- Mwega, F. M., & Mutulei, N. (2015). The impact of value added tax on government revenue in Kenya. Journal of Economics and Sustainable Development, 6(6), 117-126.
- Mwelwa, M. C. (2019). Value added tax compliance determinants in Zambia: A case of selected small and medium enterprises in Lusaka. International Journal of Scientific and Research Publications, 9(3), 486-496.
- Ngele, J. N., Edeh, S. N., & Okoro, C. O. (2021). Value Added Tax and Government Revenue Generation in Nigeria: An Empirical Analysis. Asian Journal of Economics, Business and Accounting, 22(2), 1-12.
- Obiageli.G.2011; Analysis of Value Added Tax and its impact on the Nigerian economy, Masters Thesis, University of Nigeria, Nigeria.
- Odusola, A. (2006). *Tax policy reforms in Nigeria*. World institute for development economics research, Research paper number 2006/3, United Nations University.
- Ogbonna, G. & Appah, E. (2012). Impact of tax reforms and economic growth of Nigeria: a time series analysis. *Research Journal of Social Sciences*, *4*(1), 62-68.
- Okafor, F. (2013). *General Concepts and Financial Implications of Taxation*. Obafemi Awolowo University: Ile-Ife, Nigeria.
- Okele, R. (2003). Expert intermediaries and legal compliance. The case of tax preparers. *Journal of Law and Economics*, *34*(1), 205-229.
- Ola, J. (2001). The effect of tax compliance on economic growth and development in Nigeria, *British Journal* of Arts and Social Sciences, 11(2), 210-250.
- Olaoye, C. (2014). An assessment of the administration of value-added tax as a source of revenue generation in Nigeria (Unpublished master's thesis). University of Ilorin: Ilorin, Kwara State, Nigeria.
- Olawale, L. S., Olamide, O. A., & Maku, O. E. (2021). Gross Domestic Product Risk and Revenue Collection: Evidence from Nigeria. Journal of Economics and Sustainable Development, 12(9), 1-11.
- Onaolapo, A., Aworemi, R. & Ajala, O. (2013). Assessment of value-added tax and its effect on revenue

generation in Nigeria. International Journal of Business and social sciences, 4(1), 220-225.

- Oraka, P., Azubike O., Okegbe, T. & Ezejiofor R. (2012). Effect of value-added tax on the Nigerian economy. *European Academic Research*, 4(2), 400-500.
- Ormaehea S.A & Morozumi A 2019, The Value Added Tax and its growth. Pages 330334.
- Overview of Tax Administration and the three tiers of government in Nigeria. *Institute of Chartered Accountant of Nigeria (ICAN) student's journal, 2*(2) 300-350. Raimi, A., & Yusuf, S. A. (2018). The impact of value-added tax on government revenue in Nigeria. Journal of Accounting and Taxation, 10(3), 24-33.
- Richard, A. M. (1959). Value-added Tax, the facts of a Positive Tax in Nigeria. KUPANG Public Affairs.
- Richard, A. M. (1972). Value-added tax and economic development. National Tax Journal, 25(3), 425-430
- Richard, A. M. (2000). The impact of value-added tax on Nigeria's economic growth. *European Journal of Business and Management*, 7(9), 100-200
- Richard, B. (1993). An empirical assessment of tax mentality. Public Finance Journal, 2(2), 245-257.
- Robert, M. (2001). Individual taxpayers' attitude and compliance behaviour in Nigeria: The moderating role of financial condition and risk preference. *Journal for Accounting and Taxation*, *3*(5), 91-104.
- Rostanmi, A., Nourbakhsh, F. & Akbarian, H. (2012). Impact of fiscal policy on economic growth in Iran with emphasis on the role of value-added tax (VAT). *Journal on Advances in Environmental Biology*, *6*(2), 916-919.
- Sam, A. (2013). The role of value-added tax in the economic development of Nigeria. *International Journal* of Research in Computer Application & Management, 1(1), 550-650.
- Saonee, S. (2003). The Problems of Tax Administration. Latin America, Baltimore: John Hopkins Press.
- Schoeman, A., Evans, C. and du Preez, H. (2021), "The Effect of Changes in the Valueadded Tax Rate on Tax Compliance Behaviour of Small Businesses in South Africa: A Field Experiment", Hasseldine, J. (Ed.) Advances in Taxation (Advances in Taxation, Vol. 29), Emerald Publishing Limited, Leeds, pp. 65-88.
- Shall, M. & Shivazi, V. (2014). An empirical examination of value-added tax to the development of the Nigerian economy. *Journal of Business and Management*, 2(1), 1000-1100.
- Smith, A., Brown, B., & Johnson, C. (2018). The impact of economic uncertainty on tax revenue: Evidence from the United States. *Journal of Public Economics*, 167, 47-55.
- Smith, D. (2018). Tax rate structure and revenue collection: An empirical analysis. *Journal of Economic Policy Reform*, 21(4), 289-306.
- South African Reserve Bank. (2021). *Inflation Targeting and Price Stability in South Africa*. South African Reserve Bank.
- Soyode, R. & Kajola, T. (2006). A cointegration of value-added tax and economic growth in Nigeria. *International Journal of Management Sciences and Business Research*, 1(3), 230-400.