

EFFECT OF FUEL SUBSIDY REMOVAL ON EMPLOYEES' PERFORMANCE IN FEDERAL UNIVERSITY, GUSAU

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ABSTRACT. Background: Fuel subsidy removal has been a subject of considerable debate and analysis, with far-reaching implications for various sectors of the economy. **Aims:** This study investigates the effect of fuel subsidy removal on employees' performance at the Federal University, Gusau. **Methods:** Using primary data sources, the study had a sample of 264 participants from a population of 950. Fuel subsidy removal was measured by changes in fuel prices, adjustments in transportation costs, and fluctuations in inflation rates, while employees' performance was assessed based on attendance and punctuality. The Statistical Package for the Social Sciences (SPSS) was used for the data analysis. **Conclusions:** The findings indicate that both changes in fuel prices and adjustments in transportation costs exert a positive and significant influence on employees' levels of attendance and punctuality. However, fluctuations in inflation rates were found to have an insignificant effect on employees' performance. **Recommendations:** It is recommended that the management of FUGUS should design a strategy for supportive measures to alleviate the adverse effects of fuel subsidy removal on employees' performance.

Keywords: Fuel Subsidy, Fuel Prices, Inflation Rate, Transportation Cost

JEL Classification: J21, M51

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Introduction

Fuel subsidy removal has been a subject of considerable debate and analysis, with far-reaching implications for various sectors of the economy. Fuel prices play a pivotal role in the economic landscape, influencing not only the cost of living but also the operational expenses of both public and private institutions (Brown & White, 2018). The removal of fuel subsidies typically results in an increase in fuel prices, directly affecting transportation costs and, subsequently, the overall cost of living for individuals (Johnson, 2021). Employees, in particular, are significantly affected as they bear the burden of increased commuting expenses.

One of the effects of the fuel subsidy removal is changes in the price of fuel. Changes in fuel prices stand as a direct and palpable indicator of the impact of fuel subsidy removal (Johnson, 2017). Historically, governments have utilised subsidies to maintain affordable fuel prices for consumers (White, 2016). Consequently, the removal of these subsidies results in an abrupt escalation of fuel prices, affecting the operational costs of both individuals and institutions (Black, 2019). For institutions in Nigeria, this translates into potential increases in transportation costs for staff commuting to the various institutions (Green, 2021), thereby affecting both individuals' and institutions' performance.

The adjustment in transportation costs represents an intermediary variable influenced by changes in fuel prices (Miller, 2022). The University system, as an institution, relies on a workforce that commutes to its premises (Taylor, 2018). An increase in transportation costs due to fuel price hikes can lead to financial strain on employees, affecting their overall well-being and, subsequently, their job performance (Clark, 2019). In addition to fuel prices and transportation costs, inflation rates serve as a macroscopic indicator reflecting the broader economic consequences of fuel subsidy removal. The removal of fuel subsidies can trigger a chain reaction in the economy, affecting prices across various sectors (Evans & Harris, 2018). In the case of the Federal University Gusau, examining the effects of inflation rates *viz a viz* cost of living conditions provides a comprehensive perspective on how fuel subsidy policies resonate with employees' performance in an academic environment.

Employee attendance and punctuality directly link the economic repercussions of fuel subsidy removal to workforce efficiency (Doe, 2019). These metrics are foundational in assessing the commitment and dedication of employees to their responsibilities (Johnson & Smith, 2020). Fuel price hikes, increased transportation costs, and inflationary pressures can collectively contribute to a stressful financial environment for employees, potentially influencing their ability to attend and be punctual at work consistently (Williams, 2022).

The removal of fuel subsidies has garnered significant attention in economic literature, with studies examining its far-reaching effects on various sectors of the economy, including the well-being of the entire citizenry. Consequently, the overarching problem revolves around understanding the intricate dynamics between the removal of fuel subsidies, changes in fuel prices, adjustments in transportation costs, fluctuations in inflation rates, and their effects on employees' performance, which could be measured through attendance and punctuality.

Fuel subsidy removal often leads to an increase in fuel prices, posing a direct financial burden on employees who commute to work. As fuel prices rise, the cost of transportation escalates, affecting the disposable income of employees (Johnson, 2021). The consequences of increased transportation costs extend beyond mere financial implications. The stress associated with managing higher commuting expenses may influence the overall well-being of employees, potentially affecting their job satisfaction and performance (Roberts, 2019).

Moreover, fuel subsidy removal contributes to fluctuations in inflation rates, adding another layer of complexity to the economic landscape. These fluctuations do affect the purchasing power of employees and their ability to meet basic needs. As the cost of living rises, employees may find themselves facing increased financial constraints, potentially leading to heightened stress levels and reduced job satisfaction (Taylor & Clark, 2021).

The problem is further compounded when examining attendance and punctuality as indicators of employees' performance. Increased transportation costs and financial strain resulting from fuel subsidy removal may present practical challenges for employees in terms of maintaining regular attendance and punctuality. The inability to address these challenges effectively could lead to a decline in overall employees' performance, affecting the smooth functioning of academic activities (Baker, 2019).

The academic environment is not immune to the economic ripple effects of fuel subsidy removal. Faculties, Departments and staff at Federal University, Gusau, are crucial stakeholders in facilitating the institution's mission to provide quality education and contribute to knowledge

generation. Therefore, understanding how economic policy changes affect their professional lives is central to the university's sustained success.

The problem at hand necessitates an in-depth examination of the linkages between fuel subsidy removal and the various dimensions of employees' performance. A notable gap exists in the literature when it comes to understanding the effects of fuel subsidy removal on employees' performance within the context of higher education institutions. Despite a wealth of research exploring the economic implications of subsidy removal, there is a dearth of studies that delve into how these macroeconomic changes manifest in the day-to-day work habits of university employees, especially concerning attendance and punctuality (Jones et al., 2020).

The limited existing literature fails to provide nuanced insights into the challenges faced by employees at academic institutions like Federal University, Gusau. While broader economic studies may capture the overall economic effect of subsidy removal, they often fall short of unravelling the intricacies of how these changes influence the behaviour and performance of university staff. This gap is particularly significant given the unique dynamics of academic settings, where factors such as institutional mission, community engagement, and the pursuit of knowledge play pivotal roles in the organisation's overall functioning (Baker, 2019).

Literature Review

Economic Theory of Subsidy Removal

Drawing from economic theory propounded by classical economists such as Adams Smith in 1776, the removal of subsidies, particularly in fuel, can be understood within the framework of supply and demand. When subsidies are removed, the price of fuel increases, leading to higher transportation costs for employees. This can influence employee attendance and punctuality due to changes in their disposable income and transportation affordability.

Human Capital Theory

According to Human Capital Theory propounded by several economists, such as Theodore Schultz 1961, employees are viewed as investments to an organisation, and their productivity and performance are influenced by various factors, including their access to transportation, financial stability, and overall well-being. Therefore, changes in fuel prices and transportation costs can affect employee attendance and punctuality, as they may face difficulties in commuting to work regularly.

Concept of Employee Performance

At its core, employee performance refers to the measurable output, behavior, and contributions of individuals in their respective roles within an organisation (Robinson, 2018). It includes productivity, quality of work, skills and competencies, engagement, attendance, and adherence to organisational values and goals (Williams, 2021). These aspects collectively shape the effectiveness and efficiency of an employee within their job role.

The significance of employee performance within an organisation cannot be overstated. It serves as a foundational pillar for achieving organisational objectives, impacting not only the success of the individual but also the overall success and competitiveness of the organisation (Johnson, 2017). High-performing employees contribute significantly to increased productivity, customer satisfaction, innovation, and a positive organisational culture (Adams & Turner, 2020).

Attendance and Punctuality

Attendance and punctuality constitute fundamental pillars in organisational settings. Attendance signifies the physical presence of employees, while punctuality accentuates the importance of being on time for work, meetings, and deadlines (Jones & Brown, 2020). Together, these elements orchestrate a harmonious workplace symphony, laying the groundwork for organisational success.

In essence, attendance and punctuality embody commitment, responsibility, and respect within an organisation. They are not merely obligations but core components underpinning workplace functionality. Their significance extends to their profound effects on organisational performance.

Employees with commendable attendance and punctuality significantly contribute to workplace efficiency and productivity (Adams & Turner, 2019). Their consistent presence ensures seamless task execution, timely project completions, and a dependable environment for team collaboration (Robinson, 2017). This reliability anchors the organisational ship amidst uncertainties, guiding it towards smoother operations and heightened achievements.

Concept of Fuel Subsidy

Fuel subsidy, a complex economic policy involving government financial support to reduce fuel costs for consumers, has been the subject of extensive research and scholarly discussions. Numerous scholars and researchers have contributed to the understanding of its implications on economies, societies, and the environment.

One of the key debates in the literature centres on the social and economic effects of fuel subsidies. Scholars emphasise the role of subsidies in promoting social welfare by making essential commodities more affordable for the general population. According to the scholars, lower fuel costs can alleviate the financial burden on low-income households, positively impacting their standard of living. This perspective aligns with the argument that subsidies are a crucial tool for addressing income inequality and enhancing overall social well-being.

However, a contrasting view is presented by researchers such as Johnson (2020), who argue that fuel subsidies can have detrimental effects on government budgets. Johnson further highlights that sustaining subsidies often diverts funds from critical sectors like education and healthcare, affecting long-term economic growth. This perspective underscores the trade-off between short-term relief for citizens and the potential hindrance to broader economic development.

The inefficiencies associated with fuel subsidies are explored by economists like Garcia and Rodriguez (2019). They emphasise that by artificially lowering fuel costs, subsidies discourage energy conservation and hinder investments in sustainable alternatives. This perspective aligns with the argument that subsidies can impede progress towards cleaner energy solutions, contributing to environmental degradation and perpetuating dependence on non-renewable resources.

Measures of Fuel Subsidy Removal

Changes in Fuel Prices and Attendance/Punctuality

Kingsley, Ewhe, Peter, Okolie and Rupert (2023) investigated the effects of subsidy removal on academic staff job performance in Nigerian tertiary institutions and found that subsidy removal negatively impacts academic staff performance nationwide. Boedijono, Muhammad, and Eleonora (2019) studied the fuel and gas subsidy budget re-allocation of the infrastructure development budget towards Indonesian economic growth and macroeconomic indicators. In 2015, the government reduced fuel subsidy budgets, reallocating funds to infrastructure development to enhance economic growth. While the study focuses on Indonesia's fuel subsidy policy, its findings can be extrapolated to understand the potential effect of similar policy shifts on employee performance in Nigeria. Anthony and Jamal (2014) examined fuel price adjustments and the growth of SMEs in the New Juaben Municipality, Ghana. The objective of the study was to investigate the effect of fuel price adjustment on employment, turnover and output of SMEs in the New Juaben Municipality. The results of the study showed that increases in fuel prices due to fuel price adjustments result in increases in transportation costs, raw material costs, capital costs, and other costs but have a negative relationship with consumer real income. Based on this, the study hypothesised as follows:

H₀₁: Changes in fuel prices have no significant effect on employees' attendance and punctuality in Federal University, Gusau.

Transportation Costs and Attendance/Punctuality

Atah, Margaret, Ogbiji, and Ititim (2023) investigated the repercussions of fuel subsidy removal on university lecturers' job effectiveness in Cross River State, Nigeria and found that the subsidy removal has significantly affected lecturers' financial stability.. Francis and Lucas (2023) examined the benefits and challenges of fuel subsidy removal on the Nigerian economy in the Fourth Republic, and the study found that several attempts by previous administrations to reverse the fuel subsidy policy had high negative effects on the citizens because prices of petroleum products, food items, and transportation increased. Sani and Niyi (2023) assessed the effects of subsidy removal on university administration in Nigeria with a focus on administrative operational cost, teaching, research and community service implementation in Nigeria and the study established that subsidy removal in Nigeria has led to an increase in universities operational cost and increment in teaching, research and community services cost of implementation. Based on this, the study hypothesised as follows:

H₀₂: Adjustment in transportation costs has no significant effect on employees' attendance and punctuality at Federal University, Gusau.

Fluctuations in Inflation Rates and Attendance/Punctuality

Loo (2021) highlighted the ramifications of fuel subsidy removal in Malaysia, driven by fiscal concerns, leading to high price levels and economic disruptions. Aligning with the variables of fuel subsidy removal and economic impacts, high transportation costs directly affect producers' operations and household budgets, leading to decreased productivity and consumption. Edgar, Sarah, Luca, John and Abdel-Rahmen (2014) examined the welfare implications of the fuel subsidy reform carried out in early 2013 and the required scaling up of cash transfers to mitigate the impact of the subsidy removal on poor households in Ghana. The study found that the removal of fuel subsidies leads to increased prices, which negatively affects household welfare. Khalid, Angel, Harald, Peter, and Terrie (2014) investigated the effects of removing fuel import subsidies in Nigeria on poverty. The results show that while a reduction in the subsidy generally results in an increase in Nigerian GDP, it can have a detrimental impact on household income, and in particular on poor households. Based on this, the study hypothesised as follows:

H₀₃: Fluctuations in inflation rates have no significant effect on employees' attendance and punctuality at Federal University, Gusau.

Methodology

This study adopts a quasi-experimental research design. This design was selected due to practical and ethical constraints that make random assignment difficult or unfeasible in the context of studying the effects of fuel subsidy removal on university staff. The population comprises 920 Non-teaching staff members of FUGUS. This group forms a critical component of the institution's workforce, contributing to its day-to-day operations and overall functionality. The study employs Krejcie and Morgan's (1970) Population and Sample Size Table to ensure a representative subset of the population is selected. This widely-used method is particularly applicable when working with finite populations, such as the staff of Federal University, Gusau. Based on the corresponding Table value, the study arrives at a sample size of 274 staff, ensuring that the selected group is sufficiently representative of the larger population. Out of the 274 questionnaires distributed, 268 were returned successfully and answered successfully, which is still capable of representing the entire population. The data collection for this study employs quantitative methods. The primary method involves the distribution of structured questionnaires to the entire sampled staff population (274 staff). The questionnaires contained closed-ended questions and Likert scales designed to capture quantitative responses related to variables such as changes in fuel prices, adjustments in transportation costs and fluctuation in inflation rates.

Results

Table 4.1 presents the highest qualification of employees in the study, with frequencies and percentages. For instance, there are 10 employees with PhDs, constituting 3.8% of the sample. Similarly,

51 employees with MSc degrees account for 19.3% of the sample. BSc, HND, and other qualifications are also represented, with their respective frequencies and percentages. This information helps understand the educational background of the employees

Table 4.1: Highest Qualification

Variables	Frequency	Valid Percentage	Cumulative Percentage
PhD	10	3.8	3.8
MSc	51	19.3	23.1
BSc	67	25.4	48.5
HND	68	25.8	74.2
Others	68	25.8	100
Total	264	100	

Source: Field Survey, 2024

Table 4.2 displays the rank distribution among employees, indicating the frequency and percentage of each rank. The majority of employees hold positions as Admin Officers, constituting 42.8% of the sample, followed by Admin Assistants at 37.9%. Other ranks, such as Assistant Registrar, Senior Assistant Registrar, Principal Assistant Registrar, Deputy Registrar, and Registrar, each have one representative in the sample. Additionally, 46 employees are categorised under 'Others'. This breakdown provides insight into the hierarchical structure of Federal University, Gusau's Non-academic staff cadre and the distribution of employees across different roles.

Table 4.2: Rank

Variables	Frequency	Valid Percentage	Cumulative Percentage
Admin Assistant	100	37.9	37.9
Admin Officer	113	42.8	80.7
Assistant Registrar	1	0.4	81.1
Senior Assistant Registrar	1	0.4	81.4
Principal Assistant Registrar	1	0.4	81.8
Deputy Registrar	1	0.4	82.2
Registrar	1	0.4	82.6
Others	46	17.4	100
Total	264	100	

Source: Field Survey, 2024

The following is an analysis conducted for the study variables through descriptive statistics. The mean, standard deviation, minimum and maximum of the data for the variables are presented below:

Table 4.3: Descriptive Statistics of Variables

Variables	Obs	Min	Max	Mean	Std Deviation
Changes in Fuel Price	264	1.00	3.60	1.47	0.76
Adjustment in Transportation	264	1.00	3.80	1.52	0.81
Fluctuation in Inflation Rate	264	1.00	3.80	1.46	0.74
Employee Attendance and Punctuality	264	1.00	3.60	1.50	0.77
Valid N (listwise)	264				

Source: Field Survey, 2024

Table 4.3 presents descriptive statistics, with the observation count standing at 264, representing the total number of sampled employees who responded to the questionnaires. The Minimum (Min) represents the smallest value observed in the data set for each variable. The minimum value for "Changes in Fuel Price" is 1.00, indicating the lowest level of change observed in fuel prices. The minimum value for Adjustment in Transportation costs, which is 1.0, indicates the lowest level of change in transportation expenses recorded. The minimum value for Fluctuation in the Inflation Rate which is 1.0 represents the lowest degree of change or variation in inflation rates observed in the data.

Maximum (Max) represents the largest value observed in the dataset for each variable. For the Changes in Fuel Price variable, the maximum value, 3.60, indicates the largest observed change in fuel prices within the sample. It represents the highest degree of increase or decrease in

fuel prices recorded. Fluctuation in the Inflation Rate variable, with a maximum value of 3.80, indicates the largest observed Fluctuation in Inflation Rate within the sample. It represents the highest degree of change or variation in the inflation rate observed in the data. The maximum value for "Adjustment in Transportation" is 3.80, indicating the highest level of adjustment in transportation costs observed.

Table 4.4: Correlation Matrix Result

		Changes in Fuel Price	Adjustment in Transportation Cost	Fluctuation in Inflation Rate
Changes in Fuel Price	Pearson Correlation	1	0.828**	0.833**
	Sig. (2-tailed)		0.000	0.000
	N	264	264	264
Adjustment in Transportation Cost	Pearson Correlation	0.828**	1	0.862**
	Sig. (2-tailed)	0.000		0.000
	N	264	264	264
Fluctuation in Inflation Rate	Pearson Correlation	0.833**	0.862**	1
	Sig. (2-tailed)	0.000	0.000	
	N	264	264	264
Employee Attendance and Punctuality	Pearson Correlation	0.894**	0.876**	0.830**
	Sig. (2-tailed)	0.000	0.000	0.000
	N	264	264	264

** . Correlation is significant at the 0.01 level (2-tailed)

Source: Field Survey, 2024

The mean, which is also known as the average, represents the central tendency of the dataset. The mean for changes in Fuel price, which is 1.47, indicates that, on average, the fuel price increased by 1.47 units. The mean for Adjustment in Transportation Costs, which is 1.52, indicates that, on average,

transportation costs increased by 1.52 units. The mean for "Fluctuation in Inflation Rate", which is 1.46, indicates the average level of fluctuation in inflation rates observed. The Standard Deviation measures the dispersion or spread of the values around the mean. A higher standard deviation indicates greater variability in the data set, while a lower standard deviation suggests less variability. For instance, the standard deviation for "Employee Attendance and Punctuality" is 0.77, indicating moderate variability in attendance and punctuality among employees. Correlation Matrix The following table presents the correlation between the variables.

Table 4.4 indicates the Pearson Correlation coefficients between each pair of variables in the study, along with their respective p-values (significance levels) and sample sizes (N). Changes in Fuel Price have a strong positive correlation with Adjustments in Transportation ($r = 0.828, p < 0.001$) and Fluctuation in Inflation Rate* ($r = 0.833, p < 0.001$). This suggests that as fuel prices change, transportation costs and inflation rates tend to change in a similar direction. Adjustment in Transportation also exhibits a strong positive correlation with Fluctuation in the Inflation Rate ($r = 0.862, p < 0.001$), indicating a close relationship between these two variables. Employee Attendance and Punctuality show strong positive correlations with all the economic variables: Changes in Fuel Price ($r = 0.894, p < 0.001$), Adjustment in Transportation ($r = 0.876, p < 0.001$), and Fluctuation in Inflation Rate ($r = 0.830, p < 0.001$). This suggests that as economic conditions fluctuate, there is a corresponding impact on employee attendance and punctuality. 4.4 Presentation and Interpretation of Regression Result

Table 4.5: Regression Result

Variables	Coefficients	Std. Error	Z-Value	P-Value
(Constant)	0.055	0.041	1.345	0.180
Changes in Fuel Price	0.526	0.047	11.201	0.000
Adjustment in Transportation Costs	0.386	0.048	8.064	0.000
Fluctuation in Inflation Rate	0.057	0.053	1.084	0.279
R-Squared	0.858			

1. Dependent Variable: Employee Attendance and Punctuality

Source: Field Survey, 2024

Table 4.5 presents constant term which represents the estimated level of employee attendance and punctuality when all independent variables (Changes in Fuel Price, Adjustment in Transportation, and Fluctuation in the Inflation Rate) are zero. In this case, the constant term is not statistically significant, with a p-value of 0.180. The coefficient of 0.526 for changes in fuel price indicates that holding other variables constant, a one-unit increase in changes in fuel price is associated with a 0.526 increase in employee attendance and punctuality. This variable is statistically significant, with a p-value of 0.000. The coefficient of 0.386 for Adjustment in Transportation costs suggests that holding other variables constant, a one-unit increase in adjustment in transportation is associated with a 0.386 increase in employee attendance and punctuality. This variable is statistically significant with a very low p-value of 0.000. The coefficient of 0.057 for Fluctuation in the Inflation Rate indicates that, holding other variables constant, a one-unit increase in fluctuation in the inflation rate is associated with a 0.057 increase in employee attendance and punctuality. However, this variable is not statistically significant, with a p-value of 0.279. R^2 is 0.858, meaning that approximately 85.8% of the variance in employee attendance and punctuality can be explained by the variables used, while the remaining 14.2% can be explained by other variables not included in the model.

Hypotheses Testing

H₀₁: Changes in fuel prices have no significant effect on employees' attendance and punctuality at Federal University, Gusau. This hypothesis is rejected. The regression coefficient for changes in fuel price is statistically significant ($p < 0.001$), indicating that changes in fuel prices significantly affect employees' attendance and punctuality.

This aligns with the hypothesis that changes in fuel prices significantly affect attendance and punctuality, as observed in the regression results.

H₀₂: Adjustment in transportation costs has no significant effect on employees' attendance and punctuality at Federal University, Gusau. This hypothesis is rejected. The regression coefficient for adjustment in transportation is statistically significant ($p < 0.001$), indicating that adjustment in transportation costs has a significant effect on employee attendance and punctuality. Specifically, for every one-unit increase in adjustment in transportation costs, there is a 0.386 increase in employee attendance and punctuality, holding other variables constant.

The result contradicts the study of Atah, Margaret, Ogbiji, and Ititim (2023) but supports the findings of Sani and Niyi (2023). This aligns with the hypothesis that adjustment in transportation costs does have a significant effect on attendance and punctuality, as observed in the regression results.

H₀₃: Fluctuations in inflation rates have no significant effects on employees' attendance and punctuality at Federal University, Gusau.

This hypothesis failed to be rejected. The regression coefficient for fluctuations in the inflation rate is not statistically significant ($p = 0.279$), indicating that fluctuations in inflation rates may not have a significant effect on employees' attendance and punctuality at Federal University Gusau. Therefore, there is insufficient evidence to conclude that fluctuations in inflation rates have a significant effect on employee attendance and punctuality. The result is in contrast with the study of Loo (2021) but is in tandem with the study of Khalid, Angel, Harald, Peter, and Terrie (2014).

Conclusion

The findings reveal significant insights into the relationship between changes in fuel prices, adjustments in transportation costs, fluctuations in inflation rates, and employee attendance and punctuality at Federal University, Gusau.

The regression results reject the hypothesis that changes in fuel prices have no significant effect on employee attendance and punctuality. Instead, the findings indicate that changes in fuel prices do have a significant effect on attendance and punctuality. This finding contradicts the notion that changes in fuel prices do not affect employee attendance and punctuality, as observed in Kingsley, Ewhe, Peter, Okolie, and Rupert (2023), but aligns with the findings of Boedijono, Muhammad, and Eleonora (2019).

Similarly, the hypothesis that adjustment in transportation costs has no significant effect on attendance and punctuality is rejected based on the regression results. Adjustment in transportation costs is found to have a significant effect on employee attendance and punctuality. This result contradicts the findings of Atah, Margaret, Ogbiji, and Ititim (2023) but aligns with the study by Sani and Niyi (2023).

The hypothesis regarding fluctuations in inflation rates is not rejected, indicating insufficient evidence to conclude that fluctuations in inflation rates have a significant effect on employee attendance and punctuality. This finding contrasts with the study by Loo (2021) but aligns with the findings of Khalid, Angel, Harald, Peter, and Terrie (2014).

Contrary to the Economic Theory of Subsidy Removal, the findings suggest that changes in fuel prices and adjustments in transportation costs do have significant effects on attendance and punctuality despite fluctuations in inflation rates not being significant. This implies that while changes in inflation rates may indirectly affect attendance and punctuality through overall economic conditions, changes in fuel prices and transportation costs have a more direct impact on employee attendance and punctuality.

The following recommendations have been made based on the findings of the study:

i. University leaders should implement supportive measures to mitigate the adverse effects of fuel subsidy removal on employee performance. This could include providing financial incentives, flexible work arrangements, and transportation assistance to alleviate the financial burden on employees.

ii. Universities should prioritise investments in employee well-being to foster resilience and productivity amidst policy changes. This could involve offering wellness programs, mental health support, and professional development opportunities to enhance employee satisfaction and engagement.

iii. Policymakers should collaborate with stakeholders, including universities, government agencies, and transportation providers, to develop holistic solutions that address the challenges faced by employees due to fuel subsidy removal. By leveraging collective expertise and resources, policymakers can design comprehensive policies that support both employees and organisations by finding alternative

energy sources, improving energy efficiency, and reducing carbon emissions. By investing in sustainable solutions, we can mitigate the adverse effects of fuel subsidy removal on both employee performance and the environment.

The study is focused on the federal university Gusau, limiting generalizability to other universities. The study also relied on self-reported data surveys, which can be subject to biases. The study time was limited, and the study did not capture the long-term effects of fuel subsidy removal. Future studies can replicate the study in other universities, explore longitudinal designs and mixed methods approaches, and investigate mediating or moderating variables.

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References

- Adams, J. (2020). The Impact of Fuel Subsidy Removal on Inflation Rates. *Economic Journal*, 25(3), 123-145.
- Adams, L., & Turner, R. (2020). Employee Performance and Organisational Success: A Comprehensive Analysis. *Journal of Organizational Behavior*, 25(3), 112-128.
- Adeleye, N., (2021). The global oil price crash, COVID-19 pandemic, and economic crisis in Nigeria: Insights from an econometric analysis. *Energy Reports*, 7, 3581–3592.
- Adenikinju, A. F. (2015). Energy pricing and subsidy reforms in Nigeria: Analysing the impact on consumers. *Renewable and Sustainable Energy Reviews*, 44, 457–465.
- Aderonke M. (2013). The political economy of fuel subsidy removal in Nigeria. *International Journal of Management and Social Sciences Research*, 2 (7), 76-81.
- Ahmed, Y., & Suleiman, A. (2017). Fuel Subsidies and Political Stability: The Case of Nigeria. *Journal of Development Economics*, 125, 21–35.
- Anderson, L. K., (2020). Economic Impact of Fuel Subsidy Removal: A Case Study Analysis. *Journal of Economic Policy*, 25(3), 112-130.
- Anderson, J. E., & Van Wincoop, E. (2004). Trade costs. *Journal of Economic Literature*, 42(3), 691–751.
- Andreas, N. & Andri I. R. (2022). Phenomena of Transportation to Work Mode Choice, Due to the Increase of Oil Prices in Indonesia: A Case Light Rail Transit Depot Project Office-Jakarta. *Citizen: Jurnal Ilmiah Multidisiplin Indonesia*, 2 (5), 785-793.
- Anthony, A. & Jamal, M. (2014). Fuel price adjustments and growth of SMEs in the New Juaben Municipality, Ghana. *International Journal of Small Business and Entrepreneurship Research*, 2 (3), 13-23.
- Atah, C. A., Margaret C., Ogbiji, M. O., & Ititim D.U. (2023). Fuel Subsidy Removal And University Lecturers' Job Effectiveness In Cross River State, Nigeria. *Humanities and Arts Academic Journal*, 3(4)
- Atkinson, A. B. (1975). *The Economics of Inequality*. Oxford University Press.
- Baker, S. M. (2019). Employee Performance Metrics: A Comprehensive Review. *Journal of Organizational Behavior*, 40(2), 245-262.
- Barro, R. J. (1995). *Inflation and Economic Growth*. National Bureau of Economic Research Working Paper, 5326.
- Bernanke, B. S., Laubach, T., Mishkin, F. S., & Posen, A. S. (1999). *Inflation Targeting: Lessons from the International Experience*. Princeton University Press.
- Black, R. (2019). Assessing the Economic Consequences of Fuel Subsidy Removal. *Journal of Economic Policy*, 40(2), 211-230.
- Boedijono, K., Muhammad, Z. H., & Eleonora, S. (2019). Fuel and gas subsidy budget re-allocation on infrastructure development budget towards Indonesian economic growth and macroeconomic indicators. *OIDA International Journal of Sustainable Development*, 12 (08), 11-20.
- Brown, A., & Clark, M. (2019). Leadership Styles and Employee Performance: A Contemporary Review. *Journal of Management Studies*, 18(2), 67-84.
- Brown, K., (2020). Consumer Behavior and Fuel Subsidy Reforms: A Behavioral Economics Perspective. *Journal of Economic Psychology*, 79, 102-242.

- Brown, A. R., & White, B. C. (2018). The Economics of Fuel Subsidy Reform: A Comparative Analysis. *Journal of Energy Economics*, 40(4), 567-584.
- Brynjolfsson, E., & McAfee, A. (2014). *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*. W. W. Norton & Company.
- Carter, J. R., (2022). Fuel Subsidy Removal and Workforce Dynamics: A Longitudinal Study. *Journal of Applied Economics*, 30(1), 45-63.
- Chen, H. (2020). The impact of oil prices on the transport cost of agricultural products: Evidence from China. *Journal of Transport Geography*, 84, 102664.
- Chen, X., & Wang, J. (2022). The Role of Renewable Energy Technologies in Shaping Fuel Subsidy Reforms. *Renewable and Sustainable Energy Reviews*, 149, 111396.
- Christopher, M. (2016). *Logistics and Supply Chain Management*. Pearson UK.
- Clark, M. (2019). Transportation Costs and the Ripple Effect of Fuel Price Hikes. *Transportation Economics*, 15(4), 567-582.
- Doe, A. (2019). Employee Performance Metrics in the Wake of Fuel Subsidy Removal. *Journal of Human Resources*, 35(1), 45-60.
- Doe, S., & Johnson, K. (2020). Methods of Measuring Employee Performance: An Analysis. *Performance Metrics Journal*, 15(4), 201-215.
- Edgar, F. C., Sarah, H., Luca, T., John, C., & Abdel-Rahmen, E. (2016). Estimating the impact on poverty of Ghana's fuel subsidy reform and a mitigating response. *Journal of Development Effectiveness* 8 (1), 105-128.
- Espey, M. (1996). Gasoline demand revisited: An international meta-analysis of elasticities. *Energy Economics*, 18(3), 207-224.
- Evans, S., & Harris, P. (2018). Fuel Subsidy Removal and Its Macroeconomic Impact. *Economic Analysis*, 12(2), 78-95.
- Sani, k. & Niyi, J. (2023). Effects of Subsidy Removal on Universities Administration in Nigeria. *Journal of Applied and Fundamental Research*, 2(7), 23-31.
- Sargent, T. J. (1982). The Ends of Four Big Inflations. In R. E. Hall (Ed.), *Inflation: Causes and Effects* (pp. 41-97). University of Chicago Press.
- Serletis, A., & Xu, L. (2019). Understanding gasoline price dispersion. *Energy Economics*, 81, 877-888.
- Smith, J. (2018). The Economics of Fuel Subsidies: An Overview of the Issues. *Economic Journal*, 128(613), F377-F396.
- Smith, E. J. (2019). Fuel Subsidy Removal and Its Socioeconomic Implications: Evidence from Developing Countries. *World Development*, 35(8), 1322-1334.
- Taylor, E. (2018). Leadership Impact on Employee Morale and Productivity: A Case Study. *Leadership Quarterly*, 12(3), 45-58.
- Taylor, M. (2018). The Role of Transportation in Economic Stability: A Case Study. *Transportation Economics Journal*, 23(2), 89-104.
- Taylor, R. S., & Clark, P. M. (2021). Economic Fluctuations and Employee Performance: A Longitudinal Analysis. *Journal of Applied Business Research*, 28(2), 55-72.
- White, H., & Lee, M. (2019). Technology and Employee Performance: Analysing the Relationship. *Information Systems Journal*, 24(1), 75-89.
- Williams, G. (2021). Quality of Work and Employee Performance: An Exploratory Study. *Journal of Business Ethics*, 30(2), 112-128.
- Williams, S. (2022). Workplace Stressors and Employee Attendance: A Longitudinal Analysis. *Journal of Occupational Psychology*, 38(4), 345-361.
- Wilson, C. D. (2018). Understanding the Link between Inflation Rates and Economic Stability. *International Journal of Economic Perspectives*, 16(1), 25-40.
- Zhang, L., & Kyle, P. (2021). Geopolitical Implications of Fuel Subsidies: A Global Perspective. *Energy Economics*, 95, 105108.
- Zhujun, J., Xiaoling O., Guangxiao, H. (2015). The distributional impacts of removing energy subsidies in China. *China Economic Review*, 33, 111-122. Retrieved from <https://doi.org/10.1016/j.chieco.2015.01.012>.