EFFECT OF FUEL SUBSIDY REMOVAL ON STUDENTS' ACADEMIC PERFORMANCE IN TERTIARY INSTITUTIONS IN SOKOTO STATE: A STUDY OF USMANU DANFODIYO UNIVERSITY, SOKOTO

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Abstract

The paper examined the effects of fuel subsidy removal on students' academic performance of students of Usmanu Danfodiyo University, Sokoto, with particular reference to the students of Faculty of Management Sciences of the University. The study uses descriptive survey research design. The study population consists of 1146 students of the Faculty of Management Sciences. Kriejie and Morgan (1970) table for determining sample was used to arrive at a sample size of 291 respondents, which were selected using stratified and simple random sampling techniques. A structured questionnaires based on five Likert scale rating was used to collect data. Descriptive statistic was used to analyze the data while corresponding hypotheses were tested at 0.05 level of significance. The findings indicate a significant correlation between fuel subsidy removal and decreased academic performance. The study concludes that the removal of fuel subsidies has profound and far-reaching implications for students in higher education, necessitating urgent attention from policymakers. The study recommends the establishment of targeted financial aid programmes, enhanced academic support services and increased mental health resources to ensure that students can effectively navigate the challenges posed by fuel subsidy removal.

Keywords: Subsidy, Fuel Subsidy and Academic Performance

INTRODUCTION

The removal of subsidies on fuel in Nigeria has led to increment in prices of goods and services which has impacted negatively on the activities and programmes of tertiary institutions in the country. It is so painful that fuel subsidy removal affects all programmes and activities in the school setting, which include the cost of research materials, course guides, accommodation, increased transportation costs, tuition fees, and foodstuffs. According to Maslow theory hierarchy of needs 1954 (Maslow, 1954), efficient and effective performance lies on the fulfillment of basic needs of individuals, in relating to students' academic performance, all the basic needs of students are been affected as a result of removal of fuel subsidy. The abrupt increase in fuel prices resulting from the subsidy removal has further compounded the economic hardships faced by the already struggling Nigerian masses that are struggling with high unemployment rates, extreme poverty and pervasive economic difficulties (Darlington & Monday, 2023). Tertiary institutions, school administrators, academic and nonacademic staff and students have been grossly affected. Since the removal of the subsidy, school administration, teaching and learning have not been the same again. Many students have been affected psychologically, to the extents that their academic performances were very poor. Some were forced to defer session or semester due economic crisis while many others had low grades which affect their academic performances. Since the removal of the subsidy, tuition fees of all tertiary institutions in the country have increased, school administration, teaching and learning have not been the same again. Mainasara and Fodio (2024) in a study on the effects of fuel subsidy in an era of economic crisis affirmed that the removal of fuel subsidies in Nigeria has led to an increase in the cost of running schools. This meant that schools had to cut back on resources, leading to a decrease in the quality of education in the country, this in turn has significant effects on students' academic performance. Students, on the other hand, have been affected by the increased cost of living course by removal of fuel subsidy in numerous ways. The increased cost of transportation has made it difficult for students, especially those from low-income families, to travel to schools. This has led to increased absenteeism among students, which has a direct effect on their academic performance.

Besides, the increased cost of living has made it difficult for parents to afford basic educational materials for their children, such as tuition fees, accommodation fees, foodstuffs, transportation fees, textbooks and others. This has further worsened the problem of poor academic performance among students studying at various levels of education in the country at both public and private institution (Abdullahi & Abdullahi, 2023). The increased cost of transportation has also made it difficult for teachers to commute to schools, not only those located in rural areas, but also those that are in the urban centre leading to increased absenteeism.

It is against this backdrop that the study assess the extent to which fuel subsidy removal affect students' academic performance in Usmanu Danfodiyo University, Sokoto with particular reference to the students of Faculty of Management Sciences of the University.

LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Concept of Subsidy

A subsidy is an official policy of government or a private organization to lower the prices of goods or services for its citizens or employee by paying fully or partially for the cost of production. According to Ebi (2023) a subsidy is a decrease in the market price of products or services by the government so that citizens with limited purchasing power can obtain such goods or services. It occurs when the government assists customers in paying a price that is lower than the market price for consumer products.

According to IMF et al. (2020), subsidies can take various forms, including direct government expenditures, equity infusions, tax incentives, soft loans, government provision of goods and services and procurement on favorable terms, and price supports such as price reduction. Organization for Economic Co-operation and Development (OECD, (2016) describes subsidies as a measure that keeps prices for consumers below market levels or keeps prices for producers above market levels or that reduces costs for both producers and consumers by giving direct or indirect support.

This study adapt the definition of Nwosu (2021), which opines that a subsidy is any public money or other resources out of the wealth of the entire nation which government makes available to any enterprise it owns for the purpose of enabling it to sell any of its goods or services at any price below what it would have sold it if its aim was to make any profit at all.

2.2 Concept of Fuel Subsidy

Fuel subsidy refers to a government policy where the cost of fuel production and distribution is partially or fully borne by the government to keep fuel prices lower than the actual market value. It is implemented to ease the financial burden on consumers and stabilize fuel prices, particularly for essential commodities such as gasoline and diesel (Nwankwo, 2023). Fuel subsidy according to Majekodunmi (2020) is a government programme which is created to lessen the price to be paid for oil products. These oil products include Automated Gas Oil (Diesel), Petroleum Motor Spirit (PMS) and Dual Purpose Kerosene (DPK). Ogunode and Ukozor (2023) perceived fuel subsidy as that proportion of the amount consumers are to pay for the usage of petroleum products is paid by the government in order to relieve the burden of the price. The government of Nigeria removed the fuel subsidy declaring that the prices being paid by the citizens are lower than what they are supposed to pay when compared with those of the International market. Subsidy of fuel is predominant in countries that produce oil such as Iran, Egypt, Venezuela, Angoa, South Korea, and China among others. Fuel subsidy removal policies are very responsive to the structure of an economy, a country's level of development, state of the economy and political system. Studies have revealed that countries that have succeeded in fuel subsidy removal have taken a slow approach and done a lot of research before implementation. This can be made possible by the effective communication as well as a high level of trust between the government and its citizens (Centre for Public Policy Alternatives, 2022). Comia and Stwart, 2019 argued that many Nigerians have access to affordable petroleum products through fuel subsidy. Petroleum subsidy represents universal benefit and not a benefit targeted specifically at the poor.

Similarly, Akinwale et al (2023) claimed that a large number of the citizens have seriously opposed the government's removal of fuel subsidy as it is against the Millennium Development Goals (MDGs) objective aimed at reducing the level of poverty among citizens. Fuel subsidies are typically employed in countries with high energy consumption and limited domestic energy resources. By subsidizing fuel prices, governments aim to ensure affordability and accessibility, especially for lower-income households and sectors heavily reliant on transportation and fuel (Odularu & Aluko, 2021).

Lekan and Sote (2021), also believe that there is a nexus between fuel subsidy and the economy. As he puts it, transport, powered by fuel, conveys people and goods must be factored into product costs. Therefore, if you have a regime of fuel subsidy, crops will be conveyed from the farm gate to consumers at more affordable costs. Ogunode et al (2023) viewed subsidy removal as an official elimination of subsidies on products formerly subsidized. They also captured subsidy removal as the decision of government or institutions to stop payment of subsidies on products or services previously subsidized. Subsidy removal is the stoppage of subsidy regime in an institutions or country. Subsidy removal is the policy of liberating the prices of goods and service to be regulated by forces of demand and supply. In this study, the research will adopt the definition of Centre for Public Policy Alternatives which opines that fuel subsidy refers to a government to keep fuel prices lower than the actual market value. It is implemented to ease the financial burden on consumers and stabilize fuel prices, particularly for essential commodities such as gasoline and diesel.

2.3 Concept Of Academic Performance

Academic performance is perceived differently by different scholars. Narad and Abdullah

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(2016) perceived it as the knowledge gained by students which is assessed by grade awarded by a teacher or an educational goal set by students and teachers to be achieved over a specific period of time. According to Kenni (2020) academic performance refers to the degree of accomplishment by student in his or her tasks and studies. It is the extent to which students achieve their short or long term goals. This according to them could be measured through continuous assessment, internal and external examination, in order to ascertain the knowledge or skills obtained by students after undergoing training over a specific period of time.

Academic performance is of fundamental importance as it portrays the outcome of evaluation in a school setting for reward, placement and record keeping among others. It was observed by Anselmus (2011) as a cardinal concept in education that measured the knowledge, skills and attitude acquired by students over a period of time, which might serve as prerequisite of degree of efficiency of the machinery of education. Academic performance is assessed in a formal school setting through diagnostic, formative and summative assessment (Kenni, 2020).

2.3.1 Empirical Review

Several empirical studies have been conducted on the effects of fuel subsidy removal on educational sector in Nigeria. Haruna (2024) examine the effect of fuel subsidy removal on employees' performance in Federal University Gusau. The study sample 264 respondents out of 950 using Kreijie and Morgan (1970) table. The study revealed that both changes in fuel prices and adjustments in transportation costs exert a positive and significant influence on employees' level of attendance and punctuality, which has negative effects on academic performance. The study recommends that the management of the university should design a strategy for supportive measures to alleviate the adverse effects of fuel subsidy removal on employees'

Hassan (2024) conducted a study on socio-economic impact of fuel subsidy removal on academic staff, students and university administration in Nigeria. The study relied on secondary data and established that subsidy removal in Nigeria has a socio-economic impact on academic staff, students and university administration. It thus, made the management of the university to introduce additional fees such as examination, graduation and admission acceptance among others. The students are also facing the difficulty to meet up with the increased tuition fees, rising food items and transportation costs which make them difficult to resume early after break while other students had to opt for deferment of either semester or the entire session. Based on the findings of the study, the study recommends for increase funding of the universities in the country, provision of scholarship for students and upward review of staff salaries.

Adanna and Audu (2023) assessed the impact of fuel subsidy removal on Guidance and Counseling in Nigerian educational institution. The study uses secondary data, the study observed that, fuel subsidy removal has led to increase in the cost of Guidance and Counseling programmes implementation in the country and has significantly affected job performance of Guidance and Counseling tutors, which significantly affected Guidance and Counseling students and led to increase in prices of Guidance and Counseling instructional resources. Based on this problems posed by subsidy removal, the study recommends for an increase in the budgetary allocation to educational sector. In addition, to the need to increase salaries and allowances of teachers, subsidize the cost of instructional materials and other teaching and learning materials.

2.5 Theoretical Framework

The Theoretical frameworks relevant to this study are Keynesian theory and the General Equilibrium model.

Keynesian theory developed in the 20th century explains the role of government spending in stimulating economic growth and reduce unemployment (Jahan, Mahmud & Papageorgiou, 2014). The theory elaborates on the role of aggregate demand and how government intervention addresses economic fluctuations and promotes stability. The theory suggests that in the Nigerian situations, if the government discontinues the funding of fuel subsidy, it could use the saved funds to invest in education and other sectors of the economy, which could stimulates economic growth and reduce poverty (Stigliitz, 2000).

The General Equilibrium model was developed in the late nineteenth century, to analyze the general macroeconomic fluctuations and the then great depression (Walras, 1874). The model is an economy-wide concept which analyses the impact or repercussion on the whole economy, of a change that is triggered from just a sector. Often a change that emanates from one resonates beyond the sector of its occurrence to the economy wide system. The General Equilibrium model therefore, helps to understand the overall consequences of policies taken at various individual sector of the economy. The General Equilibrium model tends to provide a theoretical framework for this study. In the Nigerian context, a fiscal implication of subsidies is accounted for through the examination of its effects on government revenue and expenditures. Central to this analysis is the concepts of opportunity cost where investments in other real sectors of the economy leading to market distortion (World Bank, 2022). This model is therefore, a pointer to adequate measure given its potency to capture the proportional effect of subsidies on a nations budgets and spending.

METHODOLOGY

The research design for this study is survey research. The purpose is to enable the researchers generalize from a sample population so that inferences can be made. The population of the study consists of all the undergraduate students of the six Departments of Faculty of Management Sciences, Usmanu Danfodiyo University, Sokoto for 2023/2024 academic session, with Accounting Department having 385 students, Business Administration 293 students, Public Administration 455, Marketing 4 students, Entrepreneurship 3 students and Taxation 6 totaling 1146 students (UDUS, Registry Department, 2024).

Based on the population of the study, a sample of 291 participants using Kriejie and Morgan (1970) table was used. A stratified sampling technique was used to ensure fair and equal representation across different department of the faculty, while simple random sampling was later used to sample the participants of the study.

The study used structured questionnaires based on five point Likert rating scale, while the corresponding hypotheses 1,2 and 4 were tested using Pearson Product Moment Correlation at 0.05 level of significance, however hypothesis three (3) was tested using t-test statistics to establish the significant difference before and after fuel subsidy removal in order to understand the extent to which the fuel subsidy removal has affected the students' academic performance in the Faculty of Management Sciences. The analysis was done with the aid of (SPSS) version 25.

RESULTS AND DISCUSSIONS

This section presents the result and the analysis of data obtained from the regression analysis. Out of 291 questionnaires distributed to the sample respondents, a total of 282 were retrieved, the analysis and result presentation was based on the 282 retrieved questionnaires. The analysis was based on the four hypotheses formulated:

Hypothesis One

Ho¹: Fuel subsidy removal has no significant effect on students' academic performance in the Faculty of Management Sciences, UDUS.

Correlations

		TD	0
TD	Pearson Correlation	1	674**
	Sig. (2-tailed)		.000
	Ν	200	200
0	Pearson Correlation	674**	1
	Sig. (2-tailed)	.000	
	Ν	200	200

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

Source: SPSS Software Output, estimated by the researcher.

The Pearson Correlation result in table 4.1 above indicates that fuel subsidy removal has significant effect on students' academic performance in the Faculty of Management Sciences, UDUS, because every variable has a negative correlation with value of -0.674. Hence, the decision rule is to reject the null hypothesis if the P-value is less than the level of significance, accept the alternative hypothesis if otherwise.

Therefore, since the P-value = 0.000 is less than the level of significance (0.01), we reject the null hypothesis and conclude that fuel subsidy removal has significant effect on students' academic performance in the Faculty of Management Sciences, UDUS.

HYPOTHESES II

Ho2: Socio-economic factor (e.g, family income, parental occupation) has no significant effect on students' academic performance due to fuel subsidy removal.

Correlations

		TD	0
TD	Pearson Correlation	1	674**
	Sig. (2-tailed)		.000
	Ν	200	200
0	Pearson Correlation	674**	1
	Sig. (2-tailed)	.000	
	Ν	200	200

**. Correlation is significant at the 0.01 level (2-tailed). Source: SPSS Software Output, estimated by the researcher.

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From the Pearson Correlation result in table 4.2 above, the result indicates that Socio-economic factor (e.g, family income, parental occupation) has significant effect on students' academic performance due to fuel subsidy removal, simply because the significant value is less than the P-value, which is 0.04 < 0.05. Therefore, since the P-value = 0.000 is less than the level of significance (0.01), we reject the null hypothesis and conclude that Socio-economic factor (e.g, family income, parental occupation) has significant effect on students' academic performance due to fuel subsidy removal.

4.3.3 HYPOTHESES III

There is no significant difference between students' academic performance before and after fuel subsidies removal.

To test the hypothesis, responses in Table 4.3 will be used, the table is shown below;

Table 4	4.3	Responses	on	whether	fuel	subsidy	removal	affects	students'	academic
performance before and after fuel subsidies removal.										

	Observed N	Expected N	Residual
Strongly disagree	0	0	0
Disagree	2	18.8	-11.8
Undecided	5	18.8	-3.8
Agree	10	18.8	-2.8
Strongly agree	268	18.8	18.2
Total	285		

Source: Author's computation from SPSS 25

Test Statistics

	fuel subsidy removal affect students' academic performance before and after fuel subsidies removal
Chi-Square	26.280 ^a
Df	5
Asymp.sig	.003

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 18.8.

Author's computation using SPSS 25

Decision rule

The study reject the null hypothesis that there is no significant difference between students' academic performance before and after fuel subsidies removal base on the P- value is 0.001, which is less than 0.05, therefore the alternate hypothesis is accepted that fuel subsidy removal affect students' academic performance before and after fuel subsidies removal.

4.4 HYPOTHESES IV

Ho⁴: fuel subsidy removal has not significantly limit students access to education, transportation

and their overall well-being

Correlations

		TD	0
TD	Pearson Correlation	1	674**
	Sig. (2-tailed)		.000
	Ν	200	200
О	Pearson Correlation	674**	1
	Sig. (2-tailed)	.000	
	Ν	200	200

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

Source: SPSS Software Output, estimated by the researcher.

From the Pearson Correlation result in table 4.4 it can be deduced that, fuel subsidy removal has significantly limit students access to education, transportation and their overall well-being, simply because the significant value is less than the P-value, which is 0.003< 0.05. Therefore, it means that we reject the null hypothesis that fuel subsidy removal has no significant effect on students' access to education, transportation and their overall well-being.

4.2 Discussion of findings

This section discussed findings derived from the study:

First finding indicated that fuel subsidy removal has significant effect on students' academic performance as majority of the respondents strongly agree that with fuel subsidy removal majority of the students has to either defer a semester or the whole session. This finding agreed with Haruna (2024) who found out that both changes in fuel prices and adjustments in transportation costs exert a positive and significant influence on employees' level of attendance and punctuality, which has negative effects on academic performance.

Second finding indicated that Socio-economic factor (e.g, family income, parental occupation) has significant effect on students' academic performance due to fuel subsidy removal, This finding corroborated with Hassan (2024) who found that subsidy removal in Nigeria has a socio-economic impact on academic staff, students and university administration. It has force the management of the university to introduce additional fees such as examination, graduation and admission acceptance among others. The students are also facing the difficulty to meet up with the increased tuition fees, rising food items and transportation costs which make them difficult to resume early after break.

Third finding reveled that from the past examination records and results before subsidy removal and after subsidy removal shows that removal of subsidy has affected students' academic performance in terms of the grade scored by students before and after the removal of fuel subsidy, as evident from the result obtained from the various examinations officers of the department.

Fourth finding indicates that not only has fuel subsidy removal increased cost of living and made it difficult for parents to afford essential educational materials for their children, such as tuition fees, accommodation fees, foodstuffs, transportation fees, textbooks and others. It has further exacerbated the problem of poor academic performance among students, The increased

cost of transportation has also made it difficult for lecturer to commute to schools in time, leading to increased absenteeism. This finding corroborated with Lekan and Sote (2021), also argued that there is a nexus between fuel subsidy and the economy. As the puts it, transport, powered by fuel, conveys people and goods must be factored into product costs. Therefore, if you have a regime of fuel subsidy, crops will be conveyed from the farm gate to consumers at more affordable costs. On the other hand, if subsidy is remove it will affect the prices of all essential services in the country.

CONCLUSION AND RECOMMENDATIONS

From the findings of the study it was concluded that there is a direct correlation between economic policies and their influence on education. This is evident as fuel subsidy removal has affected students' academic performance. With the rise in transportation and living costs as a result of subsidy removal, students faced increased financial burdens that take away their mind from academic focus. From the forgoing findings and conclusions, the following recommendations were made:

- i. Effort should be made by both State and Federal government to increase funding on education and as well establish scholarships and financial aid to assist students who require financial assistance, especially those adversely affected by increased transportation and living cost dues to the fuel subsidy removal.
- ii. University management should negotiate with student union and other stakeholders (parents, Alumnus, Labour Unions) before increasing school fees that will bring harmony in the system.
- iii. Student engagement in policy discussion with university administration and policy makers about the impacts of economic policies on education, advocating for counseling services to strengthen mental health support on campus to assist in dealing with stress and anxiety related to financial difficulties and ensure that the can maintain their academic performance.
- iv. Government should subsidy essentials educational instructional materials for students, such as textbooks, computers, transportation fees among others, in order to cushion the effects of fuel subsidy removal in the country.

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