Universal Journal of Accounting and Finance 10(3): 688-696, 2022 http://www.hrpub.org
DOI: 10.13189/ujaf.2022.100306

Effect of Taxation on Financial Performance of the African Aviation Industry

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Received November 3, 2020; Revised March 12, 2021; Accepted April 18, 2021

Cite This Paper in the following Citation Styles

(a): *[1] Samuel Adeniran Fakile, Tony Ikechukwu Nwanji, Ben-Caleb Egbide, Stephen Ojeka, Damilola Felix Eluyela , "Effect of Taxation on Financial Performance of the African Aviation Industry," Universal Journal of Accounting and Finance, Vol. 10, No. 3, pp. 688-696, 2022. DOI: 10.13189/ujaf.2022.100306.*

(b): *Samuel Adeniran Fakile, Tony Ikechukwu Nwanji, Ben-Caleb Egbide, Stephen Ojeka, Damilola Felix Eluyela (2022). Effect of Taxation on Financial Performance of the African Aviation Industry. Universal Journal of Accounting and Finance, 10(3), 688-696. DOI: 10.13189/ujaf.2022.100306.*

Abstract The African Airline Association recently reported that high airport charges and taxes are responsible for suppressing the evolution, development and growth of the African aviation industry. Therefore, the purpose of the study is to determine whether taxation metrics – tax planning, tax burden and after-tax earnings impact the financial performance of the African aviation industry, using the regression of various financial performance measures – profitability, liquidity, and going concerned. The panel data methodological approach was applied in this study. Descriptive statistics, correlation techniques, Hausman test, regression analysis and Granger Causality test result were presented. The study shows a positive relationship between tax planning and profitability, a positive relationship between tax burden and liquidity, and a positive relationship between tax charge and tax profits. This study concludes that taxation affects firms' financial performance in the African aviation industry.

Keywords African Aviation Industry, Financial Performance, Tax Burden, Tax Planning

1. Introduction

A wide range of service industries is increasingly utilizing taxation management to maximise the effective use of the industries' available capacity and ensure the firms' financial success in such an industry [27]. Taxation of any company profits is an element of fiscal policy that impacts both the nation's macroeconomic and microeconomic components. Taxation management refers to the strategy adopted in managing business and any other transactions or activities in such a way to make maximum use of tax concessions, rebates, exemptions, holidays, tax credits, deductible allowances available under the law to minimize one's tax liability.

The African Airline Association recently reported that high airport charges and taxes are responsible for suppressing the evolution, development and growth of the African aviation industry [20]. A recent fact sheet by the International Air Transport Association (IATA) reveals that a reduction in charges at the South African airport, which is very much long overdue, will save both passengers and airlines a total of US$ 233 million between the years 2017 to 2018 [14]. Therefore, tax management is key in evaluating the long and short-term level of any firm's financial performance. For the sake of specificity, the African airline industry has been focused on as many of the firms in this industry have folded up or winded up due to the increasing cost of offering their services and their absurd operational costs. This study's substantial importance is to examine taxation management's relevance in improving both the short and long-run profitability and financial performance of firms in the African aviation

industry to refine and improve the industry for better operations consequentially.

The developing aviation sector in Africa, when compared to other developed aviation sectors of other countries of the world, should not be subjected to high tax charges. This could be developed by adopting proper tax management techniques, strategies and systems, which are sure to affect both the short and long term financial performance of firms in the industry. Though this study was initially centred specifically on the Nigerian aviation industry, due to the inability to access the financial statements of the airlines operating in Nigeria, as a majority of them are privately owned, the scope of the study was therefore broadened from the Nigerian aviation industry to the African aviation industry.

Prior literature in the area of taxation, specifically in the aviation industry, has been quite scarce as most of the literature in the area of the effect of taxation has mostly been economic wide or general instead of being industry-specific. This study aims to build up a literature review that could measure how African aviation taxation affects airlines in the African airline industry. Taxation can be said to necessarily be a contentious topic. Though taxes are an ongoing issue for several spheres of the economy, they are significant to fund the activities of government, providing public goods and as a tool for causing social transfers to protect the less prosperous in society. Therefore, the various forms of imposed taxes must serve the public's interest instead of being capricious or arbitrary. Considering the composition of the current prevailing regime of taxation, it is practicable to place the taxation system of aviation into the general taxation framework. A major problem encountered in times before is examining aviation taxes being assessed as a whole entity [4].

Taxation generally refers to payment or remittal from a legal entity or natural person levied by the government. There is no direct return of good or service. Taxes are money paid by people, which is directly not related to the benefit obtained from the particular good or service provision. [4] contributed to the existing literature on the airline industry's taxation by specifically stating that though air transportation is no longer a luxury service, its taxes make it seem like one. More than 40% of the total trips made by air travel today are taken to visit relatives and friends, of which 25% of such trips occur on low-cost carriers [4]. Therefore, it can be said that airlines' current taxation can be seen as administratively comfortably for airlines but politically expedient. Button argues that the effects of such a condition of taxes in the aviation industry are not evident in the short term but are taken in by airlines, resulting in poor financial results [19].

Therefore, this study aims to establish the relationship between the effective management of an airline’s tax liability and the growth and development of the African aviation industry in terms of financial performance over both the short term and the industry's long term going concern.

2. Literature Review

Tax Planning

This reality constrains the welfare of people who wish to make trips and the financial imperativeness of ventures that utilization air travel or air freight as a critical contribution to creation. On the other hand, an indirect tax is a form of tax levied on goods and services rather than on income or profits [10]. At times this classification may prove to be misleading as the incidence of some direct taxes, for instance, Company tax, could easily be shifted. Assets can be "gained" through duty arranging by lessening current revealed assessable pay or expanding charge credits, accordingly diminishing the money charges paid. The cost of these assets is an element of measure of money charges spared, the planning of inevitable reimbursement (if by any stretch of the imagination), and any premium and installments in the long run paid to the expense specialist because of the arranging exercises. First, dissimilar to numerous other cost-cutting strategies (e.g., lessening innovative work, promoting capital consumption, staffing, and so forth.), diminishing money charges is more averse to affect firm activities antagonistically.

These investigations propose firms likely have not depleted chances to create money by means of deferral arranging techniques. Third, episodic confirmation proposes obliged firms will probably utilize charge arranging as a wellspring of money. In particular, specialists demonstrate that, amid extreme monetary circumstances, "money is the best, and a considerable measure of organizations are open to concentrating on circumstances in the duty territory that they might not have been anxious to center around before". Based on this debate, hypothesis one state that:

H_0: There is no significant relationship between tax planning and the profitability of firms in selected African aviation firms

Tax Burden

The utilization of assessment rate structures or a duty proportion is characteristically risky, as neither records or thinks about the communication between various assessments and advantages in the general taxation rate. To address this issue ponders have swung to contrasting, compelling expense rates [15]. The viable duty rate is communicated as a level of the characterized net pay, in this manner essentially taking cognizance of the statutory or ostensible expense rate and of other angles that impact imposes risk. These different perspectives allude, for example, to permissible expense conclusions and advantage installments got from the administration [15].

Viable expense rates can be estimated either by utilizing a forward-looking or a retrogressive looking methodology. A forward-looking methodology is ordinarily followed in speculative investigations utilizing reproductions, while a regressive looking methodology is taken after when genuine information is seen in an examination. The present investigation's hidden reason was to assess the taxation rate as seen by people as citizens. Hypothesis two state that:

H_0: There is no significant relationship between tax burden and liquidity of firms in selected African aviation firms**.**

Tax Policy Reforms and Aviation Development in Africa

Tax collection in the aviation industry is cost-effective and convenient for governments in raising funds. The majority of air transport service providers operating in a monopoly, the lack of transparency and proper regulatory oversight coupled with consultation have led to high taxes and fees (TFCs). This has damaged the airlines' commercial viability, restriction to growth, market distortion, and diversion of finance [11]. At 15 African airports, the Taxes, fares and charges (passenger specific) are studied and compared with that of 5 other airports around the world for comparison purpose and analyzing the departure tax in both areas for international flights within the region (excluding safety, security, service and other charges), on an average the African airports are examined to be 30% higher when compared to the examination of the non-African airports. The aggregate taxes, fees (TFCs) are 8% higher on average at African airports than the non-African airport counterparts. Therefore, hypothesis three state that:

H_0: There is no significant relationship between Tax charge and profit after tax of firms in selected African aviation firms.

Theoretical Framework

The Laffer curve is a theoretical construct of supply-side economics that is often used to aggregate to the pro-growth world view of supply-side economics [24]. The curve demonstrates two effects of changes in taxes' rates: the arithmetic effect and the economic effect [18]. The arithmetic effect occurs when there is a reduction in the tax revenue (per unit of currency) due to lower tax rates and vice versa. On the other hand, the economic effect acknowledges the irrefutable contribution lower tax rates make to output, work and employment, and, consequently, the tax base through incentives to jolt their activities. In the same vein, a raise in the tax rate results in an opposite economic effect: the discouragement of participation in such activities that were initially taxed. Several attempts have been made aimed at quantifying the relationship between the rate of tax and tax revenue. Though there has been a general acceptance of the interaction between tax revenue and tax rates, this interaction's specific nature is still debated [24]. There is likely to be a varying relationship between tax rate and tax revenue from one economy to another depending on the elasticity of labour supply and other factors.

3. Methodology

This study adopted the causal research design. This research design is used to measure the causal effect of a change in an independent variable (taxation metrics), resulting in the variation of the dependent variable (financial performance). This study's population comprises Airlines in Africa, consisting of the major and still functioning airline operators in the African continent. The technique used is the panel data analysis technique administered through the empirical analysis of some selected airline companies' financial reports and accounts across the African aviation industry. The principle behind using the panel data analysis technique is to measure the effective tax charges in the aviation industry, and it also allows for factual information gathering [24].

The study applies correlation to inquire into the relationship between taxation metrics (Tax planning, Tax burden and after-tax earnings) and airline firms' financial performance in the African continent. The study then uses the ordinary least square method, fixed effects and random effects regression analysis to estimate the extent to which the dependent and independent variables vary [30]. The study area is the various airline companies in Africa who offer air transportation service that is directly engaged in people and goods' movement from one destination to another. The population of this study is made up of thirty airlines in Africa [31]. However, this study selected ten as sample size. The justification of the selected sample is based on top 10 airlines in Africa [31]. The sample selection is also motivated by data availability for 2010 to 2019 financial year end. The study makes use of secondary data as this is due to the verifiable reliability and integrity of the data source.

Description and Measurement of Variables

Financial performance is the degree to which an entity's financial objectives are being accomplished [8, 22]. Various measures such as cash flow analysis, CVP analysis, trend analysis, ratio analysis, value-added analysis, common-size financial analysis and financial analysis. For this study, financial analysis and ratio analysis will be used [9].

Model Specification

The relationship between taxation and financial performance is mathematically represented by a linear

regression model based on panel data methodology [2,23]. To explain the relationship, a linear regression model equation was used [3,8]. The two constructs include the regression equation, which can be computed as:

The general form of panel data analysis model is specified as:

$$Y_{it} = \beta_0 + \beta_1 X_{it} + \mu_{it} \quad (1)$$

Where $\mu_{it} = \mu_i + \mu_{it}$

μ_i is the unobserved heterogeneity of individual i (airline) or indicated fixed effect.

Where:

Y_{it} = dependent variable (financial performance)

B_0 = the constant affecting net profit margin on corporate tax

X_{it} = coefficient of the explanatory variable (taxation variables)

μ_{it} = error term (assumed to have zero mean and independent across time period)

The mathematical model is adapted from the study of [17].

$$\text{Perf} = f(\text{taxation variables, control variables}) \quad (2)$$

The regression model for this empirical analysis is thus:

$$\text{FINANCIAL } P_{it} = \beta_0 + \beta_1 \text{TPLANNING}it + \beta_2 \text{TBURDEN}it + \beta_3 \text{SIZE}it + \mu_{it} \quad (3)$$

Where:

FINANCIAL P_{it}: Financial performance is estimated using Profit after tax and liquidity (cash balance).

Independent Variables

$TPLANNING_{it}$: Tax planning (evidenced in the tax savings of the entity, which is the statutory tax rate less the effective tax rate)

$TBURDEN_{it}$: Tax burden (the total amount of tax paid by the airline company as reflected in the financial statement of the airline, which can also be seen as the effective tax rate of the entity)

Control Variables

$SIZE_{it}$: Firm size- measured as the natural log of the entity's total assets (Eluyela et al., 2019b)

Where i and t represent the three airline companies in the sample and the five years

Respectively and μ_{it}, an error term.

4. Result and Discussion

In this section, the result of the estimation techniques used in this study was presented. First, the result of the descriptive statistics was shown in Table 1 to Table 3. After that, the correlation matrix was presented to show the relationship among variables. The Hausman test was used to determine the model that best fit the study. This test was used on each measure of financial performance. Based on the decision from the Hausman test, the regression analysis was presented. Finally, the Granger Causality test was included for the robustness and test of hypotheses.

Table 1. Descriptive Statistics of NDT & FS on PAT

	PAT	NDT	FS
Mean	-2.221	-1.333	2.000
Median	1.999	0.000	1.880
Maximum	1.600	5.469	4.070
Minimum	-3.010	-1.000	9.700
Std. Dev.	1.280	5.193	8.760
Skewness	-0.645	-0.645	1.102
Kurtosis	2.646	2.202	3.485
Jarque-Bera	1.118	1.438	3.187
Probability	0.571	0.487	0.203
Sum	-3.330	-2.000	3.000
Sum Sq. Dev.	2.290	3.780	1.070
Observations	15	15	15

Source: Authors Compilation (2020)

The descriptive statistics of the variables used in the analysis presented in Table 1 explain the range, minimum, maximum, mid values, spread and normality of the variables [25,26]. The African Aviation industry's mean value measured in terms of profit after tax is a negative $22,210,000. It had a median value of negative $19,990,000, a maximum value of $ 160,000,000 and a minimum value of negative $301,000,000, revealing a large variation, thereby showing some degree of variability in the airline firms' performance. The Net deferred tax (NDT) shows an average of $13,333,000 with maximum and minimum values of $54,690,000 and negative $100,000,000 respectively, while the standard deviation is $51,938,500. The Firm size (FS) exhibits a mean value of $200,000,000. It has a standard deviation of $876,000,000 with minimum and maximum values of $970,000,000 and $407,000,000 respectively. However, the industry's financial performance was skewed to the left with a value of -0.645185 and is normally distributed at 1.118825.

The descriptive statistics of the variables used in the analysis presented in Table 2 explain the range, minimum, maximum, mid values, spread and normality of the variables. The mean value of the African Aviation industry's performance measured in terms of liquidity (cash balance) is $166,000,000. It had a median value of negative $169,000,000, a maximum value of $3,320,000,000 and a minimum value of negative $31,979,820, revealing a large variation, thereby showing some variability in the performance of the airline firms. The Tax charge (TAX) shows an average of $1,805,347with maximum and minimum values of

$67,091,964 and negative $42,953,607 respectively while the standard deviation is $24,813,566. The Firm size (FS) exhibits a mean value of $200,000,000. It has a standard deviation of $876,000,000, with minimum and maximum values of $970,000,000 and $407,000,000 respectively. However, the industry's financial performance in terms of liquidity was skewed to the right with a value of 0.448303 and normally distributed at 0.508259.

Table 2. Descriptive Statistics of TAX & FS on LIQ

	LIQ	TAX	FS
Mean	1.660	1.805	2.000
Median	1.690	1.844	1.880
Maximum	3.320	6.709	4.070
Minimum	3.197	-4.295	9.700
Std. Dev.	7.716	2.481	8.760
Skewness	0.448	0.673	1.102
Kurtosis	3.096	4.936	3.485
Jarque-Bera	0.508	3.478	3.187
Probability	0.775	0.175	0.203
Sum	2.480	2.708	3.000
Sum Sq. Dev.	8.340	8.620	1.070
Observations	15	15	15

Source: Authors Compilation (2020)

Table 3. Descriptive Statistics of TAX & FS on PAT

	PAT	TAX	FS
Mean	-2.221	1.805	2.000
Median	1.999	1.844	1.880
Maximum	1.600	6.709	4.070
Minimum	-3.010	-4.295	9.700
Std. Dev.	1.280	2.481	8.760
Skewness	-0.645	0.673	1.102
Kurtosis	2.646	4.936	3.485
Jarque-Bera	1.118	3.478	3.187
Probability	0.571	0.175	0.203
Sum	-3.330	2.708	3.000
Sum Sq. Dev.	2.290	8.620	1.070
Observations	15	15	15

Source: Authors Compilation (2020)

The descriptive statistics of the variables used in the analysis presented in Table 3 explain the range, minimum, maximum, mid values, spread and normality of the variables. The African Aviation industry's mean value measured in terms of profit after tax is a negative $22,216,576. It had a median value of negative $19,994,151, a maximum value of $ 160,000,000 and a minimum value of negative $301,000,000, revealing a large variation, thereby showing some degree of variability in the performance of the airline firms. The Tax charge (TAX) shows an average of $1,805,347with maximum and minimum values of $67,091,964 and negative $42,953,607 respectively while the standard deviation is $24,813,566. The Firm size (FS) exhibits a mean value of $200,000,000. It has a standard deviation of $876,000,000, with minimum and maximum values of $970,000,000 and $407,000,000 respectively. However, the industry's financial performance was skewed to the left with a value of -0.645185 and is normally distributed at 1.118825.

Table 4. Correlation Analysis for NDT & FS on PAT

Probability	PAT	NDT	FS
PAT	1.000	-0.159	0.499
NDT	-0.159	1.000	0.345
FS	0.499	0.345	1.000

Source: Authors Compilation (2020)

Table 4 shows that the coefficient of correlation of all variables. The correlation tests for the model in table 4.4 reveals that explanatory Net Deferred (NDT) and Firm size (FS) had a negative and positive relationship, respectively, with Profit after tax (PAT) with a value of -0.159 and 0.499. The result revealed relatively high probability values with no indication of any problem of collinearity. The strongest relationship existed between Firm size and Profit after tax, with a correlation value of 0.499. Tax charge exhibited the weakest relationship with Profit after tax with a value of -0.159.

Table 5. Correlation Analysis for TAX & FS on LIQ

Probability	LIQ	TAX	FS
LIQ	1.000	0.238	0.537
TAX	0.238	1.000	0.009
FS	0.537	0.009	1.000

Source: Authors Compilation (2020)

Table 5 shows that the coefficient of correlation of all variables. The correlation tests for the model in table 4.4 reveals that explanatory Tax burden (TAX) and Firm size (FS) both had a positive relationship with Liquidity (LIQ), with a value of 0.238 And 0.537. The result revealed relatively high probability values with no indication of any problem of collinearity. The strongest relationship existed between Firm size and liquidity, with a correlation value of 0.537. Tax charge exhibited the weakest relationship with Profit after tax with a value of 0.238.

Table 6. Correlation Analysis for TAX & FS on PAT

Probability	PAT	TAX	FS
PAT	1.000	0.292	0.499
TAX	0.292	1.000	0.009
FS	0.499	0.009	1.000

Source: Authors Compilation (2020)

Table 6 shows that the coefficient of correlation of all variables. The correlation tests for the model in table 4.4 reveals that explanatory Tax burden (TAX) and Firm size (FS) both had a positive relationship with Profit after tax (PAT) with a value of 0.292 and 0.499. The result revealed relatively high probability values with no indication of any problem of collinearity. The strongest relationship existed between Firm size and Profit after tax, with a correlation value of 0.499. Tax charge exhibited the weakest relationship with Profit after tax with a value of - 0.292.

Hausman Test

To determine the most suitable regression for the analysis of this study, the hausman test was conducted. The hausman test helps decide whether the Fixed Effects or random effects are suitable for our regression analysis.

Table 7 shows that the probability value (0.000) of the correlated random effect-Hausman test is greater than 5% (0.05). We, therefore, use the fixed-effect model as the basis for discussing the findings.

Table 7. Test Period Random Effects for NDT and FS on PAT

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	24.307096	2	0.0000

Source: Authors Compilation (2020)

From table 8, using the fixed effect panel estimation, we observe that the R^2 showing that about 82% of systematic variations in the dependent variable are explained by the independent variables leaving 18% unaccounted for. The table shows that Net Deferred Tax (NDT) showed a positive and insignificant relationship with the African Aviation industry's financial performance in terms of profit after tax with a value of 1.349999. In terms of overall significance, the combined independent variables showed a significant relationship with the dependent variable with a probability (F-statistic) of 0.030798.

Table 9 shows that the probability value (0.2044) of the correlated random effect-Hausman test is greater than 5% (0.05). We, therefore, accept the random effect model as the basis for discussing the findings.

Table 8. Fixed Effect Model for NDT & FS on PAT

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FS	0.042405	0.031411	1.349999	0.2068
NDT	-3.531055	0.807857	-4.370889	0.0014
C	-1.540008	68899038	-2.235159	0.0494
R-squared	0.817771	Mean dependent var		-2.2216576
Adjusted R-squared	0.744879	S.D. dependent var		1.280008
S.E. of regression	64534251	Akaike info criterion		39.06449
Sum squared resid	4.160016	Schwarz criterion		39.30051
Log-likelihood	-287.9837	Hannan-Quinn criter.		39.06198
F-statistic	11.21900	Durbin-Watson stat		2.265962
Prob(F-statistic)	0.001023			

Source: Authors Compilation (2020)

Table 9. Test Period Random Effects for TAX & FS on LIQ

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	3.175543	2	0.2044

Source: Authors Compilation (2020)

Table 10. Random Effect Model (Rem) for TAX & FS on LIQ

Variable	Coefficient	Std. Error	t-Statistic	Prob.
TAX	0.724993	0.694493	1.043918	0.3171
FS	0.047131	0.019675	2.395450	0.0338
C	70103709	42699212	1.641803	0.1266
R-squared	0.342976	Mean dependent var	1.66E+08	
Adjusted R-squared	0.233472	S.D. dependent var	77166616	
S.E. of regression	67560611	Akaike info criterion	39.06449	
Sum squared resid	4.160016	Schwarz criterion	39.30051	
Log-likelihood	-287.9837	Hannan-Quinn criter.	39.06198	
F-statistic	3.132082	Durbin-Watson stat	1.715065	
Prob(F-statistic)	0.080443			

Source: Authors Compilation (2020)

From table 10, we observe that the R^2 showing that about 34% of systematic variations in the dependent variable are explained by the independent variables leaving 66% unaccounted for. The table shows that Tax charge (TAX) showed a positive and insignificant relationship with the African Aviation industry's financial performance with a value of 1.043918. Firm size (FS) also had a positive and significant relationship with the industry's financial performance, with a value of 2.395450. In terms of overall significance, the combined independent variables showed an insignificant relationship with the dependent variable with a probability (F-statistic) of 0.080443.

Table 11 shows that the probability value (0.2044) of the correlated random effect-Hausman test is greater than 5% (0.05). We, therefore, accept the random effect model as the basis for discussing the findings.

From table 12, using the random effect panel estimation, we observe that the R^2 showing that about 33% of systematic variations in the dependent variable are explained by the independent variables leaving 67% unaccounted for. The table shows that Tax charge (TAX) showed a positive and insignificant relationship with the African Aviation industry's financial performance in terms of profit after tax with a value of 1.406354. In terms of overall significance, the combined independent variables showed a significant relationship with the dependent variable with a probability (F-statistic) of 0.088333.

Table 13 presents the granger causality test. The acceptance of the null hypothesis can also be supported by the granger causality test, a statistical concept used to investigate the relationship of causality between two variables. From the granger-causality test results, there is no relationship between taxation and the firm's African aviation industry's financial performance. The study sets its decision rule for the acceptance of the hypothesis at a 5% level of significance and a t-value at 1.96; hence, the null hypothesis would be rejected if the probability value (P-value) is less than 0.05 and t-value less than 1.96, then accept alternative and reject the null hypothesis. There is no significant relationship between tax planning and the profitability of firms in selected African aviation firms. From the panel regression result, it was observed that net deferred assets with an absolute calculated t-value of 1.349999 and a p-value of 0.2068 are less than the critical t-value of 1.96, a less than 5% level of significance. Therefore, we accept the null hypothesis, which states that tax planning is not relevant in measuring firms' profitability in the African aviation industry and rejects the alternative hypothesis.

Table 11. Test Period Random Effects for TAX & FS on PAT

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	5.937790	2	0.0514

Source: Authors Compilation (2020)

Table 12. Random Effect Model for TAX AND FS on PAT

Variable	Coefficient	Std. Error	t-Statistic	Prob.
TAX	1.481860	1.053689	1.406354	0.1850
FS	0.072500	0.029851	2.428701	0.0318
C	-1.70E+08	64783498	-2.620300	0.0224
R-squared	0.332649	Mean dependent var		-22216576
Adjusted R-squared	0.221424	S.D. dependent var		1.28E+08
S.E. of regression	1.13E+08	Durbin-Watson stat		1.235150
F-statistic	2.990777			
Prob(F-statistic)	0.088333			

Source: Authors Compilation (2020)

Table 13. Granger Causality Test

FS does not Granger Cause LIQ	9	1.05254	0.4293
LIQ does not Granger Cause FS		2.35138	0.2113
NDT does not Granger Cause LIQ	9	0.93650	0.4639
LIQ does not Granger Cause NDT		1.70402	0.2916
TAX does not Granger Cause LIQ	9	1.11715	0.4117
LIQ does not Granger Cause TAX		2.42802	0.2040
FS does not Granger Cause PAT	9	1.14632	0.4041
PAT does not Granger Cause FS		18.0302	0.0100
NDT does not Granger Cause PAT	9	2.26179	0.2202
PAT does not Granger Cause NDT		0.87859	0.4827
TAX does not Granger Cause PAT	9	1.86288	0.2681
PAT does not Granger Cause TAX		0.17888	0.8425

Source: Authors Compilation (2020)

The second hypothesis states that there is no significant relationship between tax burden and liquidity of firms in selected African aviation firms. The panel regression result observed that the tax burden with an absolute calculated t-value of 1.043918 with a p-value of 0.3171 is lower than the critical t-value of 1.96 at a greater than 5% level significance. Therefore, we accept the null hypothesis, which states that there is no significant relationship between firms' liquidity in the African aviation industry and rejects the alternative hypothesis.

The third hypothesis states that there is no significant relationship between Tax charge and profit after tax of firms in selected African aviation firms. The panel regression result observed that the employee size with an absolute calculated t-value of 1.406354 and a p-value of 0.1850 is lower than the critical t-value of 1.96 at a higher than 5% level of significance. Therefore, we accept the null hypothesis, which states that there is no significant relationship between Tax charge and profit after tax of firms in the African aviation industry and rejects the alternative hypothesis.

5. Conclusions and Recommendation

This study explored the relationship between taxation and firms' financial performance in the African aviation industry. The research was also carried out to find the relationship between firms' financial performance in the African aviation industry and taxation. The existing literature on the airline industry's taxation specifically states that though air transportation is no longer a luxury service, taxes make it seem like one. More than 40% of the total trips made by air travel today are taken to visit relatives and friends, of which 25% of such trips occur on low-cost carriers. Therefore, it can be said that airlines' current taxation can be seen as administratively comfortably for airlines but politically expedient. The effects of such a condition of taxes in the aviation industry are not evident in the short term but are taken in by airlines, resulting in poor financial results. The study also suggests that the organisation's firm size does affect the firm's profitability. Thus, an increase in the firm's size will increase the firm's financial performance. The study also concludes that an increase in a firm's financial performance regarding the profit after tax figures or liquidity figures of an airline does not lead to an increase in the sustainability reporting of publicly listed companies in Africa. Although taxation may not decrease financial performance, effective taxation management practices should be adopted in developing countries such as Nigeria and other countries in Africa as not all airline firms in the African aviation industry can be compared in terms of profits as some firms operate in non-profitable economies where the purchasing power of consumers are low. Governments of African countries should engage in the reformation of tax policies towards aviation in their various countries as there is a potential for growth in the African aviation industry. Also, the trade liberalization policy's adoption should be adopted as these would further reduce taxes, and firm size does not increase profitability. Firms should continue to seek innovative ways and follow emerging trends, develop new products that address the economy's needs, and develop marketing campaigns to compete for the market share in the aviation industry aggressively.

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