



## **COVID-19 PANDEMIC AND ITS EFFECT ON TAX AVOIDANCE AMONG LISTED CONSUMER GOODS FIRMS IN NIGERIA**

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### **ABSTRACT**

This study is aimed at ascertaining the effects of COVID-19 pandemic on corporate tax avoidance. The study used secondary data sourced from the published financial statements of listed consumer goods firms in Nigeria for the period 2019 (before COVID-19 pandemic) and 2020 (during COVID-19 pandemic). The data sourced was Effective Tax Rate on a sample of 18 listed consumer goods firms in Nigeria. The study adopts experimental research design using the Pre-Post (difference in time) design as well as paired sample correlation statistic. In view of the research design, paired sample t-test otherwise known as Pre-Post Test is used as the data analysis technique. Pre COVID-19 tax avoidance data used is the Effective Tax Rate (ETR) recorded for the year 2019 among the 18 sampled firms in the study resulting in 18 observations while the same number of observations were used for the year 2020. From the data analyzed and interpreted, the study found that there was no significant difference between tax avoidance behaviour before COVID-19 and during COVID-19 pandemic. This evidence from the insignificant mean difference between ETR recorded in the two periods. Based on this conclusion, the



study recommends that consumer goods firms should evaluate its tax planning activities in order to boost income recorded when there is any pandemic in the country. The policy implication of this study is that government should design tax policies during a pandemic that will enhance revenue generation and ensure balance of equity among tax payers.

**Keywords:** Covid-19 Pandemic, Effective Tax Rate, Tax Avoidance, Consumer Goods Firms

## 1. INTRODUCTION

On January 30, 2020, the World Health Organization (WHO) designated Corona Virus (COVID-19) a public health emergency. Almost the whole country of Nigeria is in some form of lockdown as from February, 2020. To combat the spread of COVID-19, the federal and state governments, as well as other federating entities, have implemented a variety of steps, including limiting flying operations at airports, restricting interstate travel via buses and trains, and temporarily closing businesses and schools. As a country labelled as one of the high-risk African countries as a result of the weak nature of its healthcare facilities and personnel, Nigeria constituted Coronavirus Preparedness Group in January 31, 2020 (Aifuwa, Musa & Aifuwa, 2020). As a result, the country has seen a spike in the number of cases, which have spread throughout numerous states. While the bulk of the original cases were imported, the majority of the new cases have no history of travel or interaction with such people. This strongly suggests that communal transmission is still going on. Invariably, the COVID-19 has wreaked havoc on economies around the world, and the epidemic is projected to have an influence on Nigeria's tax income output.

According to the Organization of Economic Cooperation and Development OECD (2021), the COVID-19 pandemic has caused a significant deterioration in public finances, adding to long-term structural challenges such as population aging,



climate change, rising inequality, digitalization, and automation. The report focuses on how tax policy can be comprehensively designed so that fiscal systems can deliver a balance of equity, growth, and sustainability, highlighting some of the key considerations that policymakers should take into account to ensure optimal tax policy design and successful tax reform implementation.

COVID-19 had created great impacts such as business and production disruptions, supply - chain interruptions, volatility in the equity and debt markets, reduced revenue and cash flows and other economic consequences also have accounting and financial implications (Anisere-Hameed, 2021). Other factors include, but not limited to: Reduced consumer demand for goods and services due to loss of income and/or restrictions on consumers' ability to move freely. The harm inflicted by the Covid-19 was unaffordable, as it impacted practically every sector of the Nigerian economy, including manufacturing, entertainment, and other service sectors such as education and distribution, among others.

Taxation is viewed by individual tax payers and corporate bodies as one of the means of reducing their income and profits without commensurate compensations from the government. To this end, tax payers engage in numerous tax planning activities in order to reduce their tax liabilities. These activities result in the tax payer avoiding tax payment which is one of the major sources of government revenue. Corporate tax avoidance is the process of engaging in lawful tax planning activities by corporate bodies in order to minimize their tax liabilities. In order to curtail the negative effects of these harms caused by the pandemic, companies may engage in tax planning activities at their disposal. These would result in increased tax avoidance during the period of COVID-19 pandemic (Ajisegiri, Odusanya & Joshi, 2020).

Since the breakdown of the pandemic, there has been handful of studies in the area of effect of COVID-19 on tax avoidance and tax evasion. Ahannaya, Ogunwale, Daniel-Adebayo, Adepoju and Sanni (2022) conducted a study on the design of tax policies to ensure balance of equity, growth and sustainability. The researchers



focus specifically on the effect of these policies and COVID-19 on economic growth. Prior to this, studies conducted center on the effect of COVID-19 pandemic on corporate profit and payment of tax in developing countries (Bachas, Brockmeyer & Semelet, 2020), the implications of COVID-19 pandemic on sales and income tax revenues of state governments (Clemens & Veuger, 2020). Other studies that captured COVID-19 and its effect on taxation in Nigeria includes Olaoye (2020) and Abumere (2021).

Tax avoidance has been a serious issue bewildering the society since the promulgation of tax legislations but it is more prevalent among companies when it comes to tax administration and collection (Andreoni, Erard & Feinstein, 1998; Uadiale, Fagbemi & Ogunleye, 2010). These companies see tax paid as a means of reducing their distributable profits been taken away large percentage of the firms' pre-tax profits. The success of any economy is the ability of its administrators to provide basic amenities required to sustain its citizens. Corporate tax avoidance is seen as one of the most challenging issues in the society leading to serious loss of revenue to the governments of many developed and developing economies.

Although researchers had written on effect of the COVID-19 pandemic, but to the best knowledge of this research, none has captured the effect of the pandemic on corporate tax avoidance in Nigeria. This paper therefore intends to ascertain the effects of COVID-19 pandemic on corporate tax avoidance using data before and during the pandemic. Specifically, the study intends to ascertain the differences between corporate tax avoidance activities before and during COVID-19 era. Based on this objective, the study hypothesizes that there is no significant difference between tax avoidance practice before and during COVID-19 era. This study will guide policy makers in designing policies that improves revenue collection through taxation during the period of any possible pandemic in order to improve in the citizens' standard of living.



## **2. LITERATURE REVIEW**

Tax avoidance is usually used interchangeably with tax management, tax planning and tax aggressiveness (Dyrenge, Hanlon & Maydew, 2008; Minnick & Noga, 2010). This indicates the wide view of the meaning of tax avoidance. Hanlon & Heitzman (2010) opined that there is no generally accepted definition for the term corporate tax avoidance. However, in recent time tax avoidance is becoming a complex phenomenon construed in different ways by different parties depending on the motives employed. But Dyrenge et al. (2008) and Hanlon and Heitzman (2010) pointed out that this definition does not differentiate between tax-favored real activities, tax planning that is explicitly undertaken to avoid tax payments, and/or tax benefits expected from lobbying. Several studies followed to propose a new perception on the matter (Slemrod & Yitzhaki, 2000; Crocker & Slemrod, 2005). These studies linked the theme of corporate tax avoidance with the agency theory developed by Jensen and Meckling (1976). Tax avoidance ranges from drop of the corporate tax burden by genuine use of tax rules to abuse of tax laws (Wang, Xu, Sun & Cullinan, 2019).

One of the main challenges faced in corporate tax avoidance studies is measurement of the phenomenon. The main issues that usually relate to the measurement are the source of tax information for the measures and what the utilized measures actually captured which are seen from different angles. (Hanlon & Heitzman, 2010). Even though there are different opinions among tax researcher on measurement of tax avoidance, but effective tax rate and book tax difference are commonly used. Effective Tax Rate (ETR) is computed as the ratio of some estimate of tax liability to a measure of profit before tax profits which takes care of the average rate of tax per naira of income or cash flow. ETR is classified into two – the Generally Accepted Accounting Principles (GAAP) ETR and the cash ETR. Under the GAAP, ETR is defined as total income tax expense divided by pre-tax accounting income. What matters most in this computation is the numerator, which is the total income tax expense. According to Hanlon and Heitzman (2010), a tax strategy that defers taxes by engaging in more accelerated depreciation for tax



purposes will not vary the GAAP ETR. Besides, several items such as changes in the valuation allowance or changes in the tax contingency reserve are not tax planning strategies and as such do not have any effect on the GAAP ETR. On the other hand, the Cash ETR is computed as cash taxes paid for the year divided by total profit before tax. This measure of ETR, unlike the GAAP is affected by tax deferral strategies but is not affected by changes in the tax accounting accruals.

Another measure of tax avoidance is the book tax differences which are defined as differences between book and tax reporting of the same transaction (Hanlon and Heitzman, 2010). Thus, if information is available elsewhere about the transaction, an open question is whether investors get the information from the book-tax differences or from some other source. However, the information in book-tax differences about tax avoidance is harder to document because valid tax outcomes are difficult to obtain. Book-tax differences may not provide information about tax avoidance behavior. This study adopts the GAAP ETR to measure tax avoidance behavior of firms under study.

Olaoye (2020), explores the varied effects of the COVID-19 outbreak on the collection of taxes in Nigeria. This study employs an expo-facto research approach and collects secondary data from the Federal Inland Revenue Service of Nigeria's official website. With the help of SPSS version 2020, this study uses the Paired Sample T-test statistical tool to examine the data. The results of this study show that during the COVID-19 pandemic, the mean (standard deviation) during COVID-19 pandemic is higher than before the pandemic. Due to the obvious numerous tax collecting techniques used by the government, this study indicates that the COVID-19 outbreak has positively impacted the rise of tax income earned in Nigeria. Abumere (2021) conducted research to identify tax payment issue, which may or may not be a moral problem. This article explains why, despite social contract obligations, there is no consensus or established agreement on whether law-abiding citizens, juridical persons (legal entities), businesspeople, and



businesses should or should not pay tax to the Nigerian government during this COVID-19 pandemic due to some ethical considerations.

Auerbach, Bill Gale, Lutz and Sheiner (2020) investigated the effects of the COVID-19 pandemic on accounting and financial reporting in Nigeria. The study takes a cross-sectional approach, with data collected from various companies at a specific point in time. Secondary financial data was gathered from a variety of sample sources. Using SPSS version 25, the independent t-test and Logit Binary Regression Model were used to test the study's hypotheses. This paper found a significant difference between published financial reporting before and after the COVID-19 era; COVID-19 has a significant impact on events after the reporting period, going concern of firms in Nigeria, interim financial reporting, and COVID-19 has a significant impact on changes in expected credit losses for financial assets.

Omodero (2020) conducted a study to assess the nature of the tax responses to the current economic situation by highlighting the affected areas in the tax structure. The negative and positive implications of improving Nigeria's tax system are discussed, particularly as they would affect the government, taxpayers, and the country's entire economic structure. Omodero and Dandago (2019) examined the impact of tax revenue on public service delivery in Nigeria from 1981 to 2017, and found that tax revenue had a positive and significant impact on education and health care services.

The study of Ahannaya, Ogunwole, Daniel-Adebayo, Adepoju and Sanni (2022) concentrated on how tax policy can be designed holistically to ensure that fiscal systems deliver a balance of equity, growth, and sustainability, highlighting some of the major factors that policymakers should consider to ensure optimal tax policy design and successful tax reform implementation. This study investigates the effects of tax policy and COVID-19 on economic growth. However, the study



concludes that COVID-19 induced-lockdown has considerably hampered economic operations and, as a result, the circular flow of money in Nigeria. The recommended that more investment should be put on boosting human development, particularly health, education, and job creation, according to the report, which would result in increased household spending and company investment, therefore spreading economic growth.

The theories of taxation underpinning this study and justifying the response of the Nigerian tax system to COVID-19 pandemic include The Ability-to-pay Theory by Kendrick (1939) and Canon of Productivity postulated by Smith (1776). Kendrick (1939) explains the ability to pay tax with the term ‘*sacrifice*’. Taxes have economic consequences which result in social effects. Thus, individuals and companies make the sacrifice of paying taxes, and it is expected that these sacrifices should be based on their financial ability. This theory accepts the principle of equity or justice in taxation. The approach allows the citizens of a nation to pay taxes to the government following their ability to pay. This theory is in line with this study following the present economic realities and challenges induced by COVID-19 pandemic and the government decision to relax certain conditions in the Nigerian tax system to encourage businesses to remain in operation.

On the other hand, Smith (1776) canon of productivity is also very relevant to this study. This principle states that tax is levied on the citizen to produce sufficient revenue to the government, and collection of such charges should be less expensive and economical. Due to COVID-19 pandemic, the Nigerian government considers that cost of reducing the tax burden on taxpayers is cheaper than imposing taxes that might eventually close down businesses which is more expensive to the country. By encouraging companies to remain in operation, the government generates revenue, although it might not be as initially estimated. Whereas, if





businesses are allowed to go into extinction due to an unbearable and unaffordable tax burden, the government stands to lose all benefits accruing to it. Thus, this principle of taxation propounded by Smith (1776) is in harmony with this study.

### **3. DATA AND METHODS**

The study used secondary data sourced from the published financial statements of listed consumer goods firms in Nigeria for the period 2019 (before COVID-19 pandemic) and 2020 (during COVID-19 pandemic). The data sourced was ETR measured in ratio of tax paid to the profit before taxation. The population of the study are all the 21 listed consumer goods firms in Nigeria as at 31<sup>st</sup> December, 2020 (Appendix II). The study used census sampling to cover the entire population but eliminated three firms (Dangote Flour Mills Plc, DN Tyre & Rubber Plc and Multi-Trex Integrated Foods Plc) because they were not active during the period of study which are 2019 and 2020. This resulted in a sample of 18 listed consumer goods firms in Nigeria.

In order to achieve the study objective, experimental research design was adopted using the Pre-Post (difference in time) design. The study further used paired sample correlation statistics in order to determine any possible correlation existing between the variables paired in the two periods. In view of the research design, paired sample t-test otherwise known as Pre-Post Test is used as the data analysis technique. Pre COVID-19 tax avoidance data used is the ETR recorded for the year 2019 among the 18 sampled firms in the study resulting in 18 observations while the same number of observations were used for the year 2020 (Sani & Musa, 2019). The decision Rule is that null hypotheses would be rejected if the observed level of significance is less than 0.05 alpha level of significance otherwise the study accepts the null hypotheses.

### **4. RESULTS AND DISCUSSIONS**

The analysis of results obtained from this study is presented in a sequential order. The section starts with presentation of data used (Appendix III) which is followed



by test for normality of data. The section further discusses correlation matrix and finally analysis of results of paired t test. The hypothesis of the study earlier stated is also tested in order to achieve the study objective.

**Table 1**  
**Tests of Normality**

Variables	Obs	W	V	Z	Prob>z
ETR1	18	0.96809	0.701	-0.710	0.76120
ETR2	18	0.90861	2.009	1.393	0.08130

**Source:** Authors' Computation, 2022

Results displayed on Table 3 above show Shapiro-Wilk tests for normality of data. From the probability values of the test, all the variables are normally distributed. This is apparent from their significant values which is higher than 0.05 (Gravetter & Wallnau, 2017).

**Table 2**  
**Paired Samples Statistics**

		Mean	N	Std. Dev	Std. Error Mean
Pair	Effective Tax Rate before COVID-19 pandemic	0.1417	18	0.22240	0.05242
	Effective Tax Rate during COVID-19 pandemic	0.1322	18	0.18726	0.04414

**Source:** Authors' Computation, 2022

Table 2 displays results of mean and standard deviations of the variables before COVID-19 pandemic in Nigeria and during the COVID-19 pandemic period. Analysis of the results shows that the mean value of ETR during COVID-19 pandemic is 0.1322 which is lower than its means before COVID-19 pandemic (0.1417). On the other hand, ETR during COVID-19 pandemic has standard deviation value of approximately 19 percent lower than the recorded standard deviation of 22 percent before COVID-19. The implication of these means and



standard deviation values is that tax avoidance practice is lower during COVID-19 pandemic than the practice before the pandemic.

**Table 3**  
**Paired Samples Correlations**

Variable	Paired variables	N	Corr.	Sig.
ETR	ETR before COVID-19 pandemic and during COVID-19 pandemic	18	0.426	0.078

**Source:** Authors' Computation, 2022

The results in Table 3 above show a paired sample correlation between ETR before and during COVID-19 pandemic. The analysis of this table shows that ETR measure of tax avoidance gives coefficient of correlation of 43 percent but not statistically significant at all.

**Table 4**  
**Paired Samples Test**

Pairs	Mean	Std. Dev.	Std error	T	Sig. (2-tailed)
Values	0.00944	0.22143	0.05219	0.181	0.859

**Source:** Authors' Computation, 2022

Table 4 presents the results of paired sample t tests and related significant levels of the variables of the study. It is previously found that the means and standard deviations values of ETR are higher before COVID-19 pandemic than during the COVID-19 pandemic. But the significant values will show whether or not this difference is significant. This is used to test the hypothesis of the study.

The null hypothesis of the study states that there is no significant difference between ETR during COVID-19 pandemic and before the pandemic. From table 6, the probability value of the pair of ETR is 0.859 which is higher than 0.05 at 95% confidence interval. This indicates that there is no significant difference between



the mean values of ETR during COVID-19 pandemic and before the pandemic. The study, therefore, fail to reject the null hypothesis and concludes that there is no significant difference between the mean values of ETR before COVID-19 pandemic and during the pandemic.

## **5. CONCLUSIONS AND RECOMMENDATIONS**

### **Conclusion**

The study is conducted to assess the impact of COVID-19 pandemic on corporate tax avoidance among listed consumer goods firms in Nigeria. Analysis of the results and the hypotheses tested show that the consumer goods firms in Nigeria do not engage in excess tax avoidance practice during COVID-19 pandemic than what was obtainable before the pandemic. This implies that there was no significant difference between tax avoidance behaviour before COVID-19 and during COVID-19 pandemic. This is evidence from the insignificant mean difference between ETR recorded in the two periods.

### **Recommendations**

Based on this conclusion, the study recommends that consumer goods firms should evaluate its tax planning activities in order to boost income recorded when there is any pandemic in the country. The policy implication of this study is that government should design tax policies during a pandemic that will enhance revenue generation and ensure balance of equity among tax payers.

## **REFERENCES**

Ahannaya, C.G., Ogunwole, O.J., Daniel-Adebayo, O. Adepoju, A. & Sanni, A.S. (2022). Tax Policy and Impact of Covid- 19 on Economic Growth, *International Journal of Scientific & Engineering Research*, 13(2), ISSN 2229-5518 <http://www.ijser.org>



- Aifuwa H.O, Musa S, Aifuwa S.A. (2020). Coronavirus pandemic outbreak and firms' performance in Nigeria. *Management and Human Resources Researches*, 9(4), 15–25.
- Andreoni, J., Erard, B. & Feinstein, J. (1998). Tax compliance. *Journal of Economic Literature*, 36, 818-860.
- Anisere-Hameed, R.A. (2021) Effects of COVID-19 pandemic on accounting and financial reporting in Nigeria. *International Journal of Accounting Research*. 9(228), 1-6, DOI: 10.35248/2472-114X.21.9.228
- Auerbach, A., Bill Gale, B., Lutz, B. & Sheiner, L. (2020). Fiscal Effects of COVID-19, *Brookings Papers on Economic Activities Conference Drafts*, September, 24, 2020
- Abumere, F. (2021). Taxation in the COVID-19 Pandemic: to Pay or Not to Pay. *Philosophia*. 10.1007/s11406-021-00354-2.
- Bachas, P. Brockmeyer, A. & Semelet, C. (2020). The Impact of COVID-19 on Formal Firms: Micro Tax Data Simulations across Countries, *Policy research Working Paper*,
- Clemens, J. & Veuger, S. (2020). Implication of COVID-19 Pandemic for State Government Tax Revenues, *National Bureau of Economic Research (NBER) No. 27426*
- Crocker K.J. & Slemrod, J. (2005). Corporate tax evasion with agency costs. *Journal of Public Economics*, 89, 1593-1610.
- Dyreg, S. D., Hanlon, M., & Maydew, E. L. (2008). Long-Run Corporate Tax Avoidance, *The Accounting Review*, 83(1), 61–82. <https://doi.org/10.2308/accr.2008.83.1.61>
- Egbunike, F.C., Emudainohwo, O. B., & Gunardi, A. (2018). Tax Revenue and Economic Growth: A Study of Nigeria and Ghana. *Signifikan: Jurnal Ilmu Ekonomi*. 7(2), 213-220.
- Gravetter, F. J., & Wallnau, L. B. (2017). *Statistics for the behavioral sciences* (10th edition). Belmont, CA: Wadsworth
- Hanlon, M., & Heitzman, S. (2010). A Review of Tax Research, *Journal of Accounting and Economics*, 50(23), 127178. <https://doi.org/10.1016/j.jacceco.2010.09.002>



- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Kendrick, M. S. (1939). The Ability-to-Pay Theory of Taxation on JSTOR. *The American Economic Review*, 29(1), 92-101
- Minnick, K., & Noga, T. (2010). Do corporate governance characteristics influence tax management?, *Journal of Corporate Finance*, 16(5), 703718. <https://doi.org/10.1016/j.jcorpfin.2010.08.005>
- OECD (2021). Tax and Fiscal Policies after the COVID-19 Crisis, A report prepared and presented for G20 Finance Ministers and Central Bank Governors (FMCBG) at the request of the Italian G20 Presidency, available at <https://www.oecd.org/coronavirus/policy-responses/tax-and-fiscal-policies-after-the-covid-19-crisis-5a8f24c3/>
- Olaoye, A.A. (2020). Impact of Covid-19 Outbreak on Tax Revenue Generation in Nigeria: A Differential Analysis, *The Journal of Economic Research & Business Administration*, 4(134), 92-99, [doi.org/10.26577/be.2020.v134.i4.08](https://doi.org/10.26577/be.2020.v134.i4.08)
- Omodero, C.O. & Dandago, K.I. (2019). Tax revenue and public service delivery: Evidence from Nigeria. *International Journal of Financial Research*, 10(2), 82-91.
- Omodero, C.O. (2020). Implication of Covid-19 Pandemic on Taxation in Nigeria, *Academy of Strategic Management Journal*, 9(1)
- Sani, A.B. & Musa, U.M. (2019). Analysis of Electronic Taxation and Non-Oil Tax Revenue in Nigeria, *Sahel Analyst Journal of Resources & Economic Development*, 2(2), 64-76
- Slemrod, J., & Yitzhaki, S. (2000). Tax Avoidance, Evasion, and Administration (No. w7473; p. w7473), *National Bureau of Economic Research*. <https://doi.org/10.3386/w7473>
- Smith, Adam. (1776). *The Wealth of Nations* (1776). New York: Modern Library, 740.
- Uadiale, O. M., Fagbemi, T. O. & Ogunleye, J. O. (2010). An empirical study of the relationship between culture and personal income tax evasion in



Nigeria. *European Journal of Economics, Finance and Administrative Sciences*, 20, 116-126

Wang, F, Xu, S., Sun, J. & Cullinan, C.P. (2019). Corporate Tax Avoidance: A Literature Review and Research Agenda, *Journal of Economic Surveys*, 34(4), 793-811 available at <https://doi.org/10.1111/joes.12347>

### Appendix I – Original results from STATA 11 and SPSS Version 23

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. swilk etr1 etr2 btd1 btd2
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Shapiro-wilk w test for normal data

Variable	Obs	W	V	z	Prob>z
etr1	18	0.96809	0.701	-0.710	0.76120
etr2	18	0.90861	2.009	1.396	0.08130
btd1	18	0.96479	0.774	-0.513	0.69607
btd2	18	0.91705	1.823	1.202	0.11461

#### Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 ETR1	.1417	18	.22240	.05242
ETR2	.1322	18	.18726	.04414

#### Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 BTD1	.5296	18	.74451	.17548
BTD2	.5608	18	.62372	.14701



**Paired Samples Correlations**

	N	Correlation	Sig.
Pair 1 ETR1 & ETR2	18	.426	.078

**Paired Samples Correlations**

	N	Correlation	Sig.
Pair 1 BTD1 & BTD2	18	.426	.078

**Paired Samples Test**

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 ETR1 - ETR2	.00944	.22143	.05219	-.10067	.11956	.181	17	.859

**Paired Samples Test**

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 BTD1 - BTD2	-.03121	.74003	.17443	-.39922	.33680	-.179	17	.860

**Appendix II – Listed Consumer Goods Firms used as Population of the Study**

S/N	Firm	Date Listed
1	Cadbury Nigeria Plc.	January 9th 1965
2	Champion Breweries. Plc.	July 31st 1974
3	Dangote Flour Mills Plc	January 1st 2006
4	Dangote Sugar Refinery Plc	January 4th 2005
5	DN Tyre & Rubber Plc	October 21st 1961
6	Flour Mills Nig. Plc.	September 29th 1960





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7	Golden Guinea Breweries Plc.	September 26th 1962
8	Guinness Nigeria Plc	April 29th 1950
9	Honeywell Flour Mill Plc	July 9th 1985
10	International Breweries Plc.	December 22nd 1971
11	Menichols Plc	April 26th 2004
12	Multi-Trex Integrated Foods Plc	October 30th 1999
13	Nascon Allied Industries Plc	April 30th 1973
14	Nestle Nigeria Plc.	September 25th 1969
15	Nigerian Breweries Plc.	November 16th 1946
16	Nigerian Enamelware Plc.	May 21st 1960
17	Northern Nigeria Flour Mills Plc.	October 29th 1971
18	P Z Cussons Nigeria Plc.	April 12th 1948
19	Unilever Nigeria Plc.	November 4th 1923
20	Union Dicon Salt Plc.	November 12th 1991
21	Vitafoam Nig Plc.	April 8th 1962

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**Source:** Authors' Compilation, 2022

### **Appendix III Data on selected variables on Effective Tax Rate (Figures in ratios)**

<b>S/N</b>	<b>ETR1</b>	<b>ETR2</b>
1	0.13	0.22
2	0.14	0.04
3	0.29	0.01
4	0.28	0.32
5	0.00	0.03
6	0.19	-0.04
7	0.38	0.32
8	-0.04	-0.01
9	0.06	0.09
10	0.32	0.22
11	0.32	0.34
12	0.37	0.37



13	-0.30	-0.30
14	-0.26	0.37
15	0.16	-0.03
16	-0.03	-0.03
17	0.00	0.30
18	0.54	0.16

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**Source:** Authors' Computation, 2022

**Note**

ETR1 = Effective Tax Rate before COVID-19 pandemic

ETR2 = Effective Tax Rate during COVID-19 pandemic