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EVIDENCE OF DIFFERENCES IN PERFORMANCES OF TAX HAVEN AND NON-TAX HAVEN COMPANIES

Etumudon Ndidi Asien

Department of Accounting, Faculty of Management Sciences Federal University Otuoke, P.M.B.126 Yenagoa Bayelsa State, Nigeria. Email: <u>ndidi_66@yahoo.co.uk</u>

ABSTRACT

This study examines mean differences in the performances of tax haven and nontax haven companies in the area of pre-tax profit, intangible assets, foreign shareholdings and firm size. Data of companies quoted on the Nigerian Exchange Group between 2012 and 2019 were used to test the study's four alternative hypotheses to the effects that the profit before tax, intangible assets, percentage of foreign shareholdings and firm size of haven and non-haven companies are not equal. Independent and paired samples t-tests results show that profit before tax, intangible assets, foreign shareholdings and firm size of haven companies and nonhaven companies are significantly different from each other. We find that companies located in non-haven countries perform better than those located in taxhaven countries. Based on the findings of this study, it is recommended that international companies should consider locating to non-tax haven jurisdictions as their performance in non-tax havens may likely be better than the performance of companies located in tax-haven jurisdictions. This study contributes to the literature regarding the debate on tax haven and non-tax haven countries.

Keywords: Firm size, foreign shareholdings, intangible assets, performance, profitability, non-tax havens, tax havens.

1. INTRODUCTION

The purpose of this study is to examine whether there are mean differences in the performance of tax haven and non-tax haven companies regarding profitability, intangible assets, foreign shareholdings and firm size. Research has shown that profitability is higher in tax haven countries (see Murciego & Laborda, 2017; and Grubert, 2003). Specifically, Murciego and Laborda (2017) and Hines and Rice (1994) observed that companies located in tax havens report extraordinarily high



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profit rates on both their real and financial investments in tax havens. Murciego and Laborda (2017) are of the view that profit shifting poses challenge of fairness between countries due to movement of profit from one country to the other. The movement is not accompanied by a parallel movement of the real economic activity that generates such profit. In this regard, Grubert (2003) had asked whether multinational corporations' (MNCs') choice of locations is affected by opportunistic profit shifting out of high-tax location into low-tax locations.

The study is motivated by prior literatures. Bryan, Raffety and Wigan (2017), Dischinger and Riedel (2011) and Taylor, Richardson, and Lanis (2015) who unanimously opined that intangible asset can be located artificially at a subsidiary in a tax haven to attract service fees from other parts of a multinational corporation. Janský and Palanský (2019) observed that when intangible assets are located in a tax haven, related parties in other countries pay for their use. Clausing (2009) opined that a company may prefer to hold intangible assets in a low tax country in order to book the associated income in that country. Asien (2021) and Grubert (2003) investigated and found evidence that intangible assets have a positive effect on multinational companies' location to low tax jurisdictions. Dyreng, Hanlon, and Maydew (2008) asserted that companies that do not have non-current assets can more easily shift income through intangible assets to tax haven jurisdictions. Elemes, Blaylock, and Spence (2021) investigated and found a positive and statistically significant relationship between Big-4 accountancy firms and tax havens. Dyreng et al. (2008), Richardson and Lanis (2007), Zimmerman (1983), Watts and Zimmerman (1990) and Markle (2015) asserted that size matters for firms. This strand of research found evidence that large companies used their resources and influence to minimize tax burdens (and hence, increased profitability). Jones, Temouria, and Cobham (2018) examined the impact of Big-4 accountancy firms on the extent and complexity of MNEs tax haven activity.

Problem Statement

For profit shifting purposes, international companies locate their subsidiaries from one tax jurisdiction to the other. Tax haven countries charge low tax rates than non-tax haven countries, so that the former can attract companies to shift their profit or investments. Prior research has not investigated cases of companies registered in Nigeria but have subsidiaries or parents in a tax haven or non-haven jurisdiction. It will be interesting to investigate whether companies located in one tax jurisdiction perform better than those located in another tax jurisdiction. The current study focuses on profit before tax (*PBT*), intangible assets (*INTANG*),



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foreign shareholdings (FSH), and firm size (SIZE) in relation to haven and non-haven companies.

The Nigerian setting

Nigeria is an important market in Africa, and where some companies operating in the country make billions of the national currency, the Naira (N) in profit. There are foreign shareholders in some of the international and multinational companies operating in the country. This is coupled with the fact that there are no restrictions to repatriation of profit by companies in the country. Some of the companies operating in the country have expatriates as members of the Board of Directors. As such, this study should be of interest to the global equity investor, particularly in Europe and U.S. that participate in the Nigeria's equity investment landscape. It will also be of interest to these countries because Nigerian quoted firms mainly originated from Europe and U.S. multinational corporations. Asien (2021) provides innovative and useful nomenclatures with which to categorize companies operating in Nigeria such as: 1) Companies registered and operating only in Nigeria, 2) international companies, which are registered and domiciled in Nigeria, and which may have subsidiaries outside the country. Because Nigeria is not a tax haven country, Asien (2021) refers to these two types of companies as non-tax haven companies. The third category are foreign companies which were originally incorporated and domiciled in a foreign tax haven jurisdiction, but which were registered and operating in Nigeria at the same time. The current study adopts these definitions in classifying tax haven (havens) companies and non-tax haven (nonhavens) companies.

To this end, this study investigates whether there are mean differences in the financial performance or profitability, intangible assets, foreign shareholdings and firm size of tax haven companies and non-tax haven companies. We expect, *exante*, that there would be mean differences in these firm-level characteristics between haven and non-haven companies. *Ex post* results of parametric samples t-test shown in Tables 1-3 confirm this expectation as we found statistically significant mean differences in the firm-characteristics of haven and non-haven companies. Specifically, evidences from independent sample t-test presented in Table 1 and paired samples t-tests presented in Tables 2 and 3 suggest that financial performance, intangible assets, percentage of foreign shareholdings and firm size are not equal for haven and non-haven companies.

As the literature review below will show, to our best of knowledge, we are not aware of prior researches that have compared tax haven companies against non-tax



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haven companies, especially with respect to our variables of interest and the research setting (Nigeria). This is the void our study is attempting to fill, and this appears to be a significant contribution to the literature.

The remainder of this paper is structured as follows. The next section is a review of related literature. Section 3 addresses the empirical methodology. Section 4 presents the empirical results, while section 5 concludes the paper.

2. REVIEW OF RELATED LITERATURE AND HYPOTHESES Profit Before Tax (PBT)

The study on profitability in relation to base erosion continues to occupy the attention of researchers and organizations, including Murciego and Laborda (2017), Kundelis and Legenzova (2019), Pwc International Tax Services and Transfer Pricing (2020), Grubert (2003), Dischinger (2007), Hines and Rice (1994), Gregoriou and Gaber (2006) and Devereux (2006), amongst others. For example, Mocanu et al. (2021), who examined the determinants of tax avoidance by Romania headquartered companies from 2013 to 2017, argued that high taxable profit is a consequence of high performance, which yields high tax on profit. In particular, Hines (2010) asserted that the low tax rates available in tax havens can encourage tax avoidance by foreign companies to the extent that they would structure their transactions in order to reduce taxable profit in high tax jurisdictions and create incentives for others to channel portfolio capital flows through tax haven financial affiliates. In the same vein, Jones et al. (2018) asserted that multinational enterprises formulate strategies that align their tax haven subsidiaries with subsidiaries in non-tax haven locations for different reasons such as, for example, in order to defer or escape corporate tax at home and abroad consequent upon the wall of secrecy they have created. The study by Kundelis and Legenzova (2019) found a negative relationship between profitability and tax incentives. We hypothesize that:

H1: Profit before tax of haven companies and those of non-haven companies are not equal.

Intangible Assets (INTANG)

It has been said that intangible assets can be located artificially at a subsidiary in a tax haven to attract service fees from other segments of a multinational corporation (e.g., Bryan, Raffety & Wigan, 2017; Dischinger & Riedel, 2011; and Taylor *et al.* (2015). Some prior authors say that multinational corporations hold a large amount of intangible assets, which are hard to value but convenient to shift across



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contiguous and corporate borders (Bryan et al., 2017; Kundelis & Legenzova, 2019; Wu & Yen, 2019 and Murciego & Laborda, 2017). Since the valuation of intangible assets appears to be a difficult exercise, it has become one of the three principal means of shifting profits. For example, the study by Elemes *et al.* (2021) found that intangibles assets placements are important avenues through which Big-4 accounting firms achieve income shifting intentions. The payment for intangible assets lowers the reported profit of related companies located in high tax havens. Clausing (2009) argued that a company might prefer to hold intangible assets in a low tax country in order to book the associated income in that country. Asien (2021) and Grubert (2003) investigated and found that intangible assets have a positive effect on locating to low tax jurisdictions. Also, Dischinger and Riedel (2011) offered evidence from a panel data set of European firms that multinational enterprises preferred to locate intangible assets to low-tax locations, arguably so that they can choose favorable transfer prices for them. As mentioned elsewhere before now, Dyreng et al. (2008) asserted that companies that do not have noncurrent assets can more easily shift income to tax haven jurisdiction via intangible assets, without the difficulty experienced by firms with non-current assets. On the strength of this strand of the literature, we hypothesize that:

H2: Intangible assets of haven companies and those of non-haven companies are not equal

Percentage of Foreign Shareholdings (FSH)

Che-Ahmad, Houghton and Yusof (2006) compared the group means of the ratio of foreign substantial shareholdings to total substantial shareholdings and found support for the association between foreign-controlled companies and quality-differentiated auditors. The study by Tijjani and Zachariah (2020) tested the hypothesis that there is a negative association between foreign ownership and tax planning of non-financial companies in Nigeria. The authors found that foreign shareholdings are negatively and insignificantly associated with current tax expenses, or tax planning. Their result contradicted prior papers finding. Tijjani and Zachariah (2020), in explaining the unexpected mixed result, argued that the proportion of shares held by foreign investors of their sampled companies is relatively few. They, thus, concluded that the number of shares does not matter; hence the small proportion of shares held by investors increases tax planning. However, Asien (2021) who used data from non-financial quoted companies in Nigeria between 2012 and 2019, found an inverse and significant relationship



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between percentage foreign shareholdings and probability of tax havens location. Therefore, we hypothesize that:

H3: Percentage of foreign shareholdings of haven companies and that of nonhaven companies is not equal.

Firm Size (SIZE)

Dyreng *et al.* (2008) show evidence that the size of a company is very important in tax management as large companies tend to be more visible and receive greater levels of scrutiny than smaller companies. This could be explained by the fact that large companies have greater power in comparison to small companies. To a greater extent, large companies can influence the political process in their own favor than small companies (Markle, 2015; Watts & Zimmerman, 1990 and Zimmerman, 1983). Also, large companies can use their resources and power to reduce their tax burden (and hence, increase their performance). This leads us to hypothesize that:

H4: Size of haven companies and that of non-haven companies is not equal.

The literature reviewed in this section does not show that extant research has investigated or compared tax haven companies against non-tax haven companies concerning the variables of interest in our study and the research setting, Nigeria. This is the void the study is aiming to close.

3. METHODOLOGY

Population and sample selection

The population of study was 263 non-financial services companies quoted on the Nigeria Exchange Group (www.ngxGroup.com) at the end of December 2019. Beginning from the top of the listed companies, we purposively selected a sample of 55 companies, following well-considered criteria, which are that 1) the companies must have functional websites; 2) the companies' annual reports and audited financial statements must be able to be downloaded from the websites. In the alternative, they must be available from other online sources such as from www.africanfinancials.com, a private entity. The study covers eight years, beginning from 2012 and ending 31 December 2019. By this, there are 440 firm-year observations. Data on the remaining 24 firm-year observations



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were "missing" due to delisting from the Nigeria Exchange Group Limited listing platform and mergers and acquisitions activities that occurred within the period.

Empirical model #1

We cast the formula for the independent samples t-test as t,

$$\frac{t = \frac{\dot{x}_{1} - \dot{x}_{2}}{\sqrt{(S_{1})^{2} - (S_{2})^{2}}}}{N1 + N2}$$

Where: $\dot{X}1$, $\dot{X}2$, $(S1)^2$, $(S2)^2$ and N1, N2 are, respectively, the mean, sample variance and number of firm-year observations for haven and non-haven companies. The comparisons and tests are meant for profit before tax (*PBT*), intangible assets (*INTANG*), foreign shareholdings (*FSH*) and firm size (*SIZE*). The cut-off is .50.

Empirical model #2

Following Asien (2015), the formula for the paired samples t-test is given by t.

$$\frac{t = \frac{\sum d}{\sqrt{(n(\sum d^2)) - (\sum d)^2}}}{n-1}$$

Where: Σ = summation operator, d = difference in profit before tax (*PBT*), intangible assets (*INTANG*), foreign shareholdings (*FSH*) and firm size (*SIZE*) of haven and non-haven companies, n = number of firm-year observations for haven and non-haven companies, 114 for each group of companies, n-1 = degree of freedom (df). The SPSS statistical package was used to analyze the data of the study.

4. RESULTS AND DISCUSSION

Descriptive statistics and independent samples t-tests

Table 1 presents the descriptive statistics and independent samples t-tests results of haven and non-haven companies. The test results suggest that there are statistically significant mean differences in profit before tax (*PBT*), intangible assets (*INTANG*), foreign shareholdings (*FSH*) and firm size (*SIZE*) of havens and non-havens. The mean *PBT*, *INTANG*, *FSH*, *SIZE* of non-haven companies is more than those of tax havens companies. This result confirms our *ex-ante* expectations.



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	Group statistics and independent sample t-test result							
Variables	Haven status	Ν	Mean	Mean difference	t	df	Sig. (2- tailed)	
PBT	Haven	320	7700408.36	12056060 970	2 9 1 0	122	005**	
	Non-haven	115	19756469.24	12030000.879	-2.819	455	.005	
INITANC	Haven	320	3652994.6850	10054472 9267	1 1 266	122	000**	
INTANG	Non-haven	115	23607468.521	7	4-4.300	433	.000	
ECH	Haven	316	29.5928	10.06102	5 506	120	000**	
гоп	Non-haven	109	47.6546	18.00185	-3.390	428	.000	
SIZE	Haven	320	89547756.22	100601107 252	2 075	102	000**	
	Non-haven	115	199148953.57	109001197.333	-3.975	423	.000	

Table 1
Group statistics and independent sample t-test result

Source: Author's compilation, 2021

All the tests in Table 1 are significant at the 1% level, 2-tailed. In particular, the absolute mean difference of about N12056060.879 in PBT is statistically significant $(t = -2.819, \text{Sig. } \rho = .005).$

The absolute mean difference of about N19954473.83674 in INTANG is statistically significant (t = -4.366, Sig. $\rho = .000$). The mean difference in FSH of about 18.06183 is statistically significant (t = -5.596, Sig. $\rho = .000$). The absolute mean difference in SIZE is about N109601197.353 and is statistically significant (t = -3.975, Sig. ρ = .000). Therefore, this suggests that profit before tax (*PBT*), intangible assets (INTANG), percentage of foreign shareholdings (FSH) and firm size (SIZE) of haven and non-haven companies differ significantly between the two groups.

Descriptive statistics and paired samples t-tests

The descriptive statistics and paired samples t-test matching 114 haven companies against 114 non-haven companies on profitability, intangible assets and size is shown in Tables 2 and 3. Table 3 also contains the result of bootstrap method, to be found at the extreme far right column. (The reader is reminded that the paired samples t-test matches 101 firm-year observations haven and non-haven in the foreign shareholdings as can be seen from Table 2, the paired samples t-test results are statistically significant at the conventional levels of 1% and 5%, 2-tailed.

From Table 2, the results suggest that there are statistically significant mean differences in PBT, INTANG, FSH and SIZE of haven and non-haven companies. Specifically, the absolute mean difference of about N13213715.512368 in *PBT* is statistically significant (t = 2.258, Sig. $\rho = .026$). The absolute mean difference of



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about N21056085.524561in *INTANG* is statistically significant (t = 2.926, Sig. $\rho = .004$). The mean difference in *FSH* of about 28.028614 is statistically significant (t = 8.249, Sig. $\rho = .000$). The absolute mean difference in *SIZE* is about N124529824.52018 and is statistically significant (t = 3.102, Sig. $\rho = .002$).

Variables	Haven statu	ısN	Mean	Mean difference	t	df	Sig. (2- tailed) ρ
DRT	Haven	114	6713385.57535	12212715 512268	2 258	112	026*
IDI	Non-haven	114	19927101.08772	15215/15.512506	2.238	115	.020
INTANC	Haven	114	2758466.05439	21056095 524561	2 026	112	.004**
INTANG	Non-haven	114	23814551.57895	21030083.324301	2.920) 115	
ECH	Haven	101	18.84257	20 020614	0 240	100	000**
гзн	Non-haven	101	46.87119	28.028014	8.249	100	.000
SIZE	Haven	114	76341893.5588	104500004 50010	2 1 0 2	112	002**
	Non-haven	114	200871718.0789	124529824.52018	3.102	113	.002

Table 2								
Group statistics	and	paired	samples	t-test				

Source: Author's compilation, 2021

Therefore, again, this suggests that profit before tax (*PBT*), intangible assets (INTANG), percentage of foreign shareholdings (FSH) and firm size (SIZE) of haven and non-haven companies differ significantly between the two groups. Table 3 contains the results of the bootstrap method of paired samples t-tests. Monotonically, the results are consistent with the foregoing analyses regarding Tables 2 and 3. In particular, the absolute mean difference of about N14543322.05357 in *PBT* is statistically significant (t = 2.205, Sig. ρ -values = .030, .026). The absolute mean difference of about N23767429.8594 in INTANG is statistically significant (t = 2.938, Sig. ρ -values = .004, .027). The mean difference in FSH of about 28.028614 is statistically significant (t = 8.249, Sig. ρ -values = .000, .001). The absolute mean difference in SIZE is about N138853969.95347 and is statistically significant (t = 3.102, Sig. ρ -values = .003, .003). Again, therefore, this is indicative that profit before tax (PBT), intangible assets (INTANG), percentage of foreign shareholdings (FSH) and firm size (SIZE) of haven and nonhaven companies differ significantly between the two groups. These results further confirm the *ex-ante* expectations.



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Table 3

Group statistics and paired sample test/bootstrap for paired samples t-test								
Variables	Haven	N	Moon	лл 1°00 /		Jf	PST ⁺⁺ Bootstrap ^{a+}	
variables	status	IN	wiean	Mean unterence	Mean difference t		ρ	ρ
PBT	Haven	101	22189868.7524	⁴⁸ 14543322.05357	2 205	100	.030*	026*
	Non-haven	101	7646546.69891		2.205			.020
NITANC	Haven	101	3111820.16040	0 ^{23767429.8594}	2 0 2 0	100	.004**	027*
INTANG	Non-haven	101	26879250.0198		2.930	100		.027
ECH	Haven	101	18.84257	28.028614	0 240	100	000**	· 001**
гоп	Non-haven	101	46.87119		0.249		.000	.001
SIZE	Haven	101	84081617.8386	120052070 052472 0		100	003** 00	002**
SIZE	Non-haven	101	222935587.792	1 138833909.9334	/3.0//	100	.005	.005
^a . Unless othe	erwise noted, bo	ootstr	ap results are bas	ed on 1000 bootst	rap sam	ples		
++. PST = Pair	red sample test	using	bootstrap metho	d				

^{+.} Bootstrap for paired samples test

Source: Author's compilation, 2021

Juxtaposing Tables 1-3 together, we can therefore conclude that *PBT*, *INTANG*, *FSH* and *SIZE* of havens and non-haven companies are statistically not equal; thus, leading to the acceptance of the alternative hypotheses that mean differences in profit before tax (*PBT*), *H1*; intangible assets (*INTANG*), *H2*; percentage of foreign shareholdings (*FSH*), *H3* and firm size, *SIZE*, (*H4*) between tax haven companies and non-haven companies are *not* equal, or are statistically different from each other. In fact, almost all the means of non-haven companies are more than those of haven companies. We therefore reject their respective counterpart null hypotheses.

Additional analysis and robustness tests

It is possible that the main results discussed in the immediately preceding section could have been driven by lumping together profit-making and loss-making firms. It would be worthwhile to run the analysis using the firms' positive pretax profit only, i.e., PBT > 0. Consequently, following prior studies such as Kundelis and Legenzova (2019), Murciego and Laborda (2017) and Hines and Rice (1994), we delete all loss-making firm-year observations and missing data points also, so that only firm-year observations with complete data on PBT > 0 feature in the additional analysis. This procedure allows us to transform PBT > 0 into natural logarithm, Ln(PBT); and SIZE also. The descriptive statistics and independent sample t-test results are presented in Table 4. As in the main analysis, the absolute mean difference of about N.75040 in Ln(PBT) is statistically significant (t = 2.862, Sig. ρ -value = .004). The absolute mean difference of about N15889485.19008 in



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INTANG is statistically significant (t = 3.450, Sig. ρ -value = .001). The mean difference in *FSH* of about 18.54418 is statistically significant (t = 5.234, Sig. ρ -value = .000). The absolute mean difference in *SIZE* is about N109601197.353 and is statistically significant (t = .53742, Sig. ρ -value = .014). Allowing for 1 degree of freedom (df), the number of firm-year observations reduces to 93 (foreign shareholdings, 82). The paired samples t-test results are presented in Table 5.

Table 4 Group statistics and independent sample t-test (cut off at .50), pre-tax profit (<i>PBT</i>) > 0									
Variables	Haven status	# of obs.	Mean	Mean difference	t	df	Sig. (2- tailed)		
LN(PBT)	Haven	262	14.9651	75040	2.862	354	.004**		
	Non-haven	94	14.2147						
INTANG	Haven	262	3845401.3099	15889/85 19008	3.450	354	.001**		
INTANO	Non-haven	94	19734886.500	0					
FSH	Haven	257	30.0522	19 54419	5 224	343	.000**		
	Non-haven	88	47.6546	10.34410	5.254				
LN(SIZE)	Haven	262	17.0195	100/01/07 252	50740	254	014*		
	Non-haven	94	17.5569	109001197.353	.55742	354	.014		

Source: Author's compilation, 2021

Consistent with the main results, the absolute mean difference of about N1.02661 in Ln(PBT) is statistically significant (t = 3.576, Sig. ρ -value = .001). The absolute mean difference of about N16339941.987234 in *INTANG* is statistically significant (t = 2.281, Sig. ρ -value = .025). The mean difference in *FSH* of about 24.690964 is statistically significant (t = 6.312, Sig. ρ -value = .000). The absolute mean difference in *SIZE* is about N122982689.06702 and is statistically significant (t =2.656, Sig. ρ -values = .003). Again, most of the means of non-tax havens are more than those of haven companies. Bootstrap paired samples t-test results are presented in Table 6. As in the main analysis, the absolute mean difference of about N1.04033in Ln(PBT) is statistically significant (t = 3.279, Sig. ρ -values = .002, .003). The absolute mean difference of about N18506880.431325 in *INTANG* is statistically significant for the paired samples t-test only (t = 2.282, Sig. ρ -value = .025).



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(Group statistics and paired sample t-test, pretax profit $(PBT) > 0$									
Variables	s Haven status	# of obs.	Mean	Mean difference	t	df	Sig. (2- tailed) ρ			
$I_{m}(DDT)$	Haven	94	13.9385	1 02661	2 576	02	001**			
Ln(PDI)	Non-haven	94	14.9651	1.02001	5.570	95	.001			
INTANC	Haven	94	3394944.51277	1 (2 2 0 0 4 1 0 0 7 2 2 4	2.281	93	.025**			
INTANG	Non-haven	94	19734886.5000	10559941.98/254						
FSH Haven 83 24		24.30771	24 (000 (4	C 212	00	000**				
	Non-haven	83	48.99867	24.690964	6.312	82	.000			
	Haven	94	16.8406	122002600 06702	2 (5)	02	002**			
Ln(SIZE)	Non-haven	94	17.5569	122982689.06702	2.656	93	.003			
a	4 7 9	.1 .	2021							

Table 5

Source: Author's compilation, 2021

The mean difference in FSH of about 24.690964 is statistically significant (t =6.312, Sig. ρ -values = .000, .002). The absolute mean difference in SIZE is about N.81007and is statistically significant (t = 2.655, Sig. ρ -values = .010, .007). Again, therefore, this is indicative that profit before tax (PBT), intangible assets (INTANG), percentage of foreign shareholdings (FSH) and firm size (SIZE) of haven and non-haven companies differ significantly between the two groups.

Table 6 Group statistics and paired sample test/bootstrap for paired samples t-test, pretax profit (PBT) > 0

			p ¹ • • • • • • • • •				
Variables	Haven status	N	Mean	Mean difference	t	df	$\frac{\mathbf{PST}^{++}\mathbf{Bootstrap}^{\mathbf{a}+}}{\rho \qquad \rho}$
	Haven	83	14.2173	1.04033	2 270	00	002** 002**
Ln(PBI)	Non-haven	83	15.2576		3.279	82	.002 .003
INTANG	Haven	83	3842814.78	18506880.43	2 200	0.2	025 * 000
	Non-haven	83	22349695.22		2.288	82	.025 .080
FSH	Haven	83	24.30771	24.690964	(21)	02	000** 003**
	Non-haven	83	48.99867		6.312	82	.000 .002
Ln(SIZE)	Haven	83	17.0179	91007	2 (55	01	A1A** AA7**
	Non-haven	83	17.8279	.81007	2.055	82	.010 .007
^a . Unless of	therwise noted, I	boots	trap results are ba	ased on 1000 boots	strap san	ples	
$^{++}PST = P$	aired sample tes	t usir	ng bootstrap meth	od			
+. Bootstra	p for paired sam	ples t	est				
~							

Source: Author's compilation, 2021



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Taking Tables 4-6 together, the results on mean differences are largely similar to our main findings, except for *INTANG* which became insignificant for the boostrap paired samples test in Table 6. Thus, we can infer that our main findings on the hypothesized mean differences in *PBT*, *FSH* and *SIZE* between haven companies and non-haven companies are robust to alternative test, which strengthen the main findings on *H1*, *H2*, *H3* and *H4*. The means of non-haven companies outstrip those of haven companies.

5. CONCLUSION

This study examines whether there are mean differences in the profit before tax, intangible assets, percentage of foreign shareholdings and size of tax haven companies and non-haven companies. To carry out the examination, four null hypotheses were formulated for the study. Independent and paired samples t-tests results suggest that pretax profit (*PBT*), intangible assets (*INTANG*), percentage of foreign shareholdings (*FSH*) and firm size (*SIZE*) of haven and non-haven companies are statistically significantly different from each other. The results accept the null of H1, H2, H3, and H4. Non-tax haven companies outperform their tax-haven counterparts.

Based on the findings of this study, it is recommended that international companies should consider locating to non-tax haven jurisdictions as their performance in non-tax havens may likely be better than the performance of companies located in tax-haven jurisdictions.

To the best of our knowledge, we are not aware of extant researches that examined or compared tax haven companies against non-haven companies concerning the variables of interest of the study and the research setting, Nigeria. This study thus fills the vacuum in the literature. We think that this is a significant contribution to the literature.

Caveats (by the Author)

We draw the perceptible reader's attention to some caveats of the study. Firstly, the study uses purposive method to collect the data for the research. This method of data collection may lead to self-selection bias, which we did not control for. Secondly, a longitudinal study such as this would have required that we control for economy-wide risk or systemic shocks of some sort if the study was conducted at the national or industry level. However, the control was not feasible because the study was carried out at the firm-level and within the same country where all companies are confronted with the same economy or system-wide risk factors.



Website: https://www.nijafmautech.com Email: nijafmautech@gmail.com

Thirdly, although there could have, perhaps, been a need to control for industryspecific dynamics but that would be outside the remit of the study. A final limitation is related to the data sample for haven and non-haven companies. There is an unequal distribution of the number of haven companies and non-haven companies. Consequently, we call for caution in interpreting the findings of the study.

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