

# “Analyzing the determinants of financial management behavior of administrators in Nigerian state-owned enterprises”

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# ANALYZING THE DETERMINANTS OF FINANCIAL MANAGEMENT BEHAVIOR OF ADMINISTRATORS IN NIGERIAN STATE-OWNED ENTERPRISES

## Abstract

This study assessed the factors that determine the financial management behavior of administrators in state-owned enterprises (SOEs) in Nigeria. The rising cases of financial mismanagement, which was associated with the financial management behavior of top administrators in these SOEs, prompted this study. It is believed that identifying the factors that determine the financial management behavior of these administrators would help to find solutions to the problem. Based on the multistage sampling technique, 385 top administrators from the SOEs at the federal level in Nigeria participated in the survey. Quantitative analysis was used to analyze the data and the results show that income, family size, and financial literacy are the most important factors affecting the financial management behavior of the administrators. It is recommended that there should be an improvement in income and other working conditions of the administrators in the SOEs since income has been confirmed to be an important shift factor of financial management behavior. In the same vein, given the role of family size, it is recommended that efforts on population reduction should be intensified. Finally, financial literacy should be given priority in checkmating irresponsible financial management behavior.

## Keywords

financial management behavior, state-owned enterprises, SOEs, administrators, determinants

## JEL Classification

H11, G00, G30

## INTRODUCTION

The rising cases of financial mismanagement among administrators of SOEs in Nigeria have continued to generate a lot of concerns for both local and international agencies as they continue to affect the performances of the SOEs (Lee 2018; Laeeq et al., 2016). The structure of SOEs in Nigeria by default has a decentralized leadership controlled by the board and the management with representatives from the six geo-political zones in the country (Odior & Alenoghena, 2017). According to Idike et al. (2019), it is believed this would prevent dictatorship and autocratic style of leadership that can aid the commission of financial fraud. Notwithstanding, the extent of financial mismanagement in the sector, which is ultimately linked to the financial behavior of top administrators in the SOEs, remains very worrisome.

To mitigate the alarming cases of financial mismanagement among the SOEs prompted the civilian administration on assumption of power in the year 2000 to take some drastic steps to checkmate this menace by promulgating various anti-graft laws and establishing some agencies to implement them. It was believed that this would checkmate irresponsible financial management behavior of administrators that have been fingered in most of the cases of financial fraud and cor-

ruption generally in the Nigerian public sector. Then agencies like the Economic and Financial Crimes Commission and Independent Corrupt Practices among others were established. However, despite the establishment of these agencies, the cases of financial misappropriation owing to irresponsible financial management behavior among SOE administrators have continued to be on the rise

One of the main problems associated with finding a solution to the menace of financial mismanagement in SOEs is the fact that the financial management behavior of an individual is very difficult to control and it varies from one individual to another because different factors can account for changes in the financial management behavior of an individual at a particular period (Prihartono & Asandimitra, 2018). Therefore, a blanket approach to checkmating might seem inefficient. Consequently, the ability to determine the factors affecting the financial management behavior of an individual has been adjudged to be important in finding the solution to the problem of fund mismanagement among SOE administrators. Literature on this issue has been limited to countries outside the SSA (see, for instance, Asandimitra & Kautsar, 2017; Nidar & Bestari, 2012; Prihartono & Asandimitra, 2018). Few of them in Nigeria are not on the SOEs, which is the focus of this study (Odior & Alenoghena, 2017; Mudzingiri et al., 2018).

The factors that affect financial management behavior vary from one group of people to another and from one environment to another. In addition, identifying these factors and their respective influences on financial management behavior is believed to go a long way to provide means of finding a solution to the problem of financial mismanagement emanating from the financial behavior of administrators in Nigerian SOEs. Therefore, this study hopes to contribute to the existing literature and knowledge in general by assessing the determinants of financial management behavior among these sets of administrators in order to find the solution to these threats due to which the creation of SOEs defeats their purposes of establishment since they are mostly characterized by low internally generated revenue, low performance, poorly serviced deliveries, among others:

## 1. LITERATURE REVIEW

Both the empirical and theoretical literature are discussed in this section of the study. The main theory that the study rests upon is the theory of planned behavior.

### 1.1. The theory of planned behavior (TPB)

TPB focuses on the factors that influence individuals' behavioral choices. It was propounded by Ajzen (1991). According to this theory, three main factors can affect behavioral intentions. These include subjective norms and negative and positive attitudes towards target behavior, among others (Rivis & Sheeran, 2003). The reaction of someone to a particular behavior can be taken as the assessment of the person's character, which might be positive or negative. This has a great influence on one's belief or a perceived outcome after a behavior is displayed. Subjective norm refers to the belief of a person's acceptability or unacceptability of certain behavior from another person. TPB incorpo-

rates an additional variable-perceived behavioral control, which is not mainly associated with traditional attitude-behavioral models, e.g. Rivis and Sheeran (2003). Perceived behavioral control explains the beliefs about the difficulty in the level of displaying the behavior reflecting both previous experience and expected barriers. Generally, the rule is that, whenever an attitude is favorable to a particular behavior, this brings a greater perceived social acceptability and approval. In addition, it also leads to ease in carrying out such behavior and stronger behavioral intention.

### 1.2. Empirical literature

Findings from the literature on the determinants of Financial Management Behavior (FMB) show that several studies used a similar factor, while some few used different ones and they all came up with diverse conclusions regarding the relationship between FMB and factors influencing it.

Prominent among these studies is the study by Mien and Thao (2015) where factors influenc-

ing personal financial management behavior in Vietnam were critically assessed. Factors including personal financial attitude, financial knowledge, and locus of control were identified by the study as FMB determinants. After the application of the survey method using questionnaires and quantitative analysis, the study concluded that financial attitude and financial knowledge have significant positive impacts on financial management behaviors. The study further showed that the person who has a more external locus of control leads to worse financial management behavior

Strömbäck et al. (2020) identified some factors that account for changes in the financial management behavior of an individual and the role of budget slack. Using a cross-section of Swedish households, the study discovered that the adoption of budget slack to moderate financial management behavior is strongly influenced by self-control, which is a subjective factor as against objective factors identified by some financial management theories. In a similar study, Puri and Robinson (2007) added optimism as an important factor apart from self-control that can drive the adoption of budget slack and its effects on a household's financial management behavior.

Struewing and Jirjahn (2019) took a different perspective entirely from that of Mien and Thao (2015) and identified gender and risk attitude as the main factors influencing FMB. After the administration of the questionnaire on the target respondents who are mainly households in Germany and analyzed using quantitative techniques, the study found out that both risk-taking attitude and gender have a significant influence on FMB but this differs across nationalities as the data comprised German, Spanish and Italian nationals. In a different development but similar to the study of Mien and Thao (2015), Salim (2015) identifies three factors such as education, financial literacy, and financial attitude as the three factors responsible for a household's FMB. After the survey of some sets of households in Malaysia, the study discovered that financial literacy is the most important factor affecting the FMB of households in the country.

Prihartono and Asandimitra (2019) appear to be more recent studies among all that made use of broader factors. The study focused on income,

higher education, financial knowledge, financial literacy, financial attitude, and the locus of control as the factors affecting FMB among students in Indonesia. These were survey studies that made use of questionnaires and quantitative techniques. The study concluded that income, financial literacy, and financial attitude have significant effects on FMB, while higher education, financial knowledge, and locus on control failed to have a significant impact on FMB.

In conclusion, the reviewed literature shows that there were divergent views on the factors affecting FMB. Some studies generally identified education, financial literacy, financial knowledge, locus of control, and income as the factors that affect FMB (Prihartono & Asandimitra, 2019). Only one study considered the demographic features as factors influencing FMB (Mien & Thao, 2015). This study will build on these studies to engage in a more comprehensive assessment of the determinants of FMB by including both demographic features of the individual and other factors identified such as education, financial literacy, financial knowledge, locus of control, and income. In addition, none of the studies used the public servants, who are the focus of this study, as their case study. Since the nature of the job plays an important role in FMB, this study will focus on the administrators in the SOEs. This is a clear departure from the sets of individuals used by previous empirical studies.

This study aims to contribute to the existing literature and knowledge in general by assessing the determinants of financial management behavior among these sets of administrators to find a solution to these menaces that have made the establishment of SOEs defeat their purposes of establishment as they are mostly characterized by low internal revenue, low performance, and poorly serviced deliveries, among others.

The following hypothesis was developed:

- $H_0$ : *None of the identified determinants have a significant impact on the financial management behavior of the administrators.*
- $H_1$ : *Some of the identified determinants have a significant impact on the financial management behavior of the administrators.*

## 2. METHODS

### 2.1. Research design

Being an exploratory study, a survey method was adopted with a selection of respondents using the sampling technique. These respondents were the main participants in the survey that provided answers to the questionnaire. Mainly quantitative approach was adopted for data analysis. The main philosophy behind the study is that of positivism and epistemology. The study focuses on the exploration of means to achieve the stated objectives without any predetermined outcome in mind. In addition, the focus is on the collection of knowledge and its nature and the process through which this knowledge is acquired (Cazeaux, 2017).

### 2.2. Population of the study

Precisely, there are 202 federal government SOEs in Nigeria and all have their headquarters in Abuja, the Federal Capital Territory of Nigeria. Although the numbers of top administrators in these establishments constitute the precise population for the study, the figure is unknown due to the lack of data. The only data available regarding the workforce in the SOEs is the total number of employees, which, according to the Nigeria Bureau of Statistics (2020), is about 650,000 but the proportion that constitutes senior administrators among them is unknown. However, from the available data from the NBS, the 202 SOEs in Nigeria are divided into 15 sectors such as Agriculture, Economy, Energy, Health, Aviation, Communication, Education, Judiciary, Intelligence, Maritime, Media, and Environment, Science and Technology, Water Resources and Security.

### 2.3. Sample and sampling techniques

A multistage sampling technique is embraced by the study. According to Shimizu (2014), a population that involves different groups and strata with varying degrees of characteristics requires a multistage approach to sampling. Multistage is applied when the population is complex and clustered; during this sampling method, significant clusters of the selected people are split into sub-groups at various stages to make it simpler for primary data collection (Sedgwick, 2015). This attribute suits

the population under this study where the SOEs are split into different sectors and the staff is also categorized into different ranks, since the interest of the study is top administrators only. In multistage sampling, at various stages, different approaches of sampling techniques may be adopted before arriving at the final sample (Shimizu, 2014). In this study, a simple random sampling technique using the Taro Yamane method is adopted to select the sample size for the numbers of SOEs that are covered in the survey. The calculation is as follows:

$$n = \frac{N}{\left(1 + N(e)^2\right)}, \quad (1)$$

where  $n$  is the sample size, and  $N$  is the population. According to Smith (2013) and Oribhabor and Anyawu (2019),  $e$  is the error margin usually 0.05 is used.

In getting the sample for the numbers of SOEs included in the survey,  $N$  is 202 which is the total population of the federal government SOEs in Nigeria. Applying the formula in equation (1), the following is obtained:

$$n = \frac{202}{\left(1 + 202(0.05)^2\right)}. \quad (2)$$

Therefore, the minimum number of SOEs covered in the survey is approximately 135. They are randomly selected from the 202 SOEs, since they are all located in Abuja, it is not difficult to find and reach them. More so, the case of COVID-19 has subsided drastically in Nigeria and hence movements are allowed into offices now.

The second stage of the sample selection is the number of administrators to be included in the survey from the 135 SOEs. Since there are no data on the number of senior administrators in the SOEs, the population is deemed to be unknown, and the sampling technique identified by Smith (2013) for calculating sample size from an unknown population is adopted. The formula for calculating the sample size is described as follows: The formula makes use of the Z score, confidence interval, margin of error, and standard deviation to calculate the necessary sample size for the study.



*Necessary sample size =*

$$= \frac{(Z - score)^2 \cdot StdDev(1 - StdDev)}{(Margin\ of\ error)^2}. \quad (3)$$

The following terms are defined to give a better understanding of the formula; the margin of error depicts the allowance of error expected in the computation. The confidence interval describes the extent of the deviations existing from both the upper and lower means of the population. The implication of the result after applying the formula is that approximately at least 385 respondents are randomly selected from the 135 SOEs to participate in the survey. It should be noted that the 385 workers are distributed randomly among the 135 SOEs using their percentage of the population in terms of staff strength as discussed under the population. Furthermore, even though the case of COVID-19 has subsided drastically in the country, personal contact with respondents is greatly reduced during the data collection process, since the data collection strategy mainly relies on questionnaires and not a direct interview method. Google forms are used to send the questionnaire to various emails of the respondents for completion. With this process, contact only occurred in rare cases where compliance is low.

## 2.4. Data collection methods

This aspect of the methodology discusses the nature and approaches adopted by this study for data collection purposes. The questionnaire is the main approach used to collect information from the respondents. The questionnaires are well-structured. According to Smith (2013) and Oribhabor and Anyawu (2019), this is because the respondents are educated and have busy schedules, hence, there is a need to structure the questionnaires in such a way that they can be attended to in their leisure time with minimum assistance.

## 2.5. Questionnaire structure

The questionnaire is divided into four major parts as follows: Part A includes questions on the demographic information of the respondents. Part B contains questions on Financial Management Behavior Scales (FMBS). Part C involves questions about the various determinants of Financial Management Behavior (FMB).

## 2.6. Reliability and validity

Both validity and reliability tests were carried out on the research instrument to verify their suitability for the survey. The Chronbach Alpha test and the KMO Battlet tests were used for the reliability and the validity test, respectively.

## 2.7. Model specification

Theory of Planned Behavior (TPB) discussed in the theoretical literature serves as a precursor to the model specification for this objective, which is based on the determinants of financial management behavior. In TPB, variables such as financial attitude, financial knowledge, and locus of control are identified as the factors that influence the financial management behavior of an individual. However, demographic features and education status have been used by some studies with these three variables as the factors determining financial management behavior (Mien & Thao, 2015). Consequently, the model that explains the relationship between FMB and its determinants is stated as follows:

$$FMBS = \alpha_0 + \alpha_1 FZ + \alpha_2 QLF + \alpha_3 I + \alpha_4 FK + \alpha_5 FL + \alpha_6 LC + \mu, \quad (4)$$

where FMBS is the Financial Management Behavior Scale computed from the factor analysis approach used by Xiao and Dew (2019), FZ is family size, QLF is education qualification, and INC is income, all three represent demographic features. FK is financial knowledge, FL is financial literacy, and LC is the locus of control.

**Table 1.** A priori expectations

Variable	Expected coefficient signs	References
FZ	+/-	Barasinska (2011), Asandimitra and Kautsar (2017)
QLF	+	Kholilah and Iramani (2013)
INC	+	Suroto et al. (2022), Asandimitra and Kautsar (2017)
FK	+	Ida and Dwinta (2010)
FL	+	Sina (2016), Mien and Thao (2015)
LC	-	Chinen and Endo (2012)

## 2.8. Estimating technique

The model in equation (4) is estimated using the regression analysis, precisely the weighted least square

regression (WLS). This approach of regression analysis takes care of the heteroscedasticity problem in regression results, which may render the estimators non-efficient. Therefore, an important pre-estimation test carried out before the application of WLS is the test for heteroscedasticity. Once it is confirmed that the variance of the error term is not constant for all observations, this means there is heteroscedasticity, hence the application of linear regression might not be appropriate and WLS is opted for. This is the situation in this study. The relationship between the determinant factors and FMBS is estimated using the WLS because their relationship under pretest showed the problem of heteroscedasticity.

### 3. RESULTS

This aspect of the study starts with biodata analysis. Other efforts to interpret and discuss the empirical results will be made in this section.

#### 3.1. Biodata analysis of the respondents

This is the first aspect where all the variables under the demographic and biodata information of the respondents are analyzed and interpreted. Table 1 contains this information.

Table 1 shows that the composition of the respondents who are top administrators in the federal SOEs in Nigeria are mainly youth and young adults. This segment of people is about 93% of the total population of the entire respondents included in the study. Just less than 10% are above 60 years of age. Most of the ages who form the nucleus of the respondents are between the ages of 30 to 59 years. For gender distribution, the majority of the administrators are men as they make up 88% of the respondents, while women make up about 12%. This shows that top administrators of the SOEs in Nigeria are male-dominated. The distribution also supports the claims that most of the financial recklessness and fraud perpetrated in the entire Nigerian public sector is done by males.

For the family size distribution, most of the family sizes of the top administrators are relatively large. Family sizes of 5 to 7 are the most common among the administrators. Also, the analysis shows that about 40 of the administrators have a family size of above 8. This result indicates that the respondents

have a relatively large family size in general. On monthly income distribution, it is very obvious that most of the administrators are in the middle class of income in Nigeria. The largest percentage of the respondents have an income of one hundred thousand naira (100,000) to three hundred and ninety-nine thousand naira (399,000) monthly. This income level is enough to be in the middle class, given the economic reality of the Nigerian economy. This set of people is about 87% of the total population of the respondents.

**Table 2. Biodata distribution**

Source: Author's computation, 2022.

Age Distribution			
	Frequency	Valid Percent	Cumulative Percent
30 to 39 years	57	14.8	14.8
40 to 49 years	166	43.1	57.9
50 to 59 years	136	35.3	93.2
60 years and above	26	6.8	100.0
Total	385	100.0	
Gender Distribution			
Male	338	87.8	87.8
Female	47	12.2	100.0
Total	385	100.0	
Family Size Distribution			
Between 2 and 4	164	42.6	42.6
between 5 and 7	181	47.0	89.6
8 and above	40	10.4	100.0
Total	385	100.0	
Monthly Income Distribution			
N50,000-N99,000	88	22.9	22.9
N100,000-N199,000	135	35.1	57.9
N200,000-N399,000	121	31.4	89.4
N400,000 and above	41	10.6	100.0
Total	385	100.0	
Years in Service Distribution			
under 5 years	27	7.0	7.0
5–10 years	168	43.6	50.6
11–15 years	138	35.8	86.5
16 years and above	52	13.5	100.0
Total	385	100.0	
Years in current Position Distribution			
under 5 years	70	18.2	18.2
5-10 years	163	42.3	60.5
11-15 years	126	32.7	93.2
16 years and above	26	6.8	100.0
Total	385	100.0	
Highest qualification Distribution			
First degree or equivalent	231	60.0	60.0
Master's degree	121	31.4	91.4
PhD	31	8.1	99.5
Others	2	.5	100.0
Total	385	100.0	

Furthermore, about 41 administrators out of the 385 are top earners with monthly salaries of above four hundred thousand naira (400,000) monthly. Normally with this type of salary, it is believed that there should be little avenue or reason for irresponsible financial management behavior among the administrators but this appears not to be the case with the rising cases of financial fraud perpetrated by the administrators of the SOEs

In terms of the year in service, the results show that many of the administrators covered in the survey are highly experienced as they have spent between five to fifteen years in service, this is about 86% of the population of the respondents. In the same vein, 52 out of the 385 respondents have spent 16 years and above, these distributions show that the crop of administrators included in the survey understand the nature of their job very well and have the ability to supply the needed and required information for the data analysis. With the distribution of the years spent in the current position, there is every reason to believe that many of them have been in the position of administrators in the SOEs for a considerable long period spanning from 5 to 10 years and above.

Given the education qualification of the respondents, many of them are well educated with minimum qualification of both first and second degrees. However, this is expected as they are in the position of administrators. About 60% are with first degree, 31% with master's or second degrees, and about 8% with a Ph.D. This speaks volumes of the high level of educational attainment among the respondents. This further justifies the inclusion of financial literacy and financial knowledge as the factors affecting the financial management behavior of the administrators.

### 3.2. Pre-estimation test

The weighted least square regression analysis is also embraced for this study and an important condition is the presence of the problem of heteroscedasticity in the data. The results for the heteroscedasticity test are presented in Table 3.

**Table 3.** Breusch-Pagan/Cook-Weisberg test for heteroscedasticity

Source: Author's computation, 2022.

Statistics	Hettest	Hettestiid	Hettestfstat
chi2(1)	2.17	4.15	4.17
Prob > chi2	0.1411	0.0416	0.0417
Ho: Constant variance			

For the avoidance of doubts, three different methods are used to test for the heteroscedasticity in the data, and the results show that the  $H_0$  is accepted in just one of the three tests. The implication is that the conclusion that there is no constant variance in the residual distribution is accepted in two of the tests, which indicates the presence of the problem of heteroscedasticity. Furthermore, the graph of the residuals shown in Figure 1 indicates that the variance of residuals is not constant.

The scattered plot of the residual variance is an attestation to the fact that there is heteroscedasticity in the residual of the estimated regression model. This shows that there is a need to run the regression using the WLS regression. Table 4 presents the weighted least square regression result.

**Table 4.** WLS regression result

Source: Author's computation, 2022.

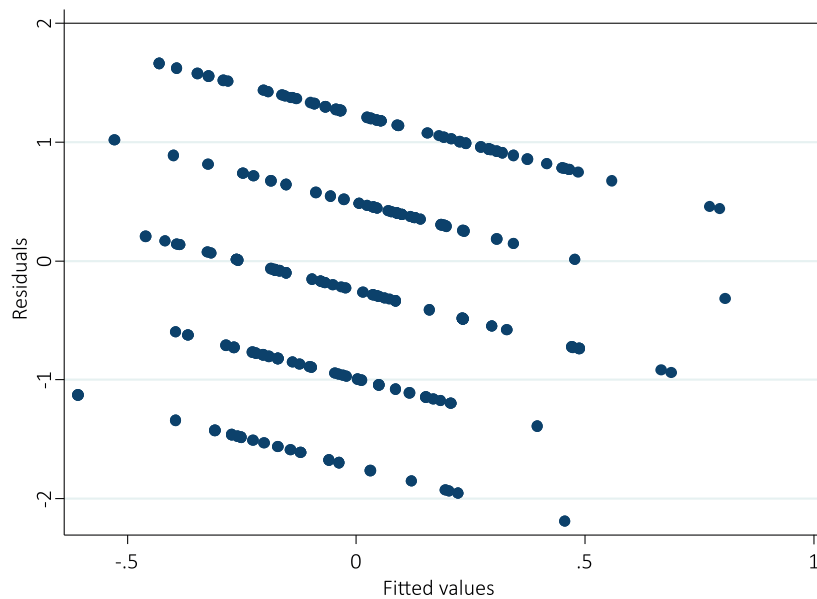
Variable	Coefficient "b" / Standard Error "SE"
Intercept	2.081332*** (0.777905)
Financial Knowledge	-.1680626*** (.0420039)
Financial Literacy	.2258617*** (.0338269)
Locus of control	-.06727 (.0963254)
Family size	-.4618663*** (.0863109)
Income	-.7020268*** (.1475796)
Qualification	-.0546704 (.1316068)
R Square	0.6986
Adjusted R Square	0.6906
Prob > F	0.0000***

Note: \*\*\* means statistical significance at 1%, \*\* statistical significance at 5%, and \* statistical significance at 10%.

Table 4 shows that some factors determine the financial management behavior of administrators in the SOEs at the federal level in Nigeria. Apart from some demographic factors like family size,



Source: Author's computation, 2022.



**Figure 1.** Residual variance graph of FMB determinants

income distribution, qualifications, financial literacy, financial knowledge and locus of control are included as the factors that can affect the financial management behavior of these administrators.

The WLS regression results show that financial knowledge has a significant effect on the financial management behavior FMB of the administrators. The coefficient is  $-0.1680626$ , and it is statistically significant. The implication is that there is a negative and significant relationship between FMBS and financial knowledge. This shows that having a good understanding of basic finance-related disciplines such as corporate finance, banking, finance, and investment finance, among others, might not influence positively the financial management behavior of an administrator.

On the contrary, financial literacy has a coefficient of  $0.2258617$  and it is statistically significant at 5%, thus implying that financial literacy has a positive effect on the financial management behavior of administrators. The implication is that if you have either formal or informal ideas of basic finance-related disciplines such as corporate finance, banking, finance, and investment finance, among others, this can make you more responsible in managing your finance. While financial knowledge is about a deep understanding of these disciplines, literacy is talking about the idea of them either formal or informal. More administrators are likely

going to be literate than knowledgeable financially. This difference might account for the difference in their impacts on the FMB of the administrators.

Locus of control failed to influence the FMBS significantly among the non-demographic factors. It has a coefficient of  $-0.06727$  and it is not statistically significant at 5%, thus showing the locus of control as the unimportant factor that can determine the financial management behavior of administrators in Nigerian SOEs.

One of the demographic features of the administrators that have a significant impact on their FMB is the family size. It has a coefficient of  $-0.4618663$  and it is statistically significant at 5%, thus showing that there is a significant negative relationship between family size and the FMB of the administrators. This simply implies that the larger the family size, the less responsible financially an administrator will be. This further indicates that an increase in family size is an important factor that causes irresponsible financial management behavior among the administrators in Nigerian SOEs.

Another demographic feature used in the model is the income distribution of the administrators and this has a coefficient of  $-0.7020268$ , which is also statistically significant at 5%. This is an indication that there is a significant negative relationship between income distribution and the FMB of the ad-

ministrators. The higher the level of income, the less responsible the administrators are likely to be financial. This may look bizarre, but this simply shows that irresponsible financial management behavior is usually shown by the administrators at the upper echelon of income distribution in the services of the SOEs at the federal level in Nigeria.

The last demographic feature of the administrators used in the model is the qualifications of an administrator. The coefficient is  $-0.0546704$  and it is not statistically significant at the 5% level. The implication is that qualification is not an important factor that determines the financial management behavior of administrators in SOEs. There appears to be some consistency in the results as financial knowledge previously showed that it does not have a significant positive impact on the financial management behavior of the administrators as well.

Notwithstanding the general note, the R square of the model that describes the determinants of the FMB has an impressive R square of 0.6986, which shows that about 70% systemic variation in FMBS of each administrator is explained by the factors iden-

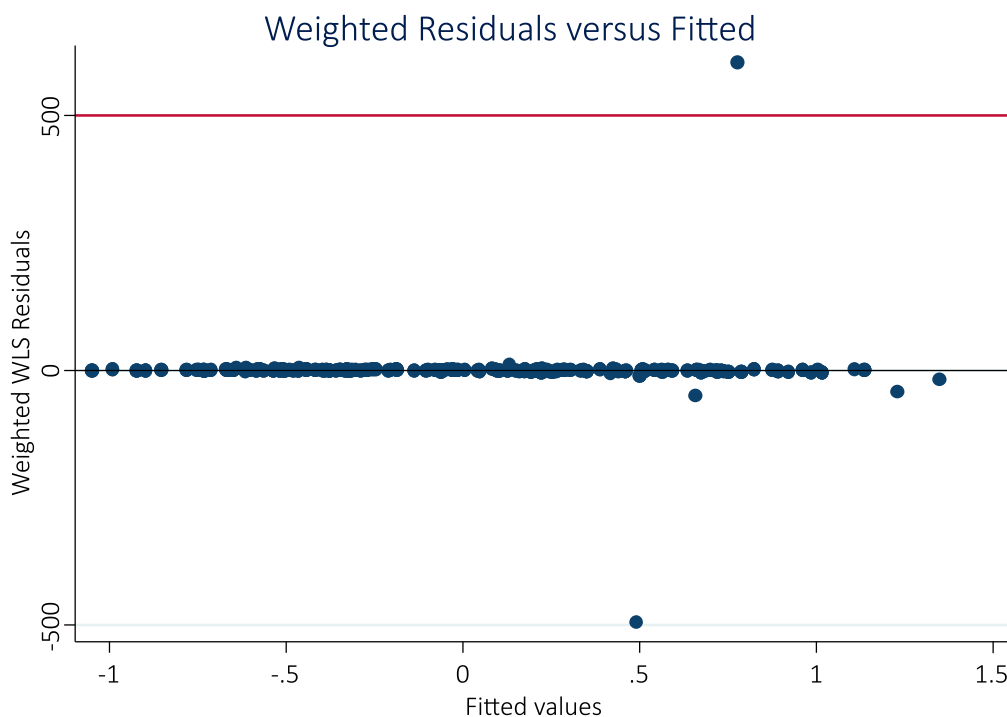
tified in the model. The F significance also confirms that the estimated model of the determinant of the FMBs is significant at a 1% level. This further confirms the explanatory strength of the predictors that is the factors that determine the FMB of the administrators in the SOEs at federal service in Nigeria.

### 3.3. Post-estimation test for the FMBS determinant estimated model

After regression estimation, i.e. WLS, the test for heteroscedasticity was again performed and a graphical illustration was shown (see Figure 2).

Figure 2 explains the test for heteroscedasticity on the estimated model. The graph shows that the variance of the error term is now constant for all the levels of observation. Figure 2 shows that the variance of the residual showed scattered dots, which indicates that the variance of the error term is not constant, which was the reason for WLS application. After the estimation of WLS, it is now clear that the estimated model showing FMBS determinants is free from the problem of heteroscedasticity.

Source: Author's computation, 2022.



**Figure 2.** Test for heteroscedasticity of the estimated model

## 4. DISCUSSION

The analysis of the relationships between FMBS and some factors that determine it has thrown up some lines of discussions that is very germane. For instance, the result has shown that Financial Knowledge might not influence FMBS positively. The implication of this is that having a very good knowledge of disciplines that are related to finance, economics, and accounting does not make an administrator financially responsible. The findings are similar to the results from the empirical study by Saidu et al. (2020) who concluded that most of public officers in Nigeria perpetrate their fraudulent acts with connivance with the accountants and the head of finance in their various organizations. Financial literacy, on the other hand, has a significant positive impact on FMB. It should be noted that financial literacy might not refer to an in-depth understanding of those finance-related disciplines but just an idea. The implication again is that an administrator does not need to have in-depth knowledge of these disciplines before

he is financially responsible. This was a similar result obtained from the studies by Ansong and Gyensare (2018).

Again, the results of the study are that the larger the family size, the more irresponsible financial management behavior shown by the administrators. The study has established the fact that administrators with very large family sizes are more likely to be financially irresponsible. Gloy (2018) shows the same result. Furthermore, the study showed that low income can aid irresponsible financial management behavior among administrators. The findings conform to much empirical literature in this area (See Mien & Thao, 2015). The finding from the study also indicates that the qualification of the administrators used in this survey failed to have a significant impact on their financial management behavior. It would be recalled that earlier financial knowledge that showed a deep understanding of finance-related disciplines does not influence financial management behavior positively, rather it does negatively.

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## CONCLUSION AND RECOMMENDATIONS

With regard to the determinants of FMBS, the study discovered some results that led to some findings that touch on the influences of some factors on the financial management behavior of the administrators. Firstly, it was deduced from the study that, for instance, the result has shown that financial knowledge might not influence FMBS positively. The implication of this is that having a very good knowledge of disciplines related to finance, economics, and accounting does not make an administrator financially responsible. Therefore, the ability to understand deeply financial concepts and economic and basic accounting concepts does not mean that an administrator will be very responsible or responsible for financial management behavior. In another way around too, the ability of an administrator to have good knowledge of these disciplines does not mean that such administrators will have irresponsible financial management behavior.

Secondly, financial literacy, which means having just an idea but not in-depth knowledge of these finance-related disciplines, has a significant impact on FMBS. The study concludes that an administrator does not need to have in-depth knowledge of these disciplines before he is financially responsible. This is very evident from the findings where financial literacy, which emphasizes just idea, improves responsible financial management behavior, while having an in-depth understanding (Financial Knowledge) does not. It is important to know that having general knowledge that is not being illiterate is enough to make one develop responsible financial management behavior.

Thirdly and still on the determinants of FMBS, the family size was shown to have a significant inverse relationship with FMBS. Consequently, the study concludes that the larger the family size, the more irresponsible financial management behavior may be exhibited administrators. It is very clear from these findings that other conclusions from some studies that the family responsibilities of household across the globe are an important factor to reckon with in the financial management

behavior of individual households are also valid for the administrators in federal SOEs in Nigeria. Generally, conclusions from this study have further shown that administrators with large family sizes are more likely to have poor cash management, credit management, savings, and investment management among others.

Again, income remains the most important factor that affects financial management behavior. This is another important conclusion from this study. There was overwhelming evidence from the study to arrive at this conclusion. The analysis showed that income of administrators is the highest influencer of their financial management behavior. Although it should be noted that income distribution is directly linked with poverty level consequently, and by extension it can be deduced from the study that income level or poverty level among SOEs' officers could be a factor that can dictate their financial management behavior. This is not to say that greed does not play a role, because many administrators with high income still indulge in irresponsible financial management behavior, but largely this study has shown that income level can dictate the degree of financial management behavior and the officer will display that he is either responsible or irresponsible FMB, especially among the administrators of the SOEs in Nigeria.

Lastly, regarding the determinants of financial management behavior, it has been revealed that academic qualification or education background does not have any significant impact on the financial management behavior of administrators in the federal level SOEs in Nigeria. This conclusion appears to go along with the earlier conclusion on financial knowledge where it was discovered that in-depth knowledge of performance-related disciplines does not have a significant effect on their financial management behavior. The same conclusion can be drawn in relation to educational qualifications, where the educational attainment in life may not play a significant role in who will behave irresponsibly in relation to financial management and who will not.

It is recommended to improve the income and other working conditions of SOE administrators, since income has been confirmed to be an important shift factor of financial management behavior. In the same vein, due to the role of family size, it is recommended to intensify efforts on population reduction. Finally, financial literacy should be given priority in checkmating irresponsible financial management behavior.

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