



Developments in Value Creation and Appropriation of Nigerian Non-financial Quoted Companies

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Authors' contributions

This study was carried out jointly by the two authors. Author FAA designed the study, collected data, carried out the analysis and wrote the first draft. Author TOA managed the literature review, proof read and amended the first draft. The authors also read and approved the final draft of the manuscript before submitting it for publication.

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ABSTRACT

This study examines the patterns and trends in the economic value created and appropriated by the Nigerian non-financial quoted companies over the years 1990-2012. The study uses panel data, collected from the audited annual financial statements of 68 out of 146 non-financial quoted companies in Nigeria. The study uses descriptive and inferential statistics such as percentages, measures of central tendency, graphs and trend analysis techniques to analyze the data. The study finds that employees captured the highest percentage (23.1 percent) of the economic value created by the companies, followed by government and shareholders in that order. In addition, the study finds significant positive relationship of time with value creation ($\beta=0.347$, $P=.067$), the value distributed to employees ($\beta=0.656$, $P<.001$) and community ($\beta=0.005$, $P<.001$) and the value retained ($\beta=0.588$, $P<.001$) by the companies. However, significant negative relationship of time with the value distributed to management executives ($\beta=-0.068$, $P<.001$) and non-significant relationship of time with the value distributed to shareholders ($\beta=-0.041$, $P=.62$), credit lenders ($\beta=0.016$, $P=.72$) and government ($\beta=0.006$, $P=.97$) were found. The study concludes that the companies' prospects for increased value creation can be realized by distributing more economic value to employees and government and by retaining and engaging economic value in value adding activities.

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1. INTRODUCTION

Though, hindered by competitive and uncertain economic environment, severe infrastructural deficiencies and macroeconomic factors, the Nigerian economy had been growing since 1990 and the contributions of the non-financial sectors cannot be overlooked. The sectors contributed 94.7, 95.0, 95.8, 96.06 and 96.2 percents to the Nigeria's economic growth in 1990, 1995 and 2000, 2005 and 2012, respectively [1].

The quoted companies operating in these sectors have also demonstrated their value creation potentials as much as (if not more than) those in other sectors and have been appropriating the value based on policies that are different from one company or period to the other. In addition, the companies have been playing a predominant role in providing income (profits, interests, dividends and salaries) to various stakeholder groups, generating tax revenue for the government and facilitating solutions to society's economic and social distress through corporate social responsibilities.

However, businesses are increasingly viewed as a major cause of social, environmental and economic problems and are widely perceived to be prospering at the expense of the broader community [2]. It is either the value created by businesses are relatively small and not capable of meeting the diverse stakeholders' needs and interests or that businesses are deliberately not distributing enough value; thereby retaining a larger proportion of the value created for business expansion and growth.

Besides, how businesses distribute value to different stakeholder groups had been a subject of debates in the literature. In fact, it had been empirically posited that value is distributed based on the bargaining powers of stakeholders [3,4] and that some stakeholders were at advantage of capturing value to themselves more than others [5]. The extent to which this is true of the stakeholders of the Nigerian non-financial quoted companies is however not empirically known.

Despite the growth experienced by the Nigerian economy over the years 1990-2012 and the myriad of theoretical and empirical studies on firm value, there is dearth of ample empirical evidence on the developments in the value

created and appropriated by the Nigerian non-financial quoted companies. This study is carried out to address this gap by examining the patterns and trends in the value created, value distributed to stakeholders and the value retained by the quoted companies over the years. Six stakeholder groups (on whose data can be collected) included in this study were management executives, shareholders, employees, credit lenders, government and the society or community where the companies are situated.

We used unbalanced panel data collected from the audited financial statements of 68 Nigerian non-financial quoted companies and descriptive statistical tools, graphs and trend analysis techniques were used to analyze the data. Since value is created by a network of interrelated individuals and constituencies called stakeholders (whose interests often conflict with one another or with a company's goal), it is clearly important to understand the implications of the investment and appropriation decisions of the managers of the Nigerian companies, over the years 1990-2012. The study will therefore help different stakeholder groups to realize the improvements (or otherwise) made in the value created and appropriated by the companies over the years.

Apart from the introductory section, the rest of this paper is divided into four sections. Section two presents theoretical and empirical review. Section three covers methodology for analysis and section four presents results and discussion while section five is devoted to summary and conclusion.

2. THEORETICAL AND EMPIRICAL REVIEW

Experts have advocated the need to change an economy from a situation where everybody is only motivated by maximizing shareholders' value to the one where every stakeholder will contribute and be compensated for the achievement of sustainable development of businesses. In fact, Booth [6] stressed that it is a normative statement to say that value is created for the shareholders and that the objective of a firm is to create shareholder value, rather than stakeholders' value. The author asserted further that the statement was based on the assumption that all markets (financial, labour and product)

are perfectly competitive, which was valid for small businesses in practically every country since they do not affect the functioning of other markets. The assumption is therefore very questionable for large and quoted companies whose impacts are very crucial to all markets and hence the functioning of an economy.

According to Mullins [7], a stakeholder is a person or a group of persons or institutions whose support is essential to a company and whose decision affects or is affected by the activities of the company. Stakeholders benefit directly or indirectly from the continuous existence of a company and their interests vary and exist at various levels of the company's environment. The interests can be formal or informal, explicit or implicit, institutional or personal, short-term or long-term in nature and can be conflicting with the company's goals or to each other [7]. It is therefore the responsibility of managers to mediate among these interests in such a way that value can be created sustainably.

A company's stakeholders include customers, who patronize a company's products or services; shareholders, who invest in the enterprise; management executives and employees, who contribute human efforts and the community, who accommodates the company. They also include government, who provide legal and regulatory framework and incentives; suppliers, who make raw materials or components and equipment available and credit lenders or institutions (banks and debenture holders), who provide short and long-term debt capital. The resources and efforts of these stakeholders are consciously transformed to create the value pie that becomes the subject of appropriation in order to meet their needs and interests [8].

The interests of customers include quality products or services at affordable prices. The shareholders expect economic rewards in form of dividends and capital appreciation and management executives and employees want to earn as much compensation, wages or salaries, allowances, bonuses, pension, insurance, training and other fringe benefits, as possible. Moreover, the interest of the community includes all contributions made to public institutions, charitable donations and sponsorships. Credit lenders expect to receive interests and other charges as and when due and the interest of government is the payment of taxes, levies and

rates. There is therefore the need for proportioning of interests in the process of distributing the value created by a firm [9].

The classical theory of firm recognizes only two stakeholders: producers and consumers who appropriate the value created by a firm. This view also assumes that employees, including top management, are merely factors of production that are subject to the forces of labour market. They are paid market wages and salaries and hence have no power to extract any of the economic profits generated by the firm. However, the resource based view (RBV) theory of firm envisaged broader stakeholders and relaxes these assumptions. Based on this theory, the bargaining powers of the various stakeholders were shown to be crucial in determining the value distributed to them [3,10,4,5].

Castanias and Helfat [3] described how employees and managers were able to appropriate part of the value created as a result of the collective efforts of a firm's stakeholders. Also, Lippman and Rumelt [5] posited that the bargaining power of the employees and other stakeholders gives them the ability to capture the value created by a company beyond what they would enjoy under fully-competitive market forces. This is one of the reasons why, in recent times, top management have been increasingly capturing value more than in the past, a trend that has been extensively researched into by Murphy [11], Bebchuk and Grinstein [12] and Kanagaretnam, Lobo and Mohammad [13]. The RBV therefore provides a framework that helps to understand that stakeholders can appropriate some of the economic value attributable to the resources they have.

A firm creates its products from the combination of resources contributed by stakeholders, which is subject to societal pressures from other members of the community and competition. Though, the stakeholders have some claims in return for their resources, these claims have to be traded off based on their bargaining powers since the firm operates in a competitive business environment [4]. It can therefore be reasonably concluded that internal stakeholders such as the top management, employees and shareholders are at advantage of capturing more value than other stakeholders, though this can be limited by the dictates of the markets (capital, labour and commodity) in which a firm is operating.

Although, not directly visible in a company's financial statements, the returns to other stakeholders of the company are also important as much as (if not more than) the returns to shareholders. When a company operates in a competitive environment where finance is scarcely available, where skilled employees needed to be highly compensated for, where strategic suppliers are few and where quality and close substitutes for a company's products or services are available in the commodity market, it requires that the interests of these stakeholders should be adequately taken care of [5]. Focusing equally on the returns to other stakeholders will therefore enable a firm to detect when it is engaging in value destruction or when value is transferred from one stakeholders group to the other rather than value being created.

Strebel and Lu [14] stressed that there is a cultural change created by switching from earnings to value management culture, which has critical influence on management compensation plan and which ensures that compensation is tied to value creation of firms. The returns to other stakeholders are captured in how the value created by a firm is appropriated, that is, how the value is distributed to the different stakeholders of a firm and retained for reinvestment. The crux of the matter, according to the authors is that modern businesses separate ownership and control and managerial compensation and welfare may tempt managers to mismanage corporate resources, which can result in sub-optimality since the managers are not immediately answerable to the owners.

The authors further posited that the fact that a company's shareholders receive nominal returns on investments (dividends and capital gains) more than shareholders in another company does not mean that the shareholders of the earlier company loose returns because the company destroyed or did not create any economic value (for example, due to poor operational practices) during a period. Much of the value created by the company might have been appropriated to employees in form of higher wages, salaries and other fringe benefits or to customers in form of lower prices. Also, top management might have appropriated a larger slice of the value pie to themselves.

The concerns of stakeholder approach to performance management define the social context within which strategic management

occurs [15]. The strategic approach to performance management also asserts how value should be appropriated by a firm. Sometimes, stakeholders' concerns seem to have conflicting relationships with each other in which case, the challenge to top management is to find creative approaches to resolving the conflicts. In fact, some empirical evidences have suggested that this is indeed possible. For example, satisfying employees also appears to contribute to satisfying shareholders and investors [16-18] and other stakeholders of the company. This therefore indicates that there is likely to be a kind of interaction in the patterns and behaviours of the value distributed to a firm's stakeholders.

3. METHODOLOGY

This study is carried out to examine the behavioural patterns and trends typical of the value created, the value distributed to six stakeholder groups and the value retained by the Nigerian non-financial quoted companies over the years 1990-2012. Secondary data, sourced from the audited annual financial statements of 68 out of 146 non-financial quoted companies in Nigeria purposively selected based on data availability, were used for analysis.

Value creation was measured by Economic Value Added (EVA), that is, the difference between what customers actually pay for goods or services and the cost of materials or bought-in components while value appropriation was measured using value distribution to six stakeholder groups (VAD) and the value retained (depreciation and retained profit) by a firm during a period (RVA). In addition, VAD was decomposed into the economic rewards given to three internal (IVAD) and three external (EVAD) stakeholders.

The internal stakeholders and the economic value distributed to them are management executives - executives compensation (MGT), shareholders - dividends (DIV) and employees - wages, salaries and other emoluments (WAG) while the external stakeholders and their rewards are government - taxes and levies (TAX), credit lenders - interests (INT) paid and the society/community - expenditure on corporate social responsibilities (CSR) projects. To control for unobservable firm heterogeneity, panel, rather than time series or cross sectional data were used. Data for all the variables were also

converted from nominal to real values using the Consumer Price Index prevailing in each of the years covered by this study.

Descriptive statistics such as percentages, graphs and measures of central tendency (arithmetic mean, standard deviation and skewness), computed to describe values and features that are typical of the variables, were used to analyze the data. Also, trend analysis was carried out to ascertain the rate of changes (increase or decrease) over time, using the following linear trend equation model:

$$Y_{it} = \alpha + \beta tp_{it} + \varepsilon_{it} \quad (1)$$

where, Y = vector of the variables of interest (i.e. EVA, IVAD, EVAD, MGT, WAG, DIV, INT, TAX, CSR, RVA), α is the intercept term or constant, β = slope or coefficient of the trend variable, tp = trend variable, t = company index, i = period of the observation, and ε = error term.

4. RESULTS AND DISCUSSION

The descriptive statistics of the value created and appropriated by the companies are as presented in Table 1, where the mean value for the value created (EVA) was ₦59.89 million in absolute real term while the mean value of ₦14.04 million (or 23.1 percent) for the value distributed to employees was found to be the highest. This was followed in rank by the mean value captured by government (₦9.925 million), ordinary shareholders (₦6.956 million), credit lenders (₦5.782 million), management executives (₦0.515 million) and community (₦0.071 million), in that order. Can we then say that ordinary shareholders' value was maximized by the non-financial quoted companies in Nigeria? Or, that employees were in a better position to capture a higher percentage of the value created by the companies during the periods?

Also, a higher mean value of ₦21.347 million for the value distributed to internal stakeholders such as management executives, employees and ordinary shareholders than that of external stakeholders (₦15.750 million) was detected. This showed that internal stakeholders (specifically, employees) were rewarded more than their external counterparts during the periods under consideration. Could this then be taken to mean that the bargaining powers of the internal stakeholders were stronger than that of their external counterparts?

In addition, highest deviation around the mean ($\delta=471.444$) was detected for EVA while that of the value distributed to government ($\delta=39.749$) was the highest among the stakeholder groups. This means that the spread of the data series was very high more than the others. Both the mean value (₦37.097 million) and error terms ($\delta= 82.678$) for the value distributed (VAD) to the internal and external stakeholders were greater than the value retained (RVA) by the companies (₦12.375 million, $\delta=36.018$). This suggested that more values were distributed to stakeholders than retained in absolute real term by the companies during the periods.

Moreover, all the variables were positively skewed, which indicated that higher values, in real term, which were created, distributed and retained, lied outside the region where the mean values resided. Kurtosis statistics also indicated that the series were peaked (i.e. leptokurtic), which means that surprises were experienced in the value created and appropriated by most of the companies in very few years. The data for Jarque-Bera (and p-values) also suggested that the series of the value created and appropriated over the years were not normally distributed because the statistics suggested that the null hypothesis of normality in distribution should be rejected.

The range (i.e. the difference between minimum and maximum values) of each of the variables suggested that it is important to seek for how the variables changed over the years and their growth rates. This was achieved by using average values of the variables over the years and results were presented in tables and graphs. The data in Table 2 showed the real value created and appropriated in four selected years 1990, 1998, 2005 and 2012, together with their growth rates. While there was reduction in the value created (EVA) in 1998 when compared to 1990 results, the value created in 2005 and 2012 progressively increased.

Except for the value captured by employees (WAG) that increased by ₦109.28 million (or 16.3 percent) from 1990 to 1998, all other variables, especially the value distributed to other stakeholder groups decreased. However, in 2006, there were progressive increases in almost all the variables from the results obtained in 1998 except for the drastic reduction in the real value captured by management executives (MGT) from ₦61.96 million in 1998 to ₦19.47 million in 2006.

Apart from the reduction in the value distributed to shareholders and the slight reduction in the value distributed to internal stakeholders, the real value created, distributed to other stakeholder groups and the value retained by the companies appreciated during 2012.

Table 1. Descriptive statistics of value creation and appropriation (1990-2012)

Variable	Mean (N'm)	Median (N'm)	Max. (N'm)	Min. (N'm)	Std. Dev.	Skew-Ness	Kurtosis	Jarque-Bera
EVA	59.885	9.8552	18111.59	-111.91	471.44	36.65	1402.26	1.26E+08
VAD	37.097	8.6225	1610.745	0.041	82.68	7.54	103.80	664332.5
RVA	12.375	2.2150	428.829	-619.414	36.02	0.02	91.87	505136.0
IVAD	21.347	4.6126	668.048	0.031	44.60	5.47	50.02	149053.0
EVAD	15.750	3.6533	942.697	-7.387	43.74	9.47	151.58	1434814.0
MGT (5)	0.515	0.1023	87.121	7.4E-05	4.44	16.72	293.37	5464068.0
WAG (1)	14.040	3.6211	371.645	0.017	29.82	5.91	54.71	179922.7
DIV (3)	6.956	0.4119	667.656	0.000	24.89	14.52	339.35	7289519.0
INT (4)	5.782	1.5013	148.312	0.000	12.18	5.21	41.63	102409.7
TAX (2)	9.925	0.7857	942.415	-5.181	39.75	11.90	221.24	3082349.0
CSR (6)	0.071	0.0022	6.674	0.000	0.285	10.36	171.56	1844679.0

Source: secondary data, 2014

Note: The figures in parenthesis indicated the ranking of the six stakeholder groups in terms of the mean real economic value distributed to them

Table 2. Value creation and appropriation (N'million)

	1990	1998	2005	2012	Growth (%)		
					1998	2005	2012
Consumer Price Index (Source: Statistical Bulletin, 2012)	2.64	28.28	66.87	135.48			
Real Value Creation (EVA)	2,454.19	1,807.30	3,195.03	4,481.30	-26.4	76.8	40.3
Total Value Captured by stakeholders (VAD)	2,032.34	1,456.99	2,438.23	2,762.08	-28.3	67.4	13.3
Value captured by internal stakeholders (IVAD)	1,120.25	990.62	1,673.05	1,636.08	-11.6	68.9	-2.20
Value captured by external stakeholders (EVAD)	913.84	504.64	834.43	1,178.62	-44.8	65.5	41.3
Management Executives compensation (MGT)	227.46	61.96	19.47	26.76	-72.7	-69.4	37.4
Dividends to shareholders (DIV)	339.89	205.48	522.86	244.82	-39.4	153.9	-53.2
Wages, Salaries and Benefits (WAG)	552.90	643.18	1,130.72	1,364.50	16.3	89.9	20.7
Value to credit lenders (INT)	441.02	287.26	337.41	527.84	-34.9	17.4	56.7
Taxes and Levies to Government (TAX)	470.24	214.87	489.72	636.82	-54.3	127.9	30.0
Value captured by the society (CSR)	2.93	2.51	7.30	13.97	-14.3	190.8	91.4
Value retained by the companies (RVA)	464.30	414.72	598.75	1,548.74	-10.6	44.3	158.6

Source: secondary data, 2014

Figs. 1 to 12 showed the behavioural patterns and changing contours in the average of the value created, the value distributed to six stakeholder groups and the value retained by the Nigerian non-financial quoted companies over the years. The figures therefore showed the extent to which each stakeholder group had been capturing part of the value created by the companies over the years under consideration. The contours and behavioural patterns of the variables showed both positive and negative growth rates and the summary of the number of times each variable demonstrated these patterns of growth is as presented in Table 3.

Positive growth rate indicated increase in value created, distributed or retained during a year

when compared to the immediate previous year's performance while negative growth indicated lesser value created or appropriated. The graphs showed both positive and negative growth in the average value created, distributed and retained by the companies together with the outliers that occurred. More positive than negative growth rates were experienced for CSR, MGT, RVA, VAD and WAG while more negative than positive growth rates were experienced for other variables during the periods. We then deduced that greater proportions of the value created by the companies during the periods were captured by internal stakeholders more than their external counterparts.

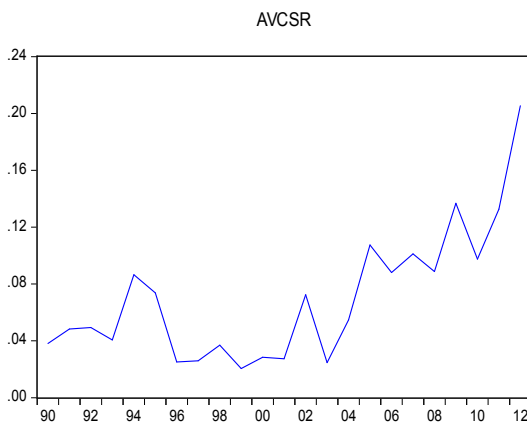


Fig. 1. Value distributed to community (CSR)

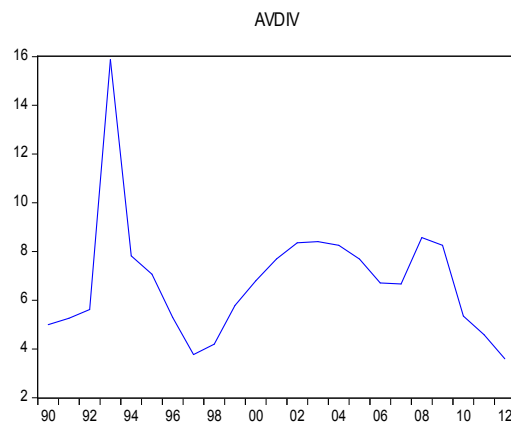


Fig. 2. Dividend to shareholders (DIV)

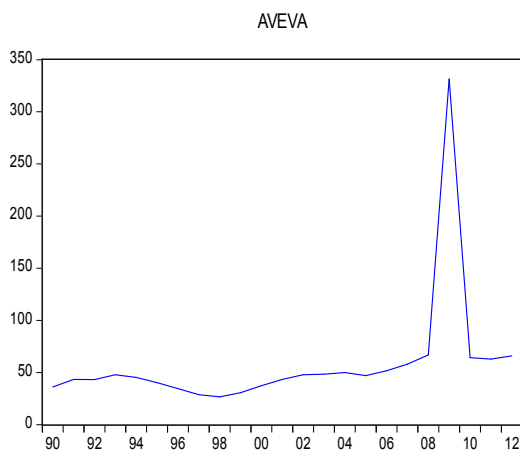


Fig. 3. Economic value added (EVA)

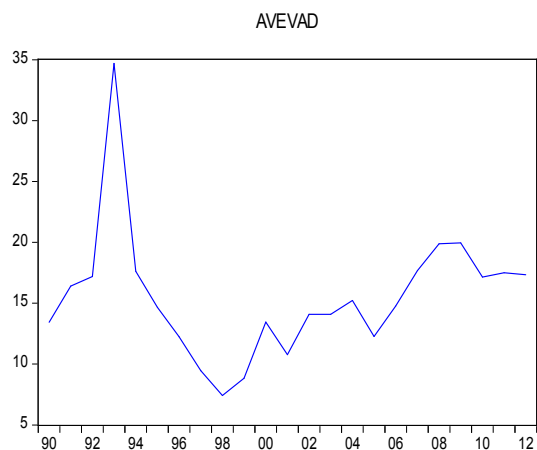


Fig. 4. Value to external stakeholders (EVAD)

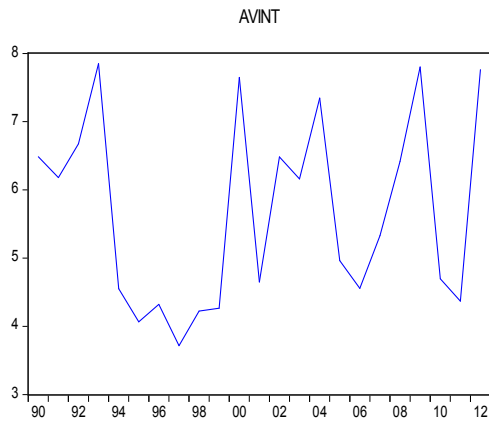


Fig. 5. Interests to credit lenders (INT)

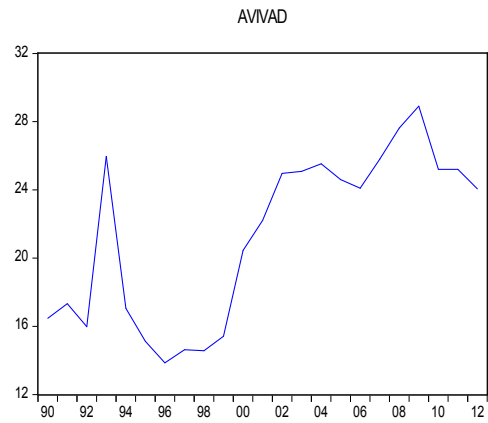


Fig. 6. Value to internal stakeholders (IVAD)

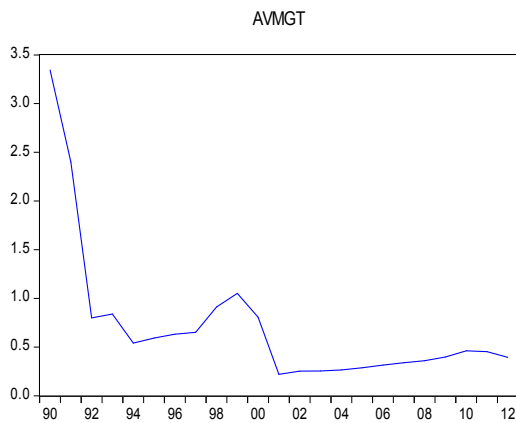


Fig. 7. Value to top management (MGT)

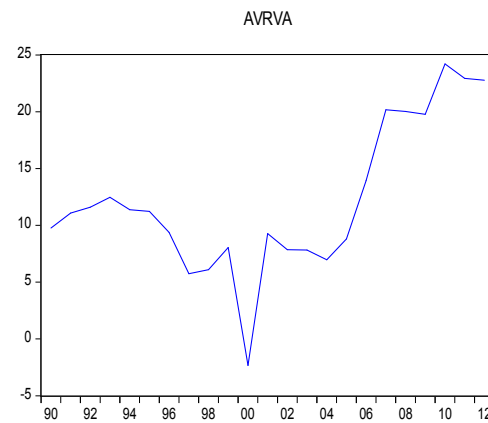


Fig. 8. Value retained by companies (RVA)

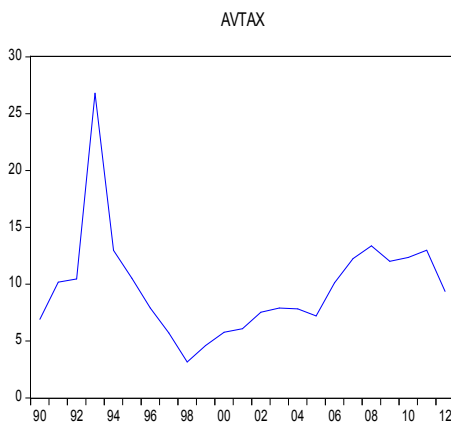


Fig. 9. Value to government (TAX)

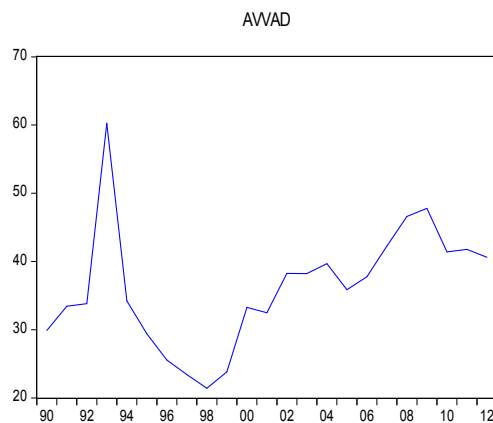


Fig. 10. Value to stakeholders (VAD)

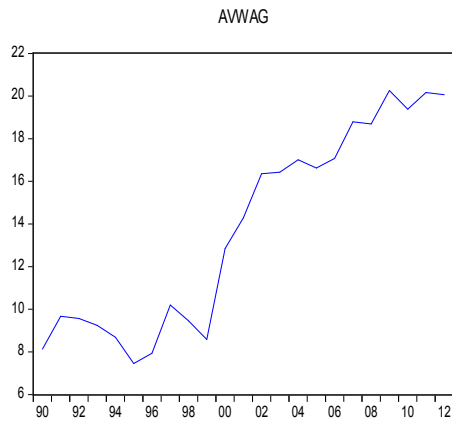


Fig. 11. Value to employees (WAG)

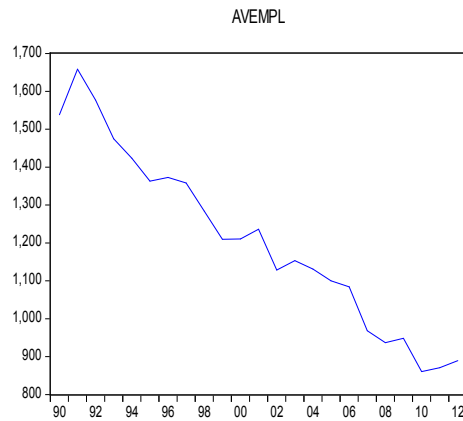


Fig. 12. Average number of employees

Source: secondary data, 2014

Table 3. Summary of growth rates and outliers in variables (%)

Variable	No. of positive growth rates	No. of negative growth rates	Outliers	
			Number	Year
CSR	13	9	1	2012
DIV	10	12	1	1993
EVA	11	11	1	2009
EVAD	10	12	1	1993
INT	10	12	5	1993,2000,2004, 2009 and 2012
IVAD	11	11	1	1993
MGT	15	8	1	1990
RVA	12	10	1	2000
TAX	11	11	1	1993
VAD	12	10	1	1993
WAG	12	10	-	-

Source: secondary data, 2014

One of the surprising findings in this study was the fact that employees ranked as the first stakeholder group for the non-financial quoted companies in Nigeria. They captured an average real economic value of ₦14.04 million (23.1 per cent of the average economic value created) during the period. Besides, despite the fact that the average real value captured by the group had been continuously on the increase since 1999 (see Fig. 11), the average number of employees engaged by the companies was steadily on the opposite side i.e. downward trend, decreasing over the years (see Fig. 12). This means that most of the companies did not engage employees at later dates as much as at earlier dates, which may be due to improvement in production technology and hence reduction in the use of labour-intensive methods.

In addition, there was a remarkable improvement in the real average economic value created in

2009 by the companies which led to higher value being captured by employees, management executives and the community. The increase in the average number of employees in the companies might have contributed to the higher economic value distributed as wages, salaries and other emoluments. There was also increase in the value captured by credit lenders, which indicated that more debt financing was employed by most of the companies during the year. These however reduced the value distributed to government as taxes and levies and to shareholders as dividends and the value retained by the companies.

Outliers, which are the observations that are influential in a data series, (that is, the observations whose residuals are far from the regression line), were experienced in some of the years for most of the variables. Generally, there were also reductions in average values (that is,

negative growth) in 2012 except in few cases where there was a marginal increase in EVA from ₦62.867 million in 2011 to ₦65.867 million in 2012 and in CSR from an average of ₦0.133 million in 2011 to ₦0.205 million in 2012, in real term.

Outliers were experienced in most of the variables especially in 1993 when there were sudden increase in the value distributed to the ordinary shareholders (Fig. 2), EVAD (Fig. 4), INT (Fig. 5), IVAD (Fig. 6), TAX (Fig. 9) and VAD (Fig. 10) despite the small increase in EVA (Fig. 3) during the year. In fact, outliers were experienced five times by INT (in 1993, 2000, 2004, 2009 and 2012). This showed the extent of usage and the number of times debt financing was given much prominence by the companies and hence interest payment during these years.

Furthermore, trend equation was estimated to establish the relationships of all variables with time such that future values can be predicted. Summary of the results of the trend analysis, using the trend equation model, specified in this study, are as presented in Table 4. The data in the table showed that not all the variables were trendy over time. There was significant and positive relationship of EVA ($\beta=0.347$, $P=.067$), VAD ($\beta=0.527$, $P=.057$), RVA ($\beta=0.588$, $P<.001$), IVAD ($\beta= 0.548$, $P<.001$), MGT ($\beta=-0.068$, $P<.001$), WAG ($\beta=0.656$, $P<.001$) and CSR ($\beta=0.005$, $P<.001$) with time. However, the results for EVAD ($\beta=0.028$, $P=.875$), DIV ($\beta=-0.041$, $P=.63$), INT ($\beta=0.016$, $P=.72$) and TAX ($\beta=0.006$, $P=.97$) indicated non-significant relationships. These results therefore showed the extent to which time can be used to forecast future values for the variables and the level of reliability of such forecasts.

The data in the table further showed that about 35 per cent of the average economic value added (EVA) generated by the companies during the periods were due to time while the balance of 65 per cent was associated with other factors not included in the equation model. Also, about 53 and 59 per cents of the value distributed to the six stakeholders and the value retained, respectively by the companies were associated with time. It is therefore likely that the number of years the companies have been in operations will have significant and positive effect on the value created and appropriated by the companies.

While about 55 per cent of the average value distributed to internal stakeholders (IVAD) was

affected by time, less than 3 per cent of the value distributed to external stakeholders (EVAD) was affected by time. Apart from the value distributed to employees as wages, salaries and other emoluments, which was significantly affected by time up to about 66 per cent, the value distributed to the five other individual stakeholder groups were negligibly affected by time, with the highest among them being 6.7 per cent for management executives (MGT).

These results indicated a significant change in the behaviours of the companies towards how they economically rewarded employees, during the periods, which can be as a result of increased number of employees engaged, or increased remuneration rate, or both. However, since there was a downward slide in the average number of employees of the companies over the years (see Fig. 12), increased remuneration over time was the major factor.

While time positively affected most of the variables under consideration, there was a negative effect of time on the average economic value distributed to management executives (MGT) and the ordinary shareholders (DIV). The negative relationship implied that the older the age of the companies, the lesser the value distributed to these stakeholder groups. It also meant that the higher the number of years a company had been in business, the lower the value captured by the stakeholders in real term. Even if in nominal term, the value captured at a later year is higher than the amount captured in later year(s) because the higher value captured at the later year(s) was due to the effect of inflation and not because the companies actually distributed more value, in real term, to the stakeholders. This result showed that it is likely that lower value, in real absolute term, will be captured by the stakeholders in the nearest future, most importantly management executives whose result was very significant at less than one percent.

The results further indicated that time did not significantly affect the economic value (EVAD) captured by most of the external stakeholders (i.e. credit lenders and government) with the exception of the community (CSR) whose value was significantly and positively affected by time. Hence, time cannot be used to predict, with certainty the total value that can be captured by the external stakeholders in the nearest future. The positive result for CSR implied that the companies' behaviours over time, with regards to

Table 4. Summary of trend analysis results (1990-2012)

Variable	Constant		Coefficient		Error term
	Statistic	p-value	Statistic	p-value	
EVA	17.09866	0.4947	0.347240***	0.0665	5.708026
VAD	29.81367*	0.0000	0.526901***	0.0568	8.313895
RVA	5.073099**	0.0414	0.588125*	0.0024	5.418502
IVAD	14.73085*	0.0000	0.548247*	0.0000	3.404447
EVAD	15.15443*	0.0000	0.027446	0.8752	5.490310
MGT	1.531633*	0.0000	-0.067605*	0.0014	0.595094
WAG	5.903674*	0.0000	0.656310*	0.0000	1.649126
DIV	7.295343*	0.0000	-0.040458	0.6226	2.576590
INT	5.478684*	0.0000	0.016351	0.7186	1.423980
TAX	9.666032*	0.0001	0.006243	0.9676	4.830475
CSR	0.012966	0.3838	0.004756*	0.0002	0.033822

Source: secondary data, 2014

Note: *, ** and *** denote 1, 5 and 10 percent levels of significance, respectively

donations and development projects, changed over time, especially of recent when CSR is being considered by corporate bodies and this was why the impact of time on CSR was very small ($\beta=0.005$, $p<0.01$), though significant.

5. SUMMARY AND CONCLUSION

This study examines the patterns and trends in the value created and appropriated by the non-financial quoted companies in Nigeria over the years 1990-2012. The study used unbalanced panel data collected on EVA and the value distributed to six stakeholder groups (management executives, shareholders, employees, credit lenders, government and community) on whom data were readily available in the audited annual financial statements and the value retained by 68 out of 146 non-financial companies listed on the Nigerian Stock Exchange. The data was converted from nominal to real values using the Consumer Price Index prevailing in each of the years. We used descriptive statistics such as measures of central tendency, percentages, graphs and trend analysis techniques to analyze the data.

Descriptive statistics provided evidence that suggested that employees captured the highest portion of the value created over the years, followed by government and shareholders in that order. This also suggested that the three stakeholder groups were at advantage of capturing a higher percentage of the economic value created by the companies as was posited by Lippman and Rumelt [5]. A higher mean value was also distributed to internal stakeholders than external stakeholders, which was taken to mean that internal stakeholders had stronger

bargaining powers than their external counterpart as was posited by Castanias and Helfat [3] and Bowman and Ambrosini [4] that value is distributed based on the bargaining powers of stakeholders.

Using the average values of the variables for graphs, both positive and negative growth rates were detected from years to years. Outliers, which were the observations whose residues were far from the regression line that occurred during the periods for each of the variables, were also detected and the number of times they appeared on each of the graphs was presented in a table. Sudden increase in EVA (in 2009); the value captured by community (in 2012), shareholders (in 1993), credit lenders (in 1993), management executives (in 1990) and government (in 1993) and in RVA (in 2000) was discovered.

In addition, the results of the trend analysis showed significant relationship of time with EVA, RVA and the value distributed to management executives (MGT), employees (WAG) and community (CSR); with highest impact of time on WAG; followed by RVA. While time had significant positive impact on EVA, RVA and WAG, the value distributed to shareholders and management executives was negatively affected by time. This indicated that higher value, in real term, was created (EVA), distributed to employees and retained by the companies in later years than earlier years and higher value, in real term, was distributed to shareholders and management executives in earlier years than later years.

The study concluded that the value created and appropriated by the Nigerian non-financial

quoted companies significantly trended over time with improvements and that the companies can realize their prospects for increased value creation and appropriation by distributing more value to stakeholders such as employees and government and by retaining and engaging a high proportion of economic value created to expand assets base and in value adding economic activities.

The major contributions from the findings of this study included the fact that the increased economic value created, the increased economic value distributed to four stakeholder groups (employees, credit lenders, government and the society) and the value retained by the non-financial quoted companies in Nigeria over the years 1990-2012 were not due mainly to inflation. Having deflated the economic values using the prevailing inflation rates during the years under review, improvements were still detected.

Also, a higher proportion of the real economic value created by the companies over the period was distributed to internal stakeholders group, specifically employees, indicating that internal stakeholders had stronger bargaining power than their external counterparts, as posited by Bowman and Ambrosini [4] and Lippman and Rumelt [5].

In addition, the real economic values distributed to management executives in earlier years of the period were higher than in later years, which was in contrast to the findings of Bebchuk and Grinstein [1] and Kanagaretnam, Lobo and Mohammad [13] that management executives are capturing higher economic values in recent times than in the past.

Future research could still be carried out on the factors that accounted for the improvements in the value created and appropriated by the companies over the years. These may include factors such as firm-specific characteristics (employees, age, assets, growth and retention policy) and macroeconomic variables (inflation rate, interest rate and economic growth). In terms of methodology, correlation, ordinary least square (OLS) regression and dynamic panel data techniques could be considered.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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