# RESEARCH ARTICLE

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# Social Accounting Disclosure and Organizational Performance: Evidence from Manufacturing Companies in Nigeria



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Abstract: This research investigated the effect of social responsibility disclosure on organizational performance. The study utilized secondary data which were collected from the yearly accounts and reports of ten listed manufacturing firms in Nigeria. The explained variable is performance, and it is represented by return on equity, while the independent variables are three items from the social responsibility disclosure, a subcategory of social disclosure. These items are local communities' responsibility disclosure, corruption disclosure, and publicity policy disclosure. Pooled ordinary least square (OLS) model was utilized in analyzing the hypotheses of the study. Meanwhile, fixed and random effect models were used as a robustness check for the results obtained from the Pooled OLS. The study revealed that local communities' responsibility disclosure and publicity policy disclosure are positively related with performance, while corruption disclosure and performance are negatively related. In the light of this, it is suggested that companies should be consistent in their implementation of corporate social responsibility disclosure, even if there is no effect on the firm's performance now. This is necessary since it will have a positive effect in the long run.

Keywords: accounting disclosure, manufacturing companies, Nigeria community, organizational performance, social responsibility

# 1. Introduction

When an organization announces its corporate social responsibility (CSR) initiatives, management sends a message to all the stakeholders of the company. In the light of this, a signal may be seen by investors as a hint that the company will succeed in exceeding their expectations. Environmental and social disclosure has a variety of positive consequences on a company's performance. It boosts stakeholders' confidence, creates fulfilling client interactions, attracts and keeps workers, and reduces business risk [1, 2]. According to Etikan [3], a company can benefit from engaging in social and environmental projects by increasing stakeholders' satisfaction and enhancing its reputation, both of which can improve financial performance. Disclosure of nonfinancial and financial information of a firm promotes sustainable development. Considering the signaling theory, a company that gives comprehensive information to all the stakeholders of the company is likely to grow more than others who keep back some vital information from the public. In the study of Carlini and Grace [4], it was supported that the branding programs of employers can be successfully implemented when there is efficient signaling in the same vein boosting the performance of the firm.

The publication of the company's CSR further strengthens the association between signaling with corporate performance in the

financial report. This action sends a favorable message to investors from the company. A company's disclosure will provide investors with further information. As more information becomes available to investors, their trust in the company will increase. If investors have a high degree of faith in a firm, the stock price will certainly rise. As a result, the company's level of transparency will influence the volatility of stock prices, which in turn will affect the volume of transactions. It sums up that corporate disclosure matters in the performance of an organization as it is ever evident from the study of Pfajfar et al. [5] that social responsibility of corporation disclosure is helpful in informing stakeholders that a company has performed successfully, which eventually increases investors' interest in the firm as seen via the rise in the firm's value and price of its stock. Stock price swings that tend to rise will almost surely have an impact on the company's stock return.

Also, Dura et al. [6] discovered that social disclosure items have positive influence on firm performance. However, Kurniasari and Warastuti [7] examined the correlation among firm profitability, firm value, and CSR disclosure. They revealed that disclosure on CSR (environment and community services) and value added are not significantly connected. In the same vein, the study of Kristyanto and Sanjaya [8] showed that disclosure on social responsibility does not influence firm's worth directly.

This research therefore seeks to contribute to the current discussion on how standard disclosure might boost a company's performance. Earlier cited studies explored the connection between firm's performance and corporate disclosure. However,

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most of these studies looked at corporate disclosure holistically without giving preference to the subcategories of CSR disclosures (i.e., the basics of economic, environmental, and social disclosures), especially in the native Nigeria. According to the Global Reporting Initiative [9], the social disclosure subcategories are the specific accounting disclosures which mostly impact humanity; it therefore needs to be investigated in relation to the performance of the domiciling corporate entities. Some scholars who researched CSR also threw up further concern as there is a sharp scholarly disagreement in their various findings. The ranging issue is that there is no consensus of opinion, and based on this shortcoming, this study seeks to contribute to existing knowledge by analyzing how the social accounting elements of CSR disclosures influence firm's performance using some selected manufacturing companies in Nigeria. The primary objective of this study is to assess the effect of social accounting disclosure on organizational performance. Nonetheless, the specific objectives are stated below.

- 1) To evaluate the relationship between local communities' responsibility disclosure of firms and organizational performance.
- 2) To examine whether corruption disclosure of a firm and organizational performance are related.
- 3) To assess the extent to which public policy disclosure of firms affect organizational performance.

To cover the identified gap, the hypotheses for this investigation are expressed in the null form, as described below:

H01: The relationship between local communities' responsibility disclosure of firms and organizational performance is negative. H02: Corruption disclosure of firm and organizational performance are not positively related.

H03: The extent to which public policy disclosure of firms affect organizational performance is not strong.

According to Breus et al. [10], there are three aspects of CSR, and they are Economic, Environmental, and Social. They argued that

all disclosures made in respect of CSR in the company's financial statements must fall under any of these 3 (three) categories.

Institutional reputation becomes pivotal when publishing a firm's annual performance and that is why performance reporting is a statutory and moderating role of not just the CEO but the board of Directors [11]. As much as there is the need for a firm to be in business, there is much more need to render the stewardship of what they have done and how it has impacted the community where they operate from. Periodically, firms have to be systematically reviewed on a business case basis in relation to how CSR influences their performances [12]. The performance indicator to adopt, however, depends on the motive and direction of the review. Among the popular performance indicators are return on equity (ROE), return on assets (ROA), return on capital employed (ROCE), earnings per share, etc.

According to Fatima and Elbanna [13], disclosure on social responsibility is the means of communicating the organization's environmental and social activities to a specific group of interested parties and the community. CSR disclosure has been incorporated into corporate policy and practice to sustain a connection with their investors and meet their demands and wants. Based on the Global Reporting Initiative [9] recommendations, organizations' management is required to disclose three standard disclosures. The three types of disclosure include social, economic, and environmental disclosures. Labor practices/decent work, internal social/human rights disclosure, CSR disclosure, and disclosure on social product responsibility are the four subcategories of social disclosure. However, the independent variables for this study are selected from the social responsibility subcategory, and the chosen items are local communities, public policy, and anti-corruption disclosures. Table 1 [9, 10] shows the comprehensive number of items in the social disclosure subcategory which is been investigated.

The financial performance of the company indicates the company's capacity to manage its financial resources [14].

Table 1
Firm's standard disclosure

			. ,					
	Economic disclosure Environmental disclosure							
Categories								
of disclosure		Social disc						
	Social disclosure							
	Corporate social							
	Labor practices/Decent	responsibility	Internal social human	Social product				
Sub-categories	work disclosure	(Society based)	right disclosure	responsibility				
Aspects of	a) Employment	a) Local Communities	a) Investment and procurement	a) Product and Service				
Disclosure	b) Labor/Management	b) Public Policy	b) Non-discrimination	Labeling				
	Relations	c) Anti-corruption	c) Forced or Compulsory Labor	b) Customer Health				
	c) Occupational Health and	d) Supplier Assessment for	d) Freedom of Association and	and Safety				
	Safety	Impacts on Society	Collective Bargaining	c) Communications				
	d) Training and Education	e) Compliance	e) Child Labor	d) Marketing				
	e) Equal Remuneration for	f) Grievance Mechanisms for	f) Assessment	e) Compliance				
	Men and Women	Impacts on Society	g) Indigenous Rights	f) Customer Privacy				
	f) Diversity and Equal							
	Opportunity							
	g) Supplier Assessment for							
	Labor Practices							
	h) Labor Practices							
	i) Grievance Mechanisms							

Financial statement analysis allows investors to see and evaluate the corporation's financial performance, and a firm's financial analysis is performed by determining financial performance ratios. According to Nengsih [15], these ratios indicate a company's level of efficiency and effectiveness [15]. One of the share price-integrated measures usually employed by investors to evaluate a corporation is the ROE and same will be adopted as the dependent variable of this study. ROE is the unit of income earned on a company's capital structure and the greater the return on an investment, the better the company's financial value [16].

Amosun et al. [17] researched on the social and environmental accounting and performance of banks quoted in Nigeria using ROCE. Their data were measured through the Global Reporting Initiative [9], and the analysis was done using a regression model on a 10-year period of data. Their findings revealed significant positive relationships between the investigated variables, indicating that social and environmental accounting have significant impact on performance of quoted banks in Nigeria. The scope of their research was, however, limited to the banking industry.

Khandelwal and Chaturvedi [18] investigated the environmental accounting disclosures and financial performance of India enterprises. The study's multidimensional test reveals a substantial relationship between environmental factors as well as ROE and ROA. According to these researchers, Indian enterprises must stay up with the regulatory framework established by the government and other regulatory agencies to enhance performance. The study was restricted to India and may not be readily adapted to the typical Nigerian environment.

Emeka-Nwokeji and Osisioma [19] used company-specific disclosures to conduct an empirical study on how all-inclusive sustainability disclosures, as well as its disaggregated components such as social, environment, and governance influence the market value of Nigerian enterprises. The authors asserted that all-inclusive sustainability disclosures have a significant and direct influence on business value. Furthermore, it was discovered that disclosure on environmental sustainability has a direct and substantial effect on a company's market value. This study however appears like a "one-cap-fits-all" and specifically failed to address local community's responsibility disclosure of firms.

de and Silva [20] explored the relationship between sustainability reporting and the financial performance of Sri Lanka's financial industry. The researcher carried out a content analysis. de and Silva [20] found that sustainability disclosures had no influence on the financial performance of Sri Lankan companies.

Wasara and Ganda [21] examined the association between organizational sustainability disclosures and financial performance of listed mining firms in Johannesburg using a content analysis technique. They identified a favorable correlation between social disclosures and the return on investment of corporations. Environmental disclosure has a positive and significant effect on financial performance, according to Haninun et al. [22].

Sopian and Mulya [23] introduced a fixed effect model to analyze the influence of CSR disclosure on value of the firms in Indonesia. The authors used secondary data that was obtained from the financial statement of sixty-seven firms. The data period was from 2014 to 2016. Panel least square estimation technique was adopted, and the result shows that disclosure on CSR has no positive and substantial influence on the performance of the firms.

Li et al. [24] assessed the influence of environmental, social, and corporate governance disclosure on business value in United Kingdom. The researchers discovered that environmental, social, and corporate governance openness had a considerable positive influence on the value of a company. In addition, the authors observed that a more powerful CEO improves the value-enhancing effect of environmental, social, and corporate governance disclosure.

Setiadi et al. [25] analyzed the effect of board independence and environmental disclosure on the value of Indonesian corporations. This study employs the Indonesian Environmental Reporting Index and Tobin's Q to measure environmental disclosure and corporate value. Using 134 firms from 2009 to 2013, the findings demonstrate that environmental disclosure has a positive and substantial effect on company value.

These literatures have been quite expansive on accounting disclosure and company performance; however, they have largely ignored how corruption and (or) financial misappropriation influences organizational performance and how the disclosure of social responsibility in the local communities affects corporate performance.

Ross [26] is credited with originating the term "signaling theory", which holds that if managers have insider knowledge, their choice of capital structure will reveal that knowledge to the market. Information asymmetry must be addressed if a robust signaling environment, with efficient and effective signal flow between the company and its stakeholders, is to be created [27]. Hence, if a firm wants to create a strong signaling environment, it needs to know how important signal precedence is, the best way to deal with negative signals, and the role of countersignals (feedback) in the signaling process [27].

There must be effective and well-organized signaling between the management and other stakeholders of the corporation, as this can influence the establishment's performance in the long run. The disclosure of the firm's social responsibility and proper stakeholder prospects, like a sign of the type of positive news provided to the public by the management, will inform the public that the organization has promising prospects and assure the formation of sustainable development [23]. In an effort to boost the company's worth and reputation, the business discloses its CSR activities [28]. This theory thus suitably justifies the basis for which social accounting disclosure is being measured in association with organizational performance.

The Freeman [29] stakeholder's theory was implied by the 1970 management discipline. After multiple phases of development, Freeman [29] made corporate accountability widely relevant to several stakeholders. Stakeholder's theory combines sociological and organizational ideas [30]. Due to its origins in organizational theory, philosophy, ethics, politics, economics, and law, the theory is not considered a formal theory. The theory emphasizes that organizations' corporate accountability does not apply only to shareholders, but to a wide spectrum of stakeholders in a significant corporation that influences society.

Equity holders, strategic partners, investors, and employees are consubstantial stakeholders. Customers, suppliers, financial institutions, and subcontractors are contractual parties. Contextual stakeholders consist of the local communities, public administration, countries, and societies, as well as knowledge and opinion of leaders who affect the corporate image of the firm [31]. It is in the light of these clearly categorized stakeholders that this study considers the stakeholders' theory equally ideal, because the biggest eventual beneficiaries of social accountability and responsibility of corporate organizations are the contextual stakeholders – the communities where the organizations operate from.

# 2. Methodology

#### 2.1. Research design

This study employed Ex-Post Facto research design and relied on secondary data obtained from the yearly financial reports of 10 quoted manufacturing firms in Nigeria. The study's population consisted of 46

manufacturing companies listed on the healthcare, agriculture, industrial, and consumer goods sectors of the Nigerian Exchange as of January 31, 2021, and the purposive sampling technique was adopted to ensure that at least a company is selected from each of the sectors in the population. The researcher believes that the population is ideal due to the supposed symbiotic relationship between the companies and their teeming patronizing citizens.

#### 2.2. Instruments

Data were obtained for an 11-year period, starting from 2010 to 2020. The panel dataset for this research is therefore 110 observations. Data were collected on local communities' responsibility of firm's disclosure, corruption disclosure, and public policy disclosure. These are the three independent variables identified from the social (society-related) accounting responsibility disclosures. These variables were carefully chosen to measure the extent of economic reciprocation that firms avail the communities where they operate from. The emergence and indeed the going concern of a firm depend largely on the opportunities available in the community where it is located, especially from its teeming customers, vendors, and employees. It is therefore important to assess the mutuality of the relationship between a company and the environment of its operation, which makes these variables suitable for evaluating this subject of interest. Data were analyzed with the use of both the descriptive and inferential statistics, and social accounting disclosures were measured in line with the Global Reporting Initiative [9].

Additionally, the content analysis and measurement were done by coding, and it is noteworthy to explain that when the firm disclosure is brief on these items, the variable is scored 1, when the information is better than brief on the disclosure item, it is recorded 2, when there is disclosure in terms of quantity, the item is scored 3, when there are both monetary and quantitative disclosures, the item is scored 4. Lastly, when there is no disclosure at all, the item is scored 0. Thus, disclosure items used in this study are scored in a number between 0 and 4 depending on what was disclosed by the firm. Three estimation techniques were used for the study which are Pooled ordinary least square (OLS), fixed, and random effect models. The Pooled OLS served as the baseline model while both the random effect model and fixed effect model served as robustness check for the Pooled OLS.

The ROE was used to assess performance and the model for this study was adopted (with modifications) from the work of Amosun et al. [17]. The model is as follows:

$$roe_{it} = \alpha_0 + \alpha_1 lcm_{it} + \alpha_2 corpt_{it} + \alpha_3 pupol_{it} + \mu_{it}$$

#### 2.3. Definition of variables

ROE is the dependent variable, and it represents organizational performance, the independent variables are LCM (local communities' responsibility of firm disclosure), CORPT (corruption disclosure), and PUPOL (public policy disclosure). These are the three items from the social accounting responsibility disclosure.  $\alpha_0$  is the slope of the equation.  $\alpha_1$  to  $\alpha_3$  are the parameters/coefficient for the independent variables, and  $\mu$  refers to the error or disturbance term of the equation.

#### 3. Results

The descriptive statistics of this study is reported using mean, standard deviation, skewness, and kurtosis, and they are displayed in the table underneath.

Table 2 displays the descriptive statistics output of the variables used for this study. The average/mean values of ROE, local communities, corruption, and public policy disclosure are approximately 0.22, 3.21, 1.46, and 1.46, respectively. Corruption and public policy disclosure have the same mean values, while local communities' responsibility disclosure has the greatest average value. All the average numbers are positive, suggesting these values can still increase. Local communities' responsibility disclosure has the highest standard deviation value. This indicates that, compared to the other variables, it is the most unstable or volatile variable. ROE on corruption and public policy disclosure are positively skewed. However, local communities' responsibility disclosure is negatively skewed.

Table 2
Descriptive statistics

	ROE	LCM	CORPT	PUPOL
Mean	0.215651	3.209091	1.463636	1.463636
Median	0.162565	4.000000	2.000000	1.000000
Maximum	2.404528	4.000000	4.000000	2.000000
Minimum	-0.883717	0.000000	0.000000	1.000000
Std. Dev.	0.334923	1.306971	0.750257	0.500958
Skewness	2.723139	-1.555490	0.058891	0.145841
Kurtosis	20.05051	4.077642	4.084566	1.021270
Jarque-Bera	1468.417	49.68109	5.454881	18.33541
Probability	0.000000	0.000000	0.065386	0.000104
Observations	110	110	110	110

\*Source: E-view 12

All the variables except public policy disclosure have kurtosis values above three. The probability of the Jarque-Bera statistics for only corruption disclosure series follows a normal distribution since its probability value is greater than 5 percent.

Three hypotheses were tested in this study. They are as follows: the relationship between local communities' responsibility disclosure of firms and organizational performance is negative; corruption disclosure of firm and organizational performance is not positively related; and the extent to which public policy disclosure of firms affect organizational performance is not strong. In this study, Stata statistical software was used in evaluating these hypotheses, and the results are provided in the tables below.

Table 3 above reveals the results obtained from the Pooled OLS are presented. The coefficient value of local communities' responsibility disclosure of firms, corruption disclosure, and public policy disclosure are approximately 0.06, -0.07, and 0.15 with probability values of 0.13, 0.23, and 0.15, respectively. Both local communities' responsibility disclosure of firms and public policy disclosure have direct impact on organizational performance, while corruption disclosure has a negative influence on performance. It is also observed that none of the explanatory variables have a

Table 3
Pooled OLS results for the three hypotheses

roe	Coef.	Std. Err.	Z	PV
lcm	0.0593488	0.0393985	1.51	0.132
corpt	-0.0703885	0.0583985	-1.21	0.228
pupol	0.1547476	0.1072571	1.44	0.149
cons	-0.0982758	0.1701292	-0.58	0.563

\*Source: Stata 15 output

substantial effect on the performance of the organization. These results will be compared to the outcomes of the fixed and random effect models.

From the output as displayed in Table 4 above, local communities' responsibility disclosure of firms and public policy disclosure and ROE proxy for performance are positively related. Only corruption disclosure has an inverse relationship with performance. These results are in consonant with the results obtained from Pooled OLS. However, public policy is significantly related to the performance of the organization. This is opposing the result of the Pooled OLS. Thus, random effect model is utilized to authenticate results obtained from the Pooled OLS and fixed effect model. This is presented in the next table.

Table 4
Fixed effect model results for the three hypotheses

roe	Coef.	Std. Err.	Z	PV
lcm	0.0112321	0.0661385	0.17	0.865
corpt	-0.0841808	0.0610353	-1.38	0.171
pupol	0.3326334	0.1411836	2.36	0.020
cons	-0.1840381	0.2458791	-0.75	0.456

\*Source: Stata 15 output

Table 5 displays the results of the random effect model. Local communities' responsibility disclosure of firms, corruption disclosure, and public policy disclosure have insignificant influence on ROE for the carefully chosen Nigerian manufacturing companies. The relationship between local communities' responsibility disclosure of firms, public policy disclosure, and ROE (performance) is direct. Notwithstanding, corruption disclosure has an indirect impact on ROE. The outcomes obtained from the random effect model are the same as those of the fixed effect model and Pooled OLS, except for the significant relationship between public policy disclosure and ROE obtained from the fixed effect model. Therefore, the results of the Pooled OLS are upheld for this study.

Table 5
Random effect model results for the three hypotheses

roe	Coef.	Std. Err.	Z	PV
lcm	0.0593488	0.0393985	1.51	0.132
corpt	-0.0703885	0.0583985	-1.21	0.228
pupol	0.1547476	0.1072571	1.44	0.149
cons	-0.0982758	0.1701292	-0.58	0.563

\*Source: Stata 15 output

#### 4. Discussion

The discussion of findings is based on the results obtained from the benchmark model (Pooled OLS). It is discovered that local communities' responsibility disclosure of firms and public policy disclosure (items in social responsibility disclosure) have a direct influence on organizational performance of manufacturing organizations in Nigeria. This indicates that as these companies disclose relevant social information, performance indicators increase. That is to say, as disclosure increases, the firm's performance

increases. This result is supported by the studies of Emeka-Nwokeji and Osisioma [19], Ghorbel and Triki [32], and Sharif and Lai [33] who used different corporate responsibility disclosures and asserted that corporate disclosure indicators have positive influence on firm's performance.

The connection between local communities' responsibility disclosure of firms and organizational performance is insignificant. Also, public policy has insignificant effect on performance of manufacturing firms in Nigeria. These findings agree with the findings of Sopian and Mulya [23] who discovered that disclosure on CSR has no significant influence on firm's performance.

The insignificant effect of CSR disclosure on firm's performance is an indication that most investors pay little attention to a company's disclosure of its CSR. They do not consider that this information can affect their investment adversely or positively. Lastly, corruption disclosure is negatively related to performance. This implies that as the companies disclose fraudrelated matters of the firm, investors or prospective investors withdraw their investment leading to a fall in performance.

#### 5. Conclusion and Policy Recommendations

The study examined the relationship between social accounting disclosure and performance of quoted manufacturing companies in Nigeria. From the results presented above, it is concluded that local communities' responsibility disclosure and public policy are positively but insignificantly related to the organizational performance of manufacturing companies in Nigeria. However, organizational performance is negatively and insignificantly influenced by corruption. Above all, it is safe to infer that social accounting disclosure has both positive and negative relationship with organizational performance of the publicly quoted manufacturing entities in Nigeria.

This study empirically reveals that by breaking down the relevant disclosures of CSR, especially into subcategories as stipulated by the Global Reporting Initiative [9], various stakeholders can identify ways by which companies' performance directly impact their economic, environmental, and social wellbeing and can therefore hold these companies responsible where they fall short of expectations.

Based on these findings, it is suggested that companies should be consistent in their implementation of disclosure on CSR, even if it has no (or weak) influence on the value of the firm immediately. This is necessary since it will have a positive effect in the long run. Additionally, and in line with the submission of Amosun et al. [17], public policymakers should continually make innovative and contemporary policies that will make social and environmental accounting disclosures mandatory, comprehensive, and timely for listed companies.

#### **Ethical Statement**

This study does not contain any studies with human or animal subjects performed by any of the authors.

#### **Conflicts of Interest**

The authors declare that they have no conflicts of interest to this work.

## **Data Availability Statement**

The data that support this work are available upon reasonable request to the corresponding author.

#### **Author Contribution Statement**

Adedayo Oluyemi Ajibare: Conceptualization, Methodology, Investigation, Software, Resources, Data curation, Writing – original draft, Writing – review & editing, Visualization. Khadijah Adeola Idowu: Validation, Formal analysis, Supervision, Project administration, Visualization. Ayodele Abraham Ojo-Agbodu: Validation, Formal analysis, Supervision, Project administration, Visualization.

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# Appendix (Analyzed Data)

<u>obs</u>	<u>cid</u>	<u>year</u>	company	nopat '000	equity '000	tot assets '000	roe	<u>roa</u>	<u>lcm</u>	<u>cort</u>	pupol
1	1	2010	PZ	4,765,224	32,678,883	36,043,806	0.15	0.13	4	2	2
2	1	2011	PZ	3,334,237	33,281,387	36,886,673	0.10	0.09	3	2	2
3	1	2012	PZ	609,532	31,216,197	34,674,194	0.02	0.02	3	2	2
4	1	2013	PZ	2,221,447	31,749,548	50,243,854	0.07	0.04	3	2	2
5	1	2014	PZ	3,990,464	27,607,313	51,694,166	0.14	0.08	4	2	2
6	1	2015	PZ	2,168,867	26,584,929	48,106,661	0.08	0.05	2	2	2
7	1	2016	PZ	389,999	33,792,289	58,279,602	0.01	0.01	2	2	2
8	1	2017	PZ	2,235,631	34,076,230	73,039,610	0.07	0.03	2	2	2
9	1	2018	PZ	1,630,557	33,750,379	74,576,119	0.05	0.02	4	2	2
10	1	2019	PZ	(5,966,995)	33,816,582	64,315,676	-0.18	-0.09	4	2	2
11	1	2020	PZ	578,355	23,896,811	59,486,850	0.02	0.01	2	2	2
12	2	2010	Dangote sugar	11,282,240	39,089,653	43,048,331	0.29	0.26	1	0	1
13	2	2011	Dangote sugar	7,403,597	39,133,709	72,814,721	0.19	0.10	1	0	1
14	2	2012	Dangote sugar	10,796,416	46,269,159	83,051,450	0.23	0.13	2	0	1
15	2	2013	Dangote sugar	13,537,612	53,817,512	87,112,182	0.25	0.16	3	0	1
16	2	2014	Dangote sugar	11,908,690	58,526,202	97,287,804	0.20	0.12	2	0	1
17	2	2015	Dangote sugar	12,659,855	66,386,057	106,671,333	0.19	0.12	1	0	1
18	2	2016	Dangote sugar	14,198,693	74,584,750	175,936,048	0.19	0.08	2	2	1
19	2	2017	Dangote sugar	37,822,608	99,207,358	196,064,664	0.38	0.19	2	1	1
20	2	2018	Dangote sugar	25,830,941	107,180,126	178,523,711	0.24	0.14	3	2	2
21	2	2019	Dangote sugar	24,102,816	118,082,942	198,129,122	0.20	0.12	3	2	2
22	2	2020	Dangote sugar	31,370,659	125,302,902	259,280,544	0.25	0.12	3	2	2
23	3	2010	Cadbury	32,641,190	13,574,885	28,673,972	2.40	1.14	4	1	1
24	3	2011	Cadbury	3,670,555	16,589,171	33,656,352	0.22	0.11	4	1	1
25	3	2012	Cadbury	3,454,991	20,039,356	40,156,508	0.17	0.09	4	1	1
26	3	2013	Cadbury	6,033,219	23,992,931	43,172,624	0.25	0.14	4	1	1
27	3	2014	Cadbury	1,512,687	11,542,026	28,820,107	0.13	0.05	4	1	1
28	3	2015	Cadbury	1,153,295	12,285,297	28,417,005	0.09	0.04	4	1	1
29	3	2016	Cadbury	(296,402)	11,056,734	28,392,951	-0.03	-0.01	4	1	1
30	3	2017	Cadbury	299,998	11,742,791	28,423,122	0.03	0.01	4	1	1
31	3	2018	Cadbury	823,085	12,676,146	27,528,040	0.06	0.03	3	1	1
32	3	2019	Cadbury	1,070,845	13,566,235	28,801,938	0.08	0.03	3	1	1
33	3	2020	Cadbury	931,827	13,549,523	33,210,684	0.03	0.04	3	1	1
34	4	2010	Dangote cement	105,322,429	208,238,023	398,699,629	0.51	0.03	2	1	2
3 <del>4</del> 35	4	2010	-		294,318,046	524,045,921	0.31	0.23	4	1	2
36	4	2011	Dangote cement Dangote cement	121,415,513 152,925,098	427,606,594	639,466,109	0.41	0.23	4	1	2
30 37	4	2012	-			821,699,780	0.30	0.24	3	2	2
38	4		Dangote cement  Dangote cement	210,262,754	571,562,826			0.20	3		
38 39	4	2014	U	185,814,123	638,543,114	963,441,064	0.29		3	2	2 2
		2015	Dangote cement	213,171,000	748,479,000	1,124,475,000	0.28	0.19			
40	4	2016	Dangote cement	368,205,000	981,367,000	1,502,564,000	0.38	0.25	3	2	2
41	4	2017	Dangote cement	254,630,000	991,017,000	1,611,087,000	0.26	0.16	3	2	2
42	4	2018	Dangote cement	481,456,000	1,293,548,000	1,721,974,000	0.37	0.28	3	2	2
43	4	2019	Dangote cement	261,349,000	1,282,249,000	1,825,076,000	0.20	0.14	4	4	2
44	4	2020	Dangote cement	352,609,000	1,352,377,000	2,116,060,000	0.26	0.17	4	4	2
45	5	2010	Okomu oil	1,629,456	9,526,996	8,640,050	0.17	0.19	4	1	1
46	5	2011	Okomu oil	3,923,760	19,010,205	12,051,224	0.21	0.33	4	1	1
47	5	2012	Okomu oil	3,590,763	25,530,751	31,054,673	0.14	0.12	4	1	1
48	5	2013	Okomu oil	2,092,174	22,617,158	30,050,647	0.09	0.07	4	1	1
49	5	2014	Okomu oil	1,553,455	23,233,385	32,881,478	0.07	0.05	4	1	1
50	5	2015	Okomu oil	2,659,607	12,145,360	20,000,240	0.22	0.13	4	1	1
51	5	2016	Okomu oil	4,910,273	17,012,041	24,507,665	0.29	0.20	4	1	1
52	5	2017	Okomu oil	9,314,322	23,135,981	31,273,705	0.40	0.30	4	1	1
53	5	2018	Okomu oil	8,501,849	28,514,154	38,417,953	0.30	0.22	4	2	1
54	5	2019	Okomu oil	5,049,637	29,180,280	43,595,792	0.17	0.12	4	2	1
55	5	2020	Okomu oil	7,780,519	34,777,784	55,011,848	0.22	0.14	4	2	1
56	6	2010	Nestle	12,602,109	20,571,771	60,828,397	0.61	0.21	4	1	1
57	6	2011	Nestle	1,688,764	23,209,984	77,728,293	0.07	0.02	4	2	1
58	6	2012	Nestle	21,137,275	34,185,562	88,963,218	0.62	0.24	4	2	1
59	6	2013	Nestle	22,258,279	40,594,801	108,207,480	0.55	0.21	4	2	1
60	6	2014	Nestle	22,235,640	35,939,643	106,062,067	0.62	0.21	4	2	1

(Continued)

# (Continued)

61 6 2015 Nestle 23,736,777 38,007,074 119,215,053 0.62 0.20 4 2 6 6 2016 Nestle 7,924,968 30,878,075 169,585,932 0.26 0.05 4 2 6 6 2017 Nestle 33,723,730 44,878,177 146,804,128 0.75 0.23 4 2 6 6 6 2018 Nestle 43,008,026 50,220,486 162,334,422 0.86 0.26 4 2 6 6 2018 Nestle 43,008,026 50,220,486 162,334,422 0.86 0.26 4 2 6 6 6 2019 Nestle 45,683,113 45,557,630 193,374,314 1.00 0.24 4 2 6 6 6 2020 Nestle 39,212,025 29,296,984 246,184,996 1.34 0.16 4 2 6 7 7 2010 flour mill nig 13,370,731 35,384,783 57,236,912 0.38 0.23 4 0 0 6 8 7 2011 flour mill nig 10,095,752 42,063,788 116,730,494 0.24 0.09 4 0 0 6 7 2012 flour mill nig 8,896,718 80,016,501 172,508,941 0.11 0.05 4 0 7 7 2013 flour mill nig 8,900,989 92,601,111 223,889,725 0.10 0.04 4 0 0 7 2 0 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 2 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2
63 6 2017 Nestle 33,723,730 44,878,177 146,804,128 0.75 0.23 4 2 2 64 6 2018 Nestle 43,008,026 50,220,486 162,334,422 0.86 0.26 4 2 2 65 6 2019 Nestle 45,683,113 45,557,630 193,374,314 1.00 0.24 4 2 2 66 6 6 2020 Nestle 39,212,025 29,296,984 246,184,996 1.34 0.16 4 2 6 7 7 2010 flour mill nig 13,370,731 35,384,783 57,236,912 0.38 0.23 4 0 68 7 2011 flour mill nig 10,095,752 42,063,788 116,730,494 0.24 0.09 4 0 6 7 2012 flour mill nig 8,896,718 80,016,501 172,508,941 0.11 0.05 4 0 7 7 2013 flour mill nig 8,900,989 92,601,111 223,889,725 0.10 0.04 4 0 7 7 2013 flour mill nig 10,437,522 98,943,111 220,145,555 0.11 0.05 4 0 7 7 2015 flour mill nig 10,437,522 98,943,111 220,145,555 0.11 0.05 4 0 7 2 7 2015 flour mill nig 10,425,786 100,244,139 233,296,607 0.10 0.04 4 1 1 7 7 2014 flour mill nig 10,425,786 100,244,139 233,296,607 0.10 0.04 4 1 1 7 7 2017 flour mill nig 9,829,046 108,115,699 322,604,582 0.09 0.03 4 1 1 7 7 2018 flour mill nig 19,317,654 138,929,273 314,058,187 0.14 0.06 4 1 7 7 2019 flour mill nig 19,317,654 138,929,273 314,058,187 0.14 0.06 4 1 7 7 2020 flour mill nig 12,582,571 146,316,890 314,267,060 0.09 0.04 4 1 1 8 8 2010 GlaxoSmithKline 2,326,484 7,385,195 14,154,058 0.32 0.16 4 2 8 2 8 2014 GlaxoSmithKline 2,671,444 8,911,598 17,710,374 0.30 0.15 4 2 8 2 8 2014 GlaxoSmithKline 2,671,444 8,911,598 17,710,374 0.30 0.15 4 2 8 2 8 2014 GlaxoSmithKline 2,671,444 8,911,598 17,710,374 0.30 0.15 4 2 8 2 8 2014 GlaxoSmithKline 2,754,863 10,502,627 21,571,268 0.26 0.13 4 2 8 8 2015 GlaxoSmithKline 2,671,444 8,911,598 17,710,374 0.30 0.15 4 2 8 8 2016 GlaxoSmithKline 2,378,145 16,853,678 27,981,229 0.14 0.07 0.04 4 2 8 8 2016 GlaxoSmithKline 2,378,145 16,853,678 27,981,229 0.14 0.07 0.04 4 2 8 8 2016 GlaxoSmithKline 2,378,145 16,853,678 27,981,229 0.14 0.07 0.04 4 2 8 8 2016 GlaxoSmithKline 485,300 16,980,217 26,286,191 0.03 0.02 4 2 2 8 8 2016 GlaxoSmithKline 623,014 8,947,132 23,735,822 0.07 0.03 0.02 4 2 8 8 2019 GlaxoSmithKline 623,014 8,947,132 23,735,822 0.07 0.03 0.0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 1 1 1 1 1 1 1 1 2
63 6 2017 Nestle 33,723,730 44,878,177 146,804,128 0.75 0.23 4 2 2 64 6 2018 Nestle 43,008,026 50,220,486 162,334,422 0.86 0.26 4 2 2 65 6 2019 Nestle 45,683,113 45,557,630 193,374,314 1.00 0.24 4 2 2 66 6 6 2020 Nestle 39,212,025 29,296,984 246,184,996 1.34 0.16 4 2 6 7 7 2010 flour mill nig 13,370,731 35,384,783 57,236,912 0.38 0.23 4 0 68 7 2011 flour mill nig 10,095,752 42,063,788 116,730,494 0.24 0.09 4 0 6 7 2012 flour mill nig 8,896,718 80,016,501 172,508,941 0.11 0.05 4 0 7 7 2013 flour mill nig 8,900,989 92,601,111 223,889,725 0.10 0.04 4 0 7 7 2013 flour mill nig 10,437,522 98,943,111 220,145,555 0.11 0.05 4 0 7 7 2015 flour mill nig 10,437,522 98,943,111 220,145,555 0.11 0.05 4 0 7 2 7 2015 flour mill nig 10,425,786 100,244,139 233,296,607 0.10 0.04 4 1 1 7 7 2014 flour mill nig 10,425,786 100,244,139 233,296,607 0.10 0.04 4 1 1 7 7 2017 flour mill nig 9,829,046 108,115,699 322,604,582 0.09 0.03 4 1 1 7 7 2018 flour mill nig 19,317,654 138,929,273 314,058,187 0.14 0.06 4 1 7 7 2019 flour mill nig 19,317,654 138,929,273 314,058,187 0.14 0.06 4 1 7 7 2020 flour mill nig 12,582,571 146,316,890 314,267,060 0.09 0.04 4 1 1 8 8 2010 GlaxoSmithKline 2,326,484 7,385,195 14,154,058 0.32 0.16 4 2 8 2 8 2014 GlaxoSmithKline 2,671,444 8,911,598 17,710,374 0.30 0.15 4 2 8 2 8 2014 GlaxoSmithKline 2,671,444 8,911,598 17,710,374 0.30 0.15 4 2 8 2 8 2014 GlaxoSmithKline 2,671,444 8,911,598 17,710,374 0.30 0.15 4 2 8 2 8 2014 GlaxoSmithKline 2,754,863 10,502,627 21,571,268 0.26 0.13 4 2 8 8 2015 GlaxoSmithKline 2,671,444 8,911,598 17,710,374 0.30 0.15 4 2 8 8 2016 GlaxoSmithKline 2,378,145 16,853,678 27,981,229 0.14 0.07 0.04 4 2 8 8 2016 GlaxoSmithKline 2,378,145 16,853,678 27,981,229 0.14 0.07 0.04 4 2 8 8 2016 GlaxoSmithKline 2,378,145 16,853,678 27,981,229 0.14 0.07 0.04 4 2 8 8 2016 GlaxoSmithKline 485,300 16,980,217 26,286,191 0.03 0.02 4 2 2 8 8 2016 GlaxoSmithKline 623,014 8,947,132 23,735,822 0.07 0.03 0.02 4 2 8 8 2019 GlaxoSmithKline 623,014 8,947,132 23,735,822 0.07 0.03 0.0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2
64         6         2018         Nestle         43,008,026         50,220,486         162,334,422         0.86         0.26         4         2           65         6         2019         Nestle         45,683,113         45,557,630         193,374,314         1.00         0.24         4         2           66         6         2020         Nestle         39,212,025         29,296,984         246,184,996         1.34         0.16         4         2           67         7         2010         flour mill nig         13,370,731         35,384,783         57,236,912         0.38         0.23         4         0           68         7         2011         flour mill nig         10,095,752         42,063,788         116,730,494         0.24         0.09         4         0           69         7         2012         flour mill nig         8,906,718         80,016,501         172,508,941         0.11         0.05         4         0           70         7         2013         flour mill nig         10,437,522         98,943,111         220,145,555         0.10         0.04         4         0           71         7         2015         flour mill nig         10,	2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 2 2 2
66         6         2020         Nestle         39,212,025         29,296,984         246,184,996         1.34         0.16         4         2           67         7         2010         flour mill nig         13,370,731         35,384,783         57,236,912         0.38         0.23         4         0           68         7         2011         flour mill nig         10,095,752         42,063,788         116,730,494         0.24         0.09         4         0           69         7         2012         flour mill nig         8,896,718         80,016,501         172,508,941         0.11         0.05         4         0           70         7         2013         flour mill nig         10,437,522         98,943,111         220,145,555         0.10         0.04         4         0           72         7         2015         flour mill nig         10,437,522         98,943,111         220,145,555         0.11         0.05         4         0           72         7         2015         flour mill nig         10,425,786         100,244,139         233,296,607         0.10         0.04         4         1           74         7         2016         flour mill nig <td>2 1 1 1 1 1 1 1 1 1 1 1 2 2 2</td>	2 1 1 1 1 1 1 1 1 1 1 1 2 2 2
66         6         2020         Nestle         39,212,025         29,296,984         246,184,996         1.34         0.16         4         2           67         7         2010         flour mill nig         13,370,731         35,384,783         57,236,912         0.38         0.23         4         0           68         7         2011         flour mill nig         10,095,752         42,063,788         116,730,494         0.24         0.09         4         0           69         7         2012         flour mill nig         8,896,718         80,016,501         172,508,941         0.11         0.05         4         0           70         7         2013         flour mill nig         10,437,522         98,943,111         220,145,555         0.10         0.04         4         0           72         7         2015         flour mill nig         10,437,522         98,943,111         220,145,555         0.11         0.05         4         0           72         7         2015         flour mill nig         10,425,786         100,244,139         233,296,607         0.10         0.04         4         1           74         7         2016         flour mill nig <td>2 1 1 1 1 1 1 1 1 1 1 1 2 2 2</td>	2 1 1 1 1 1 1 1 1 1 1 1 2 2 2
67         7         2010         flour mill nig         13,370,731         35,384,783         57,236,912         0.38         0.23         4         0           68         7         2011         flour mill nig         10,095,752         42,063,788         116,730,494         0.24         0.09         4         0           69         7         2012         flour mill nig         8,896,718         80,016,501         172,508,941         0.11         0.05         4         0           70         7         2013         flour mill nig         8,900,989         92,601,111         223,889,725         0.10         0.04         4         0           71         7         2014         flour mill nig         10,437,522         98,943,111         220,145,555         0.11         0.05         4         0           72         7         2015         flour mill nig         10,437,522         98,943,111         220,145,555         0.11         0.05         4         0           72         7         2016         flour mill nig         10,425,786         100,244,139         233,296,607         0.10         0.04         4         1           74         7         2017         flour mill	1 1 1 1 1 1 1 1 1 1 2 2
68         7         2011         flour mill nig         10,095,752         42,063,788         116,730,494         0.24         0.09         4         0           69         7         2012         flour mill nig         8,896,718         80,016,501         172,508,941         0.11         0.05         4         0           70         7         2013         flour mill nig         8,900,989         92,601,111         223,889,725         0.10         0.04         4         0           71         7         2014         flour mill nig         10,437,522         98,943,111         220,145,5555         0.11         0.05         4         0           72         7         2016         flour mill nig         10,437,522         98,943,111         220,145,5555         0.11         0.05         4         0           72         7         2016         flour mill nig         10,425,786         100,244,139         233,296,607         0.10         0.04         4         1           74         7         2017         flour mill nig         9,829,046         108,115,699         322,604,582         0.09         0.03         4         1           75         7         2018         flour mi	1 1 1 1 1 1 1 1 1 2 2
69         7         2012         flour mill nig         8,896,718         80,016,501         172,508,941         0.11         0.05         4         0           70         7         2013         flour mill nig         8,900,989         92,601,111         223,889,725         0.10         0.04         4         0           71         7         2014         flour mill nig         10,437,522         98,943,111         220,145,555         0.11         0.05         4         0           72         7         2015         flour mill nig         2,419,544         96,651,666         231,529,878         0.03         0.01         4         1           73         7         2016         flour mill nig         10,425,786         100,244,139         233,296,607         0.10         0.04         4         1           74         7         2017         flour mill nig         9,829,046         108,115,699         322,604,582         0.09         0.03         4         1           75         7         2018         flour mill nig         19,317,654         138,929,273         314,058,187         0.14         0.06         4         1           77         2020         flour mill nig         <	1 1 1 1 1 1 1 1 2 2
70         7         2013         flour mill nig         8,900,989         92,601,111         223,889,725         0.10         0.04         4         0           71         7         2014         flour mill nig         10,437,522         98,943,111         220,145,555         0.11         0.05         4         0           72         7         2015         flour mill nig         10,425,786         100,244,139         233,296,607         0.10         0.04         4         1           73         7         2016         flour mill nig         10,425,786         100,244,139         233,296,607         0.10         0.04         4         1           74         7         2017         flour mill nig         9,829,046         108,115,699         322,604,582         0.09         0.03         4         1           75         7         2018         flour mill nig         19,317,654         138,929,273         314,058,187         0.06         0.03         4         1           76         7         2019         flour mill nig         12,582,571         146,316,890         314,267,060         0.09         0.04         4         1           78         8         2010         GlaxoS	1 1 1 1 1 1 1 2 2
71         7         2014         flour mill nig         10,437,522         98,943,111         220,145,555         0.11         0.05         4         0           72         7         2015         flour mill nig         2,419,544         96,651,666         231,529,878         0.03         0.01         4         1           73         7         2016         flour mill nig         10,425,786         100,244,139         233,296,607         0.10         0.04         4         1           74         7         2017         flour mill nig         9,829,046         108,115,699         322,604,582         0.09         0.03         4         1           75         7         2018         flour mill nig         19,317,654         138,929,273         314,058,187         0.14         0.06         4         1           76         7         2019         flour mill nig         12,582,571         146,316,890         314,267,060         0.09         0.04         4         1           77         7         2020         flour mill nig         12,582,571         146,316,890         314,267,060         0.09         0.04         4         1           78         8         2010         GlaxoS	1 1 1 1 1 1 2 2
73         7         2016         flour mill nig         10,425,786         100,244,139         233,296,607         0.10         0.04         4         1           74         7         2017         flour mill nig         9,829,046         108,115,699         322,604,582         0.09         0.03         4         1           75         7         2018         flour mill nig         9,244,729         151,446,296         343,933,157         0.06         0.03         4         1           76         7         2019         flour mill nig         19,317,654         138,929,273         314,058,187         0.14         0.06         4         1           77         7         2020         flour mill nig         12,582,571         146,316,890         314,267,060         0.09         0.04         4         1           78         8         2010         GlaxoSmithKline         2,326,484         7,385,195         14,154,058         0.32         0.16         4         2           80         8         2011         GlaxoSmithKline         2,671,444         8,911,598         17,710,374         0.30         0.15         4         2           81         8         2012         GlaxoSmith	1 1 1 1 1 2 2 2
73         7         2016         flour mill nig         10,425,786         100,244,139         233,296,607         0.10         0.04         4         1           74         7         2017         flour mill nig         9,829,046         108,115,699         322,604,582         0.09         0.03         4         1           75         7         2018         flour mill nig         9,244,729         151,446,296         343,933,157         0.06         0.03         4         1           76         7         2019         flour mill nig         19,317,654         138,929,273         314,058,187         0.14         0.06         4         1           77         7         2020         flour mill nig         12,582,571         146,316,890         314,267,060         0.09         0.04         4         1           78         8         2010         GlaxoSmithKline         2,326,484         7,385,195         14,154,058         0.32         0.16         4         2           80         8         2011         GlaxoSmithKline         2,671,444         8,911,598         17,710,374         0.30         0.15         4         2           81         8         2012         GlaxoSmith	1 1 1 2 2 2
75         7         2018         flour mill nig         9,244,729         151,446,296         343,933,157         0.06         0.03         4         1           76         7         2019         flour mill nig         19,317,654         138,929,273         314,058,187         0.14         0.06         4         1           77         7         2020         flour mill nig         12,582,571         146,316,890         314,267,060         0.09         0.04         4         1           78         8         2010         GlaxoSmithKline         2,326,484         7,385,195         14,154,058         0.32         0.16         4         2           79         8         2011         GlaxoSmithKline         2,671,444         8,911,598         17,710,374         0.30         0.15         4         2           80         8         2012         GlaxoSmithKline         2,754,863         10,502,627         21,571,268         0.26         0.13         4         2           81         8         2013         GlaxoSmithKline         2,915,896         12,182,007         26,022,153         0.24         0.11         4         2           82         8         2014         GlaxoSmithKli	1 1 1 2 2 2
75         7         2018         flour mill nig         9,244,729         151,446,296         343,933,157         0.06         0.03         4         1           76         7         2019         flour mill nig         19,317,654         138,929,273         314,058,187         0.14         0.06         4         1           77         7         2020         flour mill nig         12,582,571         146,316,890         314,267,060         0.09         0.04         4         1           78         8         2010         GlaxoSmithKline         2,326,484         7,385,195         14,154,058         0.32         0.16         4         2           79         8         2011         GlaxoSmithKline         2,671,444         8,911,598         17,710,374         0.30         0.15         4         2           80         8         2012         GlaxoSmithKline         2,754,863         10,502,627         21,571,268         0.26         0.13         4         2           81         8         2013         GlaxoSmithKline         2,915,896         12,182,007         26,022,153         0.24         0.11         4         2           82         8         2014         GlaxoSmithKli	1 1 2 2 2
76         7         2019         flour mill nig         19,317,654         138,929,273         314,058,187         0.14         0.06         4         1           77         7         2020         flour mill nig         12,582,571         146,316,890         314,267,060         0.09         0.04         4         1           78         8         2010         GlaxoSmithKline         2,326,484         7,385,195         14,154,058         0.32         0.16         4         2           79         8         2011         GlaxoSmithKline         2,671,444         8,911,598         17,710,374         0.30         0.15         4         2           80         8         2012         GlaxoSmithKline         2,754,863         10,502,627         21,571,268         0.26         0.13         4         2           81         8         2013         GlaxoSmithKline         2,915,896         12,182,007         26,022,153         0.24         0.11         4         2           82         8         2014         GlaxoSmithKline         1,830,533         12,766,228         27,789,037         0.14         0.07         4         2           83         8         2015         GlaxoSmithKlin	1 2 2 2
77         7         2020         flour mill nig         12,582,571         146,316,890         314,267,060         0.09         0.04         4         1           78         8         2010         GlaxoSmithKline         2,326,484         7,385,195         14,154,058         0.32         0.16         4         2           79         8         2011         GlaxoSmithKline         2,671,444         8,911,598         17,710,374         0.30         0.15         4         2           80         8         2012         GlaxoSmithKline         2,754,863         10,502,627         21,571,268         0.26         0.13         4         2           81         8         2013         GlaxoSmithKline         2,915,896         12,182,007         26,022,153         0.24         0.11         4         2           82         8         2014         GlaxoSmithKline         1,830,533         12,766,228         27,789,037         0.14         0.07         4         2           83         8         2015         GlaxoSmithKline         864,413         12,994,477         31,121,864         0.07         0.03         4         2           84         8         2016         GlaxoSmithKline <td>2 2 2</td>	2 2 2
78         8         2010         GlaxoSmithKline         2,326,484         7,385,195         14,154,058         0.32         0.16         4         2           79         8         2011         GlaxoSmithKline         2,671,444         8,911,598         17,710,374         0.30         0.15         4         2           80         8         2012         GlaxoSmithKline         2,754,863         10,502,627         21,571,268         0.26         0.13         4         2           81         8         2013         GlaxoSmithKline         2,915,896         12,182,007         26,022,153         0.24         0.11         4         2           82         8         2014         GlaxoSmithKline         1,830,533         12,766,228         27,789,037         0.14         0.07         4         2           83         8         2015         GlaxoSmithKline         864,413         12,994,477         31,121,864         0.07         0.03         4         2           84         8         2016         GlaxoSmithKline         2,378,145         16,853,678         27,981,229         0.14         0.08         4         2           85         8         2017         GlaxoSmithKline	2 2 2
80         8         2012         GlaxoSmithKline         2,754,863         10,502,627         21,571,268         0.26         0.13         4         2           81         8         2013         GlaxoSmithKline         2,915,896         12,182,007         26,022,153         0.24         0.11         4         2           82         8         2014         GlaxoSmithKline         1,830,533         12,766,228         27,789,037         0.14         0.07         4         2           83         8         2015         GlaxoSmithKline         864,413         12,994,477         31,121,864         0.07         0.03         4         2           84         8         2016         GlaxoSmithKline         2,378,145         16,853,678         27,981,229         0.14         0.08         4         2           85         8         2017         GlaxoSmithKline         485,300         16,980,217         26,286,191         0.03         0.02         4         2           86         8         2018         GlaxoSmithKline         618,389         8,651,191         15,700,216         0.07         0.04         4         2           87         8         2019         GlaxoSmithKline	2 2
80         8         2012         GlaxoSmithKline         2,754,863         10,502,627         21,571,268         0.26         0.13         4         2           81         8         2013         GlaxoSmithKline         2,915,896         12,182,007         26,022,153         0.24         0.11         4         2           82         8         2014         GlaxoSmithKline         1,830,533         12,766,228         27,789,037         0.14         0.07         4         2           83         8         2015         GlaxoSmithKline         864,413         12,994,477         31,121,864         0.07         0.03         4         2           84         8         2016         GlaxoSmithKline         2,378,145         16,853,678         27,981,229         0.14         0.08         4         2           85         8         2017         GlaxoSmithKline         485,300         16,980,217         26,286,191         0.03         0.02         4         2           86         8         2018         GlaxoSmithKline         618,389         8,651,191         15,700,216         0.07         0.04         4         2           87         8         2019         GlaxoSmithKline	
81       8       2013       GlaxoSmithKline       2,915,896       12,182,007       26,022,153       0.24       0.11       4       2         82       8       2014       GlaxoSmithKline       1,830,533       12,766,228       27,789,037       0.14       0.07       4       2         83       8       2015       GlaxoSmithKline       864,413       12,994,477       31,121,864       0.07       0.03       4       2         84       8       2016       GlaxoSmithKline       2,378,145       16,853,678       27,981,229       0.14       0.08       4       2         85       8       2017       GlaxoSmithKline       485,300       16,980,217       26,286,191       0.03       0.02       4       2         86       8       2018       GlaxoSmithKline       618,389       8,651,191       15,700,216       0.07       0.04       4       2         87       8       2019       GlaxoSmithKline       926,054       8,980,425       18,684,558       0.10       0.05       4       2         88       8       2020       GlaxoSmithKline       623,014       8,947,132       23,735,822       0.07       0.03       4       2	
82       8       2014       GlaxoSmithKline       1,830,533       12,766,228       27,789,037       0.14       0.07       4       2         83       8       2015       GlaxoSmithKline       864,413       12,994,477       31,121,864       0.07       0.03       4       2         84       8       2016       GlaxoSmithKline       2,378,145       16,853,678       27,981,229       0.14       0.08       4       2         85       8       2017       GlaxoSmithKline       485,300       16,980,217       26,286,191       0.03       0.02       4       2         86       8       2018       GlaxoSmithKline       618,389       8,651,191       15,700,216       0.07       0.04       4       2         87       8       2019       GlaxoSmithKline       926,054       8,980,425       18,684,558       0.10       0.05       4       2         88       8       2020       GlaxoSmithKline       623,014       8,947,132       23,735,822       0.07       0.03       4       2         89       9       2010       DN Meyer       (236,374)       740,347       2,899,709       -0.32       -0.08       0       1 <td>2</td>	2
83       8       2015       GlaxoSmithKline       864,413       12,994,477       31,121,864       0.07       0.03       4       2         84       8       2016       GlaxoSmithKline       2,378,145       16,853,678       27,981,229       0.14       0.08       4       2         85       8       2017       GlaxoSmithKline       485,300       16,980,217       26,286,191       0.03       0.02       4       2         86       8       2018       GlaxoSmithKline       618,389       8,651,191       15,700,216       0.07       0.04       4       2         87       8       2019       GlaxoSmithKline       926,054       8,980,425       18,684,558       0.10       0.05       4       2         88       8       2020       GlaxoSmithKline       623,014       8,947,132       23,735,822       0.07       0.03       4       2         89       9       2010       DN Meyer       (236,374)       740,347       2,899,709       -0.32       -0.08       0       1	2
84       8       2016       GlaxoSmithKline       2,378,145       16,853,678       27,981,229       0.14       0.08       4       2         85       8       2017       GlaxoSmithKline       485,300       16,980,217       26,286,191       0.03       0.02       4       2         86       8       2018       GlaxoSmithKline       618,389       8,651,191       15,700,216       0.07       0.04       4       2         87       8       2019       GlaxoSmithKline       926,054       8,980,425       18,684,558       0.10       0.05       4       2         88       8       2020       GlaxoSmithKline       623,014       8,947,132       23,735,822       0.07       0.03       4       2         89       9       2010       DN Meyer       (236,374)       740,347       2,899,709       -0.32       -0.08       0       1	2
85     8     2017     GlaxoSmithKline     485,300     16,980,217     26,286,191     0.03     0.02     4     2       86     8     2018     GlaxoSmithKline     618,389     8,651,191     15,700,216     0.07     0.04     4     2       87     8     2019     GlaxoSmithKline     926,054     8,980,425     18,684,558     0.10     0.05     4     2       88     8     2020     GlaxoSmithKline     623,014     8,947,132     23,735,822     0.07     0.03     4     2       89     9     2010     DN Meyer     (236,374)     740,347     2,899,709     -0.32     -0.08     0     1	2
86     8     2018     GlaxoSmithKline     618,389     8,651,191     15,700,216     0.07     0.04     4     2       87     8     2019     GlaxoSmithKline     926,054     8,980,425     18,684,558     0.10     0.05     4     2       88     8     2020     GlaxoSmithKline     623,014     8,947,132     23,735,822     0.07     0.03     4     2       89     9     2010     DN Meyer     (236,374)     740,347     2,899,709     -0.32     -0.08     0     1	2
87     8     2019     GlaxoSmithKline     926,054     8,980,425     18,684,558     0.10     0.05     4     2       88     8     2020     GlaxoSmithKline     623,014     8,947,132     23,735,822     0.07     0.03     4     2       89     9     2010     DN Meyer     (236,374)     740,347     2,899,709     -0.32     -0.08     0     1	2
88 8 2020 GlaxoSmithKline 623,014 8,947,132 23,735,822 0.07 0.03 4 2 89 9 2010 DN Meyer (236,374) 740,347 2,899,709 -0.32 -0.08 0 1	2
89 9 2010 DN Meyer (236,374) 740,347 2,899,709 -0.32 -0.08 0 1	2
	1
90 9 2011 DN Meyer (54,091) 679,096 2,728,698 -0.08 -0.02 0 1	1
91 9 2012 DN Meyer (23,957) 652,988 2,577,673 -0.04 -0.01 0 1	1
92 9 2013 DN Meyer (30,606) 622,382 2,597,517 -0.05 -0.01 0 1	1
93 9 2014 DN Meyer (40,756) 581,626 2,435,368 -0.07 -0.02 0 1	1
94 9 2015 DN Meyer (73,230) 638,100 2,301,121 -0.11 -0.03 0 1	1
95 9 2016 DN Meyer (214,402) 423,698 2,178,705 -0.51 -0.10 0 1	1
96 9 2017 DN Meyer (267,739) 302,969 1,890,966 -0.88 -0.14 0 1	1
97 9 2018 DN Meyer 319,297 621,063 1,839,132 0.51 0.17 0 1	1
98 9 2019 DN Meyer (13,493) 607,570 2,186,864 -0.02 -0.01 0 1	1
99 9 2020 DN Meyer 1,108,506 1,716,076 3,015,080 0.65 0.37 0 1	1
100 10 2010 Beta-glass 1,472,444 9,816,805 15,959,173 0.15 0.09 4 2	2
101 10 2011 Beta-glass 1,774,660 11,327,212 18,021,590 0.16 0.10 4 2	2
102 10 2012 Beta-glass 1,328,580 12,455,803 22,456,567 0.11 0.06 4 2	2
103 10 2013 Beta-glass 1,473,574 13,753,157 27,166,481 0.11 0.05 4 2	2
104 10 2014 Beta-glass 2,390,223 15,952,981 26,928,387 0.15 0.09 4 2	2
105 10 2015 Beta-glass 1,991,127 17,578,125 27,171,069 0.11 0.07 4 2	2
106 10 2016 Beta-glass 3,799,393 21,474,964 33,184,130 0.18 0.11 4 2	2
107 10 2017 Beta-glass 4,115,142 25,145,114 38,211,613 0.16 0.11 4 2	2
108 10 2018 Beta-glass 5,052,805 29,627,573 46,079,629 0.17 0.11 4 2	2
109 10 2019 Beta-glass 5,580,220 34,558,001 52,080,362 0.16 0.11 4 2	
110 10 2020 Beta-glass 3,466,670 37,189,718 53,963,634 0.09 0.06 4 2	2