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AN EVALUATION OF THE RELATIONSHIP BETWEEN STAFF REMUNERATION AND PRODUCTIVITY OF PHARMACEUTICAL FIRMS IN NIGERIA

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Abstract: This study evaluated the relationship between staff remuneration and productivity of pharmaceutical firms in Nigeria. The study specifically examined the relationship between yearly bonus and return on investment and evaluated the relationship between staff salaries & wages and return on investment of Pharmaceutical firms in Nigeria. Data of the study were sourced from annual reports of the five (5) sampled pharmaceutical firms. Hypotheses raised were analysed using Correlation Coefficient, result of the hypotheses shows that yearly bonuses of pharmaceutical firms in Nigeria positively and significantly relate with the firms return on investment with Pearson Correlation result of .567** and P-value of 0.000. This implies that Yearly bonuses has a positive influence on return on investment of Pharmaceutical firms in Nigeria. Also, the findings showed that staff salaries and wages of pharmaceutical firms in Nigeria positively and significantly relate with the firms return on investment with Pearson Correlation result of. .665** and P-value of 0.000. This implies that Staff salaries and wages does significantly relate with return on investment of Pharmaceutical firms in Nigeria. Based on the findings, the study recommends among others that pharmaceutical firms should increase their yearly bonus such as pension, gratuity and other staff retirement benefits packages. This study has proved that the presence of such reserves in the income statement of the pharmaceutical firms serve as motivation for the employees of the firms.

Keywords: Staff remuneration, Productivity, Yearly bonus, Return on investment, Staff salaries & wages

INTRODUCTION

1.1 Background of the Study

Staff remuneration is a crucial factor influencing organizational performance, especially in sectors that require highly skilled and dedicated personnel, such as the pharmaceutical industry. The relationship between staff remuneration and productivity in pharmaceutical firms is a key area of interest, as it is widely believed that competitive compensation packages motivate employees to perform optimally (Armstrong, 2014). Pharmaceutical firms in Nigeria, like their counterparts globally, operate in a highly competitive and regulated environment, where the productivity of their workforce is central to their success. Remuneration, encompassing salaries, benefits, bonuses, and other incentives, is a significant determinant of employee satisfaction, retention, and performance (Lawler, 2003).

In Nigeria, the pharmaceutical industry is a vital sector contributing to the national economy by providing essential healthcare products. However, the industry faces challenges such as high operating costs, inadequate infrastructure, and fluctuating demand for pharmaceutical products (Ogunleye, 2016). Given these challenges, the role of remuneration becomes even more critical, as firms must find ways to incentivize their staff to achieve higher levels of productivity, despite external pressures (Akinyemi, 2019). Previous studies have shown that employees who perceive their compensation as fair and competitive tend to be more engaged, productive, and loyal to the organization (Ogunyemi & Adebayo, 2017).

The need for pharmaceutical firms to enhance their productivity in Nigeria requires an understanding of how different components of remuneration affect employee motivation and work output. Some studies have highlighted that while monetary compensation is important, non-monetary rewards such as recognition, job security, and career development opportunities also play a crucial role in enhancing productivity (Gottfredson, 2014). This study aims to evaluate the relationship between staff remuneration and productivity within Nigerian pharmaceutical firms, contributing to a deeper understanding of how financial and non-financial incentives can be optimized to drive performance in this essential sector.

1.2 Statement of the Problem

In the Nigerian pharmaceutical industry, productivity remains a significant challenge due to various internal and external factors, with staff remuneration emerging as a key issue. Despite the critical role that effective remuneration plays in motivating employees and enhancing organizational productivity, many pharmaceutical firms in Nigeria struggle to establish competitive compensation packages that can drive performance. Research suggests that inadequate remuneration, whether through low salaries or insufficient non-monetary incentives, often leads to decreased employee motivation, lower morale, and high turnover rates (Ogunyemi & Adebayo, 2017). This issue is further compounded by the country's economic instability, which makes it difficult for firms to offer attractive remuneration packages that align with employees' expectations and the industry's competitive landscape.

While the relationship between remuneration and productivity has been well-documented in various sectors, there is limited empirical research focusing specifically on pharmaceutical firms in Nigeria. This study aims to address this gap by evaluating how different aspects of staff remuneration both financial and non-financial affect the productivity of employees in the pharmaceutical sector. Understanding this relationship is crucial for pharmaceutical firms to develop effective compensation strategies that not only retain skilled personnel but also optimize their overall productivity.

1.3 Objectives of the Study

The main objective of this study is to examine the relationship between staff remuneration and productivity of pharmaceutical firms in Nigeria. Whereas the specific objectives were to:

i. Examine the relationship between yearly bonus and return on investment of pharmaceutical firms in Nigeria.
ii. Evaluate the relationship between staff salaries & wages and return on investment of Pharmaceutical firms in Nigeria.

1.4 Research Questions

The following research question guided the study:

i. Does yearly bonus relate with return on investment of pharmaceutical firms in Nigeria?
ii. Does staff salaries & wages affect return on investment of Pharmaceutical firms in Nigeria?

1.5 Statement of Hypotheses

The following null hypotheses were formulated for the purpose of this study:

i. Yearly bonus does not significantly relate with return on investment of Pharmaceutical firms in Nigeria.
ii. Staff salaries and wages does not significantly relate with return on investment of pharmaceutical firms in Nigeria.

REVIEW OF RELATED LITERATURE

2.1 Conceptual Review

2.1.1 Staff Remuneration

Staff remuneration is a critical aspect of human resource management that encompasses the total compensation package provided to employees in exchange for their labor. It includes various components such as salaries, wages, bonuses, benefits, and non-monetary incentives, all aimed at rewarding employees for their contributions to the organization. Remuneration is not just a monetary exchange but also a motivational tool that affects employee performance, satisfaction, and retention. According to Armstrong (2014), staff remuneration refers to the total financial and non-financial rewards that employees receive in exchange for their services. Armstrong emphasizes that it involves both direct compensation (such as salary and bonuses) and indirect compensation (such as benefits and recognition). The focus, he argues, is on designing remuneration systems that motivate employees to achieve organizational goals while ensuring fairness and equity.

Lawler (2003) offers a broader view, suggesting that remuneration is a strategic tool for managing employee behavior. He posits that effective remuneration systems should align with the organization's objectives and the individual's performance, thereby promoting organizational success and employee satisfaction. Lawler stresses that employees are not merely motivated by financial rewards but by the perceived value of the total compensation package. Ogunyemi and Adebayo (2017) further elaborate on this by noting that remuneration systems should reflect both the market value of labor and the internal equity within the organization. They argue that competitive compensation is essential for attracting and retaining talent in the highly competitive pharmaceutical industry.

Gottfredson (2014) defines remuneration in terms of its psychological impact, noting that well-structured compensation packages are instrumental in fostering employee motivation and enhancing job satisfaction. He contends that non-financial rewards, such as recognition and career development opportunities, complement financial remuneration and are integral to a holistic approach to employee compensation. Akinyemi (2019) highlights that staff remuneration is closely linked to employee productivity. He asserts that employees who perceive their remuneration as fair and rewarding are more likely to exhibit higher levels of engagement and commitment to the organization's goals, thus enhancing overall performance.

2.1.2 Yearly bonus

According to Kotun, Adeoye & Alaka, (2021) a bonus is a financial compensation that is above and beyond the normal payment expectations of its recipient. Companies may award bonuses to both entry-level employees and to senior-level executives. While bonuses are traditionally given to exceptional workers, employers sometimes dole out bonuses company-wide to stave off jealousy among staffers.

Bonuses may be dangled as incentives to prospective employees and they can be given to current employees to reward performance and increase employee retention. Companies can distribute bonuses to its existing shareholders through a bonus issue, which is an offer of free additional shares of the company's stock. In workplace settings, a bonus is a type of compensation an employer gives to an employee that complements their base pay or salary. A company may use bonuses to reward achievements, to show gratitude to employees who

meet longevity milestones, or to entice not-yet employees to join a company's ranks (Kotun, Adeoye & Alaka, 2021).

2.1.3 Staff Salaries and Wages

One purpose of a person as an employee of a company is to earn income in the form of wages or compensation. Employees received wages and salaries to meet basic needs such as food, clothing and housing. In support of this, Gunawan & Amalia (2019) state that one of the purposes of someone being the employee or a labor of a company is to earn an income in the form of wages or compensation. Wages are earned to fulfill the basic necessities such as food, clothing and housing.

Wages become an important aspect of being effective if linked to the performance significantly (Umar, 2012). Granting wages remuneration is the most complex task for the industry, is also the most significant aspects for workers, because of the amount of wages reflects the size of the value of their work among the workers themselves, their families and communities. Every company in determining the amount of wages paid to the employee must be feasible, so that the lowest wage that is given will meet the needs of their life (Kanzunnudin, 2022). Wages are very important for the industry because it reflects the industry's efforts to defend human resources in order to have a high loyalty and commitment to the industry. Effective wages strategy is expected to contribute to maintaining the viability of the work force, the realization of the vision and mission, as well as for the achievement of work objectives (Umar, 2012).

2.1.4 Firm Productivity

Firm productivity refers to the efficiency with which a firm transforms inputs (such as labor, capital, and materials) into outputs (products or services). It is a key indicator of a firm's performance and competitiveness in the market. High productivity levels indicate that a firm is utilizing its resources effectively to generate more output, which contributes to its overall success. Productivity is a multifaceted concept that is influenced by various factors, including technological advancements, employee skills, and organizational processes. According to Mankiw (2016), firm productivity can be defined as the ratio of output to input in the production process. This traditional definition focuses on measuring how efficiently a firm uses its resources to produce goods and services. Mankiw emphasizes that productivity improvements are critical for long-term economic growth and for increasing the standard of living in both individual firms and entire economies.

Solow (1957), in his seminal work on economic growth, introduced the concept of "total factor productivity" (TFP), which measures the efficiency with which all inputs in the production process are used. Solow's model suggests that TFP growth is the primary driver of long-term increases in firm productivity, as it reflects improvements in technology, innovation, and organizational effectiveness that enable a firm to produce more with the same amount of input. Gottfredson (2014) expands on this by highlighting that firm productivity is not solely about the technical efficiency of production but also about how effectively a firm's workforce is managed. He argues that employee motivation, skill development, and leadership are crucial to enhancing productivity. A well-trained and engaged workforce is more likely to contribute to higher output and better-quality products.

In contrast, Hossen (2017) defines firm productivity in terms of output per labor hour, focusing on labor efficiency as a central driver. He suggests that higher productivity results from better training, improved work processes, and a positive organizational culture. Hossen also points out that technological innovations, such as automation, can significantly enhance labor productivity by reducing the time and effort required to complete tasks. Borghans and Ter Weel (2007) discuss the role of human capital in firm productivity, defining it as the knowledge, skills,

and abilities of the workforce. They argue that investment in human capital development, such as education and training programs, directly impacts productivity by improving the capabilities of employees and their ability to contribute to firm goals. This view aligns with the concept that firm productivity is not only about efficient resource utilization but also about leveraging the potential of employees.

2.1.5 Return on investment as a measure of productivity

Return on Investment (ROI) is a performance metric used to assess the profitability or efficiency of an investment, or to compare the performance of different investments. ROI measures the return on an investment in relation to its cost. To calculate ROI, the return or benefit generated by an investment is divided by its cost, and the result is expressed as a percentage or ratio. As a widely used metric, ROI helps evaluate how effectively an investment has performed by comparing its net profit (or loss) to the initial investment. This metric enables comparisons across different projects or assets. However, ROI does not account for the time duration or holding period of an investment, potentially overlooking the opportunity costs of choosing one investment over another (Aximin, 2014).

2.2 Theoretical Framework

2.2.1 McGregor Theory X and Y Theory

McGregor propounded Theory X and Y Theory in 1960. Constructed a philosophy based on differing managerial practice and presented a sharp contrast between two different sets of managerial assumptions about people and identified them as theory X and theory Y which represents two extreme ends of a continuum of beliefs.

Theory X set of assumptions about human behaviour suggest that people act to realize basic needs and, hence, do not voluntarily contribute to organizational aims (Bloisi et al., 2013). McGregor assumed that individuals are indolent, self-centred, resistant to change, lack ambition, dislike responsibility and are naive McCaffer & Harris, (2019). Managers are, therefore, to direct and modify worker behaviour to meet organizational needs by persuading; rewarding, punishing and controlling those who do not naturally strive to learn and grow.

McGregor theory X and Y and the theory of backer 1962 are the anchor theory of this study because it is the most relevant to the primary objective of the study, that is, the relationship between staff remuneration in firm productivity.

2.3 Empirical Review

Yamoah (2013) examined the relationship between compensation and employee productivity in the banking industry in Ghana. The population consisted of all employees of Ghana Commercial Bank in the Greater Accra Region of Ghana. Structured questionnaire was the instrument used to collect the data. A sample of 60 respondents was selected for the study using convenience sampling technique. Using case study approach, a descriptive survey was carried out to collect data from employees of Ghana Commercial Bank in the Greater Accra Region of Ghana. Data was analysed in terms of descriptive statistics. Pearson chi square was used to test the significance of relationship between employee compensation and productivity. The results indicated a significant relationship between compensation and productivity.

Mphil, Ramzan, Zubair, Ali & Arslan (2014) examined the impact of compensation on employee performance. The population of the study consists of 45 banks which were selected randomly. A Sample of 201 respondents was selected randomly from the staff of the 45 banks. Secondary data were collected from the respondents through questionnaire which was designed to collect the data on the factors related to compensation like salary, rewards, indirect compensation and employee performance. The data collected were analyzed in SPSS 17.0 Version. Different analytical and descriptive techniques were used to analyze the data. It is founded from different results

that Compensation has positive impact on employee performance. It is proved from correlation analysis that all the independent variables have weak or moderate positive relationship to each other. Regression analysis shows that all the independent variables have insignificant and positive impact on employee performance. Descriptive analysis also reveals that all the independent variables have positive impact on employee performance. ANOVA results reveal that education have not same impact on employee performance.

Kotun, Adeoye & Alaka, (2021) studied the effect of contributory pension scheme on employees' productivity: Evidence from Lagos state government. Primary data comprising of questionnaire and interview were used for the study. The primary source involved field survey that consists of administering questionnaire. The sample size is one hundred and twenty respondents (120). Simple random sampling method was used in administering the questionnaire. The data collected was analyzed statistically in form of tabular presentation with the aid of Statistical Package for Social Sciences (SPSS) version 21. The result of the analyses reveals that there is significant relationship between adequate retirement package and employees' productivity and that it has a positive impact on the organization efficiency. Both empirical study and oral interview conducted however, found that the contributory pension scheme (CPS) has positive potentials over the defined benefits pension scheme (DBPS).

Chaudhrya, Sabirb, Rafi & Kalyarc (2013) explored the degree of difference in salary satisfaction and its impact on job satisfaction in public sector organizations and private sector organizations in Pakistani context. Data was collated from 160 employees (total 320) from each sector organizations. Salary satisfaction affects job involvement, work inspiration, employee performance and motivation. The posited hypothesis is if there exists a significant difference in the degree of salary satisfaction in public sector and private sector organization, and the positive influence of salary satisfaction on job satisfaction in both public and private sectors. Z test was used to analyze the degree of difference between salary satisfactions in both sectors, although its relation with job satisfaction was measured by regression analysis. The findings indicate that employees in public sector organizations have little higher salary satisfaction as compared to private sector employees. Moreover, salary satisfaction is also positively related with job satisfaction in both.

Gunawan & Amalia (2019) studied wages and employees' performance: the quality of work life as moderator. Sampling is done by stratified random sampling of 100 employees in a manufacturing company. Primary data were collected through questionnaire instrument. Data analysis was done using linear regression and moderated regression analysis. The result showed a significant negative effect on the wages of employee's performance. Other finding is negative effect of wages which are moderated by the quality of work life is caused by the effect of intrinsic motivation (quality of working life) is more powerful than extrinsic motivation (wages). Quality of work life is quasi moderators that weaken the wages variable. Further research is recommended to expand the research by adding independent variable that affects the performance of employees.

Abdul-jaleel & Milan (2022) examined the effect of compensation systems on the work performance of employees (junior staff) of the University of Cape Coast (UCC), Ghana. The sample size for the study was 346. Stratified random sampling technique was used to select the junior staff. 24 administrators were selected to help collect data from the respondents. Questionnaire and an annual assessment form were the instruments used in collecting data. Both descriptive and inferential statistics were used in analysing the data. Findings from the study show that the junior staff has positive view on the university's compensation packages as a whole. However, junior staffs' view on the university's compensation packages does not influence employees' work performance

directly. It does so only if it boosts their level of satisfaction which in turn boosts their commitment to the university and in the long run increases their work performance.

METHODOLOGY

3.1 Research Design

This study adopted an *ex-post facto* research design which provides an empirical solution to research problems by using data which are already in existence. The study is therefore based on published financial statements of the selected pharmaceutical firms in Nigeria.

3.3 Area of Study

This study was conducted in Nigeria and focused on pharmaceutical firms listed on the Nigeria Stock Exchange (NSE) during the rel**eva**nt period.

3.2 Sources of Data

Secondary data is the source of data for this study. Data on employees training expenses, yearly bonus, staff salaries and wages and firm return on investment were used from the published annual financial statement of the selected pharmaceutical firms in Nigeria for a period of ten years (2014 to 2023).

3.4 Population of the study

The population of the study comprised the ten (10) pharmaceutical firms listed on the Nigeria Stock Exchange Market (NSE).

3.5 Sample Size Determination

This study used judgmental sampling technique to select the sample of five (5) firms from the ten (10) pharmaceutical firms listed on the Nigeria Stock Exchange.

3.6 Model Specification

The following model was developed based on the variables used in the study:

R - $\{X_1, Y_1\}, \{X_2, Y_2\} \ldots\ldots\ldots\ldots\ldots\ldots \{Xn, Y_n\}$.

R - $\{ROI_2, YBN_2\}, \{ROI_2, SSW_2\} \ldots\ldots\ldots\ldots\ldots$ (1).

Where:

ROI = Return on investment

YBN = Yearly bonus

SSW =Staff Salaries & Wages

3.7 Description of Variables

Return on investment (ROI): Return on investment (ROI) is a performance measure used to evaluate the efficiency or profitability of an investment or compare the efficiency of a number of different investments.

Yearly bonus (YBN): A bonus is a financial compensation that is above and beyond the normal payment expectations of its recipient. Companies may award bonuses to both entry-level employees and to senior-level executives. While bonuses are traditionally given to exceptional workers, employers sometimes dole out bonuses company-wide to stave off jealousy among staffers.

Staff Salaries and Wages (SSW): These are payments received by workers as on the job payment to meet their basic needs such as food, clothing, medical and housing.

3.8 Method of Data Analysis

Pearson Product Moment Correlation Coefficient was used to test the relationship between the independent and the dependent variables whereby staff training/education, yearly bonus and staff salaries and wages will be used

as proxies for human capital investment (independent variables) while return on investment was used as proxy for firm productivity (dependent variable).

This test will be done at 5% significant level, which means the higher correlation coefficient; the association level was stronger between two variables. The correlation coefficient can be either positive or negative, is depending on the direction of the relationship between two variables (Hair, Money, Page and Samouel, 2022).

4.9 Decision Rule

Reject null (H_O) if the t-statistics is greater than 2.0 and the probability value is less than 0.05 (5%), otherwise accept null

DATA PRESENTATION AND ANALYSIS

4.1 Data Presentation

Table 4.1: LOGGED DATA FOR THE SELECTED FIRMS

YEAR	RETURN ON INVESTMENT NGN (000)	YEARLY BONUS NGN (000)	STAFF SALARIES & WAGES NGN (000)
2014	3.532419	2.480007	6.203342
2015	3.498347	4.627847	6.189717
2016	3.653839	5.228516	6.467679
2017	3.64745	5.117188	6.438797
2018	3.62253	5.133887	6.358685
2019	3.589208	5.107759	6.297085
2020	3.549113	5.045577	6.173275
2021	3.487032	5.426168	6.197167
2022	3.463282	5.66453	6.086463
2023	3.427979	5.722061	6.102533
2014	3.390578	5.721939	5.951646
2015	3.392412	5.677597	5.966803
2016	2.534971	3.93842	4.68472
2017	2.541861	4.401401	4.570006
2018	2.52912	4.317646	4.552388
2019	2.574382	4.316285	4.678254
2020	2.686383	4.447375	4.809816
2021	2.696444	4.362746	4.720688
2022	2.526724	4.33086	4.636287
2023	2.607845	4.340246	4.572174
2014	2.592068	4.328543	4.599304
2015	2.566436	4.284566	4.56215
2016	2.550616	4.266138	4.511282
2017	2.517601	4.233326	4.474143
2018	2.592068	4.507869	5.664334
2019	2.945143	4.659622	5.128761
2020	2.944948	4.950584	5.58529
2021	2.970864	5.035025	5.606188
2022	2.990961	5.357102	5.128735
2023	2.918011	5.440703	5.24959

2014	3.458237	5.312486	5.327216
2015	3.004964	5.429103	5.365894
2016	2.958399	5.446983	5.358723
2017	2.94955	5.452289	5.662021
2018	2.958399	5.446983	5.582729
2019	2.94955	5.452289	5.662021
2020	2.959599	4.45048	5.347531
2021	2.887462	4.458336	5.35811
2022	2.943175	4.859379	5.400762
2023	2.903858	4.727509	5.384221
2014	2.895127	4.876166	5.301631
2015	2.86888	4.984379	5.215265
2016	2.920264	5.356192	5.161787
2017	2.791603	5.393178	5.078754
2018	2.810999	5.406489	5.270562
2019	2.938292	5.348593	5.243646
2020	2.904826	5.3274	5.219695
2021	2.850505	5.290562	5.080446
2022	3.391778	4.900924	5.77016
2023	3.386658	5.060116	5.736809

Source: Author's Compilation 2024.

4.2 Test of Hypotheses

A hypothesis is a predicted answer to a research question. It is an a priori statement about the likely outcome of a research effort. This supposition is based on what others have done. Three hypotheses were altogether postulated for this study. This section is dedicated to testing of these hypotheses.

As stated earlier, The Pearson Product moment correlation coefficient was used to measure the strength of the association between the variables used. Two-tailed Pearson correlation test were employed to assess predictive validity of the posited variables.

Test of Hypothesis One

Statement of Hypothesis One

Ho: Yearly bonus does not significantly relate with return on investment of Pharmaceutical firms in Nigeria.

H_1: Yearly bonus does significantly relate with return on investment of Pharmaceutical firms in Nigeria.

Table 4.2 Showing the Correlations result of Yearly bonus and Return on investment

		Yearly bonus	Return on investment
Yearly bonus	Pearson Correlation	1	.567**
	Sig. (2-tailed)		.000
	N	360	360
Return on investment	Pearson Correlation	.567**	1
	Sig. (2-tailed)	.000	
	N	360	360

Source: SPSS 23

**. Correlation is significant at the 0.01 level (2-tailed).

Decision rule

Reject null (H_O) if the t-statistics is greater than 2.0 and the probability value is less than 0.05 (5%), otherwise accept null

From the correlation table 4.2.2, the correlation value of 56.7% is a relationship that is very strong. The p-value of the variable is greater than the level of significance of 5% (0.00 > 0.01). This shows that there is positive and strong correlation between Yearly bonuses and Return on investment, which is also significant at the 0.01 level (2-tailed). This means that we uphold the alternate hypothesis. This implies that Yearly bonus does significantly relate with return on investment of Pharmaceutical firms in Nigeria.

Test of Hypothesis Two

Statement of Hypothesis Two

Ho: Staff salaries and wages does not significantly relate with return on investment of Pharmaceutical firms in Nigeria.

H_1: Staff salaries and wages does significantly relate with return on investment of Pharmaceutical firms in Nigeria.

Table 4.3 Showing the Correlations result of Salaries and Wages and Return on investment

		Staff salaries and wages	return on investment
Staff salaries and wages	Correlation Coefficient	1.000	.665**
	Sig. (2-tailed)	.	.000
	N	360	360
Assurance2	Pearson Correlation	.665**	1.000
	Sig. (2-tailed)	.000	.
	N	360	360

Source: SPSS 23

**. Correlation is significant at the 0.01 level (2-tailed).

Decision rule

Reject null (H_O) if the t-statistics is greater than 2.0 and the probability value is less than 0.05 (5%), otherwise accept null

From the correlation table 4.2.3, the result of the correlation value of 66.5% is a relationship that is very strong. The p-value of the variable is greater than the level of significance of 1% (1.00> 0.01). This shows that there is positive and strong correlation between return on investment and salaries and wages, which is also significant at the 0.01 level (2-tailed). This means that we uphold the alternate hypothesis. This implies that Staff salaries and wages does significantly relate with return on investment of Pharmaceutical firms in Nigeria.

5.1 Summary of Findings

The following findings were made from the study.

i. It was discovered from the study that yearly bonus of pharmaceutical firms in Nigeria positively and significantly relate with the firms return on investment. The correlation value of 56.7% is a relationship that

is very strong. The p-value of the variable is greater than the level of significance of 5% (0.00 > 0.01), this implies that Yearly bonus has a positive influence on return on investment of Pharmaceutical firms in Nigeria

ii. Finally, the findings showed that staff salaries and wages of pharmaceutical firms in Nigeria positively and significantly relate with the firms return on investment. The result of the correlation value of 66.5% is a relationship that is very strong. The p-value of the variable is greater than the level of significance of 1% (1.00> 0.01), this implies that Staff salaries and wages does significantly relate with return on investment of Pharmaceutical firms in Nigeria.

5.2 Conclusion

In the light of the findings, the discussions and the summary, we hereby conclude that staff salaries and wages of pharmaceutical firms in Nigeria positively and strongly relate with return on investment of the firms. We also conclude that yearly bonus of the pharmaceutical firms positively and weakly relates with return on investment of the firms during the period studied. The study revealed that all the explanatory variables have positive relationship with profitability; however, expenditure on yearly bonus contributed more to the profitability of the firms than expenditures on salaries & wages and contributory pension. The study concluded that staff remuneration expenditure significantly influenced profitability of manufacturing companies quoted on the Nigerian Stock Exchange.

5.3 Recommendations

Based on the findings, discussions and conclusion of this study, we hereby recommend as follows:

i. Since yearly bonus positively relate with cost of productivity of the firms, Nigeria pharmaceutical firms should increase their yearly bonus such as pension, gratuity and other staff retirement benefits packages. This study has proved that the presence of such reserves in the income statement of the pharmaceutical firms serve as motivation for the employees of the firms.

ii. Finally, since staff salaries and wages of the firms positively and strongly related with the firms' productivity, Nigeria pharmaceutical firms should implement an appropriate staff salary and wages scheme that will reward hard working and good performance staff so as to motivate staff to put in their best to improve productivity in the firms.

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