An Empirical Analysis of Wage Differentials Among Public Servants in Nigeria

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ABSTRACT: *This study investigates wage differentials among public servants in Nigeria the four specific objectives: were to examine the level of wage differentials across cadre, sector of employment, state and federal employees, and the impact of wage differentials on labour turnover in Nigeria. Both primary and secondary data were used for this study. The study employs a stratified sampling technique in collecting the primary data. We employed the quantile regression and logistic models in its. Using a sample of 840 employees, in accordance with our theoretical priors, the empirical results show that there is a negative relationship between wage differential and labour turnover. That as state workers' wages increases, the probability of a State worker leaving for Federal civil service falls by 0.2901. Wage differences by gender are well pronounced among the low cadre than the high cadre, in favour of male employees and in favour of female in the middle cadre of manpower. The intergovernmental workers analysis reveals that Bayelsa State workers earn higher than other States selected, including Federal workers. Enugu State workers are seen to earn lower than the rest of the State workers selected. On inter-sector wage differences; health workers earn higher than other sector workers selected for this study. We recommend that workers welfare prioritization, adoption of a unified structure and full implementation of legislative wage, should be enthroned.*

KEYWORDS: *Wages, Wage differentials, Public Service, Public Servant, Quantile regression, Labour turnover.*

I.   INTRODUCTION

Government is seen as a major or the sole employer of specific types of workers in different labour markets, for instance military personnel, antitrust prosecutors, postal workers, fire fighters, etc. The demand for these employees is derived from society's demand for the public sector goods and services that these workers provide. When government employs workers, it exhausts or absorbs economic resources (Campbell et al, 1999). This implies that the issue of how much to pay workers in a given society lies in the hands of the government of the said society. Government pays wages from their generated revenue, either through taxation, borrowing, and grants/aids. This does not necessarily depend on workers' productivity, but most on welfare enhancement purposes. Wages will vary among government employees, on the basis of fund (resource) availability. Adam (1776) observed that "wage difference arises due to fund variation". The idea of how much to pay government employees without risking a drop in the Public Service Motivation (PSM) levels is a complex one. It is argued that government employees are generally less motivated by wages than their private counter parts. Wages satisfies both low and high order needs, which indicates achievement and recognition for effort (Taylor, 2009). Domerio and Giordano (2010) observed that union will exploit the relatively inelastic demand for labour in the public sector workers. But the extent to which this will be possible based on how tight the budget constraint will be.The level of wage disparity in Nigeria started as far back as 1951, the introduction of federal principle in administration of the country by the Macpherson constitution, regional governments and their employee dealt with wage issues with wage review commissions, and wage level differs from region to region reflecting the budgetary disparities among the various governments, (Otobo (1992), in Emmanuel, 2002).   Wage differential in Nigeria basically is determined by the degree to which institution forces limit the influence of market forces generally. Workers in different states of the federation; federal, state, and local governments have variation in what they receive as salary and other fringe benefits. This is in line with 1997 federal government budget pronouncement by late Gen. Abacha that "each state should pay its workers according to its ability (resources)" (Nick, 2001).

Wage differential is not a new terminology in labour market; it has been in existence even in the advanced society and less developed ones as well. This is due to heterogeneous participants with different innate abilities in the labour market. There exists wage disparity across the Nigerian federation and many of these variations are equilibrium and transitional wage differentials. From the third republic to date, different salary structures exist in the respective tiers of government and within ministries, creating wage disparities across employees of different sectors of the economy. Something which warrants us to carry out this study and the sources of these wage differentials and how they can be eliminated are very complicated. The existence of different salary structures in the respective tiers of government is not really based on labour productivity in the public service, reasons being existence of idle staffs, no commitment to service, lack of monitoring/supervision, indiscipline and carefree life style in the service. To some extent, it is due to professionalism, condition of service, demanding nature of the job, political interest and service to humanity. But we observed that workers in ministries/parastatals (schools and sanitation authorities) with poor salary structures are more dedicated to service than some workers in ministries/parastatals (public hospitals and health centres) with lucrative salary structures. The wage disparity across states, reflect resources base advantage and productivity, and pre-labour characteristics in the labour market. This wages disparity has led to transfer of service from state to federal and from federal to state. The different responses of log of wage earning to changes at educational level, salary grade level (proxy for experience), and other variables have gather momentum in the formation of wage differentials in the public service. However, these wage differences among public servants are not well defined, with respect to the percentage difference in their earnings across cadre of manpower, between sectors of employment, State governments and tiers of government. Hence, legislative wage (NMW) has caused a lot of controversies (labour turnover due to wage differentials) in the public sector across regions. This study therefore, tends to investigate the following research problems: what is the level of wage differentials by gender across various cadres of manpower? What is the level of wage differential between federal and state workers? What is the impact of wage differentials on labour turnover between federal and state government employees? What is the level of wage differential by sector of employment between federal and state? Which will be based on the following assumptions: jobs are heterogeneous, workers are heterogeneous, and the Nigeria labour market is imperfect.

Objectives

The broad objective of this study is to determine the level of Wage differential among Civil Servants in the two tiers of Governments (Federal and States, inter States analysis) in Nigeria. The specific objectives are:
- ❖ To examine the level of wage differential by gender across various cadres of manpower.
- ❖ To identify the level of wage differentials between federal and state workers.
- ❖ To examine the impact of wage differential on labour turnover between federal and state and
- ❖ To examine the level of wage differential based on sector of employment.

II.   LITERATURE REVIEW

The Nigerian labour force has gone through a period of remarkable demographic changes in recent years. Some of these forces are rooted in the different expectations of women regarding the balance between housewife and market work. Others include changes arising from immigration, both legal and illegal, and from different birth rates among ethnic groups. This had pronounced continued changes in the mix of groups in the labour force. The differences in earnings capacities among people have long been noted and debated. Upon the average, the lifetime earnings of graduates are greater than those of people who hold but a secondary school certificate. Statistical data from National Bureau of Statistics (NBS) in Nigeria gives a substantial differences in existence of earning streams between males and females, public and private employees. This is also applicable in other parts of the world; such as US, Italy, Spain, Germany, etc. "The cause of variation in wages and earnings among people are complex and controversial", (Ernst, 1991).Economic theories posit that wage determination is a human capital theory. Its development is due to important contribution by Jacob Mincer (1957, 1958, and 1962), Theodore Schultz (1960, 1961) and Gary Becker (1962, 1964) cited in (Ernst, 1991). In turn, modern human capital theory clearly has its roots in the classic eighteen-century writings by Adam Smith on equalizing differentials. On the assumption that individuals vary with respect to how difficult they are to perform a given task. Perfect competition ensures that these differences will be compensated for by wage differentials (Pierre & Andre, 2004). Blanchard (2009) observes those in the growing sectors that are with right skills, technological progress leads to new opportunities and higher wages. But the reverse is the case for those in declining sectors that is with skills that are no longer in demand, technological progress can mean the loss of their jobs, a period of unemployment, and possibly much lower wages. Economists believe that one of the main reasons behind this increase of wage disparity is technological change. Blanchard pointed out in US that since 1980, workers with low level of education have seen their relative wages steadily fall overtime, while workers with high levels of education have seen their relative wages steadily increasing.

The importance of wage differentials cannot be over emphasized; scholars in Labour Economics had different empirical evidence and findings in this subject. However, among the researches carried out on wage differentials includes; Ichoku (2001), In a study of wage earnings differentials in South Africa. Adopting the quintile regression observes that a strong gender bias against women exists. The result of his findings indicates that nearly in all cases, women are associated with substantial lower wage income. This agrees with Fidelis et al (2006) findings in the Nigerian context, that gender-induced wage inequality is higher at high wage brackets than at lower wage brackets. Workers in the rich provinces like Gauteng for instance earn wages far higher than their counterparts from the poorer provinces like Mpumalanga. Machado and Mata (2005) investigate the wage inequality in Portugal over time, and which factors contributed to the change in this wage inequality. They developed a technique for creating counterfactual wage distributions with quantile regressions, in order to isolate the effects of different factors contributing to the wage inequality. Like Machado and Mata, Buchinsky (1998, 2001) focused on the changes to the distribution of (in this case, female) wages and the returns to education over time. Buchinsky (1998, 2001) develops and applies the quantile regression techniques with sample selection bias, but does not study the male-female wage gap. Albrecht et al. (2003) use quantile regressions to investigate how the gender gap differs across the wage distribution in Sweden, and in particular, whether there is a "glass ceiling" at the top of the distribution for women, and the authors do in fact find positive answer to this question. The authors apply the technique from Machado and Mata (2005) to create two counterfactual log wage densities (the one for female wages with women's own characteristics but "paid like men", and the other for the case in which women were given men's characteristics but were still paid "like women")to decompose the gender wage gap `a la Blinder-Oaxaca. For the secondary focus of the paper, Albrecht et al. (2003) also looks at the recent immigrants into Sweden and find that the native–immigrant wage gap is almost constant across the wage distribution. However, there is no decomposition for the immigrants, all cited in Andrey (2008).

Derek (1998) analysis of differences in occupational earning by gender; result shows the existence of some gender bias, if pay include allowances related to family circumstances as these may be paid only to men if both spouses are employed. According to him if workers are paid according to piece of work or output based payment systems, differences in average wages may reflects differences in productivity. He concluded that there are still significant pay differences between men and women workers even when considering very comparable categories. Women still tend to receive lower average pay than men in the same occupation.

III. METHODOLOGY

We adopted the Mincerian wage earning model (the neoclassical model), with quantile regression application. Data for this analysis is secondary data which were sourced from National Salaries, Incomes and Wage Commission (NSIWC), and the salary structures of the respective Ministries and Parastatals of the States selected. And also questionnaire were also administered for the purpose of capturing the individual employee features and turnover viability. Finally we concentrate on eight hundred and forty employees in the federation, from six states; one per region (Bayelsa for south-south, Enugu for south east, Kogi for north central, Kebbi for north west, ogun for south west and Jigawa for north east) with a total of one hundred and twenty employees per state and federal.

The θth sample quantile, $0<\theta<1$, regression model propounded by Koenker and Bassett (1978) is defined as any solution of minimization problem:

Letting$\{X_t: = 1, ., . ., ,T\}$ and $\{Y_t: t = 1, ., ., T\}$ is a random sample on the regression process,$u_t = Y_t - X_t\beta$ having distribution function F. The θth QR, $0 <\theta< 1$, is define as any solution to the minimization problem:

$$\text{Min}[\sum_{t\epsilon\{t:yt>xtb\}}\theta|Y_t-X_tb| + \sum_{t \epsilon\{t:yt<xtb\}} (1-\theta)|Y_t-X_tb|]\dots\dots\dots\dots\dots 1$$

We use β_θ rather than β to make clear that different choices of θ estimate different values of β. Least absolute error estimator is the regression median, i.e., the QR for $\theta = 0.5$, gives the least absolute-deviations estimator that minimizes

Model Specification

In specifying our model in this study, we have to outline the key determinants of wages in the Nigeria public service, which depends on educational qualifications, working experience, Number of dependants, sector of employment, and employer (Federal or State). We use salary grade level as proxy for experience, showing the unique nature of the labour market.

MODEL 1: Addressing objective 1, estimating the level of wage differential by gender across cadres.

$Log(W_i) = \alpha(\theta) + edu\beta_1(\theta) + SGL\beta_2(\theta) + depnt\beta_3(\theta) + Mal\Upsilon_1(\theta) + Cadre\delta_i(\theta) + MalCadre\lambda_i(\theta) + FemHcadre\eta_1(\theta) + FemLcadre\eta_2(\theta) + \varepsilon_{\theta i}$ 3

$Quant_\theta(\varepsilon_{\theta i}|X_i) = 0$

Where $Quant\theta(\varepsilon_\theta|.)$ denote the θth conditional quantile of ε (and θ = 0.5 refers to the median)

Edu is education (1 for FSLC, 2 for SSCE, 3 for OND/NCE/HND, 4 for B.A./B.Ed./B.Sc. and above),

SGL is salary grade level (proxy for experience) and depnt is number of dependants. Cadre (high (GL12-16), middle (GL6-10) and low (GL1-5) level employees),

Mal is male and Fem is female employee

$\varepsilon_{\theta i}$ is the error term and the intercept is high cadre.

MODEL 2: Addressing objective 2, estimating wage differential between federal and state workers.

$Log (W_i) = \alpha (\theta) + X_i\beta_i(\theta) + State\delta_i(\theta) + \varepsilon_{\theta i}$ 4

Where $X_i\beta_i(\theta)$, capture the quantile of Edu, GL, and depnt, as earlier defined, the intercept represent the wage of a federal employee, while $State_i(i=1, to 6)$ represent the selected states from the six zones, which assume one (1) if an employee is working with the said employer and zero (0) otherwise.

MODEL 3: Addressing objective 3; here we employ a logistic model, we adopt an attrition model with binary stay / leave decision as the dependent variable. The model will measure the likelihood that an employee will choose to leave an employer (federal or state civil service), as a function of explanatory variables.

Our interest in this probability of labour turnover, we observe only outcomes: 1 if an employee will move and 0 if an employee will stay. This probability is a function of several explanatory variables (denoted by the matrix X):

$Pr (Y=1) = f (X\beta)$ 5

Where β, represent the vector of parameter. We then estimate this model as a logit, taking the following functional form;

$Pr (Y=1) = e^z/1 + e^z$ ....6 (where $z = \beta_0 + x \beta_i$)

Transforming eqn. (6) to linearism it results to eqn. (7)

$L_i = ln (Y/1-Y) = \beta 0 + X\beta_i$ 7

Where X, is a vector of explanatory variables; which consist of labour market (sector of employment, employer remuneration package, etc.) and individuals (educational attainment, experience acquire, dependants, gender, etc.) characteristics.

Model 4: addressing objective 4, estimating wage differential based on sector of employment.

$Log (W_i) = \alpha(\theta) + X_i\beta_i(\theta) + Hlth\lambda_1(\theta) + SB\lambda_2(\theta) + Jud\lambda_3(\theta) + \varepsilon_{\theta i}$ 7

Where Hlth is health sector (primary health workers), SB is educational sector (secondary school / board workers), and Jud is judiciary, the intercept here are those working parastatals/ministries and $X_i\beta_i(\theta)$ as earlier defined. λ_i is one (1) if employee is from that sector and zero (0) otherwise.

Empirical Results

Model 1: A parametric estimates of wage differentials by gender, across cadre of manpower: controlling for education, salary grade level and number of dependants. Absolute bootstrapped t-statistics in brackets

Table 1[a]: The estimate of model 1 by different quantiles (90 75 50 25 10) and OLS

Hcadre as base	90	75	50	25	10	OLS
EDU	-.0987 (-2.51)	-.1022 (-3.02)	-.0598 (-2.35)	-.0061 (0.00)	.0353 (0.67)	-.0462 (-1.31)
SGL	.1871 (15.00)	.1802 (14.27)	.1507 (9.36)	.1392 (0.12)	.0548 (1.97)	.1427 (9.00)
DEPND	.0099 (0.86)	.0005 (0.03)	.0053 (0.54)	.0132 (0.87)	.0062 (0.37)	.0075 (0.52)
MAL	.3731 (1.61)	.0262 (0.05)	.3961 (1.08)	.2774 (0.00)	.0935 (0.23)	.0805 (0.16)
FEM	.2685 (2.26)	.0460 (0.22)	.2724 (1.20)	.0118 (0.00)	-.1396 (-1.87)	.0344 (0.15)

Lcadre	-.4721 (-1.86)	-.5996 (-1.61)	.5058 (0.15)	.3526 (0.04)	.3745 (1.60)	-.1285 (-0.21)
Mcadre	.1077 (0.71)	.0141 (0.07)	.2412 (1.00)	.4028 (0.07)	.4427 (2.11)	.2031 (0.83)
MLcadre	-.0496 (-0.19)	.1488 (0.41)	-.3733 (-0.92)	-.3998 (-1.37)	-.3514 (-0.99)	-.0254 (-0.04)
MHcadre	.2290 (0.11)	.2446 (0.91)	.0552 (0.20)	.2549 (0.13)	.8537 (2.23)	.3336 (0.90)
MMcadre	-.1327 (-0.57)	.0065 (0.02)	-.1178 (-0.36)	-.1513 (-0.16)	-.2089 (-0.52)	.0206 (0.05)
FLcadre	.1265 (0.36)	.2329 (0.61)	-.2473 (-1.19)	-.1174 (-0.63)	-.0691 (-0.46)	.0625 (0.11)
FHcadre	.1581 (1.14)	.2414 (1.41)	.2730 (1.60)	.5172 (0.59)	.9047 (6.28)	.4246 (1.80)
Cons	12.4732 (76.12)	12.6325 (40.89)	12.0611 (36.48)	11.7528 (0.00)	12.0363 (54.75)	12.2597 (34.14)
Psuedo R^2	.5317	.5437	.5473	.4887	.3634	.6448

Econometric package: Stata 10.0

Model 2: A parametric estimate of wage differential, between Federal and State workers; controlling for education, salary grade level and number of dependants, the base category is federal workers.

Table 1[b]: estimate of quantile wage differential between federal and state workers (90 75 50 25 10) absolute bootstrap t-statistic in bracket.

Federal as intercept	90	75	50	25	10
EDU	.0222 (0.75)	-.0506 (-1.61)	.0469 (2.07)	.0843 (4.29)	.0392 (1.09)
SGL	.2010 (24.47)	.2272 (25.39)	.1555 (16.61)	.1389 (30.03)	.1562 (21.13)
DEPND	.0151 (1.28)	.0107 (0.90)	.0066 (0.43)	.0262 (2.22)	.0207 (1.19)
BAYELSA	.0461 (0.59)	.0690 (0.95)	.0700 (1.21)	.1137 (2.33)	.0728 (1.68)
KOGI	-.1496 (-1.86)	-.0502 (-0.76)	-.0644 (-0.99)	.0159 (0.28)	-.0507 (-0.98)
JIGAWA	.0141 (0.19)	.0240 (0.33)	.0052 (0.07)	.0261 (0.47)	.0499 (0.97)
ENUGU	-.1234 (-1.59)	-.2535 (-2.58)	-.5006 (-7.76)	-.6845 (-13.05)	-.7676 (-17.85)
OGUN	-.1540 (-1.93)	-.1081 (-1.79)	-.1190 (-2.60)	-.0876 (-1.78)	-.1083 (-3.30)
KEBBI	-.2232 (-2.89)	-.1293 (-2.08)	-.0750 (-1.35)	-.0566 (-1.25)	-.1161 (-2.41)
CONS	12.3472 (143.59)	12.1306 (228.14)	12.1614 (180.89)	11.9490 (193.76)	11.8223 (202.79)

Econometric package: Stata 10.0

Model 3

This is a logistic regression which shows, the probability of an employee leaving or staying with state civil service commission to federal civil service, as a result of wage disparity. Holding other variables constant, what is the level of labour turnover between federal and state employees in the service as a function of wage differentials?

Table 1[c]: Estimate on the impact of wage differential on labour turnover between federal and state workers, controlling for education, salary grade level, number of dependants and sector of employment.

Lturn	Coef	St error	Z	P>|Z|
Edu	.6825	.1251	5.46	.000
Sgl	-.1552	.0487	-3.19	.001
Depnd	-.0279	.0626	-.45	.656
Lnwage	-.2901	.1881	-1.54	.123
Hlth	16.8855	2.3556	7.17	.000
Sec	17.0597	2.2556	7.57	.000
Jud	17.2043	2.2478	7.65	.000
Mpar	16.5517	2.2388	7.39	0.000
Cons	-14.4741	.	.	.

Econometric package: Stata 10.0

Model 4: a parametric estimate of wage differential by sector of employment (health, secondary school board, judiciary and ministry/parastatals), ministry as the base category

Table 1[d]: Estimates of wage differentials by sector of employment, controlling for education, salary grade level, and number of dependants at different quantiles (90 75 50 25 10) absolute bootstrap t-statistics are in bracket.

Ministry as intercept	90	75	50	25	10
EDU	.0514 (3.03)	.0483 (2.89)	.1030 (4.51)	.0839 (1.98)	.1659 (3.06)
SGL	.1594 (25.66)	.1650 (38.52)	.1534 (29.55)	.1613 (13.95)	.0982 (6.46)
DEPND	-.0084 (-1.04)	-.0013 (-0.20)	.0040 (0.38)	.0089 (0.59)	.0187 (0.80)
HLTH	.5881 (11.09)	.5576 (22.08)	.5849 (19.14)	.5802 (8.92)	.6922 (5.12)
SB	.1003 (2.68)	.0326 (1.13)	.0211 (0.61)	.0403 (0.69)	.1275 (0.90)
JUD	.0063 (0.14)	.0042 (0.11)	-.0265 (-0.66)	.0259 (0.37)	.0442 (0.38)
CONS	12.211 (469.90)	12.0655 (326.16)	11.8266 (265.82)	11.6332 (137.19)	11.5345 (62.82)

Econometric package: Stata 10.0

IV. RESULTS AND DISCUSSION OF FINDINGS

Model 1: from table 4.1 which shows a quantile wage parameter estimate for men and women across cadre of manpower, controlling for educational level (Edu), salary grade level(SGL), and number of dependants(depnd). The cadre variables also interact with the gender variables with high cadre as the reference group of analysis. The median regression result shows the return to education as having a negative impact on the net log of wage. This is also applied to the higher income earners (75th and 90th quantiles) visa vice the low income (25th quantile) earners. Only the 10th quantile show a positive impact, concordant with OLS result, but not statistically significant. Salary grade level is seen to be the most determinant of wages in the public service. As a workers grade increases, his wages earning increases. Both the low and high income earners reveal a positive relationship between salary grade level and net logged of wages in Nigeria. The median regression show R 0.1507 increase in net logged of wage at a unit increase in salary grade level, other things remain constant. The high income earners have a higher return than the low income group as ones grade level increases. This also agrees with the OLS estimate of 0.1427. The magnitude of changes in the responses of net log of wage on SGL at different quantiles is 90th (0.1871), 75th (0.1802), 50th (0.1507), 25th (0.1392) and 10th (0.0548) respectively. The variable (depnd) number of dependants seems to have a positive impact on net logged of wage, but is not a good determinant of wages in the economy.

Analysing the level of wage differential by gender, we discovered from the result that, in the median regression, male workers earner 13% (e$^{.3961-.2724}$- 1)100% are more than their female counterpart in the service. This is also applicable to the upper quantile of about 11.03% (90th quantile) of wage differentials between male and female workers. However we observed a higher level of wage differentials by gender among the low income earners in the service. The magnitude of the difference for the 25th and 10th quantiles is 30.4% and 26.3% respectively.

Could this be as a result of labour productivity or placement in service? It is as a result of human survival, for men are ready to take any job, just to earn a living rather than remaining in abject poverty. This is contrary to women, who are selective with the hope of other means of survival. The result across shows that the median regression to be a female in the middle cadre of manpower to earn higher wages than her male counterpart with 43.2% ($e^{.2412+.1178}$- 1)100%. This result also applies to the 25th quantile (74.04%). The high income group (75th and 90th quantiles) has low wage differences of 0.7% and 27.2% respectively.Finally, the wage difference by cadre of manpower shows that low cadre workers earn 65.8% (50th quantile) less than the high cadre workers in Nigeria public service. This also applies to the high and low quantiles. But the wage difference between the low and middle care workers, the median regression show the middle cadre earn 23.3% ($e^{.2412-.5058}$- 1)100% less than their low cadre counterparts. This does not apply to the upper quantile, where the middle cadre earn 84.7% (75th quantile) and 78% (90th quantile) more than their low cadre counterparts. While the lower quantiles shows a difference of 7.1% (10th quantile) and 5% (25th quantile) of the middle cadre earning higher than their low cadre counterparts respectively. The OLS result shows that the regression line has a good fit (R^2= .6448).

Model 2: this model estimates the level of wage differential between federal and state workers, controlling for education, salary grade level and number of dependants. The result shows that Bayelsa and Jigawa States workers earn more than Federal workers, visa vice the other States workers selected. From the respective quantile estimate, Enugu State workers earn lesser than the rest of the States, followed by Ogun state workers, Kebbi state workers and then Kogi state workers. This could be as result of the non implementation of the new minimum wage for Enugu State workers as compared to other States. Secondly, also due to low strength of internally generated revenue in these States. This agrees with our literature review that public servants wages is a function of resource (fund) availability. Federal workers earn less than Bayelsa and Jigawa States workers, due to non implementation of the new minimum wage for federal worker.Bayelsa workers earn 7.2% higher than federal workers in the median regression, 7.6% in the 10th quantile, and 4.7% more in the 90th quantile. While Jigawa earn 4.7%, 5.1%, and 1.4% more than federal workers in the 50th 10th and 90th quantile respectively. Kebbi, Enugu, Ogun and Kogi States workers earn less than Federal workers by 7.2%, 39.4%, 11.2% and 6.2% in the median regression respectively. In spite of the non implementation of the new minimum wage for federal workers, these states workers still earn less, still as a result of low strength of internally generated revenue.
The Inter-State analysis; Bayelsa workers earn 6.7% ($e^{.0700-.0052}$- 1)100%, 76.9%, 14.4%, 20.8% and 15.6% higher than Jigawa, Enugu, Kogi, Ogun and Kebbi State workers in the 50th quantile respectively. On the other hand, Jigawa state workers earn 65.8%, 8.4%, 7.3% and 13.3% higher than Enugu, Kebbi, Kogi and Ogun State workers in the 50th quantile estimation. Kogi state workers are at advantage more than Federal workers at the 25th quantile, but the wage difference is not statistically significant.

Finally, among the remaining four States, Enugu State workers still earn lower than other State workers in the 50th quantile by 35%, 35.4%, and 31.7% for Kebbi, Kogi, and Ogun States workers. The wage difference between Kebbi and Kogi States workers in the 50th quantile is 1.06% at Kebbi disadvantage, between Ogun and Kogi is 5.3% and between Ogun and Kebbi is 4.3% at Ogun State workers disadvantage.
Model 3: this model estimates the impact of wage differentials on labour turnover between federal and state workers.From the estimate each slope coefficient is a partial slope coefficient and measures the change in the estimated logit for a unit change in the value of the given regressor, (holding other regressors constant). Together all the regressors have a significant impact on labour turnover (Lturn), as shown by the LR statistics (54.21), whose p-value is 0.000. From the result we discover that as an employee level of education increases, the probability of leaving state civil service to federal is very significant (high). Salary grade level (SGL) has a negative effect on Lturn; as one grade level increases, the probability of leaving the state civil service for federal decreases. Hence it is a good determinant of labour turnover (Lturn), since the p-value is less than 0.05 (0.001). The result also shows that depnd is not a good predictor of labour turnover between state and federal workers in Nigeria, although it has a negative effect on Lturn, yet not significant. Wage differential has a negative relationship with labour turnover, as state workers' wages increases by a unit the probability that a state worker will move to federal civil service (Lturn) decreases by 0.2901, all things being equal. Hence, wage differential has a significant effect on labour turnover, since the p-value is less than 0.5 (0.123), that is 5% level of significance.

Model 4: the parametric estimates of quantile wage differential by sector of employment; controlling for education, salary grade level, and number of dependants: shows that education and salary grade level have a significant effect on wage difference between public servants of different sector of employment. The inter-sector wage differential shows that, health workers earn 75% ($e^{.6922-.1275}$- 1)100% more than secondary schools workers and 91.2% ($e^{.6922-.0442}$- 1)100% than judiciary workers in the low (10th quantile) income level. What could be the

cause of these large differences may be as a result of the demanding nature of their jobs or service, or non implementation of some fringe benefits in other sectors, which are implemented in health sector. This difference is also applied to both high and middle income earners groups. For instance, in the 75th quantile, the differences are 69% for secondary schools workers and 74% for judiciary workers. While that of the median (50th quantile) income group are 76% and 75% for secondary schools and judiciary workers respectively.

Health workers earn 80% more than ministry/parastatals workers in the median income earners. While secondary schools workers earn 2.1% higher than ministry/parastatals workers in the median income earners. In the same vein the secondary workers earn 4.87% more than the judiciary workers in the 50th quantile. Finally, the judiciary workers earn 0.6% higher than ministry workers among the high income earners and 4.52% more among the low income earners (10th quantile).

V. CONCLUSION

The study investigates the level of wage differential among public servants in Nigeria. With emphasis on inter-state workers, inter-sector workers, between Federal and State workers, between gender across cadre of manpower and labour turnover as a function of wage differential between Federal and State workers. The study reveals that, wage differences by gender is more pronounced among the low cadre than high cadre against female. And that female earns more in the middle cadre than their male counterparts. In the course of our investigation, an employee placement is a key determinant of wage and a cause of wage differential in the civil service. There is a high level of wage disparity between employees of different sectors, Federal and States workers, and between States. The study shows that health workers earn higher than the rest sectors covered, Bayelsa State workers earn more than other State workers, vis-a-vis Federal workers. The study also reveals that wage differential has a significant impact on labour turnover in the civil service between the two tiers of government workers. Finally, given the determinants of wages in an economy like Nigeria, in spite of the gender differences, the more collective bargaining employees will behave the less gender wage disparity.

The scenario of wage disparity is pictured by different scholars, which calls the attention of all policy makers. We then therefore recommend that:

➢ State civil service commissions should review their terms and conditions of service, with interest on human resource management, productivity and payment of accrued benefits / allowances.
➢ Government should place the welfare of its civil servants as a primary objective, considering the level of unemployment and dependants rate and address them adequately.
➢ Proper attention should also be given to the existing allocation formula by adjusting the formula with interest on labour strength, in order to promote true federalism and prompt implementation of socio-economic policies.
➢ Wages are backed by law, so all tiers of government should endeavour to implement the new minimum wage and pay all accrued allowances to its employees as at when due.
➢ Promotion of a unified salary structure in all tiers of government across ministries, with specific allowances for professionalism and other compensations clearly stated to all employees in the service.
➢ Several analysts of labour participation determinants in Nigeria identified nepotism, tribalism and favouritism in recruitment processes, we therefore recommend strongly that recruitment should only be based on merit, and results of the exercise should be transparent to participants.
➢ And since states are not monopolized, employees should always move to where their services are more needed, in order to command higher wages, by eliminating wage differentials in the system.

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