

The Impact of Wage Differentials on Labour Turn Over in Nigeria

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Abstract

This study investigates the impact of wage differentials on labour turn over in the public service between the state and federal employees. We employed the logit model in our analysis, using a sample of 840 employees, in accordance with our theoretical priors, the empirical result support the standard inverse relationship between wage differential and labour turnover. That as state workers' wages increases, the probability of a State worker leaving to Federal civil service falls by 0.2901. We therefore recommend for a unified salary structure with no disparity to harness the legislative wage structure we assume to practice. This we believe will reduce labour turnover in the economy.

Key word: labour turnover, wage differential, logit model, public service

Introduction

Individuals are particularly attached to a feeling of equity which reinforced work psychologically. Employee expects that his or her effort will be rewarded by remuneration regarded as fair. On the other hand employer takes for granted that in exchange for the wage paid, his or her employee will also supply an effort regarded as fair. According to Akerlof (1982) cited in Pierre and Andre (2004) the employees gift consist of exceeding prevailing work standard, in exchange for which the employer pays him or her a wage exceeding the so called "reference" wage. Consideration of fairness makes employers to offer relatively higher wages in order to take advantage of the process of gift exchange. Most individuals take more satisfaction from their effort with higher relative wage. The problem of each worker consists of selecting a value of effort that maximizes his or her satisfaction. A national survey by National Bureau of Statistics (NBS) in Nigeria reveals that, more than seven out of ten (70.5%) people (72.0% female and 69.6% male) who were interested in changing employer gave reason of low income in present job as the main reason why they are interested in doing so. 16.8%(17.0% males and 16.7% females) are of job not matching skill, 2.3%(3.1% males and 0.9% females) claimed that tools are grossly inadequate, 0.2% are of the opinion of recurring stoppage of work, and 2%(3.2% males and 3.1% females) claimed on excess hours of work (NBS, 2009).

The degree to which workers are able and willing to move between jobs in different occupations and areas is known as labour mobility. According to Graham et al (1998), lack of

labour mobility may manifest itself in high frictional or structural unemployment, and it has been an object of policy to encourage workers to move to areas where jobs are available and to take on jobs in new occupations requiring skills different from those in which they were first trained. In practice, it has been found that, for a multitude of social and economic reasons, labour may be geographically and occupationally immobile. Graham et al further explain that, it is recognized that social costs could be incurred by an itinerant population, from regional overcrowding or depopulation. In Nigeria, the mobility of labour (geographical and occupational) in the public sector is well pronounced today. Every day, the number of applicant keeps on increasing, due to no job satisfaction and other reasons accompanied labour turnover. Labour turnover which implies the number of employees who leave a firm in a year as a result of the firm's total employment. In the public service this can be referred as to switching from state to federal or the reverse, based on some peculiar reasons.

Labour turnover affects both workers and firms. Workers experience disruption, the need to learn new job-specific skills and find different career prospects. Firms, on the other hand, lose job-specific skills, suffer disruption in production and incur the costs of hiring and training new workers. Incoming workers, however, may be better educated, more skilled and have greater initiative and enthusiasm than those who leave. The focus of the economic literature on labour turnover has been on the impact of turnover on workers rather than on the firms, (Brown et al, 2004). The theory used to explain the impact of turnover on firms is mostly based on the well known efficiency wage model of Salop (1979), in which firms choose wages so as to minimize the marginal cost of labour, balancing the marginal effect of higher wages against the marginal reduction in training costs induced by higher wages.

Hereto, the public sector differs from the private sector in an important way: Governments provide monopoly services in their particular jurisdiction; as such the demand for public goods and services in a particular locale is quite inelastic. This allegedly gives public sector union extraordinary bargaining power. Freeman (1986), cited in Campbell et al (1999) rejects this claim of extraordinary bargaining power on four grounds; Government face tax and budget constraints that serve as disciplinary devices similar to market demand in the private sector. (2) Cities and states are not really monopolies because people who are unhappy with the level of public services in one area can move elsewhere. (3) Workers are almost always forbidden to strike when essential services such as police and fire protection are disrupted and (4) Strikes by public workers do not block revenue flows to government. According to him the uniqueness of public sector union lies on the political nature of the public sector collective bargaining, rather than the elasticity of labour demand.

For the past three to four decades in Nigeria, Public/Civil servants' wages had been reviewed with the concept of National Minimum Wage (NMW) by the Federal Government. The NMW is proposed to over-ride employer's monopsony wage control (which keeps wages below the marginal revenue product of labour) and attract more workers into employment. It is also possible that workers can become better informed about wage levels before accepting a job with the publicizing of the legal minimum. This could lower voluntary labour turnover and allow firms to operate at a higher level of employment by reducing the number of unfilled vacancies. The recent NMW results to intergovernmental conflicts, between labour unions and government as regards to its implementation on agreement reached. Governors of the respective States always stand on the grounds of insufficient funds / resources to finance the

wages. Recently, from March through July 2011, Governors of respective states agitated for upward review and new revenue formula allocation in favour of the States to be able to pay the new National Wage increment.

Hence, legislative wage (NMW) has caused a lot of controversies (labour turnover due to wage differentials) in the public sector across regions. It was base on this backdrop that we tends to investigate the following research problem:

- What is the impact of wage differentials on labour turnover between federal and state government employees?

Objectives

The key objective of this research is to investigate the impact of wage differentials on labour turnover in Nigeria. The following is the specific objective

- ❖ To examine the impact of wage differential on labour turnover between federal and state Public Service

The answer to the above question and the stated objective will guide the researcher.

Literature review

Mobility, however, is costly. Workers must take time to seek out information on other jobs, and for some workers, job search is most efficient if they quit their current job first. Once a new job is found, workers may face monetary, and will almost certainly face psychic costs of moving to new surroundings (Robert & Ronald, 2009). The flow of workers from lower paying to higher paying jobs, for example, is what forces firms that are paying below equilibrium wages to increase their wage offers.

Employer turnover is also known as turnover or separation which implies the mobility of employees among employers. It can take place without change of residence. Individuals differ in their personal discount rates and in the psychic cost they attach to quitting one employer to find another. These differences imply that some workers are more likely than others to move among employers, even if those in both groups face the same set of wage offers (Robert & Ronald, 2009).

The relation between labour mobility, or turnover, and the structure of wages, especially by age, seniority and skill level, is a subject of research and a topic of lively interest in the analyses of most advance economies labour markets. Theories of human capital investment in worker skills and in hiring and screening have been used to explain tenure and experience wage profiles and to link them to turnover patterns across workers. Mincer and Yoshio (1987) this linkage, which we shall refer to as the duality hypothesis, has been invoked by several researchers to explain the very low Japanese turnover rate, often portrayed as a product of the "lifetime employment system." Although hard estimates are not readily available, it is well known that labour policies of Japanese firms involve a strong emphasis on recruitment for jobs, and training plus retraining of workers. The greater volume and greater firm specificity of such human capital investments in Japan than in the U.S. is claimed to be the central, proximate reason for the large differences in the degree of attachment to the firm in the two countries. An employee's decision to continue with their present firm or to seek opportunities elsewhere

depends on many factors: working conditions, personal fulfilment, and travel requirements. However, most economists assume that the relevant factors can be addressed through the study of the effects of pecuniary variables. Despite individual idiosyncrasies, however, there are clearly systematic factors that influence the patterns of job mobility posited by Robert and Ronald (2009). These factors include;

Wage effect: human capital theory predicts that other things being equal, a given worker will have a greater probability of quitting a low-wage job than a higher-paying one. That is, workers employed at lower wages than they could obtain elsewhere are the most likely to quit induced a very strong and consistent findings in virtually all studies of worker, quit behaviour is that, holding workers characteristics constant, employees in industries/sector with lower wages have higher quit rates.

Effects of employer size: another factor that can be considered is the phenomenon that large firms or well organized parastatals offer more possibilities for transfer and promotions. This builds on the facts that large firms generally pay higher wages. This asserts that large firms tend to have highly mechanized production processes, where the output of one work team is highly dependent on that of production groups preceding it in the production chain. Robert and Ronald, (2009), it is argued that, large firms have greater needs for dependable and steady workers because employees who shirk their duties can impose great costs on a highly interdependent production process. Once having invested time and effort in selecting the best workers for its operation, a large firm finds it costly for such workers to quit. Thus they pay high wages to reduce the probability of quitting because they have substantial firm specific screening investments in their workers, (Walter, 1991).

Gender differences: it has been widely observed that women have higher quit rates, and therefore shorter job tenures, than men. To a large degree, this higher quit rate probably reflects lower levels of firm-specific human capital investments. Scholars argues that, the interrupted careers of traditional women workers rendered many forms of human capital investment less beneficial than would otherwise be the case, and lower levels of firms specific training could account for lower wages, lower job tenures, and higher quit rates (Mincer & Jovanovic, 1981). In fact, once the lower wages and shorter careers of women are controlled, for there appears to be no difference between the sexes in the propensity to quit a job, especially among those with more than a high school education (Anne, 1998).

Cyclical effects: another implication of human capital theory is that workers will have a higher probability of quitting when it is relatively easy for them to obtain a better job quickly. Thus when labour markets are tight (jobs are more plentiful relative to job seekers), one would expect the quit rate to be higher than when labour market are loose (few jobs are available and many workers are being laid off). This prediction is confined in studies of time series (Robert & Ronald, 2009). A measure of tightness is the unemployment rate. Quit rates tend to rise when the labour market is tight and fall when it is loose.

Employer location: economic theory predicts that when the costs of quitting a job are relatively low, mobility is more likely. Industries with high concentration of employment in urban areas, where a worker change of employer does not necessarily require investing in a change of residence, appear to have higher rates of turnover (holding wage rates and employee age constant) than industries concentrated in non metropolitan areas (Parsons, 1979). These stated

factors are some of the determinants of labour turnover in the global labour market generally and Nigerian labour market in particular.

The general assumption of this model is that turnover is costly to firms. This leads them to create wage policies to avoid such costs from quits, training and hiring new workers, which are, by supposition, basically provided by the firm (Salop, 1979; Stiglitz, 1986; Weiss, 1980 in Jorge, 2001). The microeconomic foundations of these costs are explored in Walter (1983), and his main argument is that labour may be a fixed, rather than a variable cost. Each occupation in a specific firm requires specific training to enable an ordinary worker to increase his productivity, since the firm and the occupation possess peculiarities require a complementarity between capital and the labour force. A trained worker is defined as a quasi-fixed production factor because the firm incurs costs for hiring and training, which are considered to be an investment of the firm in its labour force. The higher the fixed costs in recruitment and training to improve labour's productivity, the longer the expected period the worker will be engaged in the firm. Thus, in order to minimize turnover, the firm offers a wage premium. These arguments are used to justify the positive relation between job tenure and wage differentials. In order to explain inter-industry wage differentials, the turnover models have to assume that an industry that pays on average a positive wage premium should have a high number of positions that require firm-specific trained workers, and that fixed costs cut across occupations, which would justify the correlation of wage premiums, to say, white and blue collar workers. John et al (2007) treats The Relationship between Employee Turnover and Employee Compensation in Small Business observed that, employees of large establishments stay in their jobs longer than employees of small establishments. Offering benefits improves employee retention. When a firm offers benefits, it decreases the probability of an employee's leaving in a given year by 26.2 percent and increases the probability of staying an additional year by 13.9 percent. The earnings results based on the relationship between establishment size and earnings show that firm size has a positive impact on earnings for service and manufacturing occupations. These findings coincide with those of past literature showing an earnings difference based on firm size. The probability of turnover increases by about 3 percent for each additional year of age, and married individuals are 22 percent more likely to leave their jobs than otherwise identical single workers. The effect of tenure is especially large; each additional year of tenure at the present job reduces the probability of turnover by 81 percent. Yet, the tenure results demonstrate that over half of the observed differences in tenure among employees at small and large establishments may be attributable to other factors besides establishment size.

Glick and Sahn (1997) analyze gender differences in earnings in Guinea; they separate earning from three activities: self employment, public sector employment and private sector employment. Their result indicate that education plays an important role in allocating labour force participants among sectors and that there is heterogeneity in the urban market and wages differences by sectors. Women are found to be less likely than men to be wage employees. Jane (2003) results shows that characteristics such as been married, and aged are associated with higher wages for me in both sectors while married women earn less than their unmarried and male counter parts. Increasing return to education is in general significant for both sexes across sectors. Workers in other regions seem to earn lower compared to those in Nairobi, although the coefficients are not consistently significant. In general Jane's result reveals the existence of marked differences in the process generating the gender wage gap in

the private and public sectors. Favouritism towards men is pronounced in all sectors while there seems to be no evidence of discrimination against women in any sector. And finally, Olufemi (2011) the evolution of skill wage differentials in developing economy, the Nigerian experience; conclude that Nigeria skill wage differentials were shown to have compressed over the years. Thus the country's experience provides some support for the natural history hypothesis of skill differentials. The narrowing trend has however not been a smooth one the compression of differentials being particularly marked in certain years and between these periods they have remained fairly stable as widened slightly.

Methodology

We adopted an attrition model with binary stay or leave decision as the dependent variable. The model measures the likelihood that an employee will choose to leave an employer (federal or state public service), as a function of explanatory variables. We employed both primary and secondary data for it analysis with a sample of 840 employees from six states; (Bayelsa, Enugu, Kogi, Ogun, Taraba and Kaduna) one per zone which comprises of both federal and state workers. The data were sourced from field survey, via questionnaire administered in the selected States, National Salaries, Incomes and Wages Commission (NSIWC) and State Ministries of Finance. The sample of 840 is large enough to represent the population. Our interest in this study is the 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):

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

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

$$\Pr (Y=1) = \frac{e^z}{1+ e^z} \dots\dots\dots 2 \text{ (where } z = \beta_0 + x \beta_i \text{)}$$

Transforming eqn. (2) to a linear form resulting to eqn. (3)

$$L_i = \ln (Y/1-Y) = \beta_0 + X\beta_i \dots\dots\dots 3$$

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 acquired, dependants, gender, etc.) characteristics.

Empirical result

The regression shows, the probability of an employee leaving or staying with state civil service 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?

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

Key: LTurn is labour turnover, Edu is education, Sgl is salary grade level, Depnd is number of dependants, Lnwage is logged wage, Hlth is health sector, Sec is secondary school board, Jud is judiciary and Mpar is ministry/agencies.

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.

Conclusion

Wage differences between federal and state civil servants have a significant impact on labour turnover in the Nigerian civil service. This has led to transfer of service over the years. But the analysis reveals that as state workers' wages increases, the turnover falls substantially by 0.2901. We therefore recommend 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. And 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.

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