

Determinants of Negotiated Wages in the Kenyan Banking Industry

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ABSTRACT

Over time, wages in the Kenyan banking sector have increased, but not at a rate that has kept up with inflation. This has had a negative effect in that the employees in the banking sector were unable to maintain the standards they were used to. In the banking industry, the average yearly wage per employee climbed from Kes 10,424 in 1968 to Kes 2,082,067 in 2021. The period from 1972 to 1994 saw the greatest loss in the buying power of earnings for banking personnel. From highs of Kes 2,629,534 in 1972 to lows of Kes 726,178 in 1994, the real average wage per employee per year fell. Between 1994 and 2008, there was a recovery in the real annual average wage per employee. Over this time, the real average wage rose from Kes 726,178 to Kes 2,330,778. By 2021, the real average annual wage per employee had decreased to Kes 1,861,550. The purpose of this study was to identify the factors that influence union wages. With time series data for the years 1968 to 2021, a wage model was fitted, and the estimated outcomes showed that gross profit before tax, labour productivity, and the prior period wage of unionisable personnel were key factors in negotiated wages. The other factors, such as the minimum pay set by law, the number of unionised employees, the unemployment rate, the inflation rate, and the union density, had no statistically significant impact on negotiated wages. The study supports the need for developing a labour productivity measurement system that is acceptable to all participants in the banking industry. The fact that the union's strength had little bearing on determining salaries also made it clear that the union needed to find new strategies for luring members.

Keywords: Kenyan Banking Industry, Labour Productivity, Negotiated Wages, Unionisable Staff

I. INTRODUCTION

One of the components of production is labour, which is compensated with wages. Wages earned are used by workers and their families to cater to household needs. It is for this reason that employees take great interest in what they are paid as wages. Employers, on their part, are interested in what they are incurring through the wages they pay out. Firms aim to maximise profits, so employers are motivated to ensure that costs are minimised as much as possible. This is more so since labour costs constitute an important component of the cost of production and a driver of competitiveness.

Governments are also interested in wages paid out in the economy. They intervene in the labour market by developing income and wage policies. These policies act as tools that help in the promotion of competition, balanced economic growth, employment creation, sustainable income earnings, and distribution, which eventually lead to poverty reduction (Campolieti et al., 2014).

Kenya has seen two wage policy eras since becoming independent. According to Omolo (2012), the first wage policy period lasted from 1964 to 1972, and the second wage policy period lasted from 1973 to 2021. The first wage policy, which ran from 1964 to 1972, set wages at comparatively high levels. The policy's major objective was to safeguard workers from repressive and unfair labour practices while also encouraging wage growth in the modern sector (Andalon & Pages-Serra, 2008). The result of this policy was that labour productivity increased, but without resulting in the rapid creation of employment as anticipated (Omolo, 2012).

The second wage policy (1973–2021) was meant to solve the shortcomings of the first wage policy. The second wage policy (1973–2021) focused on employment promotion and the distributive aspect of growth (Omolo, 2012). Under this framework, the government intervened in the labour market by issuing wage guidelines. The purpose of the wage guidelines was to prevent wage growth, increase labour cost competitiveness, support labour-intensive production methods, and safeguard employees' purchasing power (Andalon & Pages-Serra, 2008). The result

of this policy was that nominal wages stagnated while real wages declined. Labour productivity decreased, making Kenya capital intensive despite the country’s labour-abundant nature (Omolo, 2012).

Declining real wages had a negative effect on labour relations. From 1968 to 2021, the Kenyan economy has experienced a loss of man-days every year due to strikes. The worst losses in man days occurred in 2013 and 2018, when 20,795,834 man days and 5,446,584 man days were lost, respectively. Figure 1.1 captures the effect of the two wage policy periods on wages from 1968 to 2021 in the Kenyan economy.

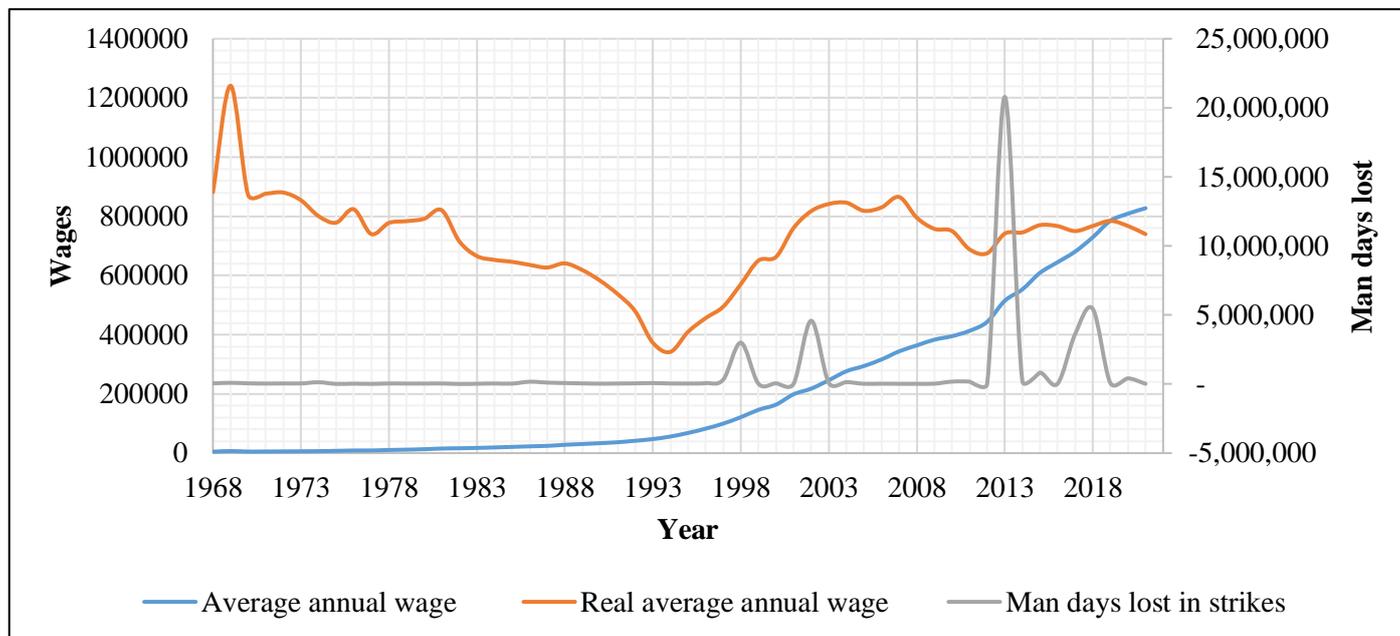


Figure 1
Average Wage per Employee, Real Average Wage per Employee and Man Days Lost in Kenya Economy
 Source of Data: Republic of Kenya, *Economic Survey and Statistical Abstract* (various issues)

Figure 1 shows that nominal wages stagnated from 1968 to 1994. From 1994 to 2013, the nominal wage has been rising gradually. The real average wage increased from 1968 to 1969. From 1969 to 1994, there was a decline in the real average wage. From 1994 to 2007, there was an increase in the real average wage. The real average wage increased as a result of wage adjustments made to account for prior increases in the cost of living (Republic of Kenya, 1995). From 2008 to 2021, the real average wage has generally been on a downward trend. Man days lost due to strikes have been a constant phenomenon of the economy. The major loss of man-days occurred in 2013 and 2018. The huge loss in man days during these two years was mainly attributed to agitation for higher wages by workers around election years. According to KIPPRA (2013), declining real wages was one of the factors that contributed to numerous strikes, especially among public sector employees in 2012. Other factors include perceived wage differentials, general unemployment, and underemployment (KIPPRA, 2013). A study by Cramton and Stacy (1992) found that a decline in real wages or a decline in unemployment could lead to the occurrence of a strike.

The Kenyan government is carrying out Kenya Vision 2030. This development blueprint spans the years 2008 through 2030. The Kenya Vision 2030, according to the Republic of Kenya (2007a), intends to make Kenya a newly industrialised middle-income country by the year 2030, offering a good standard of living to all of its residents. Kenya needs a human resource base that is globally competitive, adaptable, and capable of meeting the demands of a fast-industrialising economy in order to realise this objective. At the same time, the country needs to pursue steps that will lead to an increase in labour productivity to reach international levels (Republic of Kenya, 2007a).

The Kenyan Constitution guarantees both employers' and employees' rights (Republic of Kenya, 2010). Every employee is guaranteed a right to just compensation, appropriate working conditions, the ability to form or join a union, and the right to strike under Article 41 of the constitution (Gathongo and Ndimurwimo, 2020). Employers also have the right to establish, join, and participate in an employer's association and its activities and programmes (Republic of Kenya, 2010). The freedom to engage in collective bargaining is also guaranteed under Article 41 of the constitution for employers, employers' organisations, and trade unions (Gathongo and Ndimurwimo, 2020).

The Kenyan banking industry is made up of the Central Bank of Kenya, which serves as the industry's regulatory body, 40 banking institutions (including 38 commercial banks, 1 mortgage finance company, and 1 mortgage refinance company), 10 foreign bank representative offices, 14 microfinance banks, 3 credit reference bureaus, 19 money remittance companies, 8 non-operating bank holding companies, 10 digital credit providers, and 72 foreign exchange bureaus (Central Bank of Kenya, 2022). The industry employs a considerable number of workers. Figure 1.2 shows the number of workers in the banking sector from 1968 to 2022.

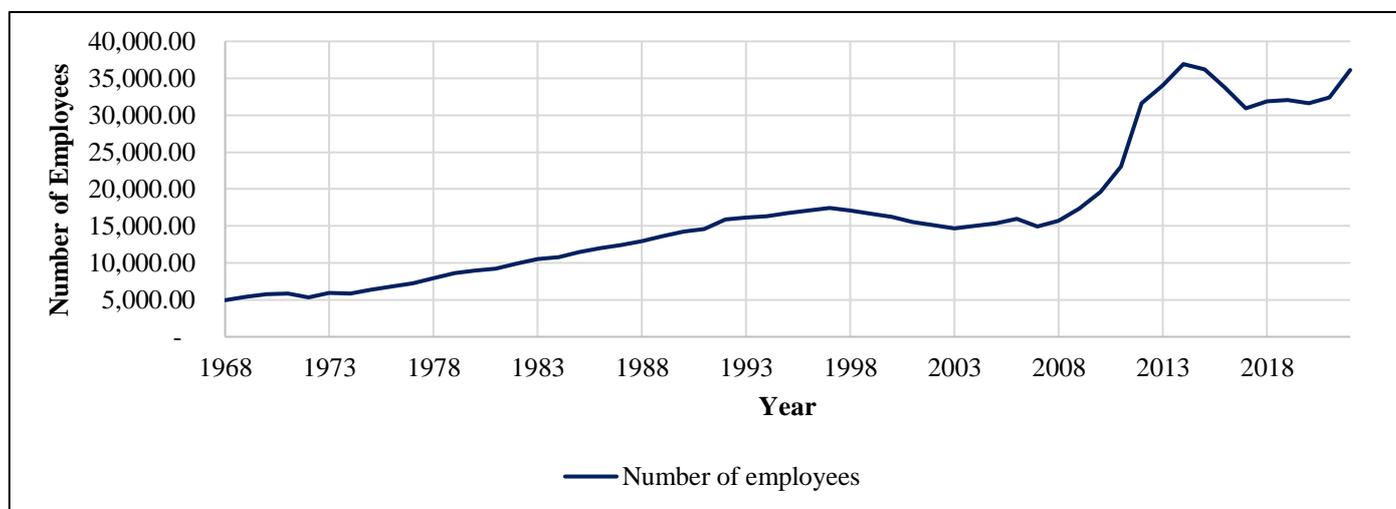


Figure 2
Number of Workers per Year in the Kenya Banking Sector
 Source of Data: Republic of Kenya, *Economic Survey* (various issues)

Figure 2 shows that the number of workers employed in the banking industry has increased over time from 4,960 workers in 1968 to 36,107 workers in 2022. This increase is attributable to both the rapid expansion of currently existing banks and the rise in the number of banks operating in the market (Central Bank of Kenya, 2007; 2022). The wages in the banking industry in the period under study mirror the trend of wages in the Kenyan economy. Figure 1.3 shows the trends in the annual average nominal and real wages in the banking industry from 1968 to 2021.

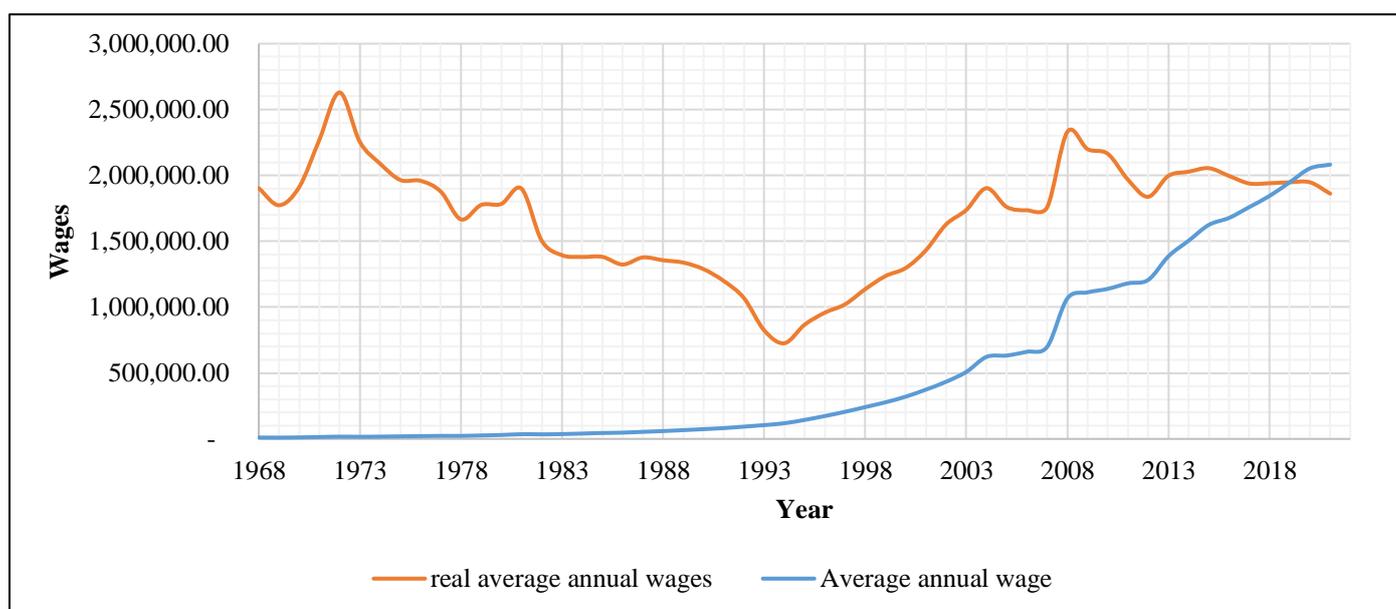


Figure 3
Real Average Wage per Year and Average Wage per Year in the Kenya Banking Industry
 Source of Data: Republic of Kenya, *Economic Survey* (various issues)

As illustrated in Figure 3, the average nominal wage in the banking industry has been on an upward trend for the period 1968–2021. On the other hand, the real average wage has been fluctuating over the same period. There was considerable erosion in purchasing power for employees in the banking industry from 1972 to 1994, when the real average wage declined from Kes 2,629,534 per annum to Kes 726,178 per annum. The real average wage in the banking industry was again on a downward trend from 2008 to 2012. During this period, real wages declined from Kes 2,330,778 per annum to Kes 1,837,944. There was a small improvement from 2013 to 2021, where the real average wage eventually increased to Kes 1,861,550 annually.

According to PriceWaterHouseCoopers (2009), as quoted by KIPPRA (2013), the financial services sector had the highest-earning Chief Executive Officer (CEO), who was earning Kes 3.9 million per month, whereas the lowest-earning staff in the sector was earning Kes 17,500 per month.

Collective bargaining and flexible wage fixing methods are utilised in Kenya's banking sector to determine wages. According to KIPPRA (2013), a collective bargaining strategy is a negotiation process in which employers or their associations meet with labour representatives to discuss pay and other employment-related terms and conditions. Wages, as stated by Layard (1991) and cited by Kittel (2001), are the most important consideration in collective bargaining.

In Kenya's banking sector, there are two parties involved in collective bargaining. These are the Banking, Insurance, and Finance Union (BIFU) and the Kenya Bankers Association (KBA). To negotiate the terms and conditions of employment for employees in the banking sector who are eligible for union representation, the KBA was founded in 1962 (KBA, 2013). The standardisation of management practices is now part of the association's mandate in order to maintain unity within the banking sector (KBA, 2013).

The Banking, Insurance, and Finance Union (BIFU) was established in 1986 as a result of a court order with the objective of recruiting union members from banks, insurance companies, building societies, and other financial institutions (Tayo, 2010). Prior to the registration of BIFU, the Kenya Union of Commercial, Food, and Allied Workers (KUCFAW) represented unionisable workers in the banking sector. According to Tayo (2010), the KUCFAW was founded in 1962. Even though the BIFU was established in 1986, it wasn't until a 1998 illegal banking strike that the organisation was able to get a sizable portion of members (Tayo, 2010). Workers in the banking sector believed that the strike had failed because KUCFAW had not given them its full support (Tayo, 2010). These prompted numerous bank employees who were unionisable to join BIFU (Tayo, 2010). Non-management staff in the banking sector who fall under the categories of support staff, supervisory and division heads, and clerical and secretarial staff are unionisable employees (Central Bank of Kenya, 2013).

1.2 Statement of the Problem

Between 1968 and 2022, nominal wages increased in the banking sector, but they have not always kept up with inflation. This has led to the erosion of the purchasing power of employees in the Kenyan banking industry. When real earnings fell from Kes 2,629,534 to Kes 726,178 in 1972 and 1994, respectively, the worst loss of purchasing power occurred. According to Cramton and Stacy (1992), a decline in real wages or a decline in unemployment could lead to the occurrence of a strike. In Kenya, there seems to be a relationship between declining real wages and the number of man-days lost through strikes. According to KIPPRA (2013), the decline in real wages was one of the factors that led to the many strikes witnessed among public sector employees. From Kes 82,068 in 1994 to Kes 1,380,338 in 2021, the average wage of unionisable employees has been rising over time. This study aims to identify the variables that influence negotiated wages in the Kenyan banking sector.

II. LITERATURE REVIEW

2.1 Theoretical Literature

The dynamics of supply and demand should determine wages in an ideal world, just as they do for other prices (Romer, 1996). Due to flaws in the labour market, this is not the case in the real world (Romer, 1996). The imperfection in the labour market is brought about by asymmetric information, government intervention in the labour market through minimum wages, and the existence of trade unions (Omolo, 2007). There are many theories that have been advanced to explain wage determination. They include the bargaining theory of wages, marginal productivity theory, wage fund theory, subsistence wage theory, and efficiency wage theory (Sari, 2000). The bargaining theory of wages is the basis of this study because the wages of unionisable employees are negotiated between their union representatives and representatives of the employers' association.

2.1.1 Bargaining Theory of Wages

Pigou advanced this theory in 1933 (Sari, 2000). According to the theory, the relative power of the parties to the collective bargaining agreement determines pay, working hours, and working conditions (Omolo, 2007). Layard (1991), as quoted by Kittel (2001), stated that the main concern for collective negotiation is wages. This theory would be appropriate for this study because BIFU represents its members in collective bargaining. Furthermore, all unionisable employees in the Kenya banking industry are covered by Collective Bargaining Agreements (CBAs) negotiated between KBA and BIFU. Also, the majority of bank industry employees are unionised. In 2022, for example, a total of 25,151 banking industry employees out of a total of 36,107 fell into the category of unionisable staff (Central Bank of Kenya, 2022). This represents 70 percent of employees employed in the Kenya banking industry. Though there could be many unionisable employees, the union can only derive its bargaining strength from the number of unionised employees. This is corroborated by research done in 1898 by Sherwood, who found that wages under the bargaining hypothesis are controlled by the relative negotiating power of the employee and employer. In 2022, BIFU had 8,802 members. This represents 35 percent of unionisable staff in the Kenya banking industry. However, BIFU continues to bargain with KBA over wages and other employment-related terms and circumstances for the unionisable workers in the banking sector.

2.2 Empirical Literature

2.2.1 Studies on Variables that Influence Negotiated Wages

In 1971, Spark and Wilton carried out an empirical investigation into the factors influencing negotiated wage changes in Canada. The study used a pooled sample of time series observations for fourteen Canadian manufacturing companies for the period 1951–1965. The basic explanatory variables used were the unemployment rate and profits. Other variables were a strike dummy, change in the unemployment rate, productivity, growth rate of employment in the particular industry, a variable for inter-industry effects, the percentage rate of change in the Consumer Price Indices (CPI) over the four quarters preceding the signing of each contract, and a variable for the interaction between unemployment and the rate of change of prices. In the study, the researchers found that the significant variables whose coefficients were statistically significant were profit levels, unemployment, price changes, relative productivity, and relative wage rates in a nonlinear formulation. The coefficients of a dummy variable for the occurrence of a strike and the growth rate of employment were found to be marginally statistically significant. The relevance of Spark and Wilton's (1971) findings to this study is that the results showed that profit levels and unemployment are important variables in wage determination.

Swidinsky and Wilton (1982) carried out a study to examine how changes in the minimum wage legislation in Canada affected the pace of wage inflation and the relative wage structures of unionised workers in the country. Microdata for specific Canadian union wage contracts was used in the study. 2,338 private-sector wage settlements compiled by Labour Canada for the years 1966 to 1975 made up the primary data set used in the study. The model used for the study was a negotiated wage settlement, which was assumed to be determined by the following factors: excess labour demand, price expectation, price catch-up, wage spillovers, and minimum wage adjustments. According to the study's findings, minimum wage changes during the previous contract period are at least somewhat reflected in union-negotiated wage settlements. The low-wage sector is the only one affected by this. According to the sectoral results, the relative pay structure should eventually evolve to become narrower in the long run. The relevance of Swidinsky and Wilton's (1982) findings to this study is that they show that the legislated minimum wage is an important variable in union-negotiated wage settlements.

In their 1996 study on wages, profit sharing, and rent-sharing, Blanchflower, Oswald, and Sanfey used data from about 200,000 full-time employees in the U.S. manufacturing sector. The study estimated a simplified version of a wage equation and assumed that a combination of internal and external factors determines the equilibrium wage. The external forces were the going wage in other economic sectors, a person's level of income when unemployed, and the unemployment rate among workers of the type that the firm hired. Profit per employee and workers' relative bargaining power was used to capture internal forces. The finding of the study was that a rise in a sector's profitability leads, after some years, to an increase in the long-run level of wages in that sector. The relevance of their finding to this study was to include profitability as a determinant of wages. This was done by incorporating gross profit after tax as a variable in the model.

Omolo (2001) conducted research on wage determination in Kenya's unionised private sector. The real wage rate was estimated as a function of the statutory minimum real wage, lagged real wage, employment status, union strength, rate of real GDP growth, increase in labour productivity, tax rate on wage incomes, rate of interest on capital, lagged rate of interest, and a dummy variable that accounts for the impact of wage guidelines on negotiated real

wages. The study found that when determining changes in negotiated real wages, the coefficients of one-year lagged real wage, statutory minimum real wage, and lagged interest rates were statistically significant. It was also discovered that factors such as union strength, real GDP growth, worker productivity, tax rate, and the dummy for wage recommendations did not significantly influence negotiated real wages. The approach adopted in this study borrows from the researcher's approach but will be limited to the banking industry.

Hammer et al. (2009) conducted a study on union leadership and member sentiments in the US. The study's goal was to examine how the union president contributed to the creation and upkeep of strong local unions. According to the study's findings, the president's internal and external leadership, union characteristics, and wage outcomes all had a substantial impact on the union's level of member perceptions and attitudes towards their unions. The study also discovered that the instrumentality and justice of the union acted as a partial mediating factor in the links between internally focused leadership and members' loyalty and willingness to work for the union. The importance of this study is that the beliefs and attitudes of union members towards the union will determine their level of participation in union activities. In Kenya, the union's membership strength can be used to gauge members' attitudes and beliefs about the union. This study includes union strength as a variable.

A study on variable compensation and collective bargaining in British retail banking was conducted in 2011 by Arrowsmith and Marginson. The study's goal was to pinpoint key trends and advancements in variable pay and the link between retail banks and well-established institutions of labour relations. Fieldwork for the case study was done from the end of 2005 to the end of 2007.

According to the study, merit pay systems hardly ever discriminate against employees. The results also demonstrated that management prerogative assertions can be used in a sector that has experienced significant transformation without giving up collective connotation. According to the study, there are several effects of variable compensation on collective bargaining. This is due to the fact that while trade unions have been successful in restricting variation in base pay, a growing area of pay regulation falls outside of their purview, such as the setting of bonuses. In Kenya, banks are adopting different ways of rewarding staff effort, like issuing bonuses or share options. The importance of the findings of the Arrowsmith and Marginson (2011) study is that the use of a variable pay system does not mean that employers will do away with collective bargaining.

A study on wages, unions, and labour productivity in Indian cotton mills was conducted by Gupta in 2011. The study's primary goal was to determine the causal relationship between wages and labour productivity. The other goal was to determine the relationship between labour productivity and worker militancy. This study's conclusion was that the rise in wages during the war was what put pressure on Bombay mills to raise labour productivity. The study also discovered that, compared to areas with limited union activity, Bombay and Ahmedabad's unionised regions had superior labour productivity. This result conflicts with the commonly held belief that unions affect labour productivity negatively. Labour productivity was included as one of the variables in this study.

A study on the effect of labour unions on corporate perks in Korea was conducted in 2012 by Cho et al. The study made use of secondary data from companies that were listed on the Korea Stock Exchange between 2002 and 2006. The Korea Financial Supervisory Service (KFSS) and the Korea Information Service (KIS) provided information specific to the company. The study's goal was to ascertain how corporate perks are impacted by unions. Unionisation rate, union presence, total corporate benefits, the proportion of real business spending to the tax exemption cap, and strike propensity were the variables utilised in the study. The researchers discovered that unions generally had a detrimental impact on corporate perks. With increases in the union organisation rate, strike propensity, and bargaining unit size, the negative impact of unions on corporate benefits becomes more pronounced. The relevance of these findings to this study is that unions are important in the allocation of corporate resources.

III. METHODOLOGY

3.1 Research Design

The non-experimental research design has been chosen as the methodology. The causal-explanatory research design is the specific non-experimental research method adopted for this study. A causal-explanatory research approach, in the words of Cooper and Schindler (2008), seeks to explain relationships between variables. Secondary data was collected from various publications of Economic surveys, Statistical abstracts.

3.2 Theoretical Framework

The wage bargaining theory served as the foundation for this study. The analysis made the assumption that the BIFU leadership considers all of its members' welfare while negotiating for more pay and improved working



conditions. According to Omolo (2001), the average union is assumed to have a uniform membership, preventing any potential conflicts of interest between the leadership and membership. The union is viewed as an individual with a utility function who stands in for all members' preferences. A utility function of this type is a well-behaved utility function (U), which is strictly concave and twice continuously differentiable. This assumption is important in portraying diminishing returns. The union's stated objective function is as follows:

$$U = f(w, L) \dots\dots\dots (3.1)$$

Where $U_w > 0$ and $U_L > 0$

The real wage rate is measured by w while L is a measure of the union members in employment

The study also makes the assumption that the firm uses labour and 'n' additional input elements at predetermined prices to create an output at the lowest possible cost. The function for minimising firm's costs is given as;

$$C = f(w, R, X) \dots\dots\dots (3.2)$$

Where:

R is a vector of other input prices such as price of deposits, price of equipment, X is the level of output and is the real wage rate is given by w .

Concave, non-decreasing in input prices, twice continuously differentiable, and homogeneous of degree one in input prices are all assumed for the cost function. This implies diminishing returns as you increase the inputs. The input demand functions that result from the derivative of a cost function are produced by differentiating equation 3.2 with regard to the wage rate (W), which yields the firm's labour demand function as,

$$\partial C(W, R, X) / \partial W = L(W, R, X) \dots\dots\dots (3.3)$$

Therefore, it is assumed that the union leader will choose the pay level (W) and employment level (L) that maximise its objective function (equation 3.1), subject to the restriction given by the employer's labour demand function (equation 3.3). This is the scenario where, in accordance with the right to manage paradigm used in Kenya, the employer is left to decide the amount of employment while the two parties to a collective bargaining agreement negotiate the wage rate (Omolo, 2010). The utility maximisation problem for the union is expressed as follows:

$$\begin{aligned} \text{Max } U &= f(W, L,) \\ \text{S.T } C &= L(W, R, X,) \end{aligned}$$

To solve the optimization problem, a lagrangian function is formed as follows;

$$Z = f(W, L) + \lambda \{ C - L(W, R, X) \} \dots\dots\dots (3.4)$$

Where:

λ – is the Lagrangian multiplier that gives the marginal utility of the constraint (labour demand function) when the union's utility is maximized. The solution to the F.O.C to the lagrangian equation 3.4 gives the optimal level of employment L^* and wage W^* which maximizes the union's utility function. These solutions are;

$$W^* = h_1(L, R, X) \dots\dots\dots (3.5)$$

$$L^* = h_2(W, R, X) \dots\dots\dots (3.6)$$

Equation 3.6 is substituted into equation 3.5 to arrive at the optimal wage rate, which is;

$$W^* = g(L^*, R, X) \dots\dots\dots (3.7)$$

where;

$$W_L^* < 0, W_X^* > 0$$

Since inputs might either be complements or substitutes, it is impossible to deduce the partial derivative of W^* with regard to R . The study presupposes a relationship between negotiated wage rate and its determinants

3.3 Model Specification

Level of employment, profits, productivity, union strength, previous wage rate, minimum wage set by law, inflation, and unemployment rate were all thought to be significant determinants of wages in the empirical research reviewed. A general model of wages is a modification of equation 3.7.

$$WUS_t = f(NUS_t, GPBT_t, LP_t, UD_t, PWMS_t, LMW_t, IR_t, UE_t) \dots\dots\dots (3.8)$$

Where;

WUS_t is the average wage of unionisable staff per month in a given year, NUS_t is the number of unionisable employees in a given year, $GPBT_t$ is the profits made by banks in a year, LP_t is the labour productivity in a given year, UD_t is the union density which is a proxy for union strength, $PWUS_t$ is the previous period wage of unionisable



staff, LMW_t is the legislated minimum wage in a given year, IR_t is the inflation rate in a given year, UE_t is the unemployment rate in a given year

There is double causation between W^* and L^* as shown by equations 3.5 and 3.6. The implication of this is that the use of Ordinary Least squares for estimation will give spurious results. Therefore, the study tested for endogeneity using Durbin-Wu-Hausman test for endogeneity. There was no endogeneity so the Ordinary Least Squares method was used for estimation. The estimation of the wage equation 3.8 was aided by the employment equation 3.9.

$$NUS_t = \alpha_0 + \alpha_1 LP_t + \alpha_2 UD_t + \alpha_3 PWUS_t + \alpha_4 LMW_t + \alpha_5 IR_t + \alpha_6 UE_t + \alpha_7 GPBT_t + e \dots\dots\dots(3.9)$$

The linear form of equation 3.9 was the best functional form since it gave the best fit and it was used to obtain NUS_t . The NUS_t obtained in equation 3.9 was used in equation 3.8, the estimable wage equation became.

$$WUS_t = \alpha_0 + \alpha_1 NUS_t + \alpha_2 LP_t + \alpha_3 UD_t + \alpha_4 PWUS_t + \alpha_5 LMW_t + \alpha_6 IR_t + \alpha_7 UE_t + \alpha_8 GPBT_t + e \dots\dots\dots(3.10)$$

IV. RESULTS

4.1 Empirical results

4.1.1 Determinants of Negotiated Wages in the Kenya Banking Industry

The objective of the study was to establish the determinants of negotiated wages in the Kenya banking industry. To achieve this, the study estimated the following model:

$$WUS_t = \alpha_0 + \alpha_1 NUS_t + \alpha_2 LP_t + \alpha_3 UD_t + \alpha_4 PWUS_t + \alpha_5 LMW_t + \alpha_6 IR_t + \alpha_7 UE_t + \alpha_8 GPBT_t + e \dots\dots\dots(4.1)$$

Wage of union staff (WUS_t) was regressed on number of unionisable staff (NUS_t), gross profit before tax ($GPBT_t$), labour productivity (LP_t), union density (UD_t), legislated minimum wage (LMW_t), Inflation rate (IR_t) and unemployment rate (UE_t). Table 1 lists the results of the regression.

Table 1
Regression Results for Negotiated Wages (Dependent variable WUS)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D2UE	188.8501	1161.566	0.162582	0.8718
D2PWUS	0.816526	0.130986	4.218249	0.0002
D2LMW	0.378982	0.226219	1.675293	0.1028
D2GPBT	0.000270	0.000164	3.580203	0.0010
DLP	3436.075	1149.793	2.988430	0.0051
DNUS	0.011863	0.624295	0.019003	0.9849
IR	108.1779	78.77816	1.373196	0.1784
UD	-40.29710	49.66513	-0.811376	0.4226
C	1905.864	1986.168	0.959568	0.3439

Adjusted R-squared 0.986002

F-statistic 397.2161

Prob (F-statistic) 0.000000

Number of Observation 53 after adjustments

D denotes first difference and D2 denotes second difference.

The F-statistic, which is the coefficient of joint determination, is displayed in Table 4.2 as 397.2161. With a probability of 0.000000, the F-statistic was statistically significant at the 1% level of significance. This means that the variables included in the model jointly determine the wage of unionisable staff. The adjusted R-squared, which measures the explanatory power of the model, was 98.6 percent. This indicates that the model accounts for 98.6% of the variation in the wages of unionisable employees.

The unemployment rate coefficient exhibited the anticipated positive sign and was not statistically significant. This means that the variable was not important in determining the wages of unionisable staff. This could be explained by the fact that wages are rigid downward (Romer, 1996). This result deviates from those of Spark and Wilton (1971), who discovered that the Canadian unemployment rate was a key determinant of negotiated wage changes.

The previous wage coefficient for unionisable employees exhibited the anticipated positive sign and was statistically significant at the 1% level. This indicates that the variable was important in determining the wage of

unionisable staff. The magnitude of the coefficient of the variable was 0.816526. This means a one-shilling change in the previous wage of unionisable staff would lead to a change of 0.816526 shillings in the wage of unionisable staff in the same direction. This outcome is consistent with Omolo's (2001) findings, which discovered that the negotiated wage was significantly influenced by wages paid a year earlier.

The coefficient of the legislated minimum wage was statistically insignificant and had the expected positive sign. This means that the variable was not important in determining the wage of unionisable staff. This could be associated with the fact that the unionisable wage are set at a higher level, so changes to the legislated minimum wage would have little, if any, impact on negotiated wages in the banking industry. The outcome is in line with Omolo's (2001) conclusions.

The coefficient of gross profit before tax was statistically significant at the 1% level and had the anticipated positive sign. Therefore, the variable was an important determinant of the wage of unionisable staff. The coefficient had a value of 0.000270. This means a change in Kes 1000 in gross profit before tax would lead to a change of Kes 0.000270 on the wage of unionisable staff in the same direction. This finding is consistent with the study by Branchflower, Oswald, and Sanfey (1996), which showed there was a relationship between wages and profits. It also fits with the findings of Spark and Wilton's (1971) study, which revealed that profit level was a key factor in negotiated wage.

The coefficient of labour productivity was statistically significant at the 1% level and had the anticipated positive sign. This means that the variable was a significant determinant of the wage of unionisable staff. The magnitude of the coefficient was 3436.075. This means if value added per employee increases by 1 unit, it would lead to an increase of Kes 3,436.075 in the monthly wage of unionisable staff. This finding is consistent with the study by Gupta (2011), where the study discovered that having a union increases labour productivity.

The coefficient for the number of employees who could join a union exhibited a positive sign but was statistically insignificant. This means that the number of unionisable staff is not an important determinant of negotiated wages. Judd (1998) found that the relationship between the number of people employed and wages seemed to vary according to the industry in the state of Wyoming in the United States. This means that depending on the industry and time period under consideration, the coefficient of the number of staff may have a positive or negative sign.

The inflation rate coefficient was statistically insignificant despite having the anticipated positive sign. This means that the inflation rate is not a significant determinant of the negotiated wage. This could be attributed to the fact that there has hardly been a period of sustained high inflation over a long period, apart from the period from 1988 to 1994. The coefficient of union density was statistically insignificant and had a negative sign. This means that union density, which is a proxy for union strength, is not a significant determinant of the wage of unionisable staff. This could be attributed to the fact that not all unionisable staff are members of BIFU. This result is in line with that of Omolo (2001), who discovered that union strength was not a significant factor in determining negotiated wages.

V. CONCLUSIONS & RECOMMENDATIONS

5.1 Conclusions

Labour productivity, gross profit before tax, and previous period wage were found to be important determinants of negotiated wages in the Kenya banking industry among unionisable workers. On the other hand, unemployment rate, legislated minimum wage, inflation rate, union membership, and union density were not important determinants of unionisable wages within the sector.

5.2 Recommendation

From the research findings, labour productivity is an important variable in the determination of wages. Thus, BIFU and KBA should come up with an acceptable way to measure productivity that is acceptable to both parties. Though the union is involved in wage negotiation, union strength was not an important variable in the determination of wages. BIFU should find other ways of luring unionisable employees to the union. They can invest more in their role as representatives of employees wherever they have a disciplinary case. This could be through the hiring of lawyers to represent their members in these disciplinary cases. An increase in the positive outcome of such cases would encourage more unionisable employees to join the union.

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