# Determinants of Gender Wage Gap: A Case of Bungoma County, Kenya

Ronald Ondigi Machogu<sup>1</sup>, Jacob Omolo<sup>1</sup>

<sup>1</sup> Kenyatta University, Nairobi, Kenya

E-mail: ondig1023@gmail.com

Received 18 November 2024 Accepted for publication 27 November 2024 Published 29 November 2024

#### Abstract

Differences in wages based on gender remain a topical policy area in many countries. Since attaining political independence in 1963, Kenya has taken legislative, administrative, programmatic and policy measures to promote gender equality. Among the major efforts are enactment of the Employment Act 2007, which provide for equal pay for work of equal value performed by men and women, and non-discrimination on account of gender in all aspects of remuneration and employment. The Constitution of Kenya (2010) also guarantees equality of opportunity and elimination of discrimination such as gender-based bias in employment and remuneration. In an effort to advance gender equality, the government also formulated the National Policy on Gender and Development in 2000, and a revised National Gender and Development Policy in 2019 to provide policy and institutional framework for promoting gender equality in the country. Despite the policy, legal, regulatory and institutional interventions, gender-based bias in employment and remuneration persist. Kenya's gender wage gap was 68 percent in 2020, implying that women earned KSh. 68 for every KSh. 100 earned by men for doing similar work. In 2014, women earned 64.7 per cent of men's earnings, on average. This study sought to establish the determinants of gender wage gap in Kenya with a focus on Bungoma County. A cross-sectional research design was used, and data collected from 410 employees sampled from Bungoma County. The research employed multiple regression method in data analysis. The results reveal that, holding other variables constant, a male worker in Bungoma County earned KSh. 8,231.65 more than a female worker. The study also established that gender, education, age, marital status, work experience, religion and employer are important determinants of gender wage gap in Bungoma County. Given that the existing policy framework at national and county levels covers gender-based discrimination, increasing compliance with the policies would be necessary to bridge the wage gap. Additionally, short-term measures such as investing and promoting female education would contribute to reducing the wage gap.

Keywords: Wages, gender

#### Introduction

Across many countries, increase in the number of women in paid work is accompanied by gender inequalities that cut across various areas of professional practice (World Economic Forum, 2018). On average, men earn more than women for the same work (Morris, Goudie & Sutton, 2011). Waqas (2013) observes that wage disparity exists in various forms. These include pay differences between males and females; wage differences between the private and public sectors; salary

#### https://atcr.kra.go.ke

ATCR ISSN (online) 2664-9535 (print) 2664-9527

variance across industries; intra-industrial wage differentials; and variations in salaries between natives and immigrants.

Gender-based inequalities exist in different degrees and across countries. The World Economic Forum (2020) confirms that wage gap is a global phenomenon. It estimates the gender gap at 31 per cent and gender wage gap at 40 per cent globally (World Economic Forum, 2020). The World Economic Forum (2018) reported that in the United States (U.S), men's median weekly earnings were approximately 19 per cent more than those of women. Further, the World Economic Forum (2018) observed that resolving the persistent unequal wages between males and females in the US would require up to 217 years. It maintained that many countries, both developed and developing, encounter wage discrimination on gender lines. According to the report, men still benefit more from work than women do worldwide with women earning about half of men's wages.

In sub-Saharan Africa, the wage ratio between males and females was about 0.8 in countries such as Benin. Botswana. Rwanda, Mozambique and Namibia in 2016 (World Economic Forum, 2017). This implies that men earned about 20 per cent more than women in the aforementioned countries. In the case of the Organization for Economic Cooperation and Development (OECD), the gender wage gap was 26 per cent and 22 per cent amongst the highly educated and less educated, respectively in 2016 (OECD, 2017). The case of OECD demonstrates that gender wage gap is more prevalent in senior positions compared to junior positions.

Several policy efforts have been made to enhance gender parity in Kenya. The National Policy on Gender and Development (NPGAD) was adopted in 2000 (Republic of Kenya, 2010). The policy offered a basis for addressing gender-based inequalities in the country. Among the key targets of the policy were to ensure that marginalized groups such as women benefit from economic development equally as men do. Although many achievements such as gender representation requirements in State and county appointments have been made, the pace of these achievements targeting gender parity has fallen below expectations (Republic of Kenya, 2019). For instance, in 2019, women earned two thirds of men's wages (Wainainah, 2020).

Bungoma County is one of the 47 counties that were established in 2012 following the promulgation of the Kenya Constitution (2010). The Bungoma County Human Development approach is anchored in universalism and emphasizes the enhancement of the rights of the rights of all by ensuring nobody is left behind (County Government of Bungoma, 2018). The county shares the aspirations of the national government such as on elimination of extreme poverty, lowering inequality and enhancing gender equality (County Government of Bungoma, 2018). In a study, Bwire (2015) noted that the Bungoma county region and its communities were still tied up in male cultural dominance which does not value female progression. As a result, disparities and inequalities affected resource allocation and other areas of development. Hence, the choice of Bungoma County which is a rural county provides an indicative case for

highlighting the state of gender empowerment at the grassroots level.

#### Statement of the Research Problem

Kenya and its devolved units have made progressive efforts to address gender inequality. In its County Integrated Development Plan (CIDP 2018 - 2022), Bungoma County government prioritized equity in access to gainful employment to all residents. As Bwire (2015) noted, Bungoma County remained a male dominated society thus likely to undermine female progression. Current research within the Kenvan context has investigated secondary and longitudinal data leading to dissimilar findings (Kaifa, 2005 & Akuma, 2010). Apart from the gender wage gap being underresearched, existing research findings are dissimilar. This study took a different approach to previous ones by proposing the use of primary and cross-sectional data to establish the determinants of the male-female wage gap. The specific objectives of the study were to:

i. Determine the gender wage gap in Bungoma County. ii. Establish the determinants of the gender wage gap in Bungoma County.

#### Methodology

To meet the research objective of identifying the determinants of gender wage gap in Bungoma County, the study adopts non-experimental research design. Specifically, the study employs the cross-sectional design. Based on the work of Cooper and Schindler (2008), the cross-sectional design seeks to explain association between or among variables by targeting data collection at one point in time.

#### Theoretical Framework

The study is anchored on the reward expectations theory because it aligns with the literature regarding the determinants of gender wage gap. Thus, the research assumes that social interactions influence the emergence of a status structure which makes the society accept less wages for women and high wages for men. Based on the structuring of society, women expect less wages compared to men. Societal cultures provide points of reference about common belief on compensation for work. Thus, based on the theory, individuals accept wage gaps based on characteristics such as gender, education, age, marital status, work experience, religion and employer as illustrated in equation 3.1.

$$= f(L, P, U, MS, PK, R, E)$$

Where: W = wages; L= gender/sex; P = education; U = age; MS = marital status; PK = work experience; R=Religion and E = Employer.

#### Model Specification

W

The general form of the model derived based on equation 3.1 is as follows:

Where: W = wages;  $\alpha_0$  = constant;  $\beta_1, \beta_2, \dots, \beta_7$  are regression coefficients; L= gender/sex; P = education; U = age; MS = marital status; PK = work experience; R = religion and E =employer  $\varepsilon$ = error term. Given the categorical nature of some

https://atcr.kra.go.ke

## ATCR ISSN (online) 2664-9535 (print) 2664-9527

variables, the following equation is derived from equation 3.2 above;

Where:

 $\gamma_0$  = Constant; *DiL*= Dummy variable for gender (1 for male and 0 for female); *DP*= education dummy variable(*DiP* = 1 if university education, 0 otherwise; *DiiP* =1 if secondary education, 0 otherwise); *U*= age; *DMS* = marital status(*DiMS* = 1 if widowed, 0 otherwise; *DiiMS* =1 if separated, 0 otherwise); PK = work experience; *DiR* = Dummy for religion (1 for Christians and 0 for Muslim); *DiE* =

Dummy for employer (1 represents county, 0 represents and  $\varepsilon$  = error term.

Further, from equation 3.3 it is possible to establish whether male workers earn more than female workers based on the regression coefficient  $\alpha_1$ . Coefficient  $\alpha_1$  helps to determine whether there is any variance in wages between men and women. The signs of the  $\alpha_1$  to  $\alpha_6$  will show which variables affect wages. In case, the estimation of equation 3.3 shows that one gender earns more than the other, it would be necessary to do separate regressions for each gender. From equation 3.3 it is possible to derive the econometric equations presented below:

#### Where: WL - wages for men; WP- wages for women

A comparison between regression equations 3.4 and 3.5 allowed for the identification of changes in the intercept and slopes for males and females regressions. The constant from equation 3.4 highlight the base wage for males while the constant for equation 3.5 show the base wage for females. Hence, the estimation of the equations reveal the magnitude of differences in wages.

#### Study Population and Sampling

The target population for the study comprises employees of the County Government of Bungoma, Equity bank and KCB banks based in Bungoma town. Based on statistics from County Government of Bungoma (2019), the county government had 5,900 workers. The workers are in three categories, namely top management, middle level management and lower level staff. The top level had 590, the middle level had 1, 770 while the lower level employed 3540 employees. Equity bank employed 25 while KCB had 20 employees. In total, the banking employee population comprised 45 workers.

To determine the sample size, the formula proposed by Yamane (1967) is used.

Where:

n0 = Sample sizeN = Population size e = Precision (5%)

 $n0 = \frac{5900}{\{1 + 5900(0.05)^2\}^2} = \frac{375}{100}.$ 

The study employs stratified sampling in selecting the sample. County workers fall into three categories namely top management, middle management and low levels. Thereafter, purposive sampling was adopted to select study participants. The sampling technique is appropriate because it permits the researcher to pick relevant units of study. The sample distribution is given in Table 3.2.

In determining the sample size in the banking sector, the formula labeled 3.6 could not apply because of relatively small populations. Hence, an alternative proposed by Krejcie and Morgan (1970) was adopted to identify respondents from employees of Equity Bank, and Kenya Commercial Bank to take part in the research Kenya Commercial Bank employed 20 while Equity employed 25 workers within Bungoma County. In total both banks had 45 workers. Based on the Krejcie and Morgan (1970), a sample of 40 is adequate for a population of 45. Krejcie and Morgan (1970) developed a table based on a formula that considers the population and desired level of accuracy. In apportioning samples to categories, a proportional approach was used.

#### Data Collection Methods

Data was collected using a structured questionnaire. Neumann (2005) defines a questionnaire as a research instrument that comprises questions with responses. The questionnaire attached to appendix 1 was administered by the researcher or a research assistant to the respondents at their work stations. *Piloting of instrument* 

A pilot study was done to assess the validity of the research instrument. This assisted the researcher to review the questions asked to detect any concerns with the framing of the questionnaire prompts. According to Connelly (2008), a pilot study sample should be approximately 10 per cent of the estimated sample for the main study. Treece and Treece (1982) support the 10 per cent sample size. However, Isaac and Michael (1995) suggested 10 - 30 participants; Hill (1998) suggested between 10 and 30 respondents for pilots in survey research. On this account, the instruments were piloted among 20 individuals selected purposively. From the piloting, the questionnaire instrument was deemed valid because the responses generated satisfied the questions that were asked. However, the religion variable options were altered after the establishment that respondents were either Muslim or Christian. The Hinduism option was dropped.

#### Diagnostic tests

Before embarking on testing the models, certain assumptions about the data and model have to be met. For instance, the data should not suffer the problem of multicolinearity. Similarly, the model being tested should fit the data well or be statistically significant. Consequently, the following diagnostic tests were carried out.

#### Breush-Godfrey -Berolo test

The research applied the Breush-Godfrey -Berolo test to test for the problem of multicollinearity. In undertaking the test, a correlation matrix was developed to assist in checking for the existence of high pair-wise correlation among regressors.

Gujarati (2007) noted that whenever zero order correlation coefficient between regressors or the pair-wise correlation is higher than 0.7, then multicollinearity is deemed to be serious problem. In cases of multicollinearity, the OLS estimators and their standard errors become sensitive to small changes in data. According to Gujarat (2007), multicollinearity leads to erroneous t-statistic outcomes. For instance, the t-statistic of one or more coefficients might be statistically insignificant although the overall measure of general fit is high. Multicollinearity might be a problem because the relationship between independent variables would complicate the chance of isolating the association between each independent variable with the dependent variable. When the problem is witnessed, one of the independent variables involved is dropped or merged with the other. Table 3.3 presents the multicollinearity matrix. Table 3.3 demonstrates that the highest pair wise correlation is 0.39 which is between age and experience. Hence, the multicollinearity problem does not affect the field data.

#### Model specification test

To test for model misspecification errors, the study applied the F-test. The F-Test is required to test the overall significance of the regression model. It checks if or not the regression model offers a better fit of a dataset compared to a model with no predictor variables. Wooldridge (2016) noted that model misspecification occurs if the researcher has omitted variable(s). The F-test was done by comparing the calculated F and critical F. If the probability is less than 0.01 it means statistical significance at 1%, while values less than 0.05 gives statistical significance at 5%. A probability of less than 0.1 shows statistical significance at 10%. In case the model specification error is present, the researcher considered dropping one or more of the predictor variables.

The F-test yielded an F-statistic of 51.63 and the probability is 0.0000 which is significant at one per cent level of significance. Hence, the sample data provides enough evidence to conclude that the regression model fits the data better in comparison to the model without independent variables.

#### Data Analysis

The estimation of equation 3.3, 3.4 and 3.5 were critical in addressing the objectives of the study. The estimation of equation 3.3 helps to address the first objective by highlighting the association between gender and wages. The analysis of regression coefficients of the equation facilitated the attainment of the second objective regarding the determinants of the gender wage gap. Similarly, the estimation of equation 3.4 and 3.5 focused on addressing the second objective.

#### Results

The study targeted 415 respondents which comprised 375 respondents from the county and 40 from KCB and Equity banks. A total of 409 respondents, which translates to a response rate of 98.6% per cent was realized (Table 4.1). According to Mugenda and Mugenda (2003), a response rate of 50 per cent is considered sufficient for preferential and consistent studies. This is further supported by Carvajal, Popovici and Hardigan (2018) who noted that 50 per cent response rates are satisfactory while 70 per cent of responses

are very good. Therefore, the response is considered adequate for analysis and inferences.

Table 4.1 illustrates that of the 409 respondents, 37 were working in the banking sector. In total, the banking staff accounted for nine per cent of the respondents, while the county government staff constituted 91 per cent of the study respondents.

#### Descriptive Statistics

Males constituted 58 per cent of the survey respondents while females accounted for 42 per cent (Figure 4.1). This is a pointer that males dominate employment in the county government and in the selected banks. Forty three per cent of the respondents had university level of education while 45.5 per cent had college level of education (Figure 4.2). Similarly, 11 per cent of the respondents had attained secondary level of education and less than one per cent of the respondents had primary level of education. The demographic data, therefore, shows that majority of the sampled workers held at least college levels of education.

Based on the data, majority (63%) of the respondents were married while the least proportion of respondents (3%) were separated. In respect to religion, 72 per cent of the sampled respondents were Christians while 24 per cent were Muslims (Figure 4.4). A small proportion (4%) of respondents did not identify with any religious orientation.

Wages comprised the dependent variable of the study. Table 4.3 shows that the male workers in the county government on average earned a monthly wage of Ksh.55, 244 while their female counterparts earned Ksh.38, 500 per month. The same trend appears in the banking sector since on average, males employed in the banks earned Ksh.62, 550 per month while female workers earned a monthly wage of Ksh.46, 428. This shows that on average, male workers earn more than female workers in Bungoma County among the employees in both the banking industry and county government.

The variance in earnings based on education was also considered. Table 4.4 captures average wage earnings of the respondents based on educational attainment. Table 4.4 shows the distribution of respondents based on their levels of education. Those with college level of education comprised the largest proportion at 45.5 per cent while primary level of education comprised lowest at 0.005 per cent. Male workers' average wages are more than those of female workers across the university, college and secondary levels of education.

#### Empirical Results

The section covers empirical results. The presentation and discussion is modeled along the objectives of the study.

### Gender Wage Gap in Bungoma County

The first objective of the study was to establish the gender wage gap in Bungoma County. To meet the objective, equation 3.3 was estimated using the OLS technique. The estimation results are presented in Table 4.5. The estimation results show that F-statistic is 51.63 with a probability of 0.0000. This implies that the coefficient of joint determination is statistically significant at 1 per cent level of significance. This means that the variables in the model jointly explain the variation in wages. The results also give Adjusted R Squared

of 0.44, meaning that 44 per cent of the changes in wages are explained by the variables in the model.

The coefficient of the gender variable has a positive sign. The variable is statistically significant at the one per cent level of significance. Based on the regression coefficient for gender, the implication is that, holding other factors constant, a male worker in Bungoma County earns Ksh.8, 635.45 more than a female worker.

#### Determinants of Gender Wage Gap in Bungoma County

The coefficient of university education variable was positive and statistically significant at one per cent level of significance (Table 4.5). The result implies that an employee with university level of education is likely to earn Ksh.1, 4784.92more than a worker with college education. The coefficient of secondary level education has a negative sign and is statistically significant at the one per cent level of significance. The implication is that an employee with secondary level of education earns Ksh.4, 243.47 less in comparison to an employee with college level of education.

For age, the regression coefficient is positive, and statistically significant at the one per cent level of significance. The implication is that on average, an additional year in one's age is associated with an increase in their wages by Ksh.1, 263.31. The coefficient for widowed employees was negative and it was insignificant statistically. The findings reveal that widowed workers can expect to earn less by Ksh.985 compared to married employees. Similarly, the coefficient for separated workers is negative and statistically insignificant. Regardless, the implication is that on average, a separated employee earns Ksh.452 less than a married worker. The coefficient for work experience is positive although statistically insignificant. Nonetheless, an extra year at work is associated with an additional Ksh.1, 133 in earnings.

Regarding religion, the coefficient is negative and statistically significant at the one per cent level of significance. The outcome indicates that a Muslim employee earns less by Ksh.1195.02 compared to a Christian employee. Finally, the employer variable coefficient has a negative sign. However, it is statistically insignificant. The result shows that a Bungoma county employee earns less by KSh.3, 227.45 in comparison to the bank employees.

A comparison of the coefficients demonstrates that males secure better wages based on their education, age, marital status, work experience, religion and employer. For instance, table 4.6 shows that university level of education earns a man approximately 700 more shillings than a female employee (Table 4.6). Although employer type has a negative impact on both sexes, a female working in the county earns approximately 800 less than a male worker. Therefore, education, age, marital status, work experience, religion and employer are the determinants of wages.

#### Discussion

The results reveal that there is a gap in earnings since a male employee earns KSH. 8, 635 more than a female employee earns. Based on the 2014 national statistics, on average, males earned KSH.17, 825 while women earned KSH.11 533 per month in the formal sector (Cheeseman, 2014). Similarly, in 2019, women were paid 32 per cent less than their male

#### https://atcr.kra.go.ke

counterparts (Wainainah, 2020). In sub-Saharan Africa, female workers earned 80 per cent of male workers' earnings while among the G-7 countries, the gender wage gap stood at 16 per cent in 2017 (IMF, 2018). Since the current findings reveal that a male worker earns KSH.8, 635 more than a female worker, there is a similar trend at Bungoma County, that is similar to what happens nationally in Kenya, regionally in sub-Saharan Africa and globally. The finding affirms results from previous studies, which indicate that male workers receive more wages than female workers. Particularly, the findings are consistent with the study by Mariara (2003) which found favouritism for male workers in Kenya. Similarly, Kaifa (2005) also established that genderbased discrimination accounted for variance in wages between males and female workers in Kenya.

The study results show that earnings have a direct relationship with education. The findings are consistent with those by Phimister (2005) and Agesa, Agesa and Dabalen (2009). Phimister (2005) conducted reached the same conclusion after investigating the gender wage gap in the UK while Agesa, Agesa and Dabalen (2009) based their conclusions after researching the male-female wage gap in Kenya. According to the latter researchers, males' dominance was attributable to their possession of more human capital which account for better earnings.

A positive significant association was also established between age and earnings. The findings show consistency with the findings by Kaifa (2005) but contrast those by Christofdes, Polycarpou and Vrachimis (2010) who found that the wage gap in the EU is not explained by employing features such as education and age. The Kaifa (2005) study was done within the Kenyan context and established that age was among the major determinants of wages, although only 25 per cent of the gap resulted from gender and other forms of discrimination.

Overall, the current findings align with those by findings by the Brynin (2017) and Nurpratiwi, Syamsurijal and Yunisvita (2020) studies which established that age, marital status, education, and other differences explained earning variations between male and female workers. Whereas Brynin (2017) conducted a study within the UK, Nurpratiwi, Syamsurijal and Yunisvita (2020) did their research in Indonesia. However, the findings largely contrast those by Christofdes, Polycarpou and Vrachimis (2010) based on a study on gender wage gap in the European Union (EU) which showed that employing features such as age, education and marital status did not explain a large part of the wage gap in the EU. Nonetheless, the establishment that marital status, work experience and employer type have no significant association with wages support the findings by Christofdes, Polycarpou and Vrachimis (2010)

#### Conclusion

The problem under investigation was the gender wage gap in Bungoma County. Further, the investigation establishes that education, age and religion have a significant effect on the wage gap. However, marital status, work experience, and employer have no significant influence on the wage gap. A number of studies corroborate the findings of the study by

highlighting that a persistent gender wage gap exists in paid employment. Based on the outcome, the study concludes that a male-female wage gap exists in Bungoma County, and education, age and religion are significant determinants of the variance.

#### Policy Implication

Although the Bungoma County government has made efforts to address gender-based discrimination regarding employment outcomes through its County Integrated Development Plan 2018-2022, it needs to step up implementation efforts to ensure that wages are not influenced by an employee's gender. In an effort to reduce wage differences, both the county and national governments should invest more in education and ensure accessibility to all persons. Accordingly, the authorities should consider short-term and medium-term measures such as increasing budgetary allocations and subsidizing fees paid by female learners as a part of the measures to bring parity. *Areas for Further Research* 

The current study has attempted to explain the gender wagegap in Bungoma County through regression. Given the variance that might result from the adoption of other approaches, it would be interesting for future studies to consider employing methods such as the Oxaca Blinder decomposition approach.

**Disclosure Statement** 

I confirm that there is no known conflict of interest regarding the publication of this study.

#### REFERENCES

- Agesa, R.U., Agesa, J., &Dabalen, A. (2009). Changes in Wage Distributions, Wage Gaps and Wage Inequality by Gender in Kenya. Journal of African Economies, Centre for the Study of African Economies (CSAE), 18(3), 431-460.
- [2] Akuma, J. (2010). The effect of occupation on wage discrimination in Kenya. Nairobi: University of Nairobi.
- [3] Antón, J. I., de Bustillo, R. M., & Carrera, M. (2010). From guests to hosts: immigrant-native wage differentials in Spain. International Journal of Manpower, 31(6), 645-659.
- [4] Blau, F. D., & Kahn, L. M. (2016). The gender wage gap: Extent, trends, and explanations. Bonn: Institute for the Study of Labor (IZA).
- [5] Blinder, A. (1973). Wage discrimination: Reduced form and structural estimates. Journal of Human Resources, 8(4), 436–455.
- [6] Cheeseman, N. (2014). The gender gap in Kenya: Taking stock and moving forward. www.democracyinafrica.org/Kenya
- [7] Christofides, L., Polycarpou, A., &Vrachimis, K. (2010). The gender wage gaps, 'sticky floors' and 'glass ceilings' of the European Union. Bonn: IZA.

https://atcr.kra.go.ke

- [8] Cooper, D. R., & Schindler, P. S. (2008). Business research methods. New York: McGraw-Hill.
- [9] County Government of Bungoma. (2018). County integrated development plan 2018-2022. Transforming Bungoma county: Investment for a better tomorrow through good governance. Bungoma: Author.
- [10] Connelly, L. M. (2008). Pilot studies. Medsurg Nursing, 17(6), 411-2.
- [11]Crosby, F. (1982). Relative deprivation and working women. London: Oxford University Press.
- [12] Equileap (2019).Gender equality in Kenya: Assessing 60 leading companies on workplace equality. Nairobi: Equileap.
- [13] Equity Group Holdings (2020). Equity launches leadership and coaching program for staff. Nairobi: Equity Group Holdings.
- [14] Hertzog, M.A. (2008). Considerations in determining sample size for pilot studies. Research in Nursing & Health, 31,180-191.
- [15] Hill, R. (1998). What sample size is "enough" in internet survey research? Interpersonal Computing and Technology Electronic Journal 6(3-4), 12-18.
- [16] Fredman, S. (2015). The right to equal pay for work of equal value. London: Oxford University.
- [17] Gujarati, D. N. (2007). Basic econometrics. New York: McGraw-Hill.
- [18] Hossain, K. A., Haque, S. M., &Haque, A. K. (2015). An analysis of the determinants of wage and salary differentials in Bangladesh. South Asia Economic Journal, 16(2), 12-21.
- [19] International Monetary Fund. (2018). Pursuing women's economic empowerment. Washington DC: Author.
- [20] IMF (2019). List of member countries with delays in completion of Article IV Consultations or mandatory financial stability assessment over 18 months. Author.
- [21] Isaac, S., & Michael, W. B. (1995). Handbook in research and evaluation. San Diego, CA: Educational and Industrial Testing Services.
- [22] Julious, S. A. (2005). Sample size of 12 per group rule of thumb for a pilot study. Pharmaceutical Statistics, 4(1), 287-291.
- [23] Kaifa, E. K. (2005). Gender wage differentials in Kenya. university of Nairobi.

# Appendix 1: Tables

# Table 3. 1: Definition and measurement of variables

S.No	Variable	Definition	Measurement
1	Wage	The mean earnings paid to worker monthly	Average earnings paid monthly in KSh.
2	Age	This is the number of	The difference between now and respondent's
		years that the respondent has lived	year of birth in years
3	Education	The highest level of schooling attained by respondent	Measured by dummy variable where 1 represents college and 0 represents university, secondary or primary.
4	Work experience	This is the duration in years that a respondent has been employed	The difference between now and year when one was employed measured in years
5	Marital status	This is one's marriage status	Measured using dummy variable where 0 represents married, 1 represents unmarried (separated, divorced, or widowed)
6	Gender	The sex of an individual	Measured by dummy, where 1-male and 0- female.

ATCR ISSN (online) 2664-9535 (print) 2664-9527 https://atcr.kra.go.							tcr.kra.go.ke				
7	Religion	This	is	based	on	Measured	by	dummy	variable	where	1
		religio	ous ori	entation		represents	Chr	istian, 0	represents	Musli	m,
				Hinduism a	and o	others					
8	Employer	This	is ba	sed on	the	Measured	by	dummy	variable	where	1
		emplo	ying c	organiza	tion	represents	coun	ty, 0 repre	sents bank		

# Table 3. 2: Sample size

Category	Target population	Sample
County Top level	590	37
County Middle level	1,770	113
County Low level	3,540	225
County Total	5,900	375
КСВ	20	18
Equity Bank	25	22
Bank Total	45	40

# Table 3. 3: Multicollinearity diagnostics

				marital			
Variable	Gender	education	Age	status	experience	religion	employer
Gender	1						

https://atcr.kra.go.ke

Education	0.01	1					
Age	0.04	-0.15	1				
marital							
status	-0.02	-0.19	0.12	1			
experience	0.04	-0.07	0.39	0.12	1		
Religion	-0.06	0.02	-0.02	-0.07	-0.06	1	
Employer	0.12	0.15	-0.32	0.04	0.05	0.14	1

Source: Own Computation

## Table 4. 1: Response Rate

Category	Target Sample	Actual Sample	Proportion
			(percentage)
County	375	372	99.20
Bank	40	37	92.50
Total	415	409	4.1

## Table 4. 2: Descriptive Statistics

Variable	Mean	Std. Dev.	Min.	Max.	Skewness	Kurtosis
Wage	47, 674.77	34, 786.32	15,000	302,000	2.16	10.92
Age	35.58	4.90	24	48	0.12	2.63
Experience	9.31	4.60	2	33	0.19	5.52

## Table 4. 3: Wages and Respondents' Gender

Workplace	Frequency	Mean Wages		
		KSh. Per month		

https://atcr.kra.go.ke

	Male	Female	Male	Female
County	217	155	55,244	38,500
government				
Bank	20	17	62, 550	46, 428

# **Table 4. 4: Education Level and Wage Earnings**

Level of Education	Mean (KSh.)	Frequency	<b>Proportion</b> (%)	
University	64,032	176	43	
Male	67, 043	102		
Female	59, 881	74		
College	23,853	186	45.5	
Male	25, 643	96		
Female	21, 943	90		
Secondary	21,937	45	11	
Male	22,000	43		
Female	20, 500	2		
Primary	22,714	2	0.005%	

## Table 4. 5: Male wage Determinants in Bungoma County

Dependent Variable: Male Wages	Coefficient	Standard Error	t-Statistic	P>t
University education	15784.92	2687.03	-11.449	0.0023
Secondary education	-3243.47	2205.088	2.3764	0.0000

https://atcr.kra.go.ke

Age	1763.31	250.68	11.5144	0.0000
Widowed	-775.139	2590.01	0.4563	0.6142
Separated	-342.46	2497.05	0.5582	0.5125
Work experience	1335.65	2878.39	0.7239	0.3330
Religion	2195.02	520.088	3.767	0.0003
Employer	-3328.46	3707.07	-1.1322	0.2761
Adjusted R Square	0.49			
Standard Error	26036.43			
F-statistic	47.63			
Prob>F	0.0000			

Source: Own Computation

# Table 4. 6: Determinants of Gender Wage Gap in Bungoma County

	Education	Age	Marital status	Work experience	Religion	Employer
Male wage	10, 235.45	1543.31	-745.32	1432.53	-980	-2700.45
Female wage	8, 451	1123.46	-1020.31	906.38	-1342.56	-3402.54

Source: Own Computation





(Adapted from County Government of Bungoma, 2018)

https://atcr.kra.go.ke



