



WHY WOMEN EARN LESS

GENDER PAY GAP AND LABOUR-MARKET
INEQUALITIES IN MALAWI



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UN Women is the United Nations organization dedicated to gender equality and the empowerment of women. A global champion for women and girls, UN Women was established to accelerate progress on meeting their needs worldwide. UN Women supports United Nations Member States as they set global standards for achieving gender equality and works with governments and civil society organizations to design laws, policies, programmes and services needed to implement these standards. It stands behind women's equal participation in all aspects of life, focusing on five priority areas: increasing women's leadership and participation; ending violence against women; engaging women in all aspects of peace and security processes; enhancing women's economic empowerment; and making gender equality central to national development planning and budgeting. UN Women also coordinates and promotes the United Nations system's work in advancing gender equality.

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1

INTRODUCTION

1 INTRODUCTION

Despite progress in women's economic and political participation, formal employment and education attainment, a gender pay gap remains a pervasive labour-market feature across the world. Globally, women earn only 73 cents for each US dollar earned by men.¹ The gender pay gap is a broader reflection of the work-related and economic inequality of women, including their lack of economic independence, lack of decision-making power both in the household (e.g. spending decisions) and in society (e.g. managerial decisions), and experience of violence. Malawi, with a population of around 20.4 million in 2022,² is among the world's poorest nations, ranked 169 out of 191 countries by the Human Development Index.³ Moreover, its Gender Inequality Index value of 0.554 placed it 142 out of 170 countries ranked from most to least equal in 2021. Although some progress has been made in the country's efforts towards gender equality, a significant journey lies ahead, with women holding only 22.9 per cent of parliamentary seats as at February 2021.⁴ Notably, the gender pay gap is a prevalent feature in Malawi's labour market.

The existence and persistence of the gender pay gap has unfavourable outcomes at both the individual and societal levels. For example, the gap is more frequently connected with higher levels of poverty and inequality among women. Moreover, women's pay being lower than men's during their working years translates into women's incomes from social security and pensions after retirement and other social benefits, such as life insurance, also being lower. The adverse effects of shorter working hours and low-paid jobs, typically associated more with women than with men, are reflected in lower pension levels, lower seniority premiums and lower levels of other coverage related to

employment contributory schemes.⁵ Around 70 per cent of Malawi's population is living on less than US\$2.15 per day, according to 2019 data. Despite this percentage having remained almost unchanged since 2010, when it was 68 per cent, population growth in the country has resulted in an additional 3 million people living in poverty, reaching a total of 13 million in the past decade.⁶

When households and society undervalue women, other severe outcomes become likely. As a result of low economic power within the household, some women may tolerate abusive and unhealthy relationships, and domestic violence. Women's families are likely to benefit when the share of household income that women control increases; for instance, women tend to invest more in their children's nutrition, health, education and housing with increased income.⁷ Overall, women's lower earnings can lead to a reduction in bargaining power and less independence, and lifetime income inequality between genders, which contributes to maintaining the lower status of women in society and ultimately to lower rates of gross domestic product (GDP) and GDP growth.

The objective of the present study is to present an overview of the adjusted gender pay gap and labour-market inequalities in Malawi. This is part of a larger 2023 UN Women study titled "Why Women Earn Less: Gender Pay Gap and Labour-Market Inequalities in East and Southern Africa". Understanding the gender pay gap and its determinants would raise awareness among employees, employers and policymakers; lead to actions for the mitigation of economic inequalities; support women in realizing their productive potential; and ultimately support economic growth. Therefore, the study contributes to achieving the Sustainable Development Goals (SDGs) for gender equality, within

SDG 5, and for decent work and economic growth, within SDG 8. SDG 5 considers inequality more broadly than simply in terms of the gender pay gap: its ambition is to achieve gender equality in the labour market (e.g. equal access to jobs and top decision-making roles), in education (e.g. achieving gender parity in education), in access to health and in an array of other target areas, with the aims of reducing gender-based violence and discrimination, and empowering women and girls. SDG

8 also seeks to promote the collection and dissemination of sex disaggregated data on other labour-market indicators, including on employment, unemployment, informal employment and rates of those not in education, employment or training.

The report is structured as follows. Chapter 2 briefly discusses the methodology and data used in this study, Chapter 3 presents the main findings of the study and, finally, Chapter 4 concludes.



2

METHODOLOGY AND DATA

2 METHODOLOGY AND DATA

The study analyses the gender pay gap and other labour-market inequalities in the country using quantitative techniques from labour economics, including regression analysis, quantile regression analysis, Oaxaca–Blinder decomposition and segregation indices. These methodologies disentangle multifaceted factors contributing to the gender pay gap to understand the drivers of gender-based labour-market disparities in the country.

The **raw** or **unadjusted gender pay gap** is the difference between the average pay earned by women and men in the labour market, expressed as a percentage of the average pay for men:⁸

$$\text{Gender pay gap} = \frac{(\text{Men's average pay} - \text{women's average pay})}{(\text{Men's average pay})} \times 100\%$$

Such a raw gender pay gap hides important information about how personal and labour-market characteristics affect the wage differential. Thus, the Mincerian earnings function⁹ is used to analyse wages as a function of the productive capacity of an individual. The Mincerian earnings function takes the form:

$$\ln(y_i) = \alpha + \beta_1 \text{gender}_i + \sum \gamma_j X'_i + \varepsilon_i \quad (1)$$

where $\ln(y_i)$ is the log of the hourly wage of person i ; gender_i is a dummy variable, taking a value of 1 for women and 0 for men; and X'_i is a vector of other individual and labour-market characteristics (including education, age and its square, experience, tenure, occupation and sector).¹⁰ The coefficient β_1 measures the **adjusted** gender pay gap. If the vector of explanatory variables X'_i is not included, then β_1 would measure the **unadjusted** gender pay gap, i.e. the calculation would estimate only a simple difference of logged mean wages.

Specifically, the empirical models estimated are:

$$\ln(y_i) = \alpha + \beta_1 \text{gender}_i + \varepsilon_i \quad (2)$$

$$\ln(y_i) = \alpha + \beta_1 \text{gender}_i + \beta_2 \text{age}_i + \beta_3 \text{age_squares}_i + \beta_4 \text{education}_i + \varepsilon_i \quad (3)$$

$$\ln(y_i) = \alpha + \beta_1 \text{gender}_i + \beta_2 \text{age}_i + \beta_3 \text{age_squares}_i + \beta_4 \text{education}_i + \beta_5 \text{marital_status}_i + \varepsilon_i \quad (4)$$

$$\ln(y_i) = \alpha + \beta_1 \text{gender}_i + \beta_2 \text{age}_i + \beta_3 \text{age_squares}_i + \beta_4 \text{education}_i + \beta_5 \text{marital_status}_i + \beta_6 \text{sectors}_i + \varepsilon_i \quad (5)$$

$$\ln(y_i) = \alpha + \beta_1 \text{gender}_i + \beta_2 \text{age}_i + \beta_3 \text{age_squares}_i + \beta_4 \text{education}_i + \beta_5 \text{marital_status}_i + \beta_6 \text{occupations}_i + \varepsilon_i \quad (6)$$

$$\ln(y_i) = \alpha + \beta_1 \text{gender}_i + \beta_2 \text{age}_i + \beta_3 \text{age_squares}_i + \beta_4 \text{education}_i + \beta_5 \text{marital_status}_i + \beta_6 \text{sectors}_i + \beta_7 \text{occupations}_i + \varepsilon_i \quad (7)$$

$$\ln(y_i) = \alpha + \beta_1 \text{gender}_i + \beta_2 \text{age}_i + \beta_3 \text{age_squares}_i + \beta_4 \text{education}_i + \beta_5 \text{marital_status}_i + \beta_6 \text{sectors}_i + \beta_7 \text{occupations}_i + \beta_8 \text{informal_job}_i + \varepsilon_i \quad (8)$$

where notations are self-explanatory.

A regression estimate of the raw pay gap is performed using Equation 2, with gender being the only explanatory variable. In Equation 2, age and its square, and education, represented by three levels – (1) primary or lower, (2) secondary and (3) tertiary or higher – are added as individual characteristics to explain the gender pay gap. Note that information on work experience or tenure was not available from the survey used for this study. In Equation 4, marital status is added, represented by two levels: (1) married and (2) single and other individuals. In Equation 5, occupation dummies (reference category: managers) are added and occupations are defined using the one-digit International Standard Classification of Occupations (ISCO-08) classification.¹¹ In Equation 6, instead of occupation, sector dummies (reference category: agriculture) are added and sectors are defined using the one-digit Statistical Classification of Economic Activities in the European Community (NACE) Rev.2 classification.¹² In Equation 7, both sector and occupation dummies are added. Finally, in Equation 8, an indicator of whether or not a job is undertaken with or without written contract (formality status) is added. For estimation, ordinary least squares (OLS) estimates were used.

The study also estimates the gender pay gap at different percentiles of the pay distribution. The quantile regression was developed as a semi-parametric method used to analyse pay, considering pay structure and distribution.¹³ While OLS estimates report the mean effects, the quantile regression method allows for the study of the marginal effects of covariates on the dependent variable at various points in the pay distribution, not only the mean. Hence, in this work, quantile regression is used, providing estimates of the gender pay gap for each of the 10 deciles along the pay

distribution, as well as for the top centile. The algorithm developed by Koenker and Bassett,¹⁴ which is based on conditional quantile regressions, is followed.

The sociologist and demographer Evelyn Kitagawa first introduced decomposition techniques in 1955.¹⁵ The standard decomposition technique, widely applied to the gender pay gap, was introduced to economics by Oaxaca¹⁶ and Blinder.¹⁷ The method enables the decomposition of the mean differences in log wages based on linear regression models in a counterfactual manner. The procedure divides the pay differential between women and men into two parts: one that is “explained” by group differences in productivity characteristics, such as education or work experience; and a residual part (the “unexplained” part) that cannot be accounted for by such differences in pay determinants. This “unexplained” part is often used as a measure of discrimination, but it also includes the effects of group differences in unobservable characteristics. More information about this methodology can be found in Fortin et al., 2011.¹⁸

Although the analysis focuses on the gender pay gaps, other indicators relating to gender inequalities in labour markets in East and Southern Africa are also used and calculated. The first part of the analysis is to observe the gender employment gap, which is the difference between the employment rates among women and men, expressed in percentage points (p.p.). Furthermore, employment shares per sector, occupation or formality status of the job are used, which are calculated for wage employees only. Using such indicators related to employment, the aim is to capture the differences in the attachment to the labour market by the two genders, reflecting two important ideas.

The first idea is that women are usually less attached to the labour market and, hence, less frequently in employment than men because of the traditional roles that they need to undertake in the household and in taking care of children and the elderly, i.e. unpaid care work. The second idea is the fact that, when employed, women tend to be segregated into specific occupations that are frequently low status and hence lower paid.

Also calculated is the gender hours gap, which is the difference in hours worked between women and men, expressed in “hours”. Capturing this difference in hours has two important roles. The first is to draw attention to the differences in gender pay gaps calculated on a monthly versus an hourly level. The basic definition of the gender pay gap uses the average hourly wages of women and men, because wages at monthly levels reflect differences in hours worked (per week or per month), in addition to differences in individual and job characteristics. This leads to the second role of this analysis. It highlights that women work shorter hours than men in paid work. This is because women invest more time in unpaid care activities, hence reducing the time they have available for paid working hours. In addition to this, hours worked are analysed by sector and occupation.

Note that negative values of gaps generally indicate a disadvantageous position for women.

Horizontal gender segregation is analysed using the Duncan Segregation Index.¹⁹ This is a measure of occupational or sectoral segregation based on gender that gauges

whether or not there is a larger than expected presence of one gender over the other in a given occupation or sector. Intuitively, it shows the share of employed women and men who would need to trade places with one another across industries (occupations) for their distribution to become identical.²⁰ A Duncan Segregation Index value of 0 indicates perfect gender integration within the workforce, while a value of 1 indicates perfect gender segregation.

Data from Malawi’s Fifth Integrated Household Survey, 2019–2020, are used. This survey comprises 11,343 households and 50,476 individuals, with a focus on 26,296 individuals aged 15–64 for employment analysis. While not primarily designed for labour market analysis, IHS5 includes a section on time use and labour among its 31 sections. Employment status is determined based on various conditions related to activities like farming, business, wage work, apprenticeships, and future work plans. These criteria cover the past 12 months but to align with international employment definitions, only those who worked in the past 7 days are counted.

To analyse wages, individuals in current work includes both those currently employed (in the past 7 days) and those employed in the 12 months before the interview. This group comprises of 2,689 wage employees, with 2,420 currently employed and 269 employed at some point in the past 12 months. These individuals provide data on wages and relevant characteristics for calculating the adjusted gender pay gap. Hourly wages are derived by standardizing wage periods to a weekly basis and then dividing by the average hours worked per week.



3

RESULTS

3 RESULTS

3.1 Employment structure

The employment rate in Malawi is 71 per cent for individuals aged 15–64 years. This is similar to the employment rate of the country for 2019 of 72.8 per cent as reported by the World Development Indicators for individuals aged 15–64 years. **Table 1** looks at the employment rate by gender and shows

that the employment rate among women is lower than among men, with an employment gap of 8.4 p.p. Gender employment gaps are similar across age groups, while, by education, the smallest gap is found among tertiary-educated individuals, at 3.1 p.p.

Table 1
Employment rates of women and men, by age and educational level

	Employment rate (%)		Gender employment gap (p.p.)
	Men	Women	
All	75.4	67.0	-8.4
Age group (years)			
15–24	62.2	54.5	-7.7
25–49	84.6	74.8	-9.8
50–64	84.0	75.3	-8.7
Educational level			
Primary or less	76.1	68.2	-7.9
Secondary	63.0	54.7	-8.3
Tertiary or more	51.3	48.2	-3.1

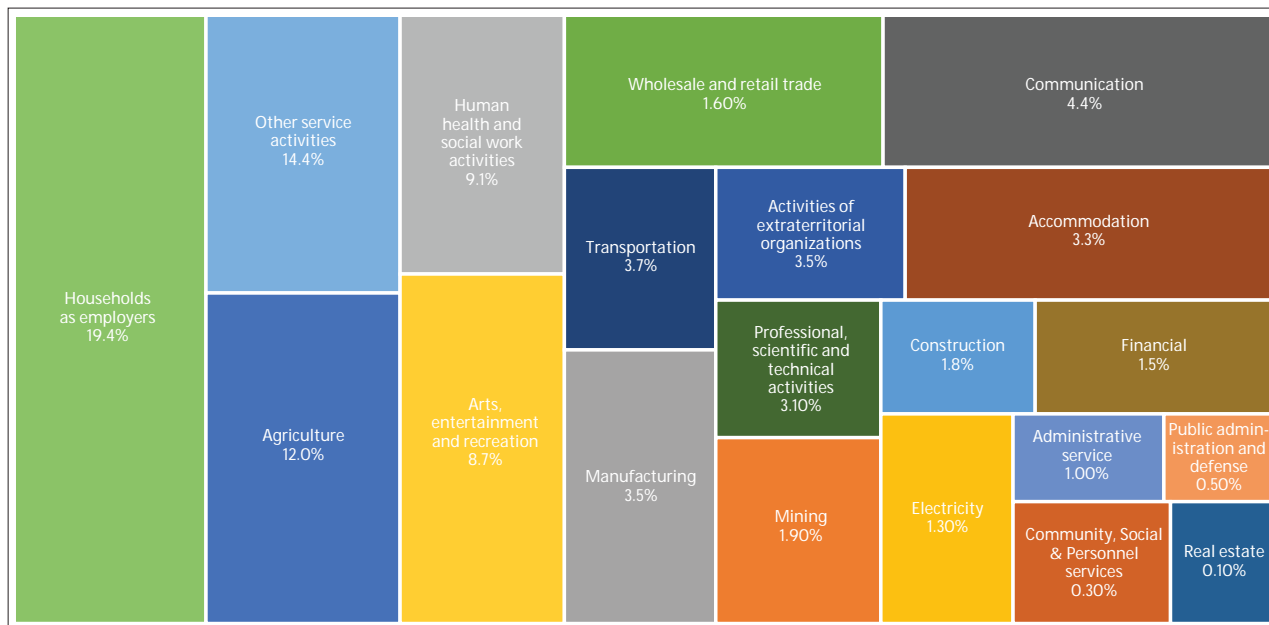
Source: Authors' own calculations.

As shown in **Figure 1**, the sectors that account for the majority of women's employment, in terms of percentages of women's wage employment, are activities of households as employers (19.4 per cent), other service activities (14.4 per cent) and agriculture (12 per cent). Agriculture (15.5 per cent), activities of households as employers (15 per cent) and other service activities (12.5 per cent) also make up the majority of men's wage employment (**Figure 2**). **Figures 3** and **4** show women's and men's employment shares by occupation. Production and related workers is the largest occupational category

for both women and men. About 26.4 per cent of employed women and 32 per cent of employed men are employed in this category. In addition to this occupational class, professional occupations account for a larger share of Malawian women's employment (26 per cent) than of Malawian men's employment (19.7 per cent). There is minimal difference in the shares of women and men in formal and informal wage employment (**Table A.1**). However, it is important to note that the feminization of informal jobs may be more apparent if data were available on contributing family members.

Figure 1

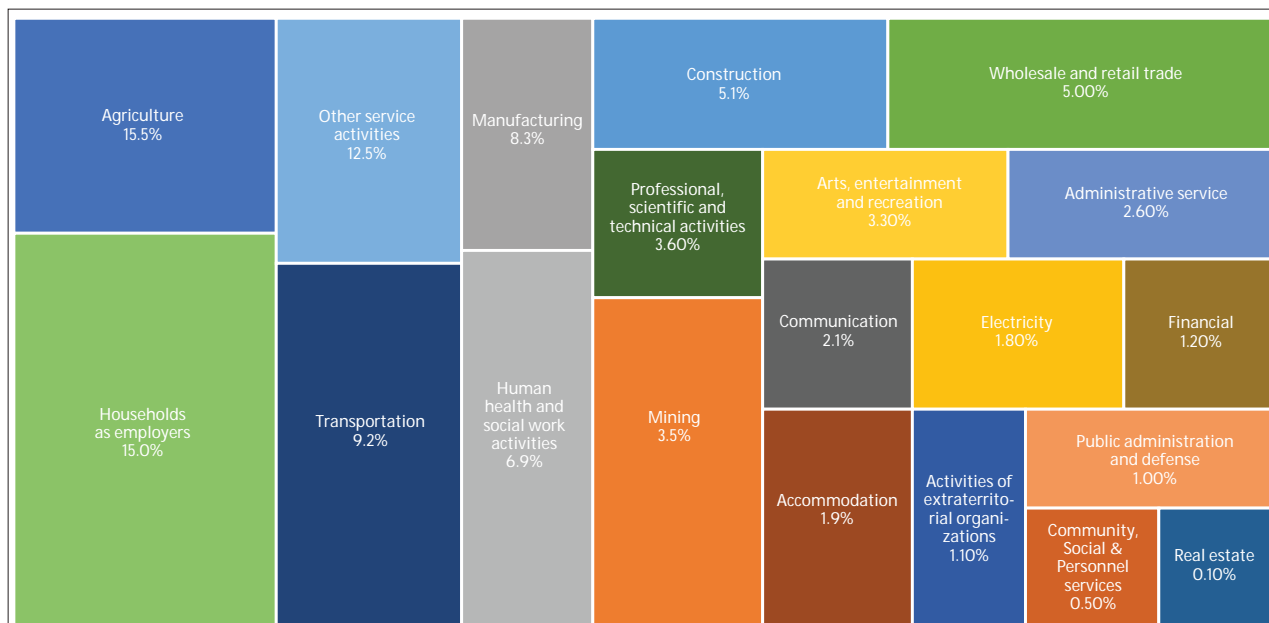
Women's share of wage employment by sector, as a percentage of women's total employment



Source: Authors' own calculations.

Figure 2

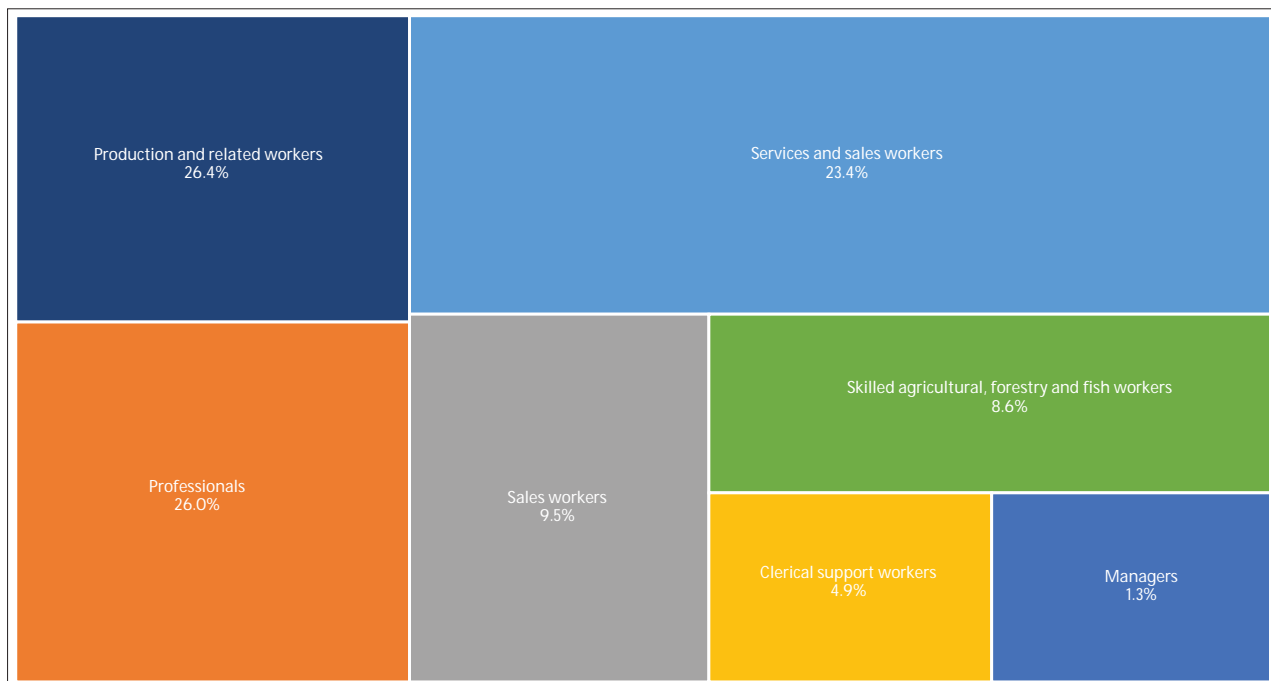
Men's share of employment by sector, as a percentage of men's total employment



Source: Authors' own calculations.

Figure 3

Women's share of employment by occupation, as a percentage of women's total employment



Source: Authors' own calculations.

Figure 4

Men's share of employment by occupation, as a percentage of men's total employment



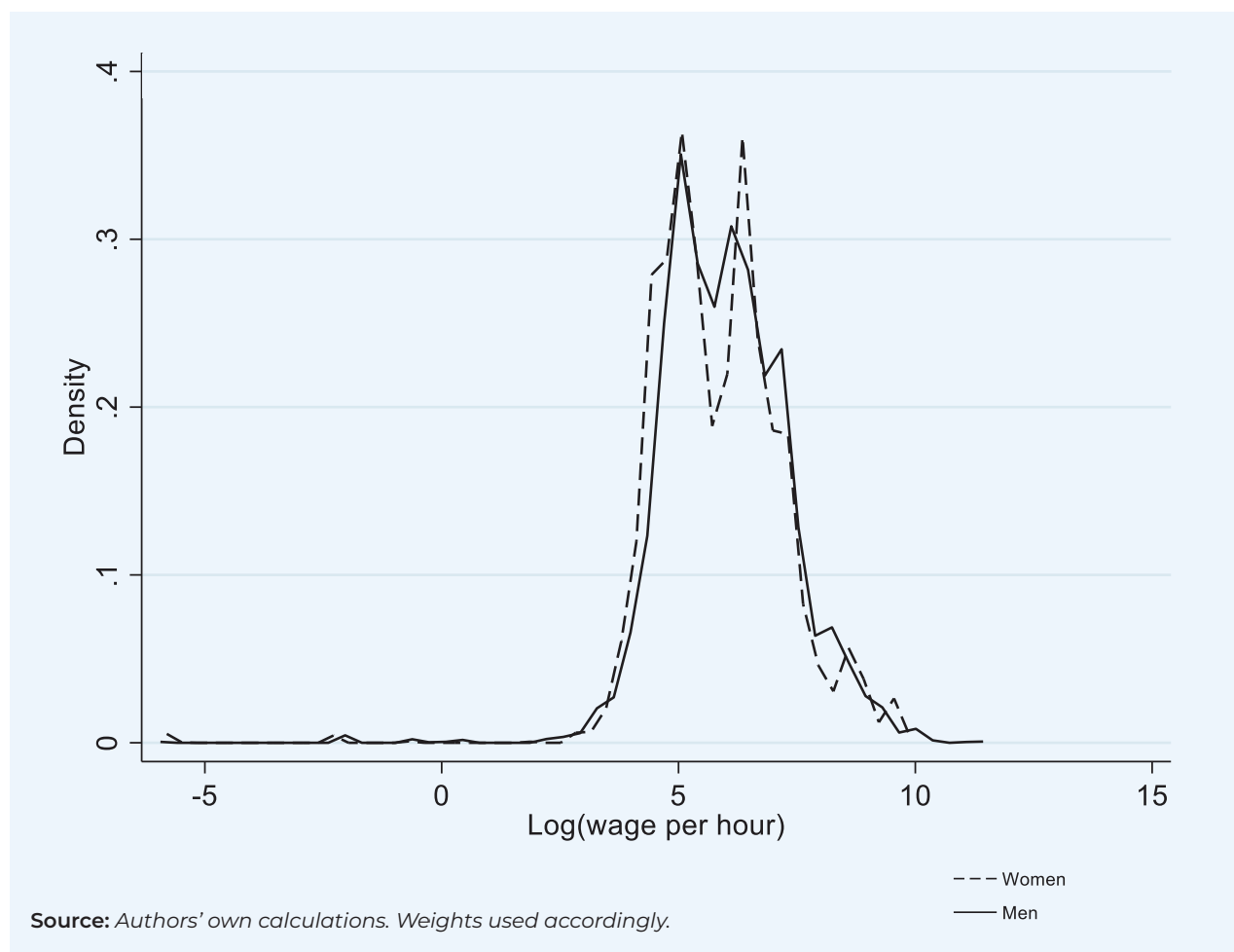
Source: Authors' own calculations.

3.2 Raw gender pay gap

Figure 5 shows the distribution of the log hourly wages of women and men. The dashed line, representing women, is, in general, to the left of the solid line, representing men, suggesting that women are more likely to earn lower wage levels than men.

Interestingly, the first (of the two) peaks of the women’s wage distribution, is about as high as the first peak of the men’s wage distribution. The second peak of women’s wage distribution is higher than the second peak of men’s distribution and to its left.

Figure 5
Distribution of log hourly wages, by gender



The unadjusted or raw gender pay gaps in Malawi are 19 per cent when considered at the monthly level and 15.5 per cent when considered at the hourly level (**Table 2**). This suggests that, on average, women work shorter hours than men in Malawi. From this point onwards, only the hourly gender pay gap is considered. The gap exists for all levels of education attainment, though it decreases

with educational level. It is widest among those with only a primary educational level, at 20.8 per cent, and is narrowest among those with a tertiary educational level, at 5.8 per cent. The gap is also affected by marital status, wherein it is almost zero for married individuals but about 5 percent for single individuals.

Table 2**Log wages and raw gender pay gaps, by educational level and marital status**

	Men	Women	Gender pay gap (%)
Log monthly wages	10.74	10.55	-19.0
Log hourly wages	5.989	5.834	-15.5
Log wages per hour, by educational level			
Primary or less	5.856	5.648	-20.8
Secondary	6.42	6.236	-18.4
Tertiary or above	6.951	6.893	-5.8
Log wages per hour, by marital status			
Single	5.672	5.622	-5.0
Married	6.059	6.056	-0.3

Source: Authors' own calculations. Weights used accordingly.

The raw gender pay gaps vary significantly by sector (**Table 3**). In agriculture, mining, electricity, administrative services and other services, women are paid more than men. In the other sectors, women are paid less than men, on average, with significant heterogeneity. For example, in the manufacturing, construction and transport sectors, which are dominated by

men, women are paid less by 7.1 per cent, 6 per cent and 17 per cent, respectively. The negative gender pay gaps are wider in some sectors that are dominated by women, such as households as employers (61.4 per cent); wholesale and retail trade (46.1 per cent); arts and entertainment (29 per cent); and accommodation and food service activities (25.8 per cent).

Table 3**Log wages and raw gender pay gaps, by sector**

Sector	Log wages per hour		Gender pay gap (%)
	Men	Women	
All	5.989	5.834	-15.5
Agriculture, hunting, forestry and fishing	5.581	5.59	0.9
Mining and quarrying	5.941	6.44	49.9
Manufacturing	5.996	5.925	-7.1
Electricity, gas, water	5.825	6.202	37.7
Construction	5.773	5.713	-6.0
Wholesale and retail trade	5.884	5.423	-46.1
Transportation and storage	6.042	5.872	-17.0

Sector	Log wages per hour		Gender pay gap (%)
	Men	Women	
Accommodation and food service activities	5.585	5.327	-25.8
Information and communication	6.214	6.176	-3.8
Financial and insurance activities	7.525	7.213	-31.2
Real estate	6.635	6.389	-24.6
Professional, scientific and technical activities	6.763	6.594	-16.9
Administrative and support service activities	6.026	7.155	112.9
Public administration and defence	6.885	5.907	-97.8
Human health and social work activities	6.351	6.298	-5.3
Arts, entertainment and recreation	6.886	6.596	-29.0
Other service activities	6.196	6.322	12.6
Activities of households as employers	5.818	5.204	-61.4
Extraterritorial organizations and bodies	5.39	5.16	-23.0
Community, social & and personnel services	6.382	6.265	-11.7

Source: Authors' own calculations. Weights used accordingly.

Table 4 presents the raw gender pay gaps by occupation. Gaps are negative for all occupations, except managerial occupations, where women are more paid than men. In fact, for managerial workers, the positive gap is very wide, implying that women's

wages are on average 2.5 times higher than men's in this occupational category. On the other hand, women are paid less as production and related workers (40.8 per cent) and as sales workers (28.9 per cent).

Table 4

Log wages and raw gender pay gaps, by occupation

Occupation	Log wage per hour		Gender pay gap (%)
	Men	Women	
All	5.989	5.834	-15.5
Professional, technical and related workers	6.758	6.617	-14.1
Administration and managerial workers	6.872	8.325	145.3
Clerical and related workers	6.293	6.072	-22.1
Sales workers	5.811	5.522	-28.9
Service workers	5.657	5.416	-24.1
Agricultural, animal husbandry and forestry workers, fishers and hunters	5.717	5.548	-16.9
Production and related workers, transport equipment operators and labourers not elsewhere classified	5.858	5.45	-40.8

Source: Authors' own calculations. Weights used accordingly.

Table 5 presents the raw gender pay gaps by formality status and reveals that women in informal employment, although represented

equally to men, face a gender pay gap that is about three times larger than average, at 32.8 per cent.

Table 5

Log wages and raw gender pay gaps, by formality status of wage employment

	Log wage per hour		Gender pay gap (%)
	Men	Women	
All	5.989	5.834	-15.5
Formal	6.278	6.374	9.6
Informal	5.591	5.263	-32.8

Source: Authors' own calculations. Weights used accordingly.

3.3 Adjusted gender pay gap

Table 6 shows regression estimates for log wages, corresponding to estimates derived from Equations 2–8. Row (1) reports the raw gender pay gap previously discussed. The adjusted gender pay gap in Malawi is 9.7 per cent, as shown in row (7). Observable characteristics of individuals and the job

characteristics explain 9.3 p.p. of the raw gender pay gap, i.e. nearly half of it. The rest of the gap is considered unexplained and could be due to differences in personal and labour-market characteristics not included in the data set, self-selection into employment and labour-market discrimination.

The coefficients are analysed group by group. Row (2) adds only personal characteristics and suggests that education offers positive returns, as a secondary education brings higher wages than a primary education, by about 59.2 per cent, while a tertiary education results in a 118 per cent increase in wages compared with only a primary education. Row (3) adds marital status and this reveals that the gender pay gap is statistically insignificant.

Row (4) adds the sectors. Most sectors pay higher wages than agriculture (the reference category), while their addition reduces the role of personal characteristics, suggesting that some sectoral segregation by educational level takes place. The addition of occupations

(row (5)) increases the adjusted gender pay gap to 15.2 per cent, and suggests that on average working women are employed in higher paid occupations than working men. Medium-skill occupations pay lower salaries than professional (high-skill) occupations by between 37 and 93.3 per cent (**Table A.2**).

When personal characteristics, sectors and occupations are combined (row (6)), the gap reduces to 12.9 per cent. Finally, on adding an indicator for informal working arrangements (row (7)), the gender pay gap reduces to 9.7 per cent, significant at the 10 per cent level. Controlling for other labour-market and personal characteristics, informal workers receive 46.9 per cent lower wages than formal workers (**Table A.2**).

Table 6
Adjusted gender pay gap (regression results on log hourly wages)

Row No.	Particular	Coefficient	Standard error
(1)	Raw/ Unadjusted GPG	-0.155**	-0.07
(2)	Adjusted GPG	Personal characteristics only	-0.157**
(3)		Personal + marriage	-0.101
(4)		Personal + sector	-0.114*
(5)		Personal + occupation	-0.152**
(6)		Personal + sector + occupation	-0.129*
(7)		All (personal + sector + occupation + informality)	-0.0969*

Source: Authors' own calculations. Weights used accordingly.

Note: *, ** and *** represent statistical significance at the 10%, 5% and 1% levels, respectively. Results robust to heteroskedasticity. For detailed regression results, refer to Table A.2. GPG, gender pay gap.

3.4 Gender pay gap decomposition

Table 7 presents the Oaxaca-Blinder decomposition of the gender pay gap in Malawi and concludes that personal and labour-market characteristics explain 11.2 p.p. of the gap, with the result being significant at the 10 per cent level. The unexplained and interaction part are statistically insignificant,

at a 5 per cent level. The unexplained part of the gap may be driven by factors not measured in the data set, such as structural differences between women's and men's bargaining power and social networks, as well as labour-market discrimination..

Table 7**Oaxaca–Blinder decomposition of the gender pay gap**

	Average log hourly wages
Men	5.989***
	(0.035)
Women	5.834***
	(0.061)
Difference (raw pay gap)	0.155**
	(0.070)
Explained part, i.e. explained by characteristics	0.112*
	(0.063)
Unexplained part	0.118
	(0.072)
Interaction of the two parts	-0.0751
	(0.064)

Source: Authors' own calculations.

Note: *, ** and *** denote statistical significance at the 10%, 5% and 1% levels, respectively. Standard errors given in parentheses. Results robust to heteroskedasticity.

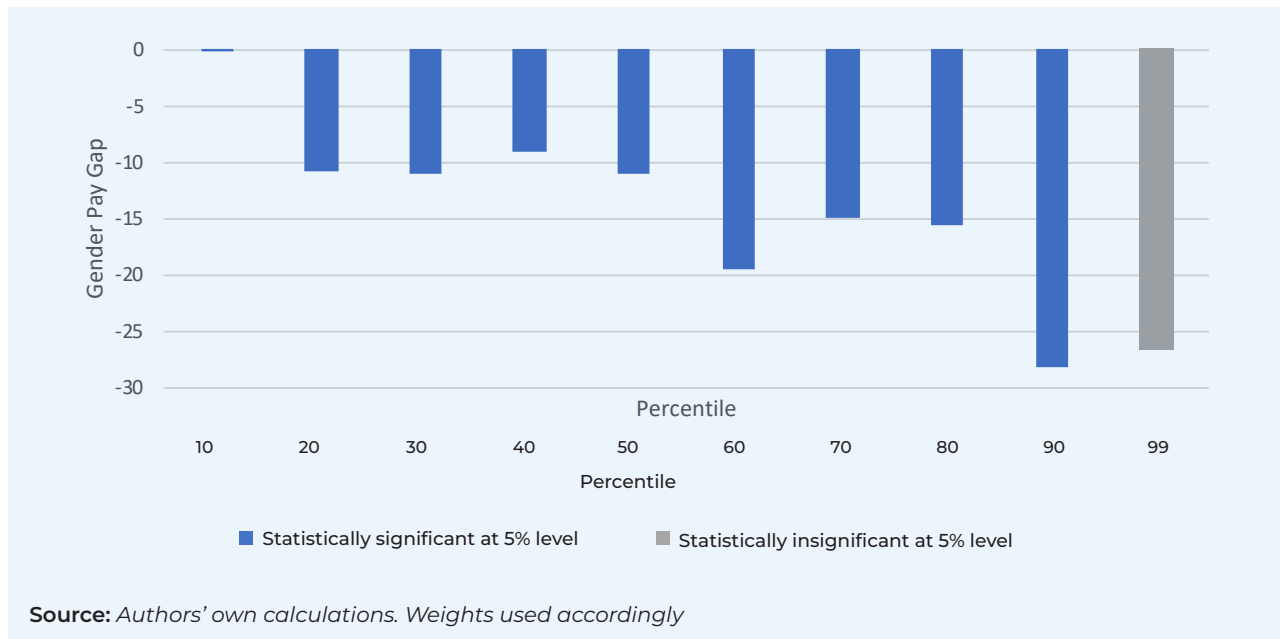
3.5 Adjusted gender pay gap by percentile

Figure 6 presents the adjusted gender pay gap through deciles (and the top centile). Understanding the gender pay gap at different points of the wage distribution can be used to examine the prevalence of a sticky floor and glass ceiling in the economy. A sticky floor refers to a labour market where workers, usually women, in low-paying jobs have low job mobility and barriers to career advancement. A glass ceiling refers to impediments that prevent women from accessing top managerial and

leadership positions. The gap is smallest for the lowest decile, at 0.06 per cent, and is larger for the second lowest decile, at 10.8 per cent. Since the average raw gender pay gap is larger than this, at 15.5 per cent, these findings suggest that there is no sticky floor in Malawi. However, the gender pay gap increases along the wage ladder, to 28.1 per cent for the highest decile, revealing a strong glass ceiling effect. Interestingly, the gap is statistically insignificant for the top 1 per cent of wage earners.

Figure 6

Adjusted gender pay gap by decile and top percentile



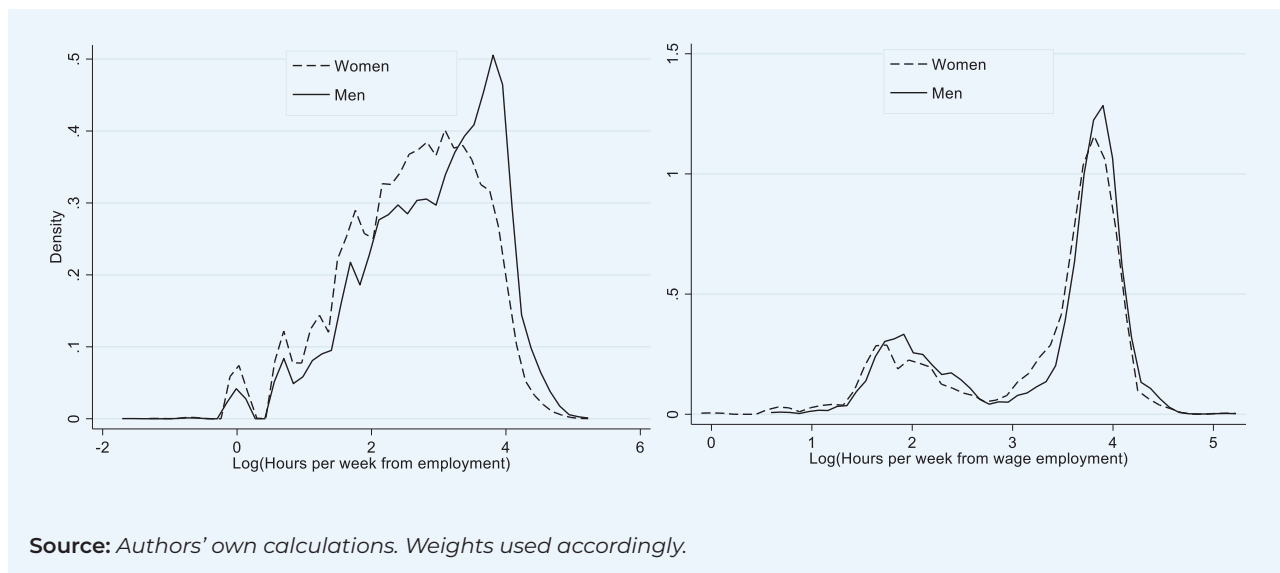
3.6 Gender differences in hours worked in paid employment

Figure 7 presents a density distribution of hours worked by women and men in total employment and in only paid wage employment. Women work for fewer hours than men along the entire distribution, i.e. for both short and long working hours, when total employment is considered. However,

the gap is wider when hours from total employment are considered than when hours from only wage employment are considered, which reveals that most of the hours gap is derived from non-wage employment.

Figure 7

Hours worked by women and men in employment (left) and in wage employment (right)

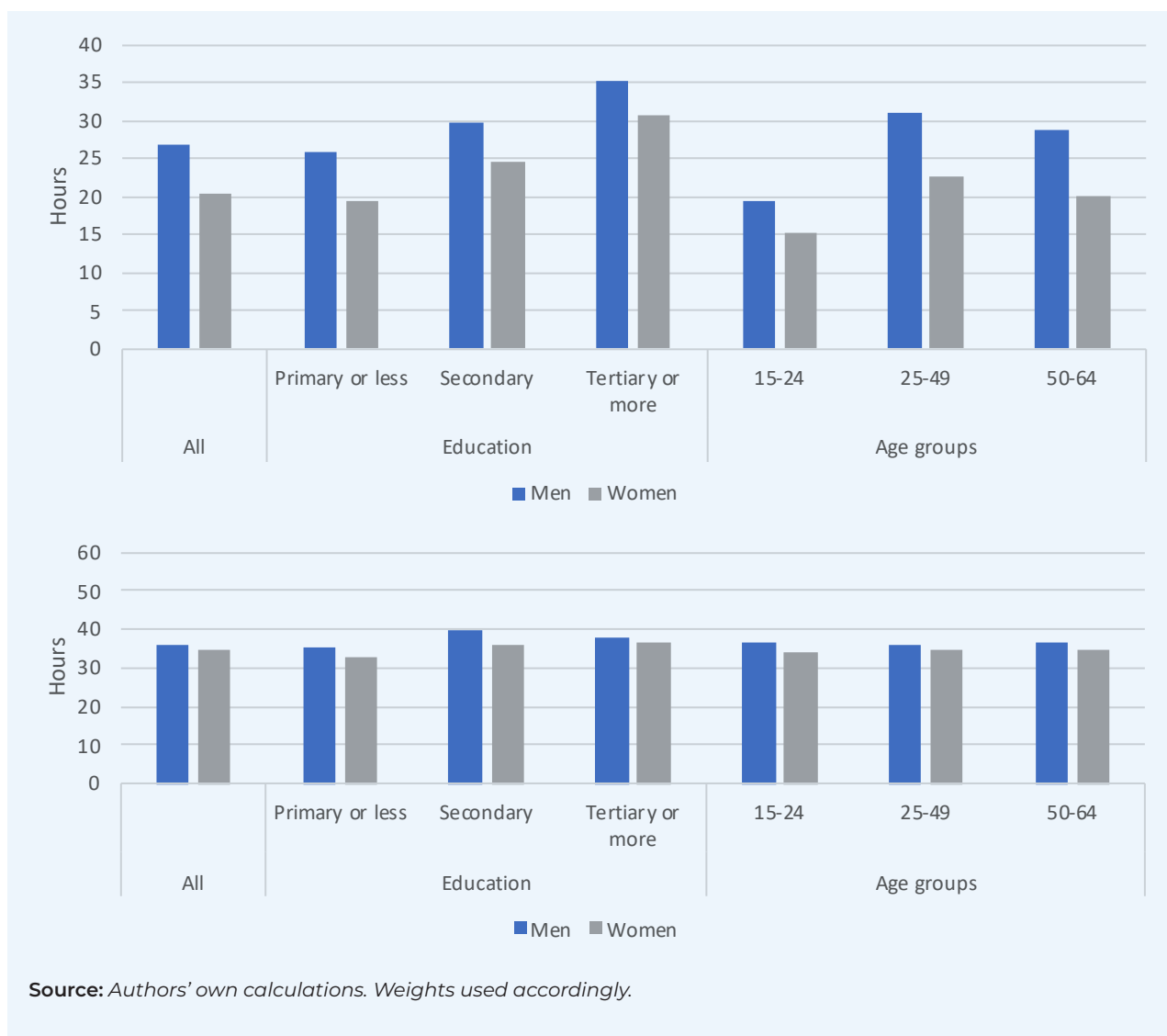


A similar picture emerges when hours are broken down by educational level and age. **Figure 8** (top panel) suggests that women work fewer hours in total employment in all age and educational level groups, although the gender hours gap is smallest among

those aged 15–24 years. Considering wage employment (Figure 8, bottom panel), the gap is smaller for all educational levels and age groups, but is widest among secondary-educated individuals and those aged 15–24 years..

Figure 8

Hours worked by women and men weekly, by age and education, in total employment (top) and wage employment (bottom)



In the remainder of this section, only hours worked in wage employment are considered, as hours could be matched with sector/occupation for wage employees only. **Table 8** illustrates the gender-based disparities in the number of hours dedicated to paid

employment across different sectors. Notably, women tend to work longer hours in sectors such as agriculture, trade, public administration, arts and entertainment, and households as employers, all of which are sectors in which women work predominantly.

It is worth highlighting that women also spend more time working in high-skilled professions such as managerial positions. In terms of formality status, women work

fewer hours in both formal and informal employment, although the difference is very small for informal jobs..

Table 8

Average hours worked per week and gender gaps in hours, by gender, sector, occupation and formality status

	Men	Women	Gender gap in hours
Sector			
Agriculture, hunting, forestry and fishing	32.28	34.41	2.13
Mining and quarrying	28.43	17.59	-10.84
Manufacturing	33.8	32.34	-1.46
Electricity, gas, water	40.73	26.95	-13.78
Construction	38.63	35.22	-3.41
Wholesale and retail trade	35.64	38.78	3.14
Transportation and storage	36.16	31.46	-4.7
Accommodation and food service activities	47.51	40.66	-6.85
Information and communication	31.93	31.99	0.06
Financial and insurance activities	30.23	39.03	8.8
Real estate	40	40	0
Professional, scientific and technical activities	36.16	36.97	0.81
Administrative and support service activities	40.87	29.59	-11.28
Public administration and defence	30.32	50.59	20.27
Human health and social work activities	31.65	30.42	-1.23
Arts, entertainment and recreation	34.67	35.84	1.17
Other service activities	37.73	31.09	-6.64
Activities of households as employers	37.94	39.46	1.52
Extraterritorial organizations and bodies	39.76	27.68	-12.08
Community, social & personnel services	22.5	31.23	8.73
Occupation			
Professional, technical and related workers	33	32.22	-0.78
Administration and managerial workers	28.74	34.34	5.6
Clerical and related workers	37.71	37.86	0.15
Sales workers	36.32	39.87	3.55
Service workers	39.5	34.79	-4.71
Agriculture	31.26	33.18	1.92

	Men	Women	Gender gap in hours
Production and related workers	36.59	33.79	-2.8
Formality status			
Formal	35.52	33.32	-2.2
Informal	36.47	36.07	-0.4

Source: Authors' own calculations. Weights used accordingly.

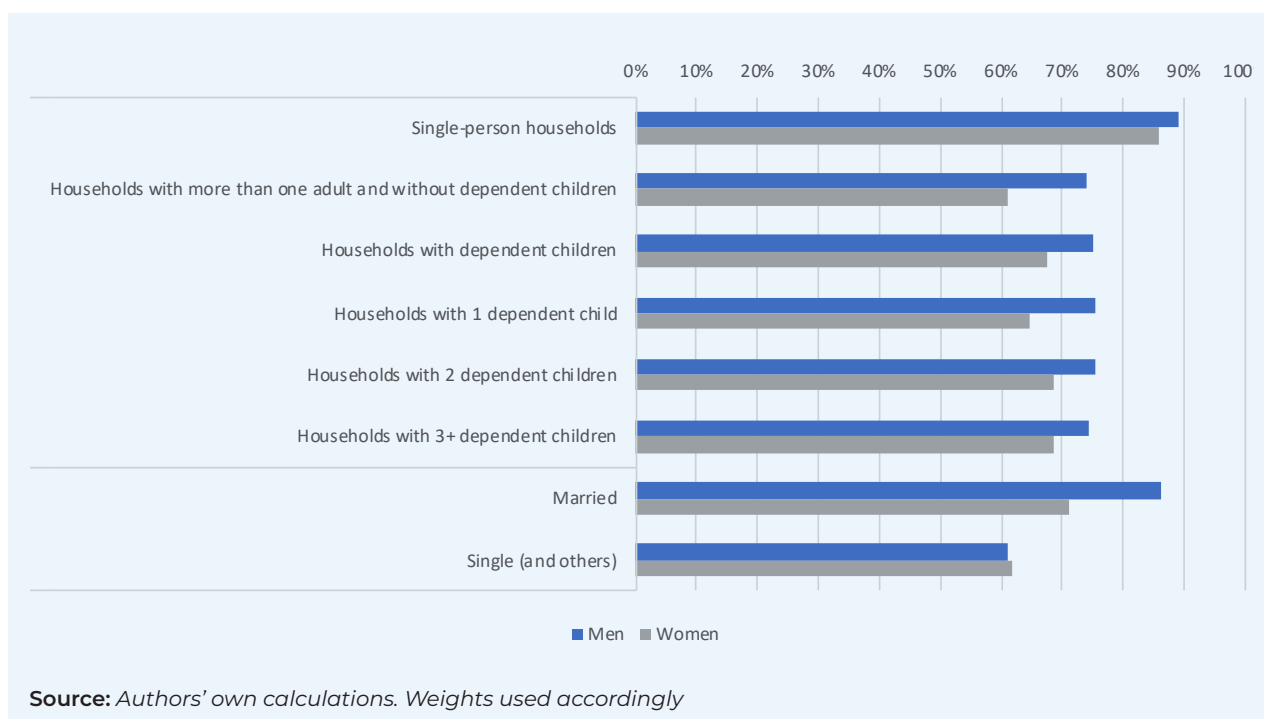
3.7 Gender inequality related to household structure and marital status

Figure 9 presents the labour-market status of both women and men by household type. For all household types, employment rates are lower among women than among men. For single-person households, the gap is smallest, at 3 p.p., followed by households with adults and dependent children, at 7.6

p.p. The gap is largest for households without children (13 p.p.) and with one child (11 p.p.). By marital status, the difference is stark: the gender employment gap among married individuals is 15.2 p.p., while among single individuals there is no gap at all.

Figure 9

Employment rates of women and men, by household type and marital status



Source: Authors' own calculations. Weights used accordingly

These figures are broken down by age in **Table 9**. The gender employment gap is minimal for single-person households and is

even positive for older adults (50–64 years), at 4.3 p.p. Notably, the substantial gender employment gap for households with adults

but no children primarily stems from the 15–24 year age group, reaching a significant 22.5 p.p. This suggests that the lower rate of employment among women in this category may be more tied to age than the presence of children. In households with children, a slightly wider gender employment gap is noticeable among those aged above 25

years; this could be associated with factors such as motherhood (ages 25–49 years) and the care of grandchildren (ages 50–64 years). By marital status, the gap appears notably larger among married individuals across all age groups than among those who are single..

Table 9

Employment rates and gender employment gaps, by gender, household type, marital status and age group

	Aged 15–24 years			Aged 25–49 years			Aged 50–64 years		
	Men (%)	Women (%)	Gender employment gap (p.p.)	Men (%)	Women (%)	Gender employment gap (p.p.)	Men (%)	Women (%)	Gender employment gap (p.p.)
Composition of household									
Single-person households	84.8	83.9	-0.9	92.7	87.9	-4.8	80.5	84.8	4.3
Households with more than one adult and without dependent children	67.3	44.8	-22.5	79.6	71.6	-8.0	85.0	77.4	-7.6
Households with dependent children	60.7	55.7	-5.0	84.8	74.9	-9.9	83.9	74.0	-9.9
Households with one dependent child	64.9	57.8	-7.1	85.1	71.7	-13.4	83.5	72.6	-10.9
Households with two dependent children	58.8	57.0	-1.8	85.7	75.5	-10.2	85.7	75.7	-10.0
Households with three or more dependent children	58.8	52.4	-6.4	83.9	75.5	-8.4	83.0	74.1	-8.9
Marital status									
Married	87.3	62.3	-25.0	86.6	73.4	-13.2	84.5	75.6	-8.9
Single (and others)	58.2	50.5	-7.7	73.3	78.7	5.4	78.8	75.0	-3.8
Total									
	62.2	54.5	-7.7	84.6	74.8	-9.8	84.0	75.3	-8.7

Source: Authors' own calculations. Weights used accordingly.

The gender employment gap is largest among those in single-person households with a tertiary-level education, but it should be noted that this result might be influenced by the small sample size of those in single-person households and with a tertiary-level education (**Table 10**). In addition, it is noteworthy that employment rates for both women and men decline with increasing levels of education, which is surprising. Despite these intricacies, women with a tertiary

educational level across various household types consistently occupy favourable positions in the Malawian labour market. In fact, their employment rates often surpass those of men. When considering marital status, the negative gender employment gap widens with increasing levels of education among married individuals, reaching 35.8 p.p. for those with a tertiary educational level. However, for tertiary-educated individuals who are single, the gap is notably positive, at 11.2 p.p.

Table 10

Employment rates and gender employment gaps, by gender, household type, marital status and educational level

	Primary or less			Secondary			Tertiary or more		
	Men (%)	Women (%)	Gender employment gap (p.p.)	Men (%)	Women (%)	Gender employment gap (p.p.)	Men (%)	Women (%)	Gender employment gap (p.p.)
Composition of household									
Single-person households	89.7	88.5	-1.2	90.7	79.6	-11.1	93.0	20.4	-72.6
Households with more than one adult and without dependent children	75.4	62.7	-12.7	62.0	39.9	-22.1	55.4	50.5	-4.9
Households with dependent children	75.8	68.6	-7.2	61.8	56.8	-5.0	46.7	48.1	1.4
Households with one dependent child	77.7	65.7	-12.0	58.0	57.6	-0.4	43.1	42.7	-0.4
Households with two dependent children	75.9	69.7	-6.2	61.0	56.5	-4.5	52.5	54.4	1.9
Households with three or more dependent children	74.5	69.3	-5.2	66.0	56.3	-9.7	46.6	51.8	5.2
Marital status									
Married	86.5	71.7	-14.8	84.5	64.4	-20.1	88.2	52.4	-35.8
Single (and others)	63.1	63.4	0.3	48.1	46.1	-2.0	34.6	45.8	11.2
Total									
	76.1	68.2	-7.9	63.0	54.7	-8.3	51.3	48.2	-3.1

Source: Authors' own calculations. Weights used accordingly.

3.8 Segregation by gender

Table 11 presents Duncan Segregation Index values. Overall, the occupational segregation value is 0.1, while the sectoral segregation value is 0.22, reflecting low levels of gender segregation in Malawi. These values suggest that only about a tenth of women and men employees would need to trade places across occupational categories for their distribution to become identical, and a fifth would need to do this for their distribution to become equal across sectors.

By educational level, the index values suggest that occupational and sectoral segregation are lowest for primary-educated individuals. Among those with secondary and tertiary levels of education, occupational segregation ranges from 27 to 22 per cent, while sectoral segregation varies between 33 and 38 per cent.

Table 11
Horizontal gender segregation index values, by occupation and sector

	All	Educational level		
		Primary or less	Secondary	Tertiary or above
Occupation	0.104	0.060	0.269	0.221
Sector	0.215	0.207	0.333	0.375

Source: Authors' own calculations. Weights used accordingly.



4

CONCLUSION AND POLICY RECOMMENDATIONS

4 CONCLUSION AND POLICY RECOMMENDATIONS

The objective of this study was to calculate and shed light on the gender pay gap and other labour-market inequalities in Malawi. Strikingly, there is an 8.4 p.p. employment gap between women and men, with women facing lower employment rates, particularly those with no more than a secondary level of education and aged 24-49 years. Among the employed population, women consistently work for fewer hours than men. The raw gender pay gap in Malawi is 19 per cent at the monthly level and 15.5 per cent at the hourly level, highlighting differences in working hours. These raw gender pay gaps are seen across all educational levels, being widest among primary-educated individuals and narrowest among tertiary-educated individuals. In terms of marital status, the gender pay gap is notably smaller for married individuals than for single individuals. After accounting for individual and labour-market characteristics, the gender pay gap declines, to give an adjusted gender pay gap of 9.7 per cent.

A significant portion of the raw gender pay gap (9.3 p.p.) remains unexplained by personal and labour-market characteristic, indicating that unmeasured factors such as differences in motivation, bargaining power, social networks and labour-market discrimination affect the gender pay gap in Malawi. Occupational and sectoral horizontal segregation levels are low, with only about a tenth and a fifth of women and men being required to switch occupational categories and sectors, respectively, for distribution to become equal. Notably, occupational and sectoral segregation are lowest for primary-educated individuals. The gender pay gap varies across different wage deciles, revealing a pronounced glass ceiling effect in the highest decile.

Closing the gender pay gap and addressing other labour-market inequalities is important for improving women's socioeconomic position and achieving social justice for more than half of the world's population. However, as this study highlights, the gender pay gap and other labour-market inequalities are complex issues influenced by various factors, such as occupational segregation, differences in education and care responsibilities, discrimination and societal norms. Addressing these issues, therefore, requires a comprehensive approach that involves multiple stakeholders, including governments, employers, civil society organizations and individuals.

The Malawian Government could strengthen existing legislation to ensure that women and men are entitled to equal remuneration for work of equal value. This includes effectively enforcing measures such as transparency in the recruitment process, for example by disallowing the collection of personal information (e.g. marital status) while hiring, prohibiting pay discrimination based on gender and promoting pay equity by making pay scales publicly available in the public and private sectors. Employers could also promote transparency in pay structures within organizations, ensuring that salary ranges, pay scales and benefits are clearly defined and communicated. Accessible and responsive complaint mechanisms could also be put in place, so that violations of the law or company policies and any discrimination can be reported.

Social protection policies, including measures such as minimum wage regulations and social security benefits, prove effective when tailored to addressing the specific needs and vulnerabilities experienced by

women in the labour market. Specifically, minimum wage laws play a crucial role in addressing wage disparities and elevating incomes for those in the lower deciles of the earnings distribution. The implementation of sector-specific minimum wage legislation can contribute to narrowing the gender pay gap across different sectors. It is important to note, however, that minimum wage laws often do not extend to informal employment and, even when they do, enforcement poses significant challenges. Despite these limitations, minimum wages can indirectly affect wages and employment within the informal sector. More research is required in the Malawian context to understand the effects of minimum wage legislation. Nevertheless, policies to increase employment formalization, supporting workers' unions and social protection programmes, are also important for complementing minimum wage legislation.

Sectoral and occupational segregation, although observed as low in Malawi, can be challenging to tackle directly. An economy-wide approach needs to be taken to encourage the breaking down of gender segregation by promoting women's participation in non-traditional fields and sectors, where they are underrepresented. This can be done through targeted recruitment, training programmes, addressing discriminatory practices and making workplaces safer for women in traditionally "masculine" sectors. Governments and employers can also support the reintegration of women into the labour force after periods of absence, for example after maternity leave. Reintegration policies may include training programmes, upskilling opportunities and support for continuing education, enabling women to update their skills and stay competitive in the job market. This would reduce occupational segregation, wherein women are underrepresented in high-paying and competitive jobs, and minimize the negative impact of career breaks.

For an optimal result, these changes should go hand in hand with policies to recognize, redistribute and reduce women's unpaid care work responsibilities. Research has shown that unpaid care work affects not only women's labour-market inputs in terms of time spent in paid employment but also how women enter and remain in paid work. It affects their occupation selection, the quality of their jobs and their job-market attachment.²¹ Policies that support work-life balance, such as flexible working arrangements, setting an upper limit to the number of working hours in the week, parental leave (where both parents are encouraged to take time off), and affordable and good-quality childcare, care for people with disabilities and elderly care, can encourage women to fully participate in the labour market. This would help to reduce the gender pay gap while also ensuring that household and caregiving responsibilities can be redistributed more equitably between men and women.

Ultimately, it is important to promote societal norms that encourage gender balance. Societal norms often assign specific gender roles and expectations, leading to the perpetuation of gender inequalities in the labour market. Thus, they affect how women and households make decisions regarding education, occupations, sectors and working hours. Societal norms can also contribute to discriminatory practices and unconscious biases that affect hiring, promotion and pay decisions. By shifting societal norms and challenging discriminatory beliefs, labour markets can become more inclusive, valuing skills and contributions over gender stereotypes.

In conclusion, achieving gender pay equality and addressing labour-market inequalities require a multifaceted approach involving various stakeholders across the economy. Better data on the pay distribution, collected at frequent intervals, would enable a better understanding of the gender pay gap in the country and inform work to advocate for

policies to address it. Public policy efforts to tackle the “explained” part of the gender pay gap could prioritize enhancing educational opportunities for women and girls, promoting women’s participation in high-paying and traditionally “masculine” occupations and sectors, supporting women’s labour force reintegration after career breaks and providing a robust social protection system. Tackling the “unexplained” part of the gender pay gap requires regulating the private sector, to

ensure that equal compensation and equal opportunities are provided to women, and introducing interventions to break down gendered cultural norms. Policies to recognize, reduce and redistribute women’s and girls’ unpaid care work responsibilities would complement all policy efforts to reduce the gender pay gap. In this way, Malawi can unlock the full potential of its workforce, fostering socioeconomic advancement, innovation and sustainable economic growth.

ANNEX

Table A.1

Women's and men's shares in wage employment, by sector, occupation and formality status

	Men (%)	Women (%)
Sector		
Agriculture, hunting, forestry and fishing	15.5	12.0
Mining and quarrying	3.5	1.9
Manufacturing	8.3	3.5
Electricity, gas, water	1.8	1.3
Construction	5.1	1.8
Wholesale and retail trade	5.0	6.5
Transportation and storage	9.2	3.7
Accommodation and food service activities	1.9	3.3
Information and communication	2.1	4.4
Financial and insurance activities	1.2	1.5
Real estate	0.1	0.1
Professional, scientific and technical activities	3.6	3.1
Administrative and support service activities	2.6	1.0
Public administration and defence	1.0	0.5
Human health and social work activities	6.9	9.1
Arts, entertainment and recreation	3.3	8.7
Other service activities	12.5	14.4
Activities of households as employers	15.0	19.4
Extraterritorial organizations and bodies	1.1	3.5
Community, social and personnel services	0.5	0.3
Occupation		
Professional, technical and related workers	17.9	26.0
Administration and managerial workers	1.5	1.3
Clerical and related workers	4.0	4.9
Sales workers	7.8	9.5
Service workers	26.1	23.4
Agricultural, animal husbandry and forestry workers, fishermen and hunters	10.7	8.6
Production and related workers, transport equipment operators and labourers not elsewhere classified	32.0	26.4
Formality status		
Formal	57.8	51.5
Informal	42.2	48.5

Source: Authors' own calculations.

Table A.2

Adjusted gender pay gap (regression estimates on log hourly wages)

	Raw/ Unadjusted GPG	Adjusted GPG					All
		Personal characteristics only	Personal + marital + marriage	Personal + sector	Personal + occupation	Personal + sector + occupation	
<i>Dependent variable: log hourly wages</i>							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Gender (1 = female)	-0.155** (0.070)	-0.157** (0.067)	-0.101 (0.069)	-0.114* (0.068)	-0.152** (0.066)	-0.129* (0.066)	-0.0969* (0.065)
Secondary		0.592*** (0.094)	0.586*** (0.093)	0.430*** (0.091)	0.369*** (0.092)	0.311*** (0.092)	0.262*** (0.090)
Tertiary or above		1.179*** (0.139)	1.206*** (0.139)	0.976*** (0.135)	0.879*** (0.135)	0.802*** (0.133)	0.725*** (0.127)
Age		0.135*** (0.018)	0.122*** (0.019)	0.113*** (0.018)	0.113*** (0.018)	0.107*** (0.018)	0.0934*** (0.018)
Age squared		-0.00144*** (0.000)	-0.00130*** (0.000)	-0.00122*** (0.000)	-0.00123*** (0.000)	-0.00115*** (0.000)	-0.000997*** (0.000)
Marital status (1 = married)			0.192** (0.078)	0.162** (0.075)	0.176** (0.075)	0.161** (0.075)	0.168** (0.073)
Mining and quarrying				0.411** (0.162)		0.479*** (0.164)	0.440*** (0.164)
Manufacturing				0.310*** (0.110)		0.349*** (0.111)	0.301*** (0.112)
Electricity, gas, water				0.168 (0.198)		0.186 (0.202)	0.0916 (0.197)
Construction				0.118 (0.145)		0.181 (0.156)	0.184 (0.163)
Wholesale and retail trade				0.224* (0.136)		0.322** (0.158)	0.428*** (0.155)

	Raw/ Unadjusted GPG	Adjusted GPG					All
		Personal characteristics only	Personal + marriage	Personal + sector	Personal + occupation	Personal + sector + occupation	
Transportation and storage			0.331*** (0.108)		0.377*** (0.112)	0.452*** (0.112)	
Accommodation and food service activities			-0.174 (0.157)		-0.0787 (0.159)	-0.00051 (0.157)	
Information and communication			0.624*** (0.149)		0.529*** (0.160)	0.499*** (0.152)	
Financial and insurance activities			1.623*** (0.214)		1.269*** (0.201)	1.211*** (0.194)	
Real estate			0.637*** (0.189)		0.710*** (0.262)	0.546** (0.244)	
Professional, scientific and technical activities			0.920*** (0.141)		0.560*** (0.141)	0.521*** (0.137)	
Administrative and support service activities			0.378* (0.200)		0.398** (0.197)	0.356* (0.189)	
Public administration and defence			0.946** (0.406)		0.643* (0.359)	0.660* (0.352)	
Human health and social work activities			0.670*** (0.116)		0.243** (0.121)	0.203* (0.121)	
Arts, entertainment and recreation			0.850*** (0.126)		0.523*** (0.141)	0.467*** (0.138)	
Other service activities			0.495*** (0.110)		0.215* (0.112)	0.215** (0.109)	
Activities of households as employers			0.0116 (0.104)		0.0919 (0.108)	0.202* (0.107)	
Extraterritorial organizations and bodies			-0.217 (0.281)		-0.154 (0.280)	-0.0176 (0.272)	

	Raw/ Unadjusted GPG	Adjusted GPG					All
		Personal characteristics only	Personal + marital + marriage	Personal + sectoral + sector	Personal + occupation	Personal + sector + occupation	
Community, social and personnel services				0.634** (0.319)		0.672** (0.336)	0.747** (0.294)
Administration and managerial workers				• 0.394 • (0.413)		0.206 (0.406)	0.218 (0.380)
Clerical and related workers				-0.370*** (0.123)		-0.386*** (0.125)	-0.329*** (0.122)
Sales workers				-0.751*** (0.106)		-0.746*** (0.127)	-0.591*** (0.127)
Service workers				-0.933*** (0.085)		-0.808*** (0.100)	-0.699*** (0.099)
Agricultural, animal husbandry and forestry workers, fishermen and hunters				-0.805***		-0.654***	-0.576***
Production and related workers, transport equipment operators and labourers not elsewhere classified				(0.104)		(0.116)	(0.114)
Informal worker				-0.791***		-0.719***	-0.598***
Constant	• 5.989*** • (0.035)	• 3.066*** • (0.330)	• 3.171*** • (0.333)	3.128*** (0.335)	4.051*** (0.335)	3.884*** (0.344)	4.276*** (0.354)
Observations	• 2,689	• 2,689	• 2,689	2,689	2,689	2,689	2,689
R-squared	• 0.003	• 0.103	• 0.106	0.163	0.178	0.201	0.225

Source: Authors' own calculations. Weights used accordingly.

Note: *, **, and *** represent statistical significance at the 10%, 5% and 1% levels, respectively. Standard errors given in parentheses. Results robust to heteroskedasticity.

REFERENCES

1. ILO (International Labour Organization) (2018). *Global Wage Report 2018/19: What Lies Behind Gender Pay Gaps*. Geneva: ILO.
2. World Bank (2023). "Population, Total – Malawi." Accessed 4 December 2023. <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=MW>.
3. UNDP (United Nations Development Programme) (2022). "Malawi." *Human Development Reports*. Accessed 4 December 2023. <https://hdr.undp.org/data-center/specific-country-data#/countries/MWI>.
4. UN Women (2023). "Malawi." Accessed 4 December 2023. <https://data.unwomen.org/country/malawi>.
5. ILO (International Labour Organization) (2016). *Women at Work: Trends 2016*. Geneva: ILO.
6. World Bank (2023). *Poverty & Equity Brief: Africa Eastern & Southern – Malawi*. Accessed 4 December 2023. https://databankfiles.worldbank.org/public/ddpext_download/poverty/987B9C90-CB9F-4D93-AE8C-750588BF00QA/current/Global_POVEQ_MWI.pdf.
7. Wodon, Q. and B. De La Briere (2018). "Unrealized Potential." *Journal of Biogeography* 16 (5), 498.
8. Blau, F.D. and L.M. Kahn (2003). "Understanding International Differences in the Gender Pay Gap." *Journal of Labor Economics* 21 (1), pp. 106–144.
9. Mincer, J. (1974). *Schooling, Experience, and Earnings*. New York: Columbia University Press.
10. Budig, M.J. and P. England (2001). "The Wage Penalty for Motherhood." *American Sociological Review* 66 (2), pp. 204–225.
11. ILO (International Labour Organization) (2016). "ISCO: International Standard Classification of Occupations – ISCO-08 Structure, Index Correspondence with ISCO-88." Accessed 17 November 2023. <https://www.ilo.org/public/english/bureau/stat/isco/isco08/>.
12. Eurostat (2008). *NACE Rev.2: Statistical Classification of Economy Activities in the European Community*. Accessed 17 November 2023. <https://ec.europa.eu/eurostat/documents/3859598/5902521/KS-RA-07-015-EN.PDF>.
13. Buchinsky, M. (1998). "Recent Advances in Quantile Regression Models: A Practical Guideline for Empirical Research." *Journal of Human Resources* 33 (1), pp. 88–126.
14. Koenker, R. and G. Bassett (1978). "Regression Quantiles." *Econometrica* 46 (1), pp. 33–50.
15. Kitagawa, E.M. (1955). "Components of a Difference Between Two Rates." *Journal of the American Statistical Association* 50 (272), pp. 1168–1194.
16. Oaxaca, R.L. (1973). "Male–Female Wage Differentials in Urban Labor Markets." *International Economic Review* 14 (3), pp. 693–709.
17. Blinder, A.S. (1973). "Wage Discrimination: Reduced Form and Structural Estimates." *The Journal of Human Resources* 8 (4), pp. 436–455.
18. Fortin, N.M., T. Lemieux and S. Firpo (2011). "Chapter 1: Decomposition Methods in Economics." In *Handbook of Labor Economics*. O. Ashenfelter and D. Card (Eds.). Amsterdam: Elsevier, pp. 1–102.
19. Duncan, O.D. and B. Duncan (1955). "A Methodological Analysis of Segregation Indexes." *American Sociological Review* 20 (2), pp. 210–217.
20. Blau, F.D., M. Ferber and A. Winkler (2002). *The Economics of Women, Men and Work*. 4th Edition. Englewood Cliffs, NJ: Prentice Hall.
21. ILO (International Labour Organization) (2018). *Global Wage Report 2018/19: What Lies Behind Gender Pay Gaps*. Geneva: ILO.

UN WOMEN IS THE UN ORGANIZATION DEDICATED TO GENDER EQUALITY AND THE EMPOWERMENT OF WOMEN. A GLOBAL CHAMPION FOR WOMEN AND GIRLS, UN WOMEN WAS ESTABLISHED TO ACCELERATE PROGRESS ON MEETING THEIR NEEDS WORLDWIDE.

UN Women supports UN Member States as they set global standards for achieving gender equality, and works with governments and civil society to design laws, policies, programmes and services needed to ensure that the standards are effectively implemented and truly benefit women and girls worldwide. It works globally to make the vision of the Sustainable Development Goals a reality for women and girls and stands behind women's equal participation in all aspects of life, focusing on four strategic priorities: Women lead, participate in and benefit equally from governance systems; Women have income security, decent work and economic autonomy; All women and girls live a life free from all forms of violence; Women and girls contribute to and have greater influence in building sustainable peace and resilience, and benefit equally from the prevention of natural disasters and conflicts and humanitarian action. UN Women also coordinates and promotes the UN system's work in advancing gender equality.



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