



Employment Participation and Determinants of the Gender Wage Gap in the Head of the Household

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ABSTRACT

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The distortion model becomes a problem in development planning, including in the development goals of reducing discrimination and concerns. These two things are closely related to gender expectations on work participation. The purpose of this study was to estimate the gender pay gap at the work participation rate of household heads in Magelang during the Covid-19 pandemic. The analytical tools used are Probit regression and the decomposition of the Blinder-Oaxaca model. The model decomposes wage differentials by gender. The study uses the 2020 SAKERNAS data. The results show that work participation for male household heads is determined by the marginal effect of work experience, age and area of residence, not education level and number of family dependents, while female household heads are only determined because of the number factor. family responsibilities. Furthermore, the potential work experience of male household heads has a significant negative effect. Research findings from the Blinder-Oaxaca Decomposition calculation show that the difference in wages between groups of household heads during the Covid 19 pandemic proved statistically significant. The role of the government is expected to be more active in disseminating policies related to gender in the labor market and exercising control over business actors in implementing labor regulations.

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Introduction

Equality and inequality are still important issues in development. Globally, there are sustainable development goals to be accomplished, namely achieving gender equality and reducing inequality. One of the targets of the two topics is ending all forms of gender discrimination and ensuring equal opportunities between genders and reducing income inequality. These two topics are reflected in the study of the gender pay gap, where the gender pay gap refers to the difference in work participation between men and women.

The issue of gender inequality cannot be denied. Not only as an issue, but the existence of this problem is still real in Indonesia, including Central Java. According to the Central Java Statistics Agency (Indonesia, 2020), in 2020, Central Java still has several gender issues that must be faced. For example, the percentage of women's literacy rate is lower than that of men, women's involvement in the world of work with working hours under 35 hours a week and their status as unpaid workers, the average wage of female workers/employees is lower than male workers/employees. -men, and an issue that is currently increasingly sticking out, is the marginalization of women who have a dual role as the head of the household.

Furthermore, the data reveal that although every year there is an increase in the number of working women, the work obtained still shows a difference in the average wage. the average wage for female workers/employees/employees from 2019-2020 has decreased and the figure is still below the average wage for male workers/employees/employees. The explanation can be seen in table 1. The phenomenon of data showing that there is still a gender gap in Central Java is empirically supported.

Table 1. Average Wages of Workers/Employees/Employees by Gender in Central Java, in period 2019-2020 (Rupiah)

Gender	Year	
	2019	2020
Male	2.438.257	2.344.375
Female	1.816.805	1.725.461
Male + Female	2.192.763	2.088.172

Source: Badan Pusat Statistik Jawa Tengah, 2020

The theory of consumer behavior is used as the basis for the theory of labor supply. A consumer is faced with alternative choices in consuming more goods or consuming more leisure. Leisure is associated with free time or not working. An individual uses his time endowment to choose work and use his income to consume goods. Individuals who work will get paid. The wages earned are assumed to be the price or opportunity cost of leisure Cahuc & Zylberberg, (2004) Therefore, this study uses the framework of maximizing the use value (utility) of the theory of consumer behavior and time allocation.

Furthermore, with the assumption raised by Anas & Damayanti (2018) that individuals have two choices in maximizing utility between working and not working (leisure). Utilities being a function of wages, individuals make decisions based on the ratio between the wages the market offers and the lowest wage that an individual is willing to work for (reservation wages). McConnell et al., (2016) explain that reservation wages have logical consequences for individuals choosing to participate in the workforce and not participate in the workforce. According to Ehrenberg & Smith (2012) and Borjas (2016) assert that individuals will decide to work if the market wage is higher than the reservation wage, while individuals do not choose to work if the market wage is lower than the reservation wage.

The Neoclassical Modal of Labor or Leisure Choice theory also uses the basic framework of consumer behavior theory. According to (Borjas, 2016), Neoclassical Modal of Labor or Leisure Choice is the preference of workers in the neoclassical model regarding individual choices to work or enjoy leisure time. Assumptions that can be built are buying more goods (consequences of working and earning income) or choosing more free time to increase the satisfaction of the individual. Individual decisions to work or enjoy free time are constrained by time and income (or what is often called budget constraints). It should be understood that in enjoying free time, individuals will continue to consume income earned outside working hours or regardless of how many hours individuals work or what is called non-labor income, the number of hours worked by individuals in the labor market for a certain period and the hourly wage rate. The individual's share of income, for example, comes from property income, dividends, and lottery prizes.

The theory that has been disclosed previously to analyze the gender pay gap on the work participation of household heads. Furthermore, it is decomposed into the work participation of male and female household heads. More specifically, male household heads who work and do not work (leisure). Female household heads who work and do not work (leisure).

There are two factors that cause differences in the level of work participation between men and women. First, endowment inequality. Endowment factors lead to more limited education and work experience for women in developing countries than men (Anas & Damayanti, 2018; Ehrenberg & Smith, 2012; McConnell et al., 2016) Second, the structural factors of supply and demand in the labor market (Psacharopoulos & Tzannatos, 1992). On the supply side, work decisions are influenced by household characteristics and time constraints. On the demand side, there is discrimination by companies in choosing workers (Tank, 2018)

There are several previous studies that have been conducted on the wage gap and gender pay in Indonesia. In general, the results of the study show the consistency of the results that there is a gender wage and wage gap in Indonesia (Anas & Damayanti, 2018; Dewi, 2019; Hennigusnia, 2014; Laili & Damayanti, 2018; Lusiyanti, 2020; Mardiana, 2015; Pirmana, 2006; Sugiharti & Kurnia, 2018). The research that has been done uses different data, approaches and levels (Ehrenberg & Smith, 2012)

On a macro level, Sugiharti & Kurnia (2018) prove that there has been a gender pay gap in Indonesia. The elasticity of education level expected wages for male workers is higher than for female workers. Education as an endowment factor shows that male workers get better welfare than female workers.

Several studies use micro data to look more deeply into the wage gap and gender pay. Pirmana (2006) using Sakernas data from 1996, 1999, 2002 and 2004 succeeded in identifying that there is a real gender income gap in Indonesia's formal sector. Furthermore, the results of the gap

decomposition are caused by differences in characteristics and are dominated by unexplained factors. In addition, the crisis had a real impact on reducing income. This was due to an increase in the consumer price index (inflation rate), so it had a strong impact on real income in the year of the economic crisis as a reflection of the higher cost of living.

Hennigusnia (2014) has also succeeded in identifying the existence of a gender wage gap in Indonesia in 2008-2012 with Sakernas data. The gap is caused by unexplained factors and is indicated as discrimination, both at the average level and across each quantile in the wage distribution. The gender pay gap tends to widen at the bottom of the wage distribution. This is in line with the results of Mardiana (2015) and Lusiyanti (2020) which show that the discrimination factor affects the gender pay gap more than the endowment factor. The difference is, Mardiana (2015) and Lusiyanti (2020) use labor participation data in the form of dummy and wages in the form of natural logarithms, Hennigusnia (2014) using the natural logarithm of wages.

In Indonesia, specifically in the manufacturing sector, Laili & Damayanti (2018) found evidence of wage discrimination against female workers. Discrimination was found in companies with non-exporter status, while in exporting companies there was no wage discrimination. In the exporting company, it shows that the wages paid are in accordance with productivity.

At the regional level, Dewi (2019) found that the income gap between men and women occurred in Sragen in 2018. In general, the income of female workers is lower than that of male workers. Furthermore, women tend to be family workers or are not paid, while men are more likely to be entrepreneurs. In addition, Anas & Damayanti (2018) found that the main cause of the gender pay gap came from structural factors in the labor market.

Previous research conducted by Sugiharti & Kurnia (2018) focused on a macro level in identifying the wage gap in Indonesia. This research has limitations to observe conditions in a micro and only limited to one explanatory variable. Using Sakernas data, Pirmana (2006) analyzed the differences in the income of male and female workers in the formal sector in Indonesia before and after the crisis. Conditions before and after the crisis were in the form of an economic shock.

In addition, Hennigusnia (2014), Mardiana (2015) and Lusiyanti (2020) empirically used observations with a large sample of Indonesian Nationals and did not focus on certain areas or certain conditions. Dewi's research (Dewi, 2019) at the district level is limited to a descriptive analysis of the visualization of research variables. Anas & Damayanti (2018) analyzed the decomposition of labor participation to explain the gender gap at the provincial level. In addition, Laili and Damayanti's research (Laili & Damayanti, 2018) is limited to certain sectors, namely manufacturing with large and medium industrial data.

Returning to the actual issue, the problems faced by women do not stop at the wage gap. The situation of marginalization of women was further exacerbated during the Covid-19 pandemic.

These women still have to fend for themselves to make ends meet. A study conducted by Doorley et al., (2021) on the workforce in Ireland found that during the Covid-19 pandemic, the gender pay gap between working women and heads of household, stabilized at 40 percent. While Tverdostup (2021) finds that in the short term there is no systematic widening of the gender gap, but rather short-term fluctuations, the penalties for women working in most of the industries hardest hit by COVID-19 could last longer than the pandemic. , and this threatens to widen gender inequality in the long run.

The two initiate papers describe how a pandemic can have different impacts on different groups of women. Unfortunately, there are no studies in Indonesia that have focused on the impact of Covid-19 on the gender pay gap for women who act as heads of families.

Based on the limitations of previous research that has been carried out, empirically there is no research that analyzes the gender pay gap in conditions of non-economic shock, especially the current health situation (the Covid-19 pandemic) which is specifically for the working women group who also has a dual role as the head of the household. ladder. Economic shock and health are certainly two different things that need to be observed regarding the gap in labor participation of women who also play the role of head of the household.

This research takes the object of research in the Magelang region (Magelang City and Regency). This is driven by the high tourism potential in the City/Regency of Magelang, which causes economic activity to also depend on the tourism sector. It is interesting to observe further about the gender pay gap associated with the health shock phenomenon due to the Covid-19 pandemic in the tourism sector, namely the Magelang area.

Inequality is still an important issue in development, proving to be one of the goals of sustainable development. One of the targets of sustainable development goals is to end all forms of discrimination and ensure equal opportunities and reduce ontrincome inequality. Thics topic is reflected in the study of the gender pay gap. The gender pay gap refers to the difference in work participation between men and women and the rights that are received, especially for groups of women who have dual roles as heads of families. Based on this, this study analyzes the wage gap between men and women who have dual roles as workers and heads of families, and how big the gap is during the Covid-19 pandemic in the Magelang Region.

Method

This study uses a post-positivism perspective with a deductive approach using probability. The type of research is quantitative. Types of data according to sources using secondary data with a cross section for the Magelang area which includes districts and cities. This study uses data from the 2020 National Labor Force Survey (SAKERNAS) compiled by the Central Statistics Agency. The

year 2020 was chosen because it has different economic conditions due to the Covid-19 pandemic. The individual in this study is the head of the household. According to data compiled by the Central Bureau of Statistics, this study uses a working age of 15 years. The data for 2020 has a sample of 3522 with details for males of 1745 (49% percent) and women of 1777 (51 percent). The sample during the COVID-19 pandemic (or 2020) was 1351 household heads with details of 1133 male household heads and 218 female household heads. Based on the theory and previous research, the variables used in this study can be seen in the table below:

Table 2. Research variable

Variable	Definition
Household Head Work Participation (Work)	Dummy 1: The head of the household who works has an income Dummy 0 : The head of the household who does not work or does not work gets paid
Income	Income of the head of household (Rupiah)
Higher education level of the household head (Schooling)	Dummy 1: the last education of the head of household is diploma/ bachelor/ master/ doctoral Dummy 0: others
Potential work experience (exper)	Work experience calculated from age minus last year of education and 6 (years)
Square Potential work experience (exper2)	The value of the square of work experience calculated from age minus the last year of education and 6 (years)
Age	Age of head of household (years)
Number of family dependents (totalfam)	Number of family members in the household of the head of the family (person)
Residence (wil)	Dummy 1: Magelang city Dummy 0: kabupaten Magelang
Married status (married)	Dummy 1: married Dummy 0: not married

In order to answer the research objectives, the probit model is used to analyze the work participation of household heads in the Magelang area. The dependent variable of this study is the head of the household who decides to work or not work. The following is the probit model in this study:

$$P_i^* = b_p X_p + \varepsilon_{pi} \tag{1}$$

Where, P_i^* is the work participation decision of the head of the household to work and have a wage (value 1 if $P_i^* > 0$) while not working or working not getting paid (value 0 if $P_i^* \leq 0$), b_p is the regression coefficient, X_p are independent variables that indicate the characteristics of the head of the household which include gender, age, number of dependents in the family, place of residence, higher education level, working hours, employment status, and business fields.

Furthermore, a decomposition method to measure the difference in the wage gap between men and women according to endowment and unexplained factors (Oaxaca, 1973) (Blinder, 1973;

Oaxaca, 1973). This method is known as the *Blinder-Oaxaca* decomposition method. In this study, this method was used to analyze the wage gap between men and women and how big the gap was during the Covid-19 pandemic in the Magelang Region. However, to understand the gap, it is not enough just to decompose wages but also to decompose the work participation rate (Anas & Damayanti, 2018).

The wage decomposition model between genders is carried out based on group a (male) and group b (female). If P_i^* is a probability $Y_i = 1$ and $(1-P_i^*)$ is a probability $Y_i = 0$, maka $E(Y_i) = P_i^* = \Phi(X_i\beta_i)$, while $E(.)$ is the expected value, and Φ is a standard *normal cumulative density function* (CFD). The coefficient of the binary options equation (β_i) is estimated using probit. Correlationship between observed rates choosing option 1 (Y_i) and the average computed probability of choosing option 1 using the standard normal CDF, which is expressed in Equation (2):

$$Y_i = \hat{P}_i = \Phi(X_i\hat{\beta}_i) \tag{2}$$

when $\hat{\beta}_i$ is $K_Y \times 1$ define as vector of probit coefficient. Furthermore, the decomposition of the difference in probabilities between groups a and b ($\hat{P}_a - \hat{P}_b$) can be expressed in Equation (3):

$$\bar{Y}_a - \bar{Y}_b = \underbrace{[\Phi(X_a\hat{\beta}_b) - \Phi(X_b\hat{\beta}_b)]}_{\text{explained portion}} + \underbrace{[\Phi(X_a\hat{\beta}_a) - \Phi(X_b\hat{\beta}_a)]}_{\text{unexplained portion}} \tag{3}$$

To distinguish between-gender and inter-period decomposition, a different notation is used. In the inter-gender decomposition equation, group a is male denoted M and group b is female denoted F. In equation 4 below is the equation for women facing the male workforce structure:

$$\bar{Y}_a - \bar{Y}_b = \underbrace{[\Phi(\bar{X}_M\hat{\beta}_M) - \Phi(\bar{X}_F\hat{\beta}_M)]}_{\text{explained portion}} + \underbrace{[\Phi(\bar{X}_F\hat{\beta}_M) - \Phi(\bar{X}_F\hat{\beta}_F)]}_{\text{unexplained portion}} \tag{4}$$

Where \hat{Y} is the employment participation rate, M is male and F is female, \hat{X} is the vector of the mean value of the explanatory variable, Φ is the cumulative normal density function, and β is the estimated coefficient. The explained section captures the gender differences in the labor participation of men and women that arise due to differences in endowments, while the unexplained section captures the gender gaps in the labor participation of men and women that arise due to structural factors in the labor market such as discrimination. To find out the contribution of the explained and unexplained parts, Equation (4) is separated into subcomponent j in Equations (5) and (6) as follows:

$$EXP_j = [\Phi(\bar{X}_M\hat{\beta}_F) - \Phi(\bar{X}_F\hat{\beta}_F)] \times \frac{[(\bar{X}_{Mj} - \bar{X}_{Fj})\hat{\beta}_{Fj}]}{[(\bar{X}_M - \bar{X}_F)\hat{\beta}_F]} \tag{5}$$

$$UNEXP_j = [\Phi(\bar{X}_F \hat{\beta}_M) - \Phi(\bar{X}_F \hat{\beta}_F)] \times \frac{[(\hat{\beta}_{Mj} - \hat{\beta}_{Fj}) \bar{X}_{Fj}]}{[(\hat{\beta}_M - \hat{\beta}_F) \bar{X}_F]}$$

Referring to previous studies which defined the unexplained portion as discrimination (Pagán, 2002; Pagán & Sánchez, 2000), this study also defines the unexplained portion as inequality. The same is true for the interperiod decomposition of males and females.

Result and Discussion

This section discuss the result of the model, based on data from the 2020 National Labor Force Survey (SAKERNAS) compiled by the Central Statistics Agency, starting with descriptive statistics with the following result:

Table 3. Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Work	1351	.762	.426	0	1
Schooling	1351	8.221	4.7	0	16
Exper	1351	167.001	96.387	0	932.25
exper2	1351	37172.859	51157.47	0	869090.06
Age	1351	52.429	13.09	17	96
Totalfam	1351	3.332	1.48	1	10
Wil	1351	.352	.478	0	1
Married	1351	.778	.416	0	1

Source : processed data

According to data compiled by the Central Bureau of Statistics, this study uses a working age of 15 years. The data for 2020 has a total of 3522 respondents, with details of 1745 (49%) males and 1777 (51%). Furthermore, samples were obtained during the COVID-19 pandemic (or 2020) as many as 1351 household heads with details of 1133 male household heads and 218 female household heads based on those who work and have wages. Details of descriptive statistics can be seen in table 3.

To analyze the work participation of household heads in the Magelang area during the COVID-19 pandemic (in 2020) using the probit model. The advantage of probit model is basically used to compute the relationships among an ordinal dependent variable and a set of the independent variable. The estimation results can be seen in table 4. As stated before, the probability variable which plays the role as dependent variable, filtered by the criteria that is a household heads who work in both the formal and informal sectors and earn wages or salaries. The probit model is decomposed by gender. The feasible model uses probit analysis indicated by a p-value (chi-square) of 0.0000 which is statistically significant at 5% significance for the probit model of male and female household heads. To analyze differences in the work participation of household heads decomposed by gender, see the marginal effects presented in table 5.

Table 4. Estimated Probit Regression During the Covid-19 Pandemic (in 2020)

Male Head of Household				
work	Coef.	St.Err.	t-value	p-value
schooling	0.017	0.015	1.12	0.262
exper	0.021	0.001	14.49	0.00***
exper2	-0.0000197	1.62e-06	-12.12	0.00***
Age	-0.015	0.005	-2.79	0.005***
totalfam	0.004	0.045	0.09	0.929
Wil	-0.433	0.133	-3.27	0.001***
married	0.203	0.21	0.97	0.334
Constant	-1.155	0.477	-2.42	0.016**
Mean dependent var	0.801	SD dependent var		0.399
Pseudo r-squared	0.567	Number of obs		1133
Chi-square	640.939	Prob > chi2		0.000
Akaike crit. (AIC)	504.522	Bayesian crit. (BIC)		544.783
Female Head of Household				
work	Coef.	St.Err.	t-value	p-value
schooling	-0.038	0.036	-1.05	0.292
exper	0.17	0.274	0.62	0.535
exper2	0	0.001	-0.62	0.538
Age	-0.005	0.018	-0.31	.076
totalfam	-0.168	0.094	-1.78	0.075*
Wil	-0.376	0.351	-1.07	0.284
married	0.416	0.6	0.69	0.488
Constant	-15.296	28.389	-0.54	0.59
Mean dependent var	0.555	SD dependent var		0.498
Pseudo r-squared	0.754	Number of obs		218
Chi-square	226.000	Prob > chi2		0.000
Akaike crit. (AIC)	89.564	Bayesian crit. (BIC)		116.640

*** $p < .01$, ** $p < .05$, * $p < .10$

Source : processed data

This shows that at a certain length of potential work experience the male household head will make his probability of working for a wage decrease. In other words, potential work experience has a significant negative effect. There are differences in the determinants of the work participation of male and female household heads in the Magelang area. The probability of a male head of household to work for a wage is more determined by experience, age and area of residence, than that of a female head of work which is only determined by the number of dependents in the family. Furthermore, in identifying the gender pay gap using the Blinder-Oaxaca Decomposition Method as presented in Tables 6 and 7.

Table 5. Average Marginal Effect During the Covid-19 Pandemic (in 2020)

Male Head of Household			
Variable	dy/dx	z	P>z
schooling	0.002	1.120	0.262
exper	0.002	14.620	0.000***
exper2	-0.000	-12.370	0.000***
age	-0.002	-2.800	0.005***
totalfam	0.000	0.090	0.929
wil	-0.052	-3.240	0.001***
married	0.024	0.970	0.334
Female Head of Household			
Variable	dy/dx	z	P>z
schooling	-0.003	-1.050	0.294
exper	0.015	0.620	0.535
exper2	-0.000	-0.620	0.537
age	-0.000	-0.300	0.761
totalfam	-0.015	-1.780	0.075*
wil	-0.034	-1.070	0.287
married	0.038	0.690	0.487

*** $p < .01$, ** $p < .05$, * $p < .10$

Source : processed data

The results of the Blinder-Oaxaca decomposition show that in the sample analyzed the difference in wages between groups of household heads during the Covid 19 pandemic proved statistically significant (indicated by a Prob value of 0.000 in the equation group 1 and group 2).

Table 6. Wage Model Estimation by Gender

Equation group 1 (female)						
ln_income	Coef.	Std.Err.	t	P>t	95%Conf.	Interval]
exper	-0.100	0.128	-0.780	0.438	-0.353	0.154
exper2	0.000	0.000	0.770	0.445	-0.000	0.001
age	-0.016	0.008	-2.010	0.048	-0.031	-0.000
totalfam	0.054	0.054	0.980	0.327	-0.055	0.162
wil	0.545	0.182	2.990	0.004	0.182	0.907
married	0.191	0.275	0.690	0.490	-0.357	0.739
_cons	25.284	13.356	1.890	0.062	-1.271	51.840
Equation group 2 (Male)						
ln_income	Coef.	Std.Err.	t	P>t	95%Conf.	Interval]
exper	-0.002	0.001	-1.500	0.135	-0.005	0.001
exper2	0.000	0.000	0.780	0.435	-0.000	0.000
age	-0.016	0.003	-5.050	0.000	-0.022	-0.010
totalfam	0.034	0.027	1.230	0.218	-0.020	0.087
wil	0.240	0.074	3.270	0.001	0.096	0.385
married	0.169	0.135	1.250	0.212	-0.096	0.434
_cons	15.603	0.301	51.840	0.000	15.012	16.195

Source : processed data

The total gap between male and female household heads widened when the COVID-19 pandemic occurred, which was 0.624. It means that on average women receive 62.4% lower wages than men. This difference can be explained by 0.327 or 32.7% of the difference in male and female characteristics in the model. The endowment value also implies that if women have the same level of productivity as men, the average wage for women will be 32.7% lower than men. Interesting When the covid19 pandemic occurred, the labor market did not seem to want to give higher wages to women. The thing to note is that the determining factor for the wage gap is the unexplained effect, which has a bigger determinant than the explained effect (Zajkowska, 2013).

Table 7. Blinder-Oaxaca decomposition estimates (n=698)

ln_income	Coef.	Std.Err.	z	P>z	[95%Conf.	Interval]
group_1	14.235	0.091	155.720	0.000	14.056	14.414
group_2	14.859	0.035	424.030	0.000	14.790	14.927
difference	-0.624	0.098	-6.370	0.000	-0.816	-0.432
endowments	-0.327	0.109	-2.990	0.003	-0.541	-0.112
coefficients	0.300	0.790	0.380	0.704	-1.248	1.849
interaction	-0.598	0.792	-0.750	0.451	-2.150	0.955

Note: With observations for Group 1: gender = 0 (female) of 92 and group 2: gender = 1 (male) of 606.

Conclusion

There are differences in the determinants of the work participation of male and female household heads in the Magelang area. The probability of a male head of household to work for a wage is more determined by experience, age and area of residence, than that of a female head of work which is only determined by the number of dependents in the family. In addition, in male household heads, the longer experience causes a decrease in the probability of working, while in female households this does not occur. Another finding is that there is a difference in wages between male and female household heads who work. The difference shows that the wages of male household heads are higher than women. The difference is caused by the unexplained factor which has a greater influence than the explained factor (endowments). However, from the sample in the study using the 2021 SAKERNAS data for the Magelang area, it shows that the sample is strongly dominated by male households who work and have income. The difference in the number of samples shows that the labor market is dominated by male household heads.

The role of the government and the synergy of various parties need to be strengthened in order to reduce the gender pay gap and increase women's work participation. Business actors need to properly implement labor regulations accompanied by monitoring by the government in ensuring gender equality in the labor market. Research has limitations on determining unexplained factors, therefore future research needs to add institutional factors such as worker participation in labor unions or the like as well as security factors and others.

References

- Anas, A., & Damayanti, M. G. A. (2018). Gender Gap pada Tingkat Partisipasi Kerja di Provinsi DKI Jakarta. *Jurnal Ekonomi Dan Pembangunan Indonesia*, 19(2), 56–78. <https://doi.org/10.21002/jepi.v19i2.827>
- Borjas, G. (2016). *Labor Economics* (4th ed.). McGraw-Hill.
- Cahuc, P., & Zylberberg, A. (2004). *Labor Economics*. MIT Press.
- Dewi, M. M. (2019). Perbedaan Karakteristik Ketenagakerjaan Laki-Laki Dan Perempuan Di Kabupaten Sragen Tahun 2018. *Jurnal Litbang Sukowati: Media Penelitian Dan Pengembangan*, 4(1), 12. <https://doi.org/10.32630/sukowati.v4i1.124>
- Doorley, K., O'Donoghue, C., & Sologon, D. M. (2021). The Gender Gap in Income and the Covid-19 Pandemic. In *SSRN Electronic Journal* (Issue 14360). <https://doi.org/10.2139/ssrn.3851033>
- Ehrenberg, R. G., & Smith, R. S. (2012). *Modern Labor Theory and Public Policy* (11th ed.). Pearson.
- FAO. (2021). *World Food Situation*. Fao.Org. <http://www.fao.org/worldfoodsituation/foodpricesindex/en/>
- Hennigusnia, H. (2014). Kesenjangan Upah Antar Jender di Indonesia: Glass Ceiling Atau Sticky Floor? (Gender Wage Gap In Indonesia: Glass Ceiling Or Sticky Floor?). *Jurnal Kependudukan Indonesia*, 9(2), 83–96.
- Indonesia, B.-S. (2020). *Keadaan Angkatan Kerja di Indonesia*.
- Laili, M. H., & Damayanti, A. (2018). Kesenjangan Upah Antargender di Indonesia: Bukti Empiris di Sektor Manufaktur. *Jurnal Ekonomi Dan Pembangunan Indonesia*, 1–21. <https://doi.org/10.21002/jepi.v0i0.1096>
- Lusiyanti, L. (2020). Kesenjangan Penghasilan Menurut Gender Di Indonesia. *Jurnal Litbang Sukowati: Media Penelitian Dan Pengembangan*, 4(1), 16. <https://doi.org/10.32630/sukowati.v4i1.214>
- Mardiana. (2015). Kesenjangan Penghasilan Antar Gender di Indonesia Tahun 2013 Dengan Metode Dekomposisi Blinder-Oaxaca. *Jurnal Aplikasi Statistika Dan Komputisasi Statistik*, 7(1), 45–64.
- McConnell, C., Brue, S., & Macpherson, D. (2016). *Contemporary Labor Economics* (11th ed.). McGraw-Hill Education.
- Oaxaca, R. (1973). Male-Female wage differentials in Urban labor markets. *International Economic Review*, 14, 693–709.
- Pagán, J. A. (2002). Gender differences in labor market decisions in rural Guatemala. *Review of Development Economics*, 6(3), 428–441. <https://doi.org/10.1111/1467-9361.00165>
- Pagán, J. A., & Sánchez, S. M. (2000). Gender differences in labor market decisions: Evidence from rural Mexico. *Economic Development and Cultural Change*, 48(3), 618–637.

<https://doi.org/10.1086/452612>

Pirmana, V. (2006). *Earnings Differential Between Male-Female In Indonesia : Evidence From Sakernas Data* (Issue 6).

Psacharopoulos, G., & Tzannatos, Z. (1992). *Case Studies on Women's Employment and Pay in Latin America*. World Bank.

Sugiharti, R. R., & Kurnia, A. S. (2018). Gender Wage Gap and Education: Case in Indonesia's Labor Market. *E3S Web of Conferences*, 73, 11019. <https://doi.org/10.1051/e3sconf/20187311019>

Tank, P. T. (2018). Gender Pay Gap in Estonia: Empirical Analysis. *Gender Pay Gap in Estonia, March*, 6–9. <http://www.praxis.ee/en/works/assessing-gender-pay-gaps-in-estonia/>

Tverdostup, M. (2021). *Gender Gaps in Employment, Wages and Work Hours: Assesment of Covid-19 Implications* (No. 220; Issue June).

Zajkowska, O. (2013). Gender Pay Gap in Poland-Blinder-Oaxaca Decomposition. *Quantitative Methods in Economics*, XIV(2), 272–278. <https://doi.org/10.1023/B:ECOP.00000005729.71467.38>