

## Women Worker Pay Gaps: 'Sticky Floors' and 'Glass Ceilings', in Indonesia

Sri Wahyuni<sup>1</sup>, Sylvia Vianty Ranita<sup>2\*</sup>, Maidalena<sup>3</sup>, Nasri Bachtiar<sup>4</sup>, Khairul Hasni<sup>5</sup>

<sup>1,5</sup>Universitas Almuslim, Bireuen, Indonesia

<sup>2</sup>Universitas Muhammadiyah Sumatera Utara, Medan, Indonesia

<sup>3</sup>Universitas Islam Negeri Sumatera Utara, Medan, Indonesia

<sup>4</sup>Universitas Andalas, Padang, Indonesia

<sup>1</sup>[sriwahyuni@umuslim.ac.id](mailto:sriwahyuni@umuslim.ac.id), <sup>2</sup>[sylviavianty@umsu.ac.id](mailto:sylviavianty@umsu.ac.id), <sup>3</sup>[maidalena@uinsu.ac.id](mailto:maidalena@uinsu.ac.id), <sup>4</sup>[nasri@eb.unand.ac.id](mailto:nasri@eb.unand.ac.id),

<sup>5</sup>[hasni@umuslim.ac.id](mailto:hasni@umuslim.ac.id)

\*Corresponding Author

### Abstract

The study tested wage disparities across Indonesian wage distribution the peak of women's careers. Using data from the fifth wave of the Indonesian Family Life Survey (IFLS-5), the study employed logistic regression analysis. The results show that the influence of work types and health insurance on women's wage disparities has a significant and negative impact on the *Glass Ceiling* (GC) phenomenon, especially on private female workers, farm women workers, and unpaid female labourers. The main results of this study show that the type of work that female workers do in Indonesia is still classified the *Sticky Floor* (SF). The study emphasizes the need for interventions to address gender inequality in the Indonesian workforce, including gender-inclusive policies, audits, equal pay, mentorship programs, workshops, and training sessions, to create a more equitable workforce.

**Keywords:** Work Type, Health Insurance, Logit Model, Wage Distribution

## Perbedaan Upah Pekerja Perempuan: 'Sticky Floor' dan 'Glass Ceiling', di Indonesia

### Abstrak

Studi ini menguji kesenjangan upah di seluruh distribusi gaji di Indonesia dalam mencapai puncak karir perempuan. Penelitian ini menggunakan data *Indonesian Life Survey* versi 5 (IFLS-5), dengan metode analisis regresi logistik. Hasil penelitian ini menunjukkan bahwa pengaruh jenis pekerjaan dan asuransi kesehatan terhadap kesenjangan upah perempuan memiliki dampak yang signifikan dan negatif terhadap fenomena *Glass Ceiling* (GC), terutama pada pekerja perempuan swasta, pekerja perempuan pertanian, dan buruh perempuan tidak dibayar. Hasil utama dari studi ini menunjukkan bahwa jenis pekerjaan yang dilakukan oleh pekerja perempuan di Indonesia masih diklasifikasikan dalam *Sticky Floor* (SF). Studi ini menekankan perlunya intervensi untuk mengatasi ketidaksetaraan gender di angkatan kerja Indonesia, termasuk kebijakan yang inklusif gender, audit, upah yang setara, program mentorship, lokakarya, dan sesi pelatihan, untuk menciptakan angkatan kerja yang lebih adil.

**Kata Kunci:** Jenis Pekerjaan, Asuransi Kesehatan, Logit Model, Distribusi Gaji

**History:** Received: 23 April 2024 Revised: 2 November 2024 Accepted: 30 January 2025

**Citation (APA 6<sup>th</sup>):** Wahyuni, S., Ranita, S.V., Maidalena., Bachtiar, N & Hasni, K. (2025). Women worker pay gaps: 'Sticky floors' and 'glass ceilings', in Indonesia. *Jurnal Economia*, 21 (2), 170-184. <https://doi.org/10.21831/economia.v21i2.72720>

## INTRODUCTION

Discrimination in pay based on gender can raise concerns about equality and levels of participation in the labour market, especially the women's labour market. Several studies have shown that while women workers are recognized for their hard work, obedience, and technical skills, they remain underrepresented in management (Ismail, Wye, and Palel 2017; de Moraes Beltramini, Cepellos, and Pereira 2022). The glass ceiling phenomenon is a challenge in reaching the top of women's careers with high payments according to education and job positions. Since 1980, glass ceiling research has been an interesting area of research and continues to receive world attention. Several countries have focused on creating work regulations policies that provide space for women workers to reach the peak of their careers. Even though many women have received appropriate educational opportunities, and work experience and occupy top management positions, women workers still have limitations and obstacles in reaching the top of their careers in the workplace. According to (Alabshar, Giyarsih, and Pitoyo 2021; Hou et al. 2022) the existence of being a mother and maternity leave are obstacles for women in achieving their careers. This contrasts with the sticky floor phenomenon, where less fortunate women either give up at the initial stages of their careers or are not actively pursuing advancement. These women often lack participation in organizations and associations, and may experience fear of failure, low self-esteem, and a lack of self-confidence. Thus, these women often remain in low-paying jobs (Puspitasari and Putry 2023; Shoaib, Khan, and Khan 2010; Tandrayen-Ragoobur and Pydayya 2015)

Women workers are required to work harder, but naturally, women are also required to look after and care for children and parents, take care of the house as a housewife, not as head of the family, even women workers often face visible obstacles even though they meet the requirements, and this is not only occurring in the organizational hierarchy, but in all job categories (Linthon-Delgado, Méndez-Heras, and Cornejo-Marcos 2022; Muslim and Perdhana 2018; Rincón and Domínguez 2021; Septiana and Haryanti 2023; Singh et al. 2023; Srivastava and Nalawade 2023). According to Noor, Faisal, and Farooq (2023), these obstacles cause discrimination in the world of work and have a negative impact on women's psychological health resulting in stress, anxiety, and depression.

Women workers tend to be vulnerable to not getting progress and promotions in their careers, so women workers are often trapped in low pay and mobility in the organizational hierarchy over a period in the distribution of sticky floors and glass ceilings (Weaver, Smith, and Sims 2021). According to Bjerk (2008) the underrepresentation of women in most job categories is not only caused by promotions, but women workers as a minority who have low qualifications due to the large amount of investment in human resources making it difficult to adapt to types of work that require higher education, long working hours, and great effort. Women are considered less capable or willing to invest in education and have limited time and face quite complex financial constraints.

The concept of glass ceilings in the workplace, especially for women, is a significant issue that continues to hinder their advancement in various industries. Despite advances in education and employment, women still face gender discrimination and barriers to

achieving top positions. This situation is further complicated by other systemic barriers that impede women's career progression (Kulik and Rae 2019; Martinčević and Klopota 2019). The glass ceiling is a complex issue influenced by both individual and contextual factors, and it is important to overcome these barriers through gender mainstreaming strategies (Casini 2016). Research on the relationship between job type and the glass ceiling reveals that women are often sorted into lower-level job queues and lower-paying firms, contributing to the glass ceiling effect (Fernandez and Campero 2017; Javdani 2015). This effect is widespread, impacting many occupations and women in the workforce (Russo and Hassink 2012). Factors such as selection effects, cultural capital, homophily, networking, gender stereotypes, discrimination, and occupational segregation all play a role in creating and maintaining the glass ceiling (Purcell, MacArthur, and Samblanet 2010).

Various studies show that discrimination in pay gaps related to the glass ceiling occurs in various job categories. According to Wald (2010), women lawyers in the legal field experienced a glass ceiling effect, failing to achieve equal representation in partnerships across generations, from the 1970s and 1980s to the 1990s and 2000s. In addition Azmat and Ferrer (2017) found that women lawyers charge fewer hours, so the pay gap widens.

Brower and James (2023) research for academics at all New Zealand Universities from 2006 to 2018 found that the balance of academic salary gaps based on gender will not be achieved soon despite the research of women academics, but double-binds and double-whammies have created a sticky floor so that women academics are paid lower so that it can hamper their careers. In line with research Rincón and Domínguez (2021) about women academics using data from 41,000 members of the National System of Researchers (SNI) under the National Council of Science and Technology (CONACyT) in Mexico from 1991 to 2017, found that the problems faced by Mexican women academics were limited access and involvement in National System of Researchers, so that many women academics publish publications in prestigious journals, get citations, and receive grants. Women academics are more advanced in the sticky floors pay distribution than in the glass ceiling pay distribution. Passaretta and Triventi (2023) found that women workers with PhD degrees who work at the bottom of the ladder experience a pay gap so there are sticky floors both in South Korea and in Italy. However, in Italy, the pay gap also occurs among women workers with PhD degrees who are at the top of the workforce, although not as much as at the bottom.

Jones and Kaya (2023) research on the work of doctors in the UK found that the gender pay gap occurred in public sector doctors at the top of the pay distribution, thus allowing for a glass ceiling. Gaiaschi (2018) research on 1000 professional doctors in five hospitals in the Lombardy region, Italy, found that there was a sticky floors effect where there was low promotion for women doctors so the representation of women in senior positions was lower. Amaya and Mougenot (2019) research in Brazil on 5,060 health professionals working in public institutions (Ministry of Health, Public Health Insurance System, and the Army) and private clinics in Peru, found that there was an increase in the number of health workers but there was pay discrimination where men had higher pays than women.

Ghignoni and Pastore (2023) researched the pay gap in the private and public sectors in Egypt, they found that the cultural factors are the primary obstacle to Egyptian women's participation in the workforce. Furthermore, the pay gap in the sticky floors distribution occurs in the private sector, while in the glass ceiling distribution, it occurs in the public sector. Bonaccolto-Töpfer, Castagnetti, and Rosti (2023) found that by examining the gender pay gaps in Italy, it was found that the level of Gender Weight Gap (GWG) was much higher in the private sector compared to the public sector, but a glass ceiling effect was found in the public sector where the facts showed that the politics of placing top management tended to favour men over women. Moreno-Mencía, Fernández-Sainz, and Rodríguez-Poo (2022) in their research in the public and private sectors, found that overall, the gender pay gap occurs in the glass ceiling distribution, but with different characteristics, the gender pay gap is more dominant in the sticky floors distribution.

While on research Ahmed and Hyder (2008) the participation of Pakistani women working as managers, legislators and senior officials is still relatively low compared to the participation of women in high-paid job categories such as managers, legislators and senior officials compared to low-paid job categories such as technicians, administrative service staff and found that the gender pay gap is increasing in sticky floors distribution. Yasmin, Jamil, and Iqbal (2021) found that the prevalence of sticky floors and glass ceilings occurs in the Pakistani labour market. Factors determining the occurrence of pay gaps include gender, age, education level, work location, marital status, additional benefits, and type of work. Furthermore, the involvement of women workers in low-income jobs in Pakistan indicates a growing pay gap.

Shabsough, Semerci, and Ergeneli (2021) found that many Turkish women workers are on the lowest pay distribution or sticky floors, causing them to take opportunities for entrepreneurship, but they have limitations in developing and managing social networks for business. Pattayat, Parida, and Paltasingh (2023) research, they found that there was a gender pay gap in the non-agricultural sector, but this gap narrowed when women workers in villages gained skills. Omar and Cecilia (2022), in their study of agricultural workers in northwestern Mexico, found that women face both sticky floor and glass ceiling effects regarding the gender pay gap, whereas men face only the glass ceiling. Segovia-Pérez et al. (2019), used Spanish income structure survey data to demonstrate pay discrimination against professional women in the ICT field. Vaccaro et al. (2022) from 2007 to 2011, explained the pay gap trend ranged from 6 % to 12% and subsequently during the research period, in which the pay gap remained constant at 17% in Peru. This research found that the pay gap in Peru is higher among women workers in the informal sector with a low distribution of pay levels, resulting in low levels of women participation. Regionally, one of the causes of the pay gap is women workers as heads of households. This is different from the pay gap that occurs in the West German labour market, where the highest pay gap occurs in the group of women workers at the top of the pay distribution and this shows that the glass ceiling challenge is more dominant (Bonaccolto-Töpfer et al. 2023)

Furthermore, the wage gap is influenced by access to health insurance, which is related to the phenomena of the glass ceiling and sticky floors. Women in low-paying positions

often lack adequate coverage, limiting their ability to pursue better career opportunities. Health insurance is a crucial variable in analyzing pay gaps, especially in the context of gender inequality in the labor market. Health insurance acts as a safety net that can influence women's decisions to participate in the workforce and their willingness to take risks in their careers. Insufficient access to adequate health coverage often relegates women to low-paying jobs, thereby constraining their career advancement opportunities. By understanding the relationship between health insurance and wage disparities, we can more effectively identify the factors contributing to gender discrimination in the workplace and develop targeted policies aimed at enhancing the well-being of women workers. Research on health insurance and gender disparities in the workplace reveals persistent challenges for women workers. Studies indicate the presence of a "glass ceiling" effect, where women face barriers to career advancement beyond initial levels (Rincón and Domínguez, 2021). Women in night-shift jobs, such as call centers, experience increased health risks and stress due to work-family balance issues (Gupta and Sekher 2023). In Malaysia, migrant workers, including women, face financial barriers to healthcare access despite mandatory insurance coverage (Loganathan, Chan, and Pocock 2020). Across Africa, publicly funded health insurance schemes show mixed results in equity, with disadvantaged groups, including women, less likely to be covered (Anjorin et al. 2019). These findings highlight the need for more comprehensive and equitable health insurance policies to address the "sticky floor" and "glass ceiling" effects experienced by women workers globally.

In Indonesia, the labor market dynamics are determined by social-cultural norms that intensify gender pay gaps. Most women work in the informal sector, facing precarious conditions, lower wages, and limited protections, reflecting broader social-cultural norms challenges. The societal view of women as housewives and primary caregivers restricts their career mobility and contributes to lower wages, further hindering their efforts to obtain formal sector jobs and higher pay in various sectors. In addition, gender norms that are part of the culture in society play an important role in restricting women workers' access to high-status and high-paying positions in the formal sector, which ultimately restricts economic progress for women compared to men (Nuraeni and Lilin Suryono 2021). Gender norms often limit women from accessing the labour market in several countries, especially Indonesia. Based on Badan Pusat Statistik (BPS) Indonesia data in 2022, the labour force participation rate for women in Indonesia was 53.41% while for men it was 83.87%, women workers dominate in the informal sector, namely 64.43% while men was 56.03%, and for women workers in the formal sector, it will be 35.57% and men were 43.97%. Furthermore, the Global Gender Gap Report noted that in 2023 Indonesia's Gender Gap Index score would still be 69.7%. Since 2020, women workers represented in management decreased sharply from 55% to 31.7% but as technical workers achieved equality from 40.1%, increasing to 50%. Estimated income parity is increasing but gaps remain large (World Economic Forum, 2023). The glass ceiling effect has caused a lack of women worker participation in management or at the highest career peaks, while the sticky floors effect has caused women workers to not desire to reach the top of their careers. In accordance with research by (Ulfa, Jamal, and Abd. Majid 2020), it was found that in most provinces in

Indonesia, there are often disparities, especially in income, education, labour force participation rates, unemployment rates and pay. According to Akbar (2022) the pay gap occurs because of the presence of a weak sticky floor in the pay distribution. The pay gap shows pay distribution from lower to higher so the pay difference is around 70%. Based on this research, education is one of the factors that reduce the pay gap. The problem of "Sticky floors" and "Glass ceiling" in various sectors and job categories is due to differences in pay determination mechanisms in various countries (Marge et al. 2021).

This research aims to explore the persistent pay gaps faced by Indonesian women workers, particularly in relation to the types of work they occupy and access to health insurance. By examining how the glass ceiling and sticky floors phenomena affect women's career advancement across various work categories, this study highlights the systemic barriers that hinder women from obtaining higher-paying positions. Additionally, it investigates the role of health insurance as a critical factor influencing women's participation in the labor market, particularly for those in lower-paid jobs who may lack adequate coverage and support. Understanding these dynamics is essential for developing targeted policy interventions that promote gender equity, improve access to health benefits, and ultimately enhance women's career progression in Indonesia.

## **METHOD**

This research uses a quantitative research approach. Radjab and Jam'an (2017) stated that research with a quantitative approach is a research approach that uses theory testing through inferential statistical procedures.

The data used in this research uses secondary data sourced from IFLS data (Indonesia Family Life Survey-5 (IFLS-5), namely the IFLS survey collected at both individual and household levels from 13 provinces in Indonesia West Java, Central Java, Yogyakarta, and East Java, Bali, West Nusa Tenggara (NTB), South Sulawesi, South Kalimantan South Sumatra, Lampung, West Sumatra, North Sumatra. Indonesian Family Life Survey-5 (IFLS-5) is part of a series of longitudinal data conducted periodically from 2014 to 2015 (currently there is no updated data). This survey aims to collect comprehensive data on various aspects of Indonesian family life, from socio-economic conditions, health, and education, to behavior and attitudes. The survey covered approximately 83% of the Indonesian population, and many experts using this data (Alabshar et al. 2021; Mustika et al. 2022; Samodra et al. 2023; Sari 2020; Wardani, Nurrochmah, and Mawarni 2022). IFLS-5 is the result of collaboration between several institutions, including: RAND (research and development) Corporation with several other Indonesian survey institutions such as Survey Meter, Demographic Institute (University of Indonesia) and Population Research Center, (Gadjah Mada University).

IFLS-5 includes various questions related to economic and non-economic well-being, such as consumption, income, assets, education, migration, and labour market outcomes. We obtained data by taking data from Book K, SC Section (Description of sampling and enumeration records), and Book 3A, Employment Section.

Based on IFLS-5 data, there were 27,783 women workers aged 15–65 years. 15,836 women workers had different pay levels and have health insurance. Next, we processed this data using logistic regression analysis techniques using the logit model. We figured out what the data meant by looking at how much variable X affected variable Y. The marginal effect, which can explain the regression results, was picked to make it easier to understand the non-linear model that was used. This happens because the result of the marginal effect is in the form of a percentage. The research uses high pay as a glass ceiling and low pay as a sticky floor as the dependent variable.

The independent variables used in this research are type of work and health insurance, and the control variables of education, marital status, age, and employment sector. Jaya et al., (2020) stated that Badan Pusat Statistik (BPS) groups pay: those with incomes above IDR 2.5 million are a group of high-income workers, and those who earn less than IDR 2.5 million are low-income workers. Therefore, we put the term Glass Ceiling (GC) on workers with high incomes and workers with low incomes as Sticky Floor (SF) (Kee 2006).

The aim of the research is to find out how much workplace environmental tendencies such as type of work, and health insurance affect the difference in pay of women workers in two groups, namely Glass Ceilings (GC) and Sticky Floors (SF). The pay gap is the dependent variable (Y), which consists of 1 being a women worker as "GC" and 0 being a women worker as "SF", with the independent variable (X), which is on a categorical scale, type of work (self-employed, self-employed with unpaid family, government worker, private worker, unpaid family worker, casual worker in agriculture) and health insurance programs (yes/no/don't know) and control variables as categorical scale (Gujarati 2003). Therefore, this research will be completed using logistic regression analysis techniques with the Logit Model (Kleinbaum and Klein 2010). The basic model in research is as follows

$$Li = Ln \left( \frac{GC}{SF} \right) = \beta_1 \text{Type of work} + \beta_2 \text{Healthins} + \beta_c VC + \varepsilon$$

One can assess the feasibility of a model utilizing maximum likelihood by examining the AIC (Akaike Information Criterion) and BIC (Bayesian Information Criterion) tests (Dziak et al. 2017). When determining the model selection method, it explains all aspects of the mechanisms underlying the data and predicts future data (Candolo 2014). Comparing several models with different amounts of data, the model with a smaller value is the information criterion that is considered better. Several researchers, including (Candolo 2014), conducted fit tests using AIC and BIC criteria in the logistic model. Apart from that, we also observe the ROC curve, which is a curve that shows the graphical results between the true signal (sensitivity) and the false signal (specificity) over a range of possible endpoints. The area under the ROC curve is between 0 and 1. Researchers can use the area under the curve to assess the model's ability to distinguish between successful events and failed observations. The ROC curve is usually a concave curve connecting the points (0,0) and (1,1). If the area under the resulting ROC curve is less than 0.5, the evaluated statistical model is considered very poor. According to Homser and Lemeshow, a classification model is acceptable if the area under the ROC curve is at least 0.7 (Nur and Oktora, 2020).

After determining the best model, we next observed the marginal effect value. Marginal effects represent the average change in the dependent variable associated with a one-unit change in an independent variable. These marginal effects are calculated while holding all other variables constant (Gujarati 2003). Tansel and Acar (2017) added that in estimating using the maximum likelihood method to find out the probability, we can use marginal effects.

## FINDING AND DISCUSSION

Based on data obtained from IFLS-5, it is known that the participation of women in work in Indonesia shows that the average pay difference for workers is 39.62%, with the largest number of workers being in the private sector. More details can be seen in Table 1 below.

Table 1. *Data Summarize*

Variable	Obs	Mean
Pay gaps	15836	0.3962
Type of work	27783	3.3898
HealtIns	15836	2.1694
Education	15328	3.0886
Age	15836	1.8055
Marital Status	15836	0.5412
Region	27783	1.3720

We performed robustness checks on all estimated models (Table 2) by including additional variables to assess the stability of the estimation results. Efforts to show that the samples used do not contain bad samples, which are thought to interfere with the measured parameters, so that they will be more consistent (Mattisson, Håkansson, and Jakobsson 2015).

In this research, we tested several models (from model 1 to model 3). We selected the right model to answer the objectives of this research. Measuring the selection of model feasibility in this study used the Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC) tests. Researchers often use this test to compare maximum likelihood models. Where the smallest AIC and BIC values indicate the best information criteria (Candolo, 2014). Table 2 shows that the AIC value is 12141.3 and the BIC value is 12194.8 These figures are the smallest compared to the figures in other models. The pseudo- $R^2$  that we observed also shows that the model is the best model with a pseudo-number of pseudo- $R^2$  and a p-value <0.05. The equations of the selected model are as follows:

$$Li = Ln \left( \frac{GC}{SF} \right) = 5.442 - 0.559 \text{ Type of work} - 1.504 \text{ Healthins} + 0.0976 \text{ Educ} \\ + 0.205 \text{ Age} + 0.294 \text{ Mar} - 1.131 \text{ Reg} + \varepsilon$$

In Figure 1, information is obtained that the confidence of the selected model shows an area under the ROC curve value of 0.8885 or greater than 0.70. This result indicates that the



model is precise in explaining the relationship between the explanatory variables and the GC and SF worker groups in the workforce of women in Indonesia.

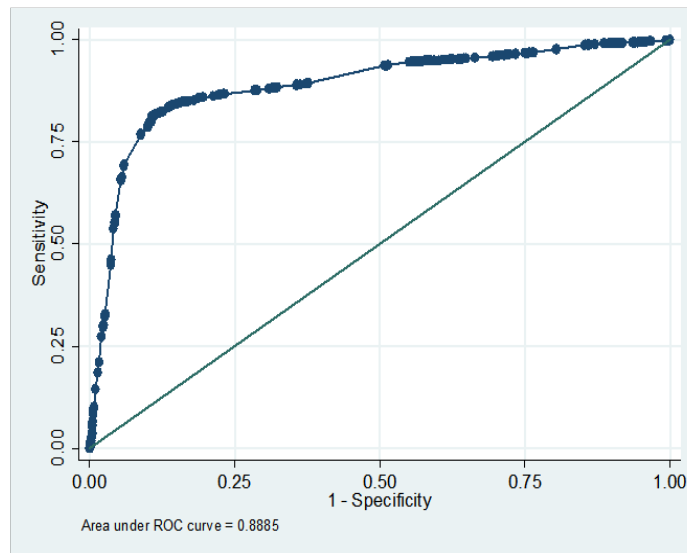


Figure 1. ROC Curves of GC and SF Logistic Regression Women Worker in Indonesia

Table 2. Result Estimation Logit Model on Glass Ceiling and Sticky Floor

Variable	Model 1	Model 2	Model 3
Type of work	-1.125*** (-34.79)	-0.511*** (-12.64)	-0.559*** (-13.23)
HealtIns		-1.617*** (-69.74)	-1.504*** (-62.63)
Education			0.0976* (2.56)
Age			0.205*** (7.31)
Marital Status			0.294*** (5.60)
Region			-1.131*** (-18.24)
_cons	4.183*** (31.99)	4.951*** (30.89)	5.442*** (22.31)
N	15836	15836	15328
Pseudo-R <sup>2</sup>	0.084	0.391	0.411
AIC	19486.2	12955.4	12141.3
BIC	19501.5	12978.4	12194.8

t statistics in parentheses

\* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

Table 2 also shows the results of GC and SF estimates for women workers in Indonesia. The types of work for women in Indonesia, which consist of self-employed with an unpaid family, government workers, private workers, unpaid family workers, and casual workers in agriculture, have a significant influence and have a negative relationship on pay

differences, namely in the GC pay group. This means that women's pay in Indonesia is more directed towards SF. The SF phenomenon is found in Indonesia because Indonesian women workers predominantly work in the low salary distribution with low skill qualifications, education, and work experience. In addition, Indonesian women workers who are in the low pay distribution are included in the disadvantaged workforce and therefore face a larger pay gap due to the sticky floors' phenomenon (Nguyen-Huu, 2023).

The participation of women workers in health insurance has a significant effect and has a negative relationship with the GC group. Higher education increases the likelihood of women workers being in the GC group compared to the SF group, after controlling for education. The marital status variable has a negative effect on women workers entering the GC group. This shows that marriage causes very limited opportunities for women to pursue a career. The age variable has no effect on pay differences in either the GC or SF groups. This shows that women have the enthusiasm and ability to fight to organize a better life through increasing pay. The region of residence variable has a significant and negative effect on the GC group. This shows that women in rural areas tend to belong to the SF group.

Table 3. *Result of Marginal Effect Test GC and SF Women Worker*

Variable	Dy/dx	Significance
Type of work	-0.1219	0.000
Health Assurance	-0.3283	0.000
Education	0.0213	0.000
Age	0.0446	0.000
Marital Status	0.0639	0.113
Region	-0.2667	0.000

Note:  $Y = \text{Pr}(\text{paygap1})$  (predict)= 0,321)

In detail, the results of the data processing that obtained marginal effect values can be explained as follows: differences in types of work, namely self-employed with an unpaid family, government worker, private worker, unpaid family worker, and casual worker in agriculture, are the differences between women workers in the GC group. Where the variable type of work for women has a probability (likelihood) of GC of 0.1219 points. This means that, on average, differences in the type of work in the agricultural category will reduce the probability of women entering the GC group by 12.19% compared to the SF group.

Working women who have health insurance have a decreased probability of being in the GC group by 32.83% compared to those who do not have health insurance. Overall, the independent variables consisting of type of work, and women's participation in health insurance have a probability of 32.1% of the tendency to fall into the GC group.

## CONCLUSION

In conclusion, this study highlights the significant influence of the types of work on pay differences for women in Indonesia. The results of the GC and SF estimations indicate that

women's pay is more concentrated in the informal sector. The variable type of work for women has a probability (likelihood) of GC of 0.559 points. This means, that on average, differences in the type of work in the agricultural category will reduce the probability of women entering the GC group by 55.9 % compared to the SF group.

This is attributed to factors such as low skill qualifications, education, and work experience. Additionally, having health insurance is a factor that positively or negatively affects their likelihood of being in the formal sector. Overall, these variables have a 32.1 % probability of determining whether women fall into the formal sector.

The study highlights the importance of interventions to address gender inequality in the Indonesian workforce, particularly in the areas of Glass Ceiling (GC) and Sticky Floor (SF). Industries must evaluate their classification systems to ensure that wages are not based on gender or other discriminatory factors. A sticky floor makes employees work with low pay and a lack of opportunities, while a glass ceiling helps them achieve higher managerial positions. It is crucial to develop and implement gender-inclusive policies, such as regular audits, promotion of equal pay, and mentoring programs. Addressing gender inequality through workshops and training sessions is also vital. By implementing these policies, industry leaders and policymakers can create a more equitable work environment for employees, ultimately reducing gender inequality and promoting gender equality.

## REFERENCES

- Ahmed, Ather Maqsood, and Asma Hyder. 2008. "Sticky floors and occupational segregation : Evidence from Pakistan." (Winter):837–49.
- Akbar, Fakhriza. 2022. "Gender wage gap: Evidence from employment in informal sector." *The Journal of Indonesia Sustainable Development Planning* 3(2):104–17.
- Alabshar, Nufi, Sri Rum Giyarsih, and Agus Joko Pitoyo. 2021. "Analisis kesejahteraan migran di Indonesia." *Jurnal Litabang Sukowati* 5(1):1–10.
- Amaya, Elard, and Benoît Mougenot. 2019. "The gender differences in highly paid wage: A case study of Peruvian physicians." *Cadernos de Saude Publica* 35(5):1–9.
- Anjorin, Seun S., Mustapha S. Abba Abimbola A. Ayorinde, Daniel Mensah, Elvis A. Okolie, Olalekan A. Uthman, and Oyinlola O. Oyeboode. 2019. "Equity of national publicly funded health insurance scheme under universal health coverage agenda: A systematic review of studies conducted in Africa." *Sustainability (Switzerland)* 11(1):1–14.
- Azmat, Ghazala, and Rosa Ferrer. 2017. "Gender gaps in performance: Evidence from young lawyers." *Journal of Political Economy* 125(5):1306–55.
- Bjerk, David. 2008. "Glass ceilings or sticky floors? Statistical discrimination in a dynamic model of hiring and promotion." *Economic Journal* 118(530):961–82.
- Bonaccolto-Töpfer, Marina, Carolina Castagnetti, and Luisa Rosti. 2023. "Changes in the gender pay gap over time: The case of West Germany." *Journal for Labour Market Research* 57(1).
- Brower, Ann, and Alex James. 2023. "Sticky floors, double-binds, and double whammies: Adjusting for research performance reveals universities' gender pay gap is not

- disappearing.” *SAGE Open* 13(3):1–8.
- Candolo, Cecilia. 2014. “The focused information criterion in logistic regression to predict repair of dental restorations.” *Rev. Bras. Biom.* 31(4):547–57.
- Casini, Annalisa. 2016. “Glass ceiling and glass elevator.” *The Wiley Blackwell Encyclopedia of Gender and Sexuality Studies* 1–2.
- Dziak, John J., Donna L. Coffman, Stephanie T. Lanza, Runze Li, and Lars S. Jeremiin. 2017. “Sensitivity and specificity of information criteria.” *Briefings in Bioinformatics* 21(2):553–65.
- Fernandez, Roberto M., and Santiago Campero. 2017. “Gender sorting and the glass ceiling in high-tech firms.” *Industrial and Labor Relations Review* 70(1):73–104.
- Forum, World Economic. 2023. *Insight Report*.
- Gaiaschi, Camilla. 2018. “Gender inequalities in medical careers: Evidences from five hospitals in the Lombardy region.” *Italian Journal of Gender-Specific Medicine* 4(2):73–78.
- Ghignoni, Emanuela, and Francesco Pastore. 2023. “The gender wage gap in Egypt: Public versus private sector.” *International Journal of Manpower* 44(8):1511–34.
- Gujarati, Damodar N. 2003. *Basic Econometrics*. Fourth. New York: McGraw-Hill.
- Gupta, Amrita, and T. V. Sekher. 2023. “Call centers and associated health hazard for women employees: A review of health implications for women employees of transnational call centers in India.” *SAGE Open* 13(3):1–14.
- Hou, Wangxinran, Yuyan Qin, Xingyu Wang, and Yunhan Wang. 2022. “The factors that exacerbate women’s experience of stigma in the workplace.” Pp. 191–96 in *Proceedings of the 2021 International Conference on Public Art and Human Development (ICPAHD 2021)*. Vol. 638.
- Ismail, Rahmah, Chung Khain Wye, and Nur Sabrina Mohd Palel. 2017. “Analysis of glass ceiling and sticky floor effects for gender wage gap in Malaysian labour market.” *Jurnal Ekonomi Malaysia* 51(2):145–57.
- Javdani, Mohsen. 2015. “Glass ceilings or glass doors? the role of firms in male-female wage disparities.” *Canadian Journal of Economics* 48(2):529–60.
- Jaya, Risman, Ahmad Syamsu Rijal, and Irwansyah Reza Mohamad. 2020. “Karakteristik sosial ekonomi masyarakat Sub Das Alo terhadap perilaku pemanfaatan fisik lahan.” *Journal of Humanity and Social Justice* 2(1):53–67.
- Jones, Melanie, and Ezgi Kaya. 2023. “The gender pay gap in medicine.” *British Columbia Medical Journal* 63(3):100–101.
- Kee, Hiao Joo. 2006. “Glass ceiling or sticky floor? Exploring the Australian gender pay gap.” *Economic Record* 82(259):408–27.
- Kleinbaum, David and Mitchel Klein. 2010. *Statistics for biology and health*. edited by K. K. M. Gail, J. M. Samet, A. Tsiatis, and W. Wong.
- Kulik, Carol T., and Belinda Rae. 2019. “The glass ceiling in organizations.” *Oxford Research Encyclopedia of Business and Management* 10–11.
- Linthon-Delgado, Diego, Lizethe Méndez-Heras, and Gino Cornejo-Marcos. 2022. “Sticky floor and glass ceiling in Ecuador. The evolution of the gender wage gap, 2010-2021.” *CEUR Workshop Proceedings* 3282:169–81.

- Loganathan, Tharani, Zhie X. Chan, and Nicola S. Pocock. 2020. "Healthcare financing and social protection policies for migrant workers in Malaysia." *PLoS ONE* 15(12 December):1–20.
- Marge, Unt, Rokicka Magda, Täht Kadri, and Triin Roosalu. 2021. "Glass Ceiling" and 'Sticky Floor' in Estonian public and private sectors." Pp. 195–209 in *Gendering Post-Soviet Space: Demography, Labor Market and Values in Empirical Research*.
- Martinčević, Ivana, and Igor Klopota. 2019. "Perceptions of a glass ceiling at top management positions in Croatian organizations." *Entrenova* (September):392–401.
- Mattisson, Kristoffer, Carita Håkansson, and Kristina Jakobsson. 2015. "Relationships between commuting and social capital among men and women in Southern."
- de Moraes Beltramini, Luisa, Vanessa Martines Cepellos, and Jussara Jéssica Pereira. 2022. "Young women, 'Glass ceiling', and strategies to face crystal walls." *RAE Revista de Administracao de Empresas* 62(6):1–25.
- Moreno-Mencía, Patricia, Ana Fernández-Sainz, and Juan M. Rodríguez-Poo. 2022. "The gender wage gap in the public and private sectors: The Spanish experience." *European Journal of Women's Studies* 29(1):72–91.
- Muslim, Muhamad Ihwanul, and Mirwan Surya Perdhana. 2018. "Glass ceiling: Sebuah studi literatur." *Jurnal Bisnis Strategi* 26(1):28.
- Mustika, Made Dwi Setyadhi, Sutastie Soemitro Remi, Mohamad Fahmi, and Maman Setiawan. 2022. "Analysis of educational migration decision in Indonesia." *Journal of Educational and Social Research* 12(6):226–35.
- Nguyen-Huu, Thanh Tam. 2023. "Wage inequality associated with job status: Evidence from Indonesia and the Philippines." *Economics Issues* 28(1):57–79.
- Noor, Nadia, Farida Faisal, and Mahnoor Farooq. 2023. "Horizontal hostility: A subset of glass ceiling." *Journal of Development and Social Sciences* 4(III).
- Nur, Muhammad Rizqi Fachrian, and Siskarossa Ika Oktora. 2020. "Analisis kurva roc pada model logit dalam pemodelan determinan lansia bekerja di Kawasan Timur Indonesia." *Indonesian Journal of Statistics and Its Applications* 4(1):116–35.
- Nuraeni, Yeni, and Ivan Lilin Suryono. 2021. "Analisis kesetaraan gender dalam bidang ketenagakerjaan di Indonesia." *Nakhoda: Jurnal Ilmu Pemerintahan* 20(1):68–79.
- Omar, Stabridis, and Salgado Cecilia. 2022. "Effects of gender and ethnicity on the wage gap among farmworkers in Northwestern Mexico." *Frontera Norte* 16(1):1–23.
- Passaretta, Giampiero, and Moris Triventi. 2023. "Inequality at the top. The gender earnings gap among the Italian Educational Elite." *Research in Social Stratification and Mobility* 85(April 2022):100796.
- Pattayat, Shiba Shankar, Jajati Keshari Parida, and Kirtti Ranjan Paltasingh. 2023. "Gender wage gap among rural non-farm sector employees in India: Evidence from nationally representative survey." *Review of Development and Change* 28(1):22–44.
- Purcell, David, Kelly Rhea MacArthur, and Sarah Samblanet. 2010. "Gender and the glass ceiling at work." *Sociology Compass* 4(9):705–17.
- Puspitasari, A., and M. Putry. 2023. "The sticky floor phenomenon a literature review." *Enrichment: Journal of Management* 13(3):1813–21.

- Radjab, Enny, and Andi Jam'an. 2017. *Metodologi Penelitian Bisnis*. Lembaga Perpustakaan dan Penerbitan Universitas Muhammadiyah Makassar.
- Rincón, Guillermina Benavides, and Alejandro Díaz Domínguez. 2021. "Academic career advances and gender gap." *Political Studies Review* 21(1):42–62.
- Russo, Giovanni, and Wolter Hassink. 2012. "Multiple glass ceilings." *Industrial Relations* 51(4):892–915.
- Samodra, Yoseph Leonardo, Hui Chuan Hsu, Kun Yang Chuang, and Ying Chih Chuang. 2023. "Family economic trajectories and body mass index in Indonesia: Evidence from the Indonesian family life surveys 2 to 5." *Preventive Medicine Reports* 34(February):102262.
- Sari, Lola Fitria. 2020. "Religiusitas dan permintaan asuransi : Studi empiris rumah tangga di Indonesia." *Jurnal Ekonomi Keuangan Dan Perencanaan Indonesia (JEKPI)* 1(1):44–53.
- Segovia-Pérez, Mónica, Rosa Belén Castro Núñez, Rosa Santero Sánchez, and Pilar Laguna Sánchez. 2019. "Being a woman in an ICT job: An analysis of the gender pay gap and discrimination in Spain." *New Technology, Work and Employment* 35(1):20–39.
- Septiana, Ade Nuri, and Rina Herlina Haryanti. 2023. "Glass ceiling pada pekerja perempuan: Studi literatur." *Jurnal Ilmu Sosial Dan Humaniora* 12(1):168–77.
- Shabsough, Tina, Anıl Boz Semerci, and Azize Ergeneli. 2021. "women's entrepreneurial intention: The role of sticky floor perception and social networking." *International Journal of Entrepreneurship and Innovation* 22(1):45–55.
- Shoaib, Shandana, Romy Sajjad Khan, and Sajjad Ahmad Khan. 2010. "The glass ceiling effect: A pakistani perspective." *Business Review* 5(1):79–90.
- Singh, Sandeep, Chetan Sharma, Purnima Bali, Shamneesh Sharma, and Mohd Asif Shah. 2023. "Making sense of glass ceiling: A bibliometric analysis of conceptual framework, intellectual structure and research publications." *Cogent Social Sciences* 9(1).
- Srivastava, Nidhi, and Rishikesh Nalawade. 2023. "Glass ceiling to sticky floor: Analogies of women leadership." *International Journal of Professional Business Review* 8(4):1–18.
- Tandrayen-Ragoobur, Verena, and Rajeev Pydayya. 2015. "Glass ceiling and sticky floors: Hurdles for mauritian working women." *Equality, Diversity and Inclusion* 34(5):452–66.
- Tansel, Aysit, and Elif Öznur Acar. 2017. "Labor mobility across the formal/informal divide in Turkey: Evidence from individual-level data." *Journal of Economic Studies* 44(4):617–35.
- Ulfa, Maria, Abd Jamal, and M. Shabri Abd. Majid. 2020. "Portrait of gender economic inequality in Indonesia." *East African Scholars Journal of Economics, Business and Management* 3(1):79–85.
- Vaccaro, Giannina, Maria Pia Basurto, Arlette Beltrán, and Mariano Montoya. 2022. "The gender wage gap in Peru: drivers, evolution, and heterogeneities." *Social Inclusion* 10(1):19–34.
- Wald, Eli. 2010. "Fordham law review the changing professional landscape of large law firms , glass ceilings and dead ends : Professional ideologies , gender stereotypes , and the future of women lawyers at large law firms the changing professional landscape of large law f." *Fordham Law Review* 78(5).
- Wardani, Iing Merillarsa Kharisma, Siti Nurrochmah, and Dian Mawarni. 2022. "Faktor

maternal sebagai determinan stunting di Kawasan Timur Indonesia: Analisis data Indonesian family life survey 5.” *Jurnal Penelitian Kesehatan Suara Forikes* 13(4):229–33.

Weaver, Jessica L., Alan Smith, and Carrie A. Sims. 2021. “Is there a glass ceiling at national trauma meetings?” *American Journal of Surgery* 221(1):222–26.

Yasmin, Shagufta, Muhammad Jamil, and Muhammad Iqbal. 2021. “The gender wage gap in Pakistan: Extent, trends, and explanations.” *Forman Journal of Economic Studies* 17(02):1–30.