
**TOWARD GENDER-BASED INCLUSIVE DEVELOPMENT:
DETERMINANTS OF FEMALE LABOR FORCE PARTICIPATION IN
INDONESIA**

Kristina Suci Antika^{1*}

Universitas Muhammadiyah Surakarta, Surakarta, Indonesia
b300220047@student.ums.ac.id

Sitti Retno Faridatussalam²

Universitas Muhammadiyah Surakarta, Surakarta, Indonesia
srf122@ums.ac.id

Abstract

This study aims to analyze the effects of early marriage among women, female fertility rates, women's health, women's education, and women's representation in parliament on the female labor force participation rate in Indonesia. A quantitative approach is employed using panel data covering 34 provinces over the 2018–2024 period. The analysis is conducted using a Fixed Effects (FE) model, selected based on the results of the Chow test and the Hausman test. The findings indicate that the female fertility rate has a negative effect on the female labor force participation rate, while women's health has a positive effect. Early marriage among women, women's education level, and women's representation in parliament do not show statistically significant effects. These results suggest that biological and health-related factors play a more substantial role than social and political factors in influencing women's economic participation. The implications of this study underscore the importance of public policies focused on improving access to reproductive health services and enhancing the overall quality of women's health in order to promote sustained and inclusive increases in female labor force participation.

Keywords: Female Labor Force Participation Rate, Female Fertility Rate, Women's Health, Inclusive Development, Panel Data

INTRODUCTION

Inclusive economic development increasingly positions gender equality as a central pillar in achieving sustainable growth (Kamran et al., 2023). One of the key indicators for assessing the success of gender-based development is the female labor force participation rate. Women’s participation in the labor market not only reflects progress in social equality but also contributes to increased economic productivity, more efficient resource allocation, and long-term economic growth (Kabeer, 2021; Thaddeus et al., 2022). A growing body of research shows that increasing women’s participation in the workforce can expand the productive labor base and improve household welfare (Gammage et al., 2020; Jabeen et al., 2020; Ibourek & Elouaourti, 2023). A report by the World Bank (2024) also indicates that a 5% increase in female labor force participation has the potential to raise a country’s Gross Domestic Product (GDP) by approximately 0.7%. Therefore, enhancing women’s economic participation has become a strategic agenda in promoting inclusive and sustainable development.

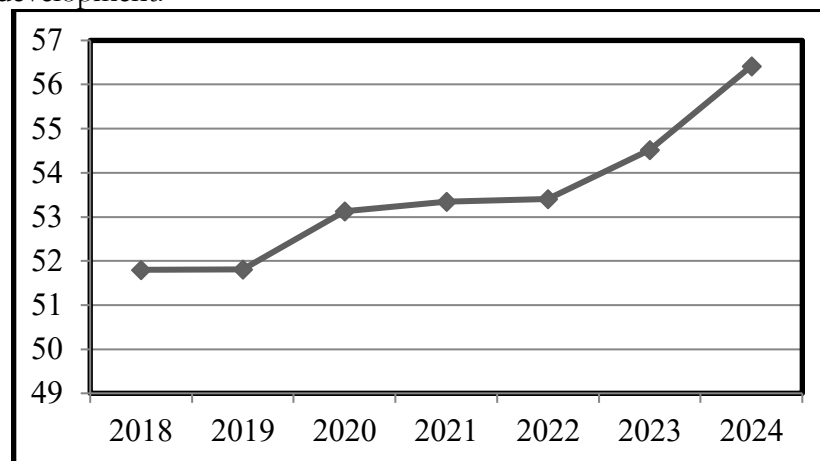


Figure 1.

Female Labor Force Participation Rate in Indonesia, 2018–2024

Source: Statistics Indonesia (BPS), processed by the author (2026).

In Indonesia, women’s participation in the labor market has shown an upward trend in recent years, although it remains below that of men. Data from Statistics Indonesia indicate that the female labor force participation rate increased from 51.8% in 2018 to 56.42% in 2024 (see Figure 1). This increase reflects improvements in women’s access to education, healthcare, and economic opportunities. Nevertheless, the participation rate remains relatively low compared to Indonesia’s substantial female demographic potential. This condition suggests that various structural and social factors continue to influence women’s decisions to engage in the labor market, including social norms, access to education, reproductive health, as well as available political and economic opportunities for women.

The study of the determinants of female labor force participation has developed extensively within the development economics literature. Several studies show that increased female participation in the labor market contributes to more inclusive and

equitable economic growth (Firmansyah & Sihaloho, 2021; Alekhina & Ganelli, 2023; Naveed et al., 2024). Women's education consistently has a positive effect on labor participation, as it enhances human capital quality and expands access to better employment opportunities (Osundina, 2020; Bawazir et al., 2022; Klasen et al., 2021; Mishra & Sahoo, 2025). Women's empowerment in the political sphere, such as increased representation in parliament, also plays a role in promoting gender-responsive public policies, including labor policies that support women's participation in the workforce (Lv & Yang, 2018; Al Faizah et al., 2020; Rahmawan & Aisyah, 2024).

Beyond education and political factors, health aspects and women's demographic characteristics also influence their participation in the labor market. Empirical studies show that good health conditions enable women to participate productively and sustainably in economic activities (Al Faizah et al., 2020; Osundina, 2020; Kurniasari et al., 2025). Conversely, socio-demographic factors such as early marriage and high fertility rates often act as barriers to women's labor market participation. These conditions may increase domestic burdens and hinder the accumulation of women's human capital (Al Faizah et al., 2022; Bawazir et al., 2022; Firmansyah & Purnomo, 2024). This phenomenon remains a challenge in many developing countries, including Indonesia, where early marriage practices and high birth rates are still prevalent in certain regions.

Although numerous studies have examined the determinants of female labor force participation, most previous research has analyzed these factors separately, such as education, fertility, or economic growth (Firmansyah & Sihaloho, 2021; Klasen et al., 2021; Al Faizah et al., 2022). Studies that integrate dimensions of women's empowerment—through education and political participation—with health and demographic aspects, such as health status, early marriage, and fertility rates, remain limited in the Indonesian context. A comprehensive approach is therefore needed to better understand the multiple factors that simultaneously influence women's decisions to participate in the labor market.

Based on this research gap, this study offers several novelties. First, it simultaneously examines the effects of early marriage, female fertility rates, women's education, women's health, and women's representation in parliament on female labor force participation in Indonesia. Second, it employs a panel data approach across provinces, enabling the analysis to capture socio-economic differences across regions in Indonesia. Third, the study applies panel data econometric techniques using Pooled Ordinary Least Squares (POLS), Fixed Effects (FE), and Random Effects (RE) estimation methods to obtain more robust and reliable estimates (Baltagi, 2021).

Based on the above discussion, this study aims to analyze the effects of early marriage among women, female fertility rates, women's education, women's health, and women's representation in parliament on the female labor force participation rate in Indonesia. The findings are expected to provide empirical contributions to the development of gender-based development economics literature and serve as a foundation for formulating more inclusive public policies to enhance women's participation in the labor market and strengthen the inclusive development agenda in Indonesia.

REVIEW OF LITERATURE

The study of the determinants of female labor force participation has developed rapidly in the development economics literature since the early 2000s. Mammen and Paxson (2000) examined the relationship between economic development and women's participation in the labor market across countries, identifying a U-shaped pattern between income levels and female participation. In the early stages of development, women's participation tends to decline, then increases as structural transformation shifts toward the service sector. This pattern suggests that women's involvement in economic activities is influenced by changes in the structure of the economy.

Bloom et al. (2009) analyzed the effect of fertility on female labor force participation using cross-country panel data from 1960 to 2000. The results show that each additional birth significantly reduces women's labor force participation during their reproductive years. This study highlights the critical role of demographic factors, particularly fertility, in shaping female labor supply and its implications for economic growth. Gaddis and Klasen (2014) revisited the U-shaped hypothesis using a more comprehensive methodological approach and found that the pattern is not uniform across countries. These differences are influenced by education levels, fertility rates, and socio-cultural norms, indicating that non-economic factors also play a role in determining women's labor force participation.

From an institutional perspective, Lv and Yang (2018) analyzed the effect of women's representation in parliament on female labor force participation using dynamic panel data. The findings indicate that an increase in the proportion of women in parliament positively affects female labor force participation through more gender-responsive policies. This result underscores the importance of the political dimension in promoting women's economic inclusion.

At the regional level, Al Faizah et al. (2020) examined the effects of reproductive health and women's empowerment on female labor force participation in ASEAN countries. The findings show that indicators of women's health and political participation have significant effects on labor force participation. These results suggest that investments in health and women's empowerment have a direct impact on economic engagement. Hessami and da Fonseca (2020) also investigated the role of women's representation in parliament and found that female political presence encourages public policies that support gender equality and improve institutional quality. Such conditions create a conducive environment for increasing women's economic participation.

At the country level, Osundina (2020) analyzed the effects of education and health on female labor force participation in Nigeria and found that both factors have positive impacts. These findings reinforce the argument that investment in women's human capital is a key determinant of labor force participation. Firmansyah and Sihalo (2021) examined the role of female participation in inclusive economic growth in Indonesia and showed that increased female participation contributes to more equitable growth, particularly in regions with better access to education and healthcare. The study also identified regional disparities influenced by socio-demographic factors.

Bawazir et al. (2022) investigated the determinants of female labor force participation in developing countries, focusing on fertility and education. The results indicate that education increases women's participation, while high fertility rates hinder it. Al Faizah et al. (2022) examined the effect of female literacy on labor force participation in ASEAN and found a positive and significant relationship. These findings highlight the importance of educational quality in enhancing labor market inclusivity.

A recent study by Naveed et al. (2024) explored the relationship between female labor force participation and the fulfillment of women's rights, encompassing economic, social, and political dimensions. The results reveal a positive association between increased female participation and the strengthening of women's rights. Mishra and Sahoo (2025) analyzed the impact of reproductive health and women's empowerment on economic opportunities in South Asia. Their findings show that family planning, the use of modern contraception, and the availability of adequate maternal healthcare services enhance women's economic opportunities. In addition, higher education, vocational training, and adequate skills contribute positively to female labor force participation.

Overall, the literature indicates that the determinants of female labor force participation include economic, demographic, social, and institutional factors. However, most studies focus on cross-country or regional levels and thus do not fully capture within-country heterogeneity. Moreover, previous research tends to examine these factors separately and has not integrated variables such as early marriage, fertility, education, health, and political participation into a unified analytical framework. Therefore, this study contributes to the literature by analyzing the determinants of female labor force participation at the provincial level in Indonesia over the 2018–2024 period. This approach enables the identification of more specific spatial variations and provides a stronger basis for formulating targeted policies to promote gender-based inclusive development.

RESEARCH METHOD

This study aims to analyze the effects of gender-based factors—namely early marriage among women, female fertility rates, women's education, women's health, and women's representation in parliament—on the female labor force participation rate in Indonesia. The study employs a quantitative approach using panel data regression analysis. Ditzen et al. (2025) explain that panel data combine time series and cross-sectional data, allowing for the observation of changes over time as well as differences across observational units. The use of panel data provides more efficient parameter estimates, increases the number of observations, and reduces potential bias commonly found in analyses relying solely on time series or cross-sectional data.

The time series data in this study cover the period from 2018 to 2024, while the cross-sectional data include 34 provinces in Indonesia. The inclusion of all provinces aims to provide a comprehensive overview of variations in social, economic, and gender-related conditions across regions that may influence female labor force participation. Differences in development characteristics across provinces—such as education levels, access to

healthcare, and socio-cultural dynamics related to early marriage and women’s political roles—make cross-provincial analysis relevant for identifying patterns at the national level.

The selection of the 2018–2024 observation period is based on the availability and consistency of gender statistics published by Statistics Indonesia (BPS). This period also reflects the dynamics of changes in women’s socio-economic conditions, including the phases before and after the COVID-19 pandemic, which affected the structure of the labor market in Indonesia. Based on this data structure, the total number of observations in this study is 238, derived from the combination of 34 provinces and seven years of observation. All data used are secondary data obtained from official publications of Statistics Indonesia (BPS).

The dependent variable in this study is the female labor force participation rate, measured as a percentage. The independent variables include early marriage among women, female fertility rates, women’s education, women’s health, and women’s representation in parliament. The early marriage variable is measured by the proportion of women aged 20–24 who were married or cohabiting before the age of 18. The fertility variable is measured by the proportion of ever-married women aged 15–49 who gave birth to their first child before the age of 20. Women’s education is measured by the average years of schooling for women. Women’s health is measured by female life expectancy at birth. Women’s representation in parliament is measured by the percentage of legislative seats held by women. All variables in the model are transformed into logarithmic form to control for potential heteroskedasticity and to facilitate the interpretation of regression coefficients as elasticities. A summary of the operational definitions, measurement units, and data sources is presented in Table 1.

Table 1.
Operational Definitions of Research Variables

Variable	Operational Definition	Unit	Source
Female Labor Force Participation Rate	Percentage of working-age women who are economically active, either employed or seeking employment	Percent (%)	BPS
Early Marriage among Women	Proportion of women aged 20–24 who were married or cohabiting before age 18	Percent (%)	BPS
Female Fertility Rate	Proportion of ever-married women aged 15–49 who gave birth to their first child before age 20	Percent (%)	BPS
Women’s Education	Average years of schooling attained by women	Years	BPS
Women’s Health	Female life expectancy at birth	Years	BPS
Women’s Representation in Parliament	Percentage of legislative seats held by women in representative institutions	Percent (%)	BPS

The analytical model used is panel data regression with three estimation approaches: Pooled Ordinary Least Squares (POLS), Fixed Effects (FE), and Random Effects (RE) (Hill et al., 2020; Baltagi, 2021). The use of multiple estimation approaches aims to identify the model that best fits the data characteristics. Model selection is conducted using the Chow

test to choose between the POLS and FE models, and the Hausman test to select between the FE and RE models. The selected model serves as the basis for inferential analysis and interpretation of the results. Zyphur et al. (2020) emphasize that model selection procedures in panel data regression are essential to ensure consistent and efficient parameter estimates. The econometric model used in this study is formulated as follows:

$$\log(\text{FLFPR})_{it} = \beta_0 + \beta_1 \log(\text{FFR})_{it} + \beta_2 \log(\text{EMW})_{it} + \beta_3 \log(\text{EDUW})_{it} + \beta_4 \log(\text{HLTHW})_{it} + \beta_5 \log(\text{WPR})_{it} + \varepsilon_{it} \quad (1)$$

Based on this equation, FLFPR represents the female labor force participation rate, EMW denotes early marriage among women, FFR represents the female fertility rate, EDUW denotes women’s education, HLTHW represents women’s health, and WPR denotes women’s representation in parliament. The symbol β_0 represents the constant term, while β_1 to β_5 represent the regression coefficients of the respective independent variables. The symbol ε denotes the error term. The index i represents the cross-sectional unit (province), the index t represents the time period, and \log denotes the logarithmic transformation.

After determining the best model, hypothesis testing is conducted using the F-test to examine the joint effect of the independent variables on the female labor force participation rate. The null hypothesis in the F-test states that early marriage, female fertility, women’s education, women’s health, and women’s representation in parliament jointly have no effect on the female labor force participation rate. The null hypothesis is rejected if the probability value of the F-statistic is less than the chosen significance level of 1 percent.

In addition, the t-test is used to examine the partial effect of each independent variable on the female labor force participation rate, holding other variables constant. The null hypothesis in the t-test states that the regression coefficient of each independent variable is equal to zero. The alternative hypothesis states that early marriage and female fertility have a negative effect on the female labor force participation rate, while women’s education, women’s health, and women’s representation in parliament have positive effects. The testing criteria are based on the probability value of the t-statistic at significance levels of 1 percent and 5 percent.

RESULTS AND DISCUSSION

The panel data regression model was estimated using three approaches: Pooled Ordinary Least Squares (POLS), Fixed Effects (FE), and Random Effects (RE). The estimation results are presented in Table 2. Following these estimations, a series of tests were conducted to determine the most appropriate model.

Table 2.

Summary of Panel Data Regression Results				
Log(FLFPR): Female Labor Force Participation Rate				
Variable	Coefficient			
	(POLS)	(FE)	(RE)	(TEST)
Constant (C)	120.756	-132.366	15.549	

Log(EMW)	-0.408*	0.053	-0.333*
Log(FFR)	-30.059*	-13.765**	-2.479
Log(EDUW)	-4.074*	-1.383	-2.161*
Log(HLTHW)	-0.299**	2.769*	0.825*
Log(WPR)	0.043	0.041	0.029
R ²	0.349	0.951	0.139
Prob F-statistic	0.000	0.000	0.000
Chow Test			0.000
Hausman Test			0.000

Source: BPS, processed using EViews 13 (2026).

Notes: (POLS) Pooled Ordinary Least Squares; (FE) Fixed Effects; (RE) Random Effects; (TEST) Estimation and Data Testing; * Significant at $\alpha = 0.01$; ** Significant at $\alpha = 0.05$.

The Chow test was used to compare the POLS and FE models, while the Hausman test was employed to choose between the FE and RE models. The Chow test results in Table 2 show that the cross-section F probability value of 0.000 is smaller than α (0.01), indicating that the FE model is more appropriate than POLS. Furthermore, the Hausman test results show a probability value of 0.000, which is also smaller than α (0.01), suggesting that the FE model is more suitable than the RE model. Therefore, the Fixed Effects model is selected for the analysis.

After model selection, an F-test was conducted to examine the simultaneous effect of the independent variables on the dependent variable. Based on Table 2, the probability value of the F-statistic is 0.000, which is smaller than α (0.01). This indicates that early marriage among women, female fertility rates, women's education, women's health, and women's representation in parliament jointly have a significant effect on the female labor force participation rate in Indonesia. The coefficient of determination (R^2) of 0.915 indicates that 91.5% of the variation in the female labor force participation rate can be explained by the independent variables in the model, while the remaining 8.5% is explained by factors outside the model.

Table 3.
t-test Results (Partial)

Log(FLFPR): Female Labor Force Participation Rate			
Variable	Coefficient	Prob.	Conclusion
Log(EMW)	0.053	0.415	Not statistically significant
Log(FFR)	-13.765	0.029	Negative effect
Log(EDUW)	-1.383	0.101	Not statistically significant
Log(HLTHW)	2.769	0.000	Positive effect
Log(WPR)	0.041	0.166	Not statistically significant

Source: BPS, processed using EViews 13 (2026).

Partial testing using the t-test shows that female fertility rates have a negative effect on the female labor force participation rate, while women's health has a positive effect. Meanwhile, early marriage among women, women's education, and women's representation in parliament do not have statistically significant effects. Specifically, the female fertility rate

(FFR) has a negative effect on the female labor force participation rate (FLFPR), with a coefficient of -13.765 and a probability value of 0.029, which is smaller than α (0.05). On the other hand, women's health (HLTHW) has a positive effect on FLFPR, with a coefficient of 2.769 and a probability value of 0.000, which is smaller than α (0.01).

The coefficient of -13.765 for FFR indicates that a 1% increase in female fertility reduces the female labor force participation rate by 13.765%. This suggests that an increase in childbirth tends to reduce women's participation in the labor market due to greater domestic responsibilities and childcare burdens. Meanwhile, the coefficient of 2.769 for HLTHW indicates that a 1% improvement in women's health increases the female labor force participation rate by 2.769%. This implies that better health conditions encourage women to participate in economic activities due to higher physical capacity and productivity.

Discussion

This study finds that early marriage among women does not have a significant effect on the female labor force participation rate. This result differs from several previous studies that identify early marriage as a barrier to women's labor market participation (Al Faizah et al., 2022; Bawazir et al., 2022). The lack of significance may be explained by socio-economic changes in Indonesia that have created employment opportunities for women who marry at a young age, particularly in the informal sector, which is more flexible and does not require high levels of education. Increasing household economic needs also encourage women to remain engaged in economic activities. The discrepancy with previous findings may be attributed to the characteristics of Indonesia's labor market, which is dominated by the informal sector, thereby reducing structural barriers associated with early marriage compared to countries or regions with more formal and structured labor markets.

Furthermore, the negative effect of female fertility on labor force participation indicates that an increase in the number of children reduces women's likelihood of participating in the workforce. This condition is associated with increased domestic burdens and childcare responsibilities, which limit time allocation and work flexibility. Limited access to affordable and quality childcare services further reinforces the trade-off between domestic roles and economic activities. This finding is consistent with studies by Al Faizah et al. (2022), Bawazir et al. (2022), and Firmansyah and Purnomo (2024), which show that high fertility rates hinder women's entry into the labor market. This consistency reflects Indonesia's socio-economic characteristics, which are still marked by strong traditional gender norms—particularly in regions with high fertility rates—where women tend to prioritize reproductive roles over productive roles.

On the other hand, women's education does not show a significant effect on female labor force participation. This result contrasts with several previous studies (Osundina, 2020; Bawazir et al., 2022; Klasen et al., 2021; Mishra and Sahoo, 2025), which found a positive relationship between education and women's labor participation. The lack of significance may be explained by a mismatch between educational attainment and job availability. Improvements in women's education have not been accompanied by sufficient job creation aligned with their qualifications. Additionally, the phenomenon of

overeducation and the limited capacity of the formal sector mean that some highly educated women are not absorbed into the labor market. In certain cases, highly educated women may choose not to work due to personal preferences, social norms, or limited suitable employment opportunities. This condition indicates that Indonesia's labor market has not yet fully absorbed the increasing quality of women's education.

This study also finds that women's health has a positive effect on female labor force participation. Good health conditions enhance women's capacity to work through increased productivity, reduced absenteeism, and improved physical and mental readiness. Greater access to basic healthcare services, including reproductive health, contributes to higher labor force participation among women. This finding is consistent with studies by Al Faizah et al. (2020), Osundina (2020), and Kurniasari et al. (2025), which emphasize the role of health as a fundamental form of capital in increasing women's labor participation. Improvements in women's health indicators during the 2018–2024 period, such as increased life expectancy and better access to healthcare services, have also supported greater female engagement in the labor market.

In addition, women's representation in parliament does not have a significant effect on female labor force participation. This result suggests that increased political representation has not yet translated into direct impacts on labor participation. This finding differs from studies by Lv and Yang (2018), Al Faizah et al. (2020), and Rahmawan and Aisyah (2024), which argue that women's representation in parliament can promote gender-responsive policies. The lack of significance may be explained by time lags between policy formulation and its effects on the labor market. Moreover, increased representation is not always accompanied by effectiveness in producing implementable policies. Institutional factors, political dynamics, and policy implementation challenges remain key obstacles in translating political representation into tangible economic outcomes.

CONCLUSION

This study aims to analyze the determinants of the female labor force participation rate within the framework of gender-based inclusive development in Indonesia over the 2018–2024 period. Specifically, it examines the effects of early marriage among women, female fertility rates, women's health, women's education, and women's representation in parliament on the female labor force participation rate. The results indicate that female fertility has a negative effect on the female labor force participation rate, while women's health has a positive effect. Meanwhile, early marriage, women's education, and women's representation in parliament do not show statistically significant effects.

Based on these findings, the government needs to strengthen fertility control policies by improving access to reproductive health services as well as implementing inclusive and sustainable family planning programs. Enhancing the quality of women's healthcare services should also be prioritized to promote women's economic participation. Furthermore, although early marriage, women's education, and women's representation in parliament do not show significant effects, policies in these areas should still be optimized through a more integrative approach. Such efforts can be undertaken by improving the quality of skills-based education, preventing early marriage, and strengthening women's

roles in public policymaking to generate more tangible impacts on women's economic empowerment. In conclusion, this study highlights that achieving gender-based inclusive development is not solely determined by women's access to education and political participation, but also by demographic and health-related factors. Therefore, integrated policies oriented toward strengthening women's fundamental capacities are essential for sustainably increasing female labor force participation.

REFERENCES

- Al Faizah, S. A., Mafruhah, I., & Sarungu, J. J. (2020). Does women's reproductive health and empowerment affect female labor participation in ASEAN? *Jurnal Ekonomi Pembangunan: Kajian Masalah Ekonomi dan Pembangunan*, 21(1), 32–39. <https://doi.org/10.23917/jep.v21i1.10387>
- Al Faizah, S. A., Perwithosuci, W., Hidayah, N., & Abidin, A. Z. (2022). Women's literacy rate and women's labor participation in ASEAN. *Jurnal Ekonomi Pembangunan: Kajian Masalah Ekonomi dan Pembangunan*, 23(1), 56–62. <https://doi.org/10.23917/jep.v23i1.17183>
- Alekhina, V., & Ganelli, G. (2023). Determinants of inclusive growth in ASEAN. *Journal of the Asia Pacific Economy*, 28(3), 1196–1228. <https://doi.org/10.1080/13547860.2021.1981044>
- Baltagi, B. H. (2021). *Econometric analysis of panel data (6th ed.)*. Springer. <https://doi.org/10.1007/978-3-030-53953-5>
- Bawazir, A. A., Osman, A. F., & Aslam, M. (2022). Factors affecting female labor force participation in the Middle East: An empirical evidence from panel data approach. *The Journal of Developing Areas*, 56(1), 59–72. <https://doi.org/10.1353/jda.2022.0010>
- Bloom, D. E., Canning, D., Fink, G., & Finlay, J. E. (2009). Fertility, female labor force participation, and the demographic dividend. *Journal of Economic Growth*, 14(2), 79–101. <https://doi.org/10.1007/s10887-009-9039-9>
- Ditzen, J., Karavias, Y., & Westerlund, J. (2025). Testing and estimating structural breaks in time series and panel data in Stata. *The Stata Journal*, 25(3), 526–560. <https://doi.org/10.1177/1536867X251365449>
- Firmansyah, C. A., & Sihaloho, E. D. (2021). The effects of women empowerment on Indonesia's regional economic growth. *Jurnal Ekonomi Pembangunan: Kajian Masalah Ekonomi dan Pembangunan*, 22(1), 12–21. <https://doi.org/10.23917/jep.v22i1.11298>
- Firmansyah, R., & Purnomo, D. (2024). Determinants of women's labor participation rate: Evidence in ASEAN. *Journal of Economics Research and Policy Studies*, 4(2), 103–116. <https://doi.org/10.53088/jerps.v4i2.974>
- Gaddis, I., & Klasen, S. (2014). Economic development, structural change, and women's labor force participation: A reexamination of the feminization U hypothesis. *Journal of Population Economics*, 27(3), 639–681. <https://doi.org/10.1007/s00148-013-0488-2>
- Gammage, S., Sultana, N., & Glinski, A. (2020). Reducing vulnerable employment: Is there a role for reproductive health, social protection, and labor market policy? *Feminist Economics*, 26(1), 121–153. <https://doi.org/10.1080/13545701.2019.1670350>

- Hessami, Z., & da Fonseca, M. L. (2020). Female political representation and substantive effects on policies: A literature review. *European Journal of Political Economy*, 63(1), 101896. <https://doi.org/10.1016/j.ejpeco.2020.101896>
- Hill, T. D., Davis, A. P., Roos, J. M., & French, M. T. (2020). Limitations of fixed-effects models for panel data. *Sociological Perspectives*, 63(3), 357–369. <https://doi.org/10.1177/0731121419863785>
- Ibourk, A., & Elouaourti, Z. (2023). Revitalizing women's labor force participation in North Africa: An exploration of novel empowerment pathways. *International Economic Journal*, 37(3), 462–484. <https://doi.org/10.1080/10168737.2023.2227161>
- Isbahi, M. B., Zuana, M. M. M., & Toha, M. (2024). The Multi-Social Relation of the Cattle Industry in the Plaosan Subdistrict Animal Market of Magetan Regency. *Malacca: Journal of Management and Business Development*, 1(1), 31–46. <https://doi.org/10.69965/malacca.v1i1.51>
- Jabeen, S., Haq, S., Jameel, A., Hussain, A., Asif, M., Hwang, J., & Jabeen, A. (2020). Impacts of rural women's traditional economic activities on household economy: Changing economic contributions through empowered women in rural Pakistan. *Sustainability*, 12(7), 2731. <https://doi.org/10.3390/su12072731>
- Kabeer, N. (2021). Gender equality, inclusive growth, and labour markets. In *Women's economic empowerment* (pp. 13–48). Routledge. <https://doi.org/10.4324/9781003141938>
- Kamran, M., Rafique, M. Z., Nadeem, A. M., & Anwar, S. (2023). Does inclusive growth contribute towards sustainable development? Evidence from selected developing countries. *Social Indicators Research*, 165(2), 409–429. <https://doi.org/10.1007/s11205-022-03020-6>
- Klasen, S., Le, T. T. N., Pieters, J., & Santos Silva, M. (2021). What drives female labour force participation? Comparable micro-level evidence from eight developing and emerging economies. *The Journal of Development Studies*, 57(3), 417–442. <https://doi.org/10.1080/00220388.2020.1790533>
- Kurniasari, W., Budiarty, I., & Murwiati, A. (2025). Economic and health dimension of female labor force participation in Indonesia. *Jurnal Ekonomi Pembangunan*, 14(1), 1–17. <https://doi.org/10.23960/jep.v14i1.3879>
- Lv, Z., & Yang, R. (2018). Does women's participation in politics increase female labor participation? Evidence from panel data analysis. *Economics Letters*, 170(1), 35–38. <https://doi.org/10.1016/j.econlet.2018.05.013>
- Mammen, K., & Paxson, C. (2000). Women's work and economic development. *Journal of Economic Perspectives*, 14(4), 141–164. <https://doi.org/10.1257/jep.14.4.141>
- Mishra, S., & Sahoo, D. (2025). Impact of women's reproductive health and empowerment on female labour force participation. *Journal for Labour Market Research*, 59(1), 1–13. <https://doi.org/10.1186/s12651-025-00414-0>
- Naveed, A., Ahmad, N., Aslam, A., Choudhry, M. T., & Bekdash-Muellers, H. (2024). Is it possible to broaden women's inclusive rights by improving their participation in the labor market? A new perspective at the global level. *International Journal of Manpower*, 45(8), 1493–1515. <https://doi.org/10.1108/IJM-11-2023-0650>
- Osundina, O. A. (2020). Sustainable development: Does improvement in education and



- health of women improve female labour force participation rate? *Sustainable Development*, 28(1), 13–24. <https://doi.org/10.1002/sd.1961>
- Rahmawan, F. A. N., & Aisyah, S. (2024). Examining determinants of women's labor participation rate in developing Asian countries. *Journal of Enterprise and Development (JED)*, 6(1), 259–269. <https://doi.org/10.20414/jed.v6i1.9542>
- Thaddeus, K. J., Bih, D., Nebong, N. M., Ngong, C. A., Mongo, E. A., Akume, A. D., & Onwumere, J. U. J. (2022). Female labour force participation rate and economic growth in sub-Saharan Africa: A liability or an asset. *Journal of Business and Socio-Economic Development*, 2(1), 34–48. <https://doi.org/10.1108/JBSED-09-2021-0118>
- World Bank. (2024). *Indonesia gender equality program*. <https://www.worldbank.org/en/country/indonesia/brief/gender-equality-for-growth-research-and-analytical-program-in-indonesia>
- Zyphur, M. J., Voelkle, M. C., Tay, L., Allison, P. D., Preacher, K. J., Zhang, Z., & Diener, E. (2020). From data to causes II: Comparing approaches to panel data analysis. *Organizational Research Methods*, 23(4), 688–716. <https://doi.org/10.1177/1094428119847280>