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ECONOMICS

Can Women's Empowerment Increase Their Participation in the Workforce? Evidence from ASEAN

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ABSTRACT

Purpose: This study aims to examine the impact of women's empowerment on female labor force participation in ASEAN countries. Women's empowerment is measured through variables such as education, health, wages, parliamentary representation, fertility rates, and maternal mortality rates.

Method: This research employs a panel data approach by applying the Random Effects Model (REM) across 10 ASEAN member countries. Socio-economic and demographic indicators are integrated to assess the extent to which these variables influence female labor force participation.

Result: Research findings indicate that education, access to healthcare services, and low maternal mortality rates positively contribute to increasing women's labor force participation. Conversely, factors such as low wage levels, limited female representation in parliament, and high fertility rates serve as barriers.

Practical Implications for Economic Growth and Development: This study identifies key factors influencing female labor force participation and provides strategic recommendations for policymakers in the ASEAN region. Improving women's access to education and healthcare services is expected to foster inclusive development, reduce gender disparities, and strengthen the achievement of the Sustainable Development Goals (SDGs), particularly in the areas of gender equality and decent work.

Originality/Value: This study makes a novel contribution by incorporating rarely discussed variables such as maternal mortality rates and fertility levels in a region characterized by diverse socio-economic conditions. It offers deeper insights into the driving forces behind female labor force participation in ASEAN countries.

Keywords: *Female Labor Force Participation, Women's Empowerment, ASEAN, Panel Data, Random Effects Model, Gender Equality*

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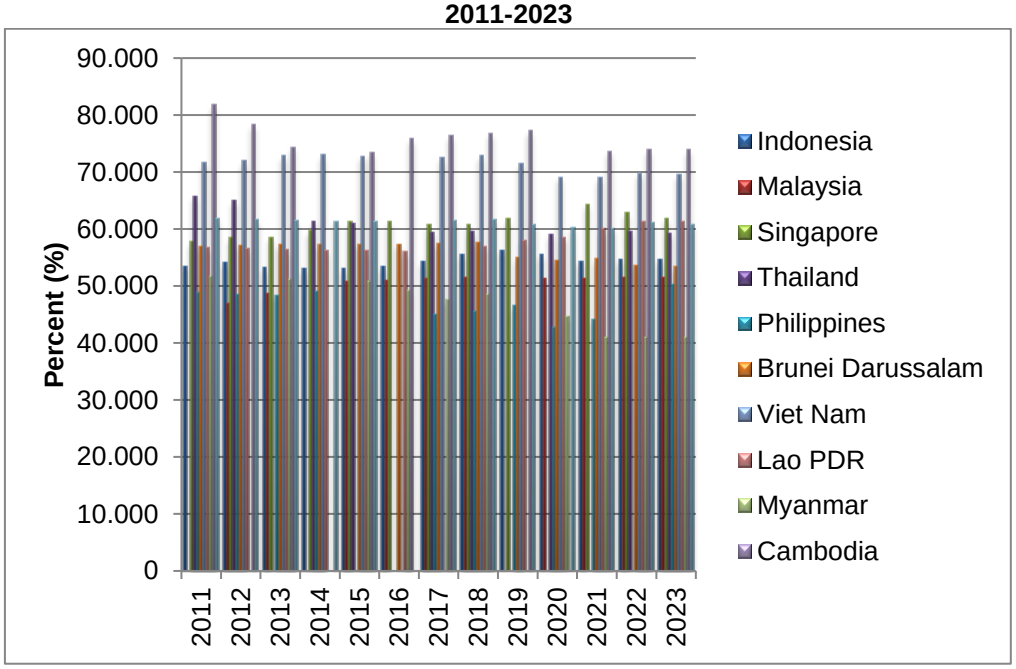
INTRODUCTION

Women's empowerment has emerged as a strategic agenda in global economic development, aligning with the goals of the Sustainable Development Goals (SDGs), which emphasize the significance of gender equality across various sectors. Women's participation in the labor force not only contributes to economic growth but also serves as an indicator of gender equality and inclusiveness in development (Lahoti & Swaminathan, 2016; Cabeza-García et al., 2018; Mishra et al., 2020). However, within the Association of Southeast Asian Nations (ASEAN) region, female participation in the workforce still exhibits significant disparities compared to male participation. These inequalities are influenced by various structural and socio-economic factors, including access to education, healthcare services, and women's

involvement in politics and public policy (Mastracci, 2017; Heymann et al., 2019; Tokal et al., 2023).

Chart 1 illustrates the notable variations in female labor force participation across ASEAN countries. Cambodia recorded the highest participation rate at 73.99%, while Myanmar experienced a sharp decline to 41.06% in 2023. Indonesia reported a participation rate of 54.67%, which is higher than Malaysia's rate of 51.57%, yet still lags behind Vietnam (69.53%) and Singapore (61.97%). These differences reflect how national policies, cultural norms, economic development levels, and the effectiveness of women's empowerment initiatives influence female labor force participation in each country (Klasen, 2019; Jayachandran, 2021). Countries with high participation rates tend to implement progressive policies that support women in the workforce, while those with lower rates face more complex cultural and structural barriers.

Figure 1. Trends in Female Labor Force Participation in 10 ASEAN Countries during 2011-2023



Source: World Development Indicators (2025)

Efforts to increase women's participation in the workforce are often linked to broader access to education, adequate healthcare services, and women's involvement in political decision-making (Lv & Yang, 2018; Abreha et al., 2020; Bhalotra & Fernández, 2021; Klasen et al., 2021; Prillaman, 2023). Higher education provides better job opportunities for women, while optimal health conditions enable them to work more productively (Klasen et al., 2021; Prillaman, 2023). Additionally, women's representation in parliament is frequently associated with more inclusive policies that promote gender equality in the workplace (Lv & Yang, 2018). However, despite various initiatives, structural barriers continue to impede the increase in female participation. Key challenges include gender-based wage discrimination, unequal domestic workloads, and inadequate labor protection policies (Cutillo & Centra, 2017; Bilan et al., 2020).

Although many studies have explored the relationship between women's empowerment and labor force participation (Lv & Yang, 2018; Al Faizah et al., 2020, 2022; Rahmawan & Aisyah, 2024; Sari & Aisyah, 2024), gaps remain in understanding how specific aspects of women's empowerment—such as education, health, wages, and parliamentary representation—affect

female labor force participation in ASEAN. Most previous research has concentrated more on the impact of education (Bhalotra & Fernández, 2021; Klasen et al., 2021; Murialti et al., 2022; Kurniasari et al., 2024; Marjanović et al., 2024) and health (Al Faizah et al., 2022; Sari & Aisyah, 2024), with less emphasis on other influential factors. Furthermore, aspects of reproductive health, including fertility rates and maternal mortality, have not been extensively analyzed as determinants of women's labor market participation (Al Faizah et al., 2020).

Addressing this gap is crucial, considering that ASEAN is characterized by diverse economic and social structures. Without a deeper understanding of the determinants of female labor force participation, the policies implemented in each country risk being ineffective in promoting economic inclusivity. Therefore, this study seeks to answer the key question: Does women's empowerment contribute to increasing their participation in the workforce? To address this question, the study employs a panel data approach to analyze various dimensions of women's empowerment, such as education, health, wages, and their involvement in national parliaments. These factors are expected to influence women's decisions to participate in the labor force. Moreover, reproductive health aspects—including fertility rates and maternal mortality—are also examined as key determinants that may either constrain or encourage women's labor market participation across ten ASEAN countries.

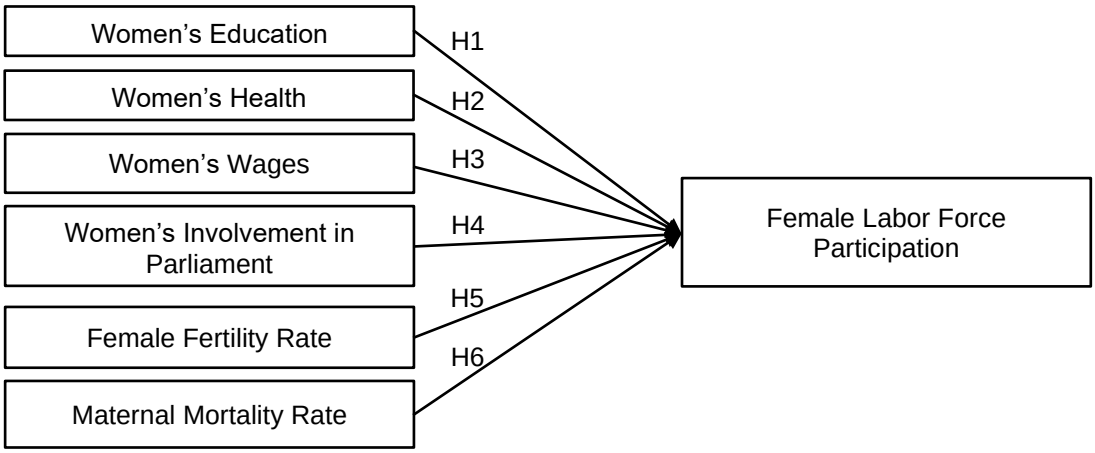
This study contributes by providing stronger empirical evidence on the relationship between women's empowerment and long-term female labor force participation across ASEAN countries. Furthermore, the findings may serve as a foundation for formulating more effective policies to enhance women's participation in the labor force, particularly through interventions in education, healthcare, and more inclusive labor policies.

The structure of this study consists of several main sections. The first part introduces the topic and its significance, identifies the research problem and gap, and outlines the research objectives and contributions. The second part elaborates on the research methods and data sources used. The third part presents the empirical results and discussion, followed by policy implications based on the key findings. The final part concludes the study and proposes directions for future research.

Hypotheses Development

The figure below illustrates the conceptual framework developed to examine the key determinants of female labor force participation in ASEAN countries.

Figure 2. Research Framework



Source: Developed by the authors (2025)

Women's Education and Female Labor Force Participation

According to Human Capital Theory, education plays a vital role in improving the quality of human resources and expanding access to decent employment (Becker et al., 1962). Women with higher levels of education tend to possess better skills and productivity, thereby increasing their chances of being accepted into the labor market. Studies conducted by Bhalotra and Fernández (2021) and Klasen et al. (2021) indicate a positive correlation between improvements in women's education and their labor force participation. Based on this, the proposed hypothesis is:

H1: Women's education has a positive effect on female labor force participation in ASEAN.

Women's Health and Female Labor Force Participation

According to the Capability Approach developed by Amartya Sen, health is one of the fundamental capabilities that enable individuals to lead productive lives (Law & Widdows, 2008). Women in good health have a greater capacity to engage in economic activities and compete in the labor market. Findings by Al Faizah et al. (2020) indicate that health indicators, such as life expectancy, play a significant role in determining women's labor force participation. Therefore, the proposed hypothesis is:

H2: Women's health has a positive effect on female labor force participation in ASEAN.

Women's Wages and Female Labor Force Participation

Based on Labor Supply Theory, an individual's decision to work is influenced by the rewards received from such activity (Chiappori, 1992; Lazear, 2018; Allon et al., 2023). However, gender discrimination in wage structures often results in women receiving lower wages than men, which, in turn, decreases their motivation to participate in the labor force. Research by Cutillo and Centra (2017) shows that wage inequality affects women's work preferences. When wage levels are not commensurate with workload and social costs, women's labor force participation tends to decline. Accordingly, the proposed hypothesis is:

H3: Women's wages have a negative effect on female labor force participation in ASEAN.

Women's Involvement in Parliament and Female Labor Force Participation

According to Institutional Theory, women's representation in legislative bodies plays a strategic role in promoting the formulation of policies that favor women (Hessami & da Fonseca, 2020; Shim, 2022). However, in some cases, such involvement is merely symbolic and does not significantly improve women's access to employment. Espírito-Santo et al. (2020) argue that the presence of women in parliament does not necessarily reflect effectiveness in decision-making that supports women's empowerment. Therefore, the proposed hypothesis is:

H4: Women's involvement in parliament has a negative effect on female labor force participation in ASEAN.

Female Fertility Rate and Female Labor Force Participation

Demographic Transition Theory explains that high fertility rates negatively correlate with women's labor force participation as a result of increased childcare responsibilities and domestic work (Soares & Falcao, 2008; Bloom et al., 2009). Women with a large number of children face constraints in time, energy, and access to formal employment. Studies by Kurniasari et al. (2024) and Marjanović et al. (2024) indicate that high birth rates pose a barrier to women's active engagement in the labor market. Therefore, the proposed hypothesis is:

H5: Female fertility rate has a negative effect on female labor force participation in ASEAN.

Maternal Mortality Rate and Female Labor Force Participation

Maternal mortality reflects the poor quality of reproductive health services available to women. Based on Gender and Development Theory, poor reproductive health conditions hinder women's ability to actively participate in the workforce (Gammage et al., 2020; Finlay, 2021). High risks of death during childbirth indicate limited access to healthcare facilities and social protection, which ultimately reduces women's opportunities for economic participation. Al Faizah et al. (2020) also found a negative correlation between maternal mortality and women's labor market participation. Hence, the proposed hypothesis is:

H6: Maternal mortality rate has a negative effect on female labor force participation in ASEAN.

METHOD

This research is a quantitative study utilizing secondary data from various official sources, including World Bank Indicators and the International Labour Organization (ILO). The data spans the period from 2011 to 2023, which represents over a decade of social and economic dynamics in the ASEAN region. This timeframe includes significant events such as the implementation of the ASEAN Community Blueprint 2015, the economic crisis caused by the COVID-19 pandemic, and the subsequent recovery phase. Therefore, this period is relevant for observing trends in female labor force participation in the context of structural changes and policy shifts.

The study incorporates data from the ten ASEAN member countries: Indonesia, Malaysia, Singapore, Thailand, the Philippines, Vietnam, Brunei Darussalam, Laos, Myanmar, and Cambodia. A panel data structure is employed due to its ability to capture inter-country heterogeneity as well as the temporal dynamics of the research variables (Hsiao, 2022). This combination of cross-sectional data (10 countries) and time-series data (13 years) allows for a more comprehensive analysis of the relationship between women's empowerment and their participation in the labor force. The selection of ASEAN countries was based on the availability of consistent data throughout the observation period, as well as the diversity in socio-economic characteristics and women's empowerment policies implemented by each country. Consequently, the total sample consists of 130 observations, derived from the combination of ten countries and thirteen years of observation within the panel data framework.

The variables in this study include women's empowerment (measured by women's education, women's health, women's wages, and women's representation in parliament), women's reproductive health as a supporting variable (measured by the female fertility rate and maternal mortality rate), and women's labor force participation. Details of the variables are presented in Table 1.

Table 1. Research Variables

Indicators	Operational Definitions	Measurement	Source
Women's Empowerment	Women aged 25 and over who have completed at least lower secondary education cumulatively	Percent (%)	WDI
	Women's life expectancy at birth	Years	WDI
	Female workers receiving wages and salaries as a share of total female workers, according to ILO	Percent (%)	WDI
	Proportion of seats held by women in national parliaments	Percent (%)	WDI

Indicators	Operational Definitions	Measurement	Source
Reproductive Health	Average number of children a woman would have during her reproductive years	Persons	WDI
	Maternal mortality ratio per 100,000 live births in a given period	Persons	WDI
Labor Force	Female labor force participation rate as a percentage of the total population aged 15–64, according to ILO	Percent (%)	WDI

Note: WDI = World Development Indicators (World Bank); ILO = International Labor Organization.

Source: Compiled by the authors (2025)

The econometric model in this study is analyzed using three main approaches: Pooled Ordinary Least Squares (POLS), Fixed Effects Model (FEM), and Random Effects Model (REM) (Baltagi & Baltagi, 2008). To determine the most appropriate model, several specification tests are conducted: the Chow Test compares POLS with FEM, while the Hausman Test assesses whether FEM is more suitable than REM (Ahn & Low, 1996). If the Chow Test results indicate that FEM is superior to POLS, and the Hausman Test supports FEM over REM, then the FEM model will be employed. Conversely, if REM is deemed more appropriate, the estimation will utilize this model to achieve more efficient and unbiased results. The econometric model used in this study is formulated as follows:

$$\mathrm{FLFPR}_{it} = \alpha_0 + \alpha_1 \mathrm{EDUC}_{it} + \alpha_2 \mathrm{HEALTH}_{it} + \alpha_3 \mathrm{WAS}_{it} + \alpha_4 \mathrm{POLITIC}_{it} + \alpha_5 \mathrm{FERTILITY}_{it} + \alpha_6 \mathrm{MMR}_{it} + e_{it} \quad \text{.....(1)}$$

Where:

FLFPR	:	Female Labor Force Participation Rate (percent)
EDUC	:	Women's Education (percent)
HEALTH	:	Women's Health (years)
WAS	:	Female Wages and Salaries (percent)
POLITIC	:	Women's Representation in National Parliament (percent)
FERTILITY	:	Female Fertility Rate (births per woman)
MMR	:	Maternal Mortality Ratio (deaths per 100,000 live births)
α_0	:	Constant of Equation (1)
$\alpha_1 - \alpha_6$	:	Coefficients of respective independent variables in Equation (1)
i	:	1–10 (cross-section across ASEAN countries)
t	:	1–13 (time series covering the 2011–2023 period)

The econometric model presented above is a modification of those proposed by Lv and Yang (2018), Al Faizah et al. (2020, 2022), Rahmawan and Aisyah (2024), and Sari and Aisyah (2024). To validate the model, an F-test is conducted to determine whether all independent variables jointly influence the dependent variable. The null hypothesis (H0) for the F-test posits that women's empowerment—encompassing education, health, wages, and representation in parliament—along with reproductive health factors, specifically fertility and maternal mortality, does not collectively affect the female labor force participation rate. The null hypothesis is rejected if the F-statistic probability is less than α (0.01).

Subsequently, a t-test is performed to assess whether each independent variable individually affects the dependent variable, holding all other independent variables constant. The null hypothesis (H0) for the t-test asserts that βi = 0 (i = 1...4), indicating that each component of women's empowerment (education, health, wages, and political participation) has no effect on female labor force participation. Additionally, βi = 0 (i = 5 and 6) suggests that reproductive health factors (fertility and maternal mortality) also have no effect.

The alternative hypothesis (HA) states that βi > 0 (i = 1...4), indicating that each component of women's empowerment positively affects female labor force participation, while βi < 0 (i = 5 and 6) suggests that reproductive health factors negatively affect female labor force participation.

RESULT AND DISCUSSION

Findings

The estimation of the panel data regression model is conducted using three main approaches: Pooled Ordinary Least Squares (POLS), Fixed Effects Model (FEM), and Random Effects Model (REM). The results of these three models are presented in Table 2. After obtaining the regression results from POLS, FEM, and REM, the next step is to conduct tests to identify the most appropriate panel data estimation model.

Table 2. Regression Results of POLS, FEM, and REM

Female Labor Force Participation Rate (FLFPR)			
Variables	**Coefficient**		
	POLS	**FEM**	**REM**
C	− 106.079	47.409	35.367
EDUC	− 0.092	0.037	0.037
HEALTH	2.075	0.424	0.536
WAS	− 0.026	− 0.357	− 0.294
POLITIC	0.117	− 0.114	− 0.121
FERTILITY	0.733	− 2.821	− 2.681
MMR	0.091	0.029	0.033
Adj. R^2	0.995	0.999	0.174
Prob. F-statistic	0.000	0.000	0.000
Chow Test Prob. = 0.000 Hausman Test Prob. = 0.250			

Source: Processed data (2025)

The first test conducted is the Chow Test, which aims to select between the Pooled Ordinary Least Squares (POLS) and Fixed Effects Model (FEM). According to the test criteria, if the F-statistic probability value is greater than α (0.01), the null hypothesis (H_0) is not rejected, indicating that POLS is more appropriate. Conversely, if the F-statistic probability is less than α, H_0 is rejected, and FEM is selected. The results of the Chow Test presented in Table 2 show a cross-section F probability of 0.000 (p < 0.01), leading to the rejection of H_0. Therefore, FEM is a more suitable model than POLS.

Next, the Hausman Test is conducted to determine the better model between the Random Effects Model (REM) and FEM. If the chi-square probability is greater than α (0.01), H_0 is not rejected, indicating that REM is more appropriate. However, if the chi-square probability is

less than α, H_0 is rejected, and FEM is selected. Based on the Hausman Test result in Table 2, the probability value is 0.250 (p > 0.01), so H_0 is not rejected. This indicates that REM is the more appropriate model for estimating the panel data in this study.

Although the R-squared value of the Random Effects Model (REM) is relatively lower than that of the Fixed Effects Model (FEM), the REM remains justifiable based on the Hausman Test (p-value = 0.250 > 0.01). This result indicates that the assumption of no correlation between individual effects and independent variables is met. Furthermore, the REM is statistically more efficient under these conditions and can capture random cross-sectional unit variations that are unobservable. Therefore, despite its lower goodness-of-fit, the REM is selected based on diagnostic test results that support its methodological validity.

Table 3. Selected Estimation Model – Random Effects Model (REM)

$FLFPR_{it} = 35.367 + {}^{**}0.037EDUC_{it} + {}^{***}0.536HEALTH_{it} - {}^{*}0.294WAS_{it} - {}^{***}0.121POLITIC_{it} - {}^{**}2.681FERTILITY_{it} + {}^{*}0.033MMR_{it}$
Adj. R^2 = 0.174; F-stat = 5.984; Prob. F-stat = 0.000

Note: * Significant at α = 0.01. ** Significant at α = 0.05. *** Significant at α = 0.1.

Source: Processed data (2025)

The F-test examines whether all independent variables simultaneously affect the dependent variable. Based on the results of the random effects model (REM) estimation, the F-statistic probability value is 0.000, which is less than the significance level (α = 0.01). Therefore, the null hypothesis (H_0) is rejected. This indicates that the variables of female life expectancy (HEALTH), female education (EDUC), female wages (WAS), female fertility rate (FERTILITY), political participation (POLITIC), and maternal mortality rate (MMR) have a significant simultaneous effect on the female labor force participation rate (FLFPR). The coefficient of determination (R^2) of 0.174 suggests that 17.4% of the variation in FLFPR is explained by these six independent variables, while the remaining 82.6% is attributable to factors outside the regression model.

The t-test evaluates the partial effect of each independent variable on the dependent variable, assuming that other independent variables are held constant. This test compares the t-statistic probability value to the significance level (α) to determine whether each independent variable individually affects the dependent variable. The results of the t-test for the REM model are presented in Table 4.

Table 4. t-Test Result

Female Labor Force Participation Rate (FLFPR)			
Variables	**Coefficient**	**Prob.**	**Interpretation**
EDUC	$\beta_1 = 0.037$	0.045	EDUC has a positive effect α = 0.05
HEALTH	$\beta_2 = 0.536$	0.077	HEALTH has a positive effect α = 0.1
WAS	$\beta_3 = -0.294$	0.000	WAS has a negative effect α = 0.01
POLITIC	$\beta_4 = -0.121$	0.050	POLITIC has a negative effect α = 0.1
FERTILITY	$\beta_5 = -2.681$	0.035	FERTILITY has a negative effect α = 0.05
MMR	$\beta_6 = 0.033$	0.005	MMR has a positive effect α = 0.01

Source: Processed data (2025)

Table 4 indicates that the variables of female wages (WAS), female fertility (FERTILITY), and political participation (POLITIC) negatively affect the female labor force participation rate (FLFPR). Conversely, female life expectancy (HEALTH), education (EDUC), and maternal mortality (MMR) positively influence FLFPR. The coefficient for HEALTH is 0.536 with a probability of 0.077 (near significant at 10%), suggesting that an increase in female life

expectancy by one year may raise FLFPR by 0.536 percent. This finding implies that women with longer life expectancy are more likely to adopt a long-term perspective on labor market engagement. The EDUC coefficient of 0.037, with a significance level of 0.045, suggests that a 1% increase in female education contributes to a 0.037% increase in labor force participation. This reflects how education enhances women's skills, knowledge, and confidence, facilitating better access to the labor market and improving their chances of obtaining decent, productive employment. The WAS coefficient of −0.294, with a significance level of 0.000, indicates that a 1% increase in female wages reduces FLFPR by 0.294%. This may occur because higher-paid women might feel financially secure enough to exit the workforce or prioritize domestic roles. The FERTILITY coefficient of −2.681, with a significance of 0.035, shows that an increase in fertility reduces FLFPR by 2.681%. This aligns with the perspective that reproductive and childcare responsibilities limit women's time and opportunities for economic activity. The POLITIC coefficient of −0.121, with a probability of 0.050 (significant at 10%), indicates a paradoxical negative correlation between female political participation and labor force engagement. This suggests that political involvement has yet to translate into economic empowerment, or that female representation in politics remains ineffective in advocating for labor issues. Finally, the MMR coefficient of 0.033, with a significance level of 0.005, suggests a positive correlation between maternal mortality and FLFPR. This may occur because women are motivated to work to compensate for the economic loss caused by the death of a family member or to meet rising household needs.

Discussion

This study reveals that women's wages negatively affect their labor force participation rate. This finding indicates that an increase in income does not automatically encourage women to enter or remain in the labor market. If wage increases are not accompanied by improved working conditions or policies that favor women, the appeal of entering the workforce diminishes. Amid persistent social expectations that women should play a dominant domestic role, the resulting double burden often drives them to withdraw from economic activities. Thus, financial incentives alone are insufficient to boost women's labor force involvement without accompanying structural reforms. This result differs from the findings of Murialti et al. (2022), which show a positive correlation between wages and women's labor force participation. The discrepancy underscores that the impact of wages is significantly influenced by prevailing social norms and institutional structures within a region.

The next finding shows that the fertility rate negatively affects women's labor force participation. High birth rates limit women's mobility in the workforce due to the increased burden of childcare. Women's decisions to exit the labor market are often not driven by a lack of economic motivation but rather by the time and energy constraints associated with reproductive roles. In countries lacking supportive infrastructure such as childcare services, flexible working hours, or childcare subsidies, women face structural barriers that hinder their labor market involvement. This finding aligns with studies by Altaf (2019), Kurniasari et al. (2024), and Marjanović et al. (2024), which emphasize that the unequal distribution of caregiving responsibilities reduces women's capacity to work outside the home.

Surprisingly, women's involvement in political institutions demonstrates a negative effect on women's labor force participation. This suggests that the presence of women in politics has yet to translate into policies that support women's economic interests. Symbolic representation without substantial political power risks weakening the gender equality agenda. Many women in parliament lack the authority or commitment needed to advocate for affirmative policies. Consequently, their presence does not significantly impact labor market structures. This finding contradicts studies by Lv and Yang (2018) and Rahmawan and Aisyah (2024), which report a positive link between political involvement and women's labor force participation. The difference highlights that the effectiveness of political representation is heavily determined by institutional quality, political culture, and the participatory space available to women.

Conversely, women's life expectancy and education levels positively influence their labor force participation. These findings support the hypothesis that healthy and educated women are more likely to engage in the formal labor sector, especially in high-value-added jobs. Education not only opens access to the labor market but also strengthens women's capacity to make crucial life decisions, such as delaying marriage or childbirth. Educated women are also better equipped to negotiate their social and economic roles more equitably. Therefore, investment in women's health and education is a strategic step toward achieving sustainable and equitable economic development. This aligns with the findings of Bhalotra and Fernández (2021) and Klasen et al. (2021), which confirm that enhancing the quality of female human capital fosters greater participation in the formal labor sector.

The most unexpected finding in this study is the positive correlation between the maternal mortality rate (MMR) and women's labor force participation. Normatively, a high MMR reflects a weak maternal and reproductive health system, which should reduce women's economic participation. However, this contradictory result reveals a more complex social dynamic. In developing countries with inadequate social protection systems, high maternal mortality often drives women into the labor market as a form of survival labor participation (Al Faizah et al., 2020). The loss of a spouse or lack of state economic support compels women to assume the role of family breadwinner. A similar phenomenon is observed in several Southeast Asian countries like Laos and Cambodia, where high female labor force participation does not signify empowerment but rather a response to economic pressure. This finding contrasts with Al Faizah et al. (2020), who found a negative impact of MMR on women's labor participation. The difference suggests that women's responses to health crises are deeply influenced by social norms, social protection systems, and the flexibility of gender roles within society.

Based on the overall findings, this study underscores the importance of formulating comprehensive and gender-sensitive labor policies. The government needs to integrate wage policies with improvements in working conditions, flexible work arrangements, and support services such as childcare (Van der Lippe et al., 2019). Furthermore, women's political representation must focus on strengthening policy substance—not merely symbolic presence—through leadership training, mentoring programs, and affirmative actions to position women in strategic roles. Long-term investment in women's education and health must be a foundational element of inclusive and equitable economic development strategies. Simultaneously, reforming social protection systems to support women is crucial so that their labor market participation is no longer driven by household or economic crises. Policies grounded in social realities and women's actual needs will be more effective in enhancing their contributions to national development.

CONCLUSION

Women's empowerment is a crucial element in promoting inclusive and sustainable economic growth in the ASEAN region. This study aims to analyze the influence of various dimensions of women's empowerment—including education, health, wage levels, and political representation—as well as aspects of reproductive health, specifically fertility rates and maternal mortality, on female labor force participation in ten ASEAN countries.

The findings reveal that women's education and health (measured by life expectancy) positively impact female labor force participation. Conversely, wage levels, fertility rates, and women's political representation exhibit a negative effect. Interestingly, maternal mortality shows a counterintuitive positive effect on female labor force participation. These findings suggest that women's participation in the labor market in the ASEAN region is not solely a reflection of empowerment but is often a response to structural pressures such as household responsibilities and economic hardship.

This study makes an important contribution to the formulation of more gender-responsive policies by emphasizing the urgency of structural interventions in education, health, and the reform of social protection and labor systems. Future research should focus on qualitative analyses of cultural and institutional factors in each ASEAN country, as well as the exploration

of the role of affirmative policies, technology, and digitalization in strengthening sustainable women's economic empowerment.

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