

EMPLOYMENT ABSORPTION IN INDONESIA: REGIONAL HETEROGENEITY AND THE TRANSMISSION MECHANISMS OF WAGES AND GOVERNMENT EXPENDITURE

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Abstract

Employment creation remains an important challenge in Indonesia due to differences in labor market conditions across regions of the country. This study examines whether wages and government expenditure affect employment differently in Western and Eastern Indonesia. Using balanced panel data from 33 provinces from 2010 to 2019, separate simultaneous equation models are estimated for 20 provinces in Western Indonesia and 13 provinces in Eastern Indonesia. The analysis considers investment, human capital, and economic growth as transmission mechanisms that link wages and government expenditure to employment absorption. The results show that wages do not have a significant direct effect on employment absorption in both regions. However, wages significantly increase investment and human capital in both Western and Eastern Indonesia. Investment contributes positively to economic growth only in Western Indonesia, but does not significantly increase employment absorption in either region. Human capital, measured by average years of schooling, has a significant negative relationship with employment absorption in both regions, indicating a mismatch between educational attainment and labor market demand. Government expenditure significantly increases investment in both regions but does not have a significant direct effect on employment absorption. Likewise, its effects on investment and economic growth are not significant. The findings also show that the mechanisms influencing employment differ across regions, with investment playing a greater role in Western Indonesia, while human capital remains an important factor in both regions. These findings suggest that employment policies should consider regional economic differences and focus on strengthening investment, human capital, and labor market conditions to improve employment absorption in Indonesia.

Keywords: Employment Absorption; Wages; Government Expenditure; Regional Disparities; Simultaneous Equation Model; Indonesia.

1. INTRODUCTION

Employment creation is a central objective of economic development because it improves household income, reduces poverty and promotes inclusive economic growth. As economies expand, increases in production are generally expected to generate sufficient employment opportunities to absorb a growing labor force. Nevertheless, many developing countries continue to experience persistent unemployment and unequal employment opportunities owing to structural disparities in regional development. Differences in infrastructure, educational attainment, institutional capacity, and productive activities often lead to uneven labor market

performance across regions (Lubell, 2026). Indonesia provides an important context for examining these disparities because its economic development has historically been concentrated in Western Indonesia, particularly on the islands of Java and Sumatra, whereas many provinces in Eastern Indonesia continue to lag behind. Manufacturing activities, financial services, and transportation infrastructure are more developed in the western region, whereas the eastern provinces remain more dependent on primary industries and natural resources (World Bank, 2020; Mendez, 2023). These differences have resulted in unequal productivity, investment, and labor demand and employment opportunities across regions.

Regional disparities also influence the mobility of labor. Workers tend to migrate to regions that offer higher wages and better employment prospects (Jiang, 2025). Although migration improves labor allocation, it may simultaneously intensify labor market competition in destination regions and reduce the availability of productive workers in less-developed areas. Consequently, labor market and fiscal policies may generate different employment outcomes, depending on regional economic conditions.

Among the policy instruments affecting employment creation, wage policy and government expenditure have received considerable attention in the literature. Wage increases may discourage labor demand by raising production costs, as suggested by neoclassical theory, whereas efficiency wage theory argues that higher wages improve worker productivity and support firms' long-term performance (Hu, 2023; Khemissi and Chebbi, 2022). Likewise, productive government expenditure on infrastructure, education, and public services can stimulate private investment, enhance labor productivity, and expand employment opportunities through fiscal-multiplier effects (Nurkodri et al., 2024; Bodykova et al., 2025). However, the effectiveness of these policies is likely to depend on regional economic structures and their institutional capacity.

The effects of wage and fiscal policies on employment are transmitted through several intermediate channels. Investment expands productive capacity, human capital improves workers' productivity and adaptability, and economic growth creates additional labor demand, although the magnitude of these effects depends on the composition of economic activities and the technology employed (Bodykova et al., 2025; Nurkodri et al., 2024). Therefore, focusing solely on the direct effects of wages and government expenditure may overlook the important mechanisms through which these policies influence employment absorption.

Previous studies have identified wages, government expenditure, investment, human capital, and economic growth as important employment determinants. However, most studies have examined these relationships separately using conventional panel regression models that estimate the average policy effects across regions (Amri et al., 2023; Jaya and Kholilah, 2020). Limited attention has been paid to the simultaneous interactions among these variables or to whether their effects differ across regions characterized by distinct levels of economic development. This limitation is particularly relevant in Indonesia, where substantial disparities persist in fiscal capacity, infrastructure, labor productivity, and labor market conditions (Hadaina et al., 2025; Rijoly et al., 2025).

Accordingly, this study investigates the direct and indirect effects of wages and government expenditure on employment absorption through investment, human capital, and economic growth by conducting separate analyses for Western and Eastern Indonesia. Using balanced panel data from 33 Indonesian provinces from 2010 to 2019, this study estimates two simultaneous equation models, one for Western Indonesia and the other for Eastern Indonesia, to identify region-specific transmission mechanisms. This approach enables a comparison of how labor market and fiscal policies operate across regions with different economic structures and levels of development. The findings contribute to the literature by providing empirical evidence of the distinct pathways through which wages and government expenditure influence employment absorption in each region, thereby offering a stronger basis for designing place-based labor market and fiscal policies in Indonesia.

2. LITERATURE REVIEW

2.1 Employment Absorption and Regional Labor Market

Employment absorption refers to an economy's ability to create productive jobs capable of accommodating the available labor force and is widely regarded as a key indicator of inclusive economic development. Keynes (1936) argued that employment is primarily determined by aggregate demand, rather than wage flexibility. Consequently, inadequate aggregate demand may prevent labor markets from reaching full employment, thereby justifying government intervention to stimulate economic activity. This view contrasts with the neoclassical perspective, which assumes that labor market equilibrium can be restored through wage adjustments (Snowdon and Vane, 2005).

Labor demand theory further explains that employment is a derived demand because firms employ workers only to produce goods and services that are in demand in the market (McConnell et al., 2021). Accordingly, employment is influenced not only by labor costs but also by productivity, investment, technological progress, and economic activity.

Regional labor markets rarely operate under homogenous conditions. Differences in industrial concentration, infrastructure, institutional quality, and economic development create substantial variations in labor demand across regions (Pfaff and Hurler, 1983). In Indonesia, these disparities are particularly evident between western and eastern Indonesia. Western Indonesia accommodates a larger share of manufacturing activities, infrastructure investment, and formal employment, whereas Eastern Indonesia remains more dependent on primary sectors and resource-based industries (World Bank, 2020). These structural differences suggest that employment dynamics should be examined within their respective regional contexts rather than assuming identical labor market behaviors across provinces.

2.2 Wage Policy, Government Expenditure, and Employment

Minimum wage policy remains one of the most debated issues in labor economics research. The neoclassical model predicts that higher minimum wages increase labor costs and reduce firms' demand for labor (Yan and Ma, 2024). Similarly, wage rigidity theory argues that wages above the market-clearing level may generate involuntary unemployment because firms reduce

employment in response to rising production costs (Ellington et al., 2023). However, alternative perspectives provide different predictions. The efficiency wage theory suggests that higher wages improve worker productivity, reduce labor turnover, and enhance organizational performance, thereby potentially supporting employment in the long run (Schlicht, 2016). Likewise, Krugman (1994) argues that migration decisions are frequently influenced by nominal rather than real wages, implying that workers tend to relocate to regions offering higher nominal earnings despite differences in living costs. Consequently, the employment effects of wage policies are likely to vary across regions characterized by different economic structures and labor market conditions (Pritchett and Hani, 2020).

Government expenditure plays a fundamental role in employment creation. Keynesian theory emphasizes that productive public expenditure stimulates aggregate demand and generates multiplier effects that increase output and labor demand (Palley, 2022).

Public investment in infrastructure lowers production costs, improves connectivity, and encourages private investment (Matsumura and Yamagishi, 2018), whereas expenditure on education and public services enhances labor productivity through human capital development (Bodykova et al., 2025).

Nevertheless, empirical findings remain mixed, indicating that the employment effects of government expenditure depend on expenditure composition, institutional quality, and regional economic conditions (Adeem et al., 2019; Brückner, 2012; Isiaka, 2020).

2.3 Investment, Human Capital, and Economic Growth As Transmission Mechanisms

Investment, human capital, and economic growth constitute important channels through which labor market and fiscal policies influence employment. Human capital theory views education, training, and skills as productive investments that increase workers' productivity and long-term earnings (Bulina et al., 2020). Higher educational attainment also improves workers' adaptability to technological changes and increases employability (Albarico and Galigao, 2024).

Investment contributes to employment by expanding the productive capacity and stimulating aggregate demand. The Harrod–Domar model emphasizes the role of investment in economic expansion, whereas Lewis' dual-sector model explains how capital accumulation facilitates the movement of labor from low-productivity agriculture to higher-productivity modern sectors (Villamil et al., 2020).

Economic growth is another important transmission mechanism. Okun's Law suggests that higher economic growth is generally associated with lower unemployment (Lim et al., 2019). However, employment gains depend on the nature of that growth. Growth driven primarily by capital-intensive production may increase output without generating a proportional employment expansion. Therefore, investment, human capital, and economic growth should be viewed as interconnected mechanisms through which labor market and fiscal policies affect employment absorption (Olamade, 2020).

2.4 Research Gap

Previous studies have consistently identified wages, government expenditure, investment, human capital, and economic growth as important determinants of employment absorption. However, these variables have generally been examined independently using conventional regression techniques that primarily focus on their direct effects (Amri et al., 2023). Consequently, limited attention has been paid to the transmission mechanisms through which wage and fiscal policies influence employment via investment, human capital, and economic growth.

The second limitation concerns the regional analysis. Most empirical studies estimate a single national model that implicitly assumes homogeneous relationships across regions, despite substantial differences in industrial structure, infrastructure, fiscal capacity, and labor market development within developing countries such as Indonesia (Hadaina et al., 2025). Such an approach may conceal region-specific policy responses and reduce the relevance of the policy recommendations.

Furthermore, studies comparing Western and Eastern Indonesia remain limited. Existing research generally discusses regional disparities descriptively or estimates average national effects without examining whether the mechanisms linking wages and government expenditure to employment differ across the two regions (Magida et al., 2025; Rijoly et al., 2025). Consequently, empirical evidence regarding region-specific transmission mechanisms remains scarce.

Accordingly, this study addresses these gaps by estimating separate simultaneous equation models for Western and Eastern Indonesia. Rather than assuming homogeneous relationships, this study investigates how wages and government expenditure influence employment absorption directly and indirectly through investment, human capital, and economic growth within each region. This approach provides a more comprehensive understanding of region-specific transmission mechanisms and offers stronger empirical evidence for developing place-based labor market and fiscal policies in Indonesia.

3. CONCEPTUAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

3.1 Conceptual Framework

Employment absorption is influenced by the interaction of labor market conditions, fiscal policy, investment, human capital and economic growth. According to the labor demand theory, employment is a derived demand because firms hire workers only when labor contributes to the production of goods and services demanded in the market (McConnell et al., 2021). Consequently, labor demand is determined not only by labor costs but also by productivity, investment, technological progress, and overall economic conditions.

Wages are one of the primary production costs faced by firms. The neoclassical labor demand model predicts that higher wages increase production costs and reduce firms' demand for labor (Yan and Ma, 2024).

Similarly, wage rigidity theory argues that wages above the market-clearing level may lead firms to reduce their employment (Ellington et al., 2023). However, the Efficiency Wage Theory suggests that higher wages improve worker productivity, reduce labor turnover, and strengthen firm performance, thereby supporting employment creation in the long run (Schlicht, 2016). In addition, Krugman (1994) argues that workers frequently respond to nominal rather than real wages (money illusion), implying that wage differentials may influence labor mobility and market outcomes across regions (Pritchett and Hani, 2020).

Government expenditure is another important policy instrument that influences employment. Keynesian theory argues that productive public expenditure stimulates aggregate demand and generates multiplier effects that increase output and labor demand (Palley, 2022).

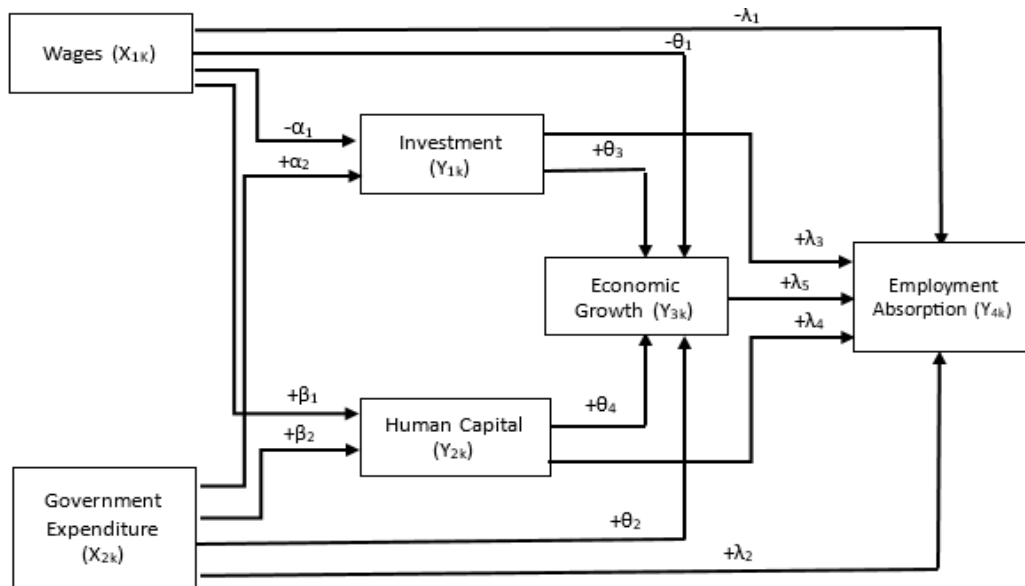
Public investment in infrastructure improves market accessibility, reduces production costs, and encourages private investment (Matsumura and Yamagishi, 2018). Moreover, government expenditure contributes to human capital development through better education and public services, thereby enhancing labor productivity and employability (Bodykova et al., 2025).

The effects of wages and government expenditure are expected to operate through three interconnected transmission mechanisms: investment, human capital, and economic growth. According to the Harrod–Domar growth model, investment expands productive capacity while simultaneously stimulating aggregate demand, creating additional employment opportunities. Lewis' dual-sector model further explains that capital accumulation facilitates the transfer of labor from traditional low-productivity sectors to more productive, modern sectors (Villamil et al., 2020).

Human Capital Theory likewise argues that education, training, and skills enhance workers' productivity and employability, while improvements in educational quality strengthen labor market performance and long-term economic growth (Bulina et al., 2020; Albarico and Galigao, 2024). Furthermore, Okun's Law suggests that economic growth generally increases employment opportunities by expanding productive activities, although the employment intensity of growth depends on the underlying production structure (Lim et al., 2019; Olamide, 2020). Accordingly, investment, human capital, and economic growth are treated as endogenous transmission mechanisms linking labor market and fiscal policies to employment absorption.

Indonesia exhibits considerable regional disparities in industrial development, infrastructure, investment, labor productivity, and human capital between Western and Eastern Indonesia (World Bank, 2020; Mendez, 2023). These differences suggest that the mechanisms through which wages and government expenditure affect employment absorption may vary by region.

Rather than assuming homogeneous relationships, this study estimates separate simultaneous equation models for Western and Eastern Indonesia to identify region-specific transmission mechanisms. This approach enables a more comprehensive understanding of how labor market and fiscal policies influence employment absorption under different regional economic conditions. The conceptual relationships among the variables are shown in Figure 1.



Note: k for West Indonesia or Eastern Indonesia.

Figure 1: Conceptual Framework

3.2 Hypothesis

- H1: Wages are expected to have a negative direct effect on employment absorption and indirect effects through investment, human capital, and economic growth in both Western and Eastern Indonesia.
- H2: Government expenditure is expected to have a positive direct effect on employment absorption and indirect effects through investment, human capital, and economic growth in both Western and Eastern Indonesia.

4. METHODOLOGY

4.1 Research Design

This study employed a quantitative approach using balanced panel data from 33 Indonesian provinces from 2010 to 2019. To capture regional differences in employment dynamics, the analysis was conducted separately for 20 provinces in Western Indonesia and 13 provinces in Eastern Indonesia. This study used secondary data obtained from Statistics Indonesia (BPS) and the Directorate General of Fiscal Balance (DJPk).

The variables included employment absorption, provincial minimum wages, government expenditure, investment, human capital, and economic growth. Employment absorption was measured as the proportion of employed workers in the labor force. Wages were represented by provincial minimum wages, and government expenditure was measured using provincial government expenditure. Investment was proxied by realized domestic and foreign direct investment. Human capital was measured by the average years of schooling (AYS), reflecting

the accumulated educational attainment of the workforce, whereas economic growth was measured using the annual growth rate of the Gross Regional Domestic Product.

4.2 Data and Variables

To examine both the direct and indirect effects of wages and government expenditure on employment absorption, this study estimated separate simultaneous equation models for Western and Eastern Indonesia. Investment, human capital, economic growth, and employment absorption were considered endogenous variables.

The structural equations are as follows:

$$\begin{aligned} Y_{2it} &= \beta_0 + \beta_1 \ln X_{1it} + \beta_2 \ln X_{2it} + \varepsilon_{2it} \\ Y_{3it} &= \theta_0 + \theta_1 \ln X_{1it} + \theta_2 \ln X_{2it} + \theta_3 \ln Y_{1it} + \theta_4 Y_{2it} + \varepsilon_{3it} \\ Y_{4it} &= \lambda_0 + \lambda_1 \ln X_{1it} + \lambda_2 \ln X_{2it} + \lambda_3 \ln Y_{1it} + \lambda_4 Y_{2it} + \lambda_5 Y_{3it} + \varepsilon_{4it} \end{aligned}$$

where

- Y_1 = investment
- Y_2 = human capital
- Y_3 = economic growth
- Y_4 = employment absorption
- X_1 = wages
- X_2 = government expenditure

The model was estimated separately for Western and Eastern Indonesia to identify region-specific transmission mechanisms linking wages and government expenditure to employment absorption through investment, human capital, and economic growth.

5. RESULTS AND DISCUSSION

5.1 Estimation Results

Table 1 presents the estimation results of the simultaneous equation model for Western and Eastern Indonesia. The model was estimated separately to identify regional differences in the relationships between wages, government expenditure, investment, human capital, economic growth, and employment absorption. For Western Indonesia, the investment equation shows relatively strong explanatory power ($R^2 = 0.627$), indicating that approximately 62.7% of the variation in investment is explained by wages and government expenditure. Both variables positively and significantly affected investment ($\beta = 0.528$, $p < 0.01$; $\beta = 1.643$, $p < 0.01$). In the human capital equation, wages have a positive and significant effect ($\beta = 14.544$, $p < 0.01$), whereas government expenditure is insignificant. The economic growth equation demonstrates that investment positively affects economic growth ($\beta = 0.346$, $p < 0.01$), whereas wages and government expenditure exert significant negative effects. Human capital does not significantly influence economic growth.

Finally, in the employment equation, investment ($\beta = -0.374$, $p < 0.05$) and human capital ($\beta = -0.101$, $p < 0.01$) significantly affect employment absorption, whereas wages, government expenditure, and economic growth are not.

In Eastern Indonesia, the investment equation explains 28.6% of the variation in investment ($R^2 = 0.286$), and Similar to Western Indonesia, both wages ($\beta = 0.877$, $p < 0.01$) and government expenditure ($\beta = 1.085$, $p < 0.01$) significantly increase investment. In contrast to Western Indonesia, both wages and government expenditure significantly affect human capital, with wages showing a positive effect ($\beta = 14.712$, $p < 0.01$) and government expenditure showing a negative effect ($\beta = -2.460$, $p < 0.05$). However, none of the explanatory variables significantly influenced economic growth in Eastern Indonesia. Likewise, in the employment equation, only human capital significantly affects employment absorption ($\beta = -0.112$, $p < 0.01$), while investment, wages, government expenditure, and economic growth are insignificant.

Overall, the estimation results indicate substantial regional differences in the transmission mechanisms linking wages and government expenditure to employment absorption. In Western Indonesia, investment plays an important role in transmitting policy effects to economic growth and employment absorption, whereas in Eastern Indonesia, human capital is the only significant determinant of employment absorption.

Table I: Simultaneous Equation Estimates For Western Indonesia and Eastern Indonesia

Relationship	Western Coef.	Eastern Coef.
Wage → Investment	0.528***	0.877***
Government expenditure → Investment	1.643***	1.085***
Wage → Human capital	14.544***	14.712***
Government expenditure → Human capital	ns	-2.460**
Investment → Economic growth	0.346***	ns
Human capital → Economic growth	ns	ns
Wage → Economic growth	-1.422***	ns
Government expenditure → Economic growth	-0.767***	ns
Investment → Employment	-0.374**	ns
Human capital → Employment	-0.101***	-0.112***
Economic growth → Employment	ns	ns
Wage → Employment	ns	ns
Government expenditure → Employment	ns	ns

Notes: The reported values are estimated coefficients from the simultaneous equation model.

*** indicates statistical significance at the 5% level ($p < 0.05$).

Western Indonesia (20 provinces; $N = 200$) and Eastern Indonesia (13 provinces; $N = 130$).

Wages, government expenditure, and investment are expressed in natural logarithms, human capital is measured by average years of schooling, and economic growth and employment absorption are expressed as percentages.

Source: Authors' calculations based on the BPS and DJPK data (2010–2019)

5.2 Effects of Wages on Employment Absorption

The empirical results indicate that wages do not exert a statistically significant direct effect on employment absorption in either western or eastern Indonesia. These findings suggest that provincial minimum wage adjustments during the study period were not the primary determinants of firms' employment decisions. Instead, firms appear to have adapted to increasing labor costs through improvements in productivity and operational efficiency, rather than reducing employment. This finding is consistent with evidence showing that increases in Indonesia's minimum wage raised workers' earnings without significantly reducing employment because firms could adjust production processes and absorb higher labor costs (Basyith et al., 2022). Similar evidence from Indonesia's manufacturing sector demonstrates that minimum wage increases improved workers' earnings while having no adverse effect on employment across firms of different sizes (Merdikawati and Izzati, 2026). These results imply that labor demand during 2010–2019 was influenced more by firms' adaptive capacity and overall business conditions than by wage increases.

Although wages do not directly influence employment absorption, the estimation results reveal that wages significantly increase investment in both Western and Eastern Indonesia. Nevertheless, investment contributes differently to each region. In Western Indonesia, investment significantly promotes economic growth but has a negative relationship with employment absorption. In Eastern Indonesia, investment does not significantly influence economic growth or employment absorption. These findings indicate that additional investment during the study period was likely concentrated in relatively capital-intensive activities, particularly in Western Indonesia, where technological upgrading expanded the productive capacity without proportionately increasing the labor demand. Previous studies have similarly argued that investment expansion does not necessarily create employment when production increasingly relies on capital-intensive technologies (McConnell et al., 2021). Recent evidence also suggests that technological progress and digital transformation enhance productivity while reducing labor demand in routine occupations, particularly in capital-intensive industries (Huo et al., 2024; Velic, 2025).

The results further indicate that wages significantly improve human capital, as measured by the average years of schooling in both regions. Higher wages provide stronger incentives for workers and households to invest in education, consistent with Becker's Human Capital Theory and empirical evidence showing that expected future earnings encourage educational investment (Araki, 2025). However, human capital is negatively associated with employment absorption in both Western and Eastern Indonesia. This finding suggests that improvements in educational attainment were not accompanied by a proportional growth in skilled employment opportunities. During 2010–2019, employment expansion remained concentrated in low- and medium-skilled sectors, resulting in persistent skill mismatches. Consequently, many educated workers experienced longer job search periods or accepted occupations below their educational qualifications. Similar conclusions have been reported by Stanković et al. (2021) and Lasso-Dela-Vega et al. (2023), who argue that qualification mismatches reduce labor market efficiency and weaken employment returns to human capital in developing economies.

Regional differences also emerge in the wage–growth relationship in the study. In Western Indonesia, wages negatively affect economic growth, whereas the relationship is statistically insignificant in Eastern Indonesia. One possible explanation is that higher labor costs in the more industrialized western region reduce firms' production efficiency in the short run, while wage adjustments in Eastern Indonesia remain too limited to influence regional economic performance. Nevertheless, because economic growth does not significantly affect employment absorption in either region, the transmission mechanism through economic growth appears to be relatively weak during the study period.

Overall, these findings indicate that wages influence employment primarily through human capital accumulation, rather than through direct labor demand. However, improvements in educational attainment alone are insufficient to generate higher employment absorption unless accompanied by a structural transformation that expands the demand for skilled labor.

5.3 Effects of Government Expenditure on Employment Absorption

Unlike wages, government expenditure primarily influences employment through fiscal investment and human capital. However, the direct effect of government expenditure on employment absorption is statistically insignificant in both regions. This finding suggests that provincial capital expenditure during 2010–2019 did not immediately translate into additional employment. One possible explanation is that much of the capital expenditure was allocated to long-term infrastructure projects, whose economic benefits require considerable time before affecting labor demand. Despite the insignificant direct effect on employment, government expenditure significantly increased investment in both regions.

This indicates that public investment in infrastructure improves the investment climate by reducing production costs, enhancing connectivity, and encouraging private investment. Previous studies have also demonstrated that productive public expenditure stimulates private investment and regional economic activity by expanding productive capacity and generating fiscal multiplier effects (Brückner, 2012; Adeem et al., 2019; Messakh et al., 2022). Similar evidence shows that investment-oriented public spending is generally more effective than consumption expenditure in supporting long-term economic development (Amri et al., 2023; Ciaffi et al., 2024; Deleidi, 2021). Nevertheless, increased investment generated by government expenditure does not significantly improve employment absorption. This finding indicates that infrastructure investment during the study period primarily enhanced productive capacity rather than immediately creating labor-intensive jobs. Previous studies have similarly reported that the positive effects of public investment on economic growth and private investment generally materialize over the medium to long term rather than immediately (Adarov et al., 2026; Khang, 2025). Infrastructure investment also tends to exhibit relatively low short-term employment multipliers, despite supporting long-run economic development (Meyer, 2026).

The relationship between government expenditure and human capital differs by region. Government expenditure does not significantly affect the average years of schooling in Western Indonesia, but it exhibits a significant negative relationship in Eastern Indonesia. Combined with the negative relationship between human capital and employment absorption

observed in both regions, these findings indicate that improvements in educational attainment alone are insufficient to increase employment when labor demand remains concentrated in low-skilled occupations in both regions. Previous studies have argued that human capital contributes to employment only when supported by structural transformation toward more productive and knowledge-intensive sectors (Febriani et al., 2026). Evidence from Indonesia also suggests that government expenditure generates stronger human development outcomes when fiscal resources are allocated strategically to sectors that directly improve labor productivity, rather than merely expanding educational participation (Dwiputrianti et al., 2025).

Government expenditure also exhibits no statistically significant relationship with economic growth in Eastern Indonesia, whereas in Western Indonesia, the relationship is negative. However, because economic growth itself does not significantly affect employment absorption in either region, the growth channel contributes little to employment creation during the study period. These findings imply that the effectiveness of government expenditure depends not only on the volume of spending but also on the composition, implementation, and sectoral allocation of public investment.

5.4 Regional Differences in Employment Transmission Mechanisms

Estimating separate simultaneous equation models for Western and Eastern Indonesia reveals important regional differences in the transmission mechanisms linking wages and government expenditure to employment absorption. In Western Indonesia, investment significantly contributes to economic growth and directly influences employment absorption, whereas these relationships are absent in Eastern Indonesia. Conversely, human capital consistently affects employment absorption in both regions, indicating that educational attainment remains an important transmission mechanism, despite the negative relationship observed.

These regional differences reflect Indonesia's unequal economic structure, where Western Indonesia has historically benefited from greater industrial concentration, infrastructure development, and investment inflows, and labor market opportunities than in Eastern Indonesia. Previous studies have similarly reported that provinces in Western Indonesia generally experience stronger economic performance and employment opportunities due to more advanced infrastructure and higher investment intensity (Badriah and Arintoko, 2024; Rambe et al., 2022). Spatial evidence also indicates that economic activity remains disproportionately concentrated in Western Indonesia, reinforcing regional disparities in the labor market outcomes (Lusiana et al., 2021).

The findings further suggest that uniform labor market and fiscal policies may not generate equivalent employment outcomes across regions in Indonesia. Differences in infrastructure quality, industrial composition, labor productivity, and institutional capacity imply that regional policy interventions should be tailored to the local economic conditions. Previous evidence suggests that fiscal policies become more effective when they account for regional disparities in public expenditure performance and levels of economic development (Sugiyarto et al., 2025). Accordingly, employment policies in Indonesia should adopt a place-based

approach by promoting labor-intensive investment in Western Indonesia, while strengthening educational quality, productive infrastructure, and private investment opportunities in Eastern Indonesia to achieve more balanced employment growth.

6. CONCLUSION

This study examined the transmission mechanisms linking wages and government expenditure to employment absorption in Western and Eastern Indonesia using separate simultaneous equation models. The findings reveal that the mechanisms through which labor market and fiscal policies influence employment absorption differ between the two regions.

First, wages do not exert a statistically significant direct effect on employment absorption in Western or Eastern Indonesia. Nevertheless, wages significantly increase investment and human capital in both the regions. While investment contributes positively to economic growth only in Western Indonesia, it does not translate into higher employment absorption.

Human capital, measured by average years of schooling, exhibits a significant negative relationship with employment absorption in both regions, suggesting that improvements in educational attainment were not accompanied by a sufficient expansion of skilled employment opportunities during the study period.

Second, government expenditure does not have a statistically significant direct effect on employment absorption in either region. Although government expenditure significantly stimulates investment in both Western and Eastern Indonesia, its effects are not transmitted to employment through investment or economic growth. Government expenditure also shows heterogeneous effects on human capital, with no significant effect in Western Indonesia, but a significant negative effect in Eastern Indonesia. These findings indicate that the employment impact of public expenditure depends not only on the amount of spending but also on its composition, implementation, and regional economic structure.

Finally, estimating separate models for Western and Eastern Indonesia reveals clear regional differences in the transmission mechanisms affecting employment absorption in the two regions.

Investment plays a more important role in Western Indonesia, whereas human capital remains the primary determinant of employment absorption in both regions of Indonesia. These results highlight that a uniform national labor market policy is unlikely to generate similar employment outcomes across regions because of differences in industrial structure, investment patterns, infrastructure, and labor market characteristics of the regions.

Overall, this study contributes to the literature by demonstrating that the effects of wages and government expenditure on employment absorption operate primarily through indirect transmission mechanisms and vary according to the regional economic conditions. These findings underscore the importance of adopting region-specific employment and fiscal policies to improve the labor market performance in Indonesia.

7. POLICY RECOMMENDATIONS

These findings have several policy implications. First, wage policy should not focus solely on adjusting minimum wages but should be integrated with programs that enhance labor productivity through vocational training, skill upgrading, and industrial development. Improving workers' educational attainment alone is insufficient unless accompanied by the expansion of productive sectors capable of absorbing skilled labor.

Second, government expenditure should prioritize productive investments with stronger employment multipliers. In addition to expanding infrastructure, greater attention should be paid to investments that encourage labor-intensive industries, support small and medium-sized enterprises, and improve workforce skills. Such policies are expected to strengthen the linkages between public investment, private investment, and employment creation.

Third, regional differences in employment transmission mechanisms indicate that labor market and fiscal policies should adopt a place-based approach. In Western Indonesia, policies should encourage investment in labor-intensive sectors to ensure that investment expansion generates employment opportunities. In Eastern Indonesia, public expenditure should be complemented by improvements in educational quality, workforce skills, and productive infrastructure to strengthen the capacity of the regional economy to absorb skilled workers.

Finally, future research could extend this analysis by incorporating post-pandemic data, sectoral employment dynamics, institutional quality, and digital transformation to better understand how structural changes influence employment absorption across Indonesian regions.

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