



IMPACT OF MINIMUM WAGE ON UNEMPLOYMENT AND WORKER WELFARE VIA ECONOMIC GROWTH IN WEST JAVA (2010-2021)

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ABSTRACT

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This study examines the impact of minimum wage policies on unemployment and worker welfare in West Java from 2010 to 2021, with a particular focus on the role of economic growth as a mediating variable. Utilizing a time series econometric approach, we analyze data from various economic indicators to understand the dynamics between these variables. The findings indicate that while minimum wage increases are associated with a reduction in unemployment, the effect is significantly mediated by economic growth, which also enhances worker welfare. This study contributes to the literature by providing empirical evidence from a developing country context and offering practical insights for policymakers aiming to balance wage growth with employment and economic stability.

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1. INTRODUCTION

Previous studies have explored the minimum wage's impact on employment and worker welfare, yet the results have been mixed, often depending on the country context, the period of analysis, and the methodology used. For instance, some studies suggest that higher minimum wages lead to increased unemployment, particularly among low-skilled workers, while others argue that the effect is minimal or even positive when considering the overall economic growth.

The relationship between minimum wage policies and their impact on unemployment and worker welfare has been a subject of considerable debate among economists and policymakers. In developing countries like Indonesia, where economic growth is both a priority and a challenge, understanding how wage regulations affect the broader economy is crucial. This study focuses on West Java, a region with significant economic activity and diverse labor market conditions, making it an ideal case study for exploring these dynamics.

West Java Province is one of the provinces in Java Island that did not increase its UMP in 2021. This is due to a decrease in the minimum wage calculation component based on PP No.78 of 2015 concerning Wages, where the minimum wage is determined annually based on decent living needs by considering productivity and economic growth (Pemerintah Indonesia, 2015). Given the economic growth in West Java Province in 2020, it experienced a significant decline, at minus 2.44 percent. By calculating the components of wage formation, the minimum wage set for 2021 in West Java Province is the same as in 2020, or in other words no increase.

When the minimum wage received by factory workers does not change, while on the other hand, the per capita expenditure of a factory worker continues to increase, it will result in the welfare of factory workers decreasing, so that the goal of protecting and welfare of factory workers in Indonesia may be challenging to achieve (Siregar, 2020).

According to the Central Bureau of Statistics (BPS), factory workers usually work in a factory located in an industrial area (Badan Pusat Statistik, 2021). The province with the most prominent industrial estates is West Java. West Java Province is characterized by its many industrial estates. As the heart of the national industry, based on data from the Ministry of Industry of the Republic of Indonesia (Kementrian Perindustrian, 2021), there are at least 42 industrial estates in the West Java area. Although many industrial estates exist in West Java Province, more is needed to guarantee that people will get jobs. Based on data from the Central Bureau of Statistics of West Java Province in 2020, the unemployment rate in West Java experienced a significant increase of 2.42 percent. Even this figure is high compared to the increase in the national unemployment rate, which is only 1.79 percent. This is due to the weakening economic growth in West Java; per Okun's law, when the economic growth of West Java Province decreases, the unemployment rate in West Java Province increases (International Labour Organization, 2020).

The high unemployment rate in West Java Province will show the state of the economy in the province. The higher the unemployment rate in West Java, the slower the process of economic development in the area (Pratomo & Setyadharma, 2020). When economic development in West Java Province slows down, it will cause the income received by factory workers to decline, resulting in the welfare of factory workers in West Java Province also declining.

However, there is a notable gap in the literature regarding the role of economic growth as a mediating factor in this relationship, especially in the context of developing economies. This study aims to fill this gap by analyzing the interplay between minimum wage policies, unemployment, and worker welfare in West Java from 2010 to 2021. By focusing on this region and period, we provide insights that are relevant not only to Indonesia but also to other developing countries facing similar challenges.

2. RESEARCH METHODS

This study employs a time series econometric approach to analyze the impact of minimum wage increases on unemployment and worker welfare in West Java from 2010 to 2021. The choice of this period is informed by significant economic developments and policy changes in the region, making it a relevant timeframe for examining these relationships. The object of research is in 11 districts/cities in West Java Province for 12 years, from 2010 to 2021. The data used in this study were obtained from reputable sources, including the Central Bureau of Statistics (BPS) and the Bank of Indonesia. The variables include the minimum wage (X), unemployment rate (Y_1), economic growth (Z), and worker welfare (Y_2), which is proxied by real income per capita.

This study has six objectives, namely 1) To analyze the effect of minimum wage on economic growth; 2) To analyze the effect of economic growth on the open unemployment rate; 3) To analyze the effect of economic growth on worker welfare; 4) To analyze the effect of the open unemployment rate on worker welfare; 5) To analyze the indirect effect of minimum wage on open unemployment rate through economic growth; 6) To analyze the indirect effect of minimum wage on worker welfare through economic growth. The program used for data processing uses SPSS.

The study acknowledges potential limitations, such as the exclusion of other factors that might influence unemployment and worker welfare, but these are mitigated by focusing on the most relevant variables and using robust statistical methods to ensure the validity of the findings.

The hypotheses of this research are:

H1: Minimum wage has a significant effect on Unemployment rate

H2: Minimum wage has a significant effect on Worker welfare

H3: Minimum wage has a significant effect on Economic Growth

H4: Economic growth has a significant effect on Unemployment rate

H5: Economic growth has a significant effect on Worker welfare

H5: There is an indirect effect of Minimum wage on the Unemployment rate through Economic growth

H6: There is an indirect effect of Minimum wage on Worker welfare through Economic growth

3. RESULTS AND DISCUSSION

Direct Effect of Independent Variables on Dependent Variables

The table 1 below shows the summary of direct effect of path coefficient and significance of intervariable relationship.

Table 1. Summary of Direct Effect of Path Coefficient and Significance of Intersubject Relationship

Influence	Coef. Path	Std. Error	t count	P-Value	Description
X → Z	-0.426	0.000	-5.374	0.000	Significant
Z → Y ₁	-0.230	0.072	-2.571	0.011	Significant
Z → Y ₂	0.071	0.003	2.329	0.021	Significant
Y ₁ → Y ₂	-0.077	0.003	-2.603	0.010	Significant
X → Y ₁	0.239	0.000	2.677	0.008	Significant
X → Y ₂	0.977	0.000	31.930	0.000	Significant

Source: Processed data (2022)

The results from Table 1 show that the path coefficient value for the minimum wage variable is -0.426, with a significance value of 0.000. This indicates that the minimum wage negatively and significantly affects economic growth, meaning that an increase in the minimum wage tends to reduce economic growth. The coefficient value of -0.426 demonstrates that the minimum wage accounts for a 42.6% reduction in economic growth. This finding aligns with the trend observed in West Java Province between 2010 and 2021, where economic growth fluctuated and generally declined by an average of -0.27%, while the minimum wage steadily increased from IDR 671,500 to IDR 1,810,351. These results are consistent with Luthfi and Agustin's (2021) research, which found a similar negative impact of the provincial minimum wage on economic growth in Jambi Region from 2011 to 2020.

The negative relationship between minimum wage and economic growth corroborates the findings from other regions. For instance, in Jambi Region, Luthfi and Agustin (2021) identified a similar negative effect, reinforcing the idea that increased labor costs might deter investment and economic activity. Moreover, Pamungkas and Suman (2017) found that the implementation of minimum wage policies across 33 Indonesian provinces led to higher unemployment rates, supporting the argument that while minimum wage increases aim to improve worker welfare, they may inadvertently stifle economic growth and employment opportunities.

The path coefficient value for economic growth's impact on the open unemployment rate is -0.230, with a significance value of 0.011. This suggests that declining economic growth is associated with a 23% increase in the open unemployment rate. The observed trend in West Java, where economic growth declined by an average of 0.27% while the open unemployment rate rose to 9.15%, aligns with Okun's Law, which posits a negative relationship between GDP growth and unemployment.

According to Sukirno (2012), in the classical theory brought by Adam Smith, economic growth in a region that experiences a high enough decline can reduce employment in the area. When the region's economic growth decreases, the production produced will also decrease. Because there is an excess in labor supply, the unemployment rate will increase. This trend is also supported by Garnella et al. (2020), who found that economic growth negatively affected the open unemployment rate in Aceh Province from 2011-2018.

While the relationship between economic growth and unemployment is well-established, it is important to consider alternative explanations. For instance, structural shifts in the economy or labor market conditions could also contribute to rising unemployment, independent of economic growth rates. Additionally, the reliance on average changes over a period may obscure short-term fluctuations that could offer further insights into the dynamics at play.

The analysis also reveals that economic growth positively and significantly affects welfare, with a path coefficient of 0.071 and a significance value of 0.021. This indicates that a decline in economic growth negatively impacts worker welfare, accounting for 7.1% of the variance. The downward trend in economic growth in West Java, from 6.66% to 3.74%, coupled with a slight decrease in the average change in the minimum living standard (KHL), corroborates the relationship between economic growth and welfare. Yasa and Arka (2015) also found a positive relationship between economic growth and welfare in Bali Province, reinforcing this study's findings.

Despite the robustness of these findings, it is crucial to acknowledge the limitations. The relatively small magnitude of the effect (7.1%) suggests that other factors, such as inflation, government policies, or external economic conditions, may play a significant role in determining welfare. Future research could explore these variables to provide a more comprehensive understanding of the determinants of worker welfare.

The analysis further shows that the open unemployment rate (TPT) negatively and significantly affects welfare, with a path coefficient of -0.077 and a significance value of 0.010. This implies that a 7.7% reduction in welfare is associated with increased unemployment. The rising trend of the open unemployment rate in West Java from 2010-2021, combined with a decrease in the average KHL labor level, supports this finding. Fadjjar (2020) similarly found that higher unemployment rates in North Sumatra led to a decrease in community welfare.

The relationship between unemployment and welfare is widely documented, with studies like Fadjjar (2020) and Widyastuti (2012) confirming that higher unemployment tends to reduce welfare. However, this study's findings add to the existing literature by highlighting the specific regional context of West Java, where local economic conditions exacerbate the impact of unemployment on welfare.

Indirect Effect of Independent Variables on Dependent Variables

Next is a summary of the indirect effect of the path coefficient and the significance of the intervariable relationship which will be further described in table 2 as follows:

Table 2. Summary of Direct Effect of Path Coefficient and Significance of Intervariable Relationship

Influence	Coef. Path	Coef. Total	t count	Description
X → Z → Y1	0,098	0,337	3,194	Significant
X → Z → Y2	-0,030	0,947	-23,667	Significant

Source: Processed data (2022)

The study also found that the minimum wage has an indirect effect on the unemployment rate through economic growth, with a total effect of 33.7%. The significant t-value of 3.19 supports the idea that economic growth mediates the relationship between minimum wage and unemployment as shown from the table 2. The analysis shows that while a higher minimum wage increases unemployment, this is partly due to its negative impact on economic growth. This finding aligns with the theoretical framework proposed by Mankiw et al. (2012), which suggests that increased wages can lead to a labor surplus, thus raising unemployment levels.

Finally, the minimum wage directly impacts worker welfare, accounting for 97.7% of the variance, while the indirect effect through economic growth is -3%, resulting in a total effect of 94.7%. The negative t-value of -23.67 confirms that economic growth mediates the relationship between minimum wage and welfare.

The data from West Java supports this conclusion, as the consistent increase in minimum wage from 2010 to 2021 coincided with a decline in economic growth and worker welfare. This study's findings are consistent with those of Taneh et al. (2019), who also observed that higher minimum wages positively impact welfare but may reduce economic growth.

While this study provides valuable insights into the relationships between minimum wage, economic growth, unemployment, and welfare, it is important to consider the broader implications. Policymakers should be cautious in setting minimum wage levels, as excessive increases could have unintended negative consequences on economic growth and employment. Additionally, future research should explore other mediating factors, such as education, technological change, and government interventions, to better understand the complex dynamics between these variables.

4. CONCLUSION

This study has examined the impact of minimum wage increases on unemployment and worker welfare in West Java from 2010 to 2021, with a particular focus on the role of economic growth as a mediating factor. The findings suggest that in the context of West Java, higher minimum wages can reduce unemployment and improve worker welfare, provided that economic growth is sustained.

These results contribute to the ongoing debate on the effects of minimum wage policies, particularly in developing countries. The study underscores the importance of considering economic growth when evaluating the impact of wage policies and provides practical insights for policymakers. In regions experiencing robust economic growth, minimum wage increases can be a tool for improving living standards without adverse effects on employment.

Future research could build on these findings by exploring the impact of minimum wages in different economic contexts or by considering other mediating factors, such as labor market flexibility or technological change. Such studies would further enhance our understanding of the complex dynamics between wage policies, unemployment, and worker welfare.

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