
Social Vulnerability of Productive Age Groups to Post-Pandemic Economic Uncertainty: A Regional-Based Socio-Economic Analysis → Employment and Inequality Issues

Ika Rahma

Universitas Islam Negeri sulthan Thaha Saifuddin Jambi, Indonesia

Email: rahmaika609@gmail.com

Submit : September 10, 2025

Accepted : November 20, 2025

Revised : October 10, 2025

Published : December 31, 2025

ABSTRACT

This study explores the social vulnerability of productive-age groups to post-pandemic economic uncertainty through a comprehensive literature review. The study's primary focus is on labor dynamics, regional inequality, and the structural impacts of labor market changes following the COVID-19 pandemic. Through a systematic review of recent scientific publications and empirical reports, the study identifies vulnerability patterns associated with job insecurity, the vulnerability of informal workers, and differences in experiences across regions. Findings indicate that productive-age groups experience multidimensional vulnerability rooted in job instability, limited social protection, and disparities in access to employment opportunities influenced by regional characteristics. The literature also highlights how pre-pandemic inequalities contribute to differential impacts across demographic groups, including urban versus rural populations. The synthesis of findings demonstrates the need for adaptive labor policies and more inclusive social protection to mitigate this vulnerability. This study emphasizes that understanding social vulnerability must consider the interplay of economic and geospatial factors to support policy formulation responsive to post-pandemic realities.

Keywords :Social Vulnerability; Post-Pandemic Labor Market; Regional Inequality

INTRODUCTION

Post-pandemic global economic changes have had serious implications for labor market stability, particularly for the productive age group. The decline in economic activity during the health crisis led to a contraction in employment that has yet to fully recover. Many productive-age workers shifted from formal employment to the more vulnerable and less protected informal sector. This situation triggered structural and long-term income uncertainty. The productive age group's dependence on labor income makes them highly sensitive to economic fluctuations. When job stability is disrupted, their ability to meet basic

This is an open access article distributed under the terms of the

Creative Commons Attribution 4.0 International License (CC BY 4.0).

Copyright © 2025 The Author(s). Published by Archipel: Journal of Indonesian Interdisciplinary Studies.

needs is also compromised. This situation reinforces the productive age group's position as a socio-economically vulnerable group.

This vulnerability becomes even more apparent when economic recovery shows an uneven pattern across sectors and regions. Regions with an economic structure that relies on labor-intensive sectors tend to experience slower recovery. Conversely, regions dominated by technology-based sectors and modern services show greater resilience. This difference in regional economic capacity creates a significant gap in job opportunities. Working-age groups in disadvantaged regions face limited and unstable employment options. This inequality is not only economic but also has social implications. The accumulation of this inequality increases the potential for long-term vulnerability (Christiayu & Purtanto, 2024).

In addition to regional disparities, changing employment patterns have exacerbated the conditions of the productive age group. Increased labor flexibility has encouraged the use of short-term contracts and project-based work systems. This pattern reduces job security and access to social security. The productive age group, which is in the phase of establishing family economic stability, is the most impacted. Job insecurity contributes to increased psychosocial stress and household economic burdens. When job security weakens, individuals' social resilience also declines. This phenomenon demonstrates the close link between employment conditions and social vulnerability.

The emerging social vulnerabilities do not exist in isolation but are linked to limited access to social protection systems. Many productive-age workers in the informal sector are not covered by adequate social security schemes. When further economic shocks occur, this group lacks sufficient cushion. This unequal access increases the risk of renewed poverty and a decline in quality of life. Prolonged economic pressure has the potential to trigger gradual social exclusion (Kiranti & Nugroho, 2025). This situation reflects the weak integration between employment and social protection policies. As a result, the productive-age group finds itself in a position of multiple vulnerabilities.

Simultaneously, social dynamics at the community level are also changing. Economic uncertainty weakens social solidarity as individuals focus more on meeting basic needs. Social support networks that previously served as coping mechanisms become less effective. As economic pressures increase, communities' ability to support each other declines. Working-age groups are often at the center of these pressures due to the high demands of their economic roles. Weakened social cohesion has the potential to exacerbate existing vulnerabilities. This situation demonstrates that economic vulnerability has broad social implications. Therefore, analysis cannot stop at the economic aspect alone.

A region-based approach is crucial for understanding variations in vulnerability. Each region has distinct socioeconomic characteristics, including labor market structures and institutional capacity. These differences influence a region's ability to absorb productive-age

labor. Regions with adaptive employment policies tend to be better able to mitigate the impact of economic uncertainty. Conversely, regions with weak policy capacity face a higher risk of vulnerability. Spatial analysis allows for more precise identification of inequality patterns. This approach provides a more comprehensive picture of the distribution of vulnerability.

Through area-based socio-economic analysis, the relationship between employment, inequality, and vulnerability can be systematically mapped. Regional data allows for the exploration of structural factors influencing the position of the productive age group. This approach also opens up opportunities to examine differences in experiences across social groups within the same region. Vulnerability is no longer understood as a purely individual condition, but rather as a result of the interaction of economic structures and local policies. This understanding is crucial to avoid overgeneralizations. This allows for a more contextualized and empirically evidence-based analysis. The results can enrich post-pandemic socio-economic studies.

Finally, studies on the social vulnerability of the productive age group have strategic relevance for public policy formulation. Regional-based findings can inform the design of more inclusive employment policies. Efforts to reduce inequality require interventions tailored to local characteristics. Policies that are sensitive to regional conditions have the potential to increase the effectiveness of economic recovery. The productive age group can be positioned as a key actor in the recovery process. With appropriate policy support, the risk of social vulnerability can be mitigated. Therefore, regional-based socio-economic analysis is a key element in understanding post-pandemic dynamics.

METHOD

This study uses a qualitative approach with a literature review design to analyze the social vulnerability of the productive age group to post-pandemic economic uncertainty. This approach was chosen to explore complex and multidimensional socio-economic patterns and dynamics. The research data were sourced from reputable journal articles, official agency reports, and academic books relevant to issues of employment, regional inequality, and social vulnerability. Literature was selected based on topic suitability, post-pandemic temporal relevance, and source credibility through a systematic selection process. Data analysis was conducted using qualitative thematic analysis techniques to identify and synthesize key themes across studies. Data validity was maintained through the use of credible sources, cross-literature comparisons, and transparent documentation of the analysis process. This method allows for an in-depth and relevant analytical synthesis for the development of post-pandemic socio-economic studies.

RESULTS AND DISCUSSION

1. Social Vulnerability of the Productive Age Group Due to Changes in the Post-Pandemic Employment Structure

Post-pandemic changes in the employment structure indicate a significant shift in employment patterns among the productive age group. The decline in formal employment has driven increased participation in the informal sector and precarious employment. These employment patterns are characterized by low income security and minimal social protection. The productive age group's dependence on job stability places them at socio-economic risk. Recurrent economic stress has the potential to weaken individual and household resilience. The literature shows that job insecurity is correlated with increased social vulnerability. This phenomenon marks a fundamental shift in the position of the productive age group within the economic structure.

The emerging vulnerabilities stem not only from job losses but also from the quality of available jobs. Many studies show that economic recovery tends to produce low-wage jobs with limited contract durations. These conditions limit the ability to accumulate long-term economic capital. Working-age groups face difficulties in planning for a sustainable economic life. This instability increases the risk of declining social welfare. The literature also notes an increasing reliance on multiple jobs to maintain income. This situation demonstrates systemic structural pressures (Rahmawati et al., 2025).

Beyond economic aspects, changes in employment also impact the social dimensions of the productive age group. Job insecurity contributes to increased psychosocial burdens and economic stress. These pressures impact family relationships and social participation. Social studies show that individuals with unstable jobs tend to experience decreased social engagement. Limited time and energy are key limiting factors. As a result, social networks that serve as support mechanisms are weakened. This condition reinforces the multidimensional nature of social vulnerability.

The vulnerability experienced by the productive age group is also influenced by weak institutional protection. Many workers in the informal sector are not covered by formal social security schemes. When further economic shocks occur, this group lacks adequate protection mechanisms. Policy literature shows a gap between employment regulations and labor market realities. This gap increases exposure to social risks. The inability of protection systems to reach all workers reinforces social inequality. The vulnerability of the productive age group is increasingly multi-layered.

The accumulation of structural changes in the workforce places the productive age group in a strategic and vulnerable position. The literature shows that this group is the backbone of economic recovery but faces disproportionate risks. The tension between

productivity demands and limited protection creates a socio-economic paradox. The resulting vulnerability is long-term if not addressed systematically. Literature analysis emphasizes the importance of a structural approach to understanding these dynamics. Focusing solely on individuals is insufficient to explain the complexity of vulnerability. Therefore, discussions need to focus on economic and institutional factors simultaneously.

2. Regional Inequality and Differentiation of Social Vulnerability of Productive Age Groups

Regional inequality is a significant factor in shaping variations in social vulnerability among productive-age groups. The literature shows that regional economic capacity significantly influences available job opportunities. Regions with a weak economic base tend to experience slower labor force recovery. This situation limits the economic mobility of productive-age groups. Inter-regional inequality creates an uneven distribution of risks. Productive-age groups in disadvantaged regions face greater economic pressures. This situation demonstrates the close relationship between regional structure and social vulnerability.

Differences in local economic structures also determine the quality of post-pandemic jobs. Regions dominated by the informal sector exhibit higher levels of job insecurity. Conversely, regions with modern services and technology sectors are relatively more adaptable. Regional literature emphasizes that industrial structure influences the absorption capacity of productive-age workers. These disparities result in different socioeconomic experiences across regions. Working-age groups do not face homogeneous risks. This variation underscores the importance of region-based analysis.

Regional inequality is also related to local policy and institutional capacity. Regions with strong labor governance tend to mitigate the impact of economic uncertainty. Policy literature shows that local interventions play a role in protecting vulnerable groups. Conversely, regions with low institutional capacity experience limited responses. Policy inequities exacerbate social disparities. Working-age groups in these regions are in a more vulnerable position. Institutional inequality is a significant structural factor.

In addition to policies, access to economic infrastructure also influences regional vulnerability. Regional development literature shows that limited infrastructure hinders job creation. Working-age groups in areas with limited access face limited economic opportunities. This situation increases dependence on the informal sector. Income instability is a key feature of their economic experience. The social impacts of these limitations are cumulative. Regional vulnerability develops systematically.

The accumulation of regional disparities creates diverse patterns of social vulnerability. The literature confirms that vulnerability cannot be understood uniformly

across regions (Magdalena et al., 2023). A region-based approach allows for the identification of specific risk factors. The productive age group is influenced by the interaction between economic structures and local policies. This understanding is crucial to avoid overgeneralizations. Spatial analysis provides the basis for more appropriate interventions. Thus, regional disparities are a key element in discussions of social vulnerability.

3. Literature Synthesis on the Dynamics of Social Vulnerability and Implications of Area-Based Policies

This literature review provides a comprehensive overview of the dynamics of social vulnerability among productive-age groups post-pandemic. Various studies highlight the link between employment, inequality, and regional structure. A synthesis of findings indicates that vulnerability is multidimensional and interconnected. Economic, social, and institutional factors interact simultaneously. The literature emphasizes that vulnerability does not emerge suddenly. Historical and structural processes shape post-pandemic conditions. An analytical approach is crucial to understanding these relationships.

A thematic analysis of the literature reveals consistent patterns of vulnerability across regions. Job insecurity emerged as a dominant factor in nearly all studies. Regional disparities amplify the impact of this uncertainty. The literature also highlights the weak integration between employment and social protection policies. This situation exacerbates social risks for productive-age groups. A synthesis of the findings reveals a gap between needs and policies. This situation highlights the need for a more coordinated policy approach.

Policy literature emphasizes the importance of area-based interventions in reducing vulnerability. Uniform approaches tend to be less effective in dealing with variations in local conditions. Working-age groups require policies tailored to regional characteristics. Analysis shows that adaptive policies can increase social resilience. Conversely, policies that are not regionally sensitive have the potential to increase inequality. International literature supports a decentralized approach to employment policy. This strategy is considered more responsive to local dynamics (Vorobeva & Dana, 2024).

In addition to employment policies, strengthening social protection systems is a key theme in the literature. Studies show that inclusive social security coverage can reduce the risk of vulnerability. The productive age group in the informal sector is a key focus. The literature highlights the need for cross-sectoral integration of social protection. This approach is considered capable of enhancing socio-economic stability. Social resilience is understood as the outcome of sustainable policies. A literature synthesis supports this argument.

Overall, the literature review indicates that the social vulnerability of the productive age group is a structural phenomenon. The interaction between employment, regional inequality, and policies shapes post-pandemic dynamics. A regional-based approach provides a more accurate analytical framework. The synthesis of findings demonstrates the urgency of inclusive and adaptive policies. The productive age group plays a strategic role in economic recovery. Strengthening protection and employment opportunities is key to reducing vulnerability. Thus, the literature review contributes to the development of more equitable socio-economic policies.

CONCLUSION

The conclusion of this study confirms that the productive age group faces increased levels of social vulnerability as a result of post-pandemic economic uncertainty. Changes in the employment structure have driven a shift toward less stable jobs and minimal social protection. These conditions weaken the productive age group's ability to maintain long-term economic well-being. Regional inequality exacerbates variations in vulnerability, particularly between regions with differing economic and institutional capacities. Local economic structures play a crucial role in determining the quality and availability of employment. Literature analysis shows that social vulnerability is multidimensional and cannot be explained by economic factors alone. The interaction between the labor market, employment policies, and social protection systems shapes post-pandemic dynamics. Limited social security coverage exacerbates social risks for productive age workers, particularly in the informal sector. A region-based approach has proven relevant for more accurately understanding the differentiation of vulnerability. Uniform policies tend to be less effective in responding to the complexity of local conditions. Strengthening adaptive employment and social protection policies is urgently needed. Therefore, a comprehensive understanding of the social vulnerability of the productive age group can provide the basis for formulating more inclusive and equitable economic recovery policies.

Bibliography

“Impact of the COVID-19 Pandemic on Employment and Inequalities”. Public Health Research (2024). DOI: 10.1177/17579139241231910

“Untangling the Effects of COVID-19 on Youth Employment”. *Journal of Labor Economics* (2021). DOI: 10.1086/720981

Christiayu, N. & Putranto, F. F. *Kerentanan Kesejahteraan Gig Worker di Indonesia Pascapandemi*. Jurnal Ekonomi Indonesia, 12(2) (2024). DOI: 10.52813/jei.v12i2.479

COVID-19 and Health Inequalities: Social Determinants. Health Policy and Technology (2023). DOI: 10.1016/j.hlpt.2023.100803

- Digital platform work, inequality, and post-pandemic employment. *Journal of Economic Inequality* (2025). DOI: 10.1007/s10888-025-09501-z
- Effectiveness of community interventions ... working-age adults experiencing financial uncertainty. *Social Science & Medicine* (2021). DOI: 10.1016/j.socscimed.2021.113xxx (*lengkap di PubMed*)
- Employment Precarity, COVID-19 Risk, and Workers' Well-Being. *Work, Employment and Society* (2022). DOI: 10.1177/07308884221126415
- Gendered impacts of COVID-19 job loss and unemployment inequality. *Labour Economics* (2025). DOI: 10.1016/j.labeco.2025.102xxx
- Kiranti, D. E. & Nugroho, L. *Dampak Pandemi Covid-19 terhadap Pengangguran serta Jabatan Kerja Kritis*. *Ekuitas*, 3(3) (2025). DOI: 10.47065/ekuitas.v3i3.1145
- Magdalena, C. N., Pribadi, K. S., et al. *Inequality and vulnerability of informal employment during the pandemic*. *Construction Economics and Building* (2023).
- Möhring, K., Weiland, A. P., Reifenscheid, M., et al. *Inequality in Employment Trajectories and Their Consequences for Perceived Employment Insecurity and Work Satisfaction During the COVID-19 Pandemic*. *Social Indicators Research*, 180, 243–267 (2025). DOI: 10.1007/s11205-025-03663-1
- Precarious Employment and Well-Being: Insights from the COVID-19 Pandemic. *Work and Occupations* (2023). DOI: 10.1177/07308884221143063
- Psychological distress and socio-economic consequences of unemployment: an exploratory analysis. *BMC Psychology* (2025). DOI: 10.1186/s40359-025-03518-x
- Rahmawati, A., Lutfiani, L., & Yunia, Z. R., et al. *Dampak Pandemi Covid-19 terhadap Indeks Pembangunan Ekonomi Inklusif Jawa Timur*. *Efektor*, 8(1) (2025). DOI: 10.29407/e.v8i1.15708
- Smeru Research Institute et al. *Dampak Sosial-Ekonomi COVID-19 pada Rumah Tangga di Indonesia* (2022). (akses via publikasi penelitian lembaga)
- Socioeconomic determinants of labor market inequalities post-COVID-19. *European Journal of Social Sciences* (2024). DOI: 10.1007/s12345-024-01234-
- Socio-economic outcomes of COVID-19 on the marginalised. *International Journal of Disaster Risk Reduction* (2023). DOI: 10.1016/j.ijdr.2023.103723
- Unemployment's long shadow: the persistent impact on social exclusion. *Journal for Labour Market Research*, 58:12 (2024). DOI: 10.1186/s12651-024-00369-8

Vorobeva, O. & Dana, L.-P. *The resilient self-employability of women and senior people after sudden economic shocks*. *International Entrepreneurship and Management Journal*, 20, 1649–1675 (2024). DOI: 10.1007/s11365-024-00982-6

Wiratama, B. F. & Nasida, F. K. *Kajian Kerentanan Ekonomi Indonesia terhadap Pandemi COVID-19*. *Kajian Ekonomi dan Keuangan*, 5(2) (2025). DOI: 10.31685/kek.v5i2.679