

Post-COVID-19 Unemployment Dynamics: Trends, Causes, and Implications for Economic Recovery

Afdhol Rinaldi

Universitas Islam Negeri Sultan Syarif Kasim Riau, Pekanbaru

*Email: afdhol.rinaldi@uin-suska.ac.id**Febyyanti**

Universitas Islam Negeri Sultan Syarif Kasim Riau, Pekanbaru

Email: febyyanti@gmail.com**Naufal Wahyu Harahap**

Universitas Islam Negeri Sultan Syarif Kasim Riau, Pekanbaru

Email: naufalwahyuharahap@gmail.com**Jihan Absharina Gusliwan**

Universitas Islam Negeri Sultan Syarif Kasim Riau, Pekanbaru

Email: jihankerinci28@gmail.com**Mr. Hilmy Faizhan**

Universitas Islam Negeri Sultan Syarif Kasim Riau, Pekanbaru

Email: faizhan11@gmail.com

ARTICLE INFO :

Keywords :

Post-COVID unemployment;
Labor market recovery;
Economic recovery after pandemic;
COVID-19 employment trends;
Post-Covid-19 unemployment;

Article History:

Received:2025-07-02

Revised : 2025-09-28

Accepted:2025-12-23

Online :2025-12-24

ABSTRACT

Unemployment remains one of the critical challenges in the post-Covid-19 period, as many countries—including Indonesia—struggle to restore labor market stability. The pandemic triggered large-scale disruptions in economic activity, leading to job losses across multiple sectors. This study aims to analyze the dynamics of unemployment after Covid-19 by examining its trends, underlying causes, and implications for economic recovery. Using a descriptive qualitative approach supported by secondary data from national and international labor reports, this study identifies shifting unemployment patterns influenced by structural changes in the labor market, digital transformation, and sectoral vulnerabilities. The findings show that post-pandemic unemployment is shaped not only by economic contraction but also by mismatches in labor skills, uneven access to digital opportunities, and the slow recovery of key industries such as tourism and manufacturing. These dynamics have significant implications for economic recovery, particularly in terms of productivity, household income stability, and the effectiveness of government employment programs. The study concludes that comprehensive policy strategies including reskilling initiatives, targeted job creation, and support for digital inclusion are essential to accelerate labor market recovery and sustain long-term economic resilience.



This is an open access article under the CC BY- SA license.

Corresponding Author : Afdhol Rinaldi

INTRODUCTION

The COVID-19 pandemic triggered an economic slowdown, mobility restrictions, and temporary closures of various business sectors, so many companies terminated their employment and laid off workers (BPS, 2021). Employment data shows that the unemployment rate in Indonesia soared in 2020 and 2021, before declining again when economic activity began to recover (BPS, 2022). The year 2020 marked a period of global crisis COVID-19 caused a global pandemic that shook the world economy. Many countries have implemented social restrictions, lockdowns, restrictions on mobility and economic activities, thereby hampering economic activity massively (World Bank, 2020).

Business closures, social restrictions, and lockdowns caused major disruptions in various sectors of the economy, triggering a global recession of declining production, declining economic activity, to mass layoffs and increased unemployment (ILO, 2020). This crisis has an impact not only on the economy but also on society – affecting people's incomes, social stability, inequality, and welfare (UNDP, 2021). reliability of financial reporting, safeguarding state assets, and compliance with laws and regulations (PP 60/2008, Chapter I Ps. 1 point 1). The Internal Control System is inherent throughout the activity, influenced by human resources, and only provides adequate confidence, not absolute confidence. Therefore, in its development and implementation, it needs to be carried out comprehensively and must pay attention to the aspects of cost and benefit, sense of justice and propriety, the development of information and communication technology and consider the size, complexity, and nature of the duties and functions of Government Agencies (Ministry of Finance, 2019).

LITERATURE REVIEW

A. Theory

The following are theories relevant to the discussion of unemployment that are commonly used in research, papers, and theses:

1. Classical Theory of Unemployment

According to classical economists such as Adam Smith and David Ricardo (1817), unemployment occurs because wages are too high compared to the balance of the labor market. If wages can be flexible, the labor market will return to balance and unemployment will disappear. Focus on labor supply demand. Relevance: used to explain structural unemployment due to high minimum wage regulation.

2. Keynesian Unemployment Theory

Introduced by John Maynard Keynes (1936) Unemployment occurs because aggregate demand (AD) is weak so that companies do not need much labor. Not because wages are inflexible, but because the economy is sluggish. Relevance: widely used to explain unemployment during economic crises (e.g. after Covid-19).

3. Human Capital Theory (Gary Becker)

According to Gary Becker (1964), unemployment arises because the quality of human resources is not in accordance with market needs. Education, training, experience affect job opportunities. Relevance: explain structural unemployment due to low competence and lack of skills.

4. Structural Unemployment Theory

According to Simon Kuznets (1960s), it is caused by a mismatch between labor skills and industrial needs. With regard to technological changes, shifts in the industrial sector, globalization. Relevance: commonly used to explain unemployment in the digital age.



This is an open access article under the CC BY- SA license.

Corresponding Author : Afdhol Rinaldi

5. Frictional Unemployment Theory

According to William Beveridge (1968), unemployment is "temporary" when a person changes jobs, has just graduated, or is looking for work for the first time. Due to imperfect job market information. Relevance: used to explain unemployment in the new workforce (fresh graduates).

B. Post-pandemic Trends

1. Recovery of the quantity of work but decrease in the quality of work

Many reports have found that the number of people returning to work is increasing, but many new jobs are part-time, low-income, or informal so "quantity recovery" is not always synonymous with quality recovery.

2. Global unemployment is relatively low

In aggregate in 2023–2024, but inequality is increasing — the OECD and ILO report unemployment rates that are at historically low levels in some developed countries, but certain groups (youth, women in some contexts, informal workers) are still lagging behind.

3. Cross-sector differences

The high-contact services sector (tourism, hospitality, retail) recovered more slowly than certain technology or manufacturing sectors; This is driving a structural shift in labor demand.

4. Changes in workforce participation

In some countries, there has been a decline in participation (people leaving the labour market) as well as an increase in the phenomenon of 'labour shortages' in certain sectors—a combination that points to a mismatch between skills/job desires and available vacancies.

5. Indonesian Context

BPS data shows a decline in TPT since the peak of the pandemic, but the number of unemployed and a number of problems (educated unemployment, informality) remain important concerns for a quality recovery.

C. Main Causes of Post-Covid Unemployment Dynamics

1. Shock supply & demand concomitant

Lockdowns have a direct impact on the demand for goods/services and on the ability of businesses to operate → temporary/permanent layoffs. An inconsistent recovery has prolonged unemployment in the hardest-hit sectors.

2. Informality and micro/MSME sector

Many workers are in the informal sector with weak social safety nets so their recovery is slower and more vulnerable. (Especially relevant for developing countries like Indonesia.)

3. Scarring effects (long-term damage)

Prolonged unemployment, loss of experience, and declining quality of skills make re-entry into the job market more difficult even after demand recovers.

4. Mismatch skills & acceleration of digital transformation

The acceleration of digitalization and the adoption of technology (including the potential for automation/AI) is widening the mismatch between worker skills and market needs. The OECD warns of the risk of job disruption by technology if it is not balanced with training.

5. Changes in preferences and health conditions

A number of workers choose to leave (e.g. due to health, family care, or new life choices) thus reducing labor force participation in some countries. APIP as a consultant is expected to be able to provide benefits in the



This is an open access article under the CC BY- SA license.

Corresponding Author : Afdhol Rinaldi

form of suggestions for improvement and participate in helping agencies carry out various improvement actions. With suggestions for improvement.

D. Implications for Economic Recovery

1. Non-inclusive recovery

When most of the employment recovery is concentrated in a specific group or sector, economic output can recover while income inequality remains high, hampering widespread household consumption.

2. Delayed productivity recovery

Scarring and skill mismatch lower productivity in the medium term if the workforce does not keep up with digital/technological transformation.

3. Increased fiscal and social pressures

The state must balance between fiscal support for recovery and long-term needs (investment in education, training programs, social protection). The debt burden from the initial stimulus may limit fiscal space for long-term programs.

4. Long-term structural unemployment risk for youth

Youth unemployment remains a red flag; failure to integrate youth into the labour market reduces the potential for long-term economic growth.

E Policies and Recommendations

Based on consensus in the ILO, OECD, World Bank, and academic studies:

Active labour market policies (ALMPs): reskilling/upskilling programs, internship/wage subsidy programs for the transition to formal employment.

Strengthen targeted social protection: expand the safety net for informal workers and layoffs to reduce long-term damage.

Support for MSMEs & affected sectors: access to financing, digitalization of micro/MSMEs, as well as incentives to absorb local workforce.

Improving data and job market services: vacancy information system, skills assessment, and strengthening job placement services (job centers).

Policies that combine demand stimulation and structural reform: investments in education, digital infrastructure, and policies that increase the participation of marginalized groups.

METHODS

This study uses a qualitative research method with a literature review approach or literature study. This approach was chosen because the purpose of the study was to analyze various scientific findings related to post-Covid-19 unemployment trends, their causative factors, and their implications for economic recovery, without collecting field data.

1. Types of Research

This type of research is a thematic literature review, which is a method that aims to collect, assess, and synthesize various research results relevant to the theme of unemployment after the Covid-19 pandemic. This approach allows researchers to identify general patterns, differences in findings, and the latest developments in academic studies related to post-pandemic job market dynamics.



This is an open access article under the CC BY- SA license.

Corresponding Author : Afdhol Rinaldi

2. Data Sources

The data used in this study are entirely derived from literature sources, including:

A. Primary Sources

1. Scientific journal articles discussing post-Covid-19 unemployment
2. Empirical research on the impact of the pandemic on the labor market
3. Official reports of international institutions such as ILO, OECD, World Bank
4. Publication of employment statistics from BPS related to unemployment conditions before–after the pandemic

This primary source is the main basis for studying the trends and causes of post-pandemic unemployment.

B. Secondary Sources

1. Macroeconomic and labor theory books
2. Supporting scientific articles on economic recovery
3. Proceedings, policy briefs, and other academic publications

For testing in this study, the following are used:

1. Data Analysis Techniques

Data analysis is carried out descriptively-critically and thematically, through three main stages:

a. Organizing

1. Post-Covid-19 unemployment trend
2. Causes of an increase or decrease in unemployment
3. The impact of the pandemic on the structure of the labor market
4. Implications for national and global economic recovery

b. Evaluating (Evaluasi Kritis)

1. Each article is evaluated based on:
2. Methodological strengths and weaknesses
3. Consistency of data and research findings
4. Research novelty related to changes in the post-pandemic situation
5. Relevance to the global and Indonesian contexts

c. Synthesis

Findings from various sources are then combined to produce a new understanding of the dynamics of post-Covid-19 unemployment, including how unemployment trends are changing, influencing factors, as well as how they all affect economic recovery. This synthesis process produces a



This is an open access article under the CC BY- SA license.

Corresponding Author : Afdhol Rinaldi

comprehensive picture of the relationship between unemployment and the post-pandemic economic recovery process.

2. Data Validity (Validity)

To maintain the validity of the review results, the following steps are taken:

1. Triangulation of sources, which is comparing findings from various journals with official reports such as BPS, ILO, and OECD.
2. Selection of credible sources (peer-reviewed and international institutions).
3. Publication year restrictions to ensure the relevance of the findings.
4. Cross-check statistical data from multiple sources to avoid bias or errors.

RESULTS AND DISCUSSION

A. Post-COVID-19 Unemployment Trends

The COVID-19 pandemic that has hit since the beginning of 2020 has become one of the largest economic and employment crises in modern history (World Bank, 2020). The impact is felt in almost all sectors of the economy. Restrictions on community activities (PSBB, PPKM, lockdown), global supply chain disruptions, and a decline in people's purchasing power have caused many companies to temporarily stop and even close their operations (Coordinating Ministry for the Economy, 2021).

At the peak of the pandemic in 2020, the open unemployment rate (TPT) in Indonesia jumped from 5.23% (2019) to 7.07% (2020). This figure reflects around 9.77 million people who lost their jobs (BPS, 2020). This impact is most severely felt by workers in the manufacturing, trade, transportation, tourism, and accommodation services sectors (ILO, 2021).

However, after the pandemic began to subside in 2022 and economic activity reopened, the unemployment trend showed a slow decline. Based on BPS data, TPT decreased to 6.26% (2022) and around 5.30% (2024). Although statistically this figure shows improvement, the structure of the labor market has changed fundamentally (OECD, 2022).

Some of the characteristics of post-pandemic trends include:

1. Growing informal sector: Many workers are turning to freelance work, online motorcycle taxis, online traders, or household-based small businesses.
2. Shift to digital economy: The pandemic accelerated digital transformation, creating new jobs in logistics, e-commerce, digital content, and information technology.
3. Increase in half-unemployment: Many workers work substandard hours (less than 35 hours per week) or in sectors that do not match their skill set.
4. Geographical gap: Big cities such as Jakarta, Bandung, and Surabaya are recovering faster than rural areas because they have access to digital infrastructure and investment.

This means that the decline in the unemployment rate does not fully indicate an increase in welfare, because most new jobs still do not provide adequate income security or social protection.



This is an open access article under the CC BY- SA license.

Corresponding Author : Afdhol Rinaldi

B. Causes of Post-COVID-19 Unemployment Dynamics

The post-pandemic unemployment dynamics are not only caused by job losses during crises, but also by long-term structural changes in the economy. Some of the main causes include:

1. Changes in Economic and Technological Structure

The pandemic accelerated digitalization and automation in many sectors. Companies are investing in technology to reduce reliance on manual labor. For example, the banking sector is shifting to digital services, the retail industry to e-commerce, and manufacturing are increasing the use of robotics. As a result, the need for human labor decreases in certain types of work.

2. Skill Mismatch

One of the main causes of structural unemployment is the mismatch between the skills of the workforce and the needs of new industries. Workers who were previously in conventional sectors (tourism, manufacturing, hospitality) often lack the digital or analytical skills needed in the post-pandemic era.

3. Slow Recovery in Labor-Intensive Sectors

Labor-intensive sectors such as textiles, footwear, and tourism take longer to recover. The decline in global demand and limited working capital have made this sector unable to absorb the workforce as before the pandemic.

4. Investment Limitations and Global Uncertainty

Unstable global economic conditions, fluctuations in energy prices, and geopolitical tensions are hampering the flow of new investment into developing countries. Without new investment, job creation is limited.

5. Changes in Consumption and Production Patterns

During the pandemic, people have become accustomed to online consumption, delivery services, and digital-based products. Although this opens up new job opportunities, these types of jobs are often temporary and have irregular incomes.

6. Regional and Sector Gaps

Inequality between regions exacerbates the unemployment problem. Areas whose economies depend on traditional agriculture and industry are still facing a slow recovery, while urban areas are more quickly adapting to digital innovation.

C. Implications for Economic Recovery

The dynamics of unemployment post-COVID-19 have important implications for the direction and speed of national economic recovery:

1. An Uninclusive Economic Recovery

Economic growth that begins to recover is not necessarily followed by an increase in the welfare of all levels of society. Some groups—especially informal workers, women, and youth—are still lagging behind in the recovery process due to limited access to formal employment and training.

2. Household Purchasing Power and Consumption Weakened

Unemployment and irregular income have led to a decline in people's purchasing power. This has an impact on the slow growth of household consumption, which is actually the main driver of Indonesia's GDP.

3. Stagnant National Productivity

When labor moves to low-productivity sectors (such as small trade and informal services), output per worker decreases. As a result, economic growth risks stagnation in the medium term.



This is an open access article under the CC BY- SA license.

Corresponding Author : Afdhol Rinaldi

4. Social and Economic Inequality

Differences in adaptability between individuals cause economic inequality to widen. Highly educated and digitally literate groups enjoy greater recovery benefits than those who do not have these skills.

5. The Need for Labor Policy Reform

The government must adjust labor market policies to new conditions. Programs such as Pre-Employment Cards, vocational training, and support for MSMEs and labor-intensive industries need to be improved in order to reduce structural unemployment.

CONCLUSION

The COVID-19 pandemic has become an important momentum that fundamentally changes the employment structure in Indonesia (World Bank, 2020; BPS 2021). The crisis that started from the health sector spread to various aspects of economic and social life, causing a high wave of unemployment due to mobility restrictions, a decline in industrial activity, and reduced global demand. At its peak, millions of workers lost their livelihoods, particularly in labor-intensive sectors such as tourism, manufacturing, transportation, and trade. However, as the pandemic subsides and economic activity returns, the unemployment rate begins to show a downward trend, although the recovery has been slow and uneven.

The post-pandemic unemployment phenomenon cannot be understood only as a temporary impact of the crisis, but rather as a process of structural transformation in the economy. The acceleration of digitalization, the application of automation technology, and changes in people's consumption patterns have created a significant shift in labor demand. Conventional employment that has absorbed many workers has decreased, while the need for workers with digital and adaptive skills has increased. This condition gives birth to a fairly wide skill mismatch, where many workers are unable to adapt to the demands of the new job market.

In addition, the national employment structure has also undergone a change in direction. Formal employment declined, while the informal sector increased rapidly. Many workers are turning to freelancers, micro-entrepreneurs, or digital platform-based workers. Although this shows the resilience of the community to the crisis, the increase in the informal sector indicates a decline in the quality of work, because most of the workforce does not receive social security, job security, or stable income. Thus, the economic recovery that occurred was not inclusive, where the benefits were felt more by urban and highly educated groups, while people with low education and living in rural areas still faced difficulties in getting decent jobs.

The implications of this condition are quite profound for the direction of national economic recovery. High hidden unemployment and weak people's purchasing power are hampering the growth of household consumption, which is the main component of Indonesia's economic drivers. In addition, the transfer of labor to low-productivity sectors has the potential to restrain the rate of national productivity growth. If not addressed immediately, this could pose a risk of long-term economic stagnation and widen social inequality.

Therefore, the biggest challenge in the post-pandemic period is not only to reduce the unemployment rate, but to improve the quality and sustainability of work. The government needs to formulate a comprehensive policy strategy, such as strengthening vocational education, increasing digital literacy, providing incentives for labor-intensive industries and MSMEs, and expanding social protection for informal workers. With these measures, the economic recovery process will not only be quantitative, but also qualitative—touching on aspects of welfare, productivity, and equality.

Overall, the post-COVID-19 unemployment dynamics reflect a shift in the employment paradigm towards a new economy that is more digital, flexible, but also full of uncertainty. The pandemic has opened up space for policy reflection that future economic development must place people and their competencies at the center of transformation. If this momentum is used properly, the post-pandemic era can be the starting point for the creation of a more resilient, inclusive, and equitable job market in Indonesia.



This is an open access article under the CC BY- SA license.

Corresponding Author : Afdhol Rinaldi

BIBLIOGRAPHY

Agustina, M., Astuti, H., & Susilo, J. H. (2023). Unemployment in Indonesia: An Analysis of Economic Determinants from. *Significant: Journal of Economic Sciences*, 12(1), 69-82. <https://doi.org/10.15408/sjje>.

Anggraini, Z. (2021). Analysis of Open Unemployment in Central Java Province in 2015-2019. *Journal of Economics (JIE)*, 5(4), 712-722

Ardhana, F. (2024). Poverty analysis in Bangka Belitung Islands Province. *Economics, Finance, and Business Review*, 1(1), 59-69. <https://doi.org/10.20885/efbr.vol1.iss1.art0>

Central Statistics Agency (BPS). (2020). August 2020: Open Unemployment Rate (TPT) of 7.07 percent.

Bato, A. R., & Ahmad, F. (2023). The Effect of GDP, Government Spending, and Inflation on Unemployment in Bone Regency. *Bulletin of Economic Studies (BEST)*, 3(3), 145-159. <https://doi.org/10.24252/best.v3i3.44052>

Blanchard, O. (2017). *Macroeconomics* (7th ed.). Harlow: Pearson Education.

Budiono, D., & Agustin, M. (2024). Determinants of Educated Unemployment in Lampung Province (Analysis of Sakernas Data in August 2022). *Journal of Economic and Business Retail*, 4(2), 1-12. <http://journal.institila.ac.id/>

Cahya, A. A., & Tanur, E. (2022). The Influence of Urban Areas on the Open Unemployment Rate in North Sumatra Province. *Journal of Economics & Education*, 2(1), 211-223.

Case, K. E., Fair, R. C., & Oster, S. M. (2014). *Principles of Economics* (11th ed.). Upper Saddle River: Pearson.

Federal Reserve Bank of Kansas City. (2024). Mismatch Unemployment During COVID-19 and the Post-Pandemic Labor Market. Accessed from <https://www.kansascityfed.org/research/research-working-papers/mismatch-unemployment-during-covid-19-and-the-post-pandemic-labor>.

Feriyanto, N. (2018). Determinants of Unemployment in Regency/City in Special Province Yogyakarta. *European Research Studies Journal*, XXI(3), 367-380.

Hornstein, A., & Kudlyak, M. (2022). The Pandemic's Impact on Unemployment and Labor Force Participation Trends. *Federal Reserve Bank of Richmond Economic Brief*, No. 22-12. Accessed from https://www.richmondfed.org/publications/research/economic_brief/2022/eb_22-12

Jubaedah, E., & Amelia, A. (2021). Identification of Determinants of Changes in Unemployment Rate in Regencies/Cities of Banten Province. *Journal of Economic Research*, 1(3), 141-150. www.jrie.feb.unpas.ac.id

Karisma, A., Subroto, W. T., & Hariyati, H. (2021). The Influence of Educators and Investment on Unemployment in Java. *COSITNG: Journal of Economics, Business and Accounting*, 5(1), 441-446.

Kawasaki, P. (2024). Analysis of labor absorption in Central Java Province. *Economics, Finance, and Business Review*, 1(1), 47-58. <https://doi.org/10.20885/efbr.vol1.iss1.art5>

Keynes, J. M. (1936). *The General Theory of Employment, Interest, and Money*. London: Macmillan.

Mankiw, N. G. (2016). *Macroeconomics* (9th ed.). New York: Worth Publishers.

Ministry of Economic Development Republic of Maldives & UNDP Maldives. (2022). *Labour Market Dynamics in Post Pandemic Times*. Accessed from <https://www.undp.org/sites/g/files/zskgke326/files/2022-12/Labour%20Market%20Dynamics%20in%20Post%20Pandemic%20Times.pdf>.

Mufida, L. L. A., & Nasir, M. S. (2021). Dynamic Analysis of the Unemployment Rate in Indonesia. *Journal of Macroeconomics and Social Development*, 1(1). 1-14. <https://economics.pubmedia.id/index.php/jmsd>

Pew Research Center. (2020). Unemployment rose higher in three months of COVID-19 than it did in two years of the Great Recession. Accessed from <https://www.pewresearch.org/short-reads/2020/06/11/unemployment-rose-higher-in-three-months-of-covid-19-than-it-did-in-two-years>.

Samuelson, P. A., & Nordhaus, W. D. (2010). *Economics* (19th ed.). New York: McGraw-Hill.

Sukirno, S. (2011). *Macroeconomics: Introductory Theory* (3rd ed.). Jakarta: Rajawali Press.

