OPEN ACCESS
World Journal of Economics, Business and Management
ISSN: 3049-2181 | Vol. 3, No. 9, Sep, 2026
Website: https://wasrpublication.com/index.php/wjebm

NATIONAL WORKFORCE TURNOVER TRENDS AND THEIR RELATIONSHIP WITH MINIMUM WAGE, UNEMPLOYMENT, AND ECONOMIC GROWTH IN INDONESIA (2021–2025): A PUBLIC DATA ANALYSIS

Sunarmie[1], Pamungkur[2], Mohdari[3*]

[1,2]*Management Study Program, Sekolah Tinggi Ilmu Ekonomi Kuala Kapuas, Indonesia*

[3]*Management Study Program, STIE Nasional Banjarmasin, Indonesia*.

Received: 24/06/2025 | Accepted: 02/09/2026 | Published: 23/09/2026

Abstract: Employee turnover voluntary and involuntary is a central HRM concern with direct implications for organizational cost and human capital loss. This study documents national-level employment turnover trends in Indonesia for 2021–2025 (with supporting macro indicators traced back to 2018 as historical context in Table 2) using public administrative data: the total value of BPJS Ketenagakerjaan claims across all programs (JHT, JKK, JKM, JP, JKP) as a proxy for formal labor-market exit intensity, and the number of workers affected by layoffs (PHK) published by the Ministry of Manpower as a proxy for involuntary turnover. Both indicators are documented alongside three public macroeconomic indicators from BPS: the open unemployment rate (TPT), annual economic growth, and the national average minimum wage (UMP) increase. Because consistently verifiable data cover only 4–8 annual data points depending on the variable, this study deliberately limits itself to descriptive trend analysis rather than inferential regression/correlation, given a sample size far below the threshold for statistical generalization. Results show total BPJS Ketenagakerjaan claims rising consistently from IDR 42.93 trillion (2021) to IDR 68.24 trillion (2025) a cumulative 59.0% increase while recorded layoffs rose from 64,855 (2023) to 88,519 workers (2025), alongside a declining TPT trend from 6.26% (2021) to 4.76% (2025) and sharply fluctuating UMP increases (0%–8.71%). The study contributes a verifiable, publicly-sourced documentation of turnover trends and underscores the need for more granular (monthly and/or provincial) panel data for future inferential analysis.

Keywords: *Employee turnover; employee retention; time-series; BPJS Ketenagakerjaan; minimum wage; HRM*.

1. INTRODUCTION

Employee turnover whether voluntary or involuntary (i.e., layoffs) is an indicator of organizational health that affects replacement costs, the loss of tacit human capital, and reduced productivity. Human capital has been shown to contribute significantly to economic growth in Indonesia (Rabie & Elliyana, 2019), so the loss of human capital from high turnover can suppress productivity not only at the organizational level but also at the macro level. In Indonesia, turnover research is predominantly conducted at the organizational level using turnover-intention questionnaires administered to employee samples at one or a few firms (Rumawas, 2022; Sofyanty et al., 2023), so trend patterns at the national/macro level are relatively rarely documented systematically from public data.

Several state agencies routinely publish administrative labor data that can be reconstructed into turnover proxies. BPJS Ketenagakerjaan (the Employment Social Security Agency) publishes the total value of Old-Age Security (JHT) claims each year, in which resignation consistently accounts for the largest share of claims, for example, in 2024 (January–July), 57.32% of 1.7 million JHT claims were due to resignation, while 30.63% were due to layoffs. The Ministry of Manpower, through Satu Data Ketenagakerjaan, periodically publishes the number of workers affected by layoffs. BPS (Statistics Indonesia) provides supporting data such as the Open Unemployment Rate (TPT) and economic growth, while the Provincial Minimum Wage (UMP) is published by the Ministry of Manpower.

This study documents national turnover trends for 2021–2025 using a combination of these public data sources. Unlike the originally planned design (a provincial panel),

*Corresponding Author
Mohdari*
Email: mohdari@stienas-ypb.ac.id.

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

this study deliberately limits itself to the national level and to descriptive-trend analysis, given that genuinely verifiable data cover only a short time span (4–5 years) and that some variables (provincial JHT claims and layoffs) are not publicly available. These limitations are discussed explicitly in Sections 3 and 5.

1.1 Research Questions

- What are the trends in total BPJS Ketenagakerjaan claims (a proxy for formal labor-market exit intensity) and the number of layoffs (a proxy for involuntary turnover) in Indonesia during 2021–2025?
- How do these trends descriptively co-move with trends in the minimum wage, unemployment rate, and economic growth over the same period?

2. LITERATURE REVIEW

2.1 Turnover and Human Capital Concepts

Employee turnover is distinguished into voluntary turnover (employee-initiated) and involuntary turnover (organization-initiated, e.g., layoffs) (Patel, 2025). Prior research also shows that human capital contributes significantly to individual performance within organizations, including in the context of lecturer performance in higher education, where human capital and entrepreneurial orientation jointly influence individual performance (Dwita et al., 2022) relevant as a micro-level analogy that investment in human capital not followed by good retention risks being lost once an individual leaves the organization.

At the macro level, job search theory predicts that wage levels and labor-market conditions influence job-switching decisions: higher wages raise the opportunity cost of leaving, while high unemployment reduces the chances of obtaining an alternative job (Iriqat & Awawda, 2025; Živković et al., 2023).

2.2 Public Administrative Data as a Turnover Proxy

The use of administrative data as a proxy for labor-market phenomena is a growing approach in empirical labor economics because of its broad coverage and freedom from respondent recall bias (Bazzoli & Marzadro, 2025; Lachowska et al., 2022). BPJS Ketenagakerjaan's JHT claims record the reason for withdrawal, with resignation consistently the largest component; this study uses this data as a proxy for voluntary turnover at the national level.

3. RESEARCH METHOD

3.1 Design

This study uses a descriptive-quantitative design based on annual time-series data at the national level (rather than a provincial panel), as a consequence of the limited availability of granular provincial data for the turnover variables (explained in Section 3.4).

3.2 Data Sources and Operationalization

Variable	Operational Definition	Public Data Source
Labor-Market Exit-Entry Intensity (Total BPJS-TK Claims)	Total value of BPJS Ketenagakerjaan claims across all programs (JHT, JKK, JKM, JP, JKP) per year (IDR trillion)	BPJS Ketenagakerjaan / official reporting based on BP Jamsostek data
Involuntary Turnover	Number of laid-off workers per year (persons)	Ministry of Manpower Satu Data Ketenagakerjaan
TPT	Open Unemployment Rate, February (%)	BPS Sakernas (National Labor Force Survey)
Economic Growth	Annual real GDP growth (%, year-on-year)	BPS Official GDP Statistical Release
UMP (national average)	Average nominal UMP across 38/34 provinces and annual percentage increase	Ministry of Manpower / BPS, compiled from official media (Kompas, CNBC Indonesia, Tempo)

3.3 Analytical Method

Given that the number of genuinely verifiable annual data points ranges only from 4 to 5 observations, this study does NOT use regression or inferential correlation testing such a sample size is far below the minimum threshold required for valid and statistically meaningful estimation (correlation coefficients from $n<5$ are highly unstable and easily misleading). Instead, this study presents descriptive-trend analysis: the movement of absolute values and year-on-year percentage changes for each variable, compared narratively to identify co-movement patterns without claiming causal relationships or statistical significance.

3.4 Data Limitations (Methodological Transparency)

- The turnover proxy used (total BPJS Ketenagakerjaan claims) covers all programs JHT (resignation/retirement/death/disability), JKP (layoffs), JKK, JKM, and JP and thus broadly represents formal labor-market exit-entry intensity rather than a pure voluntary-turnover proxy. Provincial-level data on JHT claims due to resignation are also not publicly available; only the

national proportion is available (e.g., 57.32% of 2024 JHT claims were due to resignation).

- Annual layoff data with consistent, verifiable methodology are only fully available for 2018, 2019, and 2023–2025; the 2020–2022 figures circulating in the media use different reporting definitions/coverage (including the much broader informal pandemic impact) and are therefore not directly comparable and were deliberately excluded from the trend.
- BPJS-TK claims data prior to 2021 (2018–2020) could not be found published in a comparable format and are marked [DATA] in Table 2.

4. RESULTS

4.1 Time-Series Data Trends, 2018–2025

Year	TPT Feb (%)	Economic Growth c-to-c (%)	National UMP Increase (%)	Total BPJS-TK Claims, All Programs (IDR trillion)	Number of Layoffs (persons)
2018	5.10	5.17	8.71	[DATA]	3,400
2019	4.98	5.02	8.03	[DATA]	45,000
2020	4.94	-2.07	8.51	[DATA]	[DATA] (b)
2021	6.26	3.70	0.00	42.93	[DATA] (b)
2022	5.83	5.31	1.09	49.28	[DATA] (b)
2023	5.45	5.05	7.50	54.13	64,855
2024	4.82	5.03	3.60	60.72	77,965
2025	4.76	5.11	6.50	68.24	88,519

Note: the "Total BPJS-TK Claims" column covers all programs (JHT, JKK, JKM, JP, JKP) not JHT alone following the official breakdown by the President Director of BPJS Ketenagakerjaan (quoted in Bisnis.com, 18 February 2025) and BPJS Ketenagakerjaan's 2025 press release. As a single reference point (not a time series), the JHT claim value alone for 2024 was recorded at IDR 47.87 trillion (78.8% of the total). (b) The 2020–2022 layoff figures circulating in pandemic-era reporting use a different reporting methodology/coverage than 2023 onward (see Section 3.4) and were therefore deliberately omitted so as not to mislead the trend.

4.2 Trend Description

Total BPJS Ketenagakerjaan claims across all programs rose consistently every year from 2021 to 2025: from IDR 42.93 trillion (2021) to IDR 68.24 trillion (2025) a cumulative increase of 59.0% over five years, with annual growth rates ranging from 9.8% to 14.8%. This upward trend is consistent and monotonic, unlike the pattern of JHT claims alone, which has previously been reported to fluctuate up and down in certain years.

The comparable layoff figures (2023, 2024, 2025) show successive increases: 64,855 → 77,965 (+20.2%) → 88,519 persons (+13.5%), alongside a national unemployment rate that has continued to decline (5.45% → 4.82% → 4.76%) and economic growth that has remained relatively stable-to-strengthening (5.05% → 5.03% → 5.11%). This pattern layoffs rising while the national unemployment rate falls is descriptively consistent with the observation that the labor market has been able to absorb laid-off workers into other sectors/employment statuses relatively quickly during this period; the Ministry of Manpower itself has linked the 2025 layoff surge to geopolitical pressure on the export-import and manufacturing sectors. This co-movement observation remains descriptive-suggestive rather than a conclusion tested for statistical significance.

The national UMP increase fluctuated sharply from year to year from around 8% (2018–2020), plunging to 0% (2021, due to the pandemic-era wage-freeze policy), then rising gradually to 7.5% (2023) before falling again to 3.6% (2024) and rising to 6.5% (2025) without a consistently directional co-movement pattern with total BPJS-TK claims, which instead rose steadily regardless of that year's UMP increase.

5. DISCUSSION, LIMITATIONS, AND IMPLICATIONS

5.1 Discussion

These descriptive findings are consistent with the notion that turnover whether voluntary or involuntary is a multicausal phenomenon that cannot be adequately explained by one or two macro indicators over a short time span (Heavey et al., 2013; Peltokorpi & Allen, 2023). The sharp increase in layoffs in 2024 (+20.2%) is consistent with reports that the manufacturing sector was the largest contributor to layoffs that year, indicating that sectoral/structural factors may play a greater role than macro-wage factors alone a hypothesis that cannot be tested with national aggregate data and requires sectoral or provincial data for further testing.

5.2 Limitations

- The time-series sample size (n=4–8, depending on the variable) is far below the minimum threshold for statistically meaningful regression or correlation testing; this study deliberately did not force such testing.
- The labor-market exit-entry intensity proxy (total BPJS Ketenagakerjaan claims) only covers formal workers who are BPJS Ketenagakerjaan participants, cannot be disaggregated by province from available public sources, and, as a combined indicator across all programs, cannot directly separate the voluntary from the involuntary turnover share.
- Layoff data from before and after the pandemic cannot be directly compared due to differences in reporting methodology/coverage.
- Some data cells (total BPJS-TK claims for 2018–2020 and layoff figures for 2020–2022) could not be found publicly available in a comparable format at the time this manuscript was prepared and are marked [DATA]; all 2025 data in Table 2 are complete.

5.3 Implications and Future Research

- For BPJS Ketenagakerjaan and the Ministry of Manpower: publishing more granular JHT claim and layoff data (monthly, by province, by sector) would substantially improve the feasibility of statistically valid, panel-data-based labor policy research.
- Future research is encouraged to use monthly (rather than annual) layoff data available in Satu Data Ketenagakerjaan since 2022 to obtain an adequate N for formal time-series analysis (e.g., ARIMA or lagged regression).
- Triangulation with organization-level turnover surveys remains necessary to validate this administrative proxy against actual turnover behavior.

6. CONCLUSION

This study documents national workforce turnover trends in Indonesia for 2021–2025 (with historical context back to 2018 for supporting macro indicators) using verified public data from BPJS Ketenagakerjaan, the Ministry of Manpower, and BPS. Total BPJS Ketenagakerjaan claims rose consistently every year from 2021 to 2025 (+59.0% cumulative), and the number of layoffs also rose successively over the last three years with complete data (2023–2025, from 64,855 to 88,519 persons), while the unemployment rate declined and economic growth remained relatively stable a descriptively interesting pattern that cannot be tested for significance given the limited number of time-series data points. This study explicitly stops at the descriptive level and recommends collecting more granular data (monthly and/or provincial) before causal/statistical claims can be advanced.

References

1. Bazzoli, M., & Marzadro, S. (2025). MATCHING AND INTEGRATION OF REGISTRY AND SURVEY DATA ON THE DYNAMICS OF WORK HISTORIES: A PILOT STUDY. *Italian Journal of Applied Statistics*. https://doi.org/10.36253/ijas-16751
2. Dwita, F., Elliyana, E., & Surapto, D. (2022). The Effect of Human Capital and Entrepreneurship on Lecture Performance (University Entrepreneurship Supporting Lecturer in Indonesia). *Jurnal Manajemen Bisnis Dan Kewirausahaan*, *6*(4), 457–462.
3. Heavey, A., Holwerda, J., & Hausknecht, J. (2013). Causes and consequences of collective turnover: a meta-analytic review. *The Journal of Applied Psychology*, *98* *3*, 412–453. https://doi.org/10.1037/a0032380
4. Iriqat, I., & Awawda, S. (2025). Assessing Factors Affecting Palestinian Employees' Turnover Intention: A Cross-Sectional Analysis. *Dirasat: Human and Social Sciences*. https://doi.org/10.35516/hum.2026.7617
5. Lachowska, M., Mas, A., & Woodbury, S. (2022). How Reliable are Administrative Reports of Paid Work Hours? *Labour Economics*. https://doi.org/10.17848/wp22-361
6. Patel, M. (2025). *Attrition of Teachers in Private Schools: Problems, Causes and Remedies*. Allied Publishers.
7. Peltokorpi, V., & Allen, D. (2023). Job embeddedness and voluntary turnover in the face of job insecurity. *Journal of Organizational Behavior*. https://doi.org/10.1002/job.2728
8. Rabie, R., & Elliyana, E. (2019). Human capital and economic growth in Indonesia. *Journal of Contemporary Economic Studies*, *4*(01), 169–176.
9. Rumawas, W. (2022). Employees' Turnover Intention in the Construction Industry in Indonesia. *Journal of Construction in Developing Countries*. https://doi.org/10.21315/jcdc-03-21-0050
10. Sofyanty, D., Yanti, V., Ong, D., Suwantica, S., & Agustina, T. (2023). The effect of organizational commitment and personal organizational fit on turnover intention of contract employees at PT Asia Bandar Alam Jakarta. *Enrichment : Journal of Management*. https://doi.org/10.35335/enrichment.v13i1.1282
11. Živković, A., Fosić, I., & Pap, V. A. (2023). Perceived alternative job opportunities and turnover intention as preliminary steps in employee withdrawal. In *Strategic Management*.