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► **Actuarial valuation of the
Unemployment Insurance Scheme (JKP)
administered by BPJS Employment as of
31 December 2024**

Republic of Indonesia

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Actuarial valuation of the Unemployment Insurance Scheme (JKP)
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Report to the Government

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South-East Asia and the Pacific

Country Office for Indonesia and Timor-Leste

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► Contents

► Acknowledgements	iii
► Contents	v
► List of tables	vii
► List of figures	viii
► Abbreviations and acronyms	ix
► Executive summary	x
► Introduction	1
► 1. Context	2
1.1. Compliance with Convention No. 102	2
► 2. Recent experience	4
2.1. Income and expenditure	4
2.2. Demographic and financial development	7
2.3. Recent legal changes	9
► 3. Key assumptions	10
3.1. General demographic assumptions	10
3.1.1. Population structure	10
3.1.2. Fertility	11
3.1.3. Mortality	11
3.1.4. Migration	12
3.1.5. Resulting population projection	13
3.2. Macroeconomic assumptions	14
3.3. Scheme-specific assumptions	16
3.3.1. Active insured members	16
3.3.2. Density of contribution	19
3.3.3. Members' insurable earnings	19
3.3.4. Termination rates	22
3.3.5. Eligibility rate	24
3.3.6. Beneficiaries' reference earnings	25
3.3.7. Duration of benefit	25
3.3.8. Claim processing	26
3.3.9. Administrative expenses	27
3.3.10. Rate of return	27
3.3.11. Other income and expenses	27
► 4. Demographic and financial projections	28
4.1. Base scenario	28
4.2. Estimated impact of Government Regulation No. 6/2025	31
4.3. Sensitivity tests	33
► 5. Policy considerations and reform options	36
5.1. Policy considerations	36
5.1.1. Financing policy	36
5.1.2. Indexation of the maximum insurable earnings	37
5.1.3. Separation of accounts	38

5.1.4. Further considerations for progressive alignment with Convention No. 102	38
5.2. A possible reform option for JKP	39
► 6. Actuarial opinion	41
► Appendix 1. Summary of provisions of the scheme	42
A1.1. Coverage	42
A1.2. Insurable earnings	42
A1.3. Contributions	42
A1.4. Benefit provisions	42
A1.4.1. Qualifying condition and benefit continuation	42
A1.4.2. Monthly benefit and maximum benefit duration	43
A1.4.3. Delay to submit claims	43
A1.4.4. Waiting period	43
A1.5. Financial governance	43
► Appendix 2. General methodology	44
A2.1. Purpose of projections	44
A2.2. Projection approach	44
► Appendix 3. ILO social security standards on unemployment protection	46

► List of tables

2.1.	Statement of income and expenditure, 2021–2024 (in million rupiah)	5
2.2.	Active insured members by sex, 2021–2024	7
2.3.	Beneficiaries by sex, 2021–2024	8
3.1.	Age-specific fertility rates, 2025, 2028, 2031 and 2034	11
3.2.	Estimated and projected life expectancy of the general population by sex at ages 0, 20 and 60, 2025–2034	12
3.3.	Sample mortality rates of the general population by sex for 2025, 2028, 2031 and 2034 (percentage)	12
3.4.	Key demographic assumptions, 2024–2035	13
3.5.	Projected population, by age-group, 2025–2034	14
3.6.	Main economic indicators, 2025–2034 – Base scenario (percentage)	15
3.7.	Working-age, labour force and employed populations, 2025–2034 – Base scenario	16
3.8.	Employed population (ages 15–69) and active insured members under BPJS Employment and JKP, 2024–2034	17
3.9.	Projected number of active insured members by age and sex, years 2025, 2030 and 2034	18
3.10.	Estimated and projected densities of contribution by age and sex (in months)	19
3.11.	Estimated average monthly earnings (2024 basis) by age and sex	20
3.12.	Assumed maximum monthly earnings, 2025–2034	21
3.13.	Estimated average monthly earnings by age and sex, 2025, 2030 and 2034	21
3.14.	Estimated average monthly insurable earnings by age and sex, 2025, 2030 and 2034	21
3.15.	Ratio of active insured members earnings above the maximum insurable earnings by age and sex, 2025, 2030 and 2034 (percentage)	22
3.16.	Annual termination rates derived from BPJS Employment data, by sex, 2022–2024	23
3.17.	Assumed annual termination rates by age and sex (percentage)	24
3.18.	Estimated and assumed eligibility rates by age and sex, 2022–2025+ (percentage)	25
3.19.	Assumed “survival” distribution of beneficiaries and average benefit duration by sex, selected ages (percentage)	26
3.20.	Estimated annual nominal and real rates of return, 2021 to 2024 (percentage)	27
4.1.	Projected number of active insured members and insurable earnings, 2025–2034	28
4.2.	Projected number of new beneficiaries, 2025–2034	29
4.3.	Projected benefits, 2024–2035	30
4.4.	Projected income and expenditure, 0.36 per cent contribution rate, 2025–2034 (in billions of rupiah)	31
4.5.	Estimated impact of Government Regulation No. 6/2025	33
4.6.	Sensitivity tests	35
5.1.	Comparison of key financial and adequacy indicators: Current legislation and proposed reform option	40
A3.1.	Main requirements: ILO social security standards on unemployment protection	47

► List of figures

2.1.	Contribution rate and PAYG cost rates, excluding administrative expenses, 2021–2024	6
3.1.	Estimated population structure of Indonesia in 2025	10
3.2.	Projected age structure of the population, 2025–2034 (percentage)	13
3.3.	Estimated distribution of employed and covered population by age, before and after the introduction of Government Regulation No. 6/2025, year 2025	18

► Abbreviations and acronyms

BPJS Employment	Social Security Agency for Employment (Badan Penyelenggara Jaminan Sosial Ketenagakerjaan)
GDP	gross domestic product
GAP	General Average Premium
JHT	Old-age Savings Scheme (Jaminan Hari Tua)
JKK	Employment Injury Insurance (Jaminan Kecelakaan Kerja)
JKm	Death Benefit Scheme (Jaminan Kematian)
JKN	National Health Insurance (Jaminan Kesehatan Nasional)
JKP	Unemployment Insurance Scheme (Jaminan Kehilangan Pekerjaan)
JP	Pension Scheme (Jaminan Pensiun)
PAYG	pay-as-you-go
PBI-JKN	Non-Contributory Health Insurance (Penerima Bantuan Iuran)
UN	United Nations
WPP	World Population Prospects

► Executive summary

This report presents the results of the actuarial valuation of the Unemployment Insurance Scheme (JKP) administered by the Badan Penyelenggara Jaminan Sosial Ketenagakerjaan (BPJS Employment). The valuation assesses the financial sustainability, adequacy and policy coherence of the scheme over the ten-year projection period 2025–2034, taking into account the legal amendments introduced under Government Regulation No. 6/2025, effective in 2025.

As highlighted by the scheme's recent experience, JKP has matured rapidly since its introduction in 2021. Contribution income increased steadily between 2021 and 2024, while benefit expenditures rose in line with the gradual fulfilment of eligibility conditions and then stabilized from 2023 onward. The pay-as-you-go (PAYG) cost rate¹ remained significantly below the contribution rate in force during the period, resulting in a substantial accumulation of reserves. By the end of 2024, the scheme's net assets reached 16.5 trillion rupiah, corresponding to an exceptionally high reserve ratio relative to annual benefit expenditure. The scheme therefore entered 2025 in a strong financial position.

The amendments introduced under Government Regulation No. 6/2025 brought significant modifications to the JKP framework. Key changes included:

1. the extension of coverage to additional categories of workers, notably PBI-JKN participants;
2. a reduction of the total contribution rate from 0.46 per cent to 0.36 per cent of insurable earnings;
3. the replacement of the declining benefit formula (45 per cent for three months and 25 per cent for three months) with a flat 60 per cent replacement rate for up to six months; and
4. the removal of the requirement for six consecutive months of contributions prior to termination.

Demographic and financial projections carried out under this valuation, reflecting the amendments introduced under Government Regulation No. 6/2025, indicate that the projected general average premium (GAP)², estimated at 0.15 per cent of insurable earnings, remains well below the current contribution rate of 0.36 per cent. The scheme is therefore projected to remain financially sustainable throughout the 2025–2034 projection period under the base scenario.

This strong financial position creates an opportunity to strengthen and improve the scheme's coverage and benefits within the existing contribution rate, and/or to allocate a portion of contribution revenue or accumulated surplus to support active labour market programmes (ALMPs) consistent with the scheme's broader objectives. In particular, enhancing the capacity of public employment services is essential, as these services currently face significant operational gaps – including limited geographic reach concentrated in major urban areas, an absence of mandatory monthly meetings to support jobseekers (with job search monitoring relying solely on online self-reporting), and inadequate maintenance of up-to-date job vacancy information.

At this stage, no change to the contribution rate is recommended. The scheme remains relatively young and has recently undergone significant benefit changes. It is therefore advisable to review the scheme's financial position at the next actuarial valuation, once sufficient experience has developed following the introduction of Government Regulation No. 6/2025, before considering any adjustment to the contribution rate. While the possibility of adjusting the contribution rate remains important, frequent changes can create administrative burdens. In addition, experience shows that once a contribution rate has been reduced, it is often more difficult to increase it again later.

Summary of the recommendations

Given this favourable outlook, the central policy question is no longer one of short-term financial sustainability, but rather how to strengthen adequacy, transparency, governance and alignment with international standards.

¹ The PAYG cost rate represents the ratio of total benefit expenditure to total contributory earnings in a given year.

² The GAP is the constant contribution rate, expressed as a percentage of insurable earnings, required over the entire projection period to finance all projected expenditures without consideration of the reserve.

In light of the findings of this valuation and the legal assessment conducted against the ILO Social Security (Minimum Standards) Convention, 1952 (No. 102), the following recommendations are proposed³:

- **Financing policy:** Introduce a formal and transparent contribution rate-setting mechanism to ensure that the contribution rate remains aligned with the scheme's long-term financing needs, while preserving room for adequacy improvements and potential support to ALMPs.
- **Indexation of the maximum insurable earnings ceiling:** Establish a regular and predictable indexation mechanism to maintain the relevance and adequacy of insured earnings over time.
- **Separation of accounts and transparency:** Allocate administrative expenses explicitly to the JKP branch in order to strengthen financial transparency, accountability and fairness across benefit branches.
- **Progressive alignment with Convention No. 102:** Gradually adjust selected legal and parametric elements (such as the definition of the contingency, the scope of legal coverage and requalification provisions) to strengthen conformity with international standards.

A comprehensive reform option integrating these recommendations has been assessed in this report (see section 5.2). The projections confirm that these adjustments can be implemented within the existing contribution rate of 0.36 per cent of insurable earnings.

³ See Chapter 5 for detailed policy recommendations.

► Introduction

This report presents the results of the actuarial valuation of Indonesia's Unemployment Insurance Scheme (JKP) administered by the Badan Penyelenggara Jaminan Sosial Ketenagakerjaan (BPJS Employment) as at 31 December 2024, and reflects the legal amendments introduced under Government Regulation No. 6/2025, effective from 7 February 2025. The valuation assesses the scheme's financial sustainability over the 2025–2034 projection period under the applicable financing rules and expected demographic and economic conditions. It also discusses key policy considerations related to the scheme's financing and design, including adequacy and alignment with international standards.

The actuarial analysis is primarily based on administrative and financial data provided by BPJS Employment, complemented by demographic and macroeconomic indicators from Statistics Indonesia (BPS), and informed by relevant international sources used for macroeconomic assumptions. In parallel with this actuarial valuation, the ILO has carried out a legal and policy assessment of Indonesia's social security system against the requirements of the Social Security (Minimum Standards) Convention, 1952 (No. 102).⁴ The actuarial findings presented in this report should be read in conjunction with that assessment, particularly with respect to benefit adequacy and key parameters relevant to compliance.

The report is structured as follows:

- Chapter 1 summarizes the main findings of the ILO's legal and policy assessment of JKP against Convention No. 102 (Part IV), and presents key issues relevant to the actuarial analysis.
- Chapter 2 reviews JKP's recent experience over the period 2021–2024, including developments in income and expenditure, as well as key demographic and financial trends. It also summarizes the recent legal changes introduced under Government Regulation No. 6/2025.
- Chapter 3 sets out the demographic, macroeconomic and scheme-specific assumptions used for the actuarial projections.
- Chapter 4 presents the projected demographic and financial results for JKP over the 2025–2034 period under the base scenario and discusses the main drivers of the scheme's financial development. It also assesses the estimated impact of Government Regulation No. 6/2025 and includes sensitivity tests illustrating the scheme's responsiveness to key assumptions.
- Chapter 5 presents the key policy recommendations arising from the findings of the actuarial valuation and from the ILO's legal and policy assessment of JKP against Convention No. 102 (Part IV). The chapter also outlines a comprehensive reform option for JKP that integrates and operationalizes the main recommendations set out in this report.
- Chapter 6 presents the actuarial opinion of the authors of the report.

The report includes additional information in the annexes as follows:

- Annex 1 presents a summary of the provisions of the scheme.
- Annex 2 outlines the general methodology used to assess the cost of the design options.
- Annex 3 presents the relevant ILO social security standards on unemployment protection.

⁴ See Luisa Fernanda Carmona-Llano, Ippei Tsuruga and Maya Stern-Plaza, *Assessment of the Indonesian Legislation in View of a Possible Ratification of Convention No. 102* (2026).

► 1. Context

The Unemployment Insurance Scheme (JKP) was introduced as part of Indonesia's broader social security reform agenda under Law No. 11 of 2020, which amended the National Social Security System Law (Law No. 40 of 2004) and established the legal basis for unemployment insurance. The scheme is administered by BPJS Employment and provides income support to eligible members in the event of involuntary job loss.

This actuarial valuation of JKP is conducted in the context of Indonesia's ongoing efforts to strengthen its social security system and align national schemes with international social security standards. It takes into account the reform measures introduced in early 2025 through Government Regulation No. 6/2025, which amended the JKP scheme's coverage, contribution rate and benefit provisions, effective from 7 February 2025.⁵

The valuation forms part of the technical support provided by the ILO to the Government of Indonesia within the broader framework of cooperation on social security reform and international standard-setting.

1.1. Compliance with Convention No. 102

In parallel with the present actuarial valuation of JKP, the ILO has carried out a comprehensive legal and policy assessment of Indonesia's social security system against the requirements of the Social Security (Minimum Standards) Convention, 1952 (No. 102), within the framework of the ILO's Global Ratification Campaign.⁶ That assessment examines the extent to which national legislation and administrative practice comply with Convention No. 102 and identifies areas where legal or parametric adjustments would be required in view of a possible future ratification.

The actuarial analysis presented in this report is informed by – and should be read in conjunction with – that comprehensive legal and policy assessment. While Indonesia has made substantial progress in developing a contributory unemployment insurance scheme, the legal review concludes that certain elements of the JKP branch (Part IV of Convention No. 102) would require adjustment to ensure full conformity with Convention No. 102.

With respect to unemployment benefits (Part IV of Convention No. 102), the key findings of the legal and policy assessment may be summarized as follows:

- **Contingency (Article 20):** The JKP scheme provides benefits in cases of involuntary termination of employment and requires that the beneficiary be capable of and willing to be re-employed. However, the legislation does not define the concept of "suitable employment", which is central to the Convention's definition of the contingency. In addition, administrative practice excludes certain situations – such as the expiry of fixed-term contracts – from eligibility, and the scope of "involuntary termination" is not exhaustively clarified in the regulations. These elements create uncertainty as to whether the contingency fully corresponds to the Convention's requirement of suspension of earnings due to inability to obtain suitable employment. *Clarification of the concept of suitable employment and greater precision regarding recognized forms of termination would therefore be required for full conformity.*
- **Coverage (Article 21):** Under the current legal framework, JKP mandatorily covers employees (wage earners) who are Indonesian citizens, under age 54 at registration, and employed in small, medium or large enterprises, provided that they are registered in the required social security programmes. Micro-enterprises are exempt from the obligation to register workers in JKP, and construction workers, daily workers and certain casual workers remain outside the scheme. In practice, the scheme is therefore largely limited to private-sector wage earners in formal employment. *As of 2024, effective coverage of the JKP scheme was estimated at approximately 26.5 per cent of all employees, which remains below the minimum threshold of 50 per cent of employees required under Article 21(a) of Convention No. 102.⁷*
- **Level of benefits (Article 22):** The statutory replacement rate under JKP is set at 60 per cent of the insured's average insurable monthly earnings, which, in principle, exceeds the minimum replacement rate of 45 per cent required under Convention No. 102. However, benefits are calculated on earnings capped at the maximum insurable earnings ceiling of 5,000,000 rupiah per month. Under Convention No. 102, where an earnings ceiling is applied, it must be set at a

⁵ See section 2.3 for all details on the recent legal amendments introduced by Government Regulation No. 6/2025.

⁶ See Carmona-Llano, Tsuruga and Stern-Plaza, 2026.

⁷ Although Government Regulation No. 6/2025 extended JKP coverage to PBI-JKN members, effective coverage in 2025 is still estimated to remain below 35 per cent of all wage earners, that is, below the 50 per cent threshold required under Article 21(a) of Convention No. 102.

level that ensures that the standard beneficiary (that is, a skilled worker as defined under the Convention) receives at least 45 per cent of previous earnings. Based on 2024 data, the monthly earnings of the standard beneficiary would amount to approximately 6.93 million rupiah when defined as 125 per cent of the average earnings of protected persons, or approximately 5.20 million rupiah when assessed using the 75 per cent coverage benchmark.⁸ *Since the current ceiling (5,000,000 rupiah) is below both reference levels, the effective replacement rate for the standard beneficiary falls below the 45 per cent minimum under the 125 per cent method and would require regular revalorization of the ceiling to ensure continued compliance under the 75 per cent benchmark.*

- **Qualifying period (Article 23):** Under the JKP scheme, entitlement to unemployment benefits requires that the insured person has contributed for at least 12 months within the 24 months preceding termination of employment. This requirement is broadly consistent with international practice and may be considered compatible with Convention No. 102, which allows a qualifying period only insofar as it is necessary to preclude abuse. However, Article 35 of Government Regulation No. 37/2021 introduces additional restrictions for subsequent claims. Unemployment benefits may be claimed a maximum of three times during an insured person's career, and a contribution period of five years is required to requalify for a second and third claim. Such extended requalification periods appear to go beyond what is necessary to prevent abuse and are significantly longer than those typically observed in unemployment insurance schemes. *These provisions may therefore raise concerns regarding conformity with Article 23, as they could unduly restrict access to the minimum level of protection guaranteed under Convention No. 102.*
- **Duration of benefits (Article 24):** Under the JKP scheme, unemployment benefits are payable for a maximum period of six months per claim. In principle, this exceeds the minimum duration required under Convention No. 102, which stipulates that where protection is limited to prescribed classes of employees, the benefit may be limited to at least 13 weeks within a period of 12 months. However, the interaction between the maximum number of claims (limited to three over an insured person's career) and the five-year requalification period required for subsequent claims raises concerns regarding effective compliance with Article 24. Convention No. 102 requires that, where duration varies with contribution periods or prior receipt of benefits, the average duration of benefit must reach at least 13 weeks within a 12-month period. Under the current JKP rules, an insured person who exhausts a benefit spell and becomes unemployed again within a relatively short period may not be entitled to receive benefits again unless the five-year contribution condition is met. *As a result, the minimum guarantee of 13 weeks within a 12-month period cannot be assured in all circumstances.*
- **Waiting period (Article 24(3)):** Convention No. 102 permits the introduction of a waiting period of up to seven days before unemployment benefits become payable. Under the current JKP legislation, no formal waiting period is established. In practice, benefits are payable from the beginning of the contingency, that is, from the termination of the employment relationship, subject to the completion of administrative procedures. *As such, the absence of a waiting period is fully consistent with Convention No. 102 and does not raise any compliance concerns.*

The present actuarial valuation does not reassess legal compliance per se.⁹ Rather, it evaluates whether the financial parameters of the scheme – contribution rate, benefit levels, eligibility rules and reserve accumulation – are consistent with the scheme's objectives and sustainable over time, including under alternative scenarios that would bring the scheme closer to Convention No. 102 requirements (see section 5.2).

In this regard, the actuarial valuation provides an essential quantitative complement to the legal and policy assessment. It supports informed decision-making by assessing the financial implications of potential reforms – such as adjustments to the maximum insurable earnings, coverage expansion or changes to requalification rules – aimed at strengthening the JKP scheme and, where relevant, facilitating its progressive alignment with international social security standards.

⁸ Under Convention No. 102, Member States may define the reference wage of a skilled worker using alternative methods. Two commonly applied approaches are: (1) identifying a person whose earnings are equal to 125 per cent of the average earnings of all protected persons; or (2) identifying a person whose earnings are equal to or greater than those of 75 per cent of protected persons. Based on 2024 data, the 125 per cent benchmark corresponds to approximately 6.93 million rupiah, while the 75 per cent benchmark is estimated at approximately 5.20 million rupiah.

⁹ Carmona-Llano, Tsuruga and Stern-Plaza, 2026.

► 2. Recent experience

This chapter examines the experience of the Unemployment Insurance Scheme (JKP) administered by BPJS Employment from 2021 to 2024, focusing on its financial and demographic trends. Section 2.1 analyses the scheme's income and expenditure over this period, while section 2.2 present key demographic and financial trends observed throughout these years. Section 2.3 outlines the recent changes to the provisions of the scheme, effective from 7 February 2025, introduced through Government Regulation No. 6/2025. These changes include modifications to coverage, contributions and benefit provisions.

2.1. Income and expenditure

This section reviews the income and expenditure experience of JKP during the period 2021 to 2024, based on BPJS Employment financial statements. The analysis places the financial developments of JKP in the context of the scheme's provisions in force during that period, as described in Appendix 1.

It is important to note that BPJS Employment maintains separate accounts for each benefit branch. JKP is therefore accounted for independently from the other schemes administered by BPJS Employment. This practice, which aligns with sound financial governance and international standards, ensures that revenues and expenditures are monitored according to the specific characteristics of each branch, such as the frequency and severity of claims, the duration of payments, and the applicable financing mechanisms. An exception concerns administrative expenses, which are not charged directly to the JKP accounts but instead financed through BPJS Employment's operational funds, in accordance with its regulatory framework.¹⁰ The separation of accounts nevertheless remains particularly valuable, as it allows this actuarial valuation to reflect the specific financial situation of JKP without contamination from other benefit branches.

JKP began operations in 2021 with an initial capital transfer of 6 trillion rupiah from the State Budget, as provided for in Government Regulation No. 37/2021. This transfer was intended to strengthen the financial position of the scheme at its inception and explains the large surplus recorded in the first year, when contributions also began to be collected but no benefits were yet payable. The absence of benefit expenditures in 2021 was expected, since eligibility under JKP requires at least 12 months of employment within the preceding 24 months,¹¹ which meant no member could qualify during the first year of operation. As a result, the combination of substantial revenues and the absence of benefit payments led to net assets of nearly 8 trillion rupiah at the end of 2021.

Over the period 2022–2024, JKP entered a more regular operational phase, financed through monthly contributions from employers and the Government. During this period, the contribution rate was fixed at 0.46 per cent of insurable earnings, with 0.24 per cent paid by employers and 0.22 per cent financed directly by the State Budget. Contributions from employers are collected through the Employment Injury Insurance (JKK) and Death Benefit (JKm) schemes and subsequently transferred to the JKP account – a process internally referred to by BPJS Employment as “recomposition”.

The development of benefit expenditures over the period 2022–2024 also illustrates the maturing process of the scheme. After an initial expenditure of 44.5 billion rupiah in 2022, benefit payments increased as more members met JKP's qualifying conditions, reaching 367.2 billion rupiah in 2023 and 378.9 billion rupiah in 2024. This relative stabilization of benefit payments in 2023–2024 – also reflected in the pay-as-you-go cost (PAYG) rate remaining stable during these years – suggests that the scheme has entered a stage of maturity, as is typically observed in unemployment insurance schemes globally.

Table 2.1 presents the statement of income and expenditure of JKP for the period 2021 to 2024.

¹⁰ As per Government Regulation No. 37/2021, the costs of administering JKP may be financed through BPJS Employment's operational funds, which are derived from regulated percentages of contributions and investment income from other programmes. Accordingly, the absence of a direct “administrative expenses” line for JKP is consistent with the regulatory framework, but it means that public financial reports do not provide a transparent breakdown of the administrative cost burden specifically attributable to JKP.

¹¹ In addition, prior to 2025, members were also required to have at least six consecutive months of contributions before termination of employment (as per article 19(3) of Government Regulation No. 37/2021). This condition was removed under the 2025 amendment (Government Regulation No. 6/2025).

► **Table 2.1. Statement of income and expenditure, 2021–2024 (in million rupiah)**

	2021	2022	2023	2024
Total income	7 958 150	2 676 982	3 236 744	3 801 079
Contributions income	1 953 607	2 444 027	2 720 241	2 978 726
Initial capital from the State Budget	6 000 000	n/a	n/a	n/a
Investment income ¹	4 490	232 906	516 369	822 067
Other income	53	49	134	286
Total expenditures	3	44 590	367 229	378 871
Benefits expenditures	n/a	44 516	367 205	378 863
Other expenses	3	74	24	8
Surplus / (deficit)	7 958 147	2 632 392	2 869 515	3 422 208
Technical reserve ²	n/a	(177 272)	(100 820)	(83 542)
Net asset at the end of the year	7 958 147	10 413 267	13 181 962	16 520 628

n/a = not applicable. Notes: 1 Net of expenses. 2 The net assets reported in BPJS Employment financial statements include a technical reserve, consisting of unpaid contribution income and reserves for claims still in process.

Source: BPJS Employment annual reports 2021 to 2024.

In BPJS Employment's financial statements, other income typically includes penalties for late contribution payments, gains on disposals of assets, the closing of accrued expenses and adjustments related to incentives for the Board of Supervisors and Directors. Other expenses generally comprise provisions, impairments, foreign exchange losses and miscellaneous non-operating costs. These items are reported at modest levels in the JKP accounts and do not represent core administrative or benefit-related expenditures.

As previously mentioned, administrative expenses are not recorded directly in the JKP accounts. Under the current framework, BPJS Employment administers five programmes – JKK, JKm, Old-Age Savings (JHT), Pension (JP) and JKP. Operational expenses for BPJS Employment are collectively financed through the first four benefit branches (JKK, JKm, JHT and JP), while no direct administrative costs are charged to JKP. This practice is consistent with the existing regulatory framework, under which JKP funds are reserved exclusively for benefit payments and investment income, whereas BPJS Employment's operational fund covers all administrative expenditures.

As a result, the financial statements of JKP present an incomplete picture of the scheme's total costs, as they exclude the share of BPJS Employment's operational expenditures attributable to the administration of JKP. For illustration purposes, over the period 2022–2024, BPJS Employment's consolidated operational expenses across all five programmes represented approximately 5 per cent of total contribution income and 9 per cent of total benefit expenditures. While not specific to JKP, these aggregate figures nonetheless provide a useful benchmark for assessing the overall level of administrative expenditure across BPJS Employment's benefit branches.

From a financial perspective, allocating JKP-specific operational expenses to the JKP branch would have only a marginal impact on the financial results presented in this section. Indeed, even after accounting for these expenses, JKP would continue to record a substantial operating surplus, confirming its strong financial position as of 31 December 2024. Similarly, reallocating JKP-related operational costs to the JKP branch would have only a negligible impact on the financial position of the other benefit branches administered by BPJS Employment that currently absorb these costs. That said, allocating these expenses directly to the JKP branch would align with good accounting practice and with the principle of maintaining separate financial statements for each benefit branch, as set out in Law No. 24/2011 on the Social Security Administering Body and Government Regulation No. 37/2021.

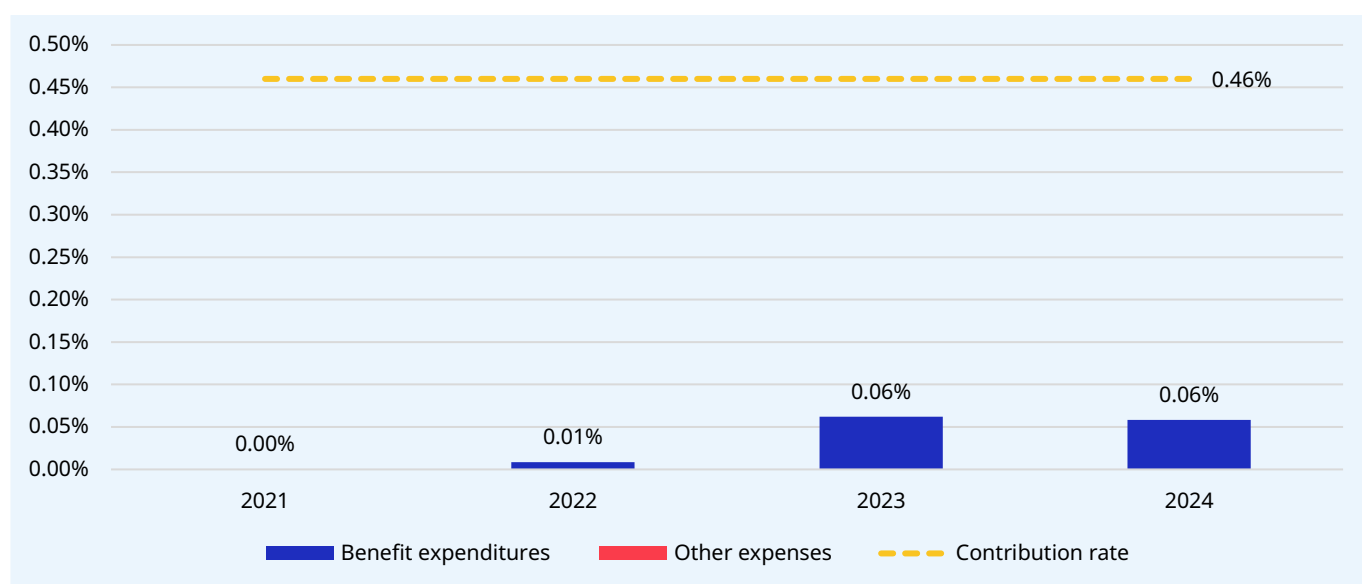
Overall:

- Contribution income increased by 52.5 per cent between financial years 2021 and 2024, or about 15.1 per cent per year on average.
- Investment income increased each year over the 2021–2024 period as the fund accumulated reserves. The average nominal rate of return (net of investment expenses) over this period was 3.2 per cent, corresponding to an average real rate of return of 0.2 per cent per year.¹²
- Benefit expenditures increased steadily over the 2021–2024 period as the scheme matured, rising from 44.6 billion rupiah in 2022 to 378.9 billion rupiah in 2024 – reflecting a 750 per cent increase over the three-year period. Since 2023, annual benefit expenditures have, however, stabilized significantly, at 367.2 billion rupiah in 2023 and 378.9 billion rupiah in 2024.
- Other income and other expenses, which mainly include non-operational items such as penalties, provisions and minor adjustments, remained marginal throughout the period.

Figure 2.1 presents the effective contribution rate and the pay-as-you-go (PAYG) cost rates, excluding administrative expenditures, observed during financial years 2021 to 2024. The PAYG cost rate represents the contribution rate that would have been required to cover all scheme expenditures (excluding administrative costs) in a given year.¹³

The absence of benefit expenditures in 2021 was expected, as eligibility under JKP requires at least 12 months of employment within the previous 24 months, meaning no member could qualify during the first year of operation. Between 2022 and 2024, benefit payments increased as more members became eligible for benefits. As the scheme matured, the PAYG cost rate stabilized at 0.06 per cent in 2023 and 2024, well below the effective contribution rate of 0.46 per cent.

► **Figure 2.1. Contribution rate and PAYG cost rates, excluding administrative expenses, 2021–2024**



Source: Authors' calculations based on BPJS Employment annual reports 2021 to 2024.

Indeed, the combination of a PAYG cost rate not exceeding 0.06 per cent, a 0.46 per cent contribution rate and the initial State Budget transfer of 6 trillion rupiah in 2021 led to a substantial accumulation of reserves during JKP's early years. By the end of 2024, the scheme's reserves were equivalent to approximately 44.6 times its annual benefit expenditures – an exceptionally high level for a maturing social insurance fund.

Such accumulation is not unusual in the early phase of a new social security benefit branch, when key parameters – including the contribution rate – are defined before sufficient experience data are available. This situation, however, underscores the importance for BPJS Employment to periodically review the scheme's parameters, particularly its

¹² These figures are based on the net assets reported at the end of each year and do not take into account the technical reserve.

¹³ Administrative expenses are excluded from these figures. While this approach does not fully align with best accounting practice, it reflects BPJS Employment's current practice and the regulatory framework governing JKP.

contribution rate and benefit provisions,¹⁴ as more robust experience data become available over time. In this context, administrative and communication measures aimed at increasing awareness of the scheme and encouraging eligible persons to claim benefits are also important. Such reviews should form part of each actuarial valuation, in accordance with the financial governance principles established under Government Regulation No. 37/2021.¹⁵ These considerations have likely contributed to BPJS Employment's decision to amend the legal framework of the scheme through Government Regulation No. 6/2025, which introduced modifications to coverage, contributions and benefit provisions, effective from 7 February 2025 (see section 2.3).

2.2. Demographic and financial development

This section presents key demographic and financial trends observed under JKP during the period 2021–2024.

Table 2.2 presents key demographic and financial trends for active members of the scheme. Table 2.3 summarizes the main demographic and financial characteristics of JKP beneficiaries.

► **Table 2.2. Active insured members by sex, 2021–2024**

	2021	2022	2023	2024
Number of active insured members	12 340 885	13 522 563	14 094 955	14 671 114
Males	8 243 120	9 075 142	9 454 145	9 842 787
Females	4 097 765	4 447 421	4 640 810	4 828 327
Average density of contribution (in months)	9.2	10.4	10.8	11.2
Males	9.3	10.4	10.8	11.2
Females	9.1	10.3	10.7	11.1
Average number of active insured members each month¹	9 505 081	11 728 654	12 640 526	13 652 181
Males	6 382 397	7 896 270	8 495 052	9 191 883
Females	3 122 684	3 832 384	4 145 475	4 460 298
Average monthly salary (in rupiah)	4 980 146	5 197 027	5 413 732	5 542 836
Males	5 121 585	5 350 670	5 560 685	5 687 353
Females	4 691 062	4 880 461	5 112 590	5 245 014
Ratio above the maximum insurable earnings² (in %)	21.7	23.7	27.8	33.2
Males	22.8	24.7	28.9	34.5
Females	19.6	21.8	25.5	30.5
Average monthly insurable salary² (in rupiah)	3 723 422	3 775 016	3 898 550	3 952 660
Males	3 788 181	3 845 161	3 967 252	4 020 217
Females	3 591 062	3 630 488	3 757 764	3 813 436

Notes: ¹ The average number of active insured members per month is derived from the number of active insured members and their average density of contribution. More precisely, the average monthly number of active insured members is calculated as: *Number of active insured members* (defined as members who have contributed at least once during the year) × *Average density of contribution* (in months) ÷ 12.

² The average monthly insurable salary used for contribution and benefit calculations reflects a ceiling of 5,000,000 rupiah per month.

Source: BPJS Employment individual data, 2021–24.

Overall:

- The number of active insured members increased gradually between 2021 and 2024, rising from 12.3 million to 14.7 million – an overall growth of 18.9 per cent, or an average of 5.9 per cent per year. Over the 2021–2024 period, males accounted for about 67 per cent of all active insured members on average, indicating a broadly stable gender composition throughout the period.

¹⁴ Administrative and communication measures to increase awareness of the scheme and to encourage those eligible to claim are also important.

¹⁵ Government Regulation No. 37/2021 establishes the legal and financial framework of JKP. It sets out the key governance principles for financial sustainability, including: (i) the requirement to conduct actuarial valuations at regular intervals to assess the scheme's financial soundness; and (ii) the authority to revise core parameters – such as contribution rates – based on economic conditions and actuarial findings (article 12).

- The average contribution density increased gradually as the scheme matured, rising from 9.2 months in 2021 to 11.2 months in 2024. Male members consistently showed a slightly higher contribution density than female members (11.2 versus 11.1 months in 2024).
- The average monthly salary increased from 5.0 million rupiah in 2021 to 5.5 million rupiah in 2024, representing an average nominal growth of about 3.6 per cent per year. The average insurable salary, which is capped at 5.0 million rupiah, increased more moderately – from 3.7 million rupiah in 2021 to 4.0 million rupiah in 2024 – equivalent to an average nominal growth of around 2.0 per cent per year. In 2024, 33.2 per cent of active insured members had monthly salaries above the maximum insurable earnings ceiling of 5.0 million rupiah, up from 21.7 per cent in 2021.¹⁶
- Throughout the 2021–2024 period, the average monthly salary of male members remained about 9 per cent higher than that of female members. This difference translated into an average monthly insurable salary for male members approximately 6 per cent higher than that of female members.

► **Table 2.3. Beneficiaries by sex, 2021–2024**

	2021	2022 ¹	2023	2024
Number of beneficiaries	n/a	10 164	58 117	55 899
Males	n/a	4 454	25 921	32 521
Females	n/a	5 710	32 196	23 378
Average benefit duration² (in months)	n/a	4.84	4.75	4.72
Males	n/a	4.55	4.53	4.55
Females	n/a	5.07	4.92	4.96
Average monthly reference salary (in rupiah)	n/a	3 741 812	4 196 655	4 212 318
Males	n/a	3 883 967	4 142 520	4 297 817
Females	n/a	3 642 272	4 236 778	4 103 259
Average monthly benefit² (in rupiah)	n/a	1 359 684	1 518 000	1 524 669
Males	n/a	1 422 986	1 502 471	1 560 283
Females	n/a	1 315 359	1 529 510	1 479 241
Effective monthly replacement rate² (in %)	n/a	36.3	36.2	36.2
Males	n/a	36.6	36.3	36.3
Females	n/a	36.1	36.1	36.1

n/a = not applicable. Notes: ¹ The year 2022 represents a partial year, as benefit payments began in February 2022. ² The average monthly benefit and the effective monthly replacement rate for 2024 were estimated using available 2024 data and extrapolated from the 2022–23 experience, as payments made in 2025 to beneficiaries who began receiving benefits in 2024 were not available.

Source: BPJS Employment annual reports 2021 to 2024.

Overall:

- Over the 2021–2024 period, the number of beneficiaries under the scheme increased rapidly following its introduction, before stabilizing in 2023–2024. In 2022, a total of 10,164 persons received benefits from JKP; this number rose to 58,117 in 2023 and 55,899 in 2024. The gender distribution of beneficiaries fluctuated during the period, with women accounting for 56 per cent and 55 per cent of beneficiaries in 2022 and 2023, respectively, and 42 per cent in 2024.
- Beneficiaries accounted for approximately 0.09 per cent of active insured members in 2022, 0.46 per cent in 2023, and 0.41 per cent in 2024, indicating the emergence of a relatively stable pattern of benefit uptake from 2023 onwards.¹⁷ Over the 2021–2024 period, females consistently showed higher benefit take-up rates than males.
- The average benefit duration remained stable over the years, at around 4.8 months overall. Male beneficiaries received benefits for slightly shorter periods than female beneficiaries during 2021–2024 (4.54 months compared with 4.95 months).

¹⁶ These ratios were calculated based on members' recognized monthly salaries, and therefore, reflect their effective contribution density.

¹⁷ These ratios reflect the effective contribution density of members. It is worth mentioning that 2022 represents a partial year, as benefit payments began in February 2022.

- The average monthly reference salary of beneficiaries, which serves as the basis for benefit calculation, was 7 to 8 per cent higher than the average monthly insurable salary of active insured members in 2023 and 2024. The higher average monthly reference salary is likely explained by scheme's qualifying conditions, which tend to exclude members with lower contribution regularity, who also generally have lower monthly salaries.
- The average monthly benefit represented roughly 36 per cent of beneficiaries' monthly reference salary each year – a level similar among male and female beneficiaries. This effective replacement rate reflects the scheme's benefit formula, which provides a 45 per cent replacement rate for the first three months of benefits and 25 per cent for the subsequent three months.

It is worth noting that the benefit take-up rates discussed above reflect two main underlying indicators: (i) the involuntary termination rate, and (ii) the eligibility rate among terminated members. While eligibility rates can now be considered relatively mature and stable in 2023–2024 – since the vast majority of active JKP members joined the scheme at its implementation in 2021 – involuntary termination rates primarily reflect broader labour market dynamics, such as economic conditions, business cycles and sectoral movements, and are therefore more volatile.

An analysis of data obtained on active insured members and beneficiaries suggests that eligibility rates among terminated members reached approximately 80 per cent in 2023 and 84 per cent in 2024, with similar levels observed for males and females. Combined with the average number of active insured members each month during these years, the involuntary termination rates have been estimated at 0.57 per cent in 2023 (0.38 per cent for males and 0.97 per cent for females) and 0.49 per cent in 2024 (0.42 per cent for males and 0.62 per cent for females).

2.3. Recent legal changes

The legal framework of the JKP was initially established under Government Regulation No. 37/2021. In early 2025, the framework was amended through Government Regulation No. 6/2025, which introduced modifications to coverage, contributions and benefit provisions, effective from 7 February 2025, as follow:

- **Coverage:** Prior to 2025, JKP eligibility required the payment of contributions to both the Old-Age Savings Scheme (JHT) and the National Health Insurance (JKN). As a result, individuals exempted from JKN contributions, such as members of the government-subsidized *Penerima Bantuan Iuran (PBI-JKN)* category, were excluded. Under Government Regulation No. 6/2025, PBI-JKN members are now covered, extending JKP protection to low-income workers whose health insurance contributions are financed by the Government.
- **Contribution:** Prior to 2025, the total contribution rate was 0.46 per cent of insurable earnings, with 0.22 per cent paid by the Government and 0.24 per cent by employers (article 11, Government Regulation No. 37/2021). As of 2025, the total contribution rate was reduced to 0.36 per cent, consisting of 0.22 per cent from the Government and 0.14 per cent from employers (article 11, Government Regulation No. 6/2025). This reduction reflects the removal of the 0.1 per cent contribution previously collected through the Death Benefit Scheme (JKm).
- **Qualifying conditions:** The eligibility requirement of six consecutive months of contributions prior to termination, originally stipulated in Government Regulation No. 37/2021, has been eliminated. Members must still have contributed at least 12 months within the 24 months period preceding termination, but the removal of the consecutive contribution condition broadens effective access to benefits.
- **Monthly benefit:** Under the original framework, benefits were paid at a declining rate: 45 per cent of the last reported wage for the first three months and 25 per cent for the following three months. The 2025 amendment replaced this with a flat rate of 60 per cent of the last reported wage, payable for the full six-month benefit duration. This represents a significant increase in the scheme's benefits and aligns its design more closely with international standards, such as ILO Convention No. 168.
- **Claiming process:** The time limit for claim submission was extended. Previously, members had to file claims within three months of termination; under the 2025 amendment, this period is extended to six months, providing greater flexibility for workers transitioning from employment to unemployment.

► 3. Key assumptions

Sections 3.1 and 3.2 present key demographic and economic assumptions used in this actuarial valuation, which were mainly derived from data provided by BPS. Section 3.3 presents the key scheme-specific data and assumptions, which were based on information obtained from BPJS Employment.

It is worth noting that a projection period of ten years, from 2025 to 2034, has been retained for this actuarial valuation. Such a period of projection not only allows the drawing of conclusions on the sustainability of an unemployment insurance scheme but also contributes to providing a good picture of the scheme's sensitivity to assumptions or changes to benefits. Section 4.3 presents sensitivity tests that explore the potential effects of varying demographic, economic and scheme-specific assumptions.

3.1. General demographic assumptions

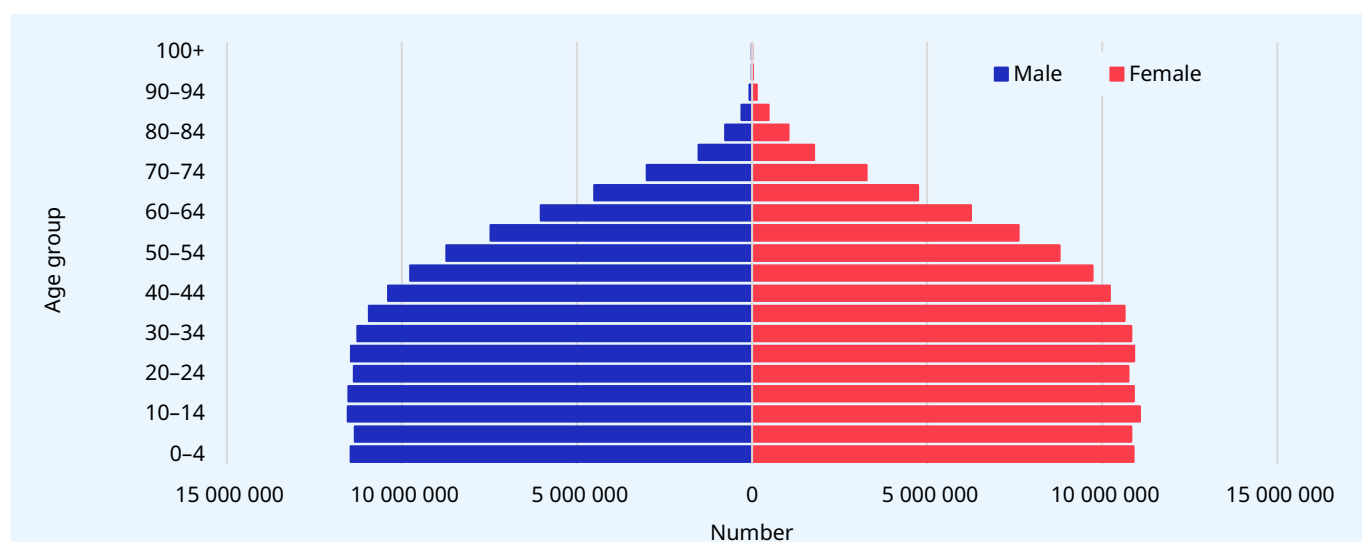
A projection of the general population is used for the purposes of determining the evolution of the scheme's members and developing the general macroeconomic framework. Population projections require specific assumptions on mortality, fertility and migration. Although the age- and sex-distribution of the general population of Indonesia is important, it is worth noting that the assumptions on mortality, fertility and migration are not key drivers in the demographic and financial projection of an unemployment insurance scheme. Indeed, mortality, fertility and migration have a marginal impact on the projection of formal employment over a projection period of less than 10 or 15 years.

3.1.1. Population structure

The general population and its structure have been assessed based on the most recent estimates from BPS and the United Nations World Population Prospects (UN WPP, 2024 Revision). The most recent population census conducted in Indonesia dates from 2020, and was implemented with rigorous quality controls, providing a highly representative depiction of the population in terms of demographic and socioeconomic characteristics. The findings of the 2020 Population Census and its projections, along with estimates from the UN WPP, 2024 Revision – which also draw upon the 2020 Population Census – have informed the population distribution used in this actuarial valuation. Minor adjustments were applied, including smoothing and interpolation by single year of age (rather than using five-year age groups), resulting in a reasonable estimate of the initial population distribution by age and sex.

According to BPS, the general population of Indonesia is estimated at 284,438,800 persons for 2025 (143,548,000 males and 140,890,800 females). Figure 3.1 presents the estimated age and sex distribution of the general population of Indonesia as of 2025.

► **Figure 3.1. Estimated population structure of Indonesia in 2025**



Source: Authors' estimates based on data provided by BPS and the UN WPP, 2024 Revision.

3.1.2. Fertility

The total fertility rate represents the average number of children a woman would have over her lifetime, assuming current age-specific fertility rates. In the absence of migration, a total fertility rate of approximately 2.1 is needed for population replacement.

In this study, fertility assumptions are based on the UN WPP, 2024 Revision (medium variant), and are consistent with recent trends and official age-specific fertility rates published by BPS. They are also generally aligned with the scenarios presented in the *Indonesia Population Projection 2020–2050*, which is also produced by BPS.

A total fertility rate of 2.11 children per woman is assumed for 2025, gradually decreasing to 2.00 by 2034. The sex ratio at birth is assumed to remain constant at approximately 1.06 male births for every female birth.

Sample age-specific fertility rates are presented in table 3.1.

► **Table 3.1. Age-specific fertility rates, 2025, 2028, 2031 and 2034**

Age	Fertility rate			
	2025	2028	2031	2034
15–19	0.0251	0.0227	0.0205	0.0186
20–24	0.0941	0.0902	0.0864	0.0827
25–29	0.1286	0.1288	0.1287	0.1283
30–34	0.0988	0.0988	0.0987	0.0984
35–39	0.0557	0.0553	0.0548	0.0543
40–44	0.0164	0.0159	0.0154	0.0149
45–49	0.0032	0.0030	0.0029	0.0028
Total fertility rate	2.11	2.07	2.04	2.00

Source: Authors' estimates and assumptions based on data provided by BPS and the UN WPP, 2024 Revision.

3.1.3. Mortality

According to BPS, life expectancy at birth in Indonesia is estimated at 74.2 years in 2025 – 71.8 years for males and 76.8 years for females. By contrast, the UN WPP, 2024 Revision, estimates life expectancy at 71.4 years – 69.3 for males and 73.6 for females. This highlights a significant divergence between national and international sources. While BPS based its 2025 estimates on projections derived from the 2020 Population Census, the UN WPP, 2024 Revision, instead relies on official estimates up to 2010 and registered deaths by age and sex through 2020 for its projections. Although the methodologies used by both sources differ, they would generally be expected to produce similar results once appropriate adjustments are made – for instance, to account for under-registration or reporting issues.

Given the above-mentioned discrepancy, which was impossible for the authors to reconcile, equal credibility was given to both the national estimates and the UN WPP, 2024 Revision. As such, a middle-ground assumption was adopted as the starting point for 2025. In this study, life expectancy at birth in 2025 is estimated at 70.6 years for males and 75.2 years for females. At age 60, life expectancy is estimated at 17.1 years for males and 20.2 years for females.

The mortality pattern used in this study was derived from the single-age estimates of the UN WPP, 2024 Revision, which are consistent with those presented in the *Indonesia Population Projection 2020–2050* published by BPS. The future mortality improvement pattern has been determined so that it matches as closely as possible the UN WPP, 2024 Revision (medium variant) over the projection period. By 2034, life expectancy at birth is projected to reach 71.7 years for males and 76.6 years for females. At age 60, life expectancy is expected to increase to 17.8 years for males and 21.1 years for females.

Table 3.2 presents life expectancies at different ages for selected years. Sample mortality rates are presented in table 3.3.

► **Table 3.2. Estimated and projected life expectancy of the general population by sex at ages 0, 20 and 60, 2025–2034**

Year	Males			Females		
	At 0	At 20	At 60	At 0	At 20	At 60
2025	70.6	52.3	17.1	75.2	56.6	20.2
2026	70.7	52.4	17.1	75.4	56.7	20.3
2027	70.8	52.5	17.2	75.5	56.8	20.4
2028	70.9	52.6	17.3	75.7	57.0	20.5
2029	71.1	52.7	17.4	75.8	57.1	20.6
2030	71.2	52.9	17.5	76.0	57.2	20.7
2031	71.3	53.0	17.5	76.1	57.3	20.8
2032	71.5	53.1	17.6	76.3	57.5	20.9
2033	71.6	53.2	17.7	76.4	57.6	21.0
2034	71.7	53.3	17.8	76.6	57.7	21.1

Source: Authors' estimates and assumptions based on data provided by BPS and the UN WPP, 2024 Revision.

► **Table 3.3. Sample mortality rates of the general population by sex for 2025, 2028, 2031 and 2034 (percentage)**

Age	Males				Females			
	2025	2028	2031	2034	2025	2028	2031	2034
0	1.48	1.41	1.34	1.27	1.04	0.97	0.91	0.85
10	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02
20	0.14	0.13	0.13	0.13	0.08	0.08	0.07	0.07
30	0.15	0.15	0.15	0.14	0.11	0.11	0.10	0.10
40	0.27	0.26	0.26	0.25	0.21	0.20	0.19	0.19
50	0.67	0.65	0.63	0.61	0.46	0.44	0.42	0.41
60	1.72	1.66	1.60	1.54	1.03	0.98	0.94	0.90
70	4.25	4.11	3.98	3.84	2.67	2.57	2.47	2.37
80	10.31	10.05	9.80	9.54	7.72	7.48	7.24	7.00
90	23.19	22.85	22.52	22.16	19.54	19.14	18.74	18.33
100	40.88	40.68	40.47	40.24	37.47	37.13	36.80	36.44

Source: Authors' estimates and assumptions based on data provided by BPS and the UN WPP, 2024 Revision.

3.1.4. Migration

For this study, net migration has been projected in line with the UN WPP, 2024 Revision (medium variant), which draws on multiple data sources, including:

- information on foreign-born populations from censuses and registers in major countries of destination;
- data on migrant workers and labour migration;
- estimates derived from the difference between total population growth and natural increase; and
- United Nations High Commissioner for Refugees (UNHCR) statistics on the number of refugees in key countries of asylum.

Overall, this study assumes an average annual net migration of –42,500 persons (that is, net emigration) over the projection period from 2025 to 2034, equivalent to approximately –0.145 per 1,000 persons. This is slightly lower than the –0.11 per 1,000 persons estimated for the 2015–2020 period, as presented in the 2020 Population Census.

3.1.5. Resulting population projection

Key demographic assumptions for the 2025–2034 projection period are presented in Table 3.4.

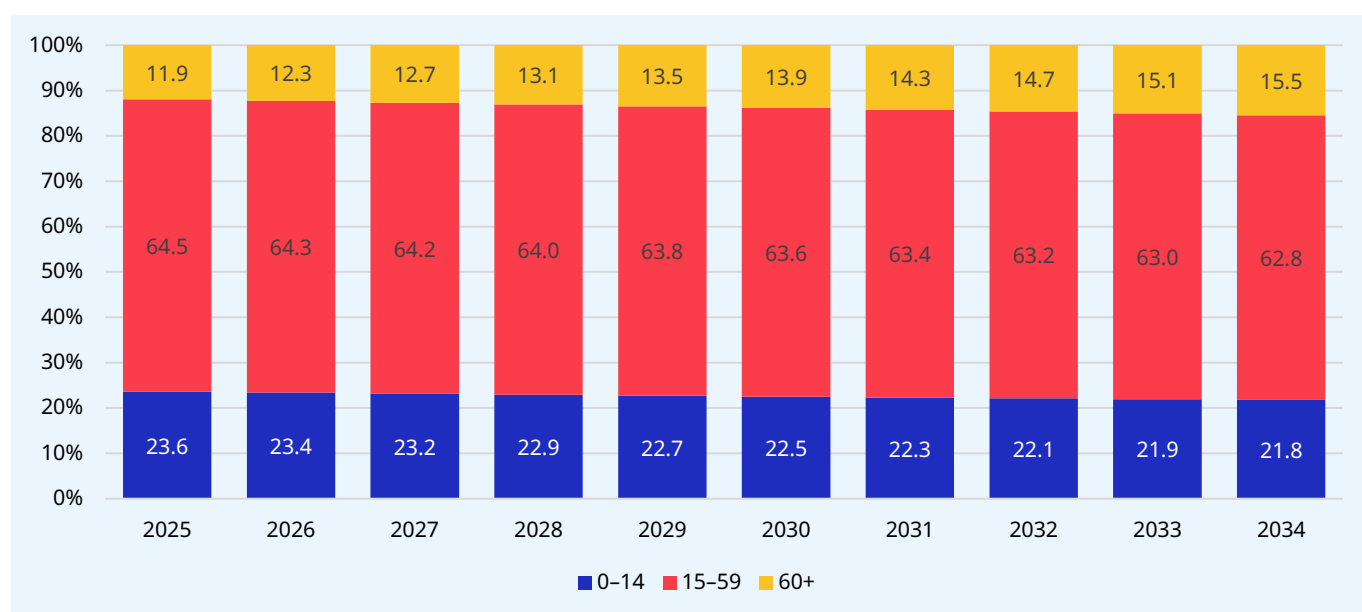
► **Table 3.4. Key demographic assumptions, 2024–2035**

Age	Total fertility rate	Life expectancy at birth		Annual net migration
		Males	Females	
2025	2.11	70.6	75.2	–39 509
2026	2.10	70.7	75.4	–40 227
2027	2.09	70.8	75.5	–40 975
2028	2.07	70.9	75.7	–41 709
2029	2.06	71.1	75.8	–42 423
2030	2.05	71.2	76.0	–43 109
2031	2.04	71.3	76.1	–43 763
2032	2.02	71.5	76.3	–44 379
2033	2.01	71.6	76.4	–44 952
2034	2.00	71.7	76.6	–45 479

Source: Authors' estimates and assumptions based on data provided by BPS and the UN WPP, 2024 Revision.

Figure 3.2 illustrates the projected evolution of Indonesia's population structure between 2025 and 2034, highlighting the gradual ageing of the population over the ten-year period. During this time, the share of children aged 0–15 is projected to decline steadily, from 23.6 per cent in 2025 to 21.8 per cent in 2034. Similarly, the share of individuals aged 15–59 – who form the contributory base of BPJS Employment¹⁸ – is projected to decrease gradually from 64.5 per cent in 2025 to 62.8 per cent in 2034. By contrast, the share of the population aged 60 and over is expected to increase continuously, from 11.9 per cent in 2025 to 15.5 per cent by 2034.

► **Figure 3.2. Projected age structure of the population, 2025–2034 (percentage)**



Source: Authors' estimates and projections based on data provided by BPS and the UN WPP, 2024 Revision.

¹⁸ The normal retirement age under BPJS Employment's pension scheme (Jaminan Pensiun) is 59 as of 1 January 2025. In accordance with Government Regulation No. 45 of 2015, it is scheduled to increase by one year every three years until it reaches age 65 by 2043.

Table 3.5 presents the projected evolution of Indonesia's population between 2025 and 2034. The total population is expected to increase from approximately 284.4 million in 2025 to around 303.4 million in 2034, reflecting an average annual growth rate of about 0.7 per cent over the ten-year period. The number of individuals aged 15–59 is projected to rise from about 183.3 million to 190.5 million over the same period, corresponding to an average annual growth rate of roughly 0.4 per cent.

► **Table 3.5. Projected population, by age-group, 2025-2034**

Age	Age group			Total
	0–14	15–59	60+	
2025	67 165 880	183 330 453	33 942 467	284 438 800
2026	67 084 974	184 461 007	35 295 533	286 841 514
2027	66 973 686	185 521 583	36 677 964	289 173 234
2028	66 846 847	186 498 567	38 086 650	291 432 064
2029	66 712 898	187 385 428	39 518 215	293 616 541
2030	66 580 524	188 175 073	40 968 628	295 724 225
2031	66 447 832	188 872 352	42 434 777	297 754 962
2032	66 313 642	189 479 598	43 914 437	299 707 677
2033	66 169 125	190 007 424	45 405 429	301 581 978
2034	66 008 739	190 461 891	46 907 233	303 377 863

Source: Authors' estimates and projections based on data provided by BPS and the UN WPP, 2024 Revision.

3.2. Macroeconomic assumptions

The base macroeconomic scenario incorporates indicators published by BPS, and also takes into account the latest economic estimates and forecasts from the International Monetary Fund, the World Bank and the Economist Intelligence Unit.¹⁹ The authors' perspectives on Indonesia's short- and medium-term economic developments have also been reflected into the base macroeconomic scenario.

In recent years, Indonesia's economy has shown resilience, supported by strong domestic consumption, investment in infrastructure and targeted industrial policies. The Government has promoted private investment, particularly in downstream mineral processing and the electric vehicle supply chain – sectors supported by regulatory reforms such as the Job Creation Law and strategic partnerships with foreign investors. Nonetheless, structural challenges remain – particularly in creating stable, high-quality jobs. A significant share of the labour force remains concentrated in low-productivity and informal sectors. Indonesia also faces challenges in attracting foreign investment into labour-intensive manufacturing compared to its regional peers. These issues are further compounded by persistent skill mismatches, which limit the labour market's ability to absorb new entrants into more dynamic formal sectors.

The base macroeconomic scenario assumes continued stability and moderate economic growth, supported by gradual monetary policy easing and targeted industrial strategies, despite ongoing global trade uncertainties and currency pressures.

Real GDP growth reached 5.0 per cent in 2024, but is expected to slow to 4.7 per cent in 2025 due to weaker job creation, modest income growth and reduced external demand. Over the projection period, annual GDP growth is projected to gradually rise, reaching 5.0 per cent by 2028 and remaining stable at that level through 2034. This rate of growth is comparable to that observed between 2014 and 2023, when excluding the effects of the COVID-19 pandemic in 2020 and 2021.

Inflation is projected to remain within the Bank of Indonesia's target range of 1.5–3.5 per cent throughout the projection period. It is expected to reach 1.8 per cent in 2025, followed by gradual increases to 2.0 per cent in 2026, 2.2 per cent in 2027, and 2.4 per cent in 2028. From 2029 onward, inflation is projected to stabilize at 2.5 per cent, which corresponds to the midpoint of the central bank's target range.

¹⁹ IMF, World Economic Outlook database, April 2025; World Bank, Data Bank database, July 2025; Economist Intelligence Unit, May 2025.

The labour force participation rate increased from 66.3 per cent in 2016 to 68.2 per cent in 2019. Due to the effects of the COVID-19 pandemic, it decreased temporarily during 2020–2022, but returned to near pre-pandemic levels in 2023. According to the latest estimates from the ILO's ILOSTAT database, the labour force participation rate stood at 67.9 per cent in 2023 (82.2 per cent for males and 53.4 per cent for females). In this study, the labour force participation rate is projected to reach 69.0 per cent by 2034 (83.0 per cent for males and 55.0 per cent for females).²⁰ This gradual increase is in line with expectations of continued economic development, evolving employment structures and further gains in female labour force participation. It also reflects a projected rise in labour force participation among older workers, associated with the gradual increase in the normal retirement age over the projection period.²¹

The limited increase in overall labour force participation reflects, in part, the already high participation rates among men, which leave little room for further growth. At the same time, population ageing tends to exert downward pressure on participation rates, as older age groups are less likely to be active in the labour market. In this context, even a modest increase in participation represents a positive outcome that would not occur without continued economic development.

Labour productivity is projected to grow strongly over the projection period – rising by 3.3 per cent in 2025 and gradually reaching 4.0 per cent by 2034. While high by international standards, these productivity growth rates are considered reasonable in the context of Indonesia, where a large share of the workforce is still engaged in low-productivity and informal sectors – providing significant room for productivity gains. This outlook is also supported by Indonesia's very low unemployment rate, estimated at just 3.3 per cent in 2023, which suggests that future economic growth will increasingly rely on productivity gains, as the potential for further employment expansion is limited.

The combined effect of productivity and economic growth is expected to keep the unemployment rate low over the projection period. The unemployment rate is projected to remain at 3.4 per cent in 2025 and 2026, before declining slightly to 3.3 per cent from 2027 onward.

Table 3.6 presents the main economic indicators pertaining to the base macroeconomic scenario.

► **Table 3.6. Main economic indicators, 2025–2034 – Base scenario (percentage)**

Year	Real GDP growth rate	Employment growth rate	Productivity growth rate	Annual inflation rate	Unemployment rate
2025	4.7	1.3	3.3	1.8	3.4
2026	4.8	1.3	3.4	2.0	3.4
2027	4.9	1.3	3.6	2.2	3.3
2028	5.0	1.2	3.8	2.4	3.3
2029	5.0	1.1	3.8	2.5	3.3
2030	5.0	1.1	3.9	2.5	3.3
2031	5.0	1.1	3.9	2.5	3.3
2032	5.0	1.0	4.0	2.5	3.3
2033	5.0	1.0	4.0	2.5	3.3
2034	5.0	0.9	4.0	2.5	3.3

Source: Authors' assumptions.

²⁰ The labour market figures presented in this report may differ from those published by BPS. This study relies on ILOSTAT estimates, which are derived from BPS labour force surveys but adjusted to align with international standards and to enable cross-country comparability. These adjustments may include the harmonization of age groups, definitions of employment and unemployment, and the treatment of informal and underemployed workers, in line with the guidelines of the 19th International Conference of Labour Statisticians (ICLS).

²¹ As noted above, the normal retirement age under BPJS Employment's pension scheme (Jaminan Pensiun) is 59 as of 1 January 2025. In accordance with Government Regulation No. 45 of 2015, it is scheduled to increase by one year every three years until it reaches age 65 by 2043.

Table 3.7 presents the projected evolution of the working-age, labour force and employed population under the base macroeconomic economic scenario.

► **Table 3.7. Working-age, labour force and employed populations, 2025–2034 – Base scenario**

	2025	2026	2028	2030	2032	2034
Working-age population	217 272 920	219 756 539	224 585 217	229 143 700	233 394 036	237 369 124
Male	109 184 872	110 347 583	112 590 488	114 692 077	116 643 642	118 464 694
Female	108 088 048	109 408 957	111 994 729	114 451 623	116 750 394	118 904 430
Labour force participation rate (%)	68.3	68.4	68.6	68.7	68.8	69.0
Male	82.6	82.7	82.8	82.8	82.9	83.0
Female	53.9	54.0	54.3	54.5	54.8	55.0
Labour force population	148 467 954	150 341 224	153 971 999	157 430 618	160 690 728	163 729 758
Male	90 197 264	91 218 125	93 177 529	95 019 125	96 736 710	98 325 529
Female	58 270 690	59 123 099	60 794 470	62 411 493	63 954 017	65 404 230
Employed population	143 420 043	145 304 793	148 890 923	152 235 407	155 387 934	158 326 676
Male	86 959 257	87 989 156	89 925 209	91 700 746	93 356 150	94 885 683
Female	56 460 786	57 315 637	58 965 714	60 534 661	62 031 784	63 440 993
Unemployed population	5 047 910	5 036 431	5 081 076	5 195 210	5 302 794	5 403 082
Male	3 238 007	3 228 969	3 252 320	3 318 379	3 380 560	3 439 846
Female	1 809 903	1 807 462	1 828 756	1 876 832	1 922 234	1 963 236
Unemployment rate (%)	3.4	3.4	3.3	3.3	3.3	3.3
Male	3.6	3.5	3.5	3.5	3.5	3.5
Female	3.1	3.1	3.0	3.0	3.0	3.0

Source: Authors' projections.

3.3. Scheme-specific assumptions

The projection of revenues and expenditures of JKP is based not only on general demographic and macroeconomic assumptions, but also on the specific characteristics of the scheme's contributors and beneficiaries. These characteristics, together with key scheme assumptions – such as the rate of return on the fund or administrative expenses – are presented in the following sections.

3.3.1. Active insured members

The projection of the number of active insured members under JKP is based on three key components:

- the projected employment growth in Indonesia (see section 3.2);
- the projected evolution in the BPJS Employment coverage rates; and
- the proportion of BPJS Employment active members effectively covered under JKP.²²

During the period 2021–2024, the number of persons affiliated with BPJS Employment increased from about 20.8 million in 2021 to 29.3 million in 2024 – an average annual growth rate of 9.6 per cent. BPJS Employment's overall coverage rate, expressed as a share of total employment in Indonesia, increased from 16.5 per cent in 2021 to 21.7 per cent in 2024.²³ This expansion during 2021–2024 largely reflects the gradual formalization of employment in Indonesia and the continued efforts of BPJS Employment to extend social protection coverage to previously uncovered workers.

In this study, the BPJS Employment coverage rate is assumed to continue increasing over time, albeit at a more moderate pace as the scheme matures and covers most of its target population. Under the base scenario, the coverage rate –

²² The number of active insured members under JKP differs from the total number of persons covered by BPJS Employment. See Appendix 1 for further details.

²³ These ratios refer exclusively to individuals aged 15–69, reflecting the typical age profile of members covered under BPJS Employment and JKP.

currently at 21.7 per cent – is projected to reach 30.0 per cent over the ten-year projection period.²⁴ The proportion of male insured members, which declined slightly from 65.2 per cent in 2021 to 64.5 per cent in 2024, is expected to reach 64.0 per cent by 2034, reflecting the gradual increase in the participation of female workers under BPJS Employment.

Not all BPJS Employment members are covered by JKP (see Appendix 1). As of 2024, active insured members under JKP represented 50.1 per cent of all active insured members registered with BPJS Employment – 52.1 per cent among males and 46.4 per cent among females.

Following the introduction of Government Regulation No. 6/2025, which extended JKP coverage to PBI-JKN members, the JKP affiliation rate (the share of BPJS Employment members also covered under JKP) is expected to increase. Based on individual data obtained for this study, this regulatory change is estimated to raise the affiliation rate from 50.1 per cent to 55.2 per cent overall (from 52.1 per cent to 57.3 per cent for males and from 46.4 per cent to 51.5 per cent for females).

These ratios were used as the starting point for the projection. The affiliation rate is projected to increase slightly over the projection period, as JKP progressively extends coverage to a growing proportion of older members already registered under BPJS Employment (coverage being limited to individuals under 54 years of age at the time of registration).

Table 3.8 presents the projection of the number of active insured members under BPJS Employment and JKP between 2024 and 2034, disaggregated by sex. It also includes key indicators such as the BPJS Employment coverage rate and JKP affiliation rate. For illustration purposes, the employed population shown includes only individuals aged 15–69, reflecting the typical age profile of BPJS Employment members.

► **Table 3.8. Employed population (ages 15–69) and active insured members under BPJS Employment and JKP, 2024–2034**

	2024	2025	2026	2028	2030	2032	2034
Employed population (ages 15–69) (in millions)	134.9	138.5	140.2	143.2	146.0	148.5	150.9
Male	82.0	83.9	84.8	86.4	87.9	89.2	90.4
Female	52.9	54.6	55.3	56.8	58.1	59.3	60.4
BPJS Employment coverage rate (in %)	21.7	23.4	24.8	27.0	28.4	29.4	30.0
Male	23.0	24.9	26.4	28.7	30.3	31.3	32.0
Female	19.7	21.1	22.4	24.3	25.6	26.4	27.0
BPJS Employment active insured members¹ (in millions)	29.3	32.4	34.8	38.6	41.5	43.6	45.3
Male	18.9	20.9	22.4	24.8	26.6	28.0	29.0
Female	10.4	11.5	12.4	13.8	14.9	15.7	16.3
JKP Affiliation rate (in %)	50.1	55.2	55.7	56.1	56.4	56.6	56.7
Male	52.1	57.3	57.9	58.4	58.8	59.0	59.3
Female	46.4	51.5	51.7	51.9	52.1	52.2	52.3
JKP Active insured members (in millions)	14.7	17.9	19.4	21.6	23.4	24.7	25.7
Male	9.8	12.0	13.0	14.5	15.6	16.5	17.2
Female	4.8	5.9	6.4	7.2	7.7	8.2	8.5

Note: ¹ BPJS Employment active insured members refer to the number of wage workers covered under the Employment Injury Insurance (JKK) scheme, which has the largest coverage among BPJS Employment schemes. These figures exclude participants covered in special programmes for construction sector (*Jasa Konstruksi*) and migrant workers abroad (*Pekerja Migran Indonesia*, or PMI). The 2024 figure was provided by BPJS Employment.

Source: Authors' estimates based on data provided by BPJS Employment (2021–2024), and authors' projections (2025–2034).

²⁴ The number of active insured members under JKP differs from the total number of persons covered by BPJS Employment. See Appendix 1 for further details.

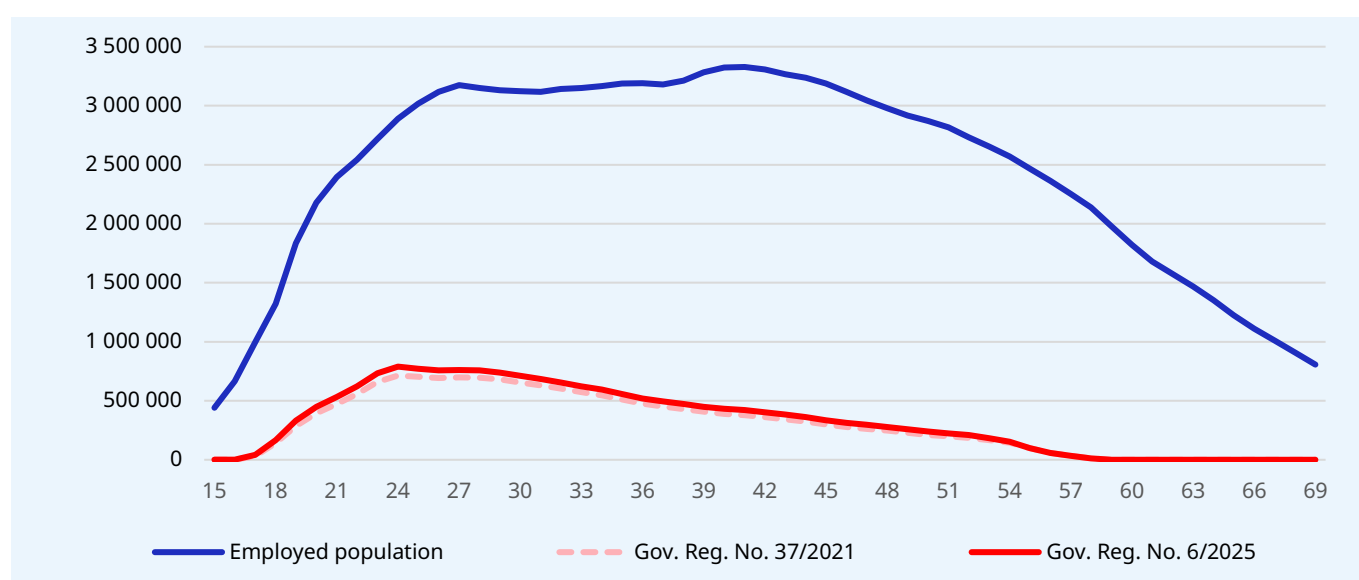
Table 3.9 presents the projected number of active insured members of JKP, disaggregated by age and sex, in 2025, 2030 and 2034. Figure 3.3 presents an illustration of the estimated distribution of the employed and covered population in 2025, comparing the provisions under Government Regulation No. 37/2021 with those introduced by Government Regulation No. 6/2025.

► **Table 3.9. Projected number of active insured members by age and sex, years 2025, 2030 and 2034**

Age	Year 2025		Year 2030		Year 2034	
	Males	Females	Males	Females	Males	Females
15–19	277 177	261 912	337 843	330 961	354 838	352 649
20–24	1 790 500	1 334 287	2 214 201	1 689 385	2 376 437	1 862 380
25–29	2 422 201	1 362 966	2 977 522	1 701 943	3 179 254	1 853 000
30–34	2 266 767	1 000 943	2 866 570	1 280 451	3 020 386	1 364 182
35–39	1 771 196	723 645	2 275 606	936 375	2 471 363	1 024 190
40–44	1 429 244	571 201	1 861 322	751 543	2 039 945	827 232
45–49	1 080 555	399 262	1 415 632	528 372	1 573 636	591 365
50–54	768 344	237 777	1 072 999	337 626	1 196 477	378 999
55–59	157 016	44 196	526 971	150 621	631 130	182 501
60–64	n/a	n/a	100 373	24 987	284 197	70 806
65–69	n/a	n/a	n/a	n/a	39 470	9 425
Total	11 963 000	5 936 189	15 649 039	7 732 265	17 167 133	8 516 729

= not applicable. Source: ILO estimates and projections derived from BPJS Employment data.

► **Figure 3.3. Estimated distribution of employed and covered population by age, before and after the introduction of Government Regulation No. 6/2025, year 2025**



Note: “Gov. Reg. No. 37/2021” refers to the estimated covered population under JKP in accordance with Government Regulation No. 37/2021. “Gov. Reg. No. 6/2025” refers to the estimated covered population under JKP following the amendments introduced by Government Regulation No. 6/2025. Source: ILO estimates and projections derived from BPJS Employment data.

It should be noted that, given the short-term nature of JKP benefits, the projection of active insured members is not a sensitive assumption in this actuarial valuation.

3.3.2. Density of contribution

The density of contribution refers to the number of months during which active insured members contribute to the scheme in a year. The density of contribution is used to project the scheme's contribution income as well as to derive the ratio of active insured members who would meet the contribution requirement for benefit eligibility (see section 3.3.6).

Between 2021 and 2024, the average density of contribution under JKP increased gradually, reflecting the gradual expansion of the scheme's coverage and the regularity of contributions among most active insured members under BPJS Employment. Over this period, the average density of contribution increased from 9.2 months in 2021 to 11.2 months in 2024 (from 9.3 to 11.2 months for males and from 9.1 to 11.1 months for females).

Based on individual data obtained for this study, the introduction of Government Regulation No. 6/2025, which extended JKP coverage to PBI-JKN members, is not expected to materially affect the scheme's overall contribution density. The members affected by this regulation appear to have contribution patterns broadly similar to those of existing contributors as of 2024.

In this study, densities of contribution were projected based on data obtained for the period 2022–2024²⁵ on both active insured members covered by JKP as of 2024 and those affected by Government Regulation No. 6/2025. Densities of contribution, by age and sex, are assumed to remain constant throughout the projection period.

Table 3.10 presents the projected densities of contribution by age and sex. For illustration purposes, the table includes the 2022–2024 estimates and the assumptions used over the 2025–2034 period.

► **Table 3.10. Estimated and projected densities of contribution by age and sex (in months)**

Age	Estimates (2022–2024)		Assumptions (2025–2034)	
	Males	Females	Males	Females
20	8.91	9.58	9.15	9.58
25	10.49	10.69	10.57	10.69
30	11.05	11.18	11.08	11.18
35	11.15	11.26	11.19	11.26
40	11.20	11.31	11.24	11.31
45	11.26	11.37	11.29	11.37
50	11.33	11.43	11.36	11.43
55+	11.44	11.50	11.45	11.50

Source: ILO estimates and assumptions derived from BPJS Employment data.

3.3.3. Members' insurable earnings

Under JKP, members' earnings are defined as the sum of the basic salary and fixed allowances, while non-wage allowances are excluded.

Between 2021 and 2024, the salary scale among JKP members remained broadly stable by age and sex. As a starting point for the projections, members' earnings – disaggregated by age and sex – were estimated based on BPJS Employment data for 2024. To appropriately assess the impact of the minimum and maximum insurable earnings, members' earnings were further distributed into deciles by age and sex – from the lowest to the highest income earners.

The initial salary scale, estimated using 2024 data, reflects the introduction of Government Regulation No. 6/2025, which extended JKP coverage to PBI-JKN members. Members newly covered under this regulation appear to have lower average earnings than existing contributors as of 2024.

Table 3.11 presents the estimated average monthly earnings (2024-basis), disaggregated by age and sex. For illustration purposes, the table shows both the estimated salary scale for 2024 (reflecting active insured members covered by JKP in

²⁵ The year 2021 has been excluded from the estimates, as it reflects only a partial year of coverage (implementation year of the JKP).

2024) and the assumed salary scale for the 2025–2034 period, which also incorporates the earnings patterns of members affected by Government Regulation No. 6/2025.

► **Table 3.11. Estimated average monthly earnings (2024 basis) by age and sex**

Age	Estimates (2024)		Assumptions (2025–2034)	
	Males	Females	Males	Females
20	3 732 639	3 337 232	3 672 396	3 326 440
25	4 305 403	4 301 968	4 219 482	4 211 158
30	5 064 370	5 148 706	4 945 735	4 992 071
35	5 832 518	5 810 104	5 671 575	5 593 593
40	6 383 525	6 162 189	6 164 553	5 873 849
45	7 106 977	6 935 696	6 807 926	6 519 442
50	8 043 090	8 165 086	7 662 003	7 563 081
55+	9 228 908	9 303 866	9 223 268	9 297 481

Source: ILO estimates and assumptions derived from BPJS Employment data.

In this study, salary scales by age and sex were assumed to remain constant over the projection period. Members' monthly earnings were projected from 2024 onward based on the assumed annual inflation rates and the projected evolution of real wage growth.

Real wage growth is assumed at 1.0 per cent in 2025, in line with BPJS Employment's recent experience, and is expected to increase gradually to 2.0 per cent by 2034. This assumption deviates from the projected productivity growth, which is expected to reach 4.0 per cent by the end of the projection period (see section 3.2). This difference reflects the fact that, although real wages and productivity growth may converge over the long term, such convergence is not necessarily observed over a shorter horizon, such as the ten-year period considered in this study. Greater credibility was therefore given to the scheme's recent experience, which better reflects the profile of JKP members, rather than national-level economic indicators.

It is also worth noting that the real wage growth assumption is not a particularly sensitive parameter in the actuarial valuation of short-term benefit branches such as JKP.

The maximum insurable earnings used for contributions and benefit calculations have been capped at 5,000,000 rupiah per month since the scheme's implementation in 2021, and this ceiling remains unchanged as of 2025. There is no automatic indexation mechanism for the ceiling under JKP; however, it may be reassessed and adjusted every two years through an amendment to the Government Regulation, based on national economic conditions and the adequacy of actuarial obligations (articles 12 and 22, Government Regulation No. 37/2021).

Although these provisions remain unclear regarding the level and frequency of future adjustments, an assumption was introduced under the base scenario to ensure that the scheme maintains its relevance over the ten-year projection period, notably by preserving a proportion of insurable earnings to total earnings similar to that observed in 2024 throughout the 2025–2034 period. It is assumed that the maximum insurable earnings will be revalorized on a biennial basis starting in 2027.²⁶

Table 3.12 presents the assumed maximum insurable earnings over the 2025–2034 period.

²⁶ Sensitivity tests reflecting alternative assumptions are presented in Chapter 4.

► **Table 3.12. Assumed maximum monthly earnings, 2025-2034**

Years	Maximum insurable earnings
2025-2026	5 000 000
2027-2028	5 480 151
2029-2030	5 903 696
2031-2032	6 393 638
2033-2034	6 959 004

Source: ILO assumptions.

Table 3.13 presents the projected average monthly earnings of JKP members by age and sex for the years 2025, 2030 and 2034. Table 3.14 presents the projected average monthly insurable earnings of JKP members – reflecting the maximum insurable earnings described above and also disaggregated by age and sex – for the same years. Finally, table 3.15 presents the projected ratio of active insured members with earnings above the maximum insurable earnings ceiling, by age and sex, for the years 2025, 2030 and 2034.

► **Table 3.13. Estimated average monthly earnings by age and sex, 2025, 2030 and 2034**

Age	2025		2030		2034	
	Males	Females	Males	Females	Males	Females
20	3 775 884	3 420 179	4 509 868	4 085 018	5 343 805	4 840 395
25	4 338 387	4 329 829	5 181 714	5 171 493	6 139 885	6 127 774
30	5 085 105	5 132 748	6 073 586	6 130 489	7 196 676	7 264 101
35	5 831 400	5 751 220	6 964 950	6 869 185	8 252 866	8 139 392
40	6 338 270	6 039 374	7 570 350	7 213 352	8 970 213	8 547 201
45	6 999 774	6 703 160	8 360 441	8 006 169	9 906 403	9 486 621
50	7 877 918	7 776 208	9 409 286	9 287 805	11 149 194	11 005 249
55+	9 483 180	9 559 484	11 326 590	11 417 727	13 421 034	13 529 023

Source: ILO assumptions derived from BPJS Employment data.

► **Table 3.14. Estimated average monthly insurable earnings by age and sex, 2025, 2030 and 2034**

Age	2025		2030		2034	
	Males	Females	Males	Females	Males	Females
20	3 671 207	3 336 540	4 372 544	3 975 867	5 174 352	4 705 966
25	3 905 699	3 827 637	4 646 461	4 551 958	5 495 563	5 382 880
30	4 035 131	3 930 998	4 796 268	4 671 503	5 670 499	5 522 279
35	4 100 179	3 910 586	4 871 039	4 646 762	5 757 527	5 492 758
40	4 101 360	3 834 176	4 872 233	4 557 356	5 758 821	5 387 856
45	4 118 414	3 879 231	4 891 621	4 609 739	5 781 276	5 449 245
50	4 155 798	3 915 344	4 934 418	4 650 938	5 831 019	5 497 124
55+	4 233 941	4 018 719	5 024 781	4 770 662	5 936 507	5 637 016

Source: ILO assumptions derived from BPJS Employment data.

► **Table 3.15. Ratio of active insured members earnings above the maximum insurable earnings by age and sex, 2025, 2030 and 2034 (percentage)**

Age	2025		2030		2034	
	Males	Females	Males	Females	Males	Females
20	17.8	13.3	18.4	13.9	18.6	14.1
25	26.8	28.6	27.5	29.4	27.9	30.1
30	33.7	34.3	34.6	35.5	35.0	36.2
35	38.0	34.7	38.9	36.2	39.3	36.7
40	38.3	32.0	39.3	33.4	39.7	33.8
45	39.8	33.9	40.7	35.3	41.1	35.7
50	42.5	36.9	43.3	37.8	43.7	38.2
55+	46.8	43.5	47.6	44.2	48.1	44.6

Source: ILO assumptions derived from BPJS Employment data.

3.3.4. Termination rates

The data made available by BPJS Employment do not include information on the total number of employment terminations. They only capture members who claimed and received benefits under JKP, and exclude those who either did not file a claim or did not meet the eligibility requirements. To estimate annual termination rates among active insured members, the pattern of terminations by age and sex was derived from the distribution of active insured members, the distribution of beneficiaries and the estimated eligibility rates during the 2023–2024 period²⁷ (see sections 3.3.1 and 3.3.5).²⁸

Termination rates are inherently difficult to predict, as they are influenced by multiple factors, including sectoral job stability, economic cycles, labour market regulations and overall macroeconomic conditions. Moreover, the national unemployment rate may not accurately reflect future termination patterns among JKP members. This is because members covered under JKP are projected to represent only about 13 to 17 per cent of total employment over the projection period. As such, termination patterns observed within the scheme may not fully align with broader labour market dynamics.

Table 3.16 presents the estimated termination rates observed during 2022–2024.

²⁷ The assumed annual termination rates were derived from the experience observed during 2023–24, as 2022 represents a partial year (benefit payments began in February 2022).

²⁸ It is worth noting that unemployment benefits under JKP are available only in cases of involuntary termination, while voluntary separations are explicitly excluded (article 20(1), Government Regulation No. 37/2021). Voluntary termination typically includes resignation, retirement, transfers by request and end of service. Involuntary termination includes dismissals, lay-offs, suspensions and redundancy.

► **Table 3.16. Annual termination rates derived from BPJS Employment data, by sex, 2022–2024**

	2022 ¹	2023	2024	Average 2023–2024 ¹
Number of active insured members	13 522 563	14 094 955	14 671 114	14 383 035
Males	9 075 142	9 454 145	9 842 787	9 648 466
Females	4 447 421	4 640 810	4 828 327	4 734 569
Average density of contribution (in months)	10.4	10.8	11.2	11.0
Males	10.4	10.8	11.2	11.0
Females	10.3	10.7	11.1	10.9
Average number of active insured members each month²	11 728 654	12 640 526	13 652 181	13 146 354
Males	7 896 270	8 495 052	9 191 883	8 843 467
Females	3 832 384	4 145 475	4 460 298	4 302 886
Annual termination rates³ (in %)	0.22	0.57	0.49	0.53
Males	0.15	0.38	0.42	0.40
Females	0.39	0.97	0.62	0.79
Estimated eligibility rate⁴ (in %)	38.6	80.2	84.3	82.2
Males	38.7	80.0	84.0	82.2
Females	38.6	80.4	84.7	82.1
Number of beneficiaries	10 164	58 117	55 899	57 008
Males	4 454	25 921	32 521	29 221
Females	5 710	32 196	23 378	27 787

Notes: ¹ The calculated averages reflect only the years 2023–2024, as 2022 represents a partial year (benefit payments began in February 2022).

² The average number of active insured members per month is derived from the number of active insured members and their average density of contribution. ³ Annual termination rates were estimated based on the average monthly number of active insured members, the estimated eligibility rates and the observed number of beneficiaries. ⁴ The eligibility rates were assessed using data on active insured members for the years 2022–2024, disaggregated by age and sex. These data were used to estimate the proportion of active insured members meeting the scheme's eligibility criteria under the provisions in force during 2022–2024.

Source: BPJS Employment individual data, 2022–2024.

The termination rates observed among JKP members appear low by international standards. For reference, the previous cost assessment study adopted an annual termination rate assumption of approximately 6.0 per cent,²⁹ whereas recent experience indicates annual termination rates of only around 0.53 per cent (based on 2023–2024 data) – more than ten times lower than initially anticipated.

The underlying reasons for these relatively low termination rates remain uncertain. Possible explanations include:

- limited awareness of the scheme;
- barriers to accessing benefits;
- low employer compliance or reporting; and
- administrative constraints.

It is also worth noting that termination rates among younger members appear particularly low, despite this group generally being more vulnerable to job loss. This could partly reflect the prevalence of fixed-term contracts among young members, as the expiry of a fixed-term contract is not recognized by BPJS Employment as a valid ground for eligibility under JKP. Alternatively, it may indicate that many young workers transition quickly into new employment and therefore do not submit a claim.

In light of the above, termination rates from 2025 onward are assumed to remain constant throughout the projection period, following the general pattern observed during 2023–2024, but set at slightly higher levels to account for the

²⁹ In the *Actuarial Valuation of a Proposed Unemployment Insurance Scheme in Indonesia* (ILO 2020), a monthly termination rate of 1.1 per cent was assumed, with 50 per cent of terminations classified as involuntary – equivalent to an annual involuntary termination rate of approximately 6 per cent ($1.1\% \times 12 \times 50\%$). These assumptions, considered reasonable at the time, were consistent with the limited experience data available from the Old-Age Savings Scheme (JHT).

scheme's limited experience and the uncertainty surrounding future termination trends. Under the base scenario, annual termination rates are therefore assumed at 0.50 per cent for males and 0.90 per cent for females. The introduction of Government Regulation No. 6/2025, which extended JKP coverage to PBI-JKN members, is assumed to have no material impact on termination patterns under the base scenario. While this assumption is considered reasonable in the current context and for the purposes of this study, sensitivity tests are presented in section 4.3 to assess the potential impact of deviations from this key parameter.

Table 3.17 presents the annual termination rates assumed for the projection period, by age and sex.

► **Table 3.17. Assumed annual termination rates by age and sex (percentage)**

Age	Males	Females
20	0.12	0.30
25	0.32	0.64
30	0.50	0.94
35	0.60	1.01
40	0.62	1.21
45	0.64	1.44
50	0.65	1.47
55+	0.66	1.47
Total¹	0.50	0.90

Note: ¹ General estimates for 2025.

Source: ILO estimates based on BPJS Employment data on the average monthly number of active insured members, the estimated eligibility rates and the observed number of beneficiaries.

3.3.5. Eligibility rate

In this study, the eligibility rate – defined as the proportion of terminated members who meet the scheme's qualifying conditions – was estimated based on the observed pattern of contribution densities among active insured members covered by JKP as of 2024 and those affected by Government Regulation No. 6/2025.

Table 3.18 presents the estimated eligibility rates under the scheme's provisions applicable during 2022–2024, disaggregated by age and sex. It also shows the eligibility rates projected from 2025 onward, following the introduction of Government Regulation No. 6/2025, which extended coverage to PBI-JKN members and removed the requirement for six consecutive months of contributions prior to termination. The eligibility rate is assumed to remain constant throughout the projection period – a reasonable assumption given that contribution densities, by age and sex, are expected to remain stable over time (see section 3.3.2).

► **Table 3.18. Estimated and assumed eligibility rates by age and sex, 2022–2025+ (percentage)**

Age	Male				Female			
	2022	2023	2024	2025+	2022	2023	2024	2025+
20	26.4	55.2	59.7	67.6	31.2	63.9	66.7	71.5
25	35.4	72.8	76.4	84.0	36.3	75.1	78.6	85.8
30	38.4	79.4	83.0	90.4	39.3	81.5	85.1	91.9
35	39.1	80.9	84.7	92.3	40.0	82.7	86.3	93.3
40	40.0	82.2	85.4	93.1	40.8	83.8	86.7	94.4
45	40.8	83.5	86.3	94.0	41.9	85.5	87.9	95.6
50	41.8	85.2	87.6	95.0	42.9	87.1	89.2	96.4
55+	43.7	90.1	92.3	95.9	45.4	92.8	94.0	97.0
Total	38.7	80.0	84.0	91.3¹	38.6	80.4	84.7	91.4¹

Note: ¹ General estimates for 2025.

Source: ILO estimates derived from BPJS Employment data for years 2022–2024.

3.3.6. Beneficiaries' reference earnings

The profile of beneficiaries under the unemployment insurance scheme may differ significantly from that of the general population of active insured members. This distinction is evident in the data provided by the BPJS Employment on both members and beneficiaries of the scheme. Not all claimants (that is, those who experience a termination of employment) are eligible for benefits due to the scheme's eligibility requirements. As a result, the characteristics of actual beneficiaries (such as earnings) tend to differ from those of the broader active insured population.

Based on data obtained from BPJS Employment, beneficiaries of the scheme have insurable earnings approximately 7–8 per cent higher than the average contributor. This reflects the scheme's qualifying conditions, which tend to exclude members with lower contribution regularity and, consequently, lower monthly earnings.

To reflect this in the projections, the base scenario assumes that beneficiaries have monthly earnings 10 per cent higher than contributors of the same age and sex, resulting in an initial average monthly reference salary – used as the basis for benefit calculation – that is about 7 per cent higher than the average insurable earnings of members of the same age and sex. This assumption is reasonable and reflects the scheme's recent experience.

3.3.7. Duration of benefit

The assumption on benefit duration was derived from BPJS Employment data on JKP beneficiaries for the period 2022–2023. The year 2024 was excluded due to incomplete data, as payments made in 2025 to beneficiaries who began receiving benefits in 2024 were not provided, limiting the ability to assess full benefit durations.

The average benefit duration has remained relatively stable for both males and females since the implementation of the scheme. Based on BPJS Employment data, the overall average duration was estimated at 4.84 months in 2022 and 4.74 months in 2023 – 4.55 and 4.53 months for males and 5.07 and 4.92 months for females in 2022 and 2023, respectively.

Table 3.19 presents the assumed “survival” distribution of beneficiaries by age and sex, together with the estimated average benefit duration under the scheme's current provisions.

► **Table 3.19. Assumed “survival” distribution of beneficiaries and average benefit duration by sex, selected ages (percentage)**

Duration (in months)	Males					Females				
	20	30	40	50	55+	20	30	40	50	55+
1	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2	78.68	80.33	81.43	78.76	78.29	84.79	85.71	86.05	85.94	84.90
3	74.26	74.83	77.73	76.27	76.38	79.92	82.67	83.79	84.12	83.60
4	65.88	69.15	74.04	73.43	73.93	76.55	79.20	81.30	82.50	82.47
5	60.73	64.60	70.22	70.57	71.44	70.82	75.60	78.60	80.44	81.63
6	49.49	54.22	61.27	60.66	60.56	61.72	68.19	71.82	73.19	73.57
Average duration (in months)	4.29	4.43	4.65	4.60	4.61	4.74	4.91	5.02	5.06	5.06

Source: ILO assumptions derived from BPJS Employment data on JKP beneficiaries, years 2022–2023.

3.3.8. Claim processing

Some elements of the JKP regulatory framework are not explicitly defined in Government Regulation No. 37/2021 or Government Regulation No. 6/2025. Consequently, BPJS Employment’s operational practices serve as the basis for interpretation and implementation. Two areas are particularly relevant to this study with respect to claim processing:

- Under article 20(1) of Government Regulation No. 37/2021, unemployment benefits are available only to members in cases of involuntary termination, while voluntary terminations are excluded. However, the regulation does not explicitly define “involuntary termination”. In practice, BPJS Employment does not accept the expiry of a fixed-term contract as a ground for eligibility. Similarly, forced resignations and voluntary resignations with just cause may also be rejected.
- The conditions governing the continuation of unemployment benefits are not explicitly regulated. In practice, however, BPJS Employment imposes certain operational requirements to maintain eligibility. Claimants must apply to at least five companies or attend one job interview, providing self-reported evidence of compliance. Additionally, while no formal rule governs participation in vocational training, BPJS Employment requires an attendance rate of at least 80 per cent. Failure to meet these requirements may result in the suspension or termination of benefits.

In this actuarial valuation, the above-mentioned administrative practices for claim processing and benefit management are assumed to remain unchanged over the projection period, with no changes to eligibility or continuation conditions over the projection period.

It is also worth mentioning that the time limit for claim submission was extended under Government Regulation No. 6/2025. Previously, members were required to file their claims within three months of termination; the amendment extends this window to six months, providing greater flexibility for workers transitioning from employment to unemployment. Although no data were available on claim submission behaviour, it is reasonable to assume that the vast majority of eligible members file their claims shortly after termination, consistent with international experience in unemployment insurance schemes. The extension of the claim submission window is therefore assumed to have no impact on the number of eligible claimants or on projected benefit expenditures in this study.

In addition, according to article 35 of Government Regulation No. 37/2021, a member may claim unemployment benefits up to a maximum of three times during their career. The second claim can only be made five years after receiving the first JKP benefit, while the third claim is permitted five years after receiving the second JKP benefit.

Given that the JKP scheme has been in operation only since 2021, no member could yet have met the conditions to receive a second or third claim. Consequently, the current experience data used in this actuarial valuation already reflect, at least to some extent, the scheme’s general claim limitations. While it is possible that the available data do not yet fully capture these limitations, the financial impact of restricting the number of claims per member is unlikely to materially affect the scheme’s overall expenditures, as the incidence of unemployment among covered members remains low. For these reasons, this provision of the JKP scheme has not been explicitly modelled in this actuarial valuation. Together, the assumed termination and eligibility rates are considered to already account for the probability that a member becomes eligible for benefits, irrespective of any prior claims history.

3.3.9. Administrative expenses

Operational expenses for BPJS Employment are collectively financed through the Employment Injury Insurance (JKK), Death Benefit (JKm), Old-Age Savings (JHT) and Pension (JP) schemes, and no direct administrative costs are charged to JKP. This practice is consistent with the existing regulatory framework, which restricts the use of JKP funds to benefit payments, while all administrative expenditures are financed through BPJS Employment's operational fund.

To reflect BPJS Employment's current regulatory framework and accounting practices, no administrative expenses are projected under the base scenario.

As mentioned in section 2.1, allocating JKP's administrative expenses directly to the branch would be consistent with good practice and with the principle of maintaining separate financial accounts for each benefit branch, as stipulated under Law No. 24/2011 on the Social Security Administering Body and Government Regulation No. 37/2021. This aspect is discussed in more detail in Chapter 5.

3.3.10. Rate of return

The average nominal rate of return (net of investment expenses) of the JKP branch reached 3.2 per cent over the 2021–2024 period. This corresponds to an average real rate of return of 0.2 per cent per year. Table 3.20 presents the estimated annual nominal rate of return (net of investment expenses) for years 2021 to 2024.

► **Table 3.20. Estimated annual nominal and real rates of return, 2021 to 2024 (percentage)**

Year	Nominal rate of return	Inflation rate	Real rate of return
2021	0.1	3.8	-3.6
2022	2.5	3.3	-0.7
2023	4.4	2.8	1.5
2024	5.6	2.0	3.5
Average	3.2	3.0	0.2

Note: The nominal rate of return is calculated net of investment expenses using the standard actuarial yield approximation, which relates annual investment income to the average invested assets during the year (assuming cash flows are distributed evenly throughout the year). The real rate of return is derived from the nominal rate and inflation using the standard compounding relationship between nominal and real returns.

Source: Authors' calculations based on BPJS Employment annual reports 2021 to 2024 and BPS (for the inflation rate).

In this study, the real rate of return is projected at 0.0 per cent per year (that is, no real return on assets), broadly consistent with the recent experience observed during 2021–2024 and reflective of the nature of the JKP branch. Short-term benefit branches generally require a high level of liquidity, as a large share of annual contribution income is used to pay benefits within the same year, leaving limited scope for long-term investment. This justifies the use of a relatively low rate of return assumption, in contrast with what would typically apply to branches providing long-term benefits.

It should be noted that the rate of return assumption generally has a limited impact on short-term benefit branches, as they typically maintain relatively small reserves. In the case of JKP, however, the reserve remains substantial due to the initial capital transfer of 6 trillion rupiah from the State Budget and the relatively low benefit expenditures observed since the scheme's implementation. As a result, the rate of return assumption may have a more sensitive impact on the financial projections compared with other short-term benefit schemes. Sensitivity tests on this parameter are presented in section 4.3.

3.3.11. Other income and expenses

Other income and other expenses, which mainly include non-operational items, such as penalties for late contribution payments, provisions, impairments and minor accounting adjustments, remained marginal throughout the 2021–2024 period. These items – which are assumed to remain negligible over the projection period – were therefore not projected under the base scenario.

► 4. Demographic and financial projections

This chapter presents the demographic and financial projections of JKP:

- Section 4.1 presents the demographic and financial projections of JKP under its current provisions, incorporating the effects of Government Regulation No. 6/2025;
- Section 4.2 estimates the impact of Government Regulation No. 6/2025 by reconciling the projection results under the base scenario (presented in section 4.1) with those that would have been obtained in the absence of the 2025 reform; and
- Section 4.3 presents sensitivity tests exploring the potential effects of varying demographic, economic and scheme-specific assumptions.

The general methodology applied in this actuarial valuation is described in Appendix 2. The projections are based on the demographic and macroeconomic assumptions, as well as the scheme-specific assumptions presented in Chapter 3.

As noted in Chapter 3, a projection period of ten years, from 2025 to 2034, has been retained for this actuarial valuation. Such a period of projection not only allows the drawing of conclusions on the sustainability of an unemployment insurance scheme but also contributes to providing a good picture of the scheme's sensitivity to assumptions or changes to benefits. Indeed, the primary objective of an actuarial valuation is to assess the scheme's financial sustainability and to support evidence-based conclusions and recommendations – not to predict exact numerical values for each year of the projection period. This projection period is consistent with that used for ILO actuarial valuations for unemployment insurance schemes in other countries.

4.1. Base scenario

This section presents the demographic and financial projections of JKP under its current provisions, incorporating the effects of Government Regulation No. 6/2025.

Table 4.1 presents the projected number of active insured members under JKP, their average contribution density and their average monthly insurable earnings over the projection period. It also shows the total annual contributory earnings of the scheme, which form the basis for contribution income.

► **Table 4.1. Projected number of active insured members and insurable earnings, 2025–2034**

Year	Total number of active insured members ¹ (A)	Average density of contribution (in months) (B)	Average number of active insured members per month ¹ (C = A x B / 12)	Average monthly insurable earnings (in rupiah) (D)	Total annual contributory earnings (in billions of rupiah) (C x D x 12)
2025	17 899 189	10.84	16 168 823	3 956 255	767 615.9
2026	19 356 391	10.85	17 498 783	4 028 093	845 840.7
2027	20 585 470	10.85	18 617 854	4 270 118	954 005.3
2028	21 649 251	10.86	19 587 960	4 363 503	1 025 665.6
2029	22 576 503	10.86	20 434 076	4 603 484	1 128 815.2
2030	23 381 303	10.86	21 168 908	4 711 616	1 196 877.1
2031	24 081 338	10.87	21 808 991	4 988 248	1 305 463.9
2032	24 689 438	10.87	22 365 877	5 111 870	1 371 977.6
2033	25 220 190	10.87	22 853 244	5 431 852	1 489 625.3
2034	25 683 862	10.88	23 280 008	5 574 951	1 557 419.0

Notes: ¹ The average number of active insured members per month is derived from the number of active insured members and their average density of contribution. More precisely, the average monthly number of active insured members is calculated as: Number of active insured members (defined as members who have contributed at least once during the year) × Average density of contribution (in months) ÷ 12.

Source: ILO projections.

The number of active insured members is projected to increase from 14.7 million in 2024 to 17.9 million in 2025 – a 22 per cent rise. This significant growth reflects the expansion of coverage to PBI-JKN members following the adoption of

Government Regulation No. 6/2025. As a result, the overall JKP affiliation rate³⁰ increased from 50.1 per cent to 55.2 per cent between 2024 and 2025 (from 52.1 to 57.3 per cent for males and from 46.4 to 51.5 per cent for females).

The newly covered members present a slightly different demographic and earnings profile compared with existing members.³¹ The most notable effect is on earnings: average monthly insurable earnings are projected to increase by only 0.1 per cent from 2024 to 2025 (this corresponds to a 1.7 per cent real-term reduction in monthly insurable earnings over the same period).

The projected average monthly insurable earnings also reflect the assumed indexation of the maximum insurable earnings ceiling (see section 3.3.3). Under the assumed schedule of ceiling increases – which aims to maintain a proportion of insurable earnings to total earnings similar to that observed in 2024 throughout the 2025–2034 period – the proportion of monthly contributors earning above the ceiling is projected to fluctuate between 31.5 and 37.0 per cent over the projection period.

This highlights the importance of regular and adequate indexation of the maximum insurable earnings ceiling. Without appropriate adjustments, members' insurable earnings – used as the basis for the calculation of both contributions and benefits – would become increasingly disconnected from their actual earnings. This principle reflects the standard set by ILO Convention No. 102, which recommends that the insurable earnings ceiling should be set so that at least 75 per cent of all insured members have earnings at or below the ceiling (that is, no more than 25 per cent should exceed the ceiling), or alternatively be assessed against a benchmark of 125 per cent of the average earnings of protected persons. Respecting this principle helps ensure that the scheme provides effective and adequate protection to the vast majority of its members.

The combined effect of the projected evolution in the number of active insured members, their contribution density and their average monthly insurable earnings results in an average annual increase of 7.3 per cent in total contributory earnings over the projection period (from 767.6 trillion rupiah in 2025 to 1,557.4 trillion rupiah in 2034).

Table 4.2 presents the projected number of new beneficiaries over the projection period. One of the key impacts of Government Regulation No. 6/2025 is the relaxation of the qualifying conditions – specifically, the removal of the requirement to have accumulated a minimum of six consecutive months of contributions prior to termination. This amendment broadens effective access to benefits, particularly for members with irregular contribution patterns. As a result, the eligibility rate is projected to increase from about 84 per cent in 2024 (see section 2.2) to approximately 91–92 per cent throughout the projection period.

► **Table 4.2. Projected number of new beneficiaries, 2025–2034**

Year	Average number of active insured members per month (A)	Annual termination rate (in %) (B)	Eligibility rate (in %) (C)	Total number of new beneficiaries during the year (A x B x C)
2025	16 168 823	0.63	91.33	93 331
2026	17 498 783	0.63	91.41	101 538
2027	18 617 854	0.64	91.47	108 473
2028	19 587 960	0.64	91.52	114 567
2029	20 434 076	0.64	91.56	119 914
2030	21 168 908	0.64	91.60	124 587
2031	21 808 991	0.64	91.63	128 683
2032	22 365 877	0.65	91.66	132 273
2033	22 853 244	0.65	91.69	135 451
2034	23 280 008	0.65	91.71	138 272

Source: ILO calculations.

Table 4.3 presents the projected benefit expenditure over the projection period. The average benefit duration is expected to remain stable at approximately 4.7 months throughout the projection period, consistent with the scheme's recent experience.

³⁰ The affiliation rate refers to the share of BPJS Employment members also covered under JKP.

³¹ See sections 3.3.1–3.3.3 for further details on the profile of newly covered members.

The average monthly benefit is projected to increase from about 2.5 million rupiah in 2025 to 3.5 million rupiah in 2034, corresponding to an average annual increase of 3.5 per cent over the projection period. This projected evolution is driven by the assumed growth in members' average monthly reference earnings³² – used as the basis for benefit calculation – and by the scheme's effective replacement rate. Following the adoption of Government Regulation No. 6/2025, JKP now applies a 60 per cent replacement rate, representing a substantial increase compared with the scheme's effective replacement rate of about 36 per cent observed during 2022–2024.

Total benefit expenditure is projected to increase from 1.1 trillion rupiah in 2025 to 2.3 trillion rupiah in 2034, corresponding to an average annual growth rate of 7.6 per cent over the projection period – closely aligned with the projected growth in contributory earnings (see table 4.2).

► **Table 4.3. Projected benefits, 2024–2035**

Year	Total number of new beneficiaries during the year (A)	Average benefit duration (in months) (B)	Average monthly reference earnings (in rupiah) (C)	Effective replacement rate ¹ (in %) (D)	Average monthly benefit (in rupiah) (E = C x D)	Total benefit expenditure (in billions of rupiah) (A x B x E)
2025	93 331	4.73	4 178 834	60.0	2 508 081	1 107.7
2026	101 538	4.73	4 237 535	60.0	2 543 251	1 222.2
2027	108 473	4.73	4 526 997	60.0	2 717 107	1 395.3
2028	114 567	4.74	4 601 945	60.0	2 762 015	1 498.4
2029	119 914	4.74	4 879 575	60.0	2 928 731	1 663.4
2030	124 587	4.74	4 966 429	60.0	2 980 773	1 759.3
2031	128 683	4.74	5 286 731	60.0	3 173 117	1 934.7
2032	132 273	4.74	5 386 037	60.0	3 232 618	2 026.3
2033	135 451	4.74	5 756 081	60.0	3 454 832	2 218.0
2034	138 272	4.74	5 871 042	60.0	3 523 709	2 309.6

Note: ¹ The effective replacement rate is calculated as a percentage of the average monthly reference earnings, which reflect the scheme's maximum insurable earnings ceiling. If the replacement rate were instead calculated using members' uncapped monthly earnings, it would be significantly lower throughout the projection period, as a substantial share of members earn above the maximum insurable earnings ceiling.

Source: ILO calculations.

Table 4.4 presents the projected income and expenditure of JKP, assuming a contribution rate of 0.36 per cent of insurable earnings, as stipulated under Government Regulation No. 6/2025. Several key findings emerge from the projections.

The most visible finding emerging from the projections is the continued and substantial increase in the scheme's reserve. The accumulated reserve is expected to almost triple over the projection period, rising from 16.9 trillion rupiah as of 31 December 2024 to 48.9 trillion rupiah in 2034.³³ The reserve ratio – measured as the ratio of accumulated reserves to annual benefit expenditure – remains very high, staying above 16 throughout the projection period and increasing to 21.2 by 2034. These levels clearly indicate that the scheme is significantly over-financed. While maintaining a contingency or stabilization reserve to absorb deviations in experience or adverse economic shocks (such as recessions) is appropriate, international practice generally considers a reserve of around two times annual expenditure sufficient for unemployment insurance schemes. The projected JKP reserve is far above this benchmark.

The table also shows the scheme's benefit pay-as-you-go (PAYG) cost rate, which represents the ratio of total benefit expenditure to total contributory earnings in a given year. The benefit PAYG cost rate reflects the contribution rate required to finance benefits year after year, in the absence of any reserve. The projected PAYG cost rate ranges between 0.14 and 0.15 per cent of insurable earnings over the projection period. Because this rate remains consistently and substantially below JKP's contribution rate of 0.36 per cent, the scheme continues to accumulate large reserves year after year.

Another important financial indicator – not shown in the table – is the general average premium (GAP). The GAP is the constant contribution rate, expressed as a percentage of insurable earnings, required over the entire projection period to

³² The reference monthly earnings reflect the projected maximum insurable earnings ceiling.

³³ For the purposes of this valuation, the reserve is presented on a consolidated basis and is not reduced by any technical reserve. This approach provides a clearer representation of the scheme's overall financial position, independent of BPJS Employment's internal accounting practices.

finance all projected expenditures without consideration of the reserve. The GAP is estimated at 0.15 per cent of insurable earnings, further confirming the significant difference between the scheme's contribution rate (0.36 per cent) and its projected cost over the ten-year projection period.

► **Table 4.4. Projected income and expenditure, 0.36 per cent contribution rate, 2025-2034 (in billions of rupiah)**

Year	Income		Expenditure		Reserve		
	Contribution income	Investment income	Benefits	Administrative expenses ¹	Reserve ² (end of year)	Reserve ratio ³	PAYG cost rate ⁴ (in %)
2025	2 763.4	318.7	1 107.7	–	18 856.7	17.0	0.14
2026	3 045.0	395.3	1 222.2	–	21 074.8	17.2	0.14
2027	3 434.4	486.0	1 395.3	–	23 599.9	16.9	0.15
2028	3 692.4	592.6	1 498.4	–	26 386.5	17.6	0.15
2029	4 063.7	689.5	1 663.4	–	29 476.3	17.7	0.15
2030	4 308.8	768.6	1 759.3	–	32 794.4	18.6	0.15
2031	4 699.7	854.2	1 934.7	–	36 413.6	18.8	0.15
2032	4 939.1	946.5	2 026.3	–	40 272.9	19.9	0.15
2033	5 362.7	1 045.9	2 218.0	–	44 463.5	20.0	0.15
2034	5 606.7	1 152.5	2 309.6	–	48 913.2	21.2	0.15

– = nil. Note: ¹ To reflect BPJS Employment's current regulatory framework and accounting practices, no administrative expenses are projected under the base scenario. ² For the purposes of this valuation, the reserve is presented on a consolidated basis and is not reduced by any technical reserve. This approach provides a clearer representation of the scheme's overall financial position, independent of BPJS Employment's internal accounting practices. ³ The reserve ratio is defined as the ratio of accumulated reserves to annual benefit expenditure. ⁴ the PAYG cost rate represents the ratio of total benefit expenditure to total contributory earnings in a given year.

Source: ILO calculations.

All the above findings highlight a striking conclusion: **although the scheme is financially sustainable in its current form, the results clearly indicate that the current contribution rate of 0.36 per cent exceeds what is required to ensure the financial sustainability of JKP. This creates an opportunity to strengthen and improve the scheme's coverage and benefits within the existing contribution rate** (see Chapter 5 for policy considerations and reform options). Alternatively, the scheme's financing policy should be reviewed to ensure better alignment between the contribution rate and its projected benefit obligations.

Finally, it is important to note that the above financial projections do not include any costs related to the scheme's administration or to the development and implementation of active labour market programmes (ALMPs). For administrative expenses, the principle of separation of accounts – as set out in Law No. 24/2011 on the Social Security Administering Body and in Government Regulation No. 37/2021 – requires that these costs be explicitly attributed to the JKP branch. This approach aligns with good accounting practice, ensures transparent cost allocation and prevents cross-subsidization between social security branches. With respect to ALMPs, these programmes are typically financed by the Government – most often through ministries responsible for labour, employment and education. However, given JKP's strong financial position, financing a portion of ALMPs activities through JKP surpluses could be considered, as is the case in several countries with unemployment insurance schemes. These two items are discussed in detail in Chapter 5.

4.2. Estimated impact of Government Regulation No. 6/2025

The demographic and financial projections presented in section 4.1 already incorporate the effects of Government Regulation No. 6/2025. As a result, the projected evolution of the scheme's indicators under the base scenario are likely to be different than the historical patterns described in Chapter 2.

To better understand the differences between the scheme's recent experience and the projections presented in section 4.1, a reconciliation was therefore carried out between the projection results under the base scenario and the projection results that would have been obtained in the absence of the 2025 reform (that is, without the application of Government Regulation No. 6/2025).

As highlighted in section 2.3, Government Regulation No. 6/2025 introduced several important modifications to the design of JKP – affecting coverage, contribution rates, qualifying conditions, benefit levels and the claiming process.³⁴ Each of these components is discussed individually below, followed by an overall assessment of their combined impact:

- **Extension of coverage:** Government Regulation No. 6/2025 extended JKP coverage to members of the government-subsidized *Penerima Bantuan Iuran (PBI-JKN)*. This reform is estimated to increase the JKP affiliation rate³⁵ from 51.2 per cent to 55.2 per cent overall, with the newly covered members having a slightly different profile compared with existing members (see sections 3.3.1–3.3.3). From a financial perspective, the impact of this coverage expansion is minimal: the required contribution rate remains essentially unchanged, and the projected reserve ratio decreases only marginally over the projection period. The reform therefore strengthens the scheme’s inclusiveness without affecting its financial sustainability.
- **Reduction of contribution rate:** Government Regulation No. 6/2025 reduced the total contribution rate from 0.46 per cent to 0.36 per cent of insurable earnings. This reform does not affect the projected expenditure of the scheme, but it reduces its projected income. Despite this 22 per cent reduction in contribution income, the scheme’s financial position remains very strong. Indeed, the reserve is projected to remain over 40 times the scheme’s annual expenditure at the end of the projection period – a level far above what is typically required for unemployment insurance schemes.³⁶ In summary, the reduction in the contribution rate does not materially affect the scheme’s financial sustainability, given its exceptionally high reserve levels.
- **Relaxation of qualifying conditions:** Government Regulation No. 6/2025 removed the requirement for six consecutive months of contributions prior to termination, originally established under Government Regulation No. 37/2021. This amendment broadens effective access to benefits, particularly for members with irregular contribution patterns. The financial impact, however, remains minimal. The eligibility rate is projected to increase from about 85 per cent to 92 per cent, resulting in only a 0.01 per cent increase in total expenditure as a share of insurable earnings. Given the scheme’s exceptionally high reserve levels, the effect on the projected reserve ratio is negligible.
- **Increase of monthly benefits:** Under the original framework, benefits were paid at a declining rate: 45 per cent of the last reported wage for the first three months and 25 per cent for the following three months. Government Regulation No. 6/2025 replaced this structure with a flat benefit of 60 per cent of the last reported wage, payable for the full six-month duration. This represents a major enhancement in benefit adequacy and is the single most financially significant component of Government Regulation No. 6/2025. This amendment is projected to increase the scheme’s effective replacement rate from approximately 36 per cent to 60 per cent (a 67 per cent increase), leading to a 0.06 per cent rise in benefit expenditure as a share of insurable earnings. It also contributes to a noticeable reduction in the scheme’s projected reserve ratio. Nonetheless, even after accounting for this substantial benefit increase – and when combined with the other elements of the reform – the scheme’s reserve ratio is still projected to remain above 20 times its annual expenditure at the end of the projection period (assuming a contribution rate of 0.36 per cent). Such a reserve level would typically be considered excessively high for an unemployment insurance scheme.
- **Extension of time limit for claim submission:** The time limit for claim submission was extended from three to six months following termination under Government Regulation No. 6/2025, providing greater flexibility for workers transitioning into unemployment. This reform is assumed to have no impact on the number of eligible claimants or on projected benefit expenditures. This is because the vast majority of eligible members are expected to file their claims shortly after termination – a pattern consistent with international experience in unemployment insurance schemes.³⁷

Table 4.5 compares three sets of results: (i) the estimates that would have been obtained under the pre-reform framework; (ii) the effect of each component introduced by Government Regulation No. 6/2025; and (iii) the final results under the base scenario presented in section 4.1. Two key financial indicators are used for this reconciliation:

- The first is the **general average premium (GAP)**, defined as the constant contribution rate – expressed as a percentage of insurable earnings – required over the entire projection period to finance all projected expenditures without consideration of the reserve. This indicator provides a concise measure of the true cost of the scheme before and after the adoption of Government Regulation No. 6/2025.

³⁴ For further details, see section 2.3 above and Appendix 1 below.

³⁵ The affiliation rate refers to the share of BPJS Employment members also covered under JKP.

³⁶ In international practice, a reserve level of around two times the annual expenditure is generally considered sufficient for unemployment insurance schemes.

³⁷ See section 3.3.8 for more details.

- The second indicator is the **projected reserve ratio in 2034**, measured as the ratio of accumulated reserves to annual benefit expenditure at the end of the projection period. This ratio illustrates both the soundness of the scheme's financing policy (which changed following the adoption of Government Regulation No. 6/2025) and its capacity to absorb economic shocks. In international practice, a reserve level of around two times annual expenditure is generally considered sufficient for unemployment insurance schemes.

Together, these two indicators provide a clear and transparent picture of how each component of the reform affects the scheme's underlying cost and whether the financing policy remains appropriate.

► **Table 4.5. Estimated impact of Government Regulation No. 6/2025**

	GAP ¹ (in %)	Projected reserve ratio in 2034 ²
Prior to Government Regulation No. 6/2025	0.08	56.6
Impact of legal changes³		
Extension of coverage	0,00	-2.1
Reduction of contribution rate	0,00	-10.1
Relaxation of qualifying conditions	+0,01	-3.7
Increase of monthly benefits	+0,06	-19.5
Extension of time limit for claim submission	0,00	0.0
Total impact of legal changes	+0,07	-35.4
After Government Regulation No. 6/2025 (Base scenario)	0.15	21.2

Notes: ¹ The GAP is the constant contribution rate, expressed as a percentage of insurable earnings, required over the entire projection period to finance all projected expenditures without consideration of the reserve. ² The projected reserve ratio corresponds to the ratio of accumulated reserves to annual benefit expenditure in 2034. It reflects the contribution rate stipulated under the legal framework of the scheme – 0.46 per cent prior to Government Regulation No. 6/2025 and 0.36 per cent under the amended framework. ³ Each measure is applied sequentially – one after another – so that the impact shown represents the additional effect of that component relative to the results already incorporating the previous ones.

Source: ILO projections, 2025–2034.

4.3. Sensitivity tests

The actuarial valuation of an unemployment insurance scheme cannot, of course, pretend to project the future with perfect accuracy. Projections rely on actuarial models and are therefore inherently sensitive to the assumptions upon which they are based.

When using a deterministic model, sensitivity analysis is the only way of showing the potential variability of results. Such analyses may focus on assumptions that have the greatest influence on the scheme's costs or, alternatively, on parameters that are subject to greater uncertainty due to limited historical data or the absence of robust experience.

In this study, the following sensitivity tests have been carried out to better assess the risks associated with the Unemployment Insurance Scheme (JKP) under its current provisions:

- **Real salary growth rate:** This sensitivity test presents the impact of an increase in the real salary growth rate of 1.0 per cent per annum throughout the projection period as well as the impact of a decrease in the real salary growth rate of 1.0 per cent per annum throughout the projection period, while keeping the maximum insurable earnings ceiling unchanged relative to the base scenario assumptions (see section 3.3.3). The results show that the financial sustainability of the scheme is largely unaffected by changes in real wage growth. This reflects the PAYG nature of short-term benefit schemes, where both contribution income and benefit expenditures evolve broadly in line with insurable earnings. However, higher wage growth combined with insufficient indexation of the maximum insurable earnings ceiling would progressively reduce the adequacy of benefits, even if the overall financial balance of the scheme remains unaffected.
- **Maximum insurable earnings:** This sensitivity test examines two alternative scenarios: one in which the ceiling remains at 5,000,000 rupiah per month throughout the projection period, and another in which the ceiling is increased by 25 per cent in 2025 (to 6,250,000 rupiah per month), followed by regular indexation in line with nominal salary

growth thereafter. Because beneficiaries have higher monthly earnings than contributors of the same age and sex,³⁸ keeping the ceiling unchanged progressively reduces the scheme's effective replacement rate and, in turn, lowers benefit expenditures. Conversely, increasing and indexing the ceiling improves the relationship between benefits and prior earnings, with only a limited impact on the scheme's overall cost. These results highlight that the level of the maximum insurable earnings primarily affects benefit adequacy and reserve accumulation, rather than the scheme's long-term financial sustainability.

- **Termination rates:** The assumption on termination rates is sensitive, as changes in this variable can significantly affect the scheme's projected cash flows. This sensitivity test examines the impact of termination rates that are 25 per cent higher or lower than those assumed in the base scenario. The results indicate that even a sustained increase in termination rates over the projection period would not, on its own, compromise the scheme's financial sustainability at the current contribution rate of 0.36 per cent.
- **Beneficiaries' reference earnings:** Under the base scenario, beneficiaries are assumed to have monthly earnings 10 per cent higher than those of contributors of the same age and sex. This sensitivity test examines the impact of a 10 per cent decrease in beneficiaries' reference earnings relative to the base scenario (bringing them in line with the average earnings of contributors of the same age and sex) and a 10 per cent increase relative to the base scenario (resulting in beneficiaries earning 20 per cent more than comparable contributors). The results indicate that plausible shifts in the earnings profile of beneficiaries – reflecting a greater concentration of terminations among lower- or higher-income workers – would not, on their own, compromise the scheme's financial sustainability at the current contribution rate of 0.36 per cent.
- **Benefit duration:** This sensitivity test presents the impact of an increase in the average benefit duration by approximately one month and a decrease in the average benefit duration by approximately one month over the projection period. The results show that moderate deviations in benefit duration have only a limited effect on the scheme's financial position.
- **Administrative expenses:** Under the base scenario, no administrative expenses are allocated to JKP, reflecting BPJS Employment's current regulatory framework and accounting practices. However, allocating administrative costs directly to the JKP branch would be consistent with good accounting practice and with the principle of maintaining separate financial accounts for each benefit branch, as stipulated under Law No. 24/2011 on the Social Security Administering Body and under Government Regulation No. 37/2021. This sensitivity test assesses the impact of recognizing administrative expenses under JKP equal to 0.05 or 0.10 per cent of total insurable earnings, respectively. The results indicate that JKP would be able to finance its own administrative costs at these levels within the current contribution rate of 0.36 per cent, without compromising the scheme's financial sustainability.
- **Real rate of return of the fund:** This sensitivity test presents the impact of an increase in the real rate of return of the fund by 1.0 per cent per annum throughout the projection period and a decrease in the real rate of return of the fund by 1.0 per cent per annum throughout the projection period. The results show that changes in the real rate of return have only a marginal impact on the scheme's financial outcomes. This reflects the nature of short-term benefit schemes such as JKP, which rely primarily on current contributions rather than investment income and, therefore, maintain a high level of liquidity, resulting in relatively low real returns compared with long-term benefit branches.

Table 4.6 presents the results of the above-mentioned sensitivity tests. The findings indicate that variations in individual assumptions do not undermine the scheme's financial sustainability at the current contribution rate of 0.36 per cent.

³⁸ As highlighted in section 3.3.6, beneficiaries of the scheme are estimated to have monthly earnings about 10 per cent higher than contributors of the same age and sex, resulting in monthly insurable earnings approximately 7–8 per cent higher than those of the average contributor as of the valuation date.

► Table 4.6. Sensitivity tests

Sensitivity test	General average premium (GAP) ¹ (in %)	Reserve ratio at the end of the projection period assuming a contribution rate of 0.36% ²	Effective replacement rate for a standard beneficiary in 2034 ³ (in %)
Base scenario	0.15	21.2	55.0
Real salary growth rate			
Real salary growth rate + 1.0%	0.15	20.7	49.8
Real salary growth rate - 1.0%	0.15	21.7	60.0
Maximum insurable earnings			
Unchanged at 5,000,000 rupiah per month	0.14	25.1	39.5
Increased by 25% in 2025, and indexed thereafter	0.15	19.5	60.0
Termination rates			
Termination rates + 25%	0.18	15.3	55.0
Termination rates - 25%	0.11	31.0	55.0
Beneficiaries' reference earnings			
Beneficiaries' reference earnings - 10%	0.14	22.5	55.0
Beneficiaries' reference earnings + 10%	0.15	20.1	55.0
Average benefit duration			
Average benefit duration + 1 month	0.18	16.1	55.0
Average benefit duration - 1 month	0.12	29.1	55.0
Administrative expenses			
Administrative expenses + 0.05%	0.20	13.7	55.0
Administrative expenses + 0.10%	0.25	9.3	55.0
Real rate of return of the fund			
Real rate of return of the Fund + 1.0%	0.15	22.7	55.0
Real rate of return of the Fund - 1.0%	0.15	19.8	55.0

Notes: ¹ The general average premium (GAP) is the constant contribution rate, expressed as a percentage of insurable earnings, required over the entire projection period to finance all projected expenditures without consideration of the reserve. ² The reserve ratio is defined as the ratio of accumulated reserves to annual benefit expenditure at the end of the projection period (in 2034), assuming no change in the current contribution rate (currently set at 0.36 per cent). ³ The scheme's effective replacement rate is not an indicator of the scheme's financial position, but rather an indicator of benefit adequacy. It corresponds to the definition used for assessing compliance with ILO Convention No. 102, based on the "standard beneficiary" concept. In this context, and for the purpose of assessing compliance, the standard beneficiary is defined as the lower of: (i) 125 per cent of the average earnings of protected persons; or (ii) the earnings level below which 75 per cent of insured members fall, in accordance with the alternative reference methods permitted under Convention No. 102.

Source: ILO projections.

► 5. Policy considerations and reform options

This chapter presents the main policy considerations related to the unemployment insurance scheme and outlines possible reform options. The analysis takes into account JKP's current legal framework, as well as the findings and observations discussed throughout this report.

5.1. Policy considerations

5.1.1. Financing policy

Unemployment insurance schemes provide short-term benefits typically paid for less than one year. As short-term benefit branches, they are by nature financed on a pay-as-you-go (PAYG) basis with the build-up of limited and defined target reserves. Contribution rates should therefore remain closely aligned with the scheme's short- to medium-term financial obligations, while maintaining a contingency reserve that is adequate but not excessive.

Following the adoption of Government Regulation No. 6/2025, the JKP contribution rate was reduced from 0.46 to 0.36 per cent of insurable earnings – a policy decision likely informed by the scheme's lower-than-expected cost during its initial years of implementation. Although this adjustment was not guided by a formal funding policy, the current legislation appears sufficiently flexible to allow regular revisions of the contribution rate. This flexibility is essential, as keeping the rate fixed regardless of labour market conditions, economic cycles or the scheme's evolving financial obligations would be problematic. However, it is important that changes to the contribution rate in the future are based on the findings of the actuarial valuation.

The recent reduction in the contribution rate (from 0.46 to 0.36 per cent) contributed to limiting the projected accumulation of reserves. Nonetheless, as shown in Chapter 4, the accumulated reserve is still projected to almost triple over the projection period, from 16.9 trillion rupiah in 2024 to 48.9 trillion rupiah in 2034. The reserve ratio – measured as the ratio of accumulated reserves to annual benefit expenditure – is also expected to remain exceptionally high, reaching 21.2 by 2034.³⁹

Despite the recent change in the JKP contribution rate, the projected reserve ratio remains far above levels typically observed in unemployment insurance schemes. International practice generally considers a target reserve of about two times annual expenditure to be sufficient to absorb cyclical fluctuations without leading to excessive accumulation. A projected reserve ratio of 21.2 in this valuation clearly indicates that the current contribution rate continues to exceed the level required to finance the scheme. This suggests that further adjustments may be necessary in the future to scheme benefits, eligibility and/or the contribution rate, either through: (i) a process similar to the one that led to Government Regulation No. 6/2025 – potentially combined with improvements to the scheme's coverage and benefits while remaining within the existing contribution rate⁴⁰; or (ii) through the establishment of a more formal contribution-rate setting mechanism. It is important to note that the scheme is not only relatively young but has also recently been subject to benefit changes. A review of the financial situation at the next actuarial valuation, after taking into account the development of experience resulting from the introduction of Government Regulation No. 6/2025, is therefore recommended before considering any further adjustment to the scheme's contribution rate. While the possibility of adjusting the contribution rate remains important, frequent changes can create administrative burdens, and experience shows that once a contribution rate is reduced, it is often more difficult to increase it again later. It is therefore not recommended to change the contribution rate at this stage.

In addition to strengthening the scheme's coverage and benefits within the existing contribution rate, policymakers could also consider allocating a portion of the scheme's contribution revenue or accumulated surplus to support active labour market programmes (ALMPs), where consistent with the legal framework and governance arrangements. Such an approach would enhance the coherence between income support and activation measures, while maintaining the financial sustainability of the scheme.

³⁹ Without the reduction introduced by Government Regulation No. 6/2025, the reserve would have increased to 61.9 trillion rupiah by 2034 (26.8 years of benefit expenditure).

⁴⁰ Given JKP's strong financial position, financing a portion of ALMPs' activities through JKP surpluses could also be considered, as is the case in several countries with unemployment insurance schemes.

To support these policy choices in a transparent and systematic manner, it is recommended that JKP consider introducing a formal policy for contribution rate setting as part of a wider funding policy, supported by regular actuarial valuations conducted every one to three years.⁴¹ Such a policy would formalize the process already applied in practice by BPJS Employment when considering the contribution rate. A formal funding policy would define a target level for the contingency reserve, establish clear rules for adjusting the contribution rate when reserves deviate from its target and ensure that the contribution rate remains aligned with the scheme's true cost over time. This approach would enhance transparency, strengthen financial sustainability and prevent excessive surplus accumulation, while preserving adequate protection for contributors and beneficiaries and limiting exposure to short-term political pressures.

5.1.2. Indexation of the maximum insurable earnings

Since its introduction in 2021, JKP has applied a maximum insurable earnings ceiling of 5,000,000 rupiah per month for the calculation of contributions and benefits. This ceiling has remained unchanged through 2025, while average monthly earnings have continued to increase – from 4.98 million rupiah in 2021 to 5.54 million rupiah in 2024. As a result, the share of contributors earning above the ceiling increased from 21.7 per cent in 2021 to 33.2 per cent in 2024. This is a significant increase in a relatively short period.

Under existing legislation, the ceiling is not automatically indexed. Government Regulation No. 37/2021 (articles 12 and 22) allows the Government to reassess and adjust the ceiling every two years, based on economic conditions and actuarial considerations. However, the Regulation does not specify criteria or triggers for these adjustments, creating uncertainty and contributing to the situation observed in recent years, where the ceiling has failed to keep pace with wage growth and now covers a progressively smaller share of total earnings.

To ensure that the scheme maintains its relevance over the projection period, the base scenario assumes a biennial revalorization of the ceiling starting in 2027, with the objective of keeping the ratio of insurable earnings to total earnings similar to that observed in 2024.⁴² Under this assumption, the share of contributors earning above the ceiling remains relatively stable over the projection period, at levels broadly comparable to those observed in 2024, and the effective replacement rate for the standard beneficiary remains compliant with Convention No. 102 throughout the projection period. By contrast, an alternative scenario assuming no future indexation of the ceiling shows this proportion increasing from 33.2 per cent in 2024 to 64.5 per cent in 2034. In this case, the effective replacement rate for the standard beneficiary declines to 39.5 per cent by 2034 – below the minimum 45 per cent required under Convention No. 102.⁴³ It is important to note, as detailed in section 4.3 above, that increasing the ceiling does not adversely affect the financial sustainability of the scheme. It is therefore strongly recommended that a process be put in place to ensure the appropriate indexation of this amount.

This highlights the need for regular and adequate indexation of the maximum insurable earnings ceiling. Without appropriate adjustments, insurable earnings – used as the basis for the calculation of both contributions and benefits – would become increasingly disconnected from actual earnings. This principle reflects the standard set by ILO Convention No. 102, which recommends that the insurable earnings ceiling should be set so that at least 75 per cent of all insured members have earnings at or below the ceiling (that is, no more than 25 per cent should exceed it), or alternatively be assessed against a benchmark of 125 per cent of the average earnings of protected persons. Respecting this principle helps ensure that the scheme provides effective and adequate protection to the vast majority of its members. Under JKP, 33.2 per cent of contributors already exceeded the ceiling in 2024.

To ensure adequacy, fairness and alignment with international standards, it is recommended to introduce a regular and predictable indexation mechanism, applied annually or biennially, so that the ceiling keeps pace with wage trends and labour market conditions. Such an approach would help maintain the effective replacement rate at its intended level over

⁴¹ The ISSA-ILO Guidelines for Actuarial Work (Guideline 27) recommend that unemployment insurance schemes conduct actuarial reviews on an annual basis in order to revise the contribution rate according to a predefined rate-setting mechanism. However, given the very high level of accumulated reserves in JKP, conducting the next actuarial valuation in three years could be considered appropriate – unless the scheme's provisions are amended before then, in which case an earlier actuarial valuation would be recommended.

⁴² The ceiling is revalorized in line with projected nominal wage growth, ensuring that the proportion of insurable earnings relative to total earnings remains broadly constant over the projection period.

⁴³ Under Convention No. 102, Member States may define the reference wage of a standard beneficiary using alternative methods. Two commonly applied approaches are: (1) identifying a person whose earnings are equal to 125 per cent of the average earnings of all protected persons; or (2) identifying a person whose earnings are equal to or greater than those of 75 per cent of protected persons (that is, the 75 per cent coverage benchmark). The projected estimates presented here are based on the 75 per cent benchmark, which results in a higher effective replacement rate than the 125 per cent method. When the 125 per cent benchmark is applied, the effective replacement rate would not comply with the 45 per cent minimum required under Convention No. 102 (sitting at approximately 41.0 per cent under the base scenario and 29.4 per cent under the scenario assuming no future indexation of the ceiling).

time and prevent a gradual erosion of benefit adequacy. This type of adjustment is not expected to have any material impact on the scheme's funding policy or contribution rate, because short-term benefit schemes such as JKP are, by nature, financed on a PAYG basis.

5.1.3. Separation of accounts

Under the current framework, operational expenses for BPJS Employment are collectively financed through the Employment Injury Insurance (JKK), Death Benefit (JKm), Old-Age Savings (JHT) and Pension (JP) schemes, and no direct administrative costs are charged to JKP. This practice is consistent with the existing regulatory framework, under which JKP funds are reserved exclusively for benefit payments and investment income, whereas BPJS Employment's operational fund covers all administrative expenditures. In this study, to reflect BPJS Employment's current regulatory and accounting practices, no administrative expenses were assumed or projected.

From an accounting perspective, however, allocating JKP's administrative expenses directly to the branch would be consistent with good practice and with the principle of maintaining separate financial statements for each benefit branch, as stipulated under Law No. 24/2011 on the Social Security Administering Body and under Government Regulation No. 37/2021. Doing so would enhance the transparency and comparability of the scheme's financial statements and provide a more accurate picture of the true cost of JKP – as well as the true costs of the four other programmes administered by BPJS Employment. It would also strengthen fairness between employers and employees contributing to different branches by avoiding implicit cross-subsidization of administrative costs across programmes.

The financial impact of such a reallocation would be marginal. Over the period 2022–2024, BPJS Employment's consolidated operational expenses across all five programmes (JKK, JKm, JHT, JP and JKP) represented approximately 5 per cent of total contribution income and 9 per cent of total benefit expenditures. While these figures are not specific to JKP, they provide a useful benchmark for assessing the potential magnitude of BPJS Employment's administrative expenses.

Given that unemployment insurance schemes are typically more complex to administer, it is reasonable to assume that the direct operational costs of JKP could be slightly higher than those suggested by BPJS Employment's consolidated figures. Taking this into account – and acknowledging that not all benefit branches apply the same maximum insurable earnings ceiling of 5,000,000 rupiah per month for contribution calculations – the projected administrative expenditure attributable to JKP would likely remain well below 0.05 per cent of insurable earnings.

5.1.4. Further considerations for progressive alignment with Convention No. 102

As discussed in section 1.1, while JKP represents a significant step forward in Indonesia's social protection system, certain legal and parametric elements would require adjustment to ensure full conformity with Part IV of Convention No. 102.

From an actuarial perspective, these changes and improvements would have limited direct impact on the scheme's short- to medium-term financial sustainability. However, they remain important from legal, governance and policy coherence perspectives. Ensuring conformity with international standards strengthens the credibility, clarity and predictability of the scheme, and supports Indonesia's broader objectives in the area of social security reform.

In particular, policymakers may wish to consider the following adjustments over time, with reference to the findings presented in section 1.1 above:

- **Clarification of the contingency definition:** Provide a clearer legal definition of “involuntary termination” and “suitable employment” to ensure that the contingency fully corresponds to Convention No. 102's definition of suspension of earnings due to inability to obtain suitable employment. Greater legal precision would reduce uncertainty in administrative practice and enhance consistency in eligibility decisions.
- **Expansion of effective coverage:** Continue efforts to increase coverage among wage earners, especially among workers currently excluded (such as workers in micro-enterprises, certain casual workers and construction workers), with the objective of progressively approaching the 50 per cent coverage threshold required under Article 21(a) of Convention No. 102.
- **Review of requalification and claim limitations:** Reassess the five-year requalification period and the lifetime limit of three claims to ensure that access to benefits is not unduly restricted and that the minimum guarantee of at least 13 weeks within a 12-month period can be effectively ensured, in line with Articles 23 and 24 of Convention No. 102.

The above legal and parametric adjustments would normally have no material impact on the scheme's financial sustainability over the projection period, provided that they are accompanied by periodic actuarial monitoring. In light of the scheme's strong projected financial position, progressive alignment with Convention No. 102 would, therefore, represent primarily a policy choice rather than a financial constraint.⁴⁴

5.2. A possible reform option for JKP

The preceding sections have presented key policy considerations relating to:

- financing policy;
- indexation of the maximum insurable earnings ceiling;
- separation of accounts; and
- progressive alignment with Convention No. 102.

While each of these elements was addressed separately (either quantitatively or qualitatively) in section 5.1, this section presents a coherent reform option that integrates the main recommendations discussed in this report and evaluates their combined impact on the financial position of the scheme.

It is important to note that some of the recommendations presented in section 5.1 (such as the introduction of a formal rate-setting mechanism or the clarification of the contingency definition) primarily affect governance, legal clarity and institutional transparency. These elements do not materially affect the short- to medium-term actuarial projections and are, therefore, not explicitly modelled.

One element that could have a more material impact on the scheme's actuarial projections is the relaxation of qualifying conditions to recognize the expiration of fixed-term contracts as a valid contingency for claiming benefits (as discussed in section 5.1.4). While it can reasonably be expected that such a measure would increase the cost of the scheme, the magnitude of this impact remains uncertain and would require additional data, particularly on contract types and termination patterns among contributors. That said, a gradual relaxation could likely be implemented at a moderate cost, potentially within the current contribution rate. However, given the limited data currently available to assess its impact with sufficient precision, this measure – although a core recommendation of the report – has not been explicitly modelled in the present reform option.

The following components, however, have been incorporated explicitly into the reform option of JKP.

- **Expansion of coverage:** The reform option incorporates a gradual extension of coverage to currently excluded categories of workers, such as construction workers and certain vulnerable groups in formal employment. It also includes the removal of the age limit at the time of registration, thereby allowing all eligible employees to access the scheme regardless of their age at registration.⁴⁵
- **Gradual increase of the maximum insurable earnings ceiling:** In line with the recommendation to ensure that the maximum insurable earnings remain aligned with members' actual earnings, the reform option incorporates an explicit indexation mechanism. As in the base scenario, it is assumed that the maximum insurable earnings will be revalorized on a biennial basis starting in 2027.⁴⁶ This is in line with good international practice and governance principles and supports both sustainability and adequacy of benefits.
- **Separation of branch accounts:** In line with the recommendation to provide a more accurate reflection of the scheme's true cost while preserving financial transparency and fairness between branches, the reform scenario assumes that administrative expenses are explicitly allocated to the JKP branch.⁴⁷

⁴⁴ While the above adjustments are not expected to materially affect the scheme's financial sustainability, the relaxation of qualifying conditions to recognize the expiration of fixed-term contracts as a valid contingency for claiming benefits could have a more noticeable impact. The magnitude of this effect remains uncertain and would require further data; however, it could likely be accommodated gradually within the current financing framework of the scheme.

⁴⁵ For modelling purposes, the extension of coverage to more vulnerable wage earners is reflected as a 25 per cent increase in the effective termination rate applied to the insured population over the projection period, compared with the base scenario. However, no specific data are available on the incidence of involuntary termination among these newly covered groups. It is therefore possible that their risk profile does not differ materially from that of workers already covered under the scheme. In such a case, the results presented in this section would tend to overestimate the cost of the reform option.

⁴⁶ The projection assumes the same evolution of the maximum insurable earnings as under the base scenario, but through an explicit indexation mechanism.

⁴⁷ For modelling purposes, administrative expenditure is assumed at 0.05 per cent of insurable earnings, consistent with the estimates and discussion presented in section 5.1.3.

- **Review of requalification and claim limitations:** The reform option also assumes the removal of the five-year requalification requirement and the lifetime limit of three claims, in order to align duration and re-entitlement provisions more closely with Convention No. 102.⁴⁸
- **Revision of the reference earnings formula:** Although a change in the reference earnings formula is not required to align the scheme with Convention No. 102 (as the scheme is already compliant in this regard), the reform option includes such an adjustment to support informed policy discussions. The reform scenario assumes that reference earnings would be calculated based on an average over the six months preceding termination. The main objective of this change is to enhance fairness among contributors by ensuring that benefits more accurately reflect usual earnings, smooth short-term fluctuations in income and reduce the risk of earnings manipulation prior to dismissal. This approach is also consistent with common international practice in earnings-related schemes.⁴⁹

Table 5.1 presents key financial and adequacy indicators under the current legislation and under the proposed reform option described above. It illustrates that the main recommendations of this report – generally aimed at aligning JKP more closely with international good practices and Convention No. 102 – could be implemented without increasing the current contribution rate of 0.36 per cent of insurable earnings.

► **Table 5.1. Comparison of key financial and adequacy indicators: Current legislation and proposed reform option**

Key indicator	General average premium (GAP) ¹ (in %)	Reserve ratio at the end of the projection period ²	Effective replacement rate for a standard beneficiary in 2034 ³ (in %)
Current legislation	0.15	21.2	55.0
Expansion of coverage	+0.03	-5.9	–
Increase of the ceiling ⁴	–	–	–
Separation of branch accounts	+0.05	-5.0	–
Review of requalification and claim limitations	+0.01	-0.7	–
Revision of the reference earnings formula	–	+0.1	–
Proposed reform option	0.24	9.7	55.0

– = nil. Notes: ¹ The general average premium (GAP) is the constant contribution rate, expressed as a percentage of insurable earnings, required over the entire projection period to finance all projected expenditures without consideration of the reserve. ² The reserve ratio is defined as the ratio of accumulated reserves to annual benefit expenditure at the end of the projection period (in 2034), assuming no change in the current contribution rate (currently set at 0.36%). ³ The scheme's effective replacement rate is not an indicator of the scheme's financial position, but rather an indicator of benefit adequacy. It corresponds to the definition used for assessing compliance with ILO Convention No. 102, based on the "standard beneficiary" concept. In this context, and for the purpose of assessing compliance, the standard beneficiary is defined as the lower of: (i) 125 per cent of the average earnings of protected persons; or (ii) the earnings level below which 75 per cent of insured members fall. ⁴ The projection assumes the same evolution of the maximum insurable earnings as under the base scenario, but through an explicit indexation mechanism.

Source: ILO projections.

⁴⁸ Over the ten-year projection period, the removal of the five-year requalification period and the lifetime limit of three claims is not expected to materially affect the financial position of the scheme, as repeat claims within short intervals remain statistically limited and the overall incidence of involuntary termination remains the dominant cost driver. Nonetheless, for prudence, a 5 per cent margin was applied to the eligible involuntary termination rate under this option.

⁴⁹ ILO instruments provide that, in earnings-related schemes, benefits should be determined with reference to previous earnings, while leaving national legislation discretion as to how such earnings are calculated. Reliance on the last reported wage may not ensure an adequate or representative level of benefit, as it can undervalue benefits when recent earnings are unusually low or overvalue them when they are temporarily high. For this reason, it is common practice to base reference earnings on an average over several months, in order to smooth short-term fluctuations in income, particularly for workers with variable or unstable earnings.

► 6. Actuarial opinion

In our opinion,

- the data on which this report is based are sufficient and reliable;
- the assumptions used are, individually and in aggregate, reasonable and appropriate; and
- the methodology employed is appropriate and consistent with accepted actuarial practice.

Based on the results of this valuation, taking into account the provisions of the Unemployment Insurance Scheme (JKP) as at 31 December 2024 and the legal amendments introduced under Government Regulation No. 6/2025, effective in 2025, we hereby certify that JKP, administered by the Badan Penyelenggara Jaminan Sosial Ketenagakerjaan (BPJS Employment), is financially sustainable over the projection period covered by this report. Financial sustainability, in this context, means that, under the applicable financing rules and projected demographic and economic conditions, the current assets of the unemployment insurance fund, together with future contribution income and investment returns, are expected to be sufficient to meet all projected benefit expenditures over the period under review.

This report has been prepared, and our opinions given, in accordance with internationally accepted actuarial practice as provided by the International Standard of Actuarial Practice 2 – Financial Analysis of Social Security Programs of the International Actuarial Association.

30 June 2026



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► Appendix 1. Summary of provisions of the scheme

The following summary provides an overview of the key coverage, contribution and benefit provisions of the Unemployment Insurance Scheme (JKP) administered by the Badan Penyelenggara Jaminan Sosial Ketenagakerjaan (BPJS Employment).

A1.1. Coverage

The scheme covers all Indonesian employees working in the private sector, provided they are under 54 years old at the time of registration.

To be eligible, they must be employed, contributing to the Old-Age Savings Scheme (JHT) and registered in the National Health Insurance (JKN) scheme. JHT participation is mandatory for employees in large, medium and small enterprises, while it remains voluntary for those in micro-enterprises. Construction workers are excluded from JHT participation and, consequently, are not covered under JKP.

Prior to 2025, employees were required to contribute to both JHT and JKN to be eligible for JKP. As a result, individuals exempted from paying JKN contributions – namely, Penerima Bantuan Iuran (PBI-JKN) members – were not covered under JKP. However, under the Government Regulation No. 6/2025, PBI-JKN members are now covered under the scheme. These individuals are low-income workers whose health insurance contributions are fully subsidized by the Government.

A1.2. Insurable earnings

Under JKP, insurable earnings are defined as the sum of the basic salary and any fixed allowances, while non-wage allowances are excluded. The maximum insurable earnings used for contributions and benefit calculations have been capped at 5,000,000 rupiah per month since the scheme's implementation in 2022, with this ceiling remaining unchanged as of 2025 (article 13, Government Regulation No. 37/2021).

There is no automatic indexation mechanism for the ceiling; however, it may be reassessed and adjusted every two years through an amendment to the Government Regulation, based on national economic conditions and the adequacy of actuarial obligations (articles 12 and 22, Government Regulation No. 37/2021).

A1.3. Contributions

JKP is funded through contributions from both the Government and employers.

Prior to 2025, the total contribution rate was 0.46 per cent of insurable earnings, consisting of 0.22 per cent from the government and 0.24 per cent from employers (article 11, Government Regulation No. 37/2021). As of 2025, the total contribution rate was reduced to 0.36 per cent, which consist of 0.22 per cent from the Government and 0.14 per cent from employers (article 11, Government Regulation No. 6/2025). This reduction resulted from the removal of the 0.1 per cent contribution previously collected through the Death Benefit Scheme (JKm). These contributions are paid monthly to BPJS Employment.

A1.4. Benefit provisions

A1.4.1. Qualifying condition and benefit continuation

To be eligible for benefits, an insured member must have been employed for at least 12 months within the last 24 months prior to employment termination.

Prior to 2025, members were also required to have accrued a minimum of six consecutive months of contributions before their employment termination (article 19(3), Government Regulation No. 37/2021). This condition was removed in the 2025 amendment (Government Regulation No. 6/2025).

Unemployment benefits are only available to members in the case of involuntary termination, while voluntary terminations are excluded (article 20(1), Government Regulation No. 37/2021). The regulation does not explicitly define

involuntary termination. In practice, BPJS Employment does not accept the expiry of a fixed-term contract as grounds for eligibility. Additionally, forced resignation and voluntary resignation with just cause may also be rejected.

In addition, to receive unemployment benefits, the insured member must be unemployed, able and willing to work, and not in reception of a pension.

The conditions for the continuation of unemployment benefits are not explicitly regulated; however, in practice, BPJS Employment imposes certain requirements for recipients to maintain eligibility. Claimants must apply to at least five different companies or attend one job interview, with self-reporting as proof of compliance. Additionally, while no formal rule governs vocational training attendance, BPJS Employment requires an 80 per cent attendance rate in practice. Failure to meet these requirements may result in the suspension or termination of benefits.

Finally, the member may claim unemployment benefits up to a maximum of three times during their career. The second claim can only be made five years after receiving the first JKP benefit, while the third claim is permitted five years after receiving the second JKP benefit (article 35, Government Regulation No. 37/2021).

A1.4.2. Monthly benefit and maximum benefit duration

Under the previous regulations (Government Regulation No. 37/2021), the unemployment benefit was paid at a decreasing rate, with 45 per cent of the last reported insurable earnings provided for the first three months and 25 per cent for the following three months. Under the 2025 amendment (Government Regulation No. 6/2025), the benefit rate was simplified and increased to 60 per cent of the last reported insurable earnings, paid for a maximum duration of six months.

A1.4.3. Delay to submit claims

According to article 40 of Government Regulation No. 6/2025, the insured member's right to receive unemployment benefits is forfeited if they fail to submit a claim within six months following the date of termination. This extends the previous three-month deadline established under Government Regulation No. 37/2025.

A1.4.4. Waiting period

The regulation does not explicitly specify a waiting period.

A1.5. Financial governance

The financial sustainability of the JKP scheme is maintained through regular actuarial valuations. An actuarial valuation is conducted every two years to assess the scheme's financial situation, ensuring that contribution rates, benefit provisions and fund adequacy remain aligned with economic conditions and long-term sustainability.

Additionally, the Government Regulation provides the framework for potential amendments, allowing for periodic revisions to financial parameters, such as the maximum insurable earnings ceiling, which is reviewed every two years, considering various factors, including the findings of the actuarial valuation.

► Appendix 2. General methodology

This actuarial valuation makes use of a comprehensive methodology developed at the Actuarial Services Unit of the Social Protection Department of the ILO for reviewing the financial position of unemployment insurance schemes.

A2.1. Purpose of projections

The purpose of the unemployment insurance model is twofold. First, it is used to assess the financial sustainability of the scheme over the projection period. Second, the model may be used to examine the financial impact of different reform options, thus assisting policymakers in the design of benefit and financing provisions. More specifically, the model is used to develop projections of the scheme's income and expenditure, for the purposes of:

- assessing the options for building up a contingency or technical reserve;
- proposing contribution rates that are consistent with the scheme's funding objective; and
- testing how the system reacts to changing economic, labour market and demographic conditions.

A2.2. Projection approach

The model focuses on the main characteristics of the scheme's current and future active members and beneficiaries.

For active members, the key characteristics include contribution densities and contribution patterns (relevant for eligibility), and monthly earnings. These characteristics have been derived from BPJS Employment data and presented by age, sex and coverage category (that is, members covered prior to 2025 and those covered from 2025 onward following the adoption of Government Regulation No. 6/2025)

For beneficiaries, the main characteristics – also derived from BPJS Employment data and presented by age and sex – reflect the scheme's recent experience and incorporate assumptions on termination rates, monthly reference earnings and benefit duration. Additional scheme-specific assumptions, such as the projected evolution of insurable earnings, the rate of return on the fund and administrative expenses, have been formulated based on the scheme's legal framework and the authors' assessment of expected economic developments.

All assumptions are presented in detail in Chapter 3.

Projections are made following a year-by-year methodology:

- Contribution income is projected based on the evolution of active insured members (by age, sex and coverage category), their projected densities of contribution and their projected monthly insurable earnings.
- Termination rates are applied to the average number of active insured members per month (by age, sex and coverage category) to estimate the total number of claimants whose employment ends in a manner that is potentially eligible under the scheme's rules.⁵⁰ At this stage, no distinction is made between eligible and ineligible claimants with respect to the minimum contribution requirements.
- The number of new beneficiaries (by age, sex and coverage category) is then derived by applying the estimated eligibility rate to the total number of claimants. The eligibility rate reflects the proportion of claimants who meet the

⁵⁰ Under JKP, unemployment benefits are payable only in cases of involuntary termination (article 20, Government Regulation No. 37/2021). In practice, BPJS Employment excludes voluntary resignation, forced resignation, and the expiry of fixed-term contracts from eligibility. This step estimates all involuntary terminations, regardless of whether individuals ultimately satisfy the contribution conditions required for benefit entitlement.

scheme's contribution requirements for benefit entitlement, and is based on the contribution profile of active insured members.

- Benefit expenditure is calculated using the projected number of new beneficiaries (disaggregated by age, sex and coverage category), their estimated reference earnings and the scheme's benefit structure, reflecting the applicable replacement rate and the maximum duration of benefits.

It is not the objective of unemployment insurance projections to forecast the exact progression of a scheme's income and expenditure, but to verify its financial sustainability. This entails evaluating the scheme with regard to the relative balance between future income and expenditure, under different possible economic scenarios.

► Appendix 3. ILO social security standards on unemployment protection

ILO social security standards have come to be recognized globally as key references for the design of rights-based, sound and sustainable social protection schemes and systems. They also give meaning and definition to the content of the right to social security as laid down in international human rights instruments (notably the Universal Declaration of Human Rights, 1948, and the International Covenant on Economic, Social and Cultural Rights, 1966), thereby constituting essential tools for the realization of this right and the effective implementation of a rights-based approach to social protection.

Guiding ILO policy and technical advice in the field of social protection, ILO social security standards are primarily tools for governments which, in consultation with employers and workers, are seeking to draft and implement social security law, establish administrative and financial governance frameworks, and develop social protection policies. More specifically, these standards serve as key references for:

- the elaboration of national social security extension strategies;
- the development and maintenance of comprehensive national social security systems;
- the design and parametric adjustments of social security schemes;
- the establishment and implementation of effective recourse, enforcement and compliance mechanisms;
- the good governance of social security and improvement of administrative and financial structures;
- the realization of international and regional obligations, and the operationalization of national social protection strategies and action plans; and
- working towards the achievement of Sustainable Development Goals, particularly Goals 1, 3, 5, 8, 10 and 16.

The ILO's normative social security framework consists of eight up-to-date Conventions and nine Recommendations. The most prominent of these are the Social Security (Minimum Standards) Convention, 1952 (No. 102), and the Social Protection Floors Recommendation, 2012 (No. 202). Other Conventions and Recommendations set higher standards in respect of the different social security branches, or spell out the social security rights of migrant workers.

ILO standards establish qualitative and quantitative benchmarks that together determine the minimum standards of social security protection to be provided by social security schemes when life risks or circumstances occur, with regard to:

- definition of the contingency (what risk or life circumstance must be covered?);
- persons protected (who must be covered?);
- type and level of benefits (what should be provided?);
- entitlement conditions, including qualifying period (what should a person do to get the right to a benefit?);
- duration of benefit and waiting period (how long must the benefit be paid/provided for?).

In addition, they set out common rules of collective organization, financing and management of social security, as well as principles for the good governance of national systems. These include:

- the general responsibility of the State for the due provision of benefits and proper administration of social security systems;
- solidarity, collective financing and risk-pooling;
- participatory management of social security schemes;
- guarantee of defined benefits;
- adjustment of pensions in payment to maintain the purchasing power of beneficiaries; and
- the right to complain and appeal.

Table A3.1 provides a summary overview of the key requirements set out in ILO standards on unemployment protection.

► **Table A3.1. Main requirements: ILO social security standards on unemployment protection**

	Convention No. 102 Minimum standards	Convention No. 168 and Recommendation No. 176 ¹ Higher standards	Recommendation No. 202 Basic protection
What should be covered?	Suspension of earnings due to inability to find suitable employment for capable and available persons.	C.168: Loss of earnings due to inability to find suitable employment for capable and available person actively seeking work. Protection should be extended to loss of earnings due to partial unemployment, suspension or reduction of earnings due to temporary suspension of work, part-time workers seeking full-time work. R.176: Provides guidance for assessing suitability of potential employment.	Basic income security for those who are unable to earn sufficient income in case of unemployment.
Who should be protected?	At least: • 50% of all employees; or • all residents with means under a prescribed threshold.	C.168: At least 85% of employees, including public employees and apprentices; all residents with means under a prescribed threshold. Coverage should be extended to persons seeking work who have never been, or have ceased to be, recognized as unemployed or covered by unemployment protection schemes. R.176: Coverage should be extended progressively to all employees as well as to persons experiencing hardship during waiting period.	At least all residents of active age, subject to international obligations.
What should the benefit be?	Periodic payments; at least 45% of reference wage.	C.168: Periodic payments: at least 50% of reference wage; or total benefits must guarantee the beneficiary healthy and reasonable living conditions. R.176: For partial employment: total benefit and earnings from the part-time work should reach the sum of previous earnings from full-time work and the amount of full unemployment benefit.	Benefits in cash or in kind at a level that ensures basic income security, so as to secure effective access to necessary goods and services; prevents or alleviates poverty, vulnerability and social exclusion; and enables life in dignity.
What should the benefit duration be?	For schemes covering employees: at least 13 weeks of benefits within a period of 12 months. For means-tested (non-contributory) schemes: at least 26 weeks within a period of 12 months. Possible waiting period of maximum seven days.	C.168: Throughout the unemployment period; possibility to limit initial duration of payment of the benefit to 26 weeks in case of unemployment or 39 weeks over any period of 24 months; possible waiting period of maximum seven days. R.176: Benefit duration should be extended until pensionable age for unemployed persons who have reached a prescribed age.	As long as the incapacity to earn a sufficient income remains.
What conditions can be prescribed for entitlement to a benefit?	Qualifying period may be prescribed as necessary to prevent abuse.	C.168: Qualifying period may be prescribed as necessary to prevent abuse. R.176: Qualifying period should be adapted or waived for new jobseekers.	Should be defined at national level, and prescribed by law, applying principles of non-discrimination, responsiveness to special needs and social inclusion, and ensuring the rights and dignity of people.

Notes: ¹ Employment Promotion and Protection against Unemployment Convention (No. 168) and Recommendation (No. 176), 1988.

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