



More Degrees, Fewer Good Jobs? Indonesia's Graduate Expansion in an Economy Still Dominated by Informal Work

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Abstract

Indonesia's higher education system now produces approximately 1.26 million bachelor's graduates annually, yet the country's labour market remains dominated by informal employment. This article examines whether the expansion of higher education has outpaced the creation of formal and high-quality employment. Using a narrative evidence synthesis and secondary descriptive analysis of the 2021–2026 literature, National Labour Force Survey statistics, higher-education statistics, and recent World Bank and ILO reports, the article distinguishes three claims that are often conflated: growth in graduate supply, growth in formal employment, and the availability of good jobs. Formal employment did not contract in absolute terms between February 2025 and February 2026; it increased from 59.19 to 59.93 million workers. However, informal employment increased more rapidly, from 86.58 to 87.74 million, leaving almost three-fifths of workers outside formal employment. More importantly for higher-education policy, the World Bank reports that the share of tertiary-educated workers in formal wage employment declined from 74.1% in 2018 to 67.8% in 2025. Indonesian studies also document substantial vertical and horizontal education–occupation mismatch and associated earnings penalties. The evidence therefore supports a more precise diagnosis: Indonesia is not running out of work, but the supply of tertiary credentials is expanding in an economy that is not generating enough productive, secure, skill-matched jobs at a comparable pace. The article argues that universities should shift from a degree-centred model toward a capability-centred model encompassing work-integrated learning, digital and analytical competence, professional networks, entrepreneurship, and career adaptability, while economic policy must simultaneously accelerate structural transformation and productivity-enhancing job creation.

Keywords: Good Jobs, Graduate Employability, Higher Education, Informal Employment, Skills Mismatch.

Introduction

The conventional social contract surrounding higher education in Indonesia is easy to understand: education raises human capital, a university degree improves access to professional employment, and professional employment supports upward mobility. That logic remains relevant, but the institutional environment around it is changing. Indonesia's higher education system now produces approximately 1.26 million bachelor's graduates each year [6], [7]. At the same time, the labour market continues to absorb most workers into activities that are classified as informal [1]–[5]. The coexistence

of educational expansion and persistent informality has generated a provocative public question: is Indonesia producing more degrees than good jobs?

The question requires more precision than its headline suggests. Three propositions should be separated. First, the supply of tertiary-educated labour is increasing. Second, formal employment may grow or shrink in absolute terms. Third, even when formal employment expands, the economy may still fail to generate enough high-productivity, secure and skill-matched positions to keep pace with the expectations and qualifications of graduates. Treating these propositions as interchangeable risks overstating the evidence.

Recent Indonesian data show that formal employment has not disappeared. Between February 2025 and February 2026, formal employment rose from 59.19 million to 59.93 million workers. However, informal employment rose from 86.58 million to 87.74 million during the same period [2]. This matters because it changes the diagnosis from a simple shortage of jobs to a structural question about the composition and quality of employment. The World Bank likewise argues that Indonesia's job creation remains disproportionately concentrated in lower-value activities and that too few middle-class, higher-productivity jobs are emerging [8]–[11].

The challenge is particularly salient for universities. If tertiary credentials become more common while the occupational structure changes more slowly, the signalling value of the degree itself can weaken. Employers may place greater weight on work experience, occupational skills, digital competence, networks and other forms of employability capital. Indonesian evidence increasingly documents education–occupation mismatch, overeducation and field-of-study mismatch [16]–[22], while newer employability research points to the importance of human, psychological and agentic capital as well as work-integrated learning [23]–[26].

This article synthesises recent evidence to answer three questions: (1) Has the supply of graduates expanded faster than the labour market's capacity to absorb them into formal and high-quality work? (2) What does the evidence on mismatch and informality imply for the economic value of a university degree? and (3) How should universities and employment policy respond? The objective is not to argue that higher education has lost its value. Rather, it is to clarify how the value proposition of higher education must change when degrees are more abundant than before but productive, secure and well-matched jobs remain comparatively scarce.

Data sources and analytical approach

This article uses a narrative evidence synthesis combined with secondary descriptive analysis. The principal labour-market data are drawn from Indonesia's National Labour Force Survey (Sakernas) publications and official BPS releases for 2025–2026 [1]–[5]. Higher-education expansion is described using the 2025 Higher Education Statistics published by the Ministry of Higher Education, Science, and Technology and related PDDikti reporting [6], [7]. The analysis of job quality and structural transformation is supplemented with World Bank and ILO reports [8]–[15].

Peer-reviewed studies were used to assess mechanisms that aggregate labour statistics cannot show directly: vertical mismatch, horizontal mismatch, wage penalties, employability capital, work



experience, and entrepreneurship [16]–[33]. The article does not claim to be a systematic review and does not estimate causal effects from the aggregate trends. Instead, it triangulates official macro indicators with micro-level findings from Indonesian labour-market and employability research.

A central analytical distinction is maintained throughout the paper. Formal work is not automatically a good job, and informal work is not automatically a bad job. High-income independent professionals and productive entrepreneurs may be classified as informal, while some formal jobs may remain low-paid or insecure. Accordingly, the term good job is used here to denote employment with a combination of adequate earnings, productivity, stability, social protection, prospects for progression, and reasonable alignment between workers' capabilities and occupational requirements [8], [11], [12].

Table 1. Key indicators linking higher-education expansion and labour-market structure in Indonesia

Indicator	Value	Period	Source	Analytical relevance
Bachelor's graduates	≈1.26 million	2025	PDDikti/Kemdiktisaintek	Large annual inflow of tertiary credentials
Labour force	154.91 million	Feb. 2026	BPS Sakernas	Employment pressure must be assessed at scale
Employed population	147.67 million	Feb. 2026	BPS Sakernas	Employment expanded despite structural concerns
Formal employment	59.93 million	Feb. 2026	BPS	Up from 59.19 million in Feb. 2025
Informal employment	87.74 million	Feb. 2026	BPS	Up from 86.58 million in Feb. 2025
Open unemployment rate	4.68%	Feb. 2026	BPS	Does not capture overeducation or mismatch
Average employee wage	IDR 3.29 million/month	Feb. 2026	BPS	National average, not a measure of job quality alone
Tertiary workers in formal wage employment	67.8%	2025	World Bank/SAKERNAS	Down from 74.1% in 2018

Note: "Formal" and "informal" follow BPS/SAKERNAS statistical classifications. "Good jobs" is a broader analytical concept and should not be inferred directly from formality status. Sources: [1]–[10].

Results and discussion

A. Graduate supply is expanding, but formal employment is not collapsing

The first part of the argument is clear: Indonesia produces a large annual flow of university graduates. PDDikti reported roughly 1.26 million bachelor's graduates in 2025 [6], [7]. This is not, by itself, evidence of graduate oversupply. A growing economy can productively absorb a growing number of graduates if occupational upgrading and firm productivity expand at a similar pace.

The second part is more nuanced. In February 2026, Indonesia had a labour force of 154.91 million and 147.67 million employed persons; the open unemployment rate was 4.68% [1]. Formal employment stood at 59.93 million workers, compared with 87.74 million informal workers [2]. Formal employment had increased by about 0.74 million over the previous year, while informal employment had increased



by about 1.16 million. Thus, the strongest defensible claim is not that formal jobs are shrinking in absolute number, but that formalisation is not advancing fast enough to transform the overall employment structure.

This distinction is important for public debate. A country can simultaneously experience rising total employment, rising formal employment and a labour market that remains structurally informal. In such a setting, unemployment alone understates labour-market pressure because graduates may accept work below their qualification level, shift into self-employment, or enter informal wage work rather than remain openly unemployed.

B. The more serious concern is the scarcity of good jobs

The quality dimension is more concerning than the headline unemployment rate. The World Bank's 2025 Indonesia Economic Prospects reported that wholesale and retail trade and agriculture accounted for approximately 52% of the jobs created during the reference year, while almost 60% of workers were in informal employment [10]. Its more recent Growth and Jobs Report concludes that job creation is skewed toward lower-value activities and that too few middle-class, higher-productivity jobs are being created [8].

The June 2026 Indonesia Economic Prospects adds a particularly important finding for higher education: among tertiary-educated workers, the share in formal wage employment fell from 74.1% in 2018 to 67.8% in 2025 [9]. This does not mean that all of the remaining tertiary-educated workers are unemployed or trapped in poor-quality work. It does mean that a smaller proportion of educated workers is being absorbed into the conventional formal wage-employment pathway that historically anchored the economic promise of a university degree.

The pattern also resonates with the World Bank's earlier analysis of middle-class jobs. The 2021 report estimated that only a minority of Indonesian income earners held jobs capable of supporting a middle-class standard of living with strong employment protections [11]. Recent evidence indicates that the challenge has not disappeared. Therefore, the relevant policy target should not be employment at any cost, but productivity-enhancing employment capable of supporting earnings growth and social mobility.

C. Education-occupation mismatch reveals the hidden pressure

A labour market can absorb graduates without using their skills efficiently. Indonesian studies consistently identify substantial vertical and horizontal mismatch. Hasibuan and Handayani found that 27.9% of workers in their 2018 Sakernas sample were overeducated and that field-of-study mismatch was considerably more widespread; overeducation and field mismatch were associated with earnings penalties [18]. Sukanti and Sulistyaningrum likewise reported that overeducated workers experienced negative wage effects [19].

Wicaksono et al. found that previous overeducation increased the probability of subsequent overeducation and was associated with wage disadvantages even when workers later moved into matched employment [17]. More recent analysis by Khoiruddin et al. shows that overeducation remains pronounced among vocational and university graduates and varies with age, gender and regional labour-



market characteristics [20]. Hakim et al. further demonstrate that horizontal educational mismatch among Indonesian graduates has heterogeneous earnings consequences across fields of study [16].

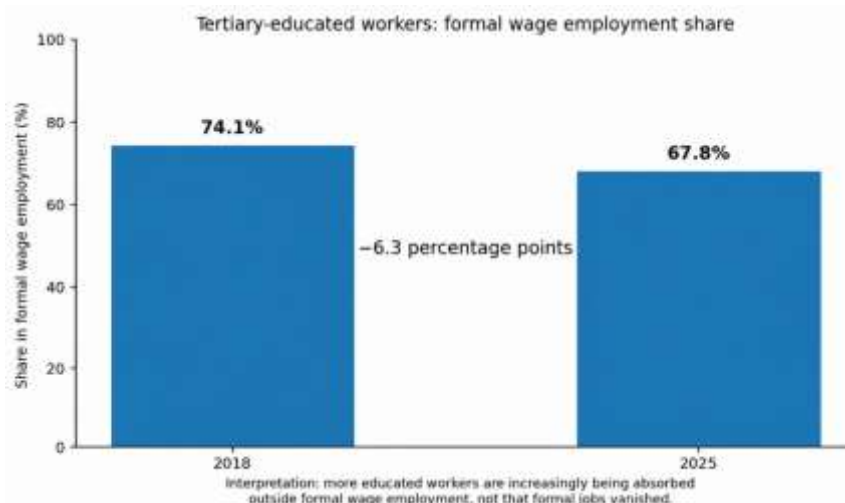


Fig. 1. Declining formal wage-employment share among tertiary-educated workers, Indonesia, 2018 and 2025.

Source: World Bank staff calculations using SAKERNAS, reported in *Indonesia Economic Prospects 2026* [9].

These findings help explain why open unemployment cannot be treated as the sole indicator of graduate labour-market health. A graduate who accepts a position requiring substantially less education is counted as employed, yet the labour market may still be underutilising the human capital created by higher education. From the individual perspective, mismatch can reduce returns to education; from the macroeconomic perspective, it represents an inefficient allocation of skills.

Table 2. Selected evidence on education–occupation mismatch and graduate employability in Indonesia.

Study	Data/sample	Focus	Main finding relevant to this article
Hasibuan & Handayani [18]	SAKERNAS 2018	Vertical + horizontal mismatch	27.9% overeducated; field-of-study mismatch widespread; wage penalties for overeducation/mismatch.
Sukanti & Sulistyanningrum [19]	SAKERNAS 2018	Education–occupation mismatch	Overeducation negatively associated with wages; undereducation positively associated with wages.
Wicaksono et al. [17]	Four SAKERNAS waves, 2017–2018	Overeducation persistence	Past overeducation predicted repeat overeducation and wage disadvantage during later transitions.
Khoiruddin et al. [20]	SAKERNAS 2022; trend evidence 2019–2023	Mismatch determinants	University and vocational graduates show substantial overeducation; mismatch varies by demographic and regional conditions.
Hakim et al. [16]	Indonesian graduates	Horizontal mismatch	Almost half were mismatched by field; earnings effects differ across fields of study.
Pham et al. [23]	98 graduates + 10 interviews	Employability capitals	Human, psychological and agentic capital were important; professional networks and career identity remained weaker areas.
Taufik & Kismono [24]	>10,000 undergraduates	Internship/employability capital	National internship participation produced multidimensional development, especially psychological and identity capital.



D. A degree still matters—but it is becoming a weaker stand-alone signal

The evidence does not justify the conclusion that university education has become economically irrelevant. Higher education continues to be associated with access to professional occupations, higher earnings potential and stronger labour-market mobility. The change is that the degree itself is less sufficient as a stand-alone signal when a much larger pool of applicants possesses similar credentials.

Employability research in Indonesia supports a broader capability model. Pham et al. report that human, psychological and agentic capital are important contributors to graduate employability, while graduates may still lack strong professional networks and career identity [23]. Saraswati and Lambert similarly adapt the CareerEDGE perspective to Indonesian higher-education graduates and emphasise the multidimensional nature of employability [26]. Evidence from a large Indonesian internship programme suggests that work-integrated learning can build not only skills but also identity and psychological capital [24].

International evidence points in the same direction. Work experience during education improves the school-to-work transition [29], while weak labour-market conditions at entry can have persistent effects on early careers [30]. Mismatch also reflects the strength of institutional links between education systems and occupations [31], [32]. Consequently, universities cannot respond merely by adding more disciplinary content. They need to strengthen the conversion of academic knowledge into demonstrable workplace capability.

E. Informality should be upgraded, not merely rejected

A binary formal-versus-informal narrative is also inadequate. Indonesia's informal economy contains necessity self-employment, casual work and low-productivity micro-enterprises, but it also includes independent professionals, creators, small business owners and other forms of entrepreneurial work. The policy objective should therefore be twofold: expand the number of productive formal jobs while simultaneously raising productivity, income security and social protection in viable forms of self-employment and entrepreneurship.

This is especially relevant for higher education because not every graduate can or should become a salaried employee. Indonesian evidence shows meaningful student interest in entrepreneurship [27], [28]. However, universities should avoid treating entrepreneurship merely as a motivational slogan or a compulsory course. Effective entrepreneurial preparation requires opportunity recognition, financial literacy, digital market access, networks, mentoring, experimentation and exposure to real customers. Entrepreneurship should be framed as a capability to create economic value, not as a statistical mechanism for reducing graduate unemployment.

Implications for higher education and employment policy

The evidence points to a shared problem rather than a single institutional failure. Universities cannot create enough good jobs by curriculum reform alone, and governments

cannot resolve graduate mismatch without improving the relevance and adaptability of education. A coordinated response is required.

First, universities should move from a degree-centred to a capability-centred value proposition. Programme quality should still be protected through academic standards and accreditation, but the student proposition must become more explicit about what graduates can do. This includes analytical reasoning, digital capability, communication, project execution, occupational skills, career adaptability and the ability to learn new technologies. Employability should be embedded across the curriculum rather than isolated in a final-semester career workshop [23]–[26].

Second, work-integrated learning should become a core part of programme design. Internships, industry projects, clinical or professional placements, applied research, freelancing projects and community-based problem solving provide evidence of competence and help students develop professional identity and networks [24], [29]. The objective is not merely to add an internship requirement but to ensure that the experience has learning outcomes, supervision and assessment.

Third, programme portfolios should be informed by labour-market intelligence. Universities need systematic information about occupational demand, graduate destinations, salary distributions, underemployment, skill mismatch and emerging sectors. Tracer studies should therefore move beyond the simple question of whether a graduate is employed within six months. They should measure job quality, education–occupation match, income progression and the use of graduate-level skills.

Fourth, entrepreneurship and independent professional work should be treated as legitimate graduate pathways, but their quality should be monitored. Universities should help graduates build businesses or professional practices capable of moving from subsistence self-employment toward higher-productivity enterprise. Entrepreneurship education is more credible when students interact with real markets, mentors and financing ecosystems [27], [28].

Fifth, economic policy must address the demand side. The core constraint cannot be solved if the economy continues to create too few productive firms and too many low-value jobs. The World Bank's diagnosis emphasises competition, investment, innovation, finance, skills diffusion and structural transformation as central to generating better-quality employment [8]. Higher education policy and industrial policy therefore need to be treated as connected systems rather than separate agendas.

Finally, universities should rethink how they communicate value to prospective students. Accreditation remains important, but it is an input and quality-assurance signal rather than a complete answer to the question increasingly asked by students and families: what can this programme enable me to become? In a labour market where degrees are common, programmes will increasingly compete on evidence of graduate capability, professional networks, work experience and credible pathways to economic value creation.

Conclusion

Indonesia is not facing a simple transition from plentiful formal work to disappearing formal work. The evidence is more complex. Formal employment increased between 2025 and 2026, but informal employment increased faster and continued to account for almost three-fifths of all

employment. At the same time, the proportion of tertiary-educated workers in formal wage employment declined substantially between 2018 and 2025, while Indonesian studies continue to document vertical and horizontal education–occupation mismatch.

The most defensible conclusion is therefore that Indonesia’s higher-education expansion is occurring faster than the economy is generating productive, secure and skill-matched employment at a comparable scale. This creates pressure not only through unemployment but also through overeducation, occupational mismatch, wage penalties and movement into informal work.

The policy response should not be to restrict higher education or to imply that a university degree has lost its value. Instead, the value proposition must change. Universities must produce graduates whose economic relevance rests on capabilities, experience, adaptability and the ability to create value—not merely on the possession of a credential. At the same time, Indonesia’s growth strategy must generate firms and sectors capable of using those capabilities productively. The question confronting the next generation is no longer only, ‘Can I earn a degree?’ It is increasingly, ‘What can I build, solve or become with it?’

Conflict of Interest

The authors declare no conflict of interest.

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