

From Growth to Jobs: An Economic Recovery Strategy

***DARI PERTUMBUHAN KE PEKERJAAN:
STRATEGI PEMULIHAN EKONOMI***

Oleh / By

Prof Ir Rudy C Tarumingkeng, PhD

www.rudyc.com/cv.pdf

Institut Bisnis dan Multimedia (IBM ASMI)

2026



FROM GROWTH TO JOBS:

AN ECONOMIC RECOVERY STRATEGY

Inclusive Growth. Productive Jobs. Resilient Indonesia.



“ Economic growth is the engine, but jobs are the destination. Our goal is not just a bigger economy, but **better jobs** for a better future. ”



SUSTAIN GROWTH
STRONG, PRODUCTIVE, INCLUSIVE



CREATE JOBS
DECENT, RESILIENT, ABUNDANT



EMPOWER PEOPLE
SKILLED, INNOVATIVE, ADAPTIVE



BUILD RESILIENCE
INSTITUTIONS, SOCIAL PROTECTION, SUSTAINABILITY

STRATEGIC PILLARS FOR JOB-CENTERED RECOVERY



1. INVEST IN PRODUCTIVE SECTORS

- Prioritize sectors with high job multiplier
- Manufacturing, agro-industry, tourism, creative economy, digital services, green industries



2. UPGRADE SKILLS & HUMAN CAPITAL

- Align education with industry needs
- TVET strengthening
- Lifelong learning and reskilling
- Digital & green skills for the future



3. EMPOWER SMES & ENTREPRENEURS

- Easier access to finance
- Technology adoption
- Market access & value chains
- Formalization & business climate



4. ACCELERATE DIGITAL & GREEN TRANSFORMATION

- Boost productivity and innovation
- Support green jobs
- Promote digital infrastructure
- Encourage R&D and startups



5. STRENGTHEN SOCIAL PROTECTION & INCLUSIVITY

- Protect vulnerable households
- Active labor market policies
- Gender equality and youth inclusion
- Regional equity



6. GOOD GOVERNANCE & COLLABORATION

- Policy coherence & certainty
- Public-private partnerships
- Data-driven decision making
- Transparent & accountable institutions

WHAT WE AIM TO ACHIEVE



HIGHER LABOR PARTICIPATION
More people in productive employment



QUALITY JOBS WITH DECENT WAGES
Better jobs, better livelihoods



LOWER UNEMPLOYMENT RATE
More opportunities, less joblessness



HIGHER LABOR PRODUCTIVITY
Do more, produce more, earn more



INCLUSIVE GROWTH
No one left behind



STRONGER INDONESIA
Resilient economy, prosperous society



By:
Prof Ir Rudy C Tarumingkeng, PhD
www.rudycct.com/cv.pdf
IBM-ASMI (Institut Bisnis dan Multimedia)
Business · Multimedia · Digital · Entrepreneurship



OUR VISION
A job-rich Indonesia with inclusive prosperity, innovation, and sustainability. Together, from growth to jobs, toward a better future.

Abstract

An economic recovery is not complete when gross domestic product merely returns to a positive growth trajectory. It becomes socially meaningful when growth generates productive employment, rising real incomes, stronger labor-force participation, opportunities for skill upgrading, and a credible path from vulnerability to economic mobility. This article examines the transition “from growth to jobs” as the central challenge of Indonesia’s recovery strategy. Indonesia entered 2026 with resilient macroeconomic performance: real GDP grew by 5.11 percent in 2025, and growth accelerated to 5.61 percent year-on-year in the first quarter of 2026, supported by domestic demand. Yet job creation must be evaluated not only by the number of people employed but also by employment quality, productivity, wage growth, formality, social protection, and the capacity of firms to move workers into higher-value activities. Drawing on macroeconomic analysis, labor economics, structural transformation, human-capital theory, and strategic public management, this article argues that Indonesia needs an employment-centered recovery architecture. Such an architecture combines demand support with productivity-enhancing investment, SME upgrading, industrial and service-sector diversification, vocational education reform, digital and green transition strategies, regional development, labor-market intermediation, and adaptive social protection. The article also emphasizes that employment policy should be treated as a system: investment, technology, education, wages, infrastructure, finance, and social policy must reinforce one another. The central proposition is simple but consequential: growth is an economic outcome; jobs are the mechanism through which growth becomes household income, dignity, capability, and durable social recovery.

Keywords

economic recovery; employment; job creation; productivity; structural transformation; labor market; human capital; SMEs; industrial policy; digital economy; green jobs; Indonesia

Current Indonesian Context, 2025–2026

Indicator	Recent figure	Employment relevance
Real GDP growth, 2025	5.11%	Shows macroeconomic resilience, but does not by itself measure job quality.
Real GDP growth, Q1 2026	5.61% y/y	Acceleration was supported by domestic demand, creating a favorable base for employment expansion.
Open unemployment rate, Aug. 2025	4.85%	Headline unemployment declined, while the composition and quality of work remain central.
Average employee wage, Aug. 2025	IDR 3.33 million/month	Wage growth must be compared with inflation, productivity, and living costs.

Consumer confidence, May 2026	120.9	Optimistic confidence supports consumption, investment, and employment demand.
BI 2026 growth range	4.9–5.7%	Policy coordination seeks to sustain domestic demand while protecting stability.
World Bank 2026 growth projection	5.0%	World Bank stresses productivity reforms as critical for job creation.
OECD 2026 growth projection	4.7%	Highlights downside risks from global conditions and labor-market weakness.

These figures are used as contextual markers rather than as a single verdict on labor-market health. Employment recovery should be interpreted through a portfolio of indicators: labor-force participation, unemployment, hours worked, underemployment, wage growth, real earnings, formalization, productivity, social protection coverage, occupational mobility, and the ability of young workers and women to enter good jobs.

1. Introduction: Growth Is Necessary, but Jobs Make Recovery Real

Macroeconomic recovery is usually announced through familiar aggregates: gross domestic product, investment, exports, fiscal balances, or inflation. These indicators matter, but they do not directly answer the question most households ask after a disruption: “Can I find stable work, earn enough, and build a better future?” Employment is the transmission mechanism that converts abstract growth into lived economic security. A factory expansion matters socially when it creates jobs, raises supplier demand, develops skills, and strengthens local incomes. A digital platform contributes to recovery when it creates productive opportunities rather than merely redistributing precarious tasks. Public infrastructure becomes transformative when it reduces business costs and expands access to labor markets.

Indonesia’s recent performance illustrates both the strength and the challenge of this perspective. The economy grew by 5.11 percent in 2025 and accelerated to 5.61 percent year-on-year in the first quarter of 2026. Domestic demand remained an important support, and official institutions continued to emphasize household consumption, government programs, investment, and policy coordination. These are encouraging signals. Yet the employment question remains qualitatively different from the growth question. A country can grow while creating too few high-productivity jobs, while real wages stagnate, or while large numbers of workers remain informal and vulnerable.

The core thesis of this article is that Indonesia should organize recovery strategy around an employment-centered growth model. This does not mean replacing growth with jobs as an objective. Rather, it means redesigning the composition of growth so that each major driver—investment, consumption, exports, infrastructure, digitalization, industrialization, education, and the green transition—can be evaluated by its capacity to generate productive employment and increase labor incomes.

An employment-centered framework also changes the meaning of “quality.” The desired outcome is not simply lower unemployment. In labor-surplus environments, people often cannot afford to remain openly unemployed; they accept low-hour, low-productivity, or unstable work. Therefore, the analytical focus must expand to job stability, adequate hours, earnings, training, safety, social insurance, upward

mobility, and worker bargaining capacity. This wider lens prevents policy from declaring victory too early.

Finally, jobs carry a social meaning that extends beyond income. Employment can provide identity, social networks, learning, discipline, and a sense of contribution. Persistent exclusion from work—especially among young people—can erode confidence and social cohesion. A recovery strategy that creates jobs therefore performs both an economic and an institutional function: it reconnects citizens to the productive system.

Policy and management implications

For public management, the implication is to translate this analysis into a small set of operational commitments: define the employment outcome, identify the institutions that influence it, establish a shared data system, specify the sequence of intervention, and review results at regular intervals. Programs should be judged by changes in worker and firm behavior rather than by administrative outputs alone. In practical terms, a training program is not successful because thousands attend; it is successful when participants enter suitable jobs, raise earnings, or improve productivity. An investment incentive is not successful because capital expenditure rises; it is successful when the project generates durable value added, local linkages, skills transfer, and fiscally sustainable employment. This results-based discipline is essential for turning an employment narrative into an executable recovery strategy.

2. The Growth–Employment Link: Why It Is Not Automatic

Economic theory often assumes that output growth raises labor demand, but the strength of that relationship varies dramatically across sectors, technologies, and stages of development. A one-percentage-point increase in output in a labor-intensive service may create more jobs than the same increase in capital-intensive mining. Likewise, automation can raise output without proportionate employment growth, while small-business expansion may generate substantial employment even with modest measured productivity.

This distinction is captured by the idea of employment elasticity of growth: the percentage change in employment associated with a percentage change in output. Elasticity is not a fixed national characteristic. It changes with sector composition, wages, technology, regulation, demand, and business expectations. A growth strategy dominated by highly capital-intensive activities can produce strong GDP numbers but relatively limited direct employment. This does not make such sectors undesirable; they may generate exports, taxes, or upstream demand. It does mean that policymakers must deliberately create linkages to more labor-absorbing sectors.

Structural transformation is therefore central. Historically, sustained development has involved moving workers from low-productivity activities into higher-productivity manufacturing and services. The challenge today is more complex because manufacturing itself is becoming more automated, global value chains are changing, and services vary enormously in productivity. Indonesia needs a diversified pathway: competitive manufacturing, modern tradable services, tourism, logistics, health, education, creative industries, agri-processing, digital services, renewable energy, and upgraded local services.

The employment content of growth also depends on firm dynamics. Young and expanding firms often account for a disproportionate share of net job creation. Yet these firms face financing constraints, uncertain demand, regulatory complexity, skills shortages, infrastructure bottlenecks, and difficulties

entering supply chains. An employment-centered strategy therefore requires attention not only to sectors but also to the life cycle of firms.

Another non-automatic link concerns wages. Employment may expand without substantial gains in household purchasing power when workers enter low-paying activities or when inflation erodes earnings. Consequently, the policy target should be productive employment in which wage growth is supported by productivity growth. This is the sustainable bridge from growth to welfare.

Policy and management implications

For public management, the implication is to translate this analysis into a small set of operational commitments: define the employment outcome, identify the institutions that influence it, establish a shared data system, specify the sequence of intervention, and review results at regular intervals. Programs should be judged by changes in worker and firm behavior rather than by administrative outputs alone. In practical terms, a training program is not successful because thousands attend; it is successful when participants enter suitable jobs, raise earnings, or improve productivity. An investment incentive is not successful because capital expenditure rises; it is successful when the project generates durable value added, local linkages, skills transfer, and fiscally sustainable employment. This results-based discipline is essential for turning an employment narrative into an executable recovery strategy.

3. Indonesia's Labor Market: Quantity, Quality, and the Informality Challenge

Indonesia has made progress in reducing open unemployment, but the structure of work remains a defining policy challenge. The August 2025 open unemployment rate stood at 4.85 percent, while average employee wages were reported at about IDR 3.33 million per month. These indicators point to continuing labor-market improvement, yet they conceal substantial diversity across provinces, sectors, education levels, age groups, and employment status.

Informality is particularly important. Informal employment can be entrepreneurial, flexible, and culturally embedded, but it often comes with low productivity, limited access to social protection, weak legal protection, and volatile incomes. Policy should therefore avoid treating formalization as merely an administrative exercise. For a microenterprise, formalization becomes attractive when it provides visible benefits: access to markets, credit, procurement, insurance, digital payment systems, training, or legal certainty.

Underemployment is another essential dimension. A worker may be classified as employed while receiving too few hours or too little income. For recovery policy, this means that job counts alone can overstate progress. Hours worked, earnings, multiple-job holding, involuntary part-time work, and worker transitions between low- and higher-productivity occupations are necessary complements.

Youth employment deserves special attention. New labor-market entrants lack experience and professional networks. When firms respond to uncertainty by reducing entry-level hiring, young people bear disproportionate costs. Extended periods outside employment, education, or training can create “scarring”: lower future earnings, weaker attachment to the labor force, and reduced confidence. Apprenticeships, internships with standards, employer-linked vocational programs, career guidance, and job-matching systems can reduce this risk.

Women also face structural constraints that are not solved by general growth alone. Childcare, eldercare, safety, transport, workplace flexibility, discrimination, and occupational segregation all shape labor-force participation. Expanding affordable care services can produce a double employment dividend: it enables more women to participate in paid work while creating jobs in the care economy itself.

Policy and management implications

For public management, the implication is to translate this analysis into a small set of operational commitments: define the employment outcome, identify the institutions that influence it, establish a shared data system, specify the sequence of intervention, and review results at regular intervals. Programs should be judged by changes in worker and firm behavior rather than by administrative outputs alone. In practical terms, a training program is not successful because thousands attend; it is successful when participants enter suitable jobs, raise earnings, or improve productivity. An investment incentive is not successful because capital expenditure rises; it is successful when the project generates durable value added, local linkages, skills transfer, and fiscally sustainable employment. This results-based discipline is essential for turning an employment narrative into an executable recovery strategy.

4. From Demand Support to Job-Rich Recovery

During a downturn, protecting aggregate demand is essential because firms will not hire if they cannot sell. Transfers, temporary subsidies, accelerated public spending, credit support, and monetary accommodation can stabilize consumption and prevent unnecessary business closures. Indonesia's policy response in 2020 has continued to emphasize household purchasing power, priority programs, social assistance, and domestic demand. Such measures can help preserve the revenue base from which employment recovers.

However, demand support should be designed with an employment lens. Public spending differs in labor intensity. Maintenance of local infrastructure, neighborhood upgrading, irrigation repair, school rehabilitation, health services, care services, tourism infrastructure, and labor-intensive environmental restoration may create different patterns of employment from highly capital-intensive projects. The relevant question is not "Which spending is labor intensive?" alone, but "Which spending generates useful assets, high social returns, and employment without sacrificing efficiency?"

Transfers also have employment effects through household demand. Lower-income households typically spend a larger share of additional income, so well-targeted support can sustain sales at local shops, food businesses, transportation providers, and microenterprises. Yet transfers are stabilizers, not substitutes for productive job creation. Their best role is to prevent destructive coping strategies—selling productive assets, withdrawing children from education, delaying healthcare—while the productive economy recovers.

Monetary and macroprudential policy influence job creation through credit conditions, exchange rates, investment expectations, and financial stability. Lower financing costs can support investment, but firms will expand capacity only when they anticipate sufficient demand and policy stability. Thus monetary easing is more effective for employment when combined with credible fiscal policy, strong banking transmission, and investment reforms.

The timing of policy withdrawal matters. Removing support too early can interrupt employment recovery; keeping emergency measures indefinitely can create fiscal costs and distort incentives.

Recovery management therefore requires a sequencing framework: stabilize incomes and firms, restore demand, accelerate productive investment, retrain displaced workers, and gradually shift resources from temporary support toward structural reforms.

Policy and management implications

For public management, the implication is to translate this analysis into a small set of operational commitments: define the employment outcome, identify the institutions that influence it, establish a shared data system, specify the sequence of intervention, and review results at regular intervals. Programs should be judged by changes in worker and firm behavior rather than by administrative outputs alone. In practical terms, a training program is not successful because thousands attend; it is successful when participants enter suitable jobs, raise earnings, or improve productivity. An investment incentive is not successful because capital expenditure rises; it is successful when the project generates durable value added, local linkages, skills transfer, and fiscally sustainable employment. This results-based discipline is essential for turning an employment narrative into an executable recovery strategy.

5. Productivity: The Sustainable Foundation of Higher Wages

A job-rich recovery should not be confused with maximizing the number of low-wage jobs. The long-term objective is rising labor productivity because productivity creates the economic space for higher wages, stronger profits, more tax revenue, and better public services. The World Bank's 2026 Indonesia Economic Prospects places productivity reform at the center of sustaining growth and creating jobs. This is a crucial point: employment quantity and productivity must be advanced together.

At the firm level, productivity can rise through better machinery, digital tools, management practices, worker skills, logistics, quality control, energy efficiency, and access to larger markets. Management quality deserves particular attention. Many enterprises do not underperform because workers are unwilling to work, but because processes are poorly organized, inventory is mismanaged, customer data are not used, maintenance is reactive, or employees lack clear performance systems.

Technology can complement or substitute labor. The policy objective should not be to stop automation but to shape a complementary transition. Firms that adopt artificial intelligence, robotics, enterprise software, or digital platforms need workers capable of operating, maintaining, interpreting, and improving these systems. Reskilling should therefore be tied to actual technology adoption rather than offered as generic training.

Productivity policy also requires diffusion. Large frontier firms may adopt advanced technologies while small firms remain far behind. National productivity rises faster when knowledge spreads through supply chains, industry associations, extension services, universities, digital platforms, and vendor networks. Supplier-development programs can connect SMEs to larger corporations and export markets, creating incentives to meet quality, delivery, and certification standards.

A social compact around productivity is equally important. Workers are more likely to support technological change when they expect to share in its benefits through higher wages, safer jobs, learning opportunities, or career progression. Employers, for their part, need predictable labor regulation and a skilled workforce. Government can facilitate this compact through social dialogue, wage-setting institutions, training finance, and portable social protection.

Policy and management implications

For public management, the implication is to translate this analysis into a small set of operational commitments: define the employment outcome, identify the institutions that influence it, establish a shared data system, specify the sequence of intervention, and review results at regular intervals. Programs should be judged by changes in worker and firm behavior rather than by administrative outputs alone. In practical terms, a training program is not successful because thousands attend; it is successful when participants enter suitable jobs, raise earnings, or improve productivity. An investment incentive is not successful because capital expenditure rises; it is successful when the project generates durable value added, local linkages, skills transfer, and fiscally sustainable employment. This results-based discipline is essential for turning an employment narrative into an executable recovery strategy.

6. SMEs and Entrepreneurship as Employment Engines

Indonesia's micro, small, and medium enterprises are central to employment because they operate across retail, food, manufacturing, transport, construction, tourism, personal services, and local supply chains. Yet policies toward SMEs often overemphasize credit. Finance matters, but a loan does not create a productive business when demand is weak, bookkeeping is poor, production quality is inconsistent, or market access is limited.

An employment-centered SME policy should therefore focus on upgrading. The sequence is diagnostic: identify the bottleneck that prevents a firm from increasing sales and labor demand. For one enterprise it may be working capital; for another, product design; for another, certification; and for another, access to an anchor buyer. Standardized programs can be administratively convenient but economically inefficient when firm constraints differ.

Digitalization can lower transaction costs and open markets, yet platform participation does not automatically increase profitability. SMEs need capability in pricing, digital marketing, inventory, customer retention, data interpretation, cybersecurity, and omnichannel operations. Public programs should measure outcomes such as revenue growth, productivity, survival, formalization, and jobs—not merely the number of firms attending training.

Government procurement is an underused lever. When procurement systems allow qualified smaller firms to participate transparently, public expenditure can create market opportunities while strengthening domestic business capabilities. The key is to maintain quality and integrity standards rather than turning procurement into protected inefficiency.

Entrepreneurship policy should also distinguish necessity entrepreneurship from opportunity entrepreneurship. Many people start microbusinesses because wage employment is unavailable. Their priority may be stable income, not rapid scaling. By contrast, innovative startups can generate new markets and high-productivity jobs but face different financing and talent constraints. Effective policy segments these groups rather than assuming that all entrepreneurs require the same support.

Policy and management implications

For public management, the implication is to translate this analysis into a small set of operational commitments: define the employment outcome, identify the institutions that influence it, establish a shared data system, specify the sequence of intervention, and review results at regular intervals. Programs should be judged by changes in worker and firm behavior rather than by administrative outputs alone. In

practical terms, a training program is not successful because thousands attend; it is successful when participants enter suitable jobs, raise earnings, or improve productivity. An investment incentive is not successful because capital expenditure rises; it is successful when the project generates durable value added, local linkages, skills transfer, and fiscally sustainable employment. This results-based discipline is essential for turning an employment narrative into an executable recovery strategy.

7. Skills, Education, and the School-to-Work Transition

The most persistent mismatch in employment policy is the gap between what training systems supply and what firms demand. Degrees and certificates can expand rapidly while employers still report shortages of practical skills, communication, problem solving, digital competence, technical experience, and work discipline. Solving this requires governance reform, not merely more courses.

Vocational education should be organized around occupational standards and employer participation. Industry must help define competencies, provide equipment input, offer internships, evaluate trainees, and recruit graduates. Educational institutions must protect academic integrity and long-term learning while remaining responsive to labor-market change. The goal is co-production of skills rather than one-way consultation.

Work-based learning is particularly powerful because it teaches tacit knowledge that is difficult to acquire in classrooms: workflow, safety, teamwork, customer interaction, quality control, and organizational culture. Apprenticeships and structured internships can reduce employers' uncertainty about inexperienced workers and improve the transition from school to work.

Digital technology enables new training models. Short modular courses, simulations, AI-supported tutoring, remote laboratories, and digital credentials can complement conventional education. But technology should not produce credential inflation. The central question remains whether the learner can perform the task, solve problems, adapt to new tools, and continue learning.

Reskilling is also needed for workers already in mid-career. Economic recovery will involve reallocation: some firms will shrink while others expand. Portable training accounts, recognition of prior learning, employer co-financing, career counseling, and modular education can help workers move without starting their education from zero.

Policy and management implications

For public management, the implication is to translate this analysis into a small set of operational commitments: define the employment outcome, identify the institutions that influence it, establish a shared data system, specify the sequence of intervention, and review results at regular intervals. Programs should be judged by changes in worker and firm behavior rather than by administrative outputs alone. In practical terms, a training program is not successful because thousands attend; it is successful when participants enter suitable jobs, raise earnings, or improve productivity. An investment incentive is not successful because capital expenditure rises; it is successful when the project generates durable value added, local linkages, skills transfer, and fiscally sustainable employment. This results-based discipline is essential for turning an employment narrative into an executable recovery strategy.

8. Industrial, Digital, and Green Transformation for Employment

Indonesia's industrial strategy should be judged partly by the employment ecosystems it creates. Downstream processing and resource-based industrialization can increase domestic value added, but their broader employment benefits depend on linkages: local suppliers, logistics, maintenance, engineering, services, housing, education, and regional business development. The objective should be an ecosystem rather than an isolated plant.

Manufacturing remains strategically important because it can combine productivity, scale, tradability, and supply-chain employment. Yet Indonesia also needs high-productivity services. Logistics, finance, software, professional services, health, education, tourism, creative industries, telecommunications, and business-process services can absorb diverse skill levels and support manufacturing competitiveness.

The digital economy creates new occupations and lowers barriers to entrepreneurship, but it also changes employment relationships. Gig work can provide flexibility and entry opportunities while exposing workers to income volatility, algorithmic control, and limited social protection. Regulation should preserve innovation while ensuring transparency, occupational safety, dispute mechanisms, and portable protection.

The green transition is another major employment opportunity. Renewable energy, energy efficiency, electric mobility, waste management, ecosystem restoration, climate-resilient agriculture, water management, and green construction can create new occupations. Yet "green jobs" require planning because workers in carbon-intensive activities may need retraining, relocation support, or income protection.

Just transition principles are therefore economically practical, not merely ethical. When communities fear that environmental policy will destroy livelihoods without alternatives, political resistance rises. When transition plans include local investment, worker retraining, social dialogue, and regional diversification, environmental goals become more credible and durable.

Policy and management implications

For public management, the implication is to translate this analysis into a small set of operational commitments: define the employment outcome, identify the institutions that influence it, establish a shared data system, specify the sequence of intervention, and review results at regular intervals. Programs should be judged by changes in worker and firm behavior rather than by administrative outputs alone. In practical terms, a training program is not successful because thousands attend; it is successful when participants enter suitable jobs, raise earnings, or improve productivity. An investment incentive is not successful because capital expenditure rises; it is successful when the project generates durable value added, local linkages, skills transfer, and fiscally sustainable employment. This results-based discipline is essential for turning an employment narrative into an executable recovery strategy.

9. Regional Development: Bringing Jobs Closer to People

Indonesia's geography makes employment policy inherently regional. Jobs are concentrated unevenly, while migration costs, housing prices, transport, family obligations, and cultural ties limit mobility. A national job-creation strategy must therefore create economic opportunities outside the largest metropolitan areas.

Regional specialization should be based on realistic comparative advantage and capability building. Tourism regions require connectivity, hospitality skills, environmental management, and local supplier networks. Agricultural regions need processing, cold chains, logistics, finance, and technology. Industrial regions need reliable power, ports, housing, technical education, and urban services. One template cannot fit all regions.

Secondary cities can play a particularly important role. They can connect rural producers to markets, host universities and hospitals, provide professional services, and absorb workers without the congestion costs of megacities. Strategic investment in secondary cities can widen the geography of opportunity.

Digital connectivity can reduce geographic barriers, but remote work and digital commerce still depend on skills, reliable electricity, payment systems, logistics, and trust. Infrastructure must therefore be conceived as an integrated platform for economic participation.

Fiscal decentralization also shapes employment. Local governments influence permits, local infrastructure, markets, vocational programs, tourism management, and public services. Their performance should be assessed partly by whether they reduce the cost of starting and expanding productive activities and whether they build local capabilities.

Policy and management implications

For public management, the implication is to translate this analysis into a small set of operational commitments: define the employment outcome, identify the institutions that influence it, establish a shared data system, specify the sequence of intervention, and review results at regular intervals. Programs should be judged by changes in worker and firm behavior rather than by administrative outputs alone. In practical terms, a training program is not successful because thousands attend; it is successful when participants enter suitable jobs, raise earnings, or improve productivity. An investment incentive is not successful because capital expenditure rises; it is successful when the project generates durable value added, local linkages, skills transfer, and fiscally sustainable employment. This results-based discipline is essential for turning an employment narrative into an executable recovery strategy.

10. Labor-Market Institutions, Social Protection, and Mobility

A dynamic economy requires both flexibility and security. Firms need the ability to adjust production, reorganize work, and respond to competition. Workers need protection against catastrophic income loss, unsafe conditions, arbitrary treatment, and the destruction of accumulated skills. The policy challenge is not to choose one side but to design institutions that support mobility with security.

Portable social protection is increasingly important as careers become less linear. Workers may shift between formal jobs, gig work, self-employment, and temporary contracts. Benefits tied rigidly to one employer can leave gaps. Systems that preserve health coverage, retirement savings, injury protection, and other benefits across employment states can reduce the fear associated with mobility.

Unemployment assistance, where feasible and well designed, can improve job matching by giving displaced workers time to search for suitable jobs rather than accepting the first available low-productivity option. Such assistance should be linked to active labor-market services: counseling, vacancy databases, training, and placement support.

Labor-market information systems are a strategic public good. Policymakers need timely data on vacancies, occupations, wages, skills, and regional shortages. Workers need credible information about

pathways. Educational institutions need to know which competencies are expanding or declining. Employers need efficient channels to find talent.

Collective voice and social dialogue can also improve transitions. When workers and employers participate in designing sectoral training, technology transitions, and workplace standards, implementation becomes more legitimate. Dialogue does not eliminate conflict, but it can turn conflict into negotiated adaptation.

Policy and management implications

For public management, the implication is to translate this analysis into a small set of operational commitments: define the employment outcome, identify the institutions that influence it, establish a shared data system, specify the sequence of intervention, and review results at regular intervals. Programs should be judged by changes in worker and firm behavior rather than by administrative outputs alone. In practical terms, a training program is not successful because thousands attend; it is successful when participants enter suitable jobs, raise earnings, or improve productivity. An investment incentive is not successful because capital expenditure rises; it is successful when the project generates durable value added, local linkages, skills transfer, and fiscally sustainable employment. This results-based discipline is essential for turning an employment narrative into an executable recovery strategy.

11. A Strategic Policy Architecture for Job-Centered Recovery

An effective employment strategy requires cross-government coordination because no single ministry controls job creation. Finance affects demand and taxation; industry affects sector development; education affects skills; labor agencies affect regulation and placement; infrastructure affects location costs; trade affects market access; digital policy affects technology adoption; social ministries affect income security; regional governments shape local implementation.

A useful strategic framework can be organized around five pillars: Protect, Activate, Productivize, Connect, and Upgrade. Protect means preventing temporary shocks from causing permanent exclusion. Activate means helping people enter or re-enter employment. Productivize means raising output per worker and management capability. Connect means linking workers to vacancies and firms to markets and supply chains. Upgrade means enabling movement into higher-value occupations, firms, and sectors.

Each pillar needs measurable outcomes. Protection can track income replacement, poverty prevention, and social-insurance coverage. Activation can track placement rates and time to employment. Productivity can track value added per worker and technology adoption. Connection can track vacancy filling and supplier linkages. Upgrading can track wage progression, formalization, and occupational mobility.

Policy evaluation should distinguish gross from net job creation. A subsidized program may report jobs supported, while simultaneously displacing jobs elsewhere or subsidizing hires that would have occurred anyway. Rigorous evaluation—using control groups where feasible, phased implementation, administrative data, and independent review—can improve resource allocation.

Strategic management also requires sunset clauses. Emergency measures should have clear exit criteria; successful pilots should have scaling criteria; ineffective programs should be redesigned or discontinued. This discipline protects fiscal space and helps government shift resources toward interventions with demonstrated employment effects.

Policy and management implications

For public management, the implication is to translate this analysis into a small set of operational commitments: define the employment outcome, identify the institutions that influence it, establish a shared data system, specify the sequence of intervention, and review results at regular intervals. Programs should be judged by changes in worker and firm behavior rather than by administrative outputs alone. In practical terms, a training program is not successful because thousands attend; it is successful when participants enter suitable jobs, raise earnings, or improve productivity. An investment incentive is not successful because capital expenditure rises; it is successful when the project generates durable value added, local linkages, skills transfer, and fiscally sustainable employment. This results-based discipline is essential for turning an employment narrative into an executable recovery strategy.

12. Risks and Trade-offs

Employment-centered recovery is not free of trade-offs. The first is inflation. Strong demand can stimulate hiring, but if supply cannot respond, prices may rise and erode real wages. This reinforces the importance of combining demand support with supply-side productivity, logistics, and food security.

The second is fiscal sustainability. Public works, wage subsidies, training, and social protection cost money. Poorly targeted programs can become permanent entitlements without raising productive capacity. Fiscal discipline is therefore compatible with job-centered policy when programs are prioritized by social return, targeting quality, and measurable employment outcomes.

The third is technology displacement. Protecting every existing job would freeze the economy and reduce competitiveness. The objective should instead be to protect people through transition—training, income support, portability, job matching—while allowing technologies and firms to evolve.

The fourth is regional inequality. Large projects may intensify concentration when supporting infrastructure, skills, and suppliers are already clustered in developed regions. Regional policy must therefore prepare local capabilities before investment arrives and connect smaller firms to new opportunities.

The fifth is policy fragmentation. A ministry may subsidize training while firms cannot access credit; infrastructure may be built while industrial land remains uncertain; digitalization programs may expand while cybersecurity capacity lags. Employment outcomes emerge from the system, so strategic coherence is more valuable than a proliferation of isolated initiatives.

Policy and management implications

For public management, the implication is to translate this analysis into a small set of operational commitments: define the employment outcome, identify the institutions that influence it, establish a shared data system, specify the sequence of intervention, and review results at regular intervals. Programs should be judged by changes in worker and firm behavior rather than by administrative outputs alone. In practical terms, a training program is not successful because thousands attend; it is successful when participants enter suitable jobs, raise earnings, or improve productivity. An investment incentive is not successful because capital expenditure rises; it is successful when the project generates durable value added, local linkages, skills transfer, and fiscally sustainable employment. This results-based discipline is essential for turning an employment narrative into an executable recovery strategy.

13. Measuring Success: A Jobs Dashboard for Indonesia

A job-centered recovery requires a dashboard broader than the unemployment rate. The first group of indicators should measure quantity: employment growth, labor-force participation, unemployment, youth unemployment, and job vacancies. The second should measure intensity: hours worked, underemployment, and multiple-job holding.

The third group should measure quality: median wages, real wage growth, wage distribution, contract stability, occupational safety, social-insurance coverage, and access to training. Median and distributional measures are important because averages can be pulled upward by high earners.

The fourth group should measure productivity and mobility: value added per worker, transitions from informal to formal work, movement from low- to higher-productivity sectors, promotion rates, wage progression, and firm survival. These indicators reveal whether workers are climbing an economic ladder rather than merely cycling through precarious jobs.

The fifth group should measure inclusion: female participation, youth transition rates, disability inclusion, regional gaps, and employment outcomes by education level. A national average can improve while particular groups fall behind.

Finally, the dashboard should connect employment indicators to macroeconomic policy. Growth, inflation, investment, credit, consumer confidence, exports, and public spending should be interpreted partly through their employment transmission. This transforms employment from a sectoral concern into a central metric of national economic management.

Policy and management implications

For public management, the implication is to translate this analysis into a small set of operational commitments: define the employment outcome, identify the institutions that influence it, establish a shared data system, specify the sequence of intervention, and review results at regular intervals. Programs should be judged by changes in worker and firm behavior rather than by administrative outputs alone. In practical terms, a training program is not successful because thousands attend; it is successful when participants enter suitable jobs, raise earnings, or improve productivity. An investment incentive is not successful because capital expenditure rises; it is successful when the project generates durable value added, local linkages, skills transfer, and fiscally sustainable employment. This results-based discipline is essential for turning an employment narrative into an executable recovery strategy.

14. Conclusion: From Output Recovery to Human Recovery

Indonesia's recovery challenge is not simply to maintain a growth rate around five percent. It is to ensure that growth creates a large enough number of productive, resilient, and upwardly mobile jobs for a diverse and expanding workforce. The country's recent macroeconomic resilience provides a valuable foundation, but employment quality must become a more explicit test of policy success.

The transition from growth to jobs requires a portfolio approach. Demand must be sufficient for firms to hire; finance must support productive investment; infrastructure must lower transaction costs; skills systems must match occupations; SMEs must be able to upgrade; social protection must support mobility; digitalization must complement workers; industrial and green policy must generate linkages; and regional strategies must spread opportunity geographically.

The central management principle is integration. Job creation does not belong to one ministry, one sector, or one program. It is the emergent outcome of a national system. Therefore, policy coordination should be organized around shared employment outcomes rather than institutional boundaries.

The second principle is quality. A low unemployment rate is valuable but insufficient if workers remain trapped in low productivity, unstable incomes, or limited protection. Productive employment is the bridge between macroeconomic growth and durable household welfare.

The third principle is adaptability. Technology, climate change, geopolitics, demographics, and business models will continue to reshape occupations. A recovery strategy should not attempt to predict every future job. It should build institutions that help workers and firms learn, move, and adapt.

Ultimately, a society experiences economic recovery when people can see a credible connection between effort and opportunity. Growth provides resources; jobs distribute those resources through participation in production. When employment is productive, fairly rewarded, and connected to learning, economic recovery becomes more than a rebound in statistics. It becomes a process of human capability, dignity, and shared progress.

15. Proposed Employment-Centered Recovery Framework, 2026–2030

1. Protect incomes during shocks. Use targeted social assistance, temporary support, and adaptive protection to prevent short-term shocks from causing permanent labor-market exclusion.

Implementation should assign a lead institution, cooperating agencies, annual targets, budget responsibility, data sources, and an evaluation calendar. This converts the framework from a statement of intention into a management system. Where possible, targets should be disaggregated by province, age, gender, education, and employment status so that improvements in national averages do not conceal exclusion.

2. Accelerate productive investment. Prioritize investment that creates value chains, supplier opportunities, technology transfer, and jobs with learning potential.

Implementation should assign a lead institution, cooperating agencies, annual targets, budget responsibility, data sources, and an evaluation calendar. This converts the framework from a statement of intention into a management system. Where possible, targets should be disaggregated by province, age, gender, education, and employment status so that improvements in national averages do not conceal exclusion.

3. Raise SME productivity. Shift SME support from credit-only programs toward integrated upgrading, market access, digital capability, certification, and management improvement.

Implementation should assign a lead institution, cooperating agencies, annual targets, budget responsibility, data sources, and an evaluation calendar. This converts the framework from a statement of intention into a management system. Where possible, targets should be disaggregated by province, age, gender, education, and employment status so that improvements in national averages do not conceal exclusion.

4. Reform vocational and lifelong learning. Build employer-linked curricula, work-based learning, modular reskilling, recognition of prior learning, and credible occupational standards.

Implementation should assign a lead institution, cooperating agencies, annual targets, budget responsibility, data sources, and an evaluation calendar. This converts the framework from a statement of intention into a management system. Where possible, targets should be disaggregated by province, age, gender, education, and employment status so that improvements in national averages do not conceal exclusion.

5. Strengthen labor-market intermediation. Develop vacancy platforms, career services, skills forecasting, mobility support, and public-private employment services.

Implementation should assign a lead institution, cooperating agencies, annual targets, budget responsibility, data sources, and an evaluation calendar. This converts the framework from a statement of intention into a management system. Where possible, targets should be disaggregated by province, age, gender, education, and employment status so that improvements in national averages do not conceal exclusion.

6. Support women and youth. Expand childcare, safe transport, flexible work arrangements, apprenticeships, first-job programs, and targeted career guidance.

Implementation should assign a lead institution, cooperating agencies, annual targets, budget responsibility, data sources, and an evaluation calendar. This converts the framework from a statement of intention into a management system. Where possible, targets should be disaggregated by province, age, gender, education, and employment status so that improvements in national averages do not conceal exclusion.

7. Build regional employment ecosystems. Align infrastructure, education, local business development, and investment promotion around each region's economic strengths.

Implementation should assign a lead institution, cooperating agencies, annual targets, budget responsibility, data sources, and an evaluation calendar. This converts the framework from a statement of intention into a management system. Where possible, targets should be disaggregated by province, age, gender, education, and employment status so that improvements in national averages do not conceal exclusion.

8. Manage digital and AI transition. Support technology adoption while financing complementary skills, portable protection, and transparent rules for platform work.

Implementation should assign a lead institution, cooperating agencies, annual targets, budget responsibility, data sources, and an evaluation calendar. This converts the framework from a statement of intention into a management system. Where possible, targets should be disaggregated by province, age, gender, education, and employment status so that improvements in national averages do not conceal exclusion.

9. Develop green-job pathways. Map occupations affected by decarbonization and build retraining, local investment, and just-transition mechanisms.

Implementation should assign a lead institution, cooperating agencies, annual targets, budget responsibility, data sources, and an evaluation calendar. This converts the framework from a statement of intention into a management system. Where possible, targets should be disaggregated by province, age, gender, education, and employment status so that improvements in national averages do not conceal exclusion.

10. Create a national jobs dashboard. Track quantity, quality, productivity, inclusion, and mobility, and link these metrics directly to fiscal, industrial, education, and regional policy reviews.

Implementation should assign a lead institution, cooperating agencies, annual targets, budget responsibility, data sources, and an evaluation calendar. This converts the framework from a statement of intention into a management system. Where possible, targets should be disaggregated by province, age, gender, education, and employment status so that improvements in national averages do not conceal exclusion.

16. Employment Scenarios for Indonesia: Three Possible Recovery Paths

A useful way to translate strategy into decision making is to consider three stylized employment scenarios. The first is a “growth without sufficient upgrading” scenario. GDP remains near its recent trend, consumption is stable, and investment proceeds, but employment growth is concentrated in low-productivity services and informal activities. Open unemployment may still decline because people accept available work, yet median real wages rise slowly. Under this scenario, household vulnerability persists and the economy becomes increasingly divided between islands of high productivity and a large labor force with limited progression. The central risk is not recession but stagnation in job quality.

The second scenario is “capital-intensive acceleration.” Large-scale investments in mining, processing, energy, infrastructure, and advanced manufacturing increase output and exports. Productivity rises substantially, but direct labor absorption is limited because projects use modern capital-intensive technologies. This scenario can still be highly beneficial if fiscal revenues, supplier linkages, logistics, engineering services, and local procurement spread the gains. Without such linkages, however, the employment dividend remains narrow. The policy task is therefore to convert major investment into ecosystems: supplier development, technical schools, maintenance services, construction capabilities, logistics firms, housing, local retail, and professional services.

The third scenario is “job-rich productivity transformation.” Growth is sustained by a balanced combination of investment, domestic demand, exports, modern services, SME upgrading, and regional diversification. Employment expands, but more importantly workers move into activities with rising productivity. Firms adopt technology while investing in complementary skills. Women’s participation increases because care and mobility constraints are reduced. Young workers enter the labor market through apprenticeships and employer-linked programs. Social protection becomes more portable, reducing the cost of job transitions. In this scenario, wage growth is not created by administrative pressure alone; it is supported by productivity, competition for talent, and improved firm capability.

The third path is the most desirable, but it is also institutionally demanding. It requires coordination across ministries and levels of government, consistent regulation, reliable data, and long-term policy credibility. The lesson is that employment outcomes are path dependent. Decisions made during recovery—what infrastructure is built, which technologies are subsidized, how training is organized, where investment is located—shape the labor market for years. Therefore, employment impact assessment should become a routine part of major economic policy, just as fiscal costs and macroeconomic effects are assessed.

Scenario planning also helps prevent an overly mechanical use of forecasts. A growth projection is not a destiny. The same GDP growth rate can be generated by different sector mixes and can produce very different patterns of employment. Strategic management should therefore monitor leading indicators

of the composition of growth: investment by sector, new business formation, vacancy postings, hours worked, wage offers, training demand, supply-chain localization, and the geographic spread of projects. These indicators allow policymakers to adjust before structural weaknesses become entrenched.

17. A Human-Centered View of Technology, AI, and Employment

Artificial intelligence and automation are now inseparable from any serious discussion of jobs. The common debate is often framed too narrowly as a contest between humans and machines. In practice, technology affects tasks before it affects whole occupations. A job consists of multiple tasks: some routine, some interpersonal, some analytical, some physical, and some judgment based. AI may automate selected tasks while increasing the productivity of others. The employment effect therefore depends on how firms redesign work and whether workers receive opportunities to learn complementary skills.

For Indonesia, the strategic question is how to use AI as a productivity tool without widening labor-market inequality. Large corporations can invest quickly in enterprise AI, robotics, cloud systems, and analytics. Smaller firms may lack capital, data, managerial capacity, or technical staff. If technology diffusion is highly unequal, productivity gaps between firms can widen, and so can wage gaps between workers. Public policy should therefore support diffusion through shared digital infrastructure, training, technical assistance, cybersecurity support, interoperable payment systems, and accessible business software.

Education must also respond differently to AI. Teaching workers a static software package is insufficient when tools change rapidly. The durable capabilities are problem definition, critical thinking, quantitative literacy, communication, domain expertise, ethical judgment, and the ability to work with intelligent systems. Technical training should teach workers how to verify outputs, recognize model limitations, protect confidential data, and integrate AI into actual workflows. These capabilities make technology complementary to labor rather than merely substitutive.

Managers have a decisive role. Technology adoption should include a workforce transition plan: which tasks will change, which jobs may shrink, which new roles will emerge, what training is required, and how performance will be measured. Firms that simply reduce headcount may capture short-term savings but lose institutional knowledge and employee trust. Firms that redesign processes around human-machine collaboration can create a more durable productivity advantage.

Public policy should avoid two extremes. The first is technological protectionism that attempts to preserve every existing task. Such a strategy would weaken competitiveness and ultimately put more jobs at risk. The second is laissez-faire disruption that treats displaced workers as an unavoidable cost. A better approach protects workers rather than specific tasks: portable benefits, retraining, career services, transition income, and regional adjustment support. This is the essence of a human-centered technological transition.

18. Financing a Job-Rich Recovery

Job creation ultimately requires finance, but the type of finance matters. Short-term consumption credit can support demand, while working-capital finance helps firms maintain operations. Long-term investment finance is needed for machinery, logistics, energy, housing, industrial estates, and digital infrastructure. Public finance must support social protection and skills. An employment-centered financial

strategy therefore distinguishes between financing that merely shifts spending across time and financing that expands productive capacity.

Banks naturally favor borrowers with collateral and established cash flows, yet many expanding firms—especially young firms and SMEs—have limited fixed assets. Credit guarantee schemes, cash-flow-based lending, supply-chain finance, invoice financing, and digital transaction records can help close this gap. However, public guarantees must be priced and governed carefully to prevent moral hazard and politically directed lending. The objective is to improve risk allocation, not to hide credit risk.

Development finance can be especially useful where projects have high social returns but long payback periods. Vocational facilities, green infrastructure, affordable housing near employment centers, industrial wastewater systems, and regional logistics may generate employment indirectly by lowering business costs. Their evaluation should therefore include broader economic benefits, not merely direct financial returns.

Capital markets also matter for scaling firms. Businesses that can graduate from microcredit to bank lending and eventually to bond or equity financing reduce pressure on the banking system and gain more diverse sources of capital. Indonesia's employment strategy would benefit from a clearer "financing ladder" aligned with the growth stages of firms.

Fiscal policy must simultaneously maintain credibility. High-quality job programs should compete for budget space on the basis of evidence. Governments should compare cost per sustained job, wage progression, productivity effects, regional spillovers, and distributional impact. Programs with weak results should not survive simply because they have visible beneficiaries. Fiscal sustainability and employment ambition are complements when public resources are directed toward interventions that expand future productive capacity.

19. Implementation Roadmap: Turning Strategy into Action

The difference between a policy framework and a recovery strategy lies in implementation. Indonesia does not lack programs, institutions, or strategic documents; the recurring challenge is alignment. A job-rich recovery should therefore begin with a limited set of national employment outcomes that can be shared across government. These might include the growth of productive employment, real wage progression, youth transition into work, female labor-force participation, reduction in underemployment, increased social-protection coverage, and movement of firms and workers into higher-productivity activities. Once these outcomes are defined, ministries can retain their specialized mandates while contributing to a common result architecture.

The first implementation stage should be diagnostic. National averages must be decomposed by province, sector, age, gender, education, and employment status. Policymakers should identify where job creation is weak, where vacancies coexist with unemployment, where wage growth lags productivity, and where firms report skills or infrastructure constraints. This diagnosis should combine BPS labor-market statistics with administrative data, business surveys, online vacancy information, training records, social-insurance data, and regional investment information. The objective is not to create a perfect database before acting, but to establish a continuously improving evidence system.

The second stage is prioritization. Not every constraint can be addressed simultaneously. Each region or sector should identify the two or three bottlenecks that most strongly restrict employment

expansion. In an industrial cluster, the bottleneck may be technical skills and supplier quality. In a tourism region, it may be connectivity and service standards. In an agricultural area, it may be cold-chain logistics and processing capacity. In urban service economies, it may be childcare, commuting costs, or digital skills. Prioritization makes policy more credible because resources are concentrated where they can change behavior.

The third stage is coordinated delivery. A practical mechanism would be cross-agency employment compacts for major sectors and regions. Each compact would specify the investment pipeline, infrastructure commitments, training capacity, employer participation, SME linkage programs, financing arrangements, and worker-protection measures. A lead institution should be responsible for convening partners and reporting progress. The purpose is not to centralize every decision, but to make interdependence visible. A training institution should know which investments are arriving; investors should know the skills pipeline; local governments should know infrastructure needs; and workers should know the occupational opportunities being created.

The fourth stage is evaluation and adaptation. Employment programs operate in uncertain environments, so policy should be designed for learning. Pilot programs can test different training models, wage subsidies, placement services, or SME interventions before national scaling. Administrative data can be used to track participants over time. Independent evaluations can compare outcomes with credible counterfactuals. When results are weak, redesign should be normal rather than politically embarrassing. Adaptive government treats evidence as a management tool, not as a threat.

The fifth stage is institutionalization. Successful recovery measures should evolve into durable labor-market institutions rather than remain temporary projects. Examples include permanent career services, employer-led occupational councils, portable benefit systems, regional skills observatories, supplier-development platforms, and evidence units that evaluate labor-market programs. Institutionalization matters because shocks will recur. A country with strong employment institutions can respond faster to future recessions, technological disruptions, commodity cycles, or climate events.

Communication is the final component. Workers and firms make decisions based partly on expectations. When policy objectives are unclear or rules change unpredictably, firms delay hiring and households become more cautious. Government communication should therefore explain not only what programs exist but also the economic logic connecting investment, skills, productivity, and employment. Clear communication can build a shared understanding that recovery is not simply a government expenditure exercise. It is a coordinated process involving firms that invest, workers who learn, institutions that reduce risk, and communities that create the conditions for productive activity.

A realistic roadmap should also acknowledge political economy. Policies create winners and losers, and reforms that improve long-term productivity may impose short-term adjustment costs. Social dialogue, transparent compensation, transition assistance, and evidence on expected benefits can reduce resistance. Employment-centered reform is politically stronger when citizens can see a pathway from disruption to opportunity. This is why the concept of a “just transition,” although often associated with climate policy, has wider relevance to digitalization, industrial restructuring, and regional economic change.

By 2030, the strategic objective should be more ambitious than recovering the number of jobs lost during past disruptions. Indonesia should aim to improve the architecture through which jobs are continuously created, upgraded, and matched with workers. Such an architecture would make the labor

market more resilient to shocks and more responsive to innovation. The ultimate measure of success would be a stronger relationship between productivity and wages, between education and employment, between investment and local opportunity, and between national growth and household economic mobility.

A final operational principle is to distinguish employment recovery from employment resilience. Recovery asks whether jobs return after a shock; resilience asks whether workers, firms, and institutions are better prepared for the next one. Resilience is strengthened when households have social protection and emergency savings, when workers possess transferable skills, when firms have diversified markets and digital capability, when regions are not dependent on a single industry, and when government can rapidly identify displaced workers and expanding vacancies. In this sense, the best recovery policy is partly preventive. It builds buffers and capabilities before the next downturn arrives.

This perspective also changes the role of universities and business schools. Higher education should not be treated solely as a supplier of graduates. It can become an active labor-market institution by conducting regional skills research, partnering with employers, supporting entrepreneurship, providing executive education for SMEs, evaluating public programs, and helping mid-career workers reskill. Universities can serve as knowledge bridges between technology producers, firms, government, and communities. For Indonesia, such a role is especially important because technological diffusion and managerial capability are as decisive for productivity as the invention of new technologies.

The private sector, meanwhile, should regard workforce development as an investment rather than a charitable activity. Firms that build internal training systems, transparent career paths, mentoring, and learning cultures can reduce turnover and adapt more quickly to technological change. Industry associations can pool training resources where individual SMEs cannot afford specialized programs. Large firms can strengthen supplier capabilities through technical assistance and long-term purchasing relationships. These arrangements transform the employment agenda from a government program into a shared productive compact.

Taken together, these measures suggest a broader definition of economic recovery. Recovery is achieved when the economy not only produces more but also organizes production in ways that expand human capability. Growth remains indispensable because without expanding output there are fewer resources to distribute. Yet the social legitimacy and durability of growth depend on whether people can participate in it through productive work. The strategic movement from growth to jobs is therefore not a secondary labor-market agenda; it is the central mechanism through which macroeconomic recovery becomes inclusive development.

Glossary

Active labor-market policy (ALMP): Programs that help people find work or improve employability, including training, placement, counseling, and wage subsidies.

Aggregate demand: Total spending on goods and services in an economy.

Employment elasticity of growth: The percentage change in employment associated with a one-percent change in economic output.

Formal employment: Employment operating within recognized legal, tax, and social-protection arrangements.

Gig economy: Labor markets in which work is organized around short tasks or contracts, often mediated by digital platforms.

Green jobs: Jobs that contribute to environmental sustainability, resource efficiency, climate mitigation, or adaptation.

Human capital: Knowledge, skills, health, and capabilities that influence a person's productivity.

Informal employment: Work lacking some or all formal legal, contractual, tax, or social-protection arrangements.

Job quality: A multidimensional concept including earnings, stability, safety, working time, protection, voice, and development opportunities.

Labor-force participation rate: The share of the working-age population that is employed or actively seeking work.

Labor productivity: Output or value added produced per worker or per hour worked.

Occupational mobility: Movement of workers across occupations, often associated with changes in skills and earnings.

Productive employment: Work that generates adequate value added and income while contributing to sustainable economic activity.

Real wage: Nominal wage adjusted for changes in the price level.

Reskilling: Learning new competencies that enable a worker to move into a different role or occupation.

Social protection: Policies and programs that protect people against poverty, income loss, health risks, disability, old age, or labor-market shocks.

Structural transformation: Long-term reallocation of workers and resources from lower- to higher-productivity activities.

Underemployment: Employment in which workers have fewer hours or less productive work than they desire or are capable of performing.

Upskilling: Improving skills for better performance or progression within an existing occupational domain.

Value chain: The connected set of activities through which a product or service is designed, produced, distributed, and sold.

References

- Badan Pusat Statistik. (2026, February 5). Indonesia's economic growth in 2025 was 5.11 percent. BPS-Statistics Indonesia.
- Badan Pusat Statistik. (2025, November 5). The open unemployment rate was 4.85 percent; average employee wage was IDR 3.33 million. BPS-Statistics Indonesia.
- Bank Indonesia. (2026). Monetary Policy Review, May 2026. Bank Indonesia.
- Bank Indonesia. (2026). Monetary Policy Review, June 2026. Bank Indonesia.

- Bank Indonesia. (2026, June 10). Consumer Survey May 2026: Consumer confidence remains strong. Bank Indonesia.
- Autor, D. H. (2015). Why are there still so many jobs? The history and future of workplace automation. *Journal of Economic Perspectives*, 29(3), 3–30. <https://doi.org/10.1257/jep.29.3.3>
- Banerjee, A. V., & Duflo, E. (2005). Growth theory through the lens of development economics. In P. Aghion & S. N. Durlauf (Eds.), *Handbook of Economic Growth* (Vol. 1A, pp. 473–552). Elsevier. [https://doi.org/10.1016/S1574-0684\(05\)01007-5](https://doi.org/10.1016/S1574-0684(05)01007-5)
- Card, D., Kluve, J., & Weber, A. (2018). What works? A meta analysis of recent active labor market program evaluations. *Journal of the European Economic Association*, 16(3), 894–931. <https://doi.org/10.1093/jeea/jvx028>
- Cirera, X., & Maloney, W. F. (2017). The innovation paradox: Developing-country capabilities and the unrealized promise of technological catch-up. World Bank. <https://doi.org/10.1596/978-1-4648-1160-9>
- Foster, L., Haltiwanger, J., & Krizan, C. J. (2001). Aggregate productivity growth: Lessons from microeconomic evidence. In C. R. Hulten, E. R. Dean, & M. J. Harper (Eds.), *New developments in productivity analysis* (pp. 303–372). University of Chicago Press. <https://doi.org/10.7208/chicago/9780226360645.003.0008>
- Haltiwanger, J., Jarmin, R. S., & Miranda, J. (2013). Who creates jobs? Small versus large versus young. *Review of Economics and Statistics*, 95(2), 347–361. https://doi.org/10.1162/REST_a_00288
- McMillan, M., Rodrik, D., & Verduzco-Gallo, Í. (2014). Globalization, structural change, and productivity growth, with an update on Africa. *World Development*, 63, 11–32. <https://doi.org/10.1016/j.worlddev.2013.10.012>
- OECD. (2026). *Indonesia: OECD Economic Outlook, Volume 2026 Issue 1*. OECD Publishing.
- Rodrik, D. (2016). Premature deindustrialization. *Journal of Economic Growth*, 21, 1–33. <https://doi.org/10.1007/s10887-015-9122-3>
- World Bank. (2019). *World Development Report 2019: The changing nature of work*. World Bank. <https://doi.org/10.1596/978-1-4648-1328-3>
- World Bank. (2026). *Indonesia Economic Prospects, June 2026: Managing risks, unlocking productivity*. World Bank.
- World Bank. (2026, June 13). *Indonesia’s growth remains resilient, but productivity reforms are key to creating jobs and sustaining momentum*. World Bank.

Author Note

Prof Ir Rudy C Tarumingkeng, PhD, Institut Bisnis dan Multimedia (IBM ASMI). Author profile: www.rudyc.com/cv.pdf.