INVESTING IN PEOPLE

SOCIAL PROTECTION FOR INDONESIA’S 2045 VISION

Social Protection Global Practice
East Asia Pacific Region
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<td>Active Labor Market Programs</td>
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<td>AMC</td>
<td>Aspiring Middle Class</td>
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<td>APBD</td>
<td>Regional Government Budget</td>
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<td>Social Assistance for the Elderly (Asistensi Sosial Lanjut Usia Terlantar)</td>
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<td>Assistance for Persons with Severe Disability (Asistensi Sosial Penyandang Disabilitas Berat)</td>
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<td>ATM</td>
<td>Automatic Teller Machine</td>
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<td>National Agency for Population and Family Planning (Badan Kependudukan dan Keluarga Berencana Nasional)</td>
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<td>Social Insurance Administration Agency – Employment (Badan Penyelenggara Jaminan Sosial Ketenagakerjaan)</td>
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<td>BLSM</td>
<td>Short-term Unconditional Cash Transfer (Bantuan Langsung Sementara Masyarakat)</td>
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<td>Unified Social Welfare List (Daftar Terpadu Kesejahteraan Sosial)</td>
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<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<td>EAP</td>
<td>East Asia and Pacific</td>
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<td>Government-to-Person</td>
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<td>Group of State-Owned Banks (Himpunan Bank-bank Milik Negara)</td>
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<td>Indonesian Rupiah</td>
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<td>(Subsidized Health Insurance Premiums) Jaminan Kesehatan Nasional-Penerima Bantuan Iuran)</td>
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<td>Know Your Customer</td>
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<td>LPG</td>
<td>Liquid Propane Gas</td>
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<td>M&amp;E</td>
<td>Monitoring &amp; Evaluation</td>
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<td>MoSA</td>
<td>Ministry of Social Affairs</td>
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<td>MoV</td>
<td>Ministry of Villages</td>
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<td>NEET</td>
<td>Not in Education, Employment, or Training</td>
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<td>NIK</td>
<td>16-digit Unique Identification Number (Nomor Induk Kependudukan)</td>
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<tr>
<td>OOP</td>
<td>Out of Pocket</td>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Cooperation and Development</td>
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<td>OJK</td>
<td>Financial Services Authority (Otoritas Jasa Keuangan)</td>
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<td>OM-SPAN</td>
<td>Online Monitoring - National Public Financial Management System (Online Monitoring - Sistem Perbendaharaan dan Anggaran Negara)</td>
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<td>Acronym</td>
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<tr>
<td>P2P</td>
<td>Person-to-Person</td>
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<td>PAUD</td>
<td>Early Childhood Education and Development (Pendidikan Anak Usia Dini)</td>
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<td>PBI</td>
<td>(Penerima Bantuan Iuran)</td>
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<td>PHP</td>
<td>Philippine Peso</td>
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<td>PIP</td>
<td>Cash transfer for poor and vulnerable students (Program Indonesia Pintar)</td>
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<td>PISA</td>
<td>Programme for International Student Assessment</td>
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<td>Personal Income Tax</td>
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<td>Cash for Work (Padat Karya Tunai)</td>
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<td>PPP</td>
<td>Purchasing Power Parity</td>
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<td>PROST</td>
<td>Pension Reform Options Simulation Toolkit</td>
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<td>PWD</td>
<td>Persons with Disability</td>
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<td>Raskin/Rastra</td>
<td>Rice for the poor</td>
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<td>RJPMN</td>
<td>National Medium-Term Development Plan (Rencana Pembangunan Jangka Panjang Nasional)</td>
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<td>SA</td>
<td>Social Assistance</td>
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<td>SDG</td>
<td>Sustainable Development Goal</td>
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<td>Sembako</td>
<td>Affordable Basic Food Program (replacing BPNT)</td>
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<td>Social Insurance</td>
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<td>SIAK</td>
<td>Population Information Administration System (Sistem Informasi Administrasi Kependudukan)</td>
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<td>Social Welfare Information System – Next Generation (Sistem Informasi Kesejahteraan Sosial-Next Generation)</td>
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<td>SJSN</td>
<td>National Social Security System (Sistem Jaminan Sosial Nasional)</td>
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<td>SOE</td>
<td>State-owned Enterprise</td>
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<td>SP</td>
<td>Social Protection</td>
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<td>SPAN</td>
<td>National Public Financial Management System (Sistem Perbendaharaan dan Anggaran Negara)</td>
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<td>National Strategy to Accelerate Stunting Reduction (Strategi Nasional Percepatan Pencegahan Stunting)</td>
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<td>National Socioeconomic Survey (Survei Sosial Ekonomi Nasional)</td>
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<td>National Team for the Acceleration of Poverty Reduction (Tim Nasional Percepatan Penanggulangan Kemiskinan)</td>
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<td>Treasury Single Account</td>
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<td>UDB</td>
<td>Unified Data Base</td>
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<td>VAT</td>
<td>Value-Added Tax</td>
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OVERVIEW

1. **Indonesia’s 2045 vision sets an ambitious path that will require significant investments in human capital and social protection**

   Achieving sustained and equitable growth in Indonesia will require an inclusive and efficient social protection system. The Government of Indonesia’s (GoI) vision for 2045, when Indonesia will celebrate 100 years of independence, is to achieve high-income status and reduce poverty to nearly zero. A modern, inclusive and efficient social protection (SP) system will be essential to meet these goals in the context of demographic, technological and environmental trends over the next decades. SP systems are important in ensuring that nobody is left behind by economic growth, and these emerging trends mean that they will also play an increasingly important role in building, employing, and protecting Indonesia’s human capital.

   **Over the past two decades, Indonesia’s SP system has been fundamentally transformed.** It moved from the dominance of regressive consumer subsidies and ad hoc crisis response to targeted and household-based social assistance programs, with a massive coverage expansion in recent years. For the social insurance system, there has been an ongoing building and integration of policies, programs and institutions. This has all been possible through better spending allocation and a build-up of the platforms needed to deliver programs effectively and efficiently.

   **But while significant the transformation remains incomplete.** Massive coverage expansion of social assistance has been concentrated mostly among poor households with children, but other groups such as the elderly and disabled, are not adequately covered. Social insurance coverage remains low, with inadequate benefits provided. And delivery systems are still often fragmented and not yet fostering strong coherence across social assistance and social insurance realms. Most importantly, new challenges and opportunities are emerging such as demographic changes, changes in how people work, technological advances and climate change. The current SP system is not yet prepared to face these new and emerging trends adequately.

2. **This is the time to rethink the objectives and reach of Indonesia’s SP system**

   **Reducing poverty and vulnerability remains relevant as a core objective of Indonesia’s SP system.** Indonesia has achieved a sustained decline in poverty rates, from 19.1 percent of the population in 2000 to 9.2 percent of the population in September 2019. However, this progress contrasts sharply with Indonesia’s performance in shared prosperity. Inequality, as measured by the Gini coefficient, rose from its lowest value of 30 points in 2000 to 41 points in 2014, declining to 38 in September 2019. While Indonesia is experiencing a rapid expansion of its middle class, the 126 million Indonesians, or 48 percent of the population, that make up the aspiring middle class (AMC) has yet to achieve economic security. Nearly one-fifth of the AMC in 1993 had become vulnerable to poverty by 2014. Two-thirds also suffer deprivation on at least one non-monetary dimension of welfare. Vulnerability remains high: while 24.7

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1 Bappenas (2019).
million Indonesians live below the poverty line, an additional 64 million live less than 50 percent above it. Inequality and vulnerability can have significant adverse consequences for growth, as well as for social and political stability, and without adequate protection small shocks can easily send the vulnerable back into poverty.

Reaping the demographic dividend will require Indonesia to create the adequate number and types of jobs for the millions that join the labor force every year. Indonesia is undergoing a period of demographic transition that will impact labor market dynamics and human capital in the coming decades (Figure 1). The number of older Indonesians will increase significantly, with important implications for health care, social assistance and pension systems. Social protection systems can play a key role in building human capital and ensuring that the potential of all Indonesians is maximized, improving their future readiness for the labor market. Strong and comprehensive social protection can empower people to be healthy, pursue education, and seek opportunities to lift their families out of poverty by providing consumption support and ensuring all citizens are able to get adequate nutrition and schooling. For example, social assistance programs are core parts of the GoI’s commitment to accelerate investments in human capital, including the National Strategy to Accelerate Stunting Reduction (Strategi Nasional Percepatan Pencegahan Stunting, or StraNas Stunting).

Figure 1: Percentages of population over time

Source: UN Population Data and World Bank staff calculations.

Technology will continue to change the nature of labor markets and work, requiring effective programs to develop skills and provide protection for workers. Technology and automation will reshape the skills needed for work, but also how people work. Indonesia will need an increasingly skilled labor force with the right level and mix of skills, including advanced cognitive skills and skill combinations that are predictive of adaptability, such as reasoning and self-efficacy. Moreover, it is likely that a larger share of the workforce will move away from traditional one-job-per-career patterns to having many sources of employment over the course of their careers, including periods of non-wage or self-employment. The informal sector in Indonesia still employs more than 50 percent of the total workers (70 percent in rural areas), and a high level of informality will likely persist given current trends and growth of the ‘gig’ economy and e-commerce. Effective social protection programs will be key in helping all Indonesians
employ their human capital in the context of the transitions brought about by the changing nature of work. Social assistance programs can include skills upgrading, and linking the unskilled poor and vulnerable with wage- and self-employment opportunities. A modern and inclusive social insurance system that is available to all and not tied to how or where people work (i.e., formal wage employment) can promote labor force participation and employment, and accommodate changes in the labor market from technology, automation, and the ‘gig’ economy.

**Indonesians, especially the poorest, will continue to be vulnerable to disaster and climate change.** Poor households are often more exposed from living in vulnerable areas such as flood-prone land and steep hillsides, or in poorly designed and constructed housing settlements. Shocks can also force poor households to resort to negative or damaging coping strategies, such as liquidating savings and assets, reducing nutrition levels, taking children out of school to work, and postponing or neglecting health needs. Limited ability to respond and recover can quickly push already poor households deeper into poverty, and the vulnerable into poverty. It is thus common for households to transition in and out of poverty due to disaster and climate change-related shocks. Social protection programs can protect human capital from disease and disasters, and build resilience by insuring against adverse impacts from shocks and allow individuals to invest in their assets and livelihoods, instead of saving for precautionary reasons. This minimizes negative coping behaviors (e.g., sacrificing productive investment to maintain minimum consumption) and contributes to beneficiaries’ human and financial capital in the long run.

**Indonesia’s future SP system needs to adapt and respond to a changing world.** In particular, technological change, changes in how and where people work, and demographic developments will impact the type of SP system and programs needed. This will require rethinking the social contract so that it can promote prosperity for all, and enable Indonesia to achieve the poverty reduction, human capital, and inclusive growth targets that it has set out for 2045. What do these opportunities and risks imply for Indonesia’s SP system, including social assistance (SA) and social insurance (SI) programs?

3. **Indonesia has, over the past two decades, laid a solid foundation for its future SP system**

Social assistance programs are key policy instruments for the GoI to reduce poverty and inequality, and to build and protect human capital. Indonesia’s social assistance system was only introduced in the late 1990s, yet it has already undergone significant expansion and achieved important results. It has evolved from providing temporary support in times of need, such as with subsidy reform (BLSM/BLT), 4 to implementation of core permanent programs that today include the conditional cash transfer program (Program Keluarga Harapan, PKH), a cash transfer for poor and vulnerable students (Program Indonesia Pintar, PIP), food assistance (Sembako), and a subsidized health insurance premium waiver (JKN-PBI). These programs are targeted to the poor and vulnerable, and aim to support their consumption and reduce poverty. Today, the social assistance system also plays an important role in building and protecting Indonesia’s human capital.

**Indonesia puts strong emphasis on social assistance programs targeted to households with children.** By design, the social assistance benefit package for households with children provides a very significant level

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3 Estimates from Rush (2013) suggest that, at the district level, a 1-standard deviation increase in disaster harm can increase the poverty rate by 0.8 percent and the poverty gap by 2.3 percent.

4 *Bantuan Langsung Tunai* and *Bantuan Langsung Sementara Masyarakat* were targeted unconditional cash transfer programs that were launched to compensate for the effects of energy subsidy reform; BLSM was last used in 2015, at the same time as the reduction of the fuel subsidy.
of protection for households in the poorest 15 percent of the population. In 2020, a household that receives PKH, PIP, Sembako and PBI-JKN has a very adequate package of protection, at an average 44 percent of median consumption. The “de-facto” coverage of programs, however, is different from the “de-jure” design and, in reality, many eligible households with children do not receive all these benefits.\(^5\)

**In contrast, both de-jure and de-facto, poor and vulnerable households without children are not adequately protected.** Poor households without children are only eligible to receive PBI-JKN and Sembako (previously named BPNT), not PIP or PKH. There is thus a need to fill coverage gaps and increase adequacy for certain groups in the social assistance system, primarily the elderly, which is a population group in Indonesia that is vulnerable today (around 36 percent are either poor or vulnerable) and will become increasingly so in the future given the rapid speed of aging. Although social assistance programs for the elderly to address the risks of old age exist, coverage is very limited. People living with disabilities are another group that needs to be significantly better covered. A final coverage gap relates to social assistance for those adversely affected by natural disasters and climate-related shocks and stresses, as the current social assistance system does not yet adequately support and protect them before and after such events.

**Social assistance contributes significantly to improved human capital as evidenced by positive impacts on household level outcomes in health and education.** This is particularly true for the PKH. The latest impact evaluation, published in 2018, found that stunting among PKH beneficiaries declined by 9 to 11 percentage points (stunting is estimated to affect 27 percent of all children in 2019). Enrolment in primary school increased by 4 percentage points among beneficiaries, which is very impressive given the already high net primary school enrolment rate of around 93 percent. For junior secondary school, enrolment increased by about 8 percentage points, with the net enrolment rate in junior secondary school at around 78 percent. Positive impacts of PKH on consumption and healthy behaviors with respect to maternal and neo-natal practices have also been found.\(^6\)

**While social assistance aims to lift people out of chronic poverty, effective social insurance allows households to smooth consumption over the lifecycle.** Social insurance can also help households and individuals weather shocks that affect most of the population, such as those related to the cost of medical procedures, unemployment, disability, death and old age. By pooling risk, it mitigates the impact of shocks at a reasonably low cost relative to alternative coping mechanisms, such as self-insurance, borrowing or selling assets. Furthermore, this protection allows individuals to invest in their human capital or livelihoods instead of saving for precautionary reasons.

**Indonesia's social insurance system is relatively young, and Indonesia has made significant progress toward rationalizing it and expanding its coverage, particularly health insurance.** There is now a single large national health insurance for all Indonesians (*Jaminan Kesehatan Nasional*, or JKN), and three separate pension schemes for private formal sector workers, civil servants and the armed forces, as well as work-related accident (*Jaminan Kecelakaan Kerja*, or JKK) and death benefits (*Jaminan Kematian*, or JKM) for salaried and non-salaried workers. Reforms in 2014 went a long way toward rationalizing the

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\(^5\) The adequacy of PKH, BPNT/Sembako and PIP is expressed in terms of the value of the cash transfer or food voucher as a share of household expenditure or consumption. The adequacy of PBI-JKN, though it is a fee waiver program with no direct benefits provided, can be thought of in similar terms. Put simply, the value of the PBI fee waiver can be constructed as the value of the premium paid for the household by the GoI. This assumes a constant elasticity of demand to PBI-JKN. Another measure of adequacy for PBI-JKN would comprise utilization of health services compared to the presence of out-of-pocket expenditures persisting despite the notion that health service fees are waived under the JKN program.

\(^6\) Cahyadi et al. (2018).
legal framework and institutional arrangements for these programs. The increase in the number of people covered by JKN—from 130 to more than 220 million in the past five years—is a major achievement.

The expansion of social insurance coverage for other risks has been much slower. By 2018, only 14 and 11 million workers were covered for old age savings (Jaminan Hari Tua, or JHT) and pensions (Jaminan Pensiun, or JP), respectively. Coverage is lower than for JKN partly due to the absence of contribution subsidies for informal sector workers. However, it is also because most formal sector workers are found in enterprises with fewer than 20 employees (small and micro enterprises) and are therefore not mandated to contribute. Furthermore, the adequacy for current workers is low as evidenced by low replacement rates. There is no unemployment benefit system in Indonesia. This, combined with a severance pay system that is not adequately implemented, has led to large number of early withdrawals from the old age savings scheme (JHT), weakening its function as part of the pension system and instead serving as a de-facto unemployment account for many workers.

As in other emerging East Asian countries, population aging is outpacing the development of traditional contributory pensions. The National Social Security System (Sistem Jaminan Sosial Nasional, or SJSN), which started operating in 2015, will pay full pensions only after 2050. Although coverage is increasing as firms and employees are registered, international experience suggests that potential coverage based on formal sector employment is limited. Most workers will continue to be excluded, and pensions for the minority that are covered will be low compared with international benchmarks. Without additional measures to bring in informal sector workers and to ensure the poor elderly are covered by social assistance, the percentage of the elderly living in poverty will almost certainly rise.

4. Social protection for Indonesia’s future: A coherent, consolidated and coordinated SP system to serve a changing country in a changing world

Indonesia’s changing demographic profile and technological advancement, coupled with persistent informality in the labor market, present a challenge to the SP policies and programs that should be in place to help people manage risks to their lives and livelihoods. It is therefore an opportune time to re-think risk-sharing in the social contract and for Indonesia to continue to evolve its overall SP system to adequately meet the changing demands for its services in a rapidly evolving context. Such a system would offer adequate protection for all, regardless of their employment status and whether they work in formal or informal jobs. Indonesia has established solid programs and systems in both social assistance and social insurance. These provide a sound foundation on which to further strengthen coverage, implementation and efficiency into a cohesive system that serves all people in need and is inclusive, adequate, sustainable and efficient for the demands of the future.

Serving a changing country in a changing world, the Indonesian SP system should support households and individuals during different states of transition: from unemployment to employment; from poverty or vulnerability to prosperity; from youth to old-age; from one job to another; between geographic locations; during periods of sickness or injury, or in the aftermath of shocks. In doing so, the system will have to meet the changing needs of a middle-income country’s population and its expectations that the state and SP system provide adequate protection in old age, support job search, and provide financial assistance in the event of shocks. Indonesia’s SP system should be one that contributes to national wealth and human capital accumulation, responds to new social dynamics and needs, and supports an emerging

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7 World Bank (2016b).
middle-class. Importantly, it should aspire to be universal and accessible to all the Indonesian population, irrespective of whether they are employed in formal or informal jobs.

To pursue this, the GoI will need a comprehensive package of safety nets, insurance, savings and services that protect people from shocks and give them the tools to manage risks and uncertainty. The increased risks encountered in the changing nature of work also call for adjustments to the existing system of worker protection. A new social contract could provide a SP system that is decoupled from how or where people work, thus increasing coherence across social assistance and social insurance. This could entail establishing a system that:

1) provides its people with a “guaranteed minimum” protection across the lifecycle through a package of programs; and

2) complements the guaranteed minimum with a coherent set of mandated and individually financed social insurance programs for consumption-smoothing.

In principle, the guaranteed minimum could be achieved through one consolidated program, or through a combination of programs targeted to different groups. It could be established by expanding individual interventions, or by introducing new and streamlined programs. Each of these modalities presents different comparative advantages and has fiscal, political, and administrative implications.

In Indonesia, where the social assistance system is relatively mature and there are a number of well-functioning programs to build on, a pragmatic approach would be to establish a guaranteed minimum by consolidating current programs and expanding social assistance coverage to households without children, especially the elderly. This could be complemented by differential and well-targeted subsidies to cover social insurance premiums and contributions for informal sector workers in the SJSN system. Existing social insurance programs could be made more efficient by implementing parametric reforms to the SJSN pension program, including a gradual increase in the retirement age, as well as parametric reforms to rationalize the civil service pension and move younger civil servants into the national scheme. The social insurance reforms could also incorporate the current severance pay system by prefunding unemployment savings accounts to be managed together with the existing old age savings program and thus introducing an unemployment benefit.

Indonesia could move progressively toward a “guaranteed minimum” and reach more people by tapering the benefits for those higher in the income distribution. As shown in Figure 2, this would entail expanding the needs-based and publicly financed social assistance package to a larger share of the population. With today’s distribution, which sees a large number of people in the poor, vulnerable, and aspiring middle class categories, this could entail potentially and gradually covering some households all the way to the 70th percentile, though the more important priority would be to provide coverage to the poorest 40 percent. The minimum level of protection should be set so that it provides adequate consumption support and protection against household shocks. Here, the guaranteed minimum is set to bring the median poor household above the poverty line. A tapered benefit entails reduced support to households as their needs decrease when moving up the consumption distribution, thus also decreasing the financial costs of an expansion. To address the current and expected future gaps in social insurance coverage, in particular for informal sector workers, this proposal also includes financing a contribution subsidy for social insurance. It should be noted that the subsidy amount would be minimal, and only to ensure all workers get a minimum pension when they reach old age. Any additional contributions would be done by the individuals through the regular contributions or through additional private insurance

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8 Packard et al. (2019).
options. The trajectory of programs will thus imply a blurring between the non-contributory and contributory programs over time.

**Figure 2: Vision 2025**

Over time, as the economy continues to grow and Indonesia progresses further toward becoming a high-income country, it is expected that the share of the population that is poor, vulnerable and AMC will decrease and the middle class will grow larger. In line with the experience of other countries, it is likely that the number of people needing a social assistance package will decrease, and over time be needed only for a smaller group of people categorized as poor or vulnerable. These people may, as overall consumption and welfare increases, receive a larger assistance package in absolute terms than the current programs provide. The future costs of the social assistance programs will thus depend on both the number of people receiving them and the size of the packages they will receive. Over time, it is also expected that a larger share of the population will be covered by an adequate social insurance package. By 2045, the middle class will likely have increased significantly, the contribution subsidies paid over the coming 20 years will have provided adequate pensions to a large number of workers as they reach retirement, and the demands on the social assistance package will thus decrease (Figure 3).

**Figure 3: Vision 2045**
5. How can this be achieved?

5.1 Establishing a guaranteed minimum level of protection

The policy objective of a core “guaranteed minimum” is to prevent further impoverishment of people who are already poor and to prevent those vulnerable at and near the poverty line to become poor, i.e. to provide a basic protection floor for all. In addition, the guaranteed minimum could be designed to promote other priority objectives, such as human capital acceleration, productivity and labor mobility, and disaster response by employing instruments such as conditional cash transfers, linkages to employment or skills programs, and incorporating resilience-building and responsive financing mechanisms.

With Indonesia’s welfare distribution today, ensuring a minimum level of protection would entail expanding the needs-based and publicly-financed social assistance package to a larger share of the population. In Indonesia, the differences in welfare between households from the 40th to the 70th percentiles are minimal today, and this could mean potentially covering some households all the way to the 70th percentile. It is important to note that, while the proposed guaranteed minimum would provide universal coverage in principle, benefit payments could be contingent and progressive, meaning that benefits are available when and where needed. This could be achieved by applying universal progression and a tapering of the publicly-financed benefits for people higher in the income distribution. Furthermore, many benefits may not be needed by many people in a given period, or even at all, so what is important is the universality of entitlement for coverage against impoverishing losses. Those who do not suffer such losses may be covered by the guarantee, but never actually receive a payout.

The range of social assistance programs currently operating in Indonesia provides a solid basis for a guaranteed minimum. These programs could be further consolidated and reformed to include currently uncovered gaps for the poor/vulnerable disabled, households without children and the elderly. While the nascent pension scheme is designed to protect the current working age population from old age poverty in the future, the 5.4 million elderly and 3.5 million disabled that are poor or vulnerable today will be
unprotected if proper safety nets are not designed for them. Households without children are also inadequately protected as they are currently eligible to receive only Sembako and PBI-JKN. For this group raising the adequacy of Sembako would render a much-needed layer of protection. Finally, considering remaining exclusion errors and marginal differences in the levels of consumption between households in the bottom quintiles, there is a clear justification to extend social assistance coverage beyond the current coverage of about 20 percent of the population.

**Three options could be considered to meet the guaranteed minimum package, building on existing programs:** (i) Consolidate cash transfer delivery by integrating the PKH and PIP programs; (ii) Increase the coverage of PKH and Sembako and provide a more adequate package of protection, with tapered benefit levels; and (iii) Improve protection for the elderly and disabled by providing a cash transfer to targeted people aged 65 years and above, and to people living with disabilities (PWD).

**Contingent coverage of catastrophic losses (health, natural disaster/climate change).** Many shocks result in losses that would overwhelm minimum income guarantees. These include the costs from health events (lost working time/earnings/costs of treatment and medication), disability, death and natural disasters. The potentially impoverishing impacts of such shocks can affect households along the whole welfare distribution. Indonesia already addresses the health shocks through subsidized premiums of JKN through the PBI component. In doing so, it extends contingent coverage against large, catastrophic losses by integrating people who cannot afford premiums into the risk-pooling system with everybody else. Similarly, the SP system should be better adapted to respond to natural disasters and to support disaster victims to meet basic needs and rebuild their lives back faster. Current disaster response in Indonesia is mostly designed and operated separately from the core social assistance programs, and is often not timely due to the budget reallocation process. For social assistance to be adaptive and scalable in response to disaster, the system should be able to increase benefits to existing recipients, extend benefits to new recipients, and introduce new benefits under the existing programs. These should be implemented under a strong adaptive SP framework that includes early warning systems, financing, and scalability of key programs to respond to disaster in a timely and predictable manner.

**5.2 Consumption smoothing through mandated and individually financed social insurance programs**

Social insurance is crucial to help individuals and households weather shocks that affect most of the population, including those related to the cost of medical procedures, unemployment, disability, death and old age. Traditionally, social insurance is provided through contributory schemes and covers the formal sector workers only. However, a large share of future employment in Indonesia is likely to be undertaken without standard work contracts, and thus without the benefits of these traditional contributory social insurance schemes or mandated worker protection. If Indonesia continues to rely on a traditional contributory social insurance scheme that links coverage with formal labor market status, it will exclude most workers and their families from coverage against short-term risks and may lose the race between pension coverage and population aging. Introducing new incentives to encourage voluntary participation in social insurance, including to cater for “future works”, could help mitigate this risk. Future social insurance should be made accessible to all Indonesians, irrespective of whether they are employed in formal or informal jobs. Over time, the intention should be for all workers, including the self-employed and informal sector, to be covered against these risks.
Social insurance programs could also be made more efficient and effective by implementing parametric reforms to the SJSN pension scheme. Important gaps still exist in the SJSN system in terms of adequacy, sustainability, and coverage. Pension coverage in particular, both current and future, is a matter of priority given the aging population. These programs could be more efficient and effective by implementing reforms to the SJSN system, including a gradual increase in the retirement age. To ensure sustainability, improvements in adequacy require additional measures such as changes in the valuation of benefits, while coverage should ideally be expanded after measures have been taken to address sustainability.

Contribution rates could be increased to postpone deficits into the distant future, but this would increase the tax wedge—the gap between labor costs and take-home wages—and could encourage greater informality. An alternative approach to promote social insurance coverage is already being implemented for health insurance in Indonesia, namely, that the GoI provides coverage for poor informal sector workers. A similar approach, combined with expanded social assistance coverage for the elderly, would help address the pension coverage gap just at the time population aging will begin to accelerate. To reach universal social insurance coverage, Indonesia could therefore rely on a combination of self-financed insurance for those who can afford it, and explicit subsidy or redistribution for those who cannot. The self-financed element would be financed by contributions, while the contribution subsidy would be covered by the budget. A seamless system such as this would allow portability regardless of employment status and would reduce administrative costs relative to having multiple funds. As with the guaranteed minimum package, the subsidy for contingent coverage can be tapered gradually as people’s income or consumption rises.

Box 1: Recommendations for JKN sustainability

The framework to improve JKN implementation, and eventually aiming at improving its sustainability, should include:

- Raising revenue.
- Update JKN premiums based using robust actuarial analysis.
- Consider extending subsidy to informal sector to attract healthier members to join the risk pool.
- Identify, mobilize potential resources especially from tobacco taxation.
- Managing medical expenditure growth.
- Strengthen the purchasing role of BPJS Healthcare which will empower them to manage resources more efficiently, and enable them to create incentives to influence provider behavior for more effective service delivery, efficient use of resources, and higher quality of care.
- Rationalize and make explicit the benefits package.
- Improve the provider payment design, e.g., address open-ended hospital payments where spending occurs.
- Improve the quality and use of data by investing in the quality and interoperability of various information systems.

Reforms to rationalize the civil service pension scheme and move younger civil servants into the national scheme will also be required. To ensure the adequacy of the civil service pension, the earnings base that is used to calculate the pension needs to be redefined. The affordability of the civil service pension scheme is also an immediate issue due to the wave of retirements coming in the next few years.
The competing goals of improving adequacy and ensuring fiscal sustainability can be achieved by enacting parametric reforms to the existing scheme and/or longer-term systemic reforms that would apply to new civil servants, such as increasing the earning period for benefit calculation, pension indexation to inflation and retirement age increase. If the GoI wishes to improve pension benefits while keeping the cost of the civil service pension program unchanged, any viable solution will involve increasing retirement ages and changing to inflation indexing. These two adjustments create the fiscal room needed for benefit improvements, as benefits begin at a later age and benefit increases following retirement are smaller. Once these two changes are made, there are options available for changing the pension program’s design and financing to make the system fairer, adequate and equitable across generations of civil servants.

Social insurance reforms could also incorporate the current severance pay system by prefunding unemployment savings accounts to be managed together with the existing old age savings program. The current worker protection provisions in Indonesia do not contain insurance against the loss of employment, with the exception of the severance pay system, which provides very limited de facto protection to workers. The introduction of an unemployment benefit would help manage these risks. A “mixed” unemployment benefit system could integrate current severance payment obligations and the old age saving system, while reducing the economic burden on workers and employers. A “mixed” unemployment benefit system in Indonesia could consist of an individual savings pillar and the establishment of a solidarity fund. Workers and employers would both contribute to the individual savings pillar. Such a design allows employers to offset (part of) their severance obligations by contributing to workers’ individual accounts, effectively integrating severance payment obligations in the system. Upon depletion of the funds in the individual account, unemployed workers could receive access to the solidarity component based on certain conditionalities such as participation in active labor market programs, including job counseling, job search, and skills training. Overall, these reforms have the potential to significantly improve income protection in case of unemployment and would be much more effective and adequate than today’s system.

6. Implementing and financing Indonesia’s social protection system

A well-functioning integrated delivery system will be required to provide the guaranteed minimum and to implement a coherent and efficient set of social insurance programs. Effective implementation requires integrated delivery systems for identifying, enrolling, and paying the targeted populations. Modern systems of monitoring and evaluation and adequate error, fraud and corruption mechanisms are also essential. Indonesia has built a solid foundation and integrated platforms to better deliver multiple programs, including the unified social registry (UDB, now referred to as DTKS)\(^9\) for identification of beneficiaries, an integrated payment gateway under the collection of state-owned banks (Himbara), as well as partnering with local governments to test digital service windows, enable dynamic data updates, and grievance redressal. Further efforts will be needed to make these and other components more effective and responsive to the changing needs of the SP system. It will also be essential for Indonesia to strengthen its currently incomplete data protection and privacy regime.

Indonesia relies mostly on general revenue, payroll taxes and compulsory contributions to finance its SP system. General revenues are used to fund social assistance and the subsidized health insurance component while social security contributions and payroll taxes fund social insurance. Despite significant cross-subsidies between formal and informal sector households, the health insurance cost to the GoI is increasing, and deficits have emerged. In addition, population aging is outpacing the expansion of traditional contributory pensions. Without additional measures to bring in informal sector workers and to ensure the poor elderly are covered by social assistance, the share of elderly living in relative poverty will

\(^9\) Tohari et al. (2019).
rise. However, this expansion will come with costs. To finance its future SP system, Indonesia should consider a combination of: (i) working within the existing revenue and expenditure envelopes to better allocate and use these resources; and (ii) collecting additional resources through improved revenue mobilization.

The allocation and efficiency of current SP spending can be further improved. Despite an overall decline since 2014, spending on poorly targeted energy subsidies has recently increased and remains sizeable (IDR 153.5 trillion, or 1.0 percent of GDP in 2018). Further reallocation away from regressive subsidies toward targeted transfers such as PKH and Sembako will improve the overall efficiency of social spending. In addition, the proposed merger of PKH and PIP, more rigorous targeting, and stronger beneficiary monitoring would increase efficiency.

The extent of SP spending is also constrained by the general revenues that the GoI generate. More resources to the SP sector would require a consideration of how to most optimally increase fiscal revenues. There are different alternatives in terms of realistic possibilities to increase collection and avoid measures that place a significant burden on the population intended to benefit from SP expansion, namely those at the bottom of the distribution. Reductions in Value-added tax (VAT) exemptions would increase resources, but could place a significant burden on the poor who tend to consume the most exempted goods, if no immediate compensation is provided to offset higher costs. Another promising alternative may be tobacco taxes, which offer additional public health benefits for the poor, who have higher consumption elasticity. There is also scope to increase collection from personal income tax by reducing evasion and lowering deductions. Ultimately, the GoI will have to match the ambition of expanding coverage of the SP system with undertaking fiscal reform to increase revenues.

Concluding remarks
The GoI’s vision for 2045 is to be a sovereign, fair, and prosperous country, and to move from middle- to high-income status. An inclusive and efficient SP system will be essential to achieving these ambitious goals. The SP system will need to operate in the context of technological development, demographic change, an evolution in how and where people work, and climate-related events such as increased disasters. Achieving Indonesia’s vision and having an SP system that protects and serves all will require a rethink of the current social contract in Indonesia. This is urgent, because otherwise it will be difficult to reach the ambitious poverty reduction and inclusive growth targets that have been set out for 2045.

This report outlines a vision for Indonesia’s future SP system. It builds on recent success but is also bold in forging additional policy paths that will make the SP system more effective and relevant in a changing and often fluid environment. It speaks to the “how to” of realizing this vision, in terms of how to finance a more inclusive SP system and achieving more robust delivery platforms. It also provides policy recommendations for the next coming years (2025), as well as over the long term (2045), addressing emerging challenges that other high-income economies also face.

The proposed changes are not minor and they come with significant costs. They will also impact the social contract and require a continued move toward a system where the state finances those who cannot insure themselves against current and future shocks, while in the upper layers of the income distribution employers and citizens contribute to insurance mechanisms, such as pensions and unemployment benefits. Poverty prevention is essential to the new risk-sharing strategy, and justifies increased coverage for the poor and to finance this from broad based taxes such as VAT. It can be done with the right reforms, such as ending unhelpful subsidies and overhauling taxation policies. The political economy of some of the reforms is complex because of the potential trade-offs between, for example, investments in the current generation of workers versus those in future generations. Overall, public spending on SP will have to become more efficient, and additional sources of revenue have to be identified to enhance social inclusion.

This is the right time to think about how to improve social protection in Indonesia. Indonesia’s human capital deficit will require significant investments for years to come to prepare the Indonesia people for the future of work. Social assistance and insurance programs tailored to the changing work force will be key. At the same time, good jobs help people acquire and build human capital, which can then create a virtuous cycle by enabling them to become more productive or to move on to better jobs. The SP system in Indonesia can support millions of people to acquire the right skills to compete in today’s changing jobs market, and millions of children with better education and health care to make them ready for the future labor market. Making these investments today, will give Indonesia a head start in ensuring it protects and promotes all as it moves toward achievement of its ambitious 2045 targets.

The report is organized as follows: Chapter 1 provides a background on Indonesia’s development trends and the evolution of the current social protection system. Chapter 2 discusses recent advances and reform options for social assistance programs. Chapter 3 does the corresponding analysis for the social insurance system and worker protection. Chapter 4 suggests how Indonesia may deliver and finance SP. Chapter 5 describes the proposed vision for a more coherent and efficient SP system in Indonesia.
CHAPTER 1: Social Protection in Indonesia: Evolution, Overview and Vision for the Future

1.1 Introduction

In 2045, Indonesia will celebrate 100 years of independence. The Government of Indonesia’s (Goi) vision of Indonesia for 2045 is to be a sovereign, fair, and prosperous country, and its “Indonesia Vision 2045” sets out four pillars to achieve this: (i) human development, science and technology mastery; (ii) sustainable economic development; (iii) equitable development; and (iv) national resiliency and good governance. These four pillars highlight that Indonesia intends to achieve its vision through inclusive development and leaving no one behind.\(^\text{10}\) Indeed, the Goi has set out an ambitious target to become a high-income country, reduce poverty to nearly zero (0.2 percent), and have a labor force with at least 12 years of education, all by 2045.\(^\text{11}\)

In addition to sustained growth and income opportunities for all, an inclusive and efficient social protection (SP) system will be essential to meet these ambitious goals. In most countries today, effective risk-sharing and SP policies play important roles in building equity, resilience and opportunity, and in strengthening human capital. Indonesia is no different. Risk-sharing interventions can reduce and prevent poverty, and make growth more equitable by safeguarding households’ human and physical capital.

An inclusive and efficient SP system will be essential to achieving Indonesia’s ambitious goals. In most countries today, effective risk-sharing and SP policies are necessary conditions to build equity, resilience and opportunity. Indonesia is no different. Risk-sharing interventions can dramatically reduce poverty and help prevent vulnerable people from falling into poverty, and can also make economic growth more equitable by safeguarding households’ human and physical capital. In order to maximize the potential of these policies, this is the time for Indonesia to revisit the set of social assistance (SA) and social insurance (SI) programs that co-exist, and make sure that they are not only comprehensive in reach, but also efficient, so as to maximize impact of each rupiah spent.

Over the past two decades, Indonesia’s SP system has been fundamentally transformed. In particular, it moved from the dominance of regressive consumer subsidies and ad-hoc crisis response to targeted and household-based social assistance programs, with a massive coverage expansion in recent years. In terms of social insurance, recent years have seen an ongoing building and integration of its policies and institutions. This has all been made possible through better spending allocation and a build-up of the needed platforms to deliver programs effectively and efficiently.

\(^{10}\) Although Indonesia has adopted a policy and institutional framework to promote women’s rights, the full potential that women have to contribute to the growth agenda once the barriers and constraints are removed has not, until recently, been a high priority. Previous RPJMN\(^s\) have mostly referred to welfare and quality of life of “women and children” under the same headings. There has been a focus on addressing high rates of violence and exploitation of women and children and some on increasing women’s participation in decision-making. However, there has been no specific priority on facilitating women’s participation in the mainstream economy other than through microenterprises. Things have changed recently with the priority placed on gender equality in the government’s new RPJMN (2020-2024) whose objectives include building the nation’s human capital, promoting gender equality and accelerating economic growth. Specific priorities on gender include targets on access to education, access to employment, health status, violence and access to politics. With the new RPJMN, the Government will monitor progress using the Gender Development Index and the Gender Empowerment Measure. The Indonesian Government has also committed to achieving Sustainable Development Goal number 5 to achieve gender equality and empower all women and girls.

\(^{11}\) Bappenas (2019).
But while significant the transformation remains incomplete. Massive coverage expansion of social assistance is concentrated mostly among poor households with children, but other groups such as the elderly and disabled are not adequately covered. High incidence of labor informality has also left social insurance coverage low, inadequate (in terms of the benefits provided), and stagnant. And delivery systems are still often fragmented and not yet fostering strong coherence across SA and SI realms. Most importantly, new challenges and opportunities are emerging, such as demographic changes, changes in how people work, technological advances and climate change. The current SP system is not yet prepared to face these new trends adequately.

This report outlines a vision for Indonesia’s future SP system. It builds on recent success but is also bold in forging additional policy paths that will make the SP system more effective and relevant in a changing and often fluid environment. It also speaks to the “how to” of realizing this vision, in terms of how to finance a more inclusive SP system, and by achieving more robust delivery platforms. It provides policy options for the next few coming years (2025), as well as over the long term (2045), addressing emerging challenges that today other high-income economies also face.

1.2 Social Protection: Core Objectives and Functions

Across the world, there is a great extent of consistency in the functions that a well-developed SP system should aim to achieve. Social protection and labor systems are being built, refined or reformed in almost every country to help people find jobs, improve their productivity, cope with shocks, and invest in the health, education, and the well-being of their children. As such, social protection and labor programs directly improve resilience by helping people insure against drops in well-being from different types of shocks, and equity by reducing poverty and destitution and promoting equality of opportunity. These policies further promote opportunity by building human capital, assets, and access to jobs and by freeing families to make productive investments because of their greater sense of security (Figure 1.1).12

Figure 1.1: Typical roles of social protection systems

What types of programs are typically included in a SP system? Broadly, programs under the resilience

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12 World Bank (2012a).
objective tend to be of an insurance nature, providing insurance against various shocks and risks, promoting risk management ex ante, and allowing for consumption smoothing in the face of shocks. Under the **equity** objective, programs are generally described as social assistance, social welfare, or safety net programs. These are usually cash or in-kind transfers, and can also include consumer price subsidies. Under the **opportunity** objective, there is a more diverse range of interventions, including those that promote long-run human capital acquisition or livelihoods, as well as active labor interventions such as employment services, and targeted training and skills development programs. There are certain programs that can reasonably be classified under more than one of the above groupings. Conditional cash transfers (CCT), for example, are multifaceted interventions that aim to contribute to all these objectives.

**In a well-designed SP system, the policies and programs in place to achieve its objectives should be mutually reinforcing.** For example, interventions to support the equity objective should not be so generous that they undermine incentives to work and pursue productive opportunities. Effective policies that promote resilience, usually through some form of insurance, can also support the opportunity objective by providing the reassurance to households to be more risk-taking in their livelihoods and generate higher returns from their effort. In short, a well-designed SP system is a coherent set of institutions, policies and interventions that promote not just the achievement of equity, resilience, and opportunity in isolation, but all of them in an inter-dependent and mutually reinforcing manner.

### 1.3 Social Protection in Indonesia: Evolution, Programs and Institutional Arrangements

**Overall, Indonesia’s SP system addresses all the three objectives of equity, opportunity and resilience.** It has a stronger focus on promoting equity, and addresses resilience and opportunity to a lesser extent. Social protection as a mandate can be traced back to Indonesia’s Constitution which, since 1945, has guaranteed it in many different forms. Explicit mention is made of social security and social assistance as protection for the poor, vulnerable and destitute. However, the seeds of the current system were not sown until much later, after the Asian financial crisis of 1997/98.

Social insurance was introduced in the 1960s, while the early social assistance system was largely informal. Prior to the Asian financial crisis, when individuals or families (including the poor and those in the informal sector) required in-kind or financial assistance, they sought it from extended families, communities or informal credit markets. During the Five-Year Development (Pelita) periods from 1969 to 1994, some SP functions were also provided in the form of subsidies, poverty reduction, community empowerment and the delivery of social services (health, education, etc.) to the general public. Social security was available only to the formal sector, with civil servants being the first to be covered under pensions and health insurance in the late 1960s. The concept of employment social security was introduced in 1992, but again limited to those working in the formal sector.

**Figure 1.2: Evolution of Indonesia’s social protection system**

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13 World Bank (2012b); Perdana and Maxwell (2011).
15 Pension programs for civil servants were set up during the Dutch occupation period and were re-affirmed in 1956 when the President enacted a law on pension spending. Civil service pension rules were revised in 1969 with the issuance of Law No. 11/1969, which is still in effect.
The Asian financial crisis of 1997/98 was a critical juncture in the evolution of Indonesia’s current SP system as it illuminated and raised awareness about the vulnerability of large segments of the Indonesian population. The GoI’s response came in the form of the introduction of a National Social Safety Net (Jaring Pengaman Sosial, or JPS) policy, covering open market operations in rice, support to education (through scholarships and block grants to schools), health (nutritional supplements and block grants to health centers), village development (projects to increase resilience) and employment creation (through public works). The JPS provided the blueprint for the social assistance system that Indonesia has today, which is based on the concept of cash and in-kind assistance to the poorest and most vulnerable households. The GoI preferred a targeted approach given limited fiscal space and the country’s relatively low tax base. Another key milestone during this phase was the social insurance legislation of 2004, although another decade would pass before a new National Social Security System (Sistem Jaminan Sosial Nasional, or SJSN) would be introduced.

Figure 1.3: Evolution of Indonesia’s health insurance system

16 JPS included OPK (Operasi Pasar Khusus — Special Market Operations, pre-cursor to the subsidized rice scheme - Rastra/Raskin); BKS (Bantuan Khusus Sekolah — School Special Support); JPS-BK (Jaring Pengaman Sosial Bidang Kesehatan — Social Safety Nets on Health), Labor Intensive Program, PDM-DKE (Pemberdayaan Masyarakat Desa — Village Development) and PPK (Program Pengembangan Kecamatan — Municipality Development Program).
17 Birdsall and Haggard (2000).
Indonesia’s main labor law is the Labor Law (Law No. 13/2003 on Manpower), issued on March 25, 2003. The other main laws regulating employment relations include the: (i) Government Regulation on Wages No. 78/2015; (ii) Law No. 21/2000 on Trade Unions; (iii) Law No. 40/2004; (iv) Work Safety Law No. 1/1970 on the National Social Security System (SJSN); (v) Law No. 39/2004 on the Placement and Protection of Workers; and (vi) Law No. 2/2004 on Industrial Relations Dispute Settlement. In addition, numerous other regulations have been adopted, such as presidential regulations, government regulations, and ministerial decrees. Provincial and district authorities establish minimum wages, which may vary by sector. Indonesia has also ratified 20 ILO conventions, including all eight fundamental conventions.19

Economic developments between 2005 and 2012 greatly influenced Indonesia’s social assistance policy. In 2005, the GoI reduced the fuel subsidy to relieve pressure on the national budget and alleviate a growing budget deficit. This marked the first of many subsidy cuts (2005, 2009 and 2013-15) that enabled the GoI to introduce a temporary unconditional cash transfer program (BLT/later BLSM) for the poorest, to compensate for the accompanying losses from the higher cost of fuel. In addition, the GoI modified, renamed and/or expanded many of the JPS programs (Figure 1.2). For example, special market operations (OPK) under JPS was modified into Raskin (later renamed Rastra), a subsidized rice program for the poor. Particularly noteworthy during this phase was the introduction of the conditional cash transfer (CCT) Program Keluarga Harapan (PKH) in 2007, which would later expand several folds to become a key part of Indonesia’s social assistance system. Thereafter, in 2009 and 2011, two important regulations were introduced that helped to guide implementation of social assistance today. Law No. 11/2009 on Social Welfare and Law No. 13/2011 on the Handling of the Poor became the basis for the development of the Unified Data Base (UDB) now renamed to Daftar Terpadu Kesejahteraan Sosial (DTKS), a database

19 List of ILO fundamental conventions see at: https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-islamabad/documents/policy/wcms_143046.pdf
consisting of the socioeconomic poorest 40 percent households. This led to standardized procedures for targeting and identifying potential beneficiaries for 12 out of 20 social assistance programs, including PKH. The year 2011 also saw the passing of Law No. 24/2011 on the Social Security Administration (BPJS), which integrated various social security programs under the umbrella of Sistem Jaminan Sosial Nasional (SJSN) and mandated that social security be made accessible not only to salaried formal workers, civil servants, and military personnel, but also to those in the informal sector.

In the past decade, Indonesia has further developed and expanded its social insurance system. The year 2014, marked the start of implementation of the SJSN Law that mandated the establishment of BPJS Kesehatan (BPJS Healthcare) and BPJS Ketenagakerjaan (BPJS Employment) to administer the unified national health insurance program (Jaminan Kesehatan Nasional, or JKN), together with four employment programs: (i) protection for work-related accidents (Jaminan Kecelakaan Kerja, or JKK); (ii) old-age savings (Jaminan Hari Tua, or JHT); (iii) pensions (Jaminan Pensiun, or JP); and (iv) death benefit (Jaminan Kematian, or JKM).20 The universal national health insurance program (JKN) is a hybrid with a government-financed, non-contributory component for the poorest 40 percent of the population (Jaminan Kesehatan Nasional-Penerima Bantuan Iuran, or JKN-PBI) and a contributory component for other members.

Social assistance programs also expanded significantly in this period. Several rounds of reduction in energy subsidies, starting in 2015 (energy subsidy spending went from 16.2 percent of total expenditure in 2014 to a budgeted 6.4 percent in 2019), led to several consequential reforms in social assistance. PKH was expanded from 3.5 million families in 2015, to 6 million families in 2017 and to 10 million families in 2018, and together with food assistance (Rastra) and a digital food voucher program (BPNT, now renamed Sembako), education assistance for children (PIP) and a subsidized component of the national health insurance program (PBI-JKN), making up the current portfolio of key social assistance for poor and vulnerable families in Indonesia. Also noteworthy during this phase is the introduction of a cash-for-work public works type program called Padat Karya Tunai (PKT) under the Village Law, designed to support village-level employment and infrastructure development.

Indonesia’s institutional and regulatory arrangements for SP remain relatively fragmented. Indonesia’s programs in social assistance and social insurance are implemented by several institutions and agencies, using a variety of delivery systems to handle targeting, enrolment, payments, case management, grievances, information and monitoring systems. Although institutional fragmentation has reduced with the integration of social security programs and development of the poverty database (UDB/DTKS), institutional “silos” still exist and many activities are carried out with limited coordination among programs, implementers, and stakeholders.

The responsibility for policy and implementation of SP is spread across a wide range of government institutions. There are at least 25 active programs in the social assistance sector spread across 11 implementing ministries.21 The Ministry of Social Affairs (MoSA) is responsible for the key social assistance programs, Sembako (previously BPNT) and PKH, as well as managing the database DTKS (previously UDB). The Ministries of Education and Culture (MoEC) and Ministry of Religious Affairs (MoRA) implement the PIP scholarship program, and the Ministry of Health (MoH) implements the health insurance subsidy PBI. In the case of social insurance, there are at least nine ministries involved in the implementation of SJSN,

20 Currently, civil servants in Indonesia are eligible for four social insurance benefits: (i) CSP or civil service pension; (ii) THT programs – lump sum at the time of retirement; (iii) JKK; and (iv) JKM.
21 Another estimate suggests nine ministries implementing 156 G2P transfers comprising 57 social assistance programs and 99 subsidy programs in the form of cash, in-kind and services. TNP2K (2019).
with the Ministry of Health and the Ministry of Manpower (MoM) responsible for technical aspects of SJSN Healthcare and SJSN Employment roll-out, respectively (Figure 1.4). The BPJS Law mandated the establishment of BPJS Kesehatan (BPJS Healthcare) and BPJS Ketenagakerjaan (BPJS Employment) to administer the SJSN Healthcare program and SJSN Employment program, respectively. Both BPJSs are non-profit public legal entities that were transformed from profit-oriented state-owned enterprises (SOEs), namely PT Askes (Persero) and PT Jamsostek (Persero). PT Taspen administers four social insurance programs for civil servants.

**Figure 1.4: Institutional arrangements of Indonesia’s social protection system**

Local governments also have an important role to play in SP in Indonesia, especially in implementation. While some local governments have set up their own cash transfer programs to address horizontal equity problems arising from low coverage of PKH prior to 2018, most local governments support the implementation of centrally-executed programs. Decentralization in 2001 gave local governments considerable scope to develop their own programs, while the introduction of the direct election of leaders in 2005 had a further expansionary impact on the spread of SP programs across the country. For instance, district level health insurance “Jamkesda” schemes expanded from 60 to more than 245 between 2008 and 2012. Lastly, local governments are also responsible for social data collection to update the UDB/DTKS data, and such efforts are supposed to be funded through regional budgets (APBD).

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22 Pisani et al (2017)
The current institutional arrangements with multiple agencies across both national and local levels pose several challenges. Duplication is a challenge when several programs with similar goals are targeted at the same households but implemented by different ministries. Education assistance provided to children in poor households by MoSA (under PKH) and MoEC (under PIP) is a clear example of this. Such duplication could lead to double benefits for some families, at the expense of exclusion of other poor ones. Inter-ministerial/agency coordination is another recurring challenge. In some cases, formal coordinating structures such as the Rastra Coordination Team (Tikor Pusat, now overseeing Sembako) might enable key actors to come together to design, deliver and adapt programs. However, it is hard for such high-level coordination mechanisms to effectively ensure that the various ministries and units ‘speak to each other’ during day-to-day implementation and year-to-year budget planning processes. A third challenge is ensuring convergence at the household level. While improvements to targeting accuracy have taken place, there is still low integration of program receipt at the household level (details in Chapter 2). Lack of convergence is also present at various stages of the delivery chain (see Chapter 4). To illustrate, although 16 of 25 programs deliver benefits purely in cash, just two programs make use of the integrated payment gateway developed under the collection of state-owned banks (Himbara) and an associated payment delivery mechanism managed under the MoSA through the family welfare card (KKS). Reasons for poor convergence can include inadequate data-sharing or siloed information systems for each program, which create inefficiencies and pose a huge administrative burden for end-users, as well as the policymakers who work on finance and planning.

**Box 1.1: Hierarchy of Indonesia’s laws**

Indonesia uses civil law or continental approach and understanding Indonesia’s legislation hierarchy is key to deciphering legal disharmony. According to Law No. 12/2011 on Legislative Drafting, Indonesia’s hierarchy of legislation is determined as follows:

1. Constitution 1945;
2. MPR Decree;
3. Law/Government Regulation for Replacing Law;
4. Government Regulation;
5. Presidential Regulation;
6. Provincial Regulation; and
7. District/Municipal Regulation.

In addition, there are other type of legislations such as regulations issued by the People’s Consultative Assembly (MPR-RI), the House of Representatives (DPR-RI), the Senate (DPD-RI), the Supreme Court (MA), the Constitutional Court (MK), the central bank, namely Bank Indonesia (BI), ministers, government agencies, government institutions, and commissions/councils. These are in the same way legally binding, as long as their issuance are mandated by higher legislation or formed based on corresponding authority.

The complex institutional framework, with multiple agencies at various levels, has also resulted in a multitude of legislation to guide SP policy and implementation in Indonesia. The high volume and

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24 Formed in 2013 and formally including nine central level agencies and their subnational counterparts, namely the Coordinating Ministries for People’s Welfare and for Economic Affairs, the National Development Planning Agency, the Ministries of Finance, Interior, Social Affairs, and Agriculture, the Central Bureau of Statistics (BPS), the State Audit Agency (BPK) and Bulog (World Bank (2017a)).
26 Several programs such as PIP do make use of these banks as well, but follow different operating and delivery procedures.
complexity of regulation has further resulted in high levels of regulatory incoherence, or “regulatory disharmony”. For example, a Bappenas study shows that around 96 regulations have been issued in relation to the implementation of the National Social Security Law (SJSN) alone. A deeper dive found that not all of them are in line with one another, and more worryingly can even be contradictory.

1.4 Indonesia’s Development Trajectory and Trends: Opportunities and Risks

1.4.1 Indonesia’s Growth, Equity and Human Capital Trajectory

Building on the system developed over the past 50 years, Indonesia’s future SP system needs to respond to current and future development trends and challenges. Indonesia has made significant gains in economic growth and poverty reduction in the past two decades. Relatively strong economic growth, averaging 5.5 percent per year since 2000, has been accompanied by a sustained decline in poverty rates: from 19.1 percent of the population in 2000 to 9.2 percent of the population in 2019. However, Indonesia’s progress on poverty reduction contrasts sharply with its performance in sharing prosperity. Inequality, as measured by the Gini coefficient, rose sharply from its lowest value of 30 points in 2000 to 41 points in 2014, reducing to 38 in September 2019, and inequality remains a key challenge threatening Indonesia’s future growth and prosperity. Vulnerability is also high: while 24.7 million Indonesians live below the poverty line, a further 64 million live less than 50 percent above it.

Inequality and vulnerability can have significant adverse consequences for growth, as well as for social and political stability. Small shocks can easily send the vulnerable back into poverty, evidenced by the fact that around half of the poor each year were not poor the year before. High inequality may also reduce economic growth for all, if poorer people are unable to properly invest in their children’s development, struggle to move into the middle class, or fail to find productive jobs. High inequality can also have social costs: large differences in wealth can create social tensions and disharmony and, in turn, conflict. Indeed, districts with higher levels of inequality than the average in Indonesia have 1.6 times the rate of conflict compared with districts with lower levels of inequality. Indonesians already think inequality is too high and should be reduced.

Jobs have contributed to both growth and poverty reduction. Indonesia has achieved significant progress in job creation, formalization and diversification. The employment rate reached a two-decade record high in 2018 while the unemployment rate continues to fall. In 2018, three-quarters of all workers were in informal jobs or with no formal/permanent contract: 37 percent as individual or household enterprise owners, and 40 percent as employees without contracts. The diversification of jobs out of agriculture and into other sectors has increased productivity and wages. However, the majority of the poor lack opportunities to work in the formal sector and thereby protect their incomes from shocks. This also explains why poverty and inequality are so persistent in many parts of the country, especially remote, isolated and rural areas.

Indonesia has made progress on several fronts related to human capital, but much remains to be done. Indonesia’s future is compromised by the low quality of its human capital stock, as evidenced by stunting rates at close to 30 percent, high under-five and adult mortality rates (26 per 1,000 live births and 182 deaths under age 60 per 1,000 alive at age 15, respectively), and low learning outcomes from education

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28 This section draws on the following sources: World Bank (2016a) and World Bank (2019a).
29 Human capital consists of the knowledge, skills, and health that people accumulate over their lives, enabling them to realize their potential as productive members of society. World Bank (2019d).
as measured by PISA scores (55 percent of 15-year-olds are functionally illiterate). This is illustrated by the Human Capital Index 2018, which rates Indonesia 87 out of 157 countries with a score of 0.53. This means that, on average, an Indonesian worker of the next generation will only be 53 percent as productive as she or he could be under the benchmark of complete education and full health. Unless it is addressed with urgency and the current positive policy progress is sustained, Indonesia’s human capital gap will compromise future growth and development for decades to come.

One of the biggest challenges in Indonesia is that conditions do not yet follow the typical transmission pathways for human capital investments in girls and women to translate to greater economic growth, although the potential is enormous. Despite the advances in health and educational attainment and declines in fertility, there has been little improvement in female labor force participation. This has remained stagnant at around 51 percent for the past two decades, far lower than 86 percent for men. It is also lower than regional (60 percent) and income-level counterparts and can be attributed to cultural norms, legal and other barriers. Adolescent fertility rates and maternal mortality also remain high compared with other countries in the region. Nonetheless, global evidence demonstrates that closing key gender gaps and attaining greater gender equality contributes to economic growth. Estimates for Indonesia show that closing gender gaps in female labor force participation, for example, could increase growth by 9 percent, and add US$135 billion a year to annual GDP, by 2025. Finally, promoting gender equality in education—at all levels—would also stimulate the economy (about 1 percent additional annual growth in per capita GDP).

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30 The World Bank’s Human Capital Index (HCI) which combines three components related to survival, learning and health into a measure of productivity provides a convenient way to assess how Indonesia performs in related aspects, relative to other countries. The HCI which combines three components (survival, learning and health) into a measure of productivity as a future worker of a child born today, relative to the benchmark of complete education and full health. The index ranges from zero to one, and a value of X means that a worker of the next generation will be only X×100 percent as she would be under the benchmark of complete education and full health.

31 World Bank (2016a).

32 Improvements in gender equality are transmitted through various pathways that enhance economic potential and performance. These transmission pathways are bound up with macroeconomic policy in a recursive way: as gender equality increases, so does economic performance, which in turn embeds new norms as social change accompanies economic progress. Improvements in human capital (education, health, nutrition) lead to improved female labor force participation and productivity. This is reinforced by the effects of smaller families, improved child welfare, household investment choices that favor education and thus intergenerational advances as future generations of workers are better equipped to take advantage of economic opportunities. Further gains are made by reducing and redistributing unpaid care work to free up women’s time to engage in economic activities, increasing diversity in the workforce, and promoting women in leadership and decision-making.

33 World Bank Indonesia Gender Equality for Growth Program (P172182) Program Concept Note.

34 Cultural norms and legal barriers discourage women from working; for example, the 1974 Marriage Law states a wife “has the responsibility of taking care of the household to the best of her ability.” Women from poor or rural households are particularly subject to discouragement to enter the labor force.


36 McKinsey Global Institute analysis April 2018. The analysis estimates growth above business as usual where gender inequalities remain as they are. As an initial step, Indonesia has signed up to a G20 commitment to reduce the gender gap in labor force participation by 25 percent by 2025 (i.e., to reach a female labor force participation of 58.5 percent). However, this target is unlikely to be met under the current policy settings. If Indonesia were able to achieve this commitment, GDP growth would increase by an estimated 0.67 of a percentage point annually, or an increase of US$123 billion on GDP (equivalent to US$432 per capita) in 2025. Cited in World Bank Indonesia Gender Equality for Growth Program (P172182) Program Concept Note.

37 World Bank Indonesia Gender Equality for Growth Program (P172182) Program Concept Note.
1.4.2 Emerging Trends

There are several emerging trends that Indonesia can take advantage of in the coming years to further advance economic growth, reduce poverty and ensure equality for all. These include a rapidly expanding middle class, the demographic dividend that comes with a young and growing labor force, a change in how people engage in the labor market, and technological advancements, among other megatrends. If not analyzed and addressed now, Indonesia is likely to struggle due to challenges that arise from high informality, technology disruptions and the changing nature of work, natural disasters/climate-related shocks, and a high dependency from population aging.

Indonesia is experiencing a rapid expansion of the middle class and rise of the aspiring middle class. In addition to aiding poverty reduction, strong economic growth over the past couple of decades has enabled Indonesia to reach middle-income status. This has led to the emergence of a vibrant middle class, comprising about 52 million people, or one in every five Indonesian. These mainly urban households have achieved economic security, are free from worry about poverty or vulnerability, and earn enough to move from subsistence to discretionary consumption. In fact, the middle class now accounts for close to half of national consumption in Indonesia. It is the fastest growing segment of the population, in both percentage terms (expanding at 10 percent per year) and in absolute terms (38 million between 2002 and 2016).

Between the middle class on the one hand, and the poor and vulnerable on the other, are about 126 million “aspiring middle class” (AMC) Indonesians, who constitute 48 percent of the population. While free from chronic poverty, the AMC has yet to achieve the economic security of the middle class. In fact, nearly one-fifth of the AMC in 1993 had become vulnerable to poverty by 2014. Two-thirds of the AMC also suffer deprivation on at least one non-monetary dimension of welfare. While a continued focus on poverty, vulnerability and inequality remains vital, efforts are needed to bring many more millions of aspiring Indonesians into the middle class. A large middle class (as opposed to a few rich and many poor) leads to higher domestic consumption, because the middle class has a higher marginal propensity to consume than the rich, and more income than the poor. It also supports economic growth, expands the tax base and reduces inequality. Finally, it can also be a source of entrepreneurship and job creation.

Indonesia is undergoing a period of demographic transition, with marked improvements in life expectancy and a reduction in fertility rates. This has led to an increase in the working-age population

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38 This section draws from World Bank. (2019a).
39 The middle-class report identifies five consumption classes. Poor (P): those living below the national poverty line, or around IDR 354,000 per person per month (US$2.20 per person per day in 2016 PPP-adjusted terms); Vulnerable (V): those living above the poverty line but with a non-negligible risk of falling into poverty, or between IDR 354,000 and IDR 531,000 per person per month (US$2.20-3.30 per person per day); Aspiring Middle Class (AMC): those no longer living in poverty or vulnerability but who are not yet economically secure, or between IDR 531,000 and IDR 1.2 million per person per month (US$3.30-7.75 per person per day); Middle Class (MC): economically secure Indonesians with little chance of falling into poverty or vulnerability, or between IDR 1.2 million and IDR 6.0 million per person per month (US$7.75-38 per person per day); and Upper Class (UC): the wealthiest Indonesians who consume more than IDR 6 million per person per month (>US$38 per person per day).
40 53 percent suffer from lower-quality housing, 30 percent lack access to proper sanitation, and 7 percent do not have access to clean water. A couple of other features differentiate AMC from the middle-class including residence (most of the middle class live in urban areas, while there are more AMC in rural areas), education status (most of the middle class completes high school and many go on to tertiary education, while nearly half of the AMC aged 25-29 years old drops out of school before senior high school) and use of public services (the AMC is still reliant on public services, while the middle class has largely opted into private provision).
41 See Banerjee and Newman (1993).
(i.e., persons 15 to 64 years old) of 1.6 percent, or 2.5 million people per year, during the period 2000-16. However, the current demographic dividend will close by around 2030, as the proportion of individuals above retirement age grows, leading to a sharp rise in Indonesia’s dependency ratio (the number of young and elderly compared with the number of working age adults) after 2040. Between 2040 and 2080, Indonesia’s dependency ratio is projected to rise from 25 to 47 percent.

Figure 1.5: Percentages of population over time

Source: UN Population Data and World Bank staff calculations.

The current demographic dividend, where the number of workers is growing faster than the number of dependents, provides a unique window of opportunity for Indonesia’s economic growth. During 2020-50, demographic trends are expected to increase the rate of Indonesia’s annual real GDP growth by close to 1 percentage point, and annual GDP per capita by close to 0.2 of a percentage point. This could position Indonesia well compared with its Asian peers, many of which are set to endure a reduction of real GDP growth as a result of adverse demographic trends.

Reaping the demographic dividend will require Indonesia to create an adequate number and types of jobs for the millions who join the labor force every year. However, job creation has fallen since 2010, from 3.5 to less than 0.5 percent in 2015. Not only has Indonesia failed to create enough jobs, but also most newly created jobs are of low quality. The majority (65 percent) of all new jobs created between 2011 and 2016 were in low-productivity, non-skilled intensive sectors, such as agriculture, wholesale and retail trade, and low-end services (community, social and personal services). These sectors have high informality and pay low wages. In fact, the informal sector in Indonesia still employs more than 50 percent of total workers (70 percent in rural areas). Moreover, workers from poorer backgrounds have limited ability to find good jobs, which typically relies on using social connections. Furthermore, due to

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42 IMF (2019).
43 Ibid.
44 This section draws from World Bank (2016a) and World Bank (2019b).
45 By 2017, one-third of employment was still in the agriculture sector, where the output per worker is about one-quarter of that in the manufacturing sector and less than half of what it is in other sectors. Manning, C., and D. Pratomo, 2018 (forthcoming). “Labor Market Developments in the Jokowi Years”.
46 Between 2001 and 2012, a total of over 20 million new jobs were created. Out of total employment growth, 30 percent occurred in community, social and personal services and 28 percent in wholesale, trade and retail, while manufacturing contributed only to 16 percent of total growth (3.3 million jobs).
demographic trends, workers are aging: the share of youth (15-24) went down from 21 percent in 2000 to 16 percent in 2018. Aging workers are accompanied with rising skill obsolescence and poorer health, and older workers are crowded into the most unprotected jobs such as informal and casual jobs, or unpaid family work.

In 2018, out of 125.1 million employed Indonesians, less than half were working as employees (49.3 percent or 61.7 million employees). Furthermore, 4.3 million Indonesians were employers (3.5 percent); 43.0 million own-account workers (34.4 percent), and 16.1 million contributing family workers (12.9 percent). The employment rate of population aged 15 and over was estimated at 64.2 percent (November 2018), including 78.4 percent for males and 50.1 percent for females. Informal employment is prevalent, with 76.5 percent of all employment outside agriculture being informal. In Indonesia, the employment-to-population ratio is much higher than the average for lower middle-income countries in Asia and the Pacific of 54.7 percent. The unemployment rate was relatively low at 4.3 percent of the labor force but higher than the average of 3.6 percent in the Asia and the Pacific region.

About 40 percent of workers are employees without a work contract (including casual and unpaid workers), and more than 35 percent of workers are self-employed or own a household enterprise. Only 8.6 percent are employees with permanent contracts who enjoy the full range of wage and social benefits, though many do not receive the full package of benefits. Half of jobs created in the past two decades are in the lowest wage and productivity sectors: wholesale and retail trade, accommodation and food/beverage services, and other-services sector. High-productivity job creation prospects of the country are dim. In 2016, 85 percent of non-agricultural enterprises were micro-enterprises with no legal status and with little prospect to grow. Although the manufacturing sector is a critical source of middle-class jobs, premature deindustrialization in 2000-10 led to the “hollowing-out” of manufacturing jobs. The compound annual growth rate of employment in manufacturing “hollowed out” to 1.73 percent per year in 2000-10 compared with 5.96 percent between 1990 and 1996, and 3.30 percent between 2011 and 2017.

Figure 1.6: Workers by status of employment

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Box 1.2: Middle-class jobs may be defined as jobs that pay a level of wages and a certain level of job satisfaction, benefits and security that is commensurate with expectations of a middle-class population. This definition is inclusive of an informal sector, but in a way that those who choose to be in the informal sector, including on- and off-farm household enterprise owners, are earning sufficient income to be able to transition towards a middle-class life.

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47 An average employment rate for lower middle-income countries in South Eastern Asia and the Pacific is 65.3 percent (November 2018).
48 ILO 2018
Technology and automation are also affecting the labor market, and reshaping the skills needed for work. Workers involved in routine tasks that are “codifiable” are the most vulnerable to technology-driven labor market changes (more than two-thirds of robots are employed in the automotive, electrical/electronics, and metal and machinery industries). Evidence from developed countries points to job polarization—the expansion of high- and low-skill jobs coupled with the decline of middle-skill jobs such as machine operators. However, while a similar pattern is emerging in some low- and middle-income countries with regards to increasing demand for high-skill workers, the change in demand for low- and middle-skill jobs is more heterogeneous across countries. How Indonesia is ultimately affected by this trend is likely to be driven by automation and globalization, as well as the rate of technology adoption, which can differ across sectors. Furthermore, it is likely that a larger share of the workforce will move away from traditional one-job-per-career patterns, to having many different jobs over the course of their careers, including periods of non-wage/self-employment work. According to McKinsey cited in an IMF report, digital technologies have the potential to add 3.7 million jobs in Indonesia and expand the economy by 10 percent by 2025.\(^5\) This employment growth is likely to change the mix of sectors in the Indonesian economy as a whole. Construction and manufacturing could see growing demand for labor, as could accommodation and food service, education, health care, and retail and wholesale trade. However, some occupations that involve routine, predictable work could be susceptible to automation, including collecting and processing data. As a consequence, new skills will be needed for the automation age.

\(^{50}\) IMF (2019).
Indonesia is particularly vulnerable to disaster risk and climate change. Indonesia is located in one of the most geologically active regions in the world and is exposed frequently to monsoonal rains. It is also extremely vulnerable to other types of disasters, and the World Risk Index ranks Indonesia’s exposure to natural hazard-related risks at the highest level. Records from the National Disaster Management Authority (BNPB) suggest that, on average, 290 significant natural disasters have occurred annually over the past 30 years, amounting to considerable damage both to people and to physical assets. The annual economic impact of natural disasters between 2000 and 2016 was estimated at IDR 22.8 trillion (or US$1.4 billion), or about 0.3 percent of Indonesia’s GDP. This excludes the estimated direct damages and losses from the West Nusa Tenggara (Lombok) earthquakes, and the Central Sulawesi (Palu) earthquake and tsunami in 2018, which are estimated to have cost at least US$1.8 billion (0.2 percent of GDP).

**Figure 1.8: Number of disasters, 1996 to 2017**

![Graph showing the number of disasters from 1996 to 2017](image)

**Table 1.1: Type and damage from disasters, 1996 to 2017**

<table>
<thead>
<tr>
<th>Disaster Type</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flood</td>
<td>4458</td>
</tr>
<tr>
<td>Landslide</td>
<td>636</td>
</tr>
<tr>
<td>Flood and Landslide</td>
<td>625</td>
</tr>
<tr>
<td>Tidal Wave Abrasion</td>
<td>1875</td>
</tr>
<tr>
<td>Cyclone</td>
<td>5354</td>
</tr>
<tr>
<td>Drought</td>
<td>301</td>
</tr>
<tr>
<td>Forest and Land Fire</td>
<td>397</td>
</tr>
<tr>
<td>Earthquake</td>
<td>119</td>
</tr>
<tr>
<td>Tsunami</td>
<td>3</td>
</tr>
<tr>
<td>Earthquake and Tsunami</td>
<td>47</td>
</tr>
</tbody>
</table>

This section draws on a background note prepared for the report.

Only five common natural hazards are considered: earthquakes, cyclones, floods, droughts, and sea level rise.

Includes direct damages, but excludes losses.
<table>
<thead>
<tr>
<th>Disaster type</th>
<th>Location</th>
<th>Year</th>
<th>Direct impacts on People</th>
<th>Financial Damage (USD billion)</th>
<th>Damage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indian Ocean Tsunami</td>
<td>Aceh</td>
<td>2004</td>
<td>167,000 fatalities</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Earthquake</td>
<td>Yogyakarta</td>
<td>2006</td>
<td>6,000 fatalities, 3.2 million affected</td>
<td>2.3</td>
<td></td>
</tr>
<tr>
<td>Flood</td>
<td>Jakarta</td>
<td>2007</td>
<td>68 fatalities, 2.2 million affected</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>Earthquake</td>
<td>Padang</td>
<td>2009</td>
<td>1,195 fatalities, 2.5 million affected</td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td>Volcanic Eruption</td>
<td>Mt Merapi</td>
<td>2010</td>
<td>322 fatalities, 137,000 affected</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>Flood</td>
<td>Jakarta</td>
<td>2013</td>
<td>34 fatalities, 250,000 affected</td>
<td>0.83</td>
<td></td>
</tr>
<tr>
<td>Earthquake</td>
<td>West Nusa Tenggara</td>
<td>2018</td>
<td>564 fatalities, 396,000 affected</td>
<td>0.86</td>
<td></td>
</tr>
<tr>
<td>Earthquake and Tsunami</td>
<td>Central Sulawesi</td>
<td>2018</td>
<td>2,256 fatalities, 1.5 million affected</td>
<td>1.3</td>
<td></td>
</tr>
</tbody>
</table>

Data source: BNPB official website

Some 110 million people across about 60 Indonesian cities are exposed to disaster hazards.\(^{54}\) Urban population growth, together with the often rapid and uncontrolled urban development that follows, is expected to further increase Indonesia’s exposure to risks,\(^{55}\) particularly from floods and seismic risk. Poor-quality urban infrastructure constructed in hazard-prone areas with inadequate consideration to, or compliance with, risk-informed planning regulations and urban design codes makes them unable to withstand damaging geotechnical and hydrometeorological forces. Climate change is expected to further increase Indonesia’s disaster risk in the coming decades. Estimates suggest that by 2055, about 64 percent of Indonesia’s population will be living in seismic hazard zones, up from 53 percent in 2016.\(^{56}\)

The poor and vulnerable are often affected disproportionately more by disasters.\(^{57}\) This is because they are often more exposed from living in vulnerable areas, such as flood-prone land and steep hillsides, or because they inhabit housing settlements that have been designed and constructed poorly. Such shocks can also force poor households to resort to negative or damaging coping strategies, such as liquidating savings and assets, reducing nutrition levels, forcing children to work and consequently miss schooling, and postponing or neglecting health needs. They can also kill, injure or displace working-age family members. In all these cases, the ability to respond and recover quickly is extremely hard, pushing already vulnerable households deeper into poverty, and the non-poor into poverty. It is thus common for households to transition in and out of poverty due to disaster- and climate-change-related shocks.

1.4.3 What Does This Mean for Social Protection in Indonesia?

Indonesia’s SP system will continue to play an important role in the coming decades and its impacts can be strengthened by leveraging on key development trends. This includes first and foremost its favorable

\(^{54}\) Gunawan et al (2015).

\(^{55}\) Deltares (2018).

\(^{56}\) ibid.

\(^{57}\) Estimates from Rush (2013) suggest that, at the district level, a one standard deviation increase in disaster harm can increase the poverty rate by 0.8 percent and the poverty gap by 2.3 percent.
demographics, reflected in a young and growing labor force, including women. The majority of Indonesia’s female population today is in the productive age group of 15-64 years old (66.2 percent) with the potential to accelerate growth, if gender gaps were closed and the barriers to their economic participation and productivity removed.\(^{58}\) McKinsey estimates that advancing women’s equality in the countries of Asia Pacific could add US$4.5 trillion to their collective annual GDP by 2025, a 12 percent increase over the business-as-usual trajectory.\(^{59}\)

The IMF expects demographic trends in general to increase growth of Indonesia’s annual real GDP by close to 1 percentage point and annual GDP per capita by close to 0.2 of a percentage point during 2020-50.\(^{60}\) This would position Indonesia relatively well compared with its Asian peers, many of which are set to endure a reduction of real GDP growth as a result of adverse demographic trends. The rapidly expanding middle class is another opportunity, as it can support economic growth, expand the tax base, reduce inequality and be a source of entrepreneurship and job creation. A third set of opportunities comes from being a vibrant environment for digital start-ups and the largest digital economy in Southeast Asia.

Indonesia also faces several risks, which could challenge its positive growth prospects. First, vulnerability is high, and about 64 million Indonesians live less than 50 percent above the poverty line and could easily fall back into extreme poverty with the smallest of shocks. Shocks can also adversely affect the economically insecure aspiring middle class and prevent them from reaching middle-class status. Nearly one-fifth of the aspiring middle class in 1993 had become vulnerable to poverty by 2014. Furthermore, persistent and rising inequality, where the richest 1 percent owns half of all the country’s wealth, is creating a more divided Indonesia. Third, the low stock of human capital manifested in high stunting, inadequate skills and poor learning outcomes. Fourth, Indonesia also has the lowest (at 50 percent) female labor force participation rates in the region and one-quarter of the population aged 15-24 is idle, i.e., not in education, employment, or training (NEET). Finally, high exposure to natural disasters and climate-related shocks that adversely affect millions of people annually, cause significant economic losses, damage infrastructure assets, and hinder human development outcomes.

These megatrends have important implications for the role of SP programs and systems. Indonesia will need to provide a comprehensive SP system that makes the poor and vulnerable more resilient to shocks, with skills that ensure workers are better prepared for job disruptions and transitions, and one that encourages economic mobility by promoting social and productive inclusion for all Indonesians. What do these opportunities and risks imply for Indonesia’s SP system, including social assistance and social insurance?

First, there is a need to continue to invest in human capital. Indonesia should take advantage of the opportunity presented by a young and expanding labor force to reduce inequality and informal employment, and prepare workers for transitions brought about by the changing nature of work.\(^{61}\) Social

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\(^{58}\) Cameron et al (2018).


\(^{60}\) IMF (2019).

\(^{61}\) Globally, the rise of the industrial sector in East Asia has more than compensated for the loss of industrial jobs in advanced economies. But not all Asian countries have benefited in the same way. While some countries, such as Vietnam, have seen an increase in the share of industrial employment (rose from 9 percent in 1991 to 25 percent in 2017), in others, including Indonesia, it remains stable. The difference is that Vietnam is credited with bringing highly skilled young workers into the labor market who, together with new technology, upgrade manufacturing production. Creating a workforce for the future would rest on meeting the growing demand for advanced cognitive skills (critical thinking, problem-solving), socio-behavioral skills (creativity, curiosity, teamwork), and skill combinations that are predictive of adaptability, such as reasoning and self-efficacy. Such skills, unlike the narrow job-specific skills, are transferable across jobs. Globalized and automated economies put a higher premium on human
protection can play a key role in building and protecting the human capital of Indonesia. Social protection’s strength in human capital development comes from the fact that SP programs can provide both protection from negative shocks and promotion to more sustainable opportunities. SP programs provide income support that permits investment in human capital and protects these investments following negative shocks. SP can help in human capital accumulation on the supply side through, for example, skills provision/upgrading and “productive inclusion” type programs to connect the unskilled poor and vulnerable with wage and self-employment. On the demand side, social assistance programs such as CCTs incentivize the demand for, use of and access to a range of education, health and other services.

**Special focus should be given to ensure that SP programs promote investment in the human capital of girls/women.** There is some evidence to show that cash transfers, for example, to poor households in Malawi, Ethiopia, Bangladesh and Pakistan reduced/delayed child marriage. This in turn helps promote girls’ education and economic opportunities, and end the intergenerational cycle of poverty. Experiences from around the world also show that various active labor market programs (ALMP) programs can help women access economic opportunities. Supportive skill-building programs such as the coding bootcamps in Colombia, Lebanon and Kenya, that provide software programming skills to youth with the aim of boosting their employment opportunities, are some examples. ALMP that address constraints to find a job are likely to be particularly important for Indonesia, given that there are still sizeable portions of unmarried (50 percent) and married (25 percent) women who report that they want a job.

**Second, Indonesia should continue to evolve policies and programs that ensure its people are resilient to shocks.** Indonesia is particularly vulnerable to natural disasters, which erode household resources and incomes, and prevent households from escaping poverty. Adequate coverage and benefit levels of social assistance programs can play a key role in this. A guiding principle to expand the reach and strengthen of social assistance can be progressive universalism, with the aim to expand coverage while giving priority to the poorest people. Such bottom-up expansion occurs while navigating the fiscal, practical, and political trade-offs that incremental levels of coverage involve. Chapter 2 on social assistance looks at all these issues in more depth. While social assistance can act as a last resort for the poor and vulnerable, for the aspiring middle class and the middle class, effective social insurance is likely to be the key to economic security.

**Third, effective social insurance will likely be key to economic security for the AMC and the middle class.** This entails complementing social assistance with basic universal social insurance that is not tied to how or where people work (i.e., formal wage employment), to better accommodate the informal sector, as well as changes in the labor market from technology, automation and the emergence of the ‘gig’ economy. It might also require subsidizing a basic level of social insurance, especially for the poor and informal sector. It will also require strengthening social insurance design features to avoid unintended gender-related consequences, of which the gender pension gap is among the best known. Indonesia’s changing

capabilities that cannot be fully mimicked by machines, including abilities such as grit, which have economic returns that are often as large as those associated with cognitive skills.


63 World Bank Indonesia Gender Equality for Growth Program (P172182) Program Concept Note.

64 The gender pension gap, a cousin to the better-known gender pay gap, reflects gender differences in three areas: demographics, the realities of the labor market and the design of pension systems. It is a world-wide phenomenon (UN Women Report, 2015) which can be mitigated by ensuring that pension systems provide broader coverage, greater redistribution, survivor benefits, and regular indexing to maintain adequate income at older ages, thus taking into account women’s longer life expectancy. Equalizing equalize the age of retirement of men and women, can also lead to better pensions once they retire. See Chłoń-Domińczak (2017).
demographics, as well as economic gains from an expanding middle class, will also have implications for the fiscal sustainability of its current programs, as enhanced social assistance and insurance offer improved risk management. Labor regulation could, where appropriate, be made more flexible to facilitate easier movement between jobs. These social insurance and labor-related issues are explored in more detail in Chapter 3.

Finally, Indonesia’s high exposure to natural disasters and climate-related shocks, together with unplanned urbanization, requires an adaptive SP system. Such a system needs to be: (i) flexible, to accommodate for unforeseen events and changes in scalability with provisions for expansion or contraction of programs depending on the needs; (ii) integrated, given the cross-sectoral nature of the problem; and (iii) comprehensive, to provide the required support before, during and after a crisis. Chapter 2, with a subsection on adaptive social protection, examines all these issues in more detail.

1.5 Social Protection in a Middle-Income Country: A New Vision for Indonesia

To be “future-ready”, Indonesia’s vision for SP should have a comprehensive and integrated framework and strategy, with coherence across social assistance and social insurance programs. Such a SP system would ensure that the appropriate policies, financing strategies and instruments are in place for different groups to address their various needs in a timely, predictable and coherent manner. While Indonesia has many of the key programs and systems in place, as this report will show, Indonesia’s poor and vulnerable would be better served by a comprehensive SP system that is effective, coordinated and integrated. The renewed system should also ensure that Indonesia gets better value for the significant money it invests in the SP sector.

With the changes and emerging trends that are impacting all elements of Indonesia’s middle-income economy and society, it is important to define the key objectives and instruments of the SP system. Indonesia has a sizeable portion of the population working in the informal sector, and thus should consider a risk-sharing framework to guide institutions toward instruments that are accessible no matter how people engage in markets for their livelihood. This in turn will require revisiting some of the distinctions often made between “social assistance” and “social insurance”, and the de-jure distinction between “contributory social insurance” and “non-contributory social assistance” may have to be blurred and, in time, potentially abandoned entirely. Instead, a comprehensive policy package of protection with a publicly-financed, guaranteed minimum risk-pooling mechanism at its core and additional layers of mandated, nudged and wholly-voluntary insurance is likely to be more appropriate.65

This report presents options for Indonesia’s “forward-looking” strategy and approach to social protection. It further outlines options for SP benefits and services that will serve the needs of the Indonesia of the future. A relevant and modern risk-sharing model also requires institutions and instruments that are accessible no matter how people engage in markets for their livelihoods. This vision could be achieved by implementing coherent reforms and adjustments across the spectrum of SP programs and interventions. This report outlines how the three main components of SP systems—social assistance, social insurance, and labor market regulation—can manage Indonesia’s labor market and risk-sharing challenges. This could imply: (i) establishing a guaranteed minimum protection across the lifecycle and determining the package of programs that would most effectively meet it; and (ii) complementing the guaranteed minimum with a coherent set of mandated and individually financed social insurance programs. As this report will show, given Indonesia’s good starting point, this can be achieved by

65 See Packard et al. (2019) for a comprehensive discussion on these issues.
rationalizing current social assistance programs and expanding coverage to households without children, especially the elderly; providing differential and better-targeted support to cover premiums and contributions for informal sector workers; undertaking parametric reforms to the pension scheme, including a gradual increase in the retirement age; and reforming the current severance pay system into a more inclusive unemployment benefit system. The necessary expansion of pension coverage will not address the short- and medium-term problem of old age poverty, which can only be addressed by an expansion of social assistance in a way that reaches the elderly. Finally, the whole SP system should have a strong delivery system and a robust governance structure, as well as an adequate and sustainable financing mechanism.

The rest of the report is organized as follows: Chapter 2 discusses recent advances and reform options for social assistance programs. Chapter 3 does the corresponding analysis for the social insurance system and worker protection. Chapter 4 suggests how Indonesia may deliver and finance SP. Chapter 5 describes the proposed vision for a more coherent and efficient SP system in Indonesia.
CHAPTER 2: Social Assistance for the Future

2.1 Introduction

An effective social assistance system can play a key role in addressing persistent poverty, vulnerability and inequality, promoting upward mobility and supporting the accumulation of human capital. These programs, generally implemented through cash or in-kind assistance, can protect the poor and vulnerable against risks and shocks along the lifecycle that could otherwise impoverish them further. Social assistance can incentivize poor and vulnerable households to invest in members’ human and financial capital for a more sustained exit from poverty, and simultaneously promote improved supply side readiness to meet increased demand for such services. For example, cash transfers allow increased consumption and more nutritious food choices and conditionalities, or complementary service provision can incentivize household investments in key human capital elements, such as immunizations, nutrition counseling, or enrolling children in school. By increasing consumption, social assistance can further reduce reliance on negative coping behaviors, which often leads poor households to sacrifice productive investments to maintain minimum levels of consumption.

Indonesia’s social assistance landscape is relatively young, and yet it has undergone significant expansion and reform over the past two decades. As discussed in Chapter 1, the first round of social assistance programs was launched in the late 1990s after the Asian financial crisis, with the aim of helping poor and vulnerable citizens achieve basic food security. Subsequently, social assistance programs were set up to help protect the poor from health shocks through a large health service fee waiver. In the past few years, however, the Government of Indonesia (GoI) has redirected spending away from direct in-kind or food distribution programs such as Rastra, and focused more on cash transfers, which have been found to be more effective in reducing poverty and improving human development outcomes. As this chapter shows, key remaining challenges include extending coverage and filling important coverage gaps for certain groups (e.g., early childhood, the elderly, the disabled), and reducing fragmentation and program overlap.

Reducing poverty and inequality has been a priority objective of the GoI, and social assistance is one of the main policy instruments to achieve this. There has been a consistent recognition that a well-functioning social assistance system has an important role to play in the GoI’s continued efforts to address persistent inequality, vulnerability and low upward mobility. The expected longer-term impact on the development of Indonesia’s economy through encouraging greater and/or more consistent investments in human and financial capital is also an increasingly heralded motivation for continued spending on social assistance.

Improvements in education and health outcomes for all citizens has long been a focus of the GoI’s social policy, and human capital development is one of the main priorities of the GoI. The 1945 Constitution establishes the right of Indonesian citizens to access quality education and health services. In the post-independence and Suharto eras, economic development strategies focused on financing capital investment in education, health, and related social services. Even as the Asian financial crisis unfolded in the late 1990s—with the headcount poverty rate doubling, and real economic activity contracting by over 13 percent—spending on health and education did not fall from previous levels. A constitutional amendment in 2000 reaffirmed the rights for all citizens to receive education and medical care, and legislation in 2003 obligated the nation to provide education for all children 7 to 15 years of age.66

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66 World Bank (2017a).
Indonesia has made great strides in these areas, but poor households continue to lag. For example, while educational achievement continues to rise for all groups (Figure 2.1), in 2007, just 15 percent of the poorest 10 percent of the population completed basic education (increasing to 28 percent in 2018). In 2018, almost none of the poorest have completed higher education. On the health side, in a context of progress and an impressive increase in coverage of free health insurance, while the richest 10 percent almost exclusively use a doctor or a midwife to give birth, 14 percent of the poor are not supported by doctors or midwives when they give birth.

Figure 2.1: Educational and health attainment at a glance

Source: Susenas 2018 and World Bank staff calculations.

To help reduce poverty and inequality, the GoI has reallocated more resources for social assistance and expanded several flagship programs in recent years. Between 2014 and 2017, spending on regressive energy subsidies fell by 71 percent in nominal terms to IDR 97.6 trillion, while spending on social assistance rose by 28 percent over the same period to IDR 72.3 trillion in 2017. The increase financed an expansion in coverage of core social assistance programs—PKH, PBI-JKN and PIP—though in real terms, the decline in energy subsidies comprised 74 percent while the increase in social assistance spending comprised just 13 percent. In addition, in 2018, a new cash-for-work initiative (Padat Karya) was introduced under the Village Fund (Dana Desa) to boost rural employment. Furthermore, the GoI established a Unified Data Base, or the UDB (Basis Data Terpadu), recently renamed DTKS, to determine the eligibility of potential beneficiaries for the core social assistance programs, as well as increasingly the remaining subsidy programs.

The GoI has also modified several core programs’ design and delivery systems to improve their effectiveness and efficiency. Throughout 2017 and 2019, Rastra was gradually replaced by an digital food assistance / voucher program (Bantuan Pangan Non-Tunai, or BPNT, now renamed Sembako). Both the PKH and PIP programs have switched their benefit payment methods to “cashless” mechanisms, including mass opening of basic saving accounts accessible through debit cards. In addition, the implementation
arrangements of core social assistance programs have been revised to give local governments a greater role in program implementation, eligible beneficiary identification and, for some programs, in coverage expansion beyond the eligible poor and vulnerable beneficiaries identified through the UDB/DTKS. As per Law No. 5/2019, MoSA has developed a broad process for local governments to register new poor and vulnerable families into the UDB/DTKS and update the registry of families.

<table>
<thead>
<tr>
<th>Program</th>
<th>Purpose</th>
<th>Targeted Coverage</th>
<th>Budget (IDR billion)</th>
<th>Benefit (nominal / average)</th>
<th>Adequacy (% of median monthly consumption of the poorest 10%)</th>
<th>Coverage of the poorest eligible 10%</th>
<th>Beneficiary incidence to the poorest eligible 10%</th>
<th>Implementing Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>PKH</td>
<td>Poverty reduction, strengthened human capital</td>
<td>10 million families</td>
<td>34,300</td>
<td>Conditional cash transfers – IDR 315,000/month/HH (average)</td>
<td>21%</td>
<td>47%</td>
<td>24%</td>
<td>Ministry of Social Affairs</td>
</tr>
<tr>
<td>PIP</td>
<td>Lower costs of attending school</td>
<td>15mn HHs/20 million students **</td>
<td>11,200</td>
<td>Cash transfers – IDR 100,000/month/HH (average)</td>
<td>7%</td>
<td>56%</td>
<td>19%</td>
<td>Ministry of Education and Ministry of Religious Affairs</td>
</tr>
<tr>
<td>Sembako</td>
<td>Boost food security and improve nutrition</td>
<td>15.6 million HHs</td>
<td>20,800</td>
<td>IDR 150,000/month H H for rice, eggs and others (nominal)</td>
<td>10%</td>
<td>42%</td>
<td>17%</td>
<td>Ministry of Social Affairs</td>
</tr>
<tr>
<td>PBI-JKN</td>
<td>Preventing health shocks</td>
<td>92.4 million people</td>
<td>26,700</td>
<td>Health service fee waiver (nominal)</td>
<td>11%</td>
<td>54%</td>
<td>15%</td>
<td>BPJS &amp; MoH</td>
</tr>
</tbody>
</table>

Source: MoF financial note, Susenas and World Bank Staff calculations.

2.2 Main Programs

2.2.1 PKH

*Program Keluarga Harapan (PKH)* is a CCT for poor households meant to alleviate short-term poverty and improve human capital through awareness-raising and increased investments in education and health. The PKH program, implemented by the MoSA, was initiated in 2007, following reductions in energy subsidies. Initially about half a million families in seven provinces were covered. Since then, coverage has

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67 On scope, the social assistance sector comprises more than just the main programs discussed in this report. Twenty-five active social assistance programs exist, spread across 11 implementing ministries. The scope of this chapter is not to discuss all the programs within the sector, but to focus on those that comprise the majority of central spending on social assistance, are significant in coverage, are objectively targeted to poor and vulnerable households or families, and have a reasonable amount of evidence available to support a common comparison of performance using standardized metrics (coverage and incidence across the welfare distribution and adequacy of the benefit provided). In addition, programs implemented at the local government-level are not included for the same reasons. Few of the programs implemented at the central level have undergone impact or process evaluations that would be important precursors in determining the worth of continuing or discontinuing programs. In this report, “social assistance spending” includes only centrally-executed social assistance programs that target the poor and vulnerable. Hence, general subsidies are not considered as social assistance and are not accounted in social assistance spending. The GoI’s official statistics on social protection spending are higher, as they include a greater number of programs and also include subsidy spending. For additional information on this sector, recent publications from TNP2K and the World Bank provide a useful inventory of the main 25 active social assistance programs. See World Bank (2017a) and TNP2K (2019).
expanded as part of a larger effort to improve poor and vulnerable families’ welfare and opportunity and, as of 2019, about 10 million families are enrolled in the program. These families receive an average of about 19 percent of median consumption in cash transfers per year. To be eligible, a family must be included in the UDB/DTKS and ranked below a certain poverty cut-off point. They must also meet at least one of the following conditions: a family member is pregnant or lactating; the family has one or more children below six years of age; the family has children aged 7 to 21 years attending primary or secondary school; or the family has children aged 16 to 21 years who have not yet completed basic education. PKH beneficiary families receive the cash transfer dependent on meeting health, nutrition and education conditionalities. Families are also encouraged to participate in Family Development Sessions that aim to raise awareness on nutrition, early childhood education, financial literacy and other relevant topics.

2.2.2 BPNT/Sembako

Food availability and food prices are important issues for poor and vulnerable households in Indonesia. Food expenditures represent about two-thirds to three-quarters of the household budget for poor and vulnerable Indonesian households. Food prices are also more unstable than other economy-wide prices. Over a 15-year period, the average annual percentage change in the economy-wide and food-only price indices was 7.5 and 8.2 percent, respectively. However, measures of price volatility were nearly twice as large in the food-only index. In other words, food price highs are higher (and lows are lower) than the general price level in Indonesia. In welfare terms, such heightened volatility is riskier for households with consumption baskets weighted more heavily with food items.68

Responding to this, one of the earliest social assistance programs launched in Indonesia was Raskin, later renamed Rastra and now reformed into a digital food voucher program called Sembako. Rastra was a food distribution program that in early 2017 reached 15.5 million families. Rastra has been well-studied, due to its large coverage and historically weak targeting accuracy. The availability of strong evidence of Rastra’s relatively poor performance and effectiveness motivated the GoI’s decision to reform the delivery of subsidized food by transitioning beneficiaries from Rastra to the BPNT program in 2017. Under BPNT, only targeted households, identified by program card ownership and validated using a personal identification number, could exchange a monthly IDR 110,000 voucher for 10 kilograms of rice or eggs at controlled distribution points called e-Warong. In 2018, non-cash food assistance under BPNT covered about 5.3 million families, rising to 12.6 million households by mid-2019. By the end of 2019, Rastra was fully phased out and 15.6 million families were instead covered under BPNT. In 2020, The GoI also broadened the scope of the program by including several new nutritious items for purchase and increased the benefit level to allow the purchase of those items. The program has been renamed as Sembako, or the Affordable Basic Food Program.

2.2.3 PBI - JKN

Health-care access, healthy behaviors, and healthy outcomes for all citizens have been a core focus of GoI social policy. Toward the end of the 20th century, the GoI began targeting health-care services facilitated by public expenditures, specifically to poor households: kartu sehat or health card (circa 1994) and its Asian-financial-crisis cousin, Jaring Pengaman Sosial Bidang Kesehatan (JPS-BK), provided poor households with free curative health care at community health centers and referral care at district hospitals. Then, throughout the 2000s, multiple compensatory transfers to poor and near-poor households—provided during periods when fuel subsidies were adjusted—contained a health services component that provided free care (inpatient or outpatient, as well as preventative services and pharmaceuticals). Recognizing that poor and vulnerable households have higher rates of non-utilization,

68 World Bank (2017a).
higher rates of preventable conditions, and more frequent income losses due to adverse health events.\textsuperscript{69} \textit{Jamkesmas} was developed (circa 2005) to improve utilization by reducing the costs of services. Today, \textit{Jamkesmas} is called \textit{Penerima Bantuan Iuran} (PBI), and is part of the JKN health insurance program. PBI-JKN subsidizes the health insurance premiums for poor and vulnerable households, and renders free the use of all available health-care services and facilities, in accordance with PBI-JKN regulations.

2.2.4 \textbf{PIP}

**Financial cost is a key constraint restricting poor households’ access to education services.** Figure 2.2 shows that enrolling a student is costly: out-of-pocket costs (including transportation) range from around IDR 1 million to more than IDR 3 million (US$77 to US$230, depending on school level), with poorer households paying slightly less and richer households slightly more. Secondary education (SMU, or SMA and SMK) can be prohibitively expensive for the poorest households: regular costs to send one child to senior secondary school consume about 18 percent of a poor household’s overall budget.

![Figure 2.2: Cost of school at different levels for poor and non-poor households](image)

Source: Susenas 2017. (SMU indicates SMA & SMK levels of schooling).

\textbf{Program Indonesia Pintar (PIP)} is a cash transfer given to enrolled students or school-age children from the poorest 25 percent of households, who have either a \textit{Kartu Indonesia Pintar} (KIP) card or a \textit{Kartu Perlindungan Sosial/Kartu Keluarga Sejahtera} (KPS/KKS) card. PIP lowers the net cost of access to education by providing cash transfers. Students from poor households who are verified as being eligible by their school are provided annual cash transfers of IDR 450,000, IDR 750,000, or IDR 1 million to meet enrolment costs at the primary, junior secondary, and senior secondary level, respectively. By lowering the enrolment cost hurdle in a targeted way, the GoI hopes to tackle the low enrolment rates and high dropout probabilities of poor students, and eliminate the education gap.\textsuperscript{70} In 2019, PIP targeted 20 million enrolled students between 6 and 21 years of age, and benefit uptake to date in 2019 has been about 85 percent of the budget made available. The reason for the incomplete uptake has been problems with the ATM functions of the benefit cards.

2.2.5 \textbf{Cash for Work}

\textsuperscript{69} World Bank (2013a).
\textsuperscript{70} World Bank (2017a).
The *Padat Karya Tunai* (PKT or Cash-for-Work, CfW) initiative was introduced at the end of 2017. Its main purpose is to bolster the impact of *Dana Desa* (Village Fund) on poverty. Through the December 2017 Joint Ministerial Decree signed by the MoF, the MoHA, the MoV and Bappenas, *Dana Desa* transfers from January 2018 were used to finance CfW activities in some villages. At this initial stage, the CfW is required to be implemented in 1,000 villages in 100 districts, targets of the GoI’s priority districts for stunting reduction. One of the requirements of the CfW is that at least 30 percent of development activities funded by *Dana Desa* should be allocated to pay for community wages, to guarantee village level employment. The target beneficiaries for this program are those aged 15 years or over who are unemployed, underemployed, poor or those from households with malnourished children under the age of five. Rather than the UDB/DTKS, village governments have been encouraged to use BKKBN (National Agency for Population and Family Planning) data to identify poor households, together with the village facilitators (*pendamping desa*) to identify the other target groups. Guidelines direct that public consultations be held to determine a lower bound for the community wage rate, while the upper bound must be below the provincial minimum wage.

Initial assessments suggest teething issues concerning targeting, wage-setting and awareness. PKT is less likely to reach the poorest 40 percent of households and is not as pro-poor as other programs. Most participants are male (female participation was low at 9 percent on average) and aged in their 40s (with the median age varying between 42 and 48 years old). Only 8 percent of village heads were aware of the rule to target households with malnourished children, and about 40 percent knew about other criteria such as poverty status (40 percent) and unemployment (42 percent). A similar share (44 percent) of households were unaware of how PKT wages are set, which may help explain why wage-setting rules were not always followed. Twenty-eight percent of participants received wages below the reported lower bound by the village head, and a small share were paid above the upper bound (7.5 percent on average). The considerable variation in outcomes across provinces/districts is also noteworthy. Nonetheless, the majority of villagers (79 percent) thought that PKT was a good use of Village Funds. They also reported an additional income of anywhere from IDR 8,000 to IDR 41,000 extra per day, with 14 to 23 working days per month through PKT. The lack of a robust M&E protocol, or even performance indicators, makes it difficult to assess the program’s impact, including on poverty and the rural labor market.

<table>
<thead>
<tr>
<th>Box 2.1: Who is responsible for social assistance?</th>
</tr>
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</table>

Social assistance is a shared responsibility between central and local governments in Indonesia. Law No. 11/2009 on Social Welfare, which provides the legal framework for social welfare (including social assistance) policy and program implementation arrangements. While the poor and vulnerable often need multiple forms of social assistance support—in cash and in-kind, such as food, health services, and subsidized electricity—the coordination between the multiple programs implemented by various agencies is often challenging. Furthermore, decentralization adds to the complexity of coordination, as both central and local governments share responsibility for the implementation of most, if not all, social assistance programs (see table below).

<table>
<thead>
<tr>
<th>Summary of main social assistance programs</th>
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</thead>
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<table>
<thead>
<tr>
<th>Core program</th>
<th>Description</th>
<th>Number of beneficiaries</th>
<th>Implementing agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sembako</td>
<td>Digital food assistance / voucher program</td>
<td>Total: 15.6 million households.</td>
<td>Ministry of Social Affairs</td>
</tr>
<tr>
<td>PKH</td>
<td>Conditional cash transfer</td>
<td>10 million families</td>
<td>Ministry of Social Affairs</td>
</tr>
</tbody>
</table>

71 Based on collection of field data in 60 villages across three provinces (North Sumatra, Central Java, and NTT) to assess PKT implementation in 2018. See Ralston and Setyonugroho (2019).
2.3 Social Assistance Spending and Coverage

Over the past decade, the GoI has executed several social assistance reforms under which spending on large social assistance programs has grown in real terms. Concurrently, several rounds of reduction in expensive and untargeted subsidies were implemented, and some of the expenditures saved were reallocated (chapter 4) to the social assistance sector through: (i) temporary, emergency, unconditional cash transfers targeted to poor and vulnerable households (BLT/BLSM); (ii) benefit and coverage increases for Indonesia’s education cash transfer program (BSM/PIP); and (iii) introduction and expansion of the conditional cash transfer program (PKH).

![Figure 2.3: Central government spending on household targeted social assistance programs](image)

Since 2015, the GoI has expanded coverage and increased the benefit level for the most effective social assistance programs. In particular, the GoI expanded major pro-poor programs such as PKH (to 10 million families in 2018) and PBI-JKN/KIS (to 96 million individuals in 2019). Both PKH and PIP quadrupled the number of beneficiaries between 2010 and 2017. Importantly, after several years of unchanged overall benefit levels, the GoI doubled PKH’s benefit level in 2019. These changes have increased the allocative efficiency of social assistance spending. Furthermore, replacing the Rastra rice subsidy program with the BPNT/Sembako food voucher program should improve the allocative efficiency of the distribution of rice and eggs to poor and vulnerable families. The CFW program also has the potential to, if even only partially targeted to poor and vulnerable households, contribute to reduced poverty and inequality.

<table>
<thead>
<tr>
<th>PBI-JKN</th>
<th>Health insurance for the poor</th>
<th>96.8 million individuals</th>
<th>Ministry of Health, BPJS-Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIP</td>
<td>Cash transfer for poor and vulnerable students</td>
<td>20 million students</td>
<td>Ministry of Education and Culture, Ministry of Religious Affairs</td>
</tr>
</tbody>
</table>
The health insurance fee-waiver program, targeted to poor and near-poor households, attracts the largest social assistance budget allocation. Spending on subsidized premiums for recipients of the health insurance fee-waiver (PBI) under the National Health Insurance program (JKN), increased significantly to IDR 26.7 trillion in 2019 (from IDR 8 trillion in 2013), following the enrolment of an additional 18 million beneficiaries and an increase in the per-capita premium calculated by the GoI. At the same time, in 2019, spending on the PIP and PKH cash transfer programs accounted for 43 percent of total social assistance spending on major programs, compared with 13 percent in 2012. This marks a positive shift in the GoI’s approach to social assistance and a recognition of the comparative effectiveness of targeted cash transfers versus food distribution programs. Food distribution benefits were also set to become better targeted and more efficient with the completed change from Rastra into Sembako in late 2019.

While social assistance expenditure has increased in real terms, it remains low as a share of GDP and by international comparison. General GoI spending on core social assistance programs, excluding subsidies, more than doubled in real terms between 2009 and 2018, reaching IDR 87.5 trillion in 2018. Nearly 90 percent of total national spending on 10 major social assistance programs is from the central government, with the remainder spent by subnational governments. Total spending on social assistance remains low at 0.7 percent of GDP, which is just less than the average of lower middle-income countries (Figure 2.4). When comparing Indonesia with some of its regional peers in the East Asia and Pacific (EAP) region, the share of GDP for social assistance is similar to countries such as Vietnam and Thailand. This is, however, still lower than most Latin American (LAC) and East Europe and Central Asia (ECA) countries. Global evidence shows that aggregate spending of social assistance (social safety nets) averages just 1.6 percent of GDP, with the average for lower-income countries at about 1.5 percent of GDP.72

**Figure 2.4: Social assistance spending as a share of GDP (percent), selected countries**

<table>
<thead>
<tr>
<th>Country</th>
<th>SA as a percent of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>3.3</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>1.2</td>
</tr>
<tr>
<td>Indonesia</td>
<td>0.7</td>
</tr>
<tr>
<td>Malaysia</td>
<td>0.7</td>
</tr>
<tr>
<td>Philippines</td>
<td>0.7</td>
</tr>
<tr>
<td>Pakistan</td>
<td>0.6</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>0.7</td>
</tr>
<tr>
<td>Thailand</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Source: World Bank ASPIRE and World Bank staff calculations.
Note: Selection based on data availability. Green highlights indicate countries that have similar revenue collection performance as Indonesia, highlighted in orange.

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72 World Bank (2018b).
2.4 Performance and Impact

2.3.1 Incidence

Indonesia’s use of the UDB/DTKS to identify eligibility for social assistance programs has yielded direct improvements in the allocative efficiency of social assistance benefits. Between 2010 and 2014, likely as a result of the adoption of the UDB/DTKS, beneficiary incidence for PKH, PIP, and PBI-JKN to the poorest 20 percent of households increased by 13, 2.5, and 2 percentage points, respectively. This was achieved in a context of expansions in coverage for PKH and Jamkesmas (now PBI-JKN) in those periods, which would usually incur a slight worsening in beneficiary incidence as coverage increases into better off deciles.

Household targeted cash transfer programs have been most efficient in allocating benefits to the poor and vulnerable. As shown in Figure 2.5a, while they target different shares of the population, PKH and PIP allocated 71 and 63 percent of their cash transfer benefits to 40 percent of the population, respectively, in 2018. This would suggest expansion in coverage or increases in the benefit level of PKH would be appropriate policies from an efficiency perspective. In recognition, the GoI has recently opted to invest more in PKH as showcased by expansions from 6 to 10 million families in 2018, and a doubling of the benefit level in 2019.

Figure 2.5a: Allocation of major social assistance program by consumption deciles (IDR billion), 2018

![Figure 2.5a](image-url)

Source: Susenas 2018 and budget data from Ministry of Finance.

Untargeted subsidies however, are by definition less efficiently allocated along the welfare distribution. Despite the overall decline since 2014, spending on energy subsidies has recently increased and remain sizeable (IDR 153.5 trillion or 1.0 percent of GDP in 2018). As there are often no restrictions on the
consumption of a given subsidy, households that are better off tend to make use of subsidies more than poorer households. (Figure 2.5b). At the same time, the value of subsidies for the rich is far less than for the poor, strengthening the argument to either better target subsidies or reallocate subsidy spending into well targeted social assistance programs. Further reallocation away from regressive subsidies toward targeted cash and near-cash transfers such as PKH and Sembako will improve the overall efficiency of social spending.

![Figure 2.5b: Allocation of major subsidies by consumption deciles (IDR billion), 2018](image)

Source: Susenas 2018 and budget data from Ministry of Finance.

**Further efforts are needed to improve targeting and ensure full utilization of the UDB/DTKS in social assistance programming.** Although in principle all major social assistance programs draw beneficiaries from the UDB/DTKS, PBI-JKN has absorbed beneficiaries from a local government variant of the previous program (*Jaminan Kesehatan Daerah*, or Jamkesda). Similarly, PIP has made use of the UDB/DTKS in allocating beneficiaries, but not fully—schools are able to recommend additional students, which may in part explain its lower allocative efficiency *vis-à-vis* PKH. In addition, likely due in part to the continued inclusion of locally proposed PBI beneficiaries and further expansions of programs, the share of the poorest households receiving PBI-JKN and PKH has declined. Only 32 percent of total households receiving PBI-JKN and PKH has declined. Only 32 percent of total households receiving (centrally-allocated) PBI-JKN in 2018 came from the poorest 20 percent of households, compared with 37 percent in 2015. A total of 44 percent of all beneficiaries receiving PKH were in the poorest 20 percent of the population in 2018, compared with 52 percent in 2015. PIP incidence also deteriorated slightly from 38 to 36 percent between 2014 and 2018. While a decline in incidence to the poor is to some extent a result of coverage expansion, full adherence to the use of UDB/DTKS including determining expansion quotas based on district poverty rates is important to improve allocative efficiency. As described further in Chapter 4 expansion of and improvements to the UDB/DTKS should also be considered.

**It is too early to fully evaluate BPNT/Sembako’s allocative efficiency.** March 2018 Susenas data on BPNT show that for urban areas 53 percent of total benefits are distributed to the poorest 40 percent. At first
glance, this does not appear to be a large improvement over Rastra, which allocated 56 percent of total benefits to the poorest 40 percent in 2017. However, it must be kept in mind that BPNT coverage in the 2018 survey data in 44 cities was about 1.2 million households (of which the survey found about 800,000 using survey weights). Given such low coverage and the relatively early stage of implementation, it is too early to conclude that allocative efficiency under BPNT has not improved relative to Rastra. Notably, the value or adequacy of the BPNT benefit has increased significantly: for those households that did receive BPNT, the benefit was much closer (8kg on average) to the designed amount of 10kg of rice, compared with only 5kg (when the designed benefit was 15kg) under Rastra.

### 2.4.2 Effectiveness

There is significant evidence of the positive impact of PKH on consumption and human capital outcomes through behavioral change. It is the flagship CCT program, PKH, that has showed the ability of safety nets to increase access to health and education services. Results from the latest impact evaluation\(^\text{73}\) show that PKH improves welfare and increases consumption of protein-rich food. The mid-line evaluation demonstrated that PKH households experienced a statistically significant 10 percent increase in average monthly expenditures, and the increase was used mainly to buy high-protein foods and to cover health costs. The end-line evaluation results\(^\text{74}\) did not find significant evidence on overall consumption impact, but for protein consumption it found that children aged 18 to 60 months were 10 to 11 percentage points more likely to have consumed eggs. The results of these impact evaluations and potential poverty impact simulations\(^\text{75}\) contributed to the GoI’s recent decisions on coverage expansion and benefit-level increase of the PKH. Statistics Indonesia (BPS) had also stated that the recent drop of about 0.5 of a percentage point in the poverty rate was, in part, due to the expansion of PKH to 6 million beneficiaries.

PKH has also had positive impacts on healthy behaviors with respect to maternal and neo-natal practices. The end-line survey showed that PKH led to a 13- to 17-percentage-point increase in medical professional assisted delivery, and a 5 percent increase in immunization rates. The mid-line evaluation found that PKH improved neonatal visits by 7.1 percentage points, though contrary to the mid-line results (which showed an increase of almost 10 percentage points), there appeared to be no significant impact of PKH on post-natal visits to health facilities in the end-line survey.\(^\text{76}\) PKH has also been shown to reduce suicide rates among farmers in Indonesia.

PKH contributes significantly to improved human capital, as evidenced by positive impacts on household-level outcomes in health and education. The end-line survey found that stunting among PKH beneficiaries declined by 9 to 11 percentage points, as well as an increase of 4 percentage points in enrolment to primary school, which is very impressive given that primary school enrolment is already high. For junior secondary school, enrolment increased by about 8 percentage points. Furthermore, the family

\(^{73}\) World Bank (2011). The original PKH pilot (launched in 2007) was designed to accommodate a randomized, controlled trial (RCT)-based impact evaluation, which involved experimental comparison of two groups of households that differed only in whether they received a “treatment”—in this case, the PKH program—or not. Both a mid-line (2011) and end-line (2013) statistical evaluation have been conducted; the former re-visited families after about three years of experience with the program, and the latter re-visited families after more than six years of receiving the program.

\(^{74}\) Cahyadi et al (2018).

\(^{75}\) Preceding simulations focused on coverage expansion impacts and estimated similar impacts on the poverty head count. World Bank (2018a).

\(^{76}\) The end-line report noted possible explanations as a prevailing belief among mothers that if their delivery went fine, there was no need for post-natal checkups and that some women noted the difficulty in arranging appointments with health-care professionals.
development sessions are raising awareness of families on important human capital investments such as nutrition, early stimulation and breastfeeding.

**There is little information on the implementation or performance of PIP.** Given the continuing high dropout rates between SD and SMP to SMA levels of schooling, the role of PIP should be evaluated and appropriate improvements to its outreach, facilitation and beneficiary support function made to improve the effectiveness of the program. Further improvements could include the direct targeting of out-of-school children, particularly those with disabilities. In line with current discussions within the GoI, a full or partial merge between PKH and PIP could also be considered to strengthen the impact of cash transfers aimed at improving attendance and transition into higher grades (grades 6, 9, and 12), as well as a stronger focus on early childhood education and development (ECED).

**The National Health Insurance Program (JKN) has expanded significantly in a very short time.** The total PBI subsidy is progressive, as 52 percent of the program benefits accrue to the poor and vulnerable population. However, as shown in Figure 2.6, centrally allocated PBI beneficiaries, targeted directly through the UDB/DTKS are allocated more efficiently (58 percent of total beneficiaries found in the poorest 40 percent) than by the local government PBI (47 percent of total beneficiaries found in the poorest 40 percent). This indicates that inclusion errors are much higher in the local PBI component. When viewing utilization of JKN benefits for those who were nominated at the local level, it appears that locally nominated beneficiaries who are poor or vulnerable use JKN less for inpatient health services than those who are non-poor or vulnerable, and also less than poor or vulnerable beneficiaries who were allocated centrally.

**Figure 2.6: The allocative efficiency of PBI subsidies can be improved (central vs local PBI-JKN incidence and utilization by decile), 2018**

In addition, JKN’s M&E system is outdated and does not focus on outcomes at the beneficiary level. The current M&E system has not been able to identify and monitor bottlenecks in benefit uptake and access. In addition, similar to PIP, grievance redress systems remain weak, while existing communication efforts

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77 World Bank (2017a).
have not been effective in addressing the lack of information to beneficiaries, as well as health service delivery points, on the ground.\textsuperscript{78} Going forward, to improve the allocative efficiency of the program and make room for more poor and vulnerable households to receive the PBI, beneficiaries allocated through local government recommendations should be included in the UDB/DTKS, with their welfare rankings calculated to allow for a full eligibility assessment, as is done for the centrally-allocated PBI beneficiaries. Furthermore, the program’s M&S system should be improved to monitor inclusion and exclusion errors/benefit incidence, and access to the JKN programs services.

2.5 Adequacy of the Current Policy Package – de jure and de facto

2.5.1 Benefit level adequacy—the value of the current package

The current “de-jure” social assistance package shows that poor families with children are well covered. Figure 2.7 depicts the “de-jure” adequacy of the benefit of the main household targeted social assistance programs along a welfare distribution. The depiction is “de jure” in the sense that the cut-off points along the horizontal axis represent what the GoI aims to reach with each program, though actual allocations stretch further along the distribution due to inclusion errors. However, in reality very few households with children receive all these benefits (see Figure 2.9 and Figure 2.14).\textsuperscript{79}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure2.7.png}
\caption{The “de jure” value of social assistance benefits up to the poorest 40 percent for households with children designed to receive four of the main programs, 2020}
\end{figure}

Source: Susenas 2018 and World Bank staff calculations.

\textsuperscript{78} World Bank (2017a).

\textsuperscript{79} The adequacy of PKH, BPNT/Sembako and PIP is expressed in terms of the value of the cash transfer or food voucher as a share of household expenditure or consumption. The adequacy of PBI-JKN, though it is a fee-waiver program with no direct benefits provided, can be thought of in similar terms. Put simply, the value of the PBI fee waiver can be constructed as the value of the premium paid for the household by the GoI. This assumes a constant elasticity of demand to access JKN. Another measure of adequacy for PBI-JKN would comprise the utilization of health services compared with the presence of out-of-pocket expenditures persisting despite the notion that health service fees are waived under the JKN program.
By design, the social assistance benefit package for households with children provides a very significant level of protection for poor and vulnerable groups in the poorest 15 percent of the population. In particular, the poorest 15 percent of households entitled to receive PKH should receive an average 19 percent of median consumption in direct cash transfer. This level of benefits places PKH among the more generous of conditional cash transfers in developing countries in the region. Thus, if a household receives PKH, it is receives the minimum level of protection. Adding on PIP, Sembako and PBI-JKN to PKH would render a very adequate package of protection for the poorest 15 percent of households with children, at an average 44 percent of median consumption. For the same group, however, PIP and Sembako benefits each constitute an average of 6 and 9 percent of median consumption. Thus, receiving both PIP and Sembako (about 15 percent of consumption budget supported) or just one or the other, would not provide an adequate package of assistance. The population beyond the poorest 20 percent thus receives a minimal package of protection, and those beyond the poorest 40 percent receive no assistance by design.

In contrast, by design, poor and vulnerable households without children are not adequately protected. Poor and vulnerable households without children are only eligible to receive PBI-JKN and Sembako, not PIP or PKH. If a household received BPNT in 2019, it received the equivalent of about two weeks of basic food support through the provision of 10kg of rice and eggs. The benefit increase in 2020 has allowed for the purchasing of more health food items and comprises about 9 percent of median consumption expenditure. In addition to Sembako, Health services acquired under JKN for fee-waiver recipients (PBI) help to protect covered households from health-related shocks.

Figure 2.8: The “de jure” value of social assistance benefits for the poorest 40 percent of households without children receiving two of the main programs, 2020

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80 World Bank (2020b).
81 The minimum level of protection here is defined relatively as the minimum level of consumption required to bring an average household that is poor up to the poverty line, also defined as the poverty gap index. A potential concern would be labor disincentive effects among recipients. However, the literature has shown that in countries (including Indonesia) delivering cash transfers representing no more than one-quarter of median consumption for beneficiaries, these effects are not present. Banerjee et al (2015). At 2020 benefit levels, PKH delivers around 19% of median consumption in cash transfers for the poorest 15% of the population.
2.5.2 Coverage and Allocative Efficiency

The “de-facto” coverage of programs is different from the “de-jure” picture, and suggests continuing errors of exclusion and inclusion along the welfare distribution. As seen in Figure 2.9, when tracking coverage along the consumption distribution, the actual allocation of programs stretches well beyond the poorest 40 percent.\textsuperscript{82} PBI-JKN is most notable here as it covers the highest share of non-poor and vulnerable, followed by PIP, Sembako and then PKH. PBI-JKN’s large coverage beyond its target group is a function of its large program size (Rastra had similarly high inclusion error rates before it was phased out) and the ability of local governments to nominate beneficiaries under the previous scheme, Jamkesda. A similar arrangement is in place for PIP, which also likely explains, in part, its current rate of inclusion errors.

\textbf{Figure 2.9: Value of benefits and coverage of main social assistance programs, 2019}

Note: Coverage adjustments made: coverage expressed over eligible population and survey coverage inflated to 2019 administrative coverage levels. Sembako coverage is measured using BPNT or Rastra participation variables. It is expected that future Susenas rounds should show lower Sembako coverage among non-target population groups. Source: Susenas 2018.

While targeting errors persist, beneficiary incidence is in line with other large cash transfer programs. In terms of beneficiary incidence, or the share of total beneficiaries found in the poorest 20 percent of the population, PKH’s targeting outcomes are on par and in some cases superior when compared to other countries employing similar targeting techniques to allocate social protection programs (proxy means tests). For example, PKH’s beneficiary incidence compared with similar cash transfer programs in the

\textsuperscript{82} Adjustments are made to fairly reflect administrative coverage over the eligible population (PIP and PKH coverage is expressed as a share of households with at least one child).
region (Figure 2.10) shows that PKH is the most effective at allocating benefits to the poorest 20 percent of the population, even after successfully completing an expansion to 10 million beneficiaries. Noting that the change in the welfare distribution in Indonesia is relatively flat until just about percentile 70 (Figure 2.20), inclusion errors between percentile 40 and 70 are in some sense admissible, given the small difference in welfare status between these population groups. However, technically these programs should be allocated to those more in need, those excluded but eligible in the poorest 15 percent (for PKH), 22 percent (for Sembako) and poorest 40 percent (for PBI-JKN).

**Figure 2.10: Allocation of program beneficiaries of key CCT and UCT consumption quintiles, various years**

![Graph showing allocation of beneficiaries for different programs in various years](image)

Source: ASPIRE and World Bank (2020).

That said, exclusion errors are high, as none of the main programs covers more than 60 percent of the poorest 10 percent of the eligible population. These error rates are typical in developing countries that do not have accurate and verified income data to determine welfare related eligibility. They are in part driven by the likelihood of the UDB/DTKS to not capture the entire poor population but also by PMT model-inherent inaccuracies. Since PMT based targeting methods predict consumption through a range of proxy indicators and cannot explain fully the variation in consumption due to the variation in these indicators, all PMTs will have in-built errors to some degree. A 2016 working paper estimated exclusion errors for a poverty rate of 10 percent and a simulated program covering the poorest 20 percent to comprise 33 percent. Through simulating an increase in coverage of the simulated program up to 50 percent, the exclusion error metric drops to 6 percent revealing that coverage expansion itself reduced inclusion errors but does not eliminate them. In addition to model inbuilt errors, measuring targeting errors themselves through the household survey is itself not without errors (both enumerative and non-enumerative); this in addition to imperfect implementation of PMT-based targeting procedures helps to explain the remaining level of exclusion errors measured in Indonesia for programs such as PKH which covers about 15 percent of the population.

**PKH’s coverage of the poorest 10 percent of the population has improved over time.** In 2014, when PKH covered 2.8 million families, its adjusted coverage of the eligible population in the poorest decile was 22

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84 Survey data often does not capture small programs well; the 2014 administrative data showed 2.8 million families received payments; survey data for the same year only shows 1.4 million families receiving PKH. To reflect actual coverage, the administrative data is combined with beneficiary incidence data from the survey. This is repeated in the same manner for 2018 coverage of PKH throughout the report.
percent. Through coverage expansion up to 10 million and despite a reduction in beneficiary incidence to the poorest 20 percent (from 52 to 44 percent between 2014 and 2018), coverage over the eligible population has increased to 47 percent.

The low allocative efficiency of the local PBI component of JKN leads to a lower overall coverage of the poor and vulnerable. As seen in Figure 2.11 and also in Figure 2.9, through the relatively low targeting accuracy of the local PBI variant of PBI-JKN, a roughly equal share of each group of the population along the welfare distribution receives PBI-JKN through local nominations. This reveals a high error of exclusion for the local component of the program.

**Figure 2.11: Coverage of PBI central versus PBI local components of the JKN program**

Source: Susenas 2018.

2.5.3 Coverage and Inclusion

The elderly in Indonesia is a vulnerable group today and will become increasingly so in the future as the country is rapidly aging. Aging can pose significant challenges to an economy, such as how to render a sustainable provision of health, pensions and long-term care for this group of the population. While Indonesia does not face a shrinking work force yet, the country is aging rapidly and is doing so without the right set of protective tools in place.

Social assistance support for the elderly in Indonesia has been increasing but remains low. Around 36 percent of the elderly are either poor or vulnerable, and around 30 percent are either living by themselves or with another person. This coupled with a low and regressive overall old-age pension coverage (Figure 2.12), makes income security for the elderly a significant concern, toward which the policy response has been inadequate to date. A cash transfer program to help address the risks of old age exists and is implemented by the MoSA. The Social Assistance for the Elderly (Asistensi Sosial Lanjut Usia Terlantar, or ASLUT) is a program for the poor elderly aged 60 years and above, with a physical condition that makes them reliant on other people, have no other source of income, and are not PKH recipients. The monetary

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85 This does translate directly to an exclusion error of 78 percent since overall coverage at that time was lower than total eligible and poor families (about 3.6 million).
assistance is IDR 200,000 per month given once every four months, and was provided to 30,000 beneficiaries in 2017.

Figure 2.12: Total pension coverage among people 65+ by decile, 2018

Source: Susenas 2018, including old-age pension (JHT) and veterans’ pension (Pensiun Veteran).

Recently, PKH has included disabled and elderly household members, which led to significant increases in coverage for both groups. In the first PKH payment phase of 2019, 64,000 persons with disability received a benefit top-up of IDR 2,400,000 a year, while 1.1 million elderly received the same benefit level. The policy is set to continue throughout 2019 and would render a significant level of support to the disabled and elderly living in PKH families and who are not receiving support through ASLUT, or Social Assistance for Persons with Severe Disability (Asistensi Sosial Penyandang Disabilitas Berat, or ASPDB), the disability support program (discussed below). However, these cash transfers are transferred to the family’s KKS card and not to the disabled/elderly themselves, which would have allowed them to access their benefit independently if they so wished.

The significant increases in both elderly and disability benefits through PKH has addressed key gaps, but long-term support to the elderly and disabled should be given more thought. As PKH is a CCT program, current design has families with disabled and elderly members needing to comply with conditionalities to have access to these benefits. Although these conditionalities are not too stringent and are at the moment soft conditionalities, the question of whether conditions should be assigned at all is an important one. This is possibly why the ASLUT is designed as an unconditional cash transfer. In fact, globally there are no large CCT program for the elderly and disabled. Brazil’s Bolsa Familia also included an elderly support component, but it was designed as an unconditional grant, with elderly support cash transfers sent to the elderly within Bolsa Familia households. In addition, poor and vulnerable elderly not living within PKH families would not be eligible for such elderly and disabled transfers through PKH. For these reasons, coverage of the elderly in households with children should be matched with expansions in households that do not have children (see the section discussing options for reform).

Programs to support persons with disabilities are also inadequate. In Indonesia, according to Law No. 8/2016, persons with disability (PWD) refer to those with long-term physical, intellectual, mental, and/or sensory limitations in interacting with their surroundings, and who experience obstacles and difficulties in participating fully and effectively with other citizens based on equal rights. Furthermore, the law classifies disability into physical disability, intellectual disability, mental disability, and sensory disability. Single- or multiple-disability can be experienced by one person. Diagnosis by a medical professional is required to receive disability benefits.
In 2018, there were 7.4 million people with moderate-to-severe disability in Indonesia, representing 2.8 percent of the total population. Other sources suggest the incidence of PWD is around 4 percent. More than 3 million of these people experience more than one type of disability. Visual problems, difficulty in walking/climbing the stairs, and difficulty in memorizing/concentrating are the most common types of disabilities in Indonesia. In addition to people with moderate to severe disabilities, minor disabilities are also observed among the population. In 2018, there were 37.2 million people with a minor disability, that is 14.1 percent of the total population.

The percentage of people with moderate-to-severe disabilities is higher in poor households. The percentage of PWD in the lowest income group (decile 1) is 4.3 percent, while in the highest income group (decile 10) it is 2.1 percent (Figure 2.13). This is possibly because disabilities limit the ability for people to work or go to workplaces. Lack of income could also prevent people from getting proper rehabilitation.

Figure 2.13: Number of persons with moderate to severe disability by consumption deciles, 2018

Source: Susenas, 2018.

Families with disabled young children are disadvantaged, given the high costs of care and medical services. This is particularly so if the caregiver has to give up work or reduce their working hours. School-aged children with disabilities (about 1.5 per cent of the population) are much less likely to be in school due to inadequate access, discrimination, barriers in schools, an absence of assistive devices or the higher costs for families. Families may also keep children with disabilities away from school due to shame or a belief that they will never be productive or independent.

Young people with disabilities are often in an even more challenging position, as they transition from childhood into adulthood and can face difficulties in both employment and independent living. Not only do many enter working life with lower education levels, but they also face discrimination, higher costs in obtaining work, and lower wages even if they do manage to obtain a job. People with disabilities consistently participate less in the labor force than the general population, and most are self-employed.

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86 Susenas 2018f.
87 Estimate from the population census 2010.
88 TNP2K (2019).
This could be due to the significant extra costs involved in accessing work and the discrimination people with disabilities encounter when they are seeking jobs. While legislation is in place for positive discrimination to give people with disabilities access to formal sector employment, it is unclear whether this is monitored or enforced. Disability is a key issue among older people, since at least four out of ten elderly people experience some form of disability and just under 10 percent have a severe disability. This reduces their ability to work and increases the likelihood of having to depend on others, which can place a significant burden on their families.

International experience suggests that provisions for disability benefits for persons who are permanently disabled due to non-occupational causes should be very similar to those for the elderly. In most countries that provide benefits to the disabled, the same basic formula usually applies for severe disability as for old age (a cash amount usually expressed as a percentage of average earnings). Increments and dependents’ supplements are generally identical under the severe disability and old-age programs. Partial disability benefits, if payable, are usually reduced, according to a fixed scale. The system may also provide rehabilitation and training. Some countries provide higher benefits for workers in arduous or dangerous employment. Benefits need to be carefully established, as international evidence also highlights a higher cost of living for families with PWD.

Indonesia has some social assistance benefits for PWD, but both coverage and adequacy of benefits have been low. For instance, the Social Assistance for Persons with Severe Disability (ASPDB) program is provided to people aged 2 to 59 years who are unable to fulfill personal needs, who do not have any other source of income, cannot be fully rehabilitated, and need someone else’s assistance in performing activities. The monetary assistance of IDR 300,000 per month, is given once every four months, and covered just 22,500 beneficiaries in 2017 with a budget of IDR 67.5 billion in 2017. Overall, Indonesia spent only 0.001 percent of GDP investment on elderly and disability grants in 2017. There are ways to render current programs more inclusive of PWD. For instance, PIP could be more inclusive of people living with disabilities by reaching out directly to both in-school and out-of-school disabled children, and render assistance to them via cash transfers and consultative support from social workers through a stronger facilitation system than PIP currently has.

Most people with disabilities of working age are unable to access support from either contributory or non-contributory schemes. In 2017, the Social Security Agency for Employment provided disability or work injury benefits to 112,490 people, while a small number receive disability benefits through the public service pension system. In 2017, around 47,100 people with disabilities (the initial target was 50,000) within the PKH families received an additional but low benefit. Overall, over 90 percent of working-age people with a severe disability are without direct financial support.

2.5.4 Gender Aspects

Global experience and rigorous impact evaluations conclude that the CCT is one type of intervention that shows great promise. Studies indicate that CCTs have yielded positive impacts on seven different gender gaps, ranging from women’s access to health services to enhancing women’s participation in decision-making in service delivery. It is likely that these far-ranging effects are tied to the diverse nature of CCTs, which can make the delivery of the cash transfer(s) conditional on a variety of actions and

89 International Social Security Association (2019).
90 TNP2K (2019).
91 Ibid.
measures. Cash-for-food, food-for-work, and public works have also yielded positive impact on several gender gaps, and these therefore constitute tried-and-tested interventions for tackling gender gaps.

The extent to which social assistance programs have incorporated gender mainstreaming into program implementation and objectives in Indonesia varies, as does their impact on related issues. In PKH and Sembako, transfers are prioritized to women in the families, which may foster a greater role of women in managing household resources. PKH also includes family development sessions training, where women are empowered in the fields of health, family financial planning, and children’s education and protection. Section 2.4.2 summarizes the many positive impacts of PKH on a range of outcomes (including consumption, health, education, etc.) many of which directly (maternal practices, neo-natal practices) and indirectly improve women’s wellbeing. Interestingly studies have found that Raskin also increased the likelihood of schooling for girls who are neither schooling nor working (by about 2.5 percent) and reduced the likelihood of marrying as a child (by about 13 percent), even though the program was not specifically designed to solve these problems. Reductions or delay in child marriage helps promote girls’ education and economic opportunities, which in turn helps break the intergenerational cycle of poverty. Yet others are less positive in their findings. A qualitative study with an unrepresentative sample found that after two years of implementation, PKH had affected neither intrahousehold gender relations nor the relative position of women within the household. This is contrary to Skoufias and McClafferty (2001) who show that CCT has successfully empowered women and increased their status against their husband. On the downside, the Raskin study mentioned earlier found that increased schooling came at the expense of girls’ leisure time, which had to be consequently foregone. PIP and JKN are considered important to achieve gender-related goals, i.e., improve the quality of health and education among girls/women.

Social assistance programs may have positive externalities for women and gender relations that may not be adequately assessed or captured during program design or monitoring. A review of the available literature on the effects of SPJ interventions on gender priority areas by the World Bank found that not surprisingly, there are still many knowledge gaps that exist even in areas where there has been substantial research and in areas that are still unknown territory to policy makers and researchers. For example, PKH may promote women’s participation in informal social-community activities and events. However, the extent to which women can engage in decision-making at the community level is not systematically monitored or assessed.

There is room to strengthen the gender focus of Indonesia’s social assistance programs. With the exception of PKH, social assistance programs focus on targeting women but do not address women’s specific risks and vulnerabilities. Empowerment programs such as KUBE-PKH for example, do not properly recognize that women usually struggle to run a business while taking care of a household. This is coupled with limitations to expand the business through capital loans due to constraints related to education, job and collateral asset requirements. Programs that support child and/or elderly care also strengthen the gender focus of social assistance, especially for women in their prime, also known as the “sandwich generation.” Similarly, citizen interface at local level could ensure that social workers are trained in gender sensitivities, with a mix of male and female staff, since local female staff favor women’s participation.

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92 Baryshnikova and Jayawardana (2019).
93 Ibid.
95 Baryshnikova and Jayawardana (2019)
It is also important to address design issues to avoid unintended gender-related consequences and/or those that reinforce gender stereotypes. Some have argued, for example, that the compliance with conditionalities in CCT programs usually fall onto the shoulders of the woman of the household, resulting in limited labor market participation and reinforcement of social norms. In cases such as this, a solution could be to allow any member of the family to assume the responsibilities of complying with the conditionalities of the CCT program.\textsuperscript{96} The existing design of PKH’s family development sessions is another example of promoting traditional roles of women, and has yet to include modules that could improve women’s voice and agency in the community. Such agency is increasingly important in times where resources are decentralized down to the village level, such as the Village Fund. Ensuring equal access to discussions and decision-making related to local development programs for both men and women would improve the allocation and effectiveness of these resources.

\subsection*{2.5.5 Program Convergence}

Convergence of programs delivered to covered poor and vulnerable households, while improving, is still low (Figure 2.14). The value of PIP and PKH would together account for about 27 percent of consumption expenditure for families living below the poverty line. However, currently less than half of the poorest 10 percent of households with at least one child receive either program, while only one-tenth receive both PIP and PKH.\textsuperscript{97} Adding in PBI-JKN and BPNT or Rastra, just 9 percent of the poorest 10 percent of families receive the full set of programs for which they were eligible in 2018.

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{coverage.png}
\caption{Convergence of social assistance programs in the poorest 10 percent in 2018 was still elusive}
\end{figure}

\textsuperscript{96} See Jones and Holmes (2011) and Arif et al (2011). Unintended consequences are also a common concern w.r.t. public works programs (PWP). Those that provide childcare and child care jobs which most of the time go to women, for example, tend to reinforce occupational segregation. Also, PWP can establish relatively low wages to meet objectives of having large coverage and avoid crowding out private employment. The unintended result is that only women participate of the program while still carrying out all the responsibility of the household while men stay back at home (Ghana). It is not enough to just pay the same wage rate to men and women, but attention also needs to be directed to have a level of wage that is attractive to men. This is because setting a wage that is below the male’s reservation wage and above the female’s reservation wage may induce only women to participate, with men staying at home and not necessarily taking responsibility for household chores.

\textsuperscript{97} Note: This is 6 percentage points more than in 2017; marking a significant increase over previous years. Total families receiving either PIP or PKH increased by 5 percentage points since 2017; both increases are likely driven by PKH’s coverage expansion.
Source: Susenas 2018. The diagram is calculated for the poorest 10 percent of households with at least one child.

**Under PKH, convergence outcomes are markedly better, suggesting that policy efforts to integrate social assistance programs under PKH have been reasonably successful.** As shown in Figure 2.15, families that receive PKH are more likely to also receive other programs, versus a comparison family (a household with one child in the poorest 20 percent). For households in the poorest 10 percent with children, 80 and 55 percent of PKH families receive PBI-JKN or PIP, respectively, in addition to PKH. These outcomes are markedly higher than for reasonably similar families that do not receive PKH.

**Figure 2.15: Convergence outcomes of social assistance for PKH and non-PKH families in the poorest 20 percent of the population, 2018**

Source: Susenas 2018 and World Bank staff calculations.

2.6 Toward an Adaptive Social Assistance System

2.6.1 Social Assistance as a Response to Natural Disasters

Social protection systems are an integral part of the GoI’s strategy toward a comprehensive disaster risk management (DRM). In this scheme, SP supports financial resilience to families and communities by channeling needed resources that can better prepare them for disaster events and ensure faster recovery in human and physical capital and livelihood activities (figure 2.16).

**Figure 2.16: GoI strategy for disaster risk management**
Social assistance programs in Indonesia provide support to the poor and vulnerable before, during and after disaster events. Currently, the MoSA implements seven types of direct assistance in cash for disaster victims: home-building materials, daily life support, household necessities, compensation for death and injury, support to restore livelihood, ex-combatant social re-habilitation, and facilitation of inclusive village. Table 2.2 provides basic information on the first five types and a few similar assistances managed by other entities. The implementation requires that Social Offices of districts/cities prepare a proposal for each purpose on eligible beneficiaries. There are several documentary requirements for each purpose, including the common ones on the beneficiary’s proof of identity, and name/address information.

**Table 2.2: Direct assistance provided to disaster victims**

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Criteria</th>
<th>Benefit level</th>
<th>Recipient</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Home building materials</td>
<td>Three levels of damage: minor, medium, and major</td>
<td>IDR 1 – 5 million for “minor”; IDR 5.5 – 10 million for “medium” IDR 10.5 – 25 million for “major”</td>
<td>A group of 5 to 15 heads of families</td>
</tr>
<tr>
<td>b. Daily life support (food)</td>
<td>Still living in shelters or have returned to home</td>
<td>IDR 10,000 per person*day for up to 30 days but could be extended to 90 days</td>
<td>Individual</td>
</tr>
<tr>
<td>c. Household necessities</td>
<td></td>
<td>No more than IDR 3 million</td>
<td>Family (per KK)</td>
</tr>
<tr>
<td>d. Compensation for heirs</td>
<td>Death certificate due to disaster</td>
<td>IDR 15 million for death; IDR 5 million for severe injury</td>
<td>Heir</td>
</tr>
<tr>
<td>e. Restoration of livelihood</td>
<td>Incapable or less-capable socioeconomic status and small business lost</td>
<td>IDR 5 million</td>
<td>Family (per KK)</td>
</tr>
</tbody>
</table>
However, to be effective and coordinated, the related programs need to be adapted, so that they can be inclusive and flexible in their response to disasters. An effective adaptive SP system provides long-term and flexible support to poor people and affected populations before, during and after disaster- and climate-related shocks. It can help reduce exposure to both current and future climate shocks, and address the structural root causes of poverty and vulnerability, while assisting households to sustain productive livelihoods after disasters and adapting to climate change. Social assistance programs need to increase their capability to respond to shocks by introducing greater flexibility and scalability in program design. Such design adaptation enables faster adjustment in response to post-disaster needs.

Although Indonesia has enacted several laws and regulations that aim to support people during disasters (see Box 2.2), the current social assistance system does not fully accommodate the needs of poor people and vulnerable groups to ‘bounce back’ after a disaster- and/or climate-related shocks. Since poor people have fewer resources, they tend to invest less, if at all, in protecting themselves from disaster- and climate-related shocks, and often depend on traditional social safety nets such as cash and in-kind assistance during emergencies. In a country that faces multiple and frequent natural disasters, and increasing effects of climate change, an adaptive SP system that embodies an integrated, forward-thinking, and preventative approach is needed to address disaster-risk reduction and climate-change adaptation.

Box 2.2: Legal basis for provision of social protection to disaster-affected people in Indonesia

Both Disaster Management Law No. 24/2007 and Social Welfare Law No. 11/2009 stipulate that disaster-affected persons are eligible to receive assistance to help fulfill basic needs. Government Regulation No. 29/2012 on Social Welfare Programming further highlights that social protection is intended to support individuals, families and community groups affected by a disaster.

The Ministry of Social Affairs (MoSA) has issued several decrees on the provision of assistance to disaster victims (No. 1/2013, No. 15/2014 and No. 4/2015). These decrees further stipulate that the provision of social assistance to individuals, families, groups and/or communities that experience social shocks and vulnerabilities due to disasters is necessary to ensure that their survival can be met in accordance with minimum basic needs. This can be done through various means, including the recovery of social psychological conditions, increasing economic capacity, and disclosing information and/or access to social welfare.

Social assistance programs need to increase their capability to respond to shocks by introducing greater flexibility and scalability in program design. Such design adaptation enables faster adjustment in response to post-disaster needs. Conceptually, a program needs to expand horizontally by “scaling out” to nonregular program beneficiaries that have been affected by a shock and/or to expand vertically by “scaling up” to increase benefit amounts at an acute time of need to existing program beneficiaries (Figure 2.17). Vertical expansion is a pragmatic and increasingly common disaster response. Leveraged in this way, existing programs such as cash transfers and public works can be used as conduits to rapidly inject assistance to existing beneficiaries in affected areas. On the other hand, horizontal expansion requires additional investment in more dynamic delivery systems. In addition, social assistance programs can also build the resilience of the poor and vulnerable households before shocks occur. By enhancing beneficiaries’ predictable income, improving their access to basic services, diversifying livelihood options,

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99 Browne (2014).
and sometimes reducing risks directly, various social protection instruments can help break the deleterious cycle of poverty and vulnerability.

**Figure 2.17: Concepts of adaptive social protection**

![Concepts of adaptive social protection](image)


Other countries with large CCT programs have used them to expand both vertically and horizontally, and to act as a “temporary UCT” to disaster-affected populations (see Box 2.3). Social assistance programs, such as PKH, could be adaptive and scalable in response to disaster through three alternative options: (i) increasing benefits to the existing recipients; (ii) extending benefits to new recipients; and (iii) introducing new benefits under the existing programs. In Indonesia, while PKH can enroll disaster victims as per the latest ministerial decree (option 2, above), the scale is small due to its eligibility requirements and, therefore, additional adaptations are needed for the program to play a major role in any disaster response. Indonesia could consider either adding a new component to PKH or rather developing a new program for emergency unconditional cash transfers, which could be made available to both existing PKH beneficiaries and new persons affected by disasters (Indonesia has some experience in this regard, with the BLSM program in the past, see Box 2.4). This new component or program could be available for a limited period (say, six months), after which the component would stop, and the recipients could apply to become regular PKH beneficiaries if they meet the regular eligibility criteria. PKH’s delivery systems, including its enrolment and recertification operation procedures, information system, payment arrangements, and on-the-ground facilitation model could be tweaked or harnessed for this temporary UCT component or program.

**Box 2.3: PROSPERA in Mexico and Pantawid in the Philippines adapt to support disasters**

In September 2017, two major earthquakes struck southern and central Mexico, affecting over 12 million people and damaging over 180,000 homes. The national CCT program that supports about 28 million beneficiaries in poor households was utilized to support families affected by the disaster events. The Government of Mexico conducted assessments of damaged homes and developed a unified database that collated information on geospatial information, details of damage, characteristics of housing, etc. This information was used by PROSPERA to issue UCTs via debit cards to affected populations, in variable payment amounts, depending on the level of damage to the house. New beneficiaries were supported through a fast-tracked activation process and conditionals went on standby. Institutional coordination was strengthened between civil defense authorities and implementation partners of PROSPERA, and a standard operating procedure was developed for PROSPERA to respond to future emergencies.
In response to Typhoon Yolanda in 2013, the Government of the Philippines released the equivalent of US$12.5 million between November 2013 and February 2014—three months after the disaster struck—in unconditional cash transfers to existing beneficiaries of the CCT program, Pantawid. In addition, the existing Pantawid cash delivery platform and national targeting systems helped the World Food Programme and the United Nations Children’s Fund (UNICEF) provide top-up benefit amounts to Pantawid households in affected areas. Emergency support was provided for two months and included the activation of previously agreed-upon legislation to remove the conditionalities of the regular program during states of emergency, Bowen, T. (2015).

Box 2.4: The experience of BLT/BLSM

Indonesia had several experiences distributing cash transfers in response to shocks, mostly of economic nature. For instance, the Bantuan Langsung Tunai (BLT) program had helped supplement consumption for poor households facing unprecedented price increases. In 2005 subsidy cuts raised household fuel prices. BLT, a direct cash transfer in four installments over one year, funded from the implied budgetary savings from subsidy reductions, was in many respects the most significant government response to these programmed increases in fuel prices. It was targeted to the poor households who were benefitting least from the old subsidy regime and most at risk from the negative impacts on consumption from price increases. Over 19 million households—more than one-third of all households in Indonesia at the time—received BLT in 2005, distributed by the post office (PT Pos). A mostly-similar BLT was introduced again in 2008 when international crises in both financial markets and in food prices combined with another domestic reduction to fuel subsidies.

BLT was found to have added cash amounts to a household’s budget equal to approximately 15 percent of regular expenditures in 2005. These transfers were more than enough to cover increased expenditure on fuels. Education, labor, and health outcomes were slightly improved in BLT households. There was even a small spillover effect of BLT on non-BLT household expenditure. However, several delivery channels were noticed. Compressed delivery schedules, insufficient guidelines and incentives, a lack of clear accountability between BLT agencies and operational bodies, poor technology, combined to make implementation problematic. The lack of either a complaint monitoring, information management, or audit system prevented any improvements to implementation in real time or between 2005 and 2008. Efforts were made to arrange less costly access to BLT disbursement locations, but travel times and costs remained elevated.

In late June 2013, and again in November 2014 and 2015, the GoI reduced again existing fuel subsidies and compensated poor and near-poor households with another temporary unconditional cash transfer similar to BLT, called this time BLSM. In 2013, about 15.5 million (the poorest 25 percent, selected through the UDB/DTKS) were targeted to receive IDR 600,000 (about US$53) in two phases, equivalent to about 11 percent of their consumption budget, thus being less generous than the previous BLT. BLSM was executed by the MoSA, also through delivering payments from PT Pos. Compared with the previous BLT (which was targeted through local officials, as UDB/DTKS was not available at the time), BLSM exhibited higher targeting accuracy towards the poorest 20 percent of the population (40 percent in 2013, vs 36 percent in BLSM 2005), though coverage among the poorest was lower (41 percent vs 50 percent in 2005). Overall, BLSM’s accessibility has not improved over BLT. Despite a new card-based ID system for BLSM-eligible beneficiaries, the pathways by which households and individuals learned about and accessed the BLSM process remain the same as in BLT, and beneficiary control over transferred resources remains weaker in 2013 than in 2005/6. For instance, roughly one-quarter of BLSM beneficiaries in the 2013 round indicated that deductions were taken from their transfers.

Future iterations of emergency cash transfers response for economic and natural disaster shocks should learn from the achievements and challenges in implementation from BLT and BLSM.

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100 World Bank (2012a)
101 World Bank (2017a)
Cash-for-Work (CfW) or public works programs have also traditionally been used after disaster events to provide relatively unskilled laborers with short-term employment (Box 2.5). They are used on projects such as debris management and removal, road construction and rehabilitation, and other basic infrastructure projects, such as construction of community centers, and the repair of water supply and sanitation infrastructure. They can provide immediate and urgently needed income transfers to affected populations, while supporting recovery programs to rehabilitate or reconstruct critical infrastructure and public facilities that need to function soon after a disaster. This is a commonly used approach in Indonesia, including in Central Sulawesi Province following the recent earthquake and tsunami, and in Aceh Province after the 2004 Indian Ocean tsunami. In the latter context, 18,000 participants from 60 villages participated in CfW programs to rebuild infrastructure, clean land, and remove corpses.

**Box 2.5: Building disaster resilience in CfW programs**

Ethiopia’s Productive Safety Net Program (PSNP) includes a public works program that helps communities to reduce potential soil erosion and increase water retention by building terraced fields on hilly slopes. This increases groundwater infiltration and enhances flood resilience. Officials conduct weekly site visits to monitor the project and also offer capacity-building programs for participants of the program to upgrade their skills. The program targets female-headed households and provides community creches so that women and caregivers are able to participate. World Bank (2013c). During heightened food insecurity, the program has extended the period of beneficiaries' eligibility beyond the regular six months, as a way of vertical scale-up.

Similar to cash transfers, other in-kind assistance programs could also be adapted to deliver intensified benefits in response to a disaster (Box 2.6). A subsidized food assistance program, Sembako, could be expanded both vertically and horizontally to ensure the food security of disaster-affected populations. There is a consensus that when a country is largely self-sufficient in food provision before and after a disaster, and there is unimpeded access to functioning local markets, cash transfers are a better instrument than the provision of subsidized food. In some countries, poor farmers receive subsidized seeds, fertilizer, and other inputs from government to keep their farming activities viable. These programs could be adapted to provide post-disaster assistance to these farmers and even their better-off peers, particularly when there is a second objective of restoration of farming activities.

**Box 2.6: School feeding program in Mali**

In Mali, the World Food Program (WFP) complements the government’s national school feeding program by delivering free school meals to several hundred thousand pupils. Following the 2012-13 crisis, relating largely to the conflict in the north of the country, WFP topped up the support it provided in three ways: it sometimes offered two meals a day instead of one, extended the provision of meals into the school holidays, or gave some pupils extra rations to take home. This represents a ‘vertical expansion’ as the emergency support served as a top-up to beneficiaries of the existing school meals program. O’Brien et al (2018).

Parametric insurance also offers alternative options to mitigate loss of livelihood for affected communities. As a large share of the poor and vulnerable in Indonesia engage in agriculture and fishery, their risk exposure to certain disasters might be mitigated by parametric insurance. For example, farmer households can be reasonably protected from weather related shocks through agricultural crop insurance, which does not indemnify the pure loss, but ex ante agrees to make a payment upon the occurrence of a
triggering weather condition such as rainfall. Other catastrophic natural events that may easily precipitate a loss include typhoons and tsunamis for fishermen, as well as volcanic eruptions for farmers living with certain radius. The design of the parameters is critical as they need to be independent, verifiable and reported frequently. The potential of this instrument needs to be explored further.

One key challenge is the availability and speed in disbursement of the budget allocated for disaster response, which has effectively limited the reach of existing support to those affects by disasters. As shown in Chapter 1 (and with the exception of the catastrophic Aceh disaster in 2004), every time major natural disaster has hit Indonesia, the damage costs have exceeded US$1-2 billion a year. Overall, budget allocation to ameliorate these damages are inadequate, as well as access to insurance or pooling funds. Moreover, this budget constraint is compounded by the cumbersome budgeting process, which can take months to disburse. The Disaster Risk Financing and Insurance Strategy, which is being prepared by the MoF, has proposed to establish a “pooling fund” to consolidate contingency funds for disaster response and will also include the pre-determined disbursement mechanism linking with adapted SP programs. The GoI has also launched the National Disaster Management Master Plan 2015-45, which advocates budget allocations to build the resilience of people and communities against disaster- and climate-related shocks by increasing community awareness and investments in disaster-risk reduction for poor households.

Investing in mobile technology and data management can also enhance the capacity to prepare and respond to disasters. For example, mobile phone technology could disburse cash transfers and send messages for early warnings and communication of disaster-risk awareness. The UDB/DTKS has been utilized by various major SP programs for beneficiary selection. However, it is not suitable for beneficiary selection in the disaster situation. By design, it has only bottom 40 percent population, while disasters typically will affect the poor and non-poor who live in the same communities. Therefore, the UDB/DTKS needs to cover a much higher proportion of population (70 to 80 percent) to be able to serve as the basis for disaster response. Before the UDB/DTKS could reach the higher coverage, the Population Registration data (SIAK) could fill the gap. As the majority of Indonesians have the unique identity number (NIK), the UDB/DTKS and SIAK can establish a data-sharing mechanism to support the disaster-response needs.

2.7 Improving Social Assistance Coverage and Adequacy for Future Needs

To support Indonesia’s 2045 Vision, reforms to the social assistance system can help to ensure that it meets the expected demands of the future. To facilitate sustainable poverty reduction, reduced vulnerability and increased human capital, in the short to medium term, while the social insurance system matures, the safety net can be extended further along the welfare distribution and to additional vulnerable segments of the population. The linkages and lines between social assistance and social insurance should be made more explicit, facilitated by a broadening of the social registry and beneficiary registry interoperability. As this chapter has shown, there are uncovered gaps in social assistance along the lifecycle, primarily for the elderly and disabled who are currently poor or vulnerable. While the nascent pension scheme (JHT) is designed to protect the current working-age population from old-age poverty in the future, the 5.4 million elderly and 3.5 million disabled who are poor or vulnerable today will be unprotected from old age-related shocks if safety nets do not cover them.

A range of policy options to fill current gaps can be considered along a trajectory. A SP simulation model anchored in the Commitment to Equity (CEQ) methodology is used to simulate impacts of three policy options. These are:
(i) integrating the PKH and PIP programs;
(ii) increasing coverage of PKH and Sembako with tapered benefit levels; and
(iii) extending social assistance coverage to poor and vulnerable elderly and disabled.

To remain compatible to the rest of the report, resultant coverage by decile is presented in disposable income deciles. The impacts discussed however account for the net impact of both taxes and transfers at the household level (such as existing value-added taxes and excise), thus providing a more accurate view of the impacts of these fiscal policies on household welfare. In addition, the impacts presented are subject to growth and inflation outcomes, which would affect poverty reduction estimates by up to +/- 25 percent of magnitudes estimated.102 The impact measures are indicative, not exhaustive, in magnitude and can help predict how a range of policies could affect welfare and coverage. The options are presented in a path dependent policy trajectory, with policies building upon the previous ones, as follows:

A. **Consolidating cash transfer delivery** - Integrating PKH and PIP.

B. **Extending the safety net** - Increased coverage of PKH and Sembako with tapered benefit levels.

C. **Fostering protection along the lifecycle** - Cash transfers to poor and vulnerable elderly and disabled.

### 2.7.1 Policy Scenarios

A. **Consolidating cash transfer delivery** - Integrating PKH and PIP

PKH and PIP broadly target the same group of households, but convergence among the programs is relatively low. PKH’s education component and PIP are very similar instruments in objective and design. But neither the implementation of PIP nor convergence of PIP beneficiaries with PKH (Figure 2.14) has been adequate. At the same time, PKH’s delivery systems (targeting procedures, facilitation, payment delivery, M&E) are much more sophisticated. Although PIP covers about 5 million more households than PKH, overall allocative efficiency is less pro-poor than PKH (Figure 2.8). In addition, PKH beneficiaries are assigned to facilitators and offered more support overall, compared with PIP beneficiaries.

An integrated PKH and PIP would lead to higher coverage among the poor and a more adequate benefits package. Merging the two programs would increase coverage among the poor by about 10 percentage points compared with the current coverage for PKH or PIP by themselves, due to PKH’s relatively superior allocative efficiency and inclusion of non-PKH receiving PIP households into PKH. Through the integration of these programs, current households in the poorest 10 percent receiving only PIP benefits would also see increase in the average benefit received, from 7 percent of median consumption to a much more adequate level of benefits: 21 percent, triple the current level for PIP recipients on average. In terms of design of such a merger, attention should be paid to ensure that poor and vulnerable families that are eligible for either program are not excluded incorrectly. Administrative costs in running PIP, though already small, would also be saved. From an efficiency standpoint, based on simulations using the commitment to equity model, phasing PIP into PKH could yield about a 3 percent reduction in the poverty headcount.

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102 In the case of Model B this would indicate the impact could vary between 24 and 39 percent, and behavior at the household level (changes to the marginal propensity to save, for instance).
PIP beneficiaries who do not receive PKH could become PKH beneficiaries with a graduation bonus when changing school level. Given that about 30 percent of PIP recipients already receive PKH, an about equivalent amount of the budget could be turned into a graduation bonus cash transfer, for children who continue school between SD, SMP and SMA. This would help the GoI to address lingering drop-out rates between these levels of school, which are most pronounced for poor and vulnerable families. PIP beneficiaries who already receive PKH would remain PKH beneficiaries and could receive in addition a transition bonus when increasing school level. In addition, to maintain the allocative efficiency of PKH, PIP beneficiaries with UDB/DTKS percentiles above a certain threshold (60+ for instance, pending sensitivity analysis) could be removed from the PKH-PIP program merger if they are considered well off enough. For this to be implemented, strong grievance mechanisms would need to be in place to allow those excluded automatically to voice grievances and request for re-surveying of their proxy welfare indicators, and potentially, re-inclusion into the program if an error of exclusion is established.

The implementation arrangements would best be shared between the MoSA and the MoEC/MoRA. In line with current arrangements under PKH, the MoSA could be responsible for outreach and registration, payment, complaint-handling, M&E, and compliance verification for pre-school (PAUD). The MoEC and the MoRA could be responsible for compliance verification of all program recipients related to school enrolment, attendance, transition, and academic achievements across all levels, in regular and madrasah schools, respectively. Information-sharing mechanisms between the MoSA and the MoEC would have to be established to ensure that benefit payments are contingent on compliance to conditionalities.

B. Expanding the safety net – Increase coverage of PKH and Sembako to vulnerable populations with tapered benefit levels

While poverty has been on the decline, around 20 percent of Indonesia’s population remains non-poor but vulnerable to becoming poor.103 There is also considerable movement between the poor and vulnerable populations, and evidence has shown that half of the poor in a given year were not poor the year before. Shocks that are unmitigated through social assistance or insurance resulting from illness, disease or unemployment, will affect the disposable income of those who are vulnerable or even non-vulnerable, and can cause these people to fall into poverty.104 Furthermore, the vulnerable population is not necessarily more economically secure than the poor. A large share of the vulnerable is not insured against health shocks (40 percent, the same rate as for the poor) and they are not likely to be formally employed (just 27 percent and 36 percent, respectively, of the poor and vulnerable are formal workers).105 The vulnerable segment of the Indonesian population is therefore only slightly better off than the poor. This claim is supported further by the relatively flat slope of the consumption distribution (Figure 2.18), meaning that households below the vulnerability line but above the poverty line only have slightly higher welfare levels than those below the poverty line.

Households without children are also inadequately protected, as by design they are eligible to receive only Sembako and PBI-JKN. They are by design protected from health shocks and may receive only a basic food security package. For this group, raising the adequacy of Sembako in the first instance, followed by inclusion under other programs such as skills development (given the differences in needs and

103 Poverty in 2019 stood at 9.2 percent, while the last available estimate on vulnerability is from 2018, at 20 percent. Inequality has fallen from previous years and stands at a Gini coefficient of 38
104 World Bank (2016a).
105 Defined as not being an employee with a contract, being self-employed and working without the support of permanent workers, as per BPS old informality definition.
vulnerabilities) would render a much-needed layer of protection. At the current level, households are provided with the equivalent of 10kg of rice per month, which provides a quarter average consumption of rice (consumption estimates range from 87kg to 124kg per person, per year) for a poor household. However, this benefit would provide only the minimum level of food security to such households. As per the plans at the time this simulation was designed, the GoI planned to increase the benefit to IDR 135,000, up from the current IDR 110,000\textsuperscript{106}. In addition, under the GoI’s National Strategy to Accelerate Stunting Prevention (StraNas Stunting), there are plans to introduce a wider spectrum of food items, including potentially local staples, such as corn, sago, meat (beef/chicken/fish), beans (such as tofu/tempe), and fruit and vegetables for families with children between 6 and 24 months old. However, households without children would still receive a relatively small package of assistance.

**Expanding the social safety net further could increase inclusion and address current coverage gaps.** Given that about half of the poor were vulnerable last year and that around a quarter of Indonesians experienced poverty at least once over three years,\textsuperscript{107} there is a clear policy rationale to extend core social assistance coverage beyond the current level of 15 to 20 percent of the population, using Sembako as the backbone. In addition, further coverage expansion, combined with strengthening the targeting system’s ability to identify inclusion errors, will increase the number of poor and vulnerable included in the current array of programs, further reducing poverty, vulnerability and inequality. As shown in previous sections, inclusion errors of the Indonesian flagship cash transfer are relatively low. While expanding social assistance would potentially lead to increased inclusion errors, exclusion errors of the poorest 10 to 20 percent would fall significantly around the same eligibility threshold, thus rendering social assistance much more inclusive just through the expansion of social assistance itself. Thus, to protect both the poor and the vulnerable, while reducing poverty, vulnerability and inequality further, the safety net should be extended further to the poorest 15 to 25 percent of the population. Ideally, such a package of cash transfers would consist of one unconditional (Sembako) and one conditional top-up (PKH) to ensure that all family compositions are adequately covered.

**Figure 2.18: Median annual household consumption distribution, poverty, vulnerability and program target coverage rates**

![Figure 2.18](image-url)

Source: Susenas 2018.

\textsuperscript{106} The benefit value of Sembako was later raised to IDR 150,000

\textsuperscript{107} World Bank (2014).
The value of an extended cash transfers package could be tapered and anchored to welfare levels relative to mean consumption at the vulnerability line. Current benefit levels for programs aimed at the poor are enough to bring the median poor household above the poverty line. If coverage is extended further, benefit levels can be adjusted such that they treat vulnerable households equally with respect to the vulnerability line. The implementation of a two-tiered tapered cash transfer could be achieved with relative ease; households below a predicted welfare threshold (percentile 15) would receive benefits as per the current design while households between percentile 16 and 41 would receive an adjusted package of benefits commensurate with their position relative to the vulnerability line.

To take into account their relative position from the vulnerability line, cash transfers are determined at a two-tier level. The first tier takes into account the value of PKH and Sembako (BPNT at the time of simulation) transfers as of 2019, which were sufficient to bring the median poor households above the poverty line. The second tier views the position of the median vulnerable household with respect to the vulnerability line and determines a package of protection that is enough to bring those households above the vulnerability line. To bring the median vulnerable household above the vulnerability line (1.5 times the poverty line), a cash transfer package worth about 60 percent of the current PKH benefit level could be offered to vulnerable families in consumption decile percentiles 16 to 40. In our modeling, Sembako benefit levels are adjusted to IDR 135,000 for existing households that receive PKH and doubled to IDR 220,000 for households that do not receive PKH because they are not eligible for it due to not having children in the household.

The benefit levels are considered adequate as they bridge the gap in consumption faced by the median household relative to poverty and vulnerability lines. For the median poor and vulnerable household, the difference between median consumption and the poverty and vulnerability line comprises 18 and 11 percent of each line, respectively; it indicates that many households are clustered near these lines and that through coverage expansion especially, a larger share of these households can be brought above these lines. This would significantly reduce the likelihood of these households falling into poverty, on average. An expanded\textsuperscript{108} PKH and BPNT/Sembako would appear as shown in Figure 2.19.

In summary, providing a more adequate package of protection could be done by extending current programs, such as PKH and Sembako, and adjusting their benefit levels. This would result in a much larger share of the poor and vulnerable being covered with social assistance. Notably, coverage among non-poor and non-vulnerable populations (about decile 4 and upward) would be significantly higher as well, assuming no improvements are made to the targeting system to address inclusion errors.

Figure 2.19: PKH and Sembako coverage for both the poor and vulnerable population: 40 percent coverage rate, disposable income deciles

\textsuperscript{108} a simulated PMT model was used to estimate where new beneficiaries would be allocated, taking into account targeting performance of existing programs – for Sembako/BPNT, KKS beneficiary incidence was used as a baseline given the low coverage of BPNT in 2018 March survey data.
A doubled Sembako benefit for households that are ineligible for family-based assistance programs, in addition to an expansion of Sembako to cover 40 percent of the population, could reduce poverty by 19 percent at a total cost of about IDR 64 trillion. As per current policy in 2020, the additional benefit could be spent to purchase more rice of higher quality, as well as eggs and potentially other food items. Taken together, the policy changes of expanding both the PKH and Sembako programs with altered benefit levels would render an increased level of protection for households both with and without children. Direct reductions in the poverty rate would amount to reducing poverty by about 31 percent from the current rate, all else being equal. Vulnerability would decline by about 9 percent and the Gini coefficient would reduce about 1.4 points. These significant impacts would come at a total cost of IDR 124 trillion, a significant departure from current spending of about IDR 55 trillion on PKH and Sembako. However, the expansions are expected to be relatively short term in nature, as coverage needs will decrease again as Indonesia continues to grow and both poverty and vulnerability decline.

C. Fostering protection along the life-cycle – Cash transfers to poor and vulnerable elderly and disabled

*Extending cash transfers to 70 percent of the poor and vulnerable elderly*

The provision of a cash transfer to the poorest 70 percent aged 65\(^\text{109}\) and above would improve protection, and reduce poverty and vulnerability further. The poor and vulnerable elderly are among the least-protected group in Indonesia today. They are, at the same time, the least likely to able to support themselves through waged employment and are therefore most in need of an adequate safety net. As shown in Figure 2.20, a significantly greater share of elderly poor and vulnerable people would receive adequate support compared with the current situation. The coverage figures presented here include elderly covered through PKH, once expanded to reach 40 percent of the population, but also those who do not live in households eligible for PKH up to 70 percent of the population. Although not included in this simulation, those elderly that receive elderly support through other means (private pensions, civil service pensions) would not receive this type of support. Screening these people out, around the 7\(^\text{th}\) decile and

\(^{109}\) 65 will be the final retirement age, as set out in Law No. 13/2003 on Manpower.
upward, would ensure social assistance and social insurance programs remain incentive-compatible and do not become duplicative. Taken together with scenario A and B, scenario C1 would reduce overall poverty by 41 percent from the current level. Vulnerability would be reduced by 12 percent and inequality would fall by a total of 1.8 Gini points. This would come at a combined cost of IDR 145 trillion.

**Figure 2.20: Share of the elderly aged 65 and older receiving social assistance, disposable income deciles**

[Bar chart showing share of the elderly aged 65 and older receiving social assistance across disposable income deciles.]


**C2 Extending cash transfers to 70 percent of the poor and vulnerable people living with disabilities**

Similarly, people living with disabilities are more often poor or vulnerable due to their relative disadvantage in finding work opportunities at the same level as those not living with disabilities. Today, 13.6 and 36.9 percent of people living with disabilities are poor or vulnerable, respectively. Providing this group with an adequate package of social assistance, using current benefit levels of the ASPDB program, would protect these groups and their families from poverty. The impacts expected from this, in addition to those resulting from Model A and B, would comprise a 32 and a 10 percent fall in overall poverty and vulnerability, respectively. Inequality as a result of this trajectory of policy changes would fall by 1.4 Gini points. The total cost of this model would reach IDR 129 trillion. These impacts are lower than described in C1 due to the overall lower amount of people receiving benefits under a 70 percent coverage of people living with disabilities program. Coverage as a result of extending assistance to 70 percent of the poorest of people living with disabilities, in addition to those disabled living within PKH families once it is expanded to cover the poorest 40 percent, would result in a significant level of coverage and protection, as shown in Figure 2.21.

**Figure 2.21: Share of the disabled receiving social assistance, disposable income deciles**
Policies that lead to increased inclusion, coverage and adequacy of social assistance programs could lead to further reductions in poverty (to around just under half the current level, all else remaining equal), vulnerability (by about 12 percent), and inequality (reduction in Gini coefficient by about 1.8 points). Through successive models A and B and including C1 or C2 in Table 2.3, impacts due to increases in adequacy and expansion of programs, up to 40 percent of the general population and up to 70 percent of the elderly and disabled population, both existing and new are modeled. The discussions here concern PKH, Sembako, PIP and elderly and disability assistance programs. At the maximum, these additional social assistance policy options will cost about 1 percent of 2018 GDP, about 0.5 percent over the existing level of spending, just for PKH, BPNT/Sembako and PIP. If these models were introduced over the course of three years, the additional spending as a share of GDP would need to increase by 0.3 of a percentage point each year. As shown in Chapter 4, this level of spending can be achieved through several financing strategies.

### Table 2.3: Cumulative estimated impacts of social assistance reforms

<table>
<thead>
<tr>
<th>Model</th>
<th>Components</th>
<th>Poverty rate</th>
<th>Vulnerability rate</th>
<th>Inequality (Gini)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Merging PIP with PKH</td>
<td>-4%</td>
<td>-1%</td>
<td>-0.0</td>
</tr>
<tr>
<td>B</td>
<td>Expand PKH, Sembako to 40% coverage with tapered benefit levels</td>
<td>-31%</td>
<td>-9%</td>
<td>-1.3</td>
</tr>
<tr>
<td>C1</td>
<td>Expand elderly assistance to 70% coverage</td>
<td>-41%</td>
<td>-12%</td>
<td>-1.8</td>
</tr>
<tr>
<td>C2</td>
<td>Expand disability assistance to 70% coverage</td>
<td>-32%</td>
<td>-10%</td>
<td>-1.4</td>
</tr>
</tbody>
</table>

Note: The impact estimations for model B, C1 or C2 are cumulative and include the previous models within them. The impacts are indicative and subject to change due to the headline growth, inflation as well as the incidence of growth and inflation across the welfare distribution. Through successive models A and B and including C1 or C2 in the table, impacts due to increases in adequacy and expansion of programs, up to 40 percent of the general population and up to 70 percent of the elderly and disabled population, both existing and new are modeled.

Compared to the current situation, with around 60 percent of the poorest 10 percent receiving at least one program (PKH or BPNT), an expanded social assistance scenario would see 90 percent of the poor

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\(^{110}\) The benefit level of the simulated package of direct transfers for the poorest 15 percent is kept as it was in 2019, at about 28 percent of median consumption, the adequacy of the simulated package for the poorest 16 to 40 percent set to comprise 11 percent of median consumption—the level of benefits required bring the average household in that group above the vulnerability line.
receiving at least one program (among PKH, Sembako or elderly or disability support). Such a safety net would thus be much more inclusive and protective than the current one. Over time, it is expected that the social assistance coverage can be scaled back again, as growth continues, the middle class grows, and an increasing share of the population is covered by social insurance.

2.7.2 Other Recommendations

Core social assistance programs could also be adapted for a more effective response to natural disasters. While there are multiple kinds of disaster-response assistance provided by multiple government agencies to disaster-affected populations, this assistance is mostly designed and operated separately from the core social assistance programs, and is often not timely due to the process of budget reallocation. The country’s SP system, especially social assistance programs, can be adapted to build resilience among the poor and vulnerable population, to better support disaster victims to meet basic needs, and to rebuild their life back faster. The GoI has recently developed a Disaster Risk Financing and Insurance Strategy, which aims to establish a dedicated “pooling fund” to more efficiently manage a budgetary allocation for disasters. Furthermore, the strategy calls for protecting households and the poor through social assistance programs directly linked to the pooling fund for predictable post-disaster assistance. To ensure better disaster response, both social assistance program design and program delivery systems need to be adapted. For example, topping up benefits for existing social assistance program beneficiaries, and temporary expansion of programs to cover new beneficiaries that are affected by disasters, should be explored but will require program design to become more flexible. In addition, the UDB/DTKS needs to take an innovative approach to ensure swift data collection and rapid needs assessments of disaster-affected populations.

For a more comprehensive response, social assistance programs would need to increase their capability to respond to shocks by introducing greater flexibility and scalability in program design. Such design adaptation enables faster adjustment in response to post-disaster needs. Conceptually, a program needs to expand horizontally by “scaling out” to non-regular program beneficiaries who have been affected by a shock and/or to expand vertically by “scaling up” to increase benefit amounts at an acute time of need to existing program beneficiaries. Vertical expansion is a pragmatic and increasingly common disaster response. Leveraged in this way, existing programs, such as cash transfers and public works, can be used as conduits to rapidly inject assistance to existing beneficiaries in affected areas. On the other hand, horizontal expansion requires additional investment in more dynamic delivery systems. In addition, social assistance programs can also build the resilience of the poor and vulnerable households before shocks occur. By enhancing beneficiaries’ predictable income, improving their access to basic services, diversifying livelihood options, and sometimes reducing risks directly, various SP instruments, including social assistance, can help break the deleterious cycle of poverty and vulnerability.

Indonesia’s objectives of social assistance should thus incorporate addressing disasters and climate change, in addition to poverty and inequality reduction. It would be beneficial to develop an Adaptive Social Protection Framework, which could form part of a comprehensive approach to disaster resilience, risk reduction and disaster response. The framework would need to lay down the flexibility and scalability needed to quickly expand and contract programs depending on the needs, including program design elements (e.g., coverage, benefit level, and type of assistance), institutionalized coordination mechanisms between key stakeholders, as well as pre-determined procedures and processes. This framework would also ideally link with the financing channeling rules, to ensure a rapid response to disasters and climate-related shocks. It should also explore more transformative measures to promote building long-term
disaster resilience, to target high-risk disaster-prone areas, and to advocate additional protection for vulnerable groups, including people with disabilities and those displaced or orphaned by disaster events.

**Strengthening social assistance contributions to human capital**

Social assistance programs play a key role in supporting Indonesia’s human capital development. As shown earlier in this chapter, both the PKH and BPNT programs have had significant impacts on human capital development in Indonesia, and both form core parts of the GoI’s Strategy to Accelerate Stunting Prevention (StraNas). Two impact evaluations of PKH showed that the program expanded access to health care among beneficiaries, increased child immunization rates and neonatal visits, and led to a 2.7 percent reduction in severe stunting. Children in PKH households were also 8.8 percent more likely to transition from primary to secondary school than children from non-beneficiary households. However, more can be done. For example, there is currently very limited connection between social assistance programs and early childhood education. This is an important entry point, because the architecture of the brain forms from the prenatal period to age five, and so this is an important stage for developing cognitive and socio-behavioral skills. During this period, the brain’s ability to learn from experience is at its highest level. Experiences and learning during this period directly affect achievement in adulthood. If this window is missed, building skills becomes harder. Indonesia’s SP programs can also do more to facilitate access to productive employment that deploys human capital. This may include livelihoods programs that create income-generating opportunities and active labor market programs that enhance the skills of the existing workforce and enhance the abilities of entrepreneurs.111

Indonesia has modernized the delivery of food assistance. Similar to other countries in the region, most notably India and Sri Lanka, Indonesia’s social assistance policy focused on food distribution from the start. Raskin, now Sembako, was launched in 1998 with the initial purpose to stabilize the price of rice by distributing excess supplies to the population. Over time, efforts were made to target the distribution to the poor and vulnerable. However, significant leakages and local norms on horizontal equity led to low overall effectiveness of the program.112 In line with global trends,113 the GoI began to reform Rastra toward BPNT/Sembako to address leakages, but has to date shied away from converting the program to a cash transfer entirely. Overall, the share of spending on food assistance has declined, from 52 percent in 2005 to just 13 percent in 2018.114

However, in the longer term, Indonesia may benefit from providing social assistance exclusively via cash transfers. Regionally, cash transfers are the preferred instrument, as just between 11 and 13 percent of programs in East Asia, South Asia and the Pacific regions deliver benefits in the form of food.115 Indeed, in the right setting, cash transfers promote choice and empowerment, while also generating local economic multipliers. On the delivery side, technological advances already wielded in Indonesia mean that delivering cash is much more cost effective than delivering food. Global experimental evidence has indicated that on average cash transfers are more cost effective at delivering resources than in-kind alternatives.116 While it may be deemed too early right now to switch away from food-based assistance, in part due to the high level and volatility of food prices and its relation to poverty, this is something to be explored in the future, especially in the absence of regular indexation of cash transfer benefit levels.

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111 Betcherman and Moroz (2018).
112 World Bank (2017a).
113 Timmer et al. (2017).
114 MoF Budget data.
115 World Bank (2020b).
2.8 Summary and Conclusions

This chapter has documented the notable progress in expanding social assistance benefits to the majority of the poor in Indonesia. The progress has been steady, with a diverse package of assistance to address several priorities, including food security, the human capital of children, and assistance for people with disabilities. Nonetheless, further progress is required to ensure a minimum package of assistance to all poor and vulnerable, including families without children and the elderly.

Simulations presented here show that this is an objective that is feasible and achievable in the long run. It would also not necessarily need untenable resources, which is still a challenge for a large middle-income country such as Indonesia. Reallocation of benefits by avoiding duplications and exploiting synergies, such as a merger between PKH and PIP, would achieve more with a similar budget envelope. Extending effective coverage to the poor and vulnerable elderly, and the disabled, would require additional resources, but as the following chapters argue, it is possible by improving tax collection and coherence of the SP system.

The social assistance system could also be strengthened to play additional needed roles, such as disaster mitigation and response, increasingly relevant for a natural disaster-prone country such as Indonesia. Similarly, programs should be more gender responsive, by tackling challenges that predominantly affect women. These functions can be expanded in parallel to make the overall social assistance system more inclusive and effective.
CHAPTER 3: Rethinking Social Insurance in Indonesia

3.1 Introduction and the evolution of social insurance in Indonesia

Social insurance can help households and individuals to weather major shocks that affect most of the population. These include those related to the cost of medical procedures, unemployment, disability, death and old age. While social assistance aims to lift people out of chronic poverty, effective social insurance allows households to smooth consumption over the lifecycle. By pooling risk, it mitigates the impact of shocks at a reasonably low cost relative to alternative coping mechanisms such as self-insurance, borrowing or selling assets. Furthermore, this protection allows individuals to invest in their human capital and livelihoods, instead of saving for precautionary reasons.

Indonesia’s social insurance system is relatively young. Civil servants were the first to be covered for pensions and health insurance in the 1960s, and only in the past two decades have programs for private formal sector workers been consolidated. Law No. 3/1993 on Employment Social Security mandated PT Jamsostek as the administrator, offering work accident benefit, life insurance, and old-age savings. The programs were limited to formal, private sector workers and covered only a small part of the population. An important shift took place when the Government of Indonesia (GoI) issued Law No. 40/2004 on the National Social Security System. Law No. 40/2004 was meant to be the basis for the redefinition and integration of the fragmented social security system (Figure 3.1). It mandated that social security be made accessible not only to salaried formal workers, civil servants and military personnel, but also to those in the informal sector. Law No. 40/2004 introducing the Sistem Jaminan Social Nasional (SJSN) was reinforced by Law No. 24/2011, which laid out the institutional details of the future social security system.

As implementation guidance, the GoI issued ‘roadmaps’ for SJSN Health and SJSN Employment, respectively. Meanwhile, Law No. 24/2011 mandated the establishment of BPJS Kesehatan (BPJS Healthcare) and BPJS Ketenagakerjaan (BPJS Employment) to administer SJSN Healthcare program and SJSN Employment program, respectively. Both BPJS agencies are non-profit public legal entities. BPJS Healthcare started to offer the health insurance program on January 1, 2014, while BPJS Employment started the SJSN Employment covering the risks of old age, disability, death and work injury on July 1, 2015.

SJSN extends the protection against health-related shocks to all Indonesian workers, formal and informal alike. In contrast, the other types of insurance are mandated on certain subsets of workers. BPJS Employment manages four programs, namely work-related accident benefit (Jaminan Kecelakaan Kerja, or JKK), death benefit (Jaminan Kematian, or JKM), old age savings (Jaminan Hari Tua, or JHT), and pension (Jaminan Pensiun, or JP). All salaried workers can participate in all four programs offered, but the non-salaried workers can only participate in three of them, excluding pension.

<table>
<thead>
<tr>
<th>Program</th>
<th>Broad purpose</th>
<th>Targeted coverage</th>
<th>Coverage of the eligible</th>
<th>Amount of contribution</th>
<th>Benefit description</th>
<th>Implementing Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>JKN (social health insurance)</td>
<td>Preventing health shocks</td>
<td>268 million people1</td>
<td>223 million; 83% (2019)</td>
<td>5% of monthly income (salaried) or IDR 42,000-IDR 160,000 (non-)</td>
<td>Health service fee waiver</td>
<td>BPJS Health</td>
</tr>
</tbody>
</table>

117 This was done under Presidential Regulation No. 74/2014.
### Table: Social Security Benefits in Indonesia

<table>
<thead>
<tr>
<th>Program</th>
<th>Description</th>
<th>Coverage</th>
<th>Contribution To Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>JKK (work-accident benefit)</strong></td>
<td>Health service and cash benefit for work-related injury and/or fatality</td>
<td>0.24%–1.75% of monthly income</td>
<td>Medical treatment, home care services, and cash benefit</td>
</tr>
<tr>
<td><strong>JKM (death benefit)</strong></td>
<td>Cash benefit to beneficiary (heir) in the event of death of the participant</td>
<td>17.8 million; 15% (2017)</td>
<td>Death grant and funeral grant of IDR 42 million and children scholarship up to 174 million</td>
</tr>
<tr>
<td><strong>JHT (old-age savings)</strong></td>
<td>Ensuring participant has savings when entering retirement or in the event of total permanent disability</td>
<td>15.4 million; 12% (2018)</td>
<td>Lumpsum cash payment upon retirement</td>
</tr>
<tr>
<td><strong>JP (pension)</strong></td>
<td>Ensuring decent living conditions for participants post-retirement or in the event of total permanent disability</td>
<td>45 million people</td>
<td>Monthly cash payment</td>
</tr>
</tbody>
</table>

**Source:** World Bank staff compilation

1. The number of total population in July 2019 including PBI.  
2. Working population in 2018; 3 the number of formal employees excluding civil servants in 2018; 4 2017 data, excluding the number of construction workers; 5 depending on severity of injury (disability) and monthly income; 6 regulation enabling early withdrawal includes work termination and resignation as a form of retirement.

**Note:** Article 1 of The Law No 40 2004 on SJSN defines the definitions and boundaries of SJSN. It stipulates that "social insurance is a mandatory fund pooling mechanism which comes from contribution and is used to protect against socio-economic risks" Article 1 (3). Furthermore, the law defines "workers are individuals who are working and who receives salary, wage, or other form of rewards, Article 1 (11)."

**Indonesia’s main employment law is Law No. 13/2003 on Manpower, the “Labor Law”, issued on March 25, 2003.** It covers areas such as severance pay, procedures for termination, and annual and parental leave. As in many countries without unemployment insurance, mandated severance pay plays the role of cushioning the impact of losing a job. However, recent evidence from the IFLS survey suggests that effective coverage is less than 30 percent among formal sector workers due to non-compliance. An even smaller fraction receives the full compensation mandated. Informal sector workers are not covered under the legislation (Law No.13/2004).

**Figure 3.1: Transition from old to new institutional arrangements for social security**

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118 Other main laws regulating to employment relations include the (i) Government Regulation No. 78/2015 on Wages; (ii) Law No. 21/2000 on Trade Unions; (iii) Law No. 40/2004 on the National Social Security System (SJSN); 118 (iv) Law No. 1/1970 on Work Safety; (v) Law No. 39/2004 on Placement and Protection of Workers; and (vi) Law No. 2/2004 on Industrial Relations Dispute Settlement. In addition, numerous other regulations have been adopted, such as presidential regulations, government regulations, and ministerial decrees. Provincial and district authorities establish minimum wages, which may vary by sector. Indonesia has also ratified 20 ILO conventions, including all eight fundamental conventions. 118
The 2014 reform has gone a long way toward rationalizing the legal framework and institutional arrangements for social insurance in Indonesia. Nevertheless, substantial fragmentation persists in the pension schemes. While health insurance for all Indonesians is now integrated in a single pool and administered by one agency, three separate pension schemes exist for salaried workers, namely formal sector workers, civil servants and the armed forces. The SJSN Law aims at integrating these three by 2029. Contributions are mandated from all participants, including workers and non-workers. Benefits are financed by contributions and the intention is that transfers from the central budget would be required only for the payment of premiums for the poor.

For health insurance (JKN), the contribution rate is set out in a presidential regulation that is updated periodically. It details the amount of contributions for participants based on several categories, namely those designated as poor and therefore eligible for the full government subsidy, the Penerima Bantuan Iuran or PBI, public sector workers, salaried workers, non-salaried workers, non-workers, retirees, and families. The PBI segment of JKN is the intersection between social insurance and social assistance, and the contributions paid for by the government are counted as social assistance spending.

The method of determining the level of contributions for social insurance programs is outlined in the SJSN Law. Different rules apply to contributions for salaried workers, non-salaried workers (those who do not receive regular income or are paid in-kind), and the poor as shown in Error! Reference source not found. However, a common theme applies to all four programs: salaried workers make contributions as a percent of payroll, while non-salaried workers pay a flat amount.

Table 3.2: Contribution rates for SJSN schemes

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119 Non-workers include investors, employers, pensioners, veterans, and those who cannot afford the contribution.

120 The most recent one is Presidential Regulation No. 82/2018.
<table>
<thead>
<tr>
<th>Segment</th>
<th>Program</th>
<th>Contribution</th>
<th>Contributor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaried Worker</td>
<td>Work-Accident (JKK)</td>
<td>0.24% - 1.74% of monthly income, depending on risk</td>
<td>Employer</td>
</tr>
<tr>
<td></td>
<td>Death Benefit (JKM)</td>
<td>0.3% of monthly income</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Old-Age Savings (JHT)</td>
<td>5.7% of monthly income</td>
<td>3.7% paid by employer, 2% paid by employee</td>
</tr>
<tr>
<td></td>
<td>Pension (JP)</td>
<td>3% of monthly income</td>
<td>2% paid by employer, 1% paid by employee</td>
</tr>
<tr>
<td></td>
<td>Health Civil service, Police &amp; military-(JKN)</td>
<td>5% of basic salary covering a spouse and up to 3 children.</td>
<td>4% paid by employer; 1% paid by employee</td>
</tr>
<tr>
<td></td>
<td>Health (Other salaried workers)</td>
<td>5% of wage, with IDR 12 million ceiling, covering a spouse and up to 3 children.</td>
<td></td>
</tr>
<tr>
<td>Non-Salaried Worker</td>
<td>Work-Accident</td>
<td>IDR 10,000 - IDR 207,000 depending on monthly income</td>
<td>Worker</td>
</tr>
<tr>
<td></td>
<td>Death Benefit</td>
<td>IDR 6,800</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Old-Age Savings</td>
<td>IDR 20,000 - IDR 414,000 depending on monthly income</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td>IDR 42,000 – IDR 160,000 Depending on the class of hospital accommodation.</td>
<td></td>
</tr>
<tr>
<td>Construction Worker</td>
<td>Work-Accident</td>
<td>Depending on construction value</td>
<td>Employer</td>
</tr>
<tr>
<td></td>
<td>Death Benefit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Migrant Worker</td>
<td>Work-Accident</td>
<td>IDR 333,000 or IDR 370,000 for max. 5 months before departure, max. 24-month coverage overseas, and max. 1 month after arrival in Indonesia</td>
<td>Worker</td>
</tr>
<tr>
<td></td>
<td>Death Benefit</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Old-Age Savings</td>
<td>IDR 105,000 - IDR 600,000 depending on income</td>
<td>Worker</td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td>IDR 42,000 – IDR 160,000 Depending on the class of hospital accommodation.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Participants are covered while in-country only.</td>
<td></td>
</tr>
</tbody>
</table>

Source: World Bank staff compilation.

There are at least nine ministries involved in the implementation of SJSN. The Ministries of Health and Manpower are responsible for technical aspects of SJSN Healthcare and SJSN Employment roll-out, respectively. From the regulatory standpoint, these are the two ministries that can propose draft regulations related to both programs. The implementing agencies, BPJS Healthcare and BPJS Employment are both supervised by the National Social Security Council (DJSN) and the Financial Services Authority (OJK). The latter is responsible for matters related to fund management and investment, and also supervises the private pension sector. PT Taspen continues to manage employment-related insurance and pensions for civil servants, while PT Asabri does the same for the military. **Error! Reference source not found.** shows the complex set of institutions involved in the implementation of social insurance in Indonesia.

Figure 3.2: Institutional arrangements for social insurance in Indonesia
The institutional arrangements are complex and still evolving. The two agencies responsible for implementation are at different stages of development in terms of coverage, with BPJS Employment programs trailing significantly. In terms of financial sustainability, the challenges to BPJS Healthcare are more immediate than those facing the still immature pension scheme. Meanwhile, the adequacy of benefits in both programs, although measured differently, could be improved. The next section reviews the BPJS Employment programs along these three dimensions: coverage, sustainability and adequacy. This is followed by a similar review of the health insurance experience to date. Section 3.4 focuses on adequacy and sustainability of the civil service pension scheme.

3.2 The BPJS Employment Schemes

3.2.1 Coverage

While the rate of growth in membership for BPJS Employment schemes has increased in the past decade, it is still very low relative both to the working age population, and to those employed and receiving salaries. Figure 3.3 shows substantial growth during the past decade in the number of workers covered for short-term risks, namely work injury and death benefits. This implies that out of a working population of 127 million, about 22 percent are covered for the risk of work injury and death. The share for the old age savings program is somewhat lower as it excludes construction workers. For the Jaminan Pensiun (JP) pension program, only an estimated 13 million workers, or about 10 percent of the employed population, are active contributors, although as many as 19 million are registered. Importantly, the contribution mandate for JP scheme applies to 23.5 million salaried workers in large and medium enterprises (the remaining salaried workers are in small enterprises), implying a non-compliance rate of more than 40 percent.
As shown in Figure 3.4, total pension coverage—including the civil service and military which adds about 5.5 million employees—is low compared with other countries at a similar income level. Even if the current upward trend continues and if all salaried employees in large and medium firms were to start contributing, most workers and their families would remain unprotected and without pension coverage. This is in sharp contrast to health insurance, which may soon become universal. By the time Indonesia reaches a level of income consistent with high coverage, its population will have already aged significantly. If it continues to rely on a traditional contributory pension scheme that links coverage with formal labor market status, Indonesia will lose the race between pension coverage and population aging.
3.2.2 Adequacy

Permanent and temporary work-related disability benefits include income compensation from work injury scheme (JKK) and lump-sum payments from the JHT scheme. The work-related disability benefits are provided upon medical assessment at rates that are governed by the law and regulations. The death benefit is paid to the participant’s heirs and consists of compensation, periodic compensation, funeral expenses, and children’s education scholarship for a participant who dies from natural causes. Only those who have contributed for at least five years can access this benefit. The old age savings program (JHT) provides benefits in the form of cash amounting to the total value of accumulated contributions plus the accrued interest, payable in a lump sum to those who reach the age of 56, the survivors, and those who suffer permanent total disability. Cash withdrawal can also be made when a person resigns from or is terminated by his/her employer.

The level of short-term benefits of work injury (JKK) and death benefits (JKM) provided by BPJS Employment are in line with those observed internationally. The key adequacy challenge is more likely to arise from a lack of awareness or understanding on the part of participants of the insurance coverage provided, which has led to a low benefit incidence. There are two types of evidence for this. First, claims ratios have remained low even into the fourth year of the program. In both programs, the ratio of claims to premium income is below one-third, resulting in (unintended) annual surpluses. While this could suggest that the actuarial calculations assumed unrealistically high rates of work accidents, the figures for death claims are much lower than what would be implied by observed mortality rates.¹²¹ Making an assumption about the age of contributors as between 25-45 years old, the number of claims should be at least triple what they have been in the past four years. As of 2020 the government has announced an increase...

¹²¹ The implied incidence of work injury is low when compared with mature schemes in Malaysia and Thailand.
increase in both JKM and JKK benefits without any increase in contribution rate. If and when the actual claim rates mirror the expected claim rates the expenditure will increase significantly.

In contrast, the annuities that are the objective of the JP pension program are long-term insurance against the decline of productivity in old age, as well as insurance for longevity. These pensions are meant to replace part of the income that a person earned during their working years so that their consumption does not fall dramatically when they leave the labor force. In a defined benefit pension scheme, the amount that is replaced is a function of how many years the person has contributed.

The BPJS pension arrangement is designed as a hybrid in that it includes both a defined benefit and a defined contribution element. Error! Reference source not found. shows the parameters of the two elements of SJSN's retirement income system. The first is a defined contribution scheme, the JHT, with a contribution rate of 5.7 percent. The second is a defined benefit scheme (JP) where the benefit is equal 1 percent of the worker’s lifetime average wage multiplied by the number of years of contribution. Table 3.3 also shows that there are minimum and maximum pensions, and that to receive any pension, 15 years of contribution are required. Finally, the retirement age for the JP scheme is scheduled to rise until reaching the age 65 in 2043. Notably, the age of eligibility of the JHT old age savings scheme—a holdover from the pre-reform period—is not scheduled to rise beyond its current level of 56 years.

Table 3.3: Parameters of old age saving and pension schemes

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Old age savings (JHT): DC</th>
<th>Pension scheme (JP): DB scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accrual rate</td>
<td>N/A</td>
<td>1%</td>
</tr>
<tr>
<td>Minimum years of service</td>
<td>N/A</td>
<td>15</td>
</tr>
<tr>
<td>Wage base</td>
<td>Monthly wages (including allowances)</td>
<td>Average of all years</td>
</tr>
<tr>
<td>Valorization</td>
<td>N/A</td>
<td>inflation</td>
</tr>
<tr>
<td>Minimum monthly pension (in 2017)</td>
<td>N/A</td>
<td>IDR 319,450</td>
</tr>
<tr>
<td>Maximum monthly pension (in 2017)</td>
<td>N/A</td>
<td>IDR 3,833,000</td>
</tr>
<tr>
<td>Indexation of pensions</td>
<td>N/A</td>
<td>inflation</td>
</tr>
<tr>
<td>Contribution rate</td>
<td>5.7% (3.7% emp + 2% employee)</td>
<td>3% (2% emp +1% employee), reviewed once every 3 years. Expected to increase to 8% by 2066</td>
</tr>
<tr>
<td>Retirement age</td>
<td>56 years paid as lump sum. Or paid when an individual is permanently disabled, passes away or leaves Indonesia for good.</td>
<td>56 years in 2017, will be increased to 57 years in 2019, then every three years, retirement age will be increased by one year until reaching 65 (in 2043)</td>
</tr>
<tr>
<td>Survivor benefit – post retirement</td>
<td>Accumulated balance paid as Lump sum to survivor</td>
<td>50% of pension</td>
</tr>
<tr>
<td>Survivor benefit – pre-retirement</td>
<td>Accumulated balance paid as Lump sum to survivor</td>
<td>50% of the benefit formula used for disability benefit calculation</td>
</tr>
<tr>
<td>Disability benefit</td>
<td>100% withdrawal of fund allowed in case of permanent disability</td>
<td>Benefit is calculated as per pension formula where years of contributions = max (actual years, 15)</td>
</tr>
</tbody>
</table>

122 The death grant has been raised from 16.2 million to 20 million. Funeral grant has gone up from 3mln to 10mln and periodic payment has been increased from 4.8 mln to 12mln
Salaried workers covered by SJSN that reach retirement age with fewer than 15 years of contributions will receive only their contribution plus interest back in the form of a lump-sum payment. Those that retire after at least 15 years of contributions will receive a pension for life calculated as above. This effectively means that there is a sharp discontinuity between those who achieve the vesting period of 15 years and those who do not. Based on the current contribution rate, workers that receive the pension are getting a return that is between two and three times that of the first cohorts to retire, or those who simply do not contribute for 15 years regardless of when they retire.

Workers that meet the 15-year rule will receive an annuity from the DB scheme (JP) and lump-sum benefit from their old age savings scheme (JHT). Their total pension income will include both elements. Such hybrid DB/DC arrangements can be found in many countries. The JP replacement rate is generated according to the formula and takes into account the contribution history. The JP formula specifies an accrual rate of 1 percent per year of contribution, multiplied by the average of all past wages. Thus, after 40 years of contributions, the pension would be equal to 40 percent of lifetime average wage. In most countries that use long averaging periods, past wages are ‘revalued’ or ‘valorized’ to consider the fact that wages have gone up over the previous decades. Typically, the wages in the past are multiplied by the accumulated nominal wage growth over the same period before the average is calculated. So, if the starting wage was 100 in 2020 and the worker reaches the retirement age in 2060, and during that period wages have risen by 5 percent nominal per year, the starting wage of 100 would be ‘revalued’ by 1.05^40 to make it 700 for the purpose of the pension calculation. In Indonesia, instead of wages, prices are used to revalue past wages. This is an important parameter choice because, with any significant real wage growth, the replacement rate will be significantly reduced when prices are used to revalue past wages. For example, with real wage growth of 2 percent, the replacement rate on the final salary will fall from 40 percent under wage valorization to about 28 percent with inflation (or price) valorization.

The JHT old age savings program was designed to add to retirement income through a funded, defined contribution component. It is possible to estimate the replacement rate that could be generated by the 5.7 percent defined contribution component by projecting the accumulated balance after 40 years of contributions plus interest and then converting this amount into an actuarially fair annuity. Under reasonable assumptions, this would add roughly 22 percentage points to the DB replacement rate for a total of around 60 percent. Again, this should be considered an upper bound since most workers will not have contributed for all of their working age years and given that JHT retirement age is not legislated to rise, the maximum years of contribution in JHT will be closer to 30 years.

Currently, however, the 5.7 percent JHT contribution is being withdrawn long before retirement. Following the introduction of Government Regulation No. 60/2015, the number of withdrawals has

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123 Note that in this example, the worker has contributed for 40 years. Most workers will not have full contribution densities for various reasons so the replacement rate here can be considered an upper bound.

124 The actuarially fair annuity factor will change over time as life expectancy increases. We have used the mortality rates in 2020 for our calculation. Since life expectancy will rise in the future one would need to raise contributions to provide for the same RR.

125 Our calculation assumes retirement age of 65, real wage growth of 2 percent, inflation of 2 percent, real investment return of 3.5 percent, admin costs of 0.5 percent of returns, which gives net investment return of 3 percent real. The RR are calculated assuming individual receives indexed annuities at 65.

126 Government Regulation No. 60/2015 on “The Amendment to Government Regulations No. 46/2015 on the Implementation of Old Age Social Security Program”. Government Regulation No. 60/2015 was issued two months after the Government Regulation No. 46/2015 on Implementation of Old Age Savings came into effect, creating loophole that enabled JHT early withdrawal. The regulation has fundamentally changed JHT withdrawal requirement by allowing discontinuation of work,
increased dramatically (Figure 3.5). To some extent, frequent withdrawals may reflect liquidity needs of workers. However, most of the claims are related to loss of employment, suggesting that in many cases the old age savings scheme is being used as a substitute for an unemployment savings account. As a result, under current rules, the DC component will not generate any significant income for old age.

**Figure 3.5: Withdrawals have risen sharply since Government Regulation No. 60/2015 was issued**

![Old-Age Savings Claims 2014-2018](chart)


Every OECD country has higher replacement rate targets from the pension scheme, with an average of almost double the Indonesian replacement rate from JP. Figure 3.6 compares Indonesia’s prospective replacement rate with those of other countries in the region. The results are sensitive to the wage growth assumption used in the simulation. The figure assumes that the current policy of allowing withdrawals from JHT continues indefinitely which is why we do not add RR from JHT scheme in the bar for Indonesia BPJS.

**Figure 3.6: Simulated full career replacement rates in selected Asian countries**

whether it is voluntary (resignation) or forced (termination), as a form of reaching retirement age which therefore allow withdrawal without having to fulfill the minimum of 10 years of contribution. Following the amendment, Ministry of Manpower Regulation No. 19/2015 on JHT Benefit Payment was issued to enable the payment. The requirement for JHT early withdrawal due to resignation and termination is further explicitly mentioned by the Ministry of Manpower Regulation No.19/2015.”
Note: The estimated RR from BPJS and CSP (Civil Service Pensions) does not include the RR from JHT and THT, which are schemes that provide lump-sum benefits to members in BPJS and CSP, respectively. The lump sum benefits from JHT and THT could be converted into an annuity and would then translate to a higher RR during retirement. However, given the high rate of withdrawals from JHT and unavailability of data for THT, we have excluded them from the graph above.


These relatively low replacement rates are actually the upper bound of what the scheme is likely to generate for the majority of workers. It is important to note that these long-run replacement rates are based on a lifetime contribution history spent in the formal sector and without interruption. The first cohort with the possibility of generating a full pension as simulated here is around 30 years old today. Moreover, most workers will experience periods out of the formal sector labor force, especially women (see Box 3.1). In short, without reform, the current design of the DB scheme and the withdrawal patterns in the DC scheme will make it very difficult, if not impossible, for Indonesians to smooth their consumption through this vehicle alone.

Box 3.1: The ‘Gender Pension Gap’

The gender pension gap is a world-wide phenomenon (UN Report for Women 2015). It reflects gender differences in three areas: (i) demographics (women tend to live longer than men, increasing their share among the elderly and stretching their pension benefits across more years); (ii) the realities of the labor market (women are paid less than men resulting in lower pension contributions, they are less likely than men to work at jobs that offer pension benefits, those with formal jobs tend to have shorter careers than men, either because of child and elderly parent caregiving, or they retire earlier often because the law in some countries permits them to do so); and (iii) the design of pension systems (the level of benefits and the extent of coverage). There is significant diversity in the East Asia and Pacific countries. A 2017 ranking (see table below) assessing the adequacy of the pension system and the gender pension gap in eight EAP countries found larger challenges in Indonesia, Malaysia and the Philippines.

The gender pension gap can be mitigated by ensuring that pension systems provide broader coverage (including through elderly social assistance), greater redistribution, survivor benefits, and regular indexing to maintain adequate income at older ages. Equalizing the retirement age of men and women also contributes to reducing the gender pension gap. In terms of pension system design, policies related to vesting periods and maternity leave contribute to the lower coverage of women. In six of the countries (including Indonesia) the average expected years of contribution are not sufficient to meet the vesting period. Coverage of maternity benefits is lowest in
Indonesia and periods of maternity are not counted as employment for purposes of computing pension levels. In developed OECD economies, by contrast, periods of childcare are counted in one way or another, depending on the structure of the country’s pension system (D’Addio 2013). Indonesia also does not offer systematic and regular adjustment of pension benefits, and indexing is based on governmental discretion or done only infrequently. This exposes women to the risk of inflation or declines in benefit levels (relative to prices), and can exacerbate the pension gap between men and women.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>(and weight accorded that indicator in the overall ranking)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coverage, in terms of the share of women receiving pension benefits (2)</td>
<td></td>
</tr>
<tr>
<td>Expected years in wage employment (1)</td>
<td></td>
</tr>
<tr>
<td>Pension level for women earning average wage (2)</td>
<td></td>
</tr>
<tr>
<td>Difference between men’s and women’s benefits at average wage (1)</td>
<td></td>
</tr>
<tr>
<td>Degree of redistribution toward those who earned lower wages (1)</td>
<td></td>
</tr>
<tr>
<td>Survivor benefit (0.5)</td>
<td></td>
</tr>
<tr>
<td>Overall ranking</td>
<td></td>
</tr>
</tbody>
</table>

Source: Agnieszka Chłoń-Domińczak (2017). Notes: For each selected indicator, the countries are ranked in order from 1 (the highest or more equal value) to 8 (the lowest or least equal value). The overall indicator is calculated as the weighted average of ranking in the six areas. Two indicators (coverage and pension level) are given a weight of 2; survivor benefit is weighted at 0.5; the other three indicators have a weight of 1.

3.2.3 Sustainability

There is no sustainability issue related to short-term benefits. In fact, the short-term benefit programs (work injury and death) are currently running surpluses. It is not clear, however, if this is due to erroneous actuarial assumptions or low awareness of participants. It seems like the death benefits (JKM) are likely running surpluses because the actual number of claims is lower than the expected claim rate. Assuming that most contributors are evenly distributed in the age group 25-45 one can calculate the expected number of deaths using the mortality rates published by UN. The calculation shows that if there are 100 contributors evenly distributed between ages 25 – 45, 0.25 of them will die in any given year. As of 2018, there were 30.4 million individuals registered with JKM and therefore the expected number of dead is about 74,635. The actual claims reported in BPJS Employment Financial Report 2018 were 25,883. Therefore, even under these simplistic assumptions one finds that actual claims are significantly lower than expected. Under this scenario efforts should be made to understand whether it is the lack of awareness of patients that is leading to lower claims. Increasing benefits during the period when most claims are likely incurred but not reported would lead to significant increase in expenditures when the claims start being reported.
While there is no immediate sustainability issue, the pension scheme is projected to run deficits in the long run. When the BPJS Law was promulgated, it was understood that the initial 3 percent contribution rate was not sufficient to fund the liabilities that were being created. From the day it began, an unfunded liability began to accumulate, just as has been the case in almost all publicly managed defined benefit schemes around the world. The law foresaw periodic reviews and a gradual increase in the contribution rate that would extend the period during which contributions would be sufficient to cover pension payments.

Indonesia has followed the same path that most countries have taken, introducing a defined benefit scheme. However, it is the most recent country to adopt this model and therefore is at the earliest stage of the maturation of such a pension scheme. Most other countries have already passed through the early stages of the cycle when there are many contributors and few pensioners, resulting in surpluses and low spending ratios. In a growing number of these countries, particularly in Eastern and Southern Europe and the Southern Cone of Latin America, significant deficits have arisen and are absorbing scarce fiscal resources. In addition to the fiscal sustainability issue, in countries with partial coverage skewed to the higher end of the income distribution, such as Indonesia, the need to bail out the formal sector pension scheme has potentially regressive redistributive impact.

As a result of this relatively late start, contributory pension spending as a share of GDP will continue to be lower than many countries at Indonesia’s stage of demographic aging. Figure 3.7 shows that the predicted spending level will be almost 1 percentage point higher based on the international pattern. The pension spending that is taking place now in Indonesia is related to its mature civil service pension scheme, which is analyzed later in this chapter. The fiscal burden of pension spending in the long run, therefore, will comprise any deficits arising from the BPJS scheme, as well as the continued financing of the civil service pension scheme.

![Graph showing pension spending as a share of GDP](image)

**Figure 3.7: Indonesia is spending less than other countries at the same stage of aging**

\[
y = 0.0037x^2 + 0.2573x - 0.3111 \\
R^2 = 0.6908
\]

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127 Generally, East Asian countries appear to spend less at a given income level than countries in other regions. See World Bank (2016c).
A good measure of long-run sustainability of a traditional defined benefit pension scheme is the financing gap. This is defined as the difference between the future stream of contribution revenues plus any investment returns and future pension spending. The BPJS pension was introduced with the intention of partial rather than full funding of the future pension obligations. Full funding—accumulating assets equal to liabilities—would have required a significantly higher contribution rate. However, the regulations stipulated periodic actuarial reviews and anticipated a gradual increase in the contribution rate to postpone deficits in the long run. In order to measure the financing gap, data for contributors including their age, sex and earnings were obtained from BPJS and projections of future patterns of retirement were generated using the World Bank’s PROST model. These projections were based on assumptions about key macroeconomic variables such as productivity and inflation, as well as the UN demographic projections (Annex 1). The subsequent projections presented here assume that an anomalous parameter, the indexation of the maximum pension to prices, is corrected. Left unchanged, it would effectively phase out the scheme altogether over the long run.

The financing gap projections for the baseline scenario are shown in Figure 3.8, along with two other scenarios—one of a gradually increasing contribution rate from 3 to 8 percent, and another of an immediate increase to the actuarially fair rate of 6 percent. The current contribution of 3 percent is assumed to continue throughout the projection period in the baseline case. Deficits appear in about 40 years, i.e., just as the scheme is maturing. This is to be expected since those who retire from 2030 onward will have contributed much less than the value of their pensions so that cash flow surpluses will turn to deficits. Until that time, accumulated contributions and interest are returned to contributors so that the scheme is essentially fully funded during this initial period.

Figure 3.8: Projected SJSN pension scheme financing gap through 2080

128 Globally, there is no case of a national defined benefit scheme that is fully funded.
129 The results shown here are revenue surplus/deficit or financing gap instead of cashflow surplus/deficit. Therefore, projections assume reserves during years of surplus, accrue interest.
There are at least two important caveats to the projections. First, to the extent that the maturation of the scheme is postponed through coverage expansion, deficits would also be pushed out further into the future. The international experience over the past few decades has, however, not seen the kind of coverage expansion that would have been expected as incomes grew. The informal sector has remained high in most low- and middle-income countries, including Indonesia. The emerging trends regarding automation and the decline of standard employment contracts will likely also work against coverage in traditional social insurance schemes. Second, the baseline case assumes that investment returns are slightly higher than wage growth. Since pension liabilities depend on the latter and assets on the former, this relationship is important, and the results are sensitive to this assumption. Many public pension funds have had poor investment returns over long periods of time. In the case of returns that are 2 percentage points below wage growth, deficits would begin about five years earlier. The converse would be true to the extent that returns exceeded those assumed in the base case (See Annex 1 for details on assumptions).

### 3.2.4 Options for Reform

#### 3.2.4.1 Options to Increase Coverage

The current pension scheme will not provide income in old age for most Indonesians. The pension coverage gap has two dimensions. The first is due to the immaturity of the new pension scheme; those workers already in their forties and older will not have time to contribute long enough to generate reasonable pensions. In fact, those with fewer than 15 years until retirement will not be eligible for any pension and would receive a relatively small lump sum payment. For these cohorts, only social assistance of some kind can address their needs and supplement other forms of voluntary savings or family support. The policy options for extending social assistance to the elderly were reviewed in Chapter 2.

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130 World Bank (2020a).
The second source of the coverage gap is due to the link between the financing of contributory pensions—deductions from wages—and eligibility for a pension. The result is that only workers in the formal sector can be covered and, as noted above, the formalization of the workforce is unlikely to take place before the population ages. Indonesia, similar to many other middle-income countries, will lose the race between coverage and aging unless it moves away from the traditional model.

One approach is to calculate the contribution required to generate a certain pension level in the future and finance it partly or completely from general revenues, just as in the case of health insurance. In fact, the pension calculation is easier in principle since the actuarial assumptions involved are much less complex as there are fewer variables affecting the monetary values of pensions than those affecting medical services.

Subsidized or matching contributions for pensions are not as common as subsidized health insurance premiums. Nevertheless, they have been implemented in a number of countries including China, the Rep. of Korea, India and Thailand. The experiences have been varied, with large coverage gains in China where the subsidy is estimated to be more than 80 percent, while a match of 1:1 (up to a certain amount) has yielded modest participation in India. In no case, however, has a government paid the entire contribution for pensions as is often the case with health insurance.

In the Indonesian context, where there are both DB and DC schemes, subsidized contributions could be applied to either without creating parallel funds. A contribution from the government could be deposited in JHT accounts or could be paid on individuals’ behalf into JP. The latter approach would be analogous to how Indonesia subsidizes health insurance premia already. A pension account for the working age members of a household deemed eligible could be opened and the government could make periodic contributions into it. In contrast to health insurance, however, rather than an unlimited package of medical services, the amount to be contributed would be calculated so as to reach a certain minimum pension level. For example, the target could be an annuity equivalent to the current poverty line projected into the future. Until the scheme matured, transition cohorts would receive only part of this minimum and would continue to depend on the social pensions described in the last section. Ultimately, however, the mature subsidized contributory pension would eliminate the need for these transfers.

The effective minimum pension for formal sector workers currently is the product of the benefit formula and the minimum wage. As there is no minimum wage in the informal sector, however, the minimum pension can be set based on some policy objective. If the goal were a pension at the poverty line, say around IDR 200,000 per month, the contribution rate required would be equal to about 3 percent of the current minimum wage. This would translate into an actuarially fair accrual rate of about 0.35 percent per year of contribution.

This approach has at least two benefits compared with the alternative of relying exclusively on social assistance. First, by placing all workers in the same pension scheme, any shift from informal to formal sector or vice versa allows for complete portability of pension wealth, thus eliminating an important

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131 See World Bank (2013b).
132 It is worth noting that for the first 15 years, the JP scheme effectively operates as a defined contribution scheme paying out a lump sum.
133 Under current JP rules the contribution rate is 3 percent and individual will get about 28 percent at time of retirement (since past earnings are price valorized). The actuarially fair contribution rate is 6 percent. Therefore if govt puts in contribution of 3 percent for an individual they would, in a fair system be entitled to (3/6)*28 percent = 14 percent RR after 40 years of work or 14 percent/40= 0.35 percent accrual rate.
distinction between formal and informal sector status. Those in the informal sector could contribute more when they were able, and this would translate directly into a higher pension on a pro-rata basis. In contrast, separate schemes targeted to particular groups such as farmers are often not portable and may impede labor mobility.

Second, this approach effectively prefunds the emerging liability that will arise with population aging and smoothens the long transition that Indonesia will face as the formal pension system matures and begins to pay pensions. Moreover, using general revenues to finance pensions reduces the need to increase payroll taxes, increasing the incentive to remain in the informal sector.

There is a trade-off between the scope of the contribution subsidy in terms of cost and the potential impact on the labor market. As in the case of health insurance, a sharp cut-off could create negative incentives to work in the formal sector and would be rather arbitrary. The combination of the two subsidies could have a significant impact at the margin. However, fully subsidizing all informal sector workers would be expensive. The cost of subsidizing the bottom 40 percent of non-salaried adults is estimated to be around 0.28 percent of GDP, while subsidizing all non-salaried workers would cost about 0.71 percent of GDP.

The least distortionary and most expensive option in this regard would be to subsidize everyone of working age regardless of whether they were in the informal or formal sector. This would eliminate any disincentive to formalization due to the subsidy. In the example above, the government contribution required to fund the poverty line minimum pension was about 3 percent of the minimum wage. Applying this to formal sector workers would reduce employers’ social insurance contribution costs and effectively eliminate them for minimum wage workers, effectively subsidizing their employment. This is important as the workers most vulnerable to an exogenous increase in their labor cost are those earning the minimum wage and at the margin of where their productivity exceeds their cost. The cost of a universal subsidized contribution equivalent to 3 percent of the minimum wage is about 0.71 percent of GDP. Combined with the additional cost of subsidizing the health insurance premiums of the remaining uncovered population, the total additional resources required would be around 1.2 percent of GDP per year.135

A similar approach of partly or fully subsidizing the contributions of informal sector workers can be considered for short-term risks. As of 2018, there were a total of 27.6 million individuals enrolled in the JKK and JKM programs. They are required to pay at least 0.54 percent of their salary (0.3 percent for JKK and 0.24 percent for JKM) as contributions. Just as was the case in pension, before deciding whether to subsidize contributions partially or fully for the work injury and death benefit, it is important to first ensure the actuarial fairness of the contributions being charged. It could very well be the case that these schemes have reserves not because the contributions are too high but because the claim rate is lower than expected.136 The “fair” contribution for the death benefit in particular, should be relatively straightforward

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134 We refer to all individuals between ages 20 to 64 as adults for this simulation.
135 The short-term fiscal pressure could be reduced by issuing special non-marketable government bonds as has been done in the Malaysian and Singaporean provident funds as well as the U.S. Social Security program. This may not lead to an increase in national savings to the extent that the government increased its consumption due to this source of captive credit. On the other hand, this would allow for a gradual transition for pension fund investments into the real economy and limit volatility in the early years of the system.
136 This could happen for example if individuals are unaware of the benefits under these schemes, when and how to register claims for these benefits.
since it can be based on mortality tables and involves minimal moral hazard issues.\textsuperscript{137} Once the actuarially fair contribution is determined,\textsuperscript{138} the GoI could consider subsidizing the short-term risks for all adults or bottom 40 percent of adults. For illustration, we assume that the 0.54 percent contribution being charged currently is fair. If so, it would cost about 0.02 percent of GDP to fully subsidize the work injury and death benefits of currently enrolled workers (27.6 million). If the subsidy was extended to all adults it would cost up to 0.12 percent of GDP and the cost of subsidizing the bottom 40 percent would be 0.03 percent (Table 3.5).

**Table 3.5: Incremental cost of expanding SI coverage through premium subsidies as % of GDP under various options**

<table>
<thead>
<tr>
<th>Schemes</th>
<th>Subsidy offered to</th>
<th>Current subsidy cost</th>
<th>Bottom 40% of adults</th>
<th>All adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Accident (JKK) &amp; Death Benefit (JKM)</td>
<td>No subsidy given to individuals currently enrolled</td>
<td>0.03 %</td>
<td>0.12 %</td>
<td></td>
</tr>
<tr>
<td>Pension</td>
<td>No subsidy given to those currently enrolled</td>
<td>0.28 %</td>
<td>0.71 %</td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td>0.2 %</td>
<td>0.20 %</td>
<td>0.49 %</td>
<td></td>
</tr>
<tr>
<td>Social assistance for elderly (aged 65+)</td>
<td>0.02 %</td>
<td>0.07 %</td>
<td>0.17 %</td>
<td></td>
</tr>
<tr>
<td><strong>Total cost</strong></td>
<td><strong>0.22 %</strong></td>
<td><strong>0.58%</strong></td>
<td><strong>1.49%</strong></td>
<td></td>
</tr>
</tbody>
</table>

Note: Adults in our calculations include all individuals aged 20-64, i.e., 159 million as of 2019. JKK and JKM calculations assume subsidy equal to 0.54 percent of average monthly wage of IDR 2 million paid to all adults/bottom 40 percent of adults. Note that under current law JKK/JKM/JP are mandated to cover only a subset of all adults. Health coverage increase would involve covering the remaining 60 million individuals. Pension contribution subsidy is equal to 3 percent of IDR 2.4 million monthly and this subsidy today would give future retirees a pension equivalent to IDR 200,000 monthly. Social assistance for elderly cost in third column is for 70 percent of those aged 65 and above as discussed in Chapter 2.

**3.2.4.2 Options to Improve Adequacy**

As described in Section III, the replacement rate that is likely to result from the combined defined benefit (JP) and defined contribution elements (JHT) of the pension system is quite low. This is due to two factors, both of which could be changed. The first is a matter of policy. Government Regulation No. 60/2015 as mentioned earlier has superseded the intended policy in the BPJS Law, which aimed at supplementing the defined benefit pension with lump-sum benefits from JHT. The second factor is the choice to revalue historical wages by prices rather than wages, which would then raise the replacement rate expected from JP scheme.

Most countries that have opted to use long averaging periods, including most OECD countries, have chosen to revalue historical wages by wage growth.\textsuperscript{139} If one uses any other metric to revalue past wages

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\textsuperscript{137} In other words, changes in behavior that led to a higher probability of death are unlikely for the vast majority of working age individuals that would be covered by the new insurance. Work injury claims would seem much more problematic however, and very difficult to monitor.

\textsuperscript{138} The “fair” contribution rate will be a dynamic concept until the system matures and therefore will require frequent valuation in the short term.

\textsuperscript{139} See OECD (2017).
(prices, mix of prices and wages), the replacement rates would vary depending on the real wage growth that takes place during an individual cohort’s career, leading to potentially significant differences between cohorts. Replacement rates will be lower the higher the rate of real wage growth and vice versa. In Indonesia, where the pension scheme (JP) revalues past earnings using prices, a consistent real wage growth of zero would result in a replacement rate of 40 percent, compared with a 28 percent replacement rate with real wage growth of 2 percent. Despite the uncertainty associated with projecting future wage growth, it is likely that real wage growth will be at least moderately positive. If so, moving to revaluation using wages would ensure reasonable replacement rates while the current rules would not. It should be noted that the 28 percent replacement rate is for a worker that has contributed for 40 years, i.e., a full, formal sector career with no breaks from the labor force. The first worker that could have contributed for 40 years will retire in 2055. In the meantime, the transition cohorts will, by definition, have lower replacement rates. Even after the scheme matures, few workers will have contributed throughout their working lives as data on contribution densities from other middle-income countries have shown.\(^{140}\) In short, even these low replacement rates that are implied by the current formula will not be achieved by a majority of workers, especially women and those with low lifetime incomes who tend to move in and out of the formal labor market.

There are at least two options that could remedy the situation and increase replacement rates in the mandatory system. The first is to reinstate the old age pension savings scheme so that it serves the purpose that its name implies. This would entail restricting withdrawals in the same way that other defined contribution pension schemes do around the world. The second measure would be to change the method for revaluing historical wages in the DB formula. The role of voluntary pension provision could also be expanded and would help increase pension adequacy in the transition period, particularly for higher-income workers (see Box 3.2).

\(^{140}\) See OECD (2014)
These reform options are not mutually exclusive. A change to the defined benefit formula and a repeal of Government Regulation No. 60/2015 could be done separately, or both could be implemented. Figure 3.16 shows the results of the different combinations of these two reforms. The first bar is the current baseline replacement rate that was earlier shown to be lower than other countries in the region. In (2), historical wages are revalued by wage growth instead of prices, increasing the replacement rate to 40 percent after 40 years of contributions. Option (3) provides the maximum replacement rate by assuming the revaluation of wages as in (2), but adding an estimated annuity value generated by the 5.7 percent DC component in the case of no withdrawals. The rest are intermediate cases where some withdrawals occur. The range of the enhanced pensions, relative to the baseline, is between 40 and 55 percent.

Figure 3.16: Replacement rates with different reforms

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**Box 3.2: Increasing the role of voluntary, private pensions**

Private pensions can play a significant role in the overall pension system, especially when the mandated scheme provides relatively modest replacement rates as is the case in Indonesia. Despite a long history going back more than a quarter of a century, however, only around 6 percent of the labor force currently participates.

There are three main challenges with the current voluntary system that, if addressed, would lead to a more robust private pensions market. First, there is a lack of clarity and a coherent strategy about the role of voluntary pensions generally, including how they interact with employer mandates for social insurance and severance pay. Second, the legal and regulatory framework supporting voluntary pensions is weak. The 1992 Pensions Law in particular requires updating and improvement in line with good international practice in areas such as governance and market conduct. Third, current rules and practices have discouraged long-term investments.

There are positive signs emerging as the number of workers covered by defined contribution DPLK schemes has risen and the regulator, OJK, has begun to take steps to encourage longer investment horizons. However, as long as the high severance pay burden continues (at least for those complying), and while employers face uncertainty regarding tax treatment and the potential increases in contribution rates for the mandated scheme, the potential that voluntary private pensions have to contribute to income protection in an aging Indonesia will continue to be untapped.

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141 As discussed below, these withdrawals may be considered to completely or partially finance unemployment benefits.

142 The calculations are for an individual with a full career of 40 years, retiring at age 65.
1. Status quo - DB with price valorization, no JHT
2. Wage valorization DB, no JHT
3. Wage valorization, full JHT
4. Wage valorization, 2.7% from JHT for UI
5. Wage valorization, 1.7% from JHT for UI
6. DB with price valorization full JHT

The intermediate cases assume that a portion of the 5.7 percent contribution is diverted to finance a benefit related to unemployment. This recognizes the fact that the old age savings scheme withdrawals are partly due to the need for such a consumption-smoothing device. There are at least two options to address this gap. The first is a traditional unemployment insurance scheme where a premium is charged and a replacement rate specified along with the duration of the benefit. This kind of formula is common in high-income OECD countries but could be problematic in a developing country context where it is very difficult to monitor actual labor market status. An alternative that reduces moral hazard is a hybrid scheme that includes an unemployment savings account backed by risk pooling in the form of insurance. The worker first draws down his/her own savings before triggering the insurance, in this way discouraging workers from taking advantage of the insurance pool. Several countries, such as Chile and the Rep. of Korea, have pursued this approach.

It is important to keep in mind the fact that the severance pay system in Indonesia is currently not functioning well. Severance payments provide lump-sum cash transfers to workers who involuntarily or voluntarily separate from their jobs. In Indonesia, such benefits are comparatively high. Contract termination payments consist of three parts:

a) severance pay: up to 9 months’ salary;

b) reward-for-years-of-service pay: up to 10 months’ salary; and

b) compensation pay for rights or entitlements that the dismissed worker/laborer has not utilized.

As shown in Figure 3.17, the severance pay for workers with long job tenure is among the most generous in the world. Among comparator countries, severance pay for redundancy dismissal for a worker with 10 years of job tenure equals 43 salary weeks in China, the Rep. of Korea, Turkey and Vietnam; 17 salary
weeks in Brazil; and 95 salary weeks in Indonesia; while Singapore does not have legally mandated severance pay.

**Figure 3.17: Statutory severance pay in selected countries (for a worker with 1, 5 and 10 years of tenure, in salary weeks) in 2019**

![Chart showing severance pay in selected countries](image)


Even among Indonesians who are formally employed, only a minority actually benefits from the severance pay regulations. While 11.3 percent of the workers with job terminations were entitled to severance payments, only 3.2 percent received severance pay.\(^{143}\) This means that only 27.6 percent of all workers who were theoretically entitled to severance received it (Figure 3.18). From 2002 to 2007, 36.1 percent of those eligible received severance payments.\(^{144}\) Furthermore, even those workers who do receive severance pay rarely receive the full amount.

**Figure 3.18: Only a few workers benefit from severance payments and even fewer receive the full amount**

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\(^{144}\) Data from the IFLS 4.
The likelihood that severance pay obligations are met varies systematically by size of firm and sector. Some firms even prefund their obligations under rules linked to private pension provision. As a result, the incentives for reform vary across firms and the true cost of replacing severance pay with unemployment benefits will differ accordingly. Firms complying with regulations will tend to incur lower costs of introducing new contributions for unemployment benefits than those that do not.

The current severance payment obligations could be revised in exchange for a reform that introduces a modern unemployment benefit system. Providing more predictable income and transition support to workers will increase in importance, as the nature of work evolves with automation and changes in labor demand. A reform of Indonesia’s income protection for the unemployed does not necessarily imply a significant additional burden to the current (theoretical) obligations for employers. Rather, an income protection reform for the unemployed could make it much more attractive to both workers and employers. One argument in this context is the (implicit) costs of the severance provisions. Calculations using the ILFS 4 and 5 datasets estimate the de jure severance payment claims workers have accumulated throughout their careers at about 2 to 7 percent of the monthly wage bill. This implicit contribution, or part thereof, could be converted into an explicit contribution to a new unemployment benefit system, while lowering the severance pay obligations to internationally comparable levels. If designed well, such a reform may even soften the strict labor market segmentation and modestly reduce informality.

The most common type of unemployment insurance scheme is triggered when a worker becomes unemployed and immediately pays out benefits for a prescribed period of time. These schemes often require unemployed workers to actively search for a new job. In the context of a high degree of informality, however, such schemes are more likely to be manipulated by workers rotating in and out of the formal labor market in order to take advantage of the insurance that is available. This “moral hazard” problem arises even in developed economies.

A “mixed” unemployment benefit system, one that mixes (i) an individual savings component to address moral hazard issues with (ii) a solidarity or risk-pooling component, has great potential to lead
to better worker protection for Indonesia. This combination can help reduce and integrate employer-paid severance, improve workers’ facilities for precautionary and aspirational savings, provide a link to more reliable pensions, and cover more workers with adequate income protection. It would also extend across both fixed-term and open-ended contract workers, with specific provisions for fixed-term contracts.\textsuperscript{145} The key is to place greater reliance on a strong, safe and responsive national social security system that offers better protection from shocks through a broader distribution of risks. Such a system could also integrate (reduced) severance payments, which do not have to be abandoned. Instead, payments from employers to individual accounts could reduce the severance payment obligation fully or partially. This would allow the inclusion of disadvantaged groups and provide reliable support to people whose livelihoods are disrupted by unemployment.\textsuperscript{146}

International experience from the Rep. of Korea and Chile shows positive effects of such reforms for workers’ income protection.\textsuperscript{147} Both countries experienced a stagnating economy and labor market as they decided to reform their unemployment insurance system. Before the reform, Chile suffered from high but underperforming severance pay obligations that hampered (formal) employment. With the introduction of a mixed-model of unemployment insurance system, workers received better protection while moral hazard problems could be substantially reduced relative to traditional unemployment insurance.\textsuperscript{148} The system proved to be robust to the shock of the 2008 global financial crisis. In 2009, Chile extended its unemployment benefit system to include fixed-term workers.\textsuperscript{149} As in Chile, the Rep. of Korea also has a mixed system that involves strong efforts to comprehensively link unemployment benefit reception to active labor market policies to better re-integrate unemployed workers into the labor market ("employment insurance"). The Rep. of Korea’s reform required substantial investments in training and qualification systems to support the reintegration efforts.\textsuperscript{150}

Learning from this international experience, as well as other international case studies, underlines the need for an integrated system. In parallel to establishment of a centrally administered unemployment benefit system, international best practices follow a comprehensive reform attempt that modernizes labor regulations and links unemployment benefit reception to a centrally administered model of job search support to improve the quality of labor market matches. Using the example of the Rep. of Korea, this would, ideally, be complemented by a skills development system. Such a system would be responsible for the upskilling of workers based on market needs, including the engagement of the enterprise sector. Programs directly targeting unemployed youth and women can help address their specific labor market constraints.

In Indonesia, a “mixed” unemployment benefit system could integrate severance payment obligations, while reducing the economic burden on workers and employers. The proposition for the “mixed” unemployment benefit system in Indonesia consists of an individual savings pillar and a newly created solidarity fund. Figure 3.19 demonstrates how this could function. Workers and employers would both contribute to the individual savings pillar. This should help reduce moral hazard and maintain incentives

\textsuperscript{145} For fixed-term contract workers, the risk that needs to be covered is unexpected unemployment during their contract, rather than at the end. Therefore, important design parameters such as access to the unemployment benefit or contribution and replacement rates need to be specifically adapted for the nature of the employment related risks of fixed-term contract workers.

\textsuperscript{146} See Robalino and Weber (2013).

\textsuperscript{147} See also Holzmann and Vodopivec (2012) for a compendium of articles on an international perspective on severance payment obligations and economic consequences.

\textsuperscript{148} Hartley et al (2010).


\textsuperscript{150} Yun and Hur (2011) as cited in Holzmann and Vodopivec (2012)
to actively participate in the (formal) labor market. Such a design allows employers to offset (part of) their severance obligations by contributing to workers’ individual accounts, effectively integrating severance payment obligations—that ideally correspond with international levels—into the system. Upon depletion of the funds in their individual accounts, unemployed workers would then have access to the solidarity component based on certain conditionalities. These could involve participation in active labor market policies, including programs for job counseling, active job search, and skills training. Overall, income protection in case of unemployment would be much more effective and adequate.

Figure 3.19: Unemployment savings and insurance

Contributions by workers and employers should be within the current implicit costs of income protection in Indonesia and in line with other countries. Currently, Indonesia’s implicit severance payment contributions range from 2 to 7 percent of monthly wages. A reform simulation suggests contributions within a tighter 2 to 3 percent range. Financing options range from diverting the entire amount from the JHT account to adding a completely new contribution, to a number of options in between. Unused unemployment savings can be folded back into the remaining old age savings account and contribute to higher pensions.

3.2.4.3 Options to Improve Sustainability for BPJS Pension


Calculated using IFLS 4 and IFLS 5 datasets.
There are clear trade-offs between sustainability and adequacy in any pension scheme. In the last section, concerns over adequacy in the private sector scheme were addressed in two ways. Restricting withdrawals from the JHT scheme has no impact on the financial sustainability of the pension system. In contrast, changing the defined benefit formula to revalue past wages by wage growth instead of prices will unambiguously increase the deficits in the BPJS scheme. In such a scenario, deficits emerge about 10 years earlier than in the status quo baseline case, and eventually exceed 1 percent of GDP. The gradual increase in the contribution rate from 3 to 8 percent is no longer sufficient to preclude deficits during the projection period. An immediate increase in the contribution rate from 3 to 9 percent of wages would be required to avoid deficits, compared with 6 percent under the current rules. As described in Box 3.4, all of these projections assume that the anomalous method of indexing the benefit ceiling will be corrected (i.e., indexed to wage growth).

Box 3.4. How indexing the maximum pensions to prices would end the pension scheme

The current rules include an anomaly not found in other pensions schemes around the world. The maximum pension (typically, the maximum is on earnings subject to the benefit formula) is indexed to prices. The maximum pension is currently about IDR 3.8 million, close to the current average covered wage. Since no pensions will be awarded until 2030, this parameter can be ignored for the moment. However, if wages grow faster than prices, the ratio of the maximum pension to the average new pension will start to converge. Contributions will continue to be made on the basis of the actual wage, while the pension will be limited by the maximum pension. A worker who enters the labor force in 2020 with a wage of 100 and experiences wage growth of 5 percent annually would qualify for a pension worth about 250 in 2060. The maximum pension, however, would have grown only by inflation of say, 2 percent, so that it reached about 245 in 2060. All workers at the average and above would receive the same pension. These pensions would bear no relationship to the contributions that the worker had made over the 40-year period. The figure below shows the divergence between wages and pensions over time. The exact outcome would depend on real wage growth and is therefore both unpredictable and arbitrary.

Source: World Bank staff calculations.

Policymakers could choose to leave the current benefit levels in the DB scheme. This would still mean that deficits would eventually arise without an increase in contribution rates. If the decision were to increase replacement rates, contribution rates would have to increase even more to ensure that deficits did not arise during the period in question. In either case, contribution rates would have to increase if long-term balance were to be maintained. The timing of these increases have important implications, however.
A gradual increase in the contribution rate has the advantage of avoiding the potential disruption to firms and the labor market. On the other hand, increasing contributions early would avoid the inevitable intergenerational transfer whereby future cohorts paid more contributions for the same pension than earlier cohorts. Another advantage of increasing contribution rates to the level required to match liabilities is related to inequities caused by the 15-year vesting period.152

One way to address this disparity would be to immediately increase the contribution rate. This would equalize the contribution-benefit relationship for all current and future workers, and minimize future deficits. On the other hand, increasing the tax wedge could have negative implications for the goal of reducing informality and increasing coverage. It is worth noting that the contribution subsidy described earlier and aimed to increase coverage would also partially offset any contribution rate increase.

Increasing the contribution rate would lead to a much faster accumulation of reserves in the near term in the context of a limited domestic capital market and lack of experience in pension fund management. How those reserves are invested will be important in determining sustainability at the margin (see Box 3.5). The international experience suggests that this is not a trivial challenge and highlights the importance of good governance, accountability and a sound investment policy.153

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152 The intention of this rule is reasonable in that below a certain threshold paying a very small annuity may not make sense. At the same time, the fact that the contribution rate is lower than what is needed to finance the one percent accrual rate in the defined benefit scheme means that each contribution of a worker that is only in the scheme for 14 years yields a benefit that is only half of the value of each contribution a worker that reaches year 15.

Box 3.5. BPJS investment of reserves

It will become increasingly important for the GoI to increase its capacity to manage pension fund investments and to ensure that returns on assets can best meet liabilities. This would include an investment governance framework that emphasizes risk management, controlling costs, matching assets and liabilities, and maximizing long-term returns, and that is grounded in an agreed risk-return profile, and well-defined operational policies and procedures on fund management and oversight. It will be important to ensure adequate investment expertise and member representation in governance arrangements, and that a clear distinction be made between the task of setting overall investment strategies and rules, and of managing day-to-day investments.

BPJS Employment has an overly conservative investment approach for a program intended to provide long-term retirement security. The core issue for BPJS Employment in terms of investment strategy is the prevalence of early withdrawals from the JHT program. More than half of the annual contribution inflows for BPJS go out in the same year to fulfill early withdrawal requests for BPJS. Only a minority of BPJS JHT funds remain after a 10-year period. Beyond the reality of this short-term challenge, BPJS investment strategies are also currently limited by an inability to register any realized losses. This reality arises from an interpretation of an anti-corruption clause in the law pertaining to national audits. Based on this interpretation by the auditor-general, any “national assets” that were to lose value may be viewed as an instance of corruption. This interpretation has had the effect of encouraging investment in only “safe” assets, not those tied to the liability.

There are some promising signs of progress in the most recent BPJS Employment financial data. The 2017 annual report reveals that the size of the JP Investment pool more than doubled in 2017, growing from IDR 12 billion to IDR 25 billion. In addition, the investment mix for this pool improved, with the proportion of bank deposits falling from roughly one-quarter of the JP investments to 12.7 percent. Unfortunately, again, the JP pool, despite growth, is still a minority of total BPJS Employment investments.


3.3 BPJS Health Insurance

3.3.1 Coverage
Health insurance coverage has surged in the past few years. This is primarily because of payments provided by both central and local governments to cover the premiums for almost 130 million of the more than 220 million people covered. Figure 3.9 shows how the massive increase for the subsidized poor at the national and local levels has been the major force behind the expansion. The remainder include salaried workers whose employers pay 5 percent of wages as premiums, and non-workers and non-salaried workers who pay a flat premium. As discussed later, this last group is de-facto heavily cross-subsidized. While the expansion of coverage has been remarkable, there are still close to 50 million people without health insurance. A disproportionate number of these are children, especially those aged 0 to 4 years old. Moreover, an analysis of the incidence of the subsidized population (see Chapter 2 on Social Assistance) shows that there are significant errors of both inclusion and exclusion. Among the bottom 40 percent of the distribution who are meant to be covered by the subsidy (PBI-JKN), at least half were excluded and more than one-fifth of the highest quintile was subsidized. At the same time, low entry barriers for informal workers allow them to access expensive healthcare services after a limited period of contribution (45 days), constituting a major cost driver for this group.

Figure 3.9: Dramatic increase in coverage for national health insurance scheme in Indonesia

Source: Pisani (2017)

3.3.2 Adequacy

Data on the actual number of workers for whom the 5 percent deduction is being made are not available. They cannot be assumed to be the same workers as those contributing for pensions or short-term benefits because the two registration processes are administered separately by the two BPJS institutions and there is no mechanism for cross-checking the two databases. Based on survey data, we estimate that the number of employees paying health insurance premium in the private formal sector is about the same as those contributing to the JP program.
Assessing the adequacy of health insurance is more complicated than for pensions as it involves both financial protection and costing the range of services available. The depth of the coverage—what medical services and procedures are effectively covered (as opposed to what is covered de jure in the rules)—is an important metric of adequacy but beyond the scope of this report. What is clear is that without limits on what is covered, demand is likely to outstrip the available supply, resulting in rationing. While JKN offers a comprehensive and generous package in principle, the supply side constraints limit the de facto coverage, with variable service readiness across different parts of the country and utilization rates much lower in poorer, remote areas. Only one-tenth of physicians live in rural areas where 45 percent of the population lives. According to one study, “…many subsidized members did not know how to access services or lived too far from PCPs, resulting in much lower claim ratios and use ratio than contributing members.” The most pronounced disparities in terms of lack of utilization is in the eastern regions of Indonesia.

By at least one important measure—reducing out-of-pocket (OOP) expenditures—Indonesia has shown significant success as shown in Figures 3.10 and 3.11. Figure 3.10 shows a clear relationship between the expansion of coverage and the reduction in OOP expenditures over time. An increase of 20 percentage points of coverage in Indonesia was accompanied with a decline of around 15 percentage points in the share of health OOP spending. Since 2010, the share of health spending through social health insurance also rose, from about 5 to 17 percent, further corroborating the impact of the expanding coverage.

The Indonesian experience also compares well with its neighbors in terms of progress in reducing OOP spending. As shown in Figure 3.10, the latest figures for 2016 put Indonesian OOP spending just below that of Malaysia and significantly lower than the Philippines or Vietnam. This is clearly due to the massive expansion of coverage since 2014. At the same time, Thailand shows that further reductions are possible, albeit not without additional spending. Thailand spends more than three times as much as Indonesia as a share of GDP. This is partly due to the fact that it subsidizes an even larger share of the population than does Indonesia. As is the case in improving the adequacy of pensions, additional resources will be required to continue to make progress in ensuring access and adequacy of Indonesia’s health insurance program.

Figure 3.10. OOP spending on health has started to decline as coverage has increased

156 The decline could have been higher if patients were not being charged. There is evidence that out-of-pocket expenditures are still significant, especially for medicines, despite rules that all treatment should be provided free.
3.3.3 Sustainability

Source: WHO (2017)
Health insurance deficits, defined as the difference between premium income of all kinds and expenditures, has been rising in the past few years as shown in Table 3.4.

Table 3.4: Health insurance revenues, expenditures and deficits, 2014-18

<table>
<thead>
<tr>
<th></th>
<th>JKN 2014</th>
<th>2015</th>
<th>2016</th>
<th>2017*</th>
<th>2018**</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premium Revenue</td>
<td>40.72</td>
<td>52.69</td>
<td>67.4</td>
<td>74.25</td>
<td>81.97</td>
<td>317.03</td>
</tr>
<tr>
<td>Medical expenses</td>
<td>42</td>
<td>57</td>
<td>67</td>
<td>84</td>
<td>94</td>
<td>344</td>
</tr>
<tr>
<td>Deficit</td>
<td>-1.28</td>
<td>-4.31</td>
<td>0.4</td>
<td>-9.75</td>
<td>-12.03</td>
<td>-26.97</td>
</tr>
</tbody>
</table>

Note: * unaudited; ** estimated.
Source: BPJS presentation at the National JKN Evaluation; August 2019.

Health insurance coverage has increased mostly through government subsidies to cover premium payments for the poor. However, the population covered through this premium subsidy consumes less than what is spent on its medical treatment. Importantly, with this coverage and with improving service readiness, utilization rates have doubled for the subsidized PBI population, even though they still remain much lower than for the general population. This group has out-patient rates that are one-third of the national level and in-patient rates that are half of the national rate. As suggested earlier, this may stem not from a lack of demand, but because of supply and access constraints and/or a lack of awareness. As these problems are addressed, utilization rates should increase toward at least the national averages, contributing to better equity, though this would increase the overall cost of the scheme.

The current system leads to a series of cross-subsidies that when netted out leave a significant deficit that must be covered by the central budget, the ultimate guarantor of the scheme’s finances. At least a portion of the cross-subsidy is regressive and could be addressed by increased access for the centrally subsidized PBI population. The locally determined PBI households are much less likely to be poor, and appear to have more access and information allowing them to utilize at a higher rate than the national PBI households whose eligibility is determined using the UDB/DTKS. Finally, utilization rates are two to three times higher for the voluntary informal sector participants in the scheme than the national average, largely because of the adverse selection and the low entry barrier, and this is what is driving the bulk of the deficits. The country has made a policy choice to keep entry barriers low, and so voluntary informal sector participants end up joining the scheme only when they need services, or become passive soon after they have availed services, thereby making this group who pay a flat premium consume much more resources than they pay into the system. This has also meant that the service utilization by this category of beneficiaries is much larger than those who contribute at any point of time. In addition, deficits are also driven by expenditures, especially design issues that lead to overutilization of hospitals, weak incentives for providers to contain costs, and lack of cost-sharing or spending caps along with weak referral and gatekeeping practices.157

As shown in Figure 3.12, the adverse selection creates a large cross-subsidy from three population groups: formal sector workers, public sector employees, and the centrally determined PBI population158. Those able to use the low entry barriers of JKN—the voluntarily enrolled informal sector workers—produce most of the deficits, along with the local PBI who are poorly targeted, and the non-

157 See World Bank (2018d).
158 The most recent data appear to show that there are no longer surpluses due to the centrally sponsored PBI population. This is likely due to increased utilization rates by this group.
workers. In the past two years, cross-subsidy within the covered groups has not been adequate to prevent deficits, and has needed additional subsidization. Recent analyses suggest that these deficits are likely to continue growing unless there are changes to the way the scheme operates. More importantly, the value derived through the significant government subsidy - in the form of premium paid for the PBI group, and the burden of deficit for low entry barriers among the informal workers - can be significantly improved through expenditure-side measures. It is worth noting that Indonesia spends significantly less as a share of GDP on health than other countries at a similar income level.

**Figure 3.12: Growing deficits largely among the voluntary informal sector workers**

![Graph showing growing deficits among different groups](source)

Source: BKF (2018a) based on data from BJPS Healthcare; figures are in billions.

### 3.3.4 Options for Reform
#### 3.3.4.1 Options for expanding coverage

The GoI aim was to achieve universal health coverage by 2019. Figure 3.21 shows that there has been impressive progress toward universal health coverage in the past few years. Most of the increase is due to the subsidized coverage for more than 130 million people.

**Figure 3.21: Growth in health insurance coverage**

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159 According to one projection, baseline deficits would increase by close to 60 percent by 2021. Pisani (2017)

160 See World Bank (2019b).
Nevertheless, close to 50 million people remain uncovered. Expanding the coverage to this population would bring the total to 180 million. The costs of covering all these members at government’s cost would be partially offset by the implicit subsidy they already receive on account of the adverse selection and the safety net function that low entry barriers provide. However, there would be growing subsidy needs in the scheme if no expenditure-side reforms are undertaken. In addition, as mentioned earlier, expanding the supply of medical services available to people in poor regions would also require investment to improve the equity of the scheme. Also, financing is not the only challenge. A large share of those not covered are children, especially those aged 0-4 years old. This may be at least partly due to lags in birth registration, and would require improvements in civil registration and linkages to the health insurance registration process.

Even if perfect targeting were achieved, the dichotomous approach to subsidies results in a sharp discontinuity between one percentile of the population and the next. The capacity to pay is certainly higher in the 40th percentile than in the 11th, but all these households are subsidized equally. And a household in the 42nd percentile receives no subsidy at all. Ideally, the limited budget for subsidizing health insurance premiums could be used more effectively by differentiating between the poor and non-poor informal sector. It should also be possible to extend this logic beyond the bottom two quintiles. The proposed expansion and improvement of the social registry described in Chapter 4 would make this possible. In addition, as administrative databases in Indonesia improve and the GoI digitizes its information in a way that allows for interoperability, the combination of the data in the social registry and cross-checking with property, automobile, income tax and other databases can help improve targeting accuracy. Examples can be seen in countries such as Egypt and Turkey. Turkey, for example, has used
more than 24 databases to differentiate health insurance premia among different parts of the informal sector.

3.3.4.2 Options for improving adequacy and sustainability

Declining OOP expenditures and increasing utilization rates suggest that financial protection provided by health insurance coverage is improving as more people are covered. At the same time, the low utilization of the subsidized PBI population indicates problems of access and/or awareness among poor households.\textsuperscript{161} Evidence on geographical patterns of utilization support the notion that supply constraints are limiting the impact of health insurance coverage for people in remote areas. Expanding access, especially for the central PBI population, should increase utilization and therefore costs. At the same time, close to 50 million people are not yet covered. Extending the PBI program to cover this population would further increase budgetary outlays. There is clearly a tension between increasing coverage, service adequacy and sustainability. The World Bank’s recent public expenditure review explores some areas of potential savings and new revenue sources, but ultimately concludes that overall spending levels will have to rise to achieve reasonable levels of adequacy and continue to reduce OOP spending, though there is considerable room for cost containment through expenditure-side reforms.

Deficits in the health insurance scheme have been rising in the past few years and totaled about 0.1 percent of GDP in 2018. Addressing the remaining coverage gap and improving access will require additional resources of at least the same magnitude. A recent World Bank report\textsuperscript{162} provides an in-depth analysis of the health system and recommends higher and more efficient spending. The JKN-specific reform options on the revenue side include:

- **Updating JKN premiums using more robust actuarial methodology:** Currently, the model used to estimate the premium increase is inadequate. It is a simple projection based on the status quo. There is no attempt to look at where growth in membership may come from (i.e., from what type of member, mainly healthier informal sector workers), or based on more granular assumptions regarding age, sex, epidemiologic or geographic variation, and top cost drivers. There is no doubt that premiums need to increase but the question is how the increase should be allocated fairly across member groups to ensure affordability and participation, especially among the informal sector. Currently, BPJS Healthcare’s single national pool allows a high degree of cross-subsidization across member groups, and remains a remarkable achievement for Indonesia. However, given the imbalances in the premium rates, the system is not able to compensate for the high degree of adverse selection by sicker informal sector workers- which in effect represents a coverage far higher than the contributory member base.

- **Extend coverage similar to the PBI, to the informal sector:** This would bring in healthier informal sector workers currently not enrolled, lowering the cost per member per month for all informal workers and providing a more predictable source of additional revenue for BPJS Healthcare.

- **Measures to enforce contribution compliance:** If the coverage is not extended to the informal sector, then changes to JKN design (see below) will be needed to mitigate the likely continued adverse selection from the informal sector. This, however, remains a suboptimal solution.

On the expenditure side (in order of potential impact):

\textsuperscript{161} Preliminary data suggest that there was an increase in PBI utilization in 2018.

\textsuperscript{162} See World Bank (2018b).
• **Modify regulations to empower BPJS Healthcare:** Despite the original 2004 Social Security Law allocating most key purchasing functions to BPJS Healthcare (e.g., developing provider payment methods, setting payment rates, setting contracting terms with providers), a series of regulations has kept these functions de facto under the MoH. This situation leaves BPJS Health with limited levers to undertake cost containment (which should be a primary role for the single payer) and to incentivize effective service delivery, efficient provider behavior, and higher quality of care. These key functions need role clarity so that BPJS Healthcare is empowered to deliver on expectations from the single payer.

• **BPJS Healthcare, once empowered to do so, could improve the design and implementation of provider payment methods:** In particular: (i) design, test and refine alternative hospital payment arrangements as case-based payment systems still leave scope for overutilization with no caps on hospital spending, leading to hospitals accounting for 84 percent of all JKN expenditure, and driving both the deficit and health-care cost inflation (estimated at about 17 percent per year); (ii) refine and expand existing performance-based indicators (jointly with the MoH); and (iii) harmonize regulations around the use of capitation funds (jointly with the MoH).

• **Rationalize the benefit package:** Currently, JKN offers a generous benefit package covering all medically necessary treatment with no copayments or caps on spending. At the same time, public health expenditure is low (US$49 per capita)—well below regional and lower middle-income averages and the recommended US$110 per capita needed to deliver an essential UHC package. While it is unlikely that shrinking the benefit package will be politically feasible, there are several steps that the MoH can take to better align benefits with available resources. For instance: (i) better costing of interventions to help inform premium/reimbursement rates, starting with the 144 services covered under JKN capitation; (ii) developing diagnostic and clinical protocols, including referral pathways, for each intervention included under the benefit package; (iii) limiting the enrolment period to 2-3 months once a year or lengthening the activation period to discourage adverse selection; and (iv) limiting treatment coverage to lowest (shared) class of hospital rooms (class 3) as per the original law (and also reiterated by Perpres No. 82).

• **Strengthen accountability mechanisms:** Invest in improving the quality and interoperability of various data systems, as the effectiveness of BPJS Healthcare to manage funds more efficiently is dependent on information that is owned by other entities. Currently, the operationalization of the GoI’s One Data Initiative is left to line ministries, with the result that the MoH is developing implementation guidelines for MoH systems. However, wider coordination and collaboration is needed to fulfill BPJS Healthcare’s mandate. Empowering the National Social Security Council (DJSN) by either giving it independent status or by changing the representation and decision-making authority of the Council would be a key measure as well. By law, DJSN is meant to have overall supervisory authority over the implementation of JKN. In practice, DJSN has limited influence as representation and funding gives more weight to represented ministries. As a result, DJSN has no institutional power to veto any regulation that might adversely compromise JKN’s sustainability.

While a modest increase in JKN premiums is required, long-term sustainability can only be achieved if expenditure growth is also addressed. Raising revenue and containing cost are both necessary. However, many of the changes needed to address inefficiencies in JKN implementation lie outside the control of BPJS Healthcare and will require high-level intervention from the Office of the President or the Vice-President, as well as empowering BPJS Healthcare for greater jurisdiction over core ‘purchasing’ functions as detailed below. Finally, there is widespread recognition of the need to invest in the supply side
infrastructure of Indonesia’s health system in the longer run, especially in rural and remote areas, and to improve service delivery in general.163

Experience in other countries in the region suggests the need to start planning early to address the financial pressures that will come with growth of the “very old” population and the continued increase in life expectancy. The need for alternatives to expensive hospitalization for those above 75 or 80 years of age in the form of aged care raises important policy questions as to the most viable options, given the specific conditions in Indonesia. Wisely, Indonesian policymakers are starting to study these options, and looking to the good and bad experiences of neighboring countries.

3.4 Civil service pensions

3.4.1 Adequacy

Civil servants and the military are covered by different defined benefit pension scheme(s). Pension programs for civil servants were set up during the Dutch occupation period and were re-affirmed in 1956 when the President enacted a law on pension spending. Civil service pension rules were revised in 1969 with the issuance of Law No. 11/1969, which is still in effect. Currently, civil servants in Indonesia are eligible for four social insurance benefits (i) civil service pension, CSP; (ii) THT programs – lump sum at the time of retirement; (iii) JKK – work accident; and (iv) JKM – death benefits. These programs are sponsored by the GoI, and administered by PT Taspen, a state-owned enterprise dedicated to this sole purpose. Civil servants pay a total of 8.64 percent of basic salary164 in contributions for the four programs (4.75 percent for CSP, 3.25 percent for THT, 0.24 percent for JKK, and 0.3 percent for JKM).165

The civil service pension program provides civil servants with old-age, disability and survivor benefits. It provides lifetime annuities at retirement age equal to 2.5 percent (accrual rate) of final base pay for each year of service to a maximum of 75 percent.166 The mandatory retirement age for civil servants is 58, or age 50 with 20 years of service.167 The pensions after retirement are indexed to a Presidential matrix, which translates to a nominal wage growth indexation for pensions. Although the government collects 4.75 percent of base wage as contributions from civil servants,168 the financing of CSP is on a pay-as-you-go (PAYG) basis from the budget. The endowment benefit (THT) scheme is financed by a 3.25 percent deduction from ‘basic salary + family allowances’ and entitles the civil servant to a lump sum equivalent to 60 percent of final basic salary plus family allowance. It also includes a life insurance payout of twice the final basic salary plus basic allowance.

The defined benefit formula that is used to calculate the annuity paid to civil servants is designed to produce much higher replacement rates than the pension scheme (JP) for salaried workers. A civil servant who works for 30 years receives a replacement rate of 75 percent, which is applied not to the

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163 See World Bank (2016c).
164 Family allowances are included in basic salary when calculating contributions due, where family allowance is 10 percent of basic salary.
165 We have not analyzed the JKK and JKM programs for civil servants due to lack of data.
166 They also get a thirteenth pension in Indonesia, so the effective accrual rate is 2.71 percent and effective max RR is 81.3 percent (2.71 percent *30 years). The maximum Replacement rate is reached when a person has a service credit of 30 years
167 It can be extended to 65 or 67 for certain categories, including government officials (pejabat); there is no mandatory retirement age for the President and Vice-President.
168 Technically the contributions are government assets but the GoI is likely using PT Taspen as an agent to manage and invest the funds. While the GoI could use this fund to make the benefit payments it has chosen not to do so.
lifetime average salary but to the *final* basic salary. In comparison, a salaried worker who contributes for 30 years to the JP scheme receives a replacement rate of 30 percent, which is applied to the lifetime average salary, where past salaries are revalued using prices. While the target replacement rates for civil servants are extremely high, the actual replacement rate produced is much lower. This is because allowances form a large share of total salary for many civil servants and they are not included in the basic salary, which is used for the purpose of pension calculations.

**Civil service pay in Indonesia has three main elements—basic salary, standard allowances, and honoraria allowance—and the allowances are growing at a faster rate for senior civil servants.** As part of standard allowance, ‘Performance allowances’ have increased 71 percent annually between 2006 and 2011. During the same period, standard allowances and honoraria increased by 24 and 23 percent, respectively, while basic salary grew the slowest at 13 percent annually (Pay report, 2013). The rapid increase in allowances relative to basic salary has led to an increase in allowances as percentage of total compensation from 10 percent in 2009 to 27 percent by 2018 (Government Statistics 2019). Allowances not only form an increasingly higher percentage of total compensation but also vary significantly across grades. Basic salary is the dominant component of total cash compensation (60 percent or more) only for junior, relatively unskilled employees. These staff, who do not have a bachelor’s degree, make up 34 percent of the civil servants in the central ministries and agencies.169

The proportion of allowances in total compensation is significantly higher for mid and senior staff (Figure 3.13). This leads to a large variation in the actual replacement rates across civil servants. In some cases, owing to the low percentage of base pay in total compensation, senior staff might receive a pension as small as “10 percent of take-home pay”.170

**Figure 3.13: High, and varying allowances by rank**

![Bar chart showing average monthly compensation for non-BR agencies (IDR)](chart1)

![Bar chart showing average monthly compensation for BR agencies (IDR)](chart2)

Source: World Bank (2013d)

In addition to the DB pension, civil servants are entitled to lump-sum payments and pre/post life insurance benefits under the THT scheme. However, owing to design challenges, discussed in the following section, THT has been underfunded for many years. The growing size of the unfunded liability as a percent of GDP necessitated a benefit freeze in 2001171 and significant special government

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169 World Bank (2013d)
170 Ibid.
171 Lump sum benefits under THT are to be calculated as 60 percent of basic pay. The reform of 2001 froze the benefit for service before Jan 2001 to the 1997 Presidential matrix. Therefore, for someone retiring in 2012 with 30 years of service, the benefit for
contributions to the program. While the reduction in benefits after the 2001 reform helped control some of the burgeoning liability, additional reforms would be needed to make the scheme fully funded.

### 3.4.2 Sustainability

The factors that determine the financial future of the civil service pension scheme are very different from those of the SJSN. In contrast to the SJSN, the civil service pension scheme is fully mature in that cohorts retiring today have spent their entire careers under the scheme. Moreover, the underlying demographics are more related to historical hiring patterns than to the age structure of Indonesia’s population. As can be seen in the count distribution, by age, of current civil servants (Figure 3.14), there is a bulge in number starting from age 44 until age 56. The fall between ages 35 and 43 is likely related to the 1997-98 Asian financial crisis. Income per capita did not recover fully until around 2003—a period that corresponds to the lower hiring rates that are reflected in the age distribution of civil servants today. The result of these demographic patterns is a rapid increase in the number of civil service pensioners as the bulge cohorts retire in the next few years. While some pensioners die each year, the net change will be significantly positive for the next decade.

**Figure 3.14: Civil service demographics will lead to a sharp, short-run increase in the number of pensioners**

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172 World Bank (2013d)
Figure 3.15 shows the baseline results of financial projections using the PROST model.\textsuperscript{173} Expenditures grow until 2026 before stabilizing at around 0.8 percent of GDP, only to increase once the system dependency ratio worsens.\textsuperscript{174} Adding pensions for military and police would increase the expenditures slightly.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure3.15.png}
\caption{Baseline projections of civil service pension expenditure as \% of GDP}
\end{figure}

The THT program was meant to be a fully funded scheme paid for by the 3.25 percent employee contribution rate. However, in reality, it is a defined benefit scheme and since the benefit formula is fairly generous, the required contribution rate to fully fund the program is more than double the current contribution rate. Consequently, the THT program has been underfunded for many years and the current structure means that the unfunded liability will continue to increase each year. According to PT Taspen’s 2017 annual report, premium and contribution income for THT program amounted to IDR 6,098.20 billion, reaching 99.22 percent of RKAP 2017 of IDR 6,146.17 billion. The size of the unfunded liability is expected to continue increasing as a percent of GDP for the next 5 to 10 years before starting to decline.\textsuperscript{175} The projections suggest that the internal demographics of the civil service will result in an increase in the ratio of pension spending to GDP (including the THT)\textsuperscript{176} over the next decade or so before stabilizing. Since the scheme is mostly non-contributory, this increase will directly affect the overall government deficit. There are no reserves and therefore investment policy is not a factor.

There is a significant probability that there may be fundamental changes to the scheme that would dramatically change the financial picture. To begin with, the BPJS Law envisioned that by 2029 civil servants would go into the BPJS such that over time all workers would be covered by the BPJS pensions just as is the case with health insurance. However, a proposal to set up a new defined contribution scheme for civil servants is now being developed. Furthermore, consideration is being given to shifting allowances

\begin{itemize}
\item \textsuperscript{173} The underlying macroeconomic assumptions are the same as for the BPJS projections. The projections also assume a hiring freeze from 2016 to 2022. No change to the current situation regarding the high proportion of allowances in total compensation is included in the baseline. We assume pensions to be indexed to nominal wage growth as pensions have traditionally been revised in line with Presidential matrix on wages. However, over the past two years, pension increases have been almost half of the wage increases announced.
\item \textsuperscript{174} The dependency ratio is the ratio of pensioners to active civil service employees.
\item \textsuperscript{175} World Bank (2013d)
\item \textsuperscript{176} See Executive Summary (2013d) report by the World Bank for a discussion on program finances of THT.
\end{itemize}
into the pensionable salary going forward. These changes would have a significant impact on the fiscal costs of civil service pensions and are discussed in the next section, along with options for parametric reforms to the existing scheme.

3.4.3 Options for Reform
3.4.3.1 Options to Improve Adequacy

Improving the adequacy of the civil service pension will require redefining the earnings base that is used to calculate pension benefits. The replacement rate as a share of total salary has been falling for civil servants, especially so for senior civil servants who have the highest proportion of their total salary as allowances. For some individuals, the base salary is such a small part of total compensation that, even with the relatively high accrual rate of 2.5 percent, the replacement rates as a share of total salary can be as low as 20 percent. Moreover, this replacement rate is changing every year as the share of allowances changes and continues to vary significantly across workers in different grades.

One way to correct this situation is to prospectively consider some, or all, of the allowances as part of the earnings base when calculating pension benefits. In adopting this approach, the adequacy of pensions is improved while retaining “pay flexibility”\(^{177}\)—a goal of the recent bureaucracy and pay reforms. If all the allowances are prospectively included in the earnings base the average replacement rate (RR), which is currently 35 percent of an individual’s last gross wage, would go up to 80 percent.\(^{178}\) The higher RR will cause pension spending to more than double relative to the baseline, as shown in Figure 3.22.

Figure 3.22: Expenditures as % of GDP

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\(^{177}\) Multiple allowances are seen as a way to introduce flexibility in Indonesia’s otherwise rigid basic salary structure, to respond to the rising complexity of labor market World Bank (2013d)

\(^{178}\) Since pensions are paid 13 times a year, the RR for 30 years of service is greater than 75 percent.
Some of this can be offset by simultaneously carrying out parametric reforms, such as retirement age increase, moving away from final pay to lifetime earnings with wage valorization, and change in indexation of pensions from wages to inflation. In particular, it will be necessary to reduce the accrual rate significantly to avoid a huge jump in replacement rates from one cohort to another, as well as a sudden spike in spending.\(^{179}\) This package of reforms carried out in conjunction with including allowances for benefit calculation, modeled as Option 1a, will not only contain the otherwise rising deficits\(^{180}\) but also make the system fairer for all its participants. A move to include allowances into pensionable salary should involve an analysis using individual records of civil servants on allowances. Given the decentralization of data on allowances, the analysis here instead uses the average allowance to total salary ratio\(^{181}\) and the results in this chapter would hold true for the civil service population, on average.\(^{182}\)

### 3.4.3.2 Options to Improve Sustainability

The affordability of the civil service pension scheme is a more immediate issue due to the wave of retirements coming in the next few years. Under no changes to the scheme (baseline scenario) expenditures will grow in the short run, stabilize in the medium run, and rise in the long run as the dependency ratios worsen. However, decisions made to improve adequacy by bringing in allowances could have a significant fiscal impact, as could a decision to introduce a new, prefunded, contributory pension scheme. The competing goals of improving adequacy and ensuring fiscal sustainability can be achieved by enacting parametric reforms to the existing scheme and/or longer-term systemic reforms that would apply to new civil servants. At least three parametric reforms, namely, increasing the earnings period for the benefit calculation, pension indexation to inflation, and retirement age increase, should be considered. Each is in line with best international practice and most OECD countries have adopted them in the past 10-15 years.

The first is to increase the earnings period that is used for the benefit calculation from final salary to the lifelong earnings. Using final salary was a practical feature of DB schemes when paper records were used. In the past few decades, however, digital records make it relatively straightforward to include historical earnings in the calculation. The reason for moving to longer periods is related to potential distortions and inequities that may arise when final salary is used. Final salary-based formulas can lead to regressive outcomes if, for example, lower-income workers have flatter age earnings profiles than more skilled workers, as is typically the case. It may also lead to manipulation whereby some individuals are able to receive a substantial pay increase just prior to retirement. Finally, the final salary may be arbitrarily higher for a cohort that retires the year after a public-sector wage increase, compared with cohorts that retire just before an increase. All OECD countries have moved to longer averaging periods (France is the

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179 There are cases (e.g., Sri Lanka) where wage bill reforms were not coordinated with pension reforms resulting in unanticipated large increases in spending.

180 In the short run Option 1a will in fact lead to lower deficits than baseline as contributions of 4.75 percent will be collected on pensionable salary and pensions will be indexed to inflation.

181 We worked with counterparts from the MoF to validate the assumption on average allowance to total salary.

182 A more detailed analysis using individual level records, or a random sample of records would enable commentary on adequacy of pensions at a granular level and to assess the distributional impacts of including allowances to pensionable salary. This would be important especially given that allowances vary considerably by rank, by ministry, and by location.
shortest, with 25 years considered). Almost all revalue historical wages using wage growth (except France).

**A similar argument applies to the indexation of pensions.** All OECD countries automatically index pensions and the vast majority use prices to do so. This protects the purchasing power of the pensions and avoids arbitrary outcomes due to differential inflation across cohorts. The civil service pension in Indonesia is indexed to wage growth as wages are revised in line with the wage increases as per the Presidential matrix. This injects an arbitrary element as wage increases are determined periodically, and some cohorts will be more fortunate than others depending on the timing and magnitude of the increases. Wage indexation also increases the cost of the scheme.

**Finally, rising life expectancy means that the period during which a pension will be received is higher for a cohort retiring today than the cohort that retired 20 years ago, and lower than the cohort that retires 20 years from now.** As life expectancy continues to rise due to reductions in mortality rates, all else equal, longer lives would mean more rupiah out of the system for the same contributions over time. This creates issue of fairness between generations. Moreover, the ability to work is generally increasing along with life expectancy. Unless retirement ages are increased, the present value of pensions for future cohorts would continue to rise and the economy may lose as productive workers leave the labor force. For these reasons, the retirement age in OECD countries has increased by around five years in the past two decades, with some countries planning to link changes in retirement age to changes in life expectancy. As retirement age increases, the maximum service credit period\(^\text{183}\) over which benefits can be accrued should also increase in line or else people would have little incentive to work. Early retirement could be allowed but pension benefits for early retirees should be reduced, using actuarially fair factors to reflect the longer duration over which pension benefits are paid. One caveat is that the reduction in pension spending due to later retirement may not result in lower overall government spending since older workers are more expensive than younger workers. Also, younger workers may still be recruited due to the need for other skills. In short, the estimated savings from increasing retirement age should be viewed as an upper bound.

**The aforementioned parametric reforms, when carried out with allowances included in the earnings base (Option 1a), help improve the equity, fairness and adequacy of the scheme.** However, as seen in Figure 3.23 and Figure 3.24, the deficits and implicit pension debt (IPD)\(^\text{184}\) under Option 1a have gone up relative to the baseline. This is because the savings from the three parametric reforms are not enough to offset the increased liability due to higher benefit payouts. The system could be made cost-neutral by gradually reducing the accrual rate from the current level of 2.5 percent per year to 1.7 percent. This option, modeled as Option 1b, preserves the package of reforms in Option 1a and includes the accrual rate reduction. It should be noted that even with the accrual rate reduction, the replacement rate for a new civil servant is 60 percent of final total salary, significantly higher than the current RR of 35 percent.

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183 It is 30 years for Indonesia under current rules.

184 The IPD is calculated as the present value of future spending at a given point in time.
A proposal to introduce a new defined contribution (DC) scheme for the civil service is being considered. An additional contribution from the GoI as the employer to a funded scheme would be an additional expenditure and would grow as the number of incoming employees in the scheme rose. Since the contribution rate has yet to be determined, we model a scenario such that RR from the “cost-neutral reformed DB scheme (Option 1b)” matches the RR from the new DC scheme. In doing so, we prevent any discrimination between generations of civil servants. Our analysis shows that a contribution rate of at least 20 percent (10 percent from the GoI and 10 percent from civil servants) will be needed for a new DC scheme, to match the 60 percent RR provided to civil servants in the cost-neutral reformed DB scenario.\(^{185}\)

Figure 3.25 compares future spending on the “cost-neutral reformed DB scheme for all” (Option 1b) with the “cost neutral reformed DB for existing CS + DC scheme for new CS” (Option 2). The 10 percent contribution is an additional cost to the government, and it would amount to 10 percent of the wage bill, or close to 0.35 percent of GDP in the long run. On the other hand, future pensions would be paid out of the DC fund so that budget financed spending would eventually disappear (see IPD graph, Figure 3.26). It should be noted that the nature of DC plans means that investment and longevity risks will be fully borne by the individual civil servants. Consequently, the RRs under a DC scheme are subject to a greater uncertainty.

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\(^{185}\) Replacement rate from DC scheme are highly sensitive to assumption on (a) retirement age (b) spread assumption, i.e., relation between real wage growth and investment return. The results here assume retirement age of 65 years and spread of 1.5 percent. Sensitivity analysis on these assumptions are shown in a forthcoming CSP policy note. If retirement age is kept constant at 58 then a civil servant with 30 years of service would receive about 41 percent RR.
A third option (Option 3) is for new civil servants to join the BPJS scheme. This was the intention of the SJSN Law, which required the shift to take place by 2029. The current BPJS rules (with price valorization of benefits) require 3 percent in contributions to the JP scheme and provide only about 28 percent in RR. This would be significantly lower than RR for existing civil servants, who would receive a RR of 60 percent if the DB scheme were reformed as per Option 1b (i.e., allowances were brought in and parametric reforms were carried out). Therefore, if the new civil servants were moved to the BPJS scheme and the benefits of existing civil servants were reformed, the GoI would need to top up the benefits of the new civil servants to maintain parity in benefits between existing and new civil servants. This top-up benefit could be provided as part of a new scheme set up and managed by the GoI or PT Taspen, or simply be higher contributions for new civil servants in the JHT or JP scheme (see Options 3a and 3b for options on the latter). A new civil servant would be neutral to either of these options as he/she would only pay 20 percent in contributions and would get a RR of 60 percent on average at the time of retirement. However, the integration with the BPJS scheme would give higher labor mobility to new civil servants, and allow for the preservation of rights should the civil servant move from public to private sector.

- **Option 2:** A 20 percent contribution from new civil servants goes into the DC scheme set up independently. In the long run, deficits to the civil servant scheme will go down as new civil servants will be in the funded DC scheme. This option would not lead to integration of public and private sector scheme.
- **Option 3a:** A 20 percent contribution from new civil servants split into 3 percent into the JP scheme + 17 percent into the top-up scheme. An individual civil servant would receive a DB benefit from the JP scheme and a lump-sum (or annuitized) benefit from the top-up DC scheme. The 20 percent

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186 As shown in the BPJS section, the actuarially fair contribution rate under current design of JP scheme is 6 percent. Therefore, if new civil servants are added to the JP scheme at 3 percent contribution rate, one would simply be increasing liabilities of the scheme in the long run.
187 Assumed here to be 10 percent from civil servants and 10 percent from the GoI.
188 The top-up scheme could be DC scheme managed by PT Taspen or 17 percent into JHT scheme (under BPJS) for civil servants.
contribution rate, if managed prudently, would give him/her a combined RR at the time of retirement of 60 percent.

- **Option 3b**: A 20 percent contribution from new civil servants, with 9 percent going into the reformed JP scheme + 11 percent into the top-up scheme. If the GoI chooses to reform the JP scheme, a higher percentage of contributions would be required for the JP scheme and subsequently a lesser top-up would be needed to provide a 60 percent RR to a new civil servant.

The parametric reforms in Option 1b are fiscally neutral in the long run, while the systemic reforms described in Options 2, 3a and 3b will result in higher expenditures for the GoI in the medium term as the government would need to pay 10 percent in contributions. In the long run, however, deficits would disappear and the unfunded liability would be the same between Option 2,3a and 3b.

If the GoI wishes to improve pension benefits while keeping the cost of the civil servant pension program unchanged, any viable solution will involve increasing retirement ages and changing to inflation indexing. These two changes create the fiscal room needed for benefit improvements, as benefits begin at a later age and benefit increases following retirement are smaller. Once these two changes are made, there are options available, summarized in Table 3.6, for changing the pension program’s design and financing to make the system fairer, adequate and equitable across generations of civil servants.

Finally, it is worth noting that there are at least two more important differences between the parametric reform package and the two defined contribution options. First, the integration of the DB component in Option 3b is in line with best practice and trends in OECD countries toward integration and single national schemes for all workers. This facilitates labor mobility, reduces administrative costs and is equitable. Second, the accumulation of a second large pension fund will pose additional challenges to ensure that there is a robust investment policy and transparent governance. In contrast to the defined benefit scheme, the investment risk in the proposed DC scheme falls squarely on the civil servants themselves. In this sense, Option 3b better diversifies the pension risk for civil servants.

<table>
<thead>
<tr>
<th>Reforms</th>
<th>Baseline</th>
<th>Option 1</th>
<th>Option 1a</th>
<th>Option 1b</th>
<th>Option 2</th>
<th>Option 3a/3b</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPD in 2016</td>
<td>35.9%</td>
<td>35.9%</td>
<td>35.9%</td>
<td>35.9%</td>
<td>35.9%</td>
<td>35.9%</td>
</tr>
</tbody>
</table>

Table 3.6: Summary of reform options for civil service pensions

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189 RR under DC schemes are subject to greater uncertainty to be borne by the employee. Therefore, a higher contribution rate in the DC scheme exposes civil servants to greater RR uncertainty at time of retirement.

190 Assuming JP scheme is reformed with actuarially fair contribution rate and wage valorization of benefits.

191 Six percent in the JP scheme and 14 percent in JHT. If the JP scheme rules are changed to allow for wage valorization then the split should be 9 percent in JP and 11 percent in JHT, to ensure actuarial fairness.
<table>
<thead>
<tr>
<th>IPD in 2080</th>
<th>34.2%</th>
<th>85.6%</th>
<th>46.6%</th>
<th>31.7%</th>
<th>0.3%</th>
<th>0.3%</th>
</tr>
</thead>
<tbody>
<tr>
<td>RR for new CS</td>
<td>35%</td>
<td>87.8%</td>
<td>88.3%</td>
<td>60%</td>
<td>60% for existing CS; 59.6% for new hires</td>
<td>59.6%</td>
</tr>
</tbody>
</table>

**Pros**
- Affordable in the medium term
- Improves adequacy
- Less expensive than option 1, fairer design
- Cost-neutral to baseline
- No discrimination between existing CS and future hires; IPD close to zero by 2080
- In accordance with the SJSN Law, a seamless system allows for portability of benefits. Same RR for new CS as existing one

**Cons**
- Unfair, inequitable and inadequate for majority CS
- Expensive
- Costs more than baseline
- IPD remains
- Huge fund reserves; RR in DC schemes volatile to returns, short-run cost of paying government contributions
- Transition challenges

Source: World Bank staff calculations.

### 3.5 Summary and conclusion

This chapter has noted the progress that has been made over the past decade in rationalizing Indonesia’s social insurance system, as well as the massive expansion of health insurance coverage. It has also noted the important gaps that still exist in terms of adequacy, sustainability and coverage. Pension coverage in particular is a matter of serious concern, given the aging of Indonesia’s population. Among the key findings from this analysis are the following:

- There has been dramatic expansion of health insurance coverage and a reduction in out-of-pocket spending over the past decade; this has been achieved by subsidizing the premia for about half of the population. Covering the remaining portion would increase costs further in the context of deficits that have been growing since the inception of the scheme.
- The coverage for other risks—pensions, work injury and death—remains very low for a country at Indonesia’s level of income; even those private sector workers who are covered will only begin to receive full pensions 30 to 40 years from now. In the meantime, lump sums and partial pensions are not likely to be adequate. Replacement rates for civil servants have been falling due to the increased proportion non-pensionable allowances, especially for more senior civil servants.
- The adequacy of pensions in the private sector scheme is negatively affected by the current practice of withdrawing savings from the old age savings scheme, as well as the method of valorization. The pressure to withdraw appears to be at least partially related to the lack of protection against unemployment.
- Deficits in the health insurance scheme are largely due to voluntary participants from the informal sector, while premia for the subsidized poor population exceed spending on this group. This may reflect adverse selection in the case of informal sector workers and supply constraints with regard to the utilization rates of the poor, especially in underserved areas of the country.
- The financial sustainability of BPJS in terms of deficits can be sustained by increasing contribution rates over time, but this will not happen automatically. At current rates, deficits
will appear at about the time that the scheme begins to mature. Civil service pension spending will increase due to internal demographics and then stabilize in the absence of major reforms, before rising once again. Some of the proposed reforms, especially the introduction of a new defined contribution scheme, would lead to higher government spending in the short run.

To address these issues, a series of policy options were presented and costed:

With regard to **adequacy**, the following options were considered:
- Continue to reduce OOP health spending, especially through higher utilization by poor households through increased access to and financing for health.
- Shift from price to wage revalorization of JP pensions to increase future replacement rates (while extending social assistance to the elderly during the transition).
- Reduce or eliminate withdrawals from the JHT program so as to increase old age savings.
- Introduce unemployment benefits while reducing the severance pay burden.
- Rationalize civil service pensions through parametric reforms and changing the pensionable wage base to include allowances.

With regard to **sustainability**, the following options were considered:
- Eliminate voluntary premium payments for health, while increasing earmarked government transfers and identify potential revenue source related to non-essential services.
- Increase government transfers to cover part of the premium increase required to avoid long-run pension deficits.
- Finance new unemployment savings/insurance program using part of the existing JHT contribution.
- Implement parametric reforms of the civil service pension scheme including automatic price indexation, longer averaging periods, increased retirement age and a gradual reduction of accrual rate.

With regard to **coverage**, the following options were considered:
- Increase contribution subsidies for non-health risks covered by BPJS Employment.
- Avoid large increases in payroll taxes that increase the tax wedge and encourage informality.
- Improve social insurance administration, including joint collection, record-keeping and other functions of the employment and health agencies, which should help increase revenues and reduce administrative costs (see Chapter 4).

Finally, it is important to note the interrelated nature of these reforms. Improvements in adequacy require additional measures to ensure sustainability, while coverage should ideally be expanded after measures have been taken to ensure sustainability. Moreover, to achieve universal coverage in the context of a labor market where the majority of workers operate in the informal sector, the line between social assistance or non-contributory programs and contributory programs will have to become increasingly blurred.
CHAPTER 4: Implementing a Comprehensive Social Protection System: Toward Sustainable Financing and an Integrated Delivery System

4.1 Introduction

Despite the significant progress over the past decade, Indonesia’s SP system faces pending challenges and putting in place the reforms outlined in the previous chapters will require substantial financial investment along with a well-functioning integrated delivery system. The need to expand social assistance to mitigate the impact of uncovered risks along the lifecycle, as well as the inclusion of poor/informal workers in subsidized pension and health insurance programs, makes it imperative to think of affordable, sustainable and effective ways to finance and deliver the envisioned SP system. This chapter first discusses the financing aspect: looking at how other countries and Indonesia have financed SP, assessing the current status and ending with the specific reform opportunities available to Indonesia. These sections are followed by discussions on delivery aspects: starting with unbundling the components of an integrated delivery system, assessing where Indonesia stands and finishing by identifying possible reform options.

4.2 How Have Other Countries Financed Social Protection?

Across the world, countries have adopted different strategies to finance social protection. However, decisions on how to finance SP usually reflect political and social realities that are highly context specific. While the experiences from other countries might provide lessons, they do not provide a set roadmap, particularly for developing countries in the EAP region with less developed tax and transfer systems. The potential risks and trade-offs associated with each option should therefore be carefully examined.

The most common approach relies on linking revenues, raised from introducing or altering broadly five types of taxes (consumption/sales, income, corporate, natural resource extraction and import/export tariffs) to specific programs. This has been particularly true for Latin American countries, which spent much of their windfall revenue from the commodity boom in the 2000s on equity-enhancing areas, including social assistance. Brazil, in particular, imposed a financial transaction tax (Contribuição “Provisória” por Movimentação Financeira, or CPMF) during 1997 to 2007 to finance SP interventions. During the period in which the tax was applied, 42 percent of the revenue collected was used for the public unified health system, 21 percent for social insurance, 21 percent for its CCT (Bolsa Família) and 16 percent for other social purposes. By 2007, total revenue from CPMF amounted to 1.4 percent of GDP, enough to cover the total cost of its CCT (Bolsa Família) and other non-contributory SP programs. In addition, the country financed its rural social pension program through a 2.5 percent wage levy on urban enterprises and a corporate tax of 1.0 percent on rural produce. In Bolivia, renegotiation of former oil and gas contracts in 2006 allowed the government to expand/sustain a non-contributory pension to all Bolivians over 60 years old (Renta Dignidad/ previously Bonosol), as well as a cash transfer for all children in public elementary schools (Bono Juancito Pinto). Bolivia, as well as Mongolia and Zambia, also financed universal old-age pensions, child benefits and other schemes from taxes on mining and gas. In Argentina, more than 40 percent of pension spending was covered with revenue from earmarked consumption taxes

192 This section draws from Ortiz et al (2017) and ILO (2018)
193 World Bank (2016c)
194 IMF (2019).
195 Lloyd-Sherlock and Barrientos (2009).
by 2010. Many countries in Africa have also used similar strategies, including Ghana where 2.5 percent of VAT is allocated for social health insurance, while Algeria and Mauritius impose high taxes on tobacco to complement social security revenues. In Asia, a Sin Tax Law (STL) in the Philippines financed the extension of fully subsidized health insurance for the poorest 40 percent of the population in 2015. Sin tax revenues (which reached PHP 141.8 billion, or over 1 percent of GDP in 2015) were also subsequently used to subsidize insurance coverage of senior citizens. Finally, China also supplements social security spending but through revenues from a Welfare Lottery.

Another common strategy is to reallocate public expenditure, predominately eliminating subsidies on fuel, but also on electricity, food and agriculture. Since 2010, 132 governments in 97 developing and 35 high-income countries have reduced subsidies, predominately eliminating subsidies on fuel, but also on electricity, food and agriculture—a process that is often accompanied by the development of a basic safety net as a way to compensate the poor. Iran, for one, introduced its energy subsidy reform in 2010, reallocating fiscal resources to a universal cash transfer program and to the extension of health-care coverage. The government in Jordan also withdrew fuel price subsidies in 2013, and converted a substantial portion of the fiscal savings into cash transfers to individuals and households. Reallocation from consumer subsidies to social assistance has also taken place in Pakistan, where reductions in universal electricity subsidies funded the flagship cash transfer program, i.e., the Benazir Income Support Program or BISP. Currently, Egypt is in the process of a large expansion in its cash transfer program financed by savings from the reduction of fuel price subsidies. Costa Rica and Thailand have reallocated military expenditures for universal health-related programs. Others are tapping into fiscal reserves for social investments. This includes drawing down fiscal savings and other state revenues stored in special funds, such as sovereign wealth funds, and/or using excess foreign exchange reserves in the central bank for domestic and regional development. Norway’s Government Pension Fund Global is perhaps the best-known case. Others include Chile and Timor Leste.

Often it is a combination of strategies. Several middle-income countries, including Mexico, Brazil, Thailand, Costa Rica and Bolivia, have financed social pensions using a variety of sustainable financing methods, including general taxation, payroll and consumption taxes, expenditure switching and taxing natural resources. However, there is a need to consider revenue composition from several angles, including revenue potential, sensitivity to economic cycles, costs of administration and compliance. A taxonomy of general revenue sources, together with their potential and impacts, is given in Table 4.1.

Table 4.1: Potential financing sources in Indonesia and other EAP countries

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197 World Bank (2016c).
200 World Bank (2016c).
204 HelpAge International (2011).
Social protection is just one part of the broader system of government spending and taxation, whose impact on poverty and inequity must be simultaneously considered. Indeed, people’s well-being is dependent on the net impact after all the spending and taxes are considered. Thus, there is little point in allocating general revenues to re-distributional SP programs if the funding source itself is so regressive as to outweigh the positive distributional impacts on the expenditure side. Ultimately, one needs to look at how the revenue and expenditure sides come together in terms of the re-distributional impact of fiscal policy and the SP system. Currently, there is a substantial difference between developed and developing countries in terms of the distributional impact of tax and transfer systems. On average, in developed countries, the net impact of tax and transfer policies reduces inequality by one-third, from a 43-point income Gini pre-tax and transfers (so-called market income) to a 28-point disposable income Gini after taxes and transfers. Overall, in developing countries, the re-distributional impact of fiscal policy is much more modest. A reasonable starting point would be to work within the existing revenue and expenditure envelopes, and then consider the possibilities for additional resources, bearing in mind the many competing demands and the potential negative effects of new taxes.

4.3 SP Financing and Spending in Indonesia Today

Indonesia, similar to other countries in the EAP region, relies most commonly on general revenue, payroll taxes and compulsory contributions to finance its SP system. There are two main sources of finance for SP in Indonesia currently. First, general revenues, which are used to fund social assistance and the subsidized health insurance component (PBI-JKN). About three-quarters of all public revenues in Indonesia come from taxes, and the remainder through natural resource royalties and other fees. In the case of tax revenues, roughly equal shares are generated from direct taxes on incomes of individuals.
and corporate entities (80 percent of direct taxes) and indirect taxes (primarily value-added and excise taxes) on individuals’ and corporate entities’ expenditures. Second, social security contributions/payroll taxes, which are used to fund social insurance. This is also in line with common practice in the EAP region,\textsuperscript{211} where benefits that are more closely attached to conditions of employment are more often funded from payroll taxes, or employer contributions.\textsuperscript{212} The method of determining the level of contributions for SJSN employment programs is outlined in the SJSN Law, with different rules applying for different segments (Chapter 3). However, despite significant cross-subsidies between formal and informal sector households, the health insurance cost to the GoI is increasing, and deficits have started to emerge. In addition to the short-term fiscal pressure arising from health insurance deficits, population aging is outpacing the development of traditional contributory pensions. And without additional measures to bring in informal sector workers and to ensure the poor elderly are covered by social assistance, the percentage of the elderly living in relative poverty will almost certainly rise.

**Looking at social protection (social insurance and social assistance) as a whole, spending reached about IDR 208.6 trillion (US$14.6 billion) in 2018.** Since 2007, social insurance expenditures have exceeded those on social assistance (including non-permanent spending on temporary cash transfers accompanying energy subsidy reductions) in absolute terms. However, the share of social insurance in total SP spending has been declining over the years, from its highest of 69 percent in 2010 and 2011, to 52 percent in 2018. On the whole, central government expenditures on SP have been and remain low, accounting for about 1.41 percent of GDP in 2018.

**Figure 4.1: Expenditure/spending on social assistance and social insurance (2006/9-18)**

![Figure 4.1: Expenditure/spending on social assistance and social insurance (2006/9-18)](image)

This level is still low by international comparison. Data-related constraints make it difficult to compare for SP as a whole, but available information on separate components suggests Indonesia could do a lot better. In 2018, total spending on core social assistance in Indonesia as a share of GDP stood at 0.7 percent. This is relatively low, especially when compared with the average lower middle-income country, which spends about 1.4 percent of GDP on social assistance. Compared with countries with similar revenue-raising capacity, Indonesia spends less than the Dominican Republic, which spends 1.2 percent of GDP, but more than Pakistan and Sri Lanka (Chapter 2)\textsuperscript{Error! Reference source not found.} It is also

\textsuperscript{211} World Bank (2016c).

\textsuperscript{212} For example, most work injury schemes are funded from employers only, including in Bangladesh, Fiji, Kiribati, Lao PDR, Nepal, Pakistan, the Philippines, PNG, the Solomon Islands, the Rep. of Korea, Thailand and Vietnam.
lower than many Latin American countries, including Brazil, which spends about 1.5 percent of GDP on social assistance. Two of the main social assistance programs, i.e., the social pensions program for the poor elderly and disabled (BPC) and the CCT (Bolsa Familia), account for 0.7 and 0.5 percent of GDP, respectively. This makes Indonesia’s total social assistance spending about the same as Brazil’s spending on one program alone. As far as pensions are concerned, East Asian countries in general (including Indonesia) appear to spend less at a given income level than countries in other regions. As a result of the relatively late start of the BPJS pension scheme, contributory pension spending as a share of GDP will continue to be lower than many countries at Indonesia’s stage of demographic aging. As described in Chapter 3, the predicted spending level would be almost 1 percentage point higher based on the international pattern.

4.4 Fiscal Space and Financing Opportunities in Indonesia

4.4.1 Improved (Re)Allocation of Resources within the Existing Budget Envelope

In the past, the GoI has re-allocated resources away from expensive and untargeted energy subsidies, toward the expansion of several flagship social assistance programs, in order to help reduce poverty and inequality. Several rounds of reduction in expensive and untargeted subsidies were implemented, and some of the expenditures saved were reallocated to the social assistance sector. Between 2014 and 2017, spending on regressive energy subsidies fell by 71 percent in nominal terms to IDR 97.6 trillion, while spending on social assistance rose by 28 percent over the same period to IDR 72.3 trillion in 2017. The increase financed an expansion in coverage of core social assistance programs—PKH, PBI-JKN and PIP. The continued decline in the poverty rate (Figure 4.2) was concurrent with these reforms, although also to a large extent driven by growth, suggesting that the reallocation of spending has been effective.

Figure 4.2: Trends in poverty and spending on social assistance and energy subsidies

While spending on inefficient energy (fuel plus electricity) subsidies has been reduced, it remains sizeable and could be more effectively spent instead on poverty targeted programs. As shown in Figure 4.3 between 2014 and 2017, spending on regressive energy subsidies fell significantly. However, despite a significant decline of 74 percent in real terms since 2014, spending on poorly targeted energy (electricity and fuel) subsidies has recently increased and comprises a sizeable IDR 153.5 trillion, or 1.0 percent of

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213 World Bank (2016b).
GDP in 2018 (Figures 4.3 and 4.4). As substantiated by global evidence, as well as evidence from Indonesia,\textsuperscript{214} spending on untargeted subsidies is far less efficient compared with targeted spending on social assistance programs. Subsidies, both energy and non-energy, are meant to help the poor and vulnerable afford goods and services at levels in line with their purchasing power. However, they are often mistargeted, encourage rent-seeking and induce heavy expenditure burdens on government, particularly in the case of energy subsidies that are pegged to global fuel prices. The bulk of energy subsidies—39 and 29 percent of LPG and electricity subsidy benefits, respectively—are consumed by the economically secure middle class. As done on several occasions in the past, it would be more efficient to redirect such spending to other more pro-poor programs, such as PKH, which allocates 73 percent of program benefits to the bottom 40 percent of the population.

\textbf{Figure 4.3: Spending on energy subsidies has been partially redirected toward social assistance...}
\begin{figure}[h]
\centering
\includegraphics[width=0.8\textwidth]{spending_on_energy_subsidies.png}
\caption{Spending on energy subsidies has been partially redirected toward social assistance...}
\end{figure}

\textbf{Figure 4.4: ...but remains substantial at 1.0 percent of GDP}
\begin{figure}[h]
\centering
\includegraphics[width=0.8\textwidth]{spending_on_energy_subsidies_bar.png}
\caption{...but remains substantial at 1.0 percent of GDP}
\end{figure}

Source: Ministry of Finance, World Bank staff calculations.
Note: Except 2018, all years refer to audited expenditure data. For social assistance, 2018 is a World Bank estimate based on preliminary data from the MoF. For subsidies, 2018 is preliminary data as reported by the MoF in January 2019.

\textbf{To continue addressing the ineffectiveness of subsidies, the GoI is finalizing plans to reform the distribution of the LPG subsidy.} In 2018, the LPG subsidy bill amounted to IDR 64 trillion, or 0.4 percent of GDP. The aim of the LPG subsidy is to render affordable the purchasing of 3kg LPG canisters for the poor and vulnerable population. However, actual consumption patterns of this subsidy suggest that just 36 percent of the total 3kg LPG canisters purchased were purchased by poor or vulnerable households. A primary reason for this is the unlimited nature of the distribution of these canisters; there is no direct targeting of poor or vulnerable beneficiaries, nor is there any mechanism to restrict purchasing of LPG 3kg canisters by those who are well off. In recognition of this, the GoI has committed to improving the allocation of the LPG subsidy, either by a closed distribution system or by letting PT PLN and Pertamina sell LPG at market price, with cash compensation for eligible households.

\textsuperscript{214}Jellema et al. (2017). The methodology has been repeated for more recent budget years and consistent results were found.
Following a pilot project, the latest information suggests that the GoI is considering a closed distribution system to allocate LPG subsidies. The closed distribution system is to be launched in 2020 targeting all poor and vulnerable households in the UDB/DTKS as eligible beneficiaries to receive 3kg LPG canisters. While some uncertainties persist as to the size of the coverage, the inclusion of micro and small enterprises and the implementing ministry, a road map has been developed by Bappenas. The roadmap foresees that, through a continued transition in the G2P payment system, the provision of the LPG subsidy can be delivered through digital means. Indeed, using the available digital delivery system to roll out subsidized LPG canisters to the poorest 40 percent would be the first step toward improving the allocative efficiency of the subsidy.

4.4.2 Indonesia’s Domestic Revenue Context and Possibilities to Expand the Budget Envelope

The extent to which Indonesia can spend, including on social assistance and insurance programs, is limited by the government revenues that it is able to generate. In recent years, social assistance programs such as PKH have been scaled up, primarily by reallocating expenditures from lower priority areas such as subsidies. As large as these subsidy savings were, they will not be enough to support the growing needs, not just in the SP space but also to address other priorities. Besides, the extent to which the subsidies will remain sustainable is also under question.

In order to expand its SP system’s reach, Indonesia will need to collect more revenues. Indonesia’s revenue-to-GDP ratio stood at 12.2 percent in 2017, which is less than half of the emerging economy average of 27.8\(^{215}\) (Figure 4.5). Tax collections lag regional peers and other countries at a similar level of development. Given the important role that natural resources and commodities continue to play in the country’s economy, cyclical moves in the global commodities market have an important bearing on the country’s tax collection. For example, following the oil price collapse in 2014, annual tax collection as a share of GDP declined every year since 2013, reaching just 9.9 percent in 2017.\(^{216}\)

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\(^{215}\) World Bank (2018d).
\(^{216}\) Ibid.
The following sections take a deeper dive into a few specific opportunities available to expand the budget envelope, looking specifically at VAT and tobacco excise. Some counterfactual policy simulations are carried out and examined from the perspective of the additional revenue these might generate, as well as any distributional consequences of such policies. The objective of the exercise is to demonstrate possible ways in which some of the policies (such as exemptions on VAT, low tobacco excises), which may be currently in place to protect the poor, could be reconsidered to increase revenues while simultaneously protecting the poor through other vehicles, including some of Indonesia’s existing social programs. Indonesia currently underutilizes taxation on commodities that have clear externalities on public health and the environment, such as plastic and tobacco. Similarly, direct taxes such as those on income are collected off of a very low base. At the current level of annual non-taxable income (PTKP) threshold, only a low percentage of citizens would be eligible to pay any tax.\textsuperscript{217} Furthermore, compliance rates among those eligible is low, which makes this an underutilized instrument of tax policy.

**Value-added tax: Reduce exemptions accompanied by compensating transfers**

*Indonesia adopted value-added tax (VAT) in 1984, but very few firms in Indonesia have to actually register to pay VAT.* Mandatory filing for the purposes of charging VAT is only required for business with annual gross turnover in excess of IDR 4.8 billion. Registration and filing are voluntary for all businesses with turnover below this threshold. Relative to per capita GDP, the size of this threshold is among the highest in the world (Figure 4.6). This, coupled with exemptions on a number of goods and services, also contributes to keeping the base lower than what it could be. In part because of these reasons, despite having a VAT rate that is 30 and 40 percent higher than Thailand and Malaysia, respectively, Indonesia collects the same share of GDP in VAT revenues as these countries.

\textsuperscript{217} World Bank (2020a)
Currently, the statutory VAT rate stands at 10 percent on most goods and services, with some exceptions. Items such as printed books, medical supplies, real estate, domestic energy, livestock and agriculture products are exempted from VAT. This implies that vendors cannot charge VAT on their outputs, or reclaim any VAT paid on their inputs. In addition, VAT on items such as capital manufacturing equipment, construction services and exports are zero-rated, which means that the products are not VAT-able, but the producers can reclaim any VAT paid on the inputs.

There are various reasons why countries such as Indonesia may wish to implement exemptions and preferential rates on VAT. First, when it comes to small firms, the cost of administration required to enforce compliance can be much higher relative to expected revenue, and thus the practice is often to apply a registration threshold for VAT. Second, when the market price of the services in question is not clearly observed, it is difficult to impose a tax on it. Examples are public services that are often used for free by users but financed by taxes or contributions, or financial services that are paid for by interest rate differentials rather than explicit fees. Third, considerations for equity may drive these decisions. For example, many low-income, low-to-middle-income and even high-income countries have exemptions or reduced rates on primary goods such as foods, which are items to which the poor allocate a relatively high fraction of their overall expenditures. Almost half of the tax expenditures currently in place are motivated by the stated objective of “improving the welfare of the people.” It is estimated that the exemptions in place imply IDR 154.6 trillion, or equivalently 1.14 percent of GDP, in forgone revenues. The reported tax expenditures include VAT and luxury goods, personal income tax, as well as excise. Tax expenditures through VAT and luxury goods alone account for 81 percent of the total.

The question then becomes the following: are these poorly targeted VAT tax expenditures the best way of protecting the poor in Indonesia? Beyond this generally well-recognized discussion about VATs, the focus here is on the equity objective of exemptions. The poor and the vulnerable, and those generally at the bottom end of the distribution, do spend a larger share of their income on primary goods such as food. In that sense, exemptions can help reduce the relative burden of VATs on the lower-income households. But it is also true that, in absolute terms, the richer households actually spend more on these necessities. This implies that the exemptions end up not being very well targeted, as they benefit the richer segments of the population more than the poor. Indonesia could achieve a win-win solution by broadening the tax base by eliminating some of these exemptions to boost revenue and at the same time find other ways of making the poor at least as well off.

It is possible to use an analysis of the incidence of taxes and spending on households in Indonesia using the commitment-to-equity (CEQ) framework. Focusing specifically on the VAT component of the analysis, it is possible to simulate a policy counterfactual under which there are no exemptions except for those that are in place for administrative purposes, such as for small traders, public services such as education and health, and financial services. As is standard in the CEQ methodology, statutory tax rates are scaled down to account for the fact that actual collection of VAT is often lower than the stated rate due to evasion and the smaller firms not being required to register for VAT. Given Indonesia’s high registration threshold, this is an important consideration. The estimated effective rate for Indonesia in 2017 was 4.1 percent. Also embedded in the simulations are the input-output relationship between the various sectors of the economy, which is modeled using the standard approach set out in Inchauste and

References:

218 Harris et al (2018).
219 BKF (2018b).
220 Tiwari et al (2019), and Wai-Poi et al. (2015).
221 This is lower than the effective rate of 5.2 percent estimated in 2012 suggesting that the increase in VAT registration threshold in 2015 could have ended up lowering compliance in recent years.
Jellema (2018). This is important to account for the fact that eliminating exemptions on a particular good can have a cascading effect on the prices of other goods and services that use that good as an input.

The incidence of VAT in Indonesia remains relatively neutral in the relative sense (Figure 4.7). Richer and poorer households roughly pay the same overall share of their market income in VAT. But in absolute terms, the higher-income groups account for larger shares of overall VAT payments, owing essentially to their higher consumption base. When the exemptions are eliminated, VAT payments as a share of overall market income increase for all deciles but they increase more those in the lower parts of the distribution. For example, consumers in the lowest decile pay 3.4 percent of their market incomes in VAT in the baseline, but after the elimination of exemption this goes up to 5.7 percent. For the richest decile, VAT payments go up from 3.3 to 4.0 percent. The share of overall VAT collection accounted for by the richest decile goes down from 31 to 28 percent after the elimination of exemptions. This suggests that the exemptions currently in place do have some progressivity embedded in them and overall do help ease the burden of VAT on the poorest segments of Indonesian society.

Even though the poor would stand to become worse off after the elimination of exemptions, the policy would lead to a significant increase in revenue collection. Estimates show that the current structure of exemptions cost about 34.8 percent of the modeled revenues. This translates to IDR 90.6 trillion or equivalently, US$21.6 billion (in 2011 PPP terms), which is 0.67 percent of GDP. The cost of exemptions is in the ballpark of estimates from a similar exercise undertaken in a select few countries by Harris et al. (2018) (Table 4.2).<sup>222</sup> It nears the higher bounds of the more recent range of estimates produced by the Government, which put revenue gains from the elimination of VAT exemptions between 0.25 and 0.78 depending on the extent of the exemptions: removing exemptions only for food related items would yield

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<sup>222</sup> Given the assumptions required to produce this estimate, it is important not to overstate the exact quantum of the revenue gains.
0.25 percent of GDP while the elimination of exemptions on food, education, health and transportation services would yield 0.78 percent of GDP. Even if one assumes a midpoint estimate of 0.4 percent of GDP, these revenue increases could more effectively support the poor by financing SP programs.

Table 4.2: Estimated revenue cost of VAT exemptions in Indonesia and a few select countries

<table>
<thead>
<tr>
<th>Country</th>
<th>% of actual VAT revenues captured</th>
<th>Modeled cost of exemptions (2011 PPP US$, million)</th>
<th>Cost of exemptions (% of modeled VAT revenue)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>85.9</td>
<td>21,623</td>
<td>34.8</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>93</td>
<td>1,330</td>
<td>22.8</td>
</tr>
<tr>
<td>Ghana</td>
<td>106</td>
<td>1,843</td>
<td>34.5</td>
</tr>
<tr>
<td>Senegal</td>
<td>48</td>
<td>435</td>
<td>36.5</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>42</td>
<td>1,039</td>
<td>44.4</td>
</tr>
<tr>
<td>Vietnam</td>
<td>88</td>
<td>8,176</td>
<td>31.3</td>
</tr>
<tr>
<td>Zambia</td>
<td>55</td>
<td>336</td>
<td>33.5</td>
</tr>
</tbody>
</table>

Source: Tiwari et al. (2019) and Harris et al. (2018).

**Tobacco excise: Use as a source to raise revenues**

Excise taxes on tobacco represents another potential opportunity to raise revenues in Indonesia. For a country with one of the highest prevalence of adult smoking in the world, the burden of taxes on tobacco is still lower than in many countries and insufficient to have any meaningful influence on consumption behavior. Tobacco consumption in Indonesia is among the highest in the world: 68.1 percent of men above the age of 15 and 2.5 percent of women use some form of tobacco. The public health issues related to high tobacco consumption are well known. For example, the World Health Organization (WHO) estimates that more than 7 million people worldwide die of tobacco related causes such as lung cancer, stroke, ischemic heart disease and other respiratory diseases. Tobacco is the second leading cause of death and morbidity worldwide. It is also among the most preventable causes of premature mortality globally.

**Table 4.3: Smoking prevalence in Indonesia is among the highest in the world**

**Figure 4.8: Cigarette prices have changed very little in real terms**

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223 World Bank (2018e).
<table>
<thead>
<tr>
<th>Country</th>
<th>Adult male smoking prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>68%</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>61%</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>58%</td>
</tr>
<tr>
<td>China</td>
<td>53%</td>
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<tr>
<td>Greece</td>
<td>51%</td>
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<tr>
<td>Ukraine</td>
<td>50%</td>
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<tr>
<td>Philippines</td>
<td>49%</td>
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<tr>
<td>Turkey</td>
<td>48%</td>
</tr>
<tr>
<td>India</td>
<td>48%</td>
</tr>
</tbody>
</table>

Source: World Bank (2018d)
Note: Indonesia numbers are based on data from 2016.

Source: Fuchs et al. (2018).

Not only are tobacco prices low in Indonesia, but they have increased very little in recent years. The GoI has been gradually raising excise taxes on tobacco products over the past decade or so. This has caused prices to increase in nominal terms, but this increase has been modest relative to the overall pace of inflation; in real terms average cigarette prices increased between 2011 and 2017. Taxes on tobacco products, including excise and VAT, average 57.4 percent, which remains well below the WHO recommended 75 percent. In addition, Indonesia also has one of the most complex cigarette excise tax structures in the world. It currently constitutes 12 tiers, with preferential rates on kretek (clove cigarettes), especially hand-rolled kretek.

Even though the GoI has been considering reforming the excise tax structure by, among other things, reducing and consolidating these tax tiers, ambitious tobacco price reforms face two key objections in the country. First, there is a concern that raising tobacco taxes, especially on kretek, might affect the livelihoods of workers employed across the kretek value chain. These include workers employed in hand-rolling factories, as well as tobacco and clove farmers. Second, there is a concern that the taxes, when passed through to consumers in the form of higher prices, may disproportionately affect households at the lower end of the consumption distribution. Among all food items, tobacco is second only to rice in terms of expenditure shares. Thus, heightened sensitivities related to potentially impoverishing effects of higher tobacco prices make reforms a difficult challenge.

225 Indonesia also charges 9.1 percent VAT on all tobacco products. This is collected directly from manufacturers.

226 In 2018, tobacco excise on hand-rolled kretek was 24 percent of minimum retail price, almost half of the excise on machine-made kretek, which stood at 45.8. Hand-rolled kretek industry dominates the overall kretek production and accounts for more than all tobacco workers in the country.

227 Recent research has attempted to address both of these concerns. First, the World Bank (2018) looked at the employment dimension of tobacco price increases. The main finding was that the “gross employment impact of reforming tobacco excise taxes and structure in Indonesia is not as big as previously thought”. Specifically, the study finds that increasing in cigarette taxes by an average of 47 percent and concurrently simplifying the structure to six tiers reduces gross employment in the tobacco manufacturing sector by less than 0.5 percent. The study concludes that the revenue generated could easily compensate those who would stand to lose their jobs by cash transfers, expanded social safety nets or support to find alternative occupations. Second, Fuchs and Carmen (2019) use an extended cost-benefit analysis to estimate the long-run distributional impact of tobacco price increases in Indonesia. The key finding is that even though the impact of higher tobacco taxes might be regressive in the short run, accounting for these longer-run benefits the policy is overall progressive.
Two tax increase scenarios are simulated, with different behavioral assumptions. In the first, demand is assumed to be perfectly inelastic in that there is no behavioral response to the higher prices. In the second, tobacco consumption is allowed to adjust based on price elasticity of demand, which is different for each consumption decile, as well as for white and clove cigarettes. The low-, mid- and high-elasticity scenarios correspond, respectively, to the short-, medium- and long-run impacts accounting for the time it may take to adjust tobacco consumption behavior with respect to prices. Excise revenue from tobacco was roughly around 1.2 percent of GDP in 2017. Using excise to increase prices of cigarettes by 33 percent—which would take the tax content of tobacco to WHO recommended levels of 62 percent—and by a more moderate 18 percent would increase revenues from tobacco excise substantially (Table 4.4). If consumption did not adjust, a 33 percent price increase would roughly double the tobacco excise revenues as a share of GDP. The smaller price increase of 18 percent would also drive up total excise revenue to 2.0 percent of GDP if consumption did not adjust. Assuming medium elasticity and an increase in the price increase by 33 percent would yield 0.7 percent of GDP in additional revenues. The range of estimates presented here are also in line with a recently developed tobacco excise reform model developed by the government, which estimates fiscal impacts between 0.5 and 0.8 percent of GDP due to simplification of tiers and more moderate increases in the excise tax of tobacco.

<table>
<thead>
<tr>
<th>Table 4.4: Revenue impact of increase tobacco prices</th>
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</thead>
<tbody>
<tr>
<td>Additional revenue (% of GDP)</td>
</tr>
<tr>
<td>Price increase 33%</td>
</tr>
<tr>
<td>No behavioral change</td>
</tr>
<tr>
<td>Behavioral change</td>
</tr>
<tr>
<td>Lower bound elasticity</td>
</tr>
<tr>
<td>Medium elasticity</td>
</tr>
<tr>
<td>Upper bound elasticity</td>
</tr>
</tbody>
</table>

Taking all of these variations in price elasticity of demand of white and clove cigarettes in Indonesia, the results of the simulation show that the revenue gains will be sizeable. Across all products, poor consumers likely have a more elastic demand relative to those that are better off. Even in the highest elasticity scenario—the best-case scenario from a public health perspective—the base of consumption remains large enough to generate sizeable revenue gains of around 0.6 percent of GDP. Larger price increases are considered more effective in reducing smoking than smaller incremental price changes. This is because incremental changes are either absorbed entirely by companies, or even when allowed to pass through on prices, entrenched consumers often fully internalize the gradual price creep. This implies that the revenue gain will also be smaller.

Figure 4.9: Additional burden of tobacco price increases (% of market income)

a. Price increases by 84 percent
b. Price increases by 50 percent

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228 Elasticity estimates used in the analysis are based on Fuchs et al (2019).
229 Demand elasticities are typically calculated off of consumption and price variation across a cross-section of data. As such, while these estimates provide reliable local approximations of consumer behavior at observed prices (when price changes are in the 25 to 30 percent range) it breaks down for larger, and unobserved price changes.
Moreover, the burden of tax would increase across the entire distribution, but the largest increases would not be for those in the bottom two deciles, but instead for those more in the middle deciles. This is for two reasons: the tobacco consumption base in the bottom two deciles is actually lower than those in the 30 to 60th percentile of the distribution. And the behavioral response among the poor is also likely to be higher. The fact that those roughly in the “aspiring middle class” and in the “middle class” categories are likely to be the most affected also underscores why this is a difficult reform.

Again, as in the case of the VAT exemption removal, the size of the potential revenue generated would be large enough to compensate those who bear the brunt of additional excise. For example, consider the second most ambitious social assistance package considered in Chapter 2. The package consists of expansion of PKH (Family Hope Program), expanding the electronic food transfer program (BPNT/Sembako) to cover all households in the bottom 40 percent, and providing social pensions for the elderly and disabled in the bottom 40 percent. The total estimated cost of that package is around 0.7 percent of GDP. This is exactly the amount of revenue that would be generated by increasing the price of tobacco by 33 percent under the medium elasticity scenario. As shown in Figure 4.10, such a package would more than compensate for the additional excise burden borne by individuals in the lower half of the distribution.

**Figure 4.10: Compensating additional excise burden with social assistance expansion**
Another instrument of tax policy that could be utilized to raise revenues is personal income tax. According to latest estimates, personal income tax (PIT) accounted for 4.6 percent of GDP in 2018. PIT in Indonesia is levied on gross income from all sources, less exemptions and deductions (for example, for child dependents, pension income, occupational expenses, or pension contributions). Out of 124 million workers identified in the labor force, only 32 million, or one-quarter of them, were registered in the PIT system. Moreover, of those who were registered, only 9 million were found to have filed their taxes. There was an even smaller number (3.2 million) who actually paid their PIT. In addition, Indonesia has also been regularly increasing the non-taxable income thresholds. PITs have been an important source of revenue in advanced economies and a key component of efficient systems for the redistribution of income. However, high levels of tax exemption and tax evasion in Indonesia limit the short-term potential for such revenue. Even so, experience shows that countries can still raise sizeable additional revenue through stronger PIT systems.

Summary of opportunities to raise revenues to finance social protection

Financing the expansion of SP will require Indonesia to spend more in a fiscally sustainable manner. A reasonable starting point would involve looking for opportunities to better use resources that are already available, by reallocating current inefficient and regressive public spending. The regressive incidence of energy price subsidies is well documented and uncontested in this regard. Another source of financing is to expand the budget envelope by broadening the base of existing taxes and/or deploying new revenue instruments, keeping in mind the many competing demands upon any new revenue, and balancing the potential negative effects of new taxes against the gains of more accessible and robust risk-sharing institutions.

Simulations show that successful implementation of some key reforms in the revenue system could generate additional fiscal space of up to 1.8 percent of GDP for spending on priority sectors. The combined impact of reallocating energy subsidies including LPG and diesel, removing poorly targeted VAT exemptions and raising the tobacco excise could raise a combined 1.8 percent of GDP. The proposed SP reforms comprising 1.5 percent of GDP would therefore be well within the government’s fiscal capacity.

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230 IMF (2019)
231 Packard et al (2019)
while continuing to target a 2 percent of GDP fiscal deficit (Table 4.5). The level of fiscal gain required to finance these reforms is well within the Government’s own target in its medium-term revenue strategy of raising an additional 5 percentage points of GDP through a number of tax policy and administration reforms, which include improving compliance, broadening the base for VAT and income taxes, raising personal income taxes, and applying green taxes including on single-use plastics.

<table>
<thead>
<tr>
<th>Fiscal gain</th>
<th>Percentage of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gains from eliminating energy subsidies</td>
<td>0.7</td>
</tr>
<tr>
<td>Gains from tobacco excise reform</td>
<td>0.7</td>
</tr>
<tr>
<td>Gains from removal of VAT exemptions</td>
<td>0.4</td>
</tr>
<tr>
<td>Total</td>
<td>1.8</td>
</tr>
<tr>
<td>Total cost of incremental SP reform</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Source: World Bank (2020a) and World Bank staff calculations. Energy subsidies based on 2017 data.

### 4.5 Indonesia’s SP Delivery System: Current Status and Looking Ahead

Indonesia’s future SP system will increasingly require a ‘whole-of-government’ approach to deliver programs and coordinate agencies, and to efficiently distribute the benefits and services across the population. Across the various programs and pillars, the different agencies involved in the system will need to better coordinate policy and delivery system reforms, which will require them to work beyond traditional policy and program implementation silos. In particular, coordination between social assistance and social insurance programs, and their distinct systems of delivery will need to be strengthened. These systems will also need to become more flexible, especially in the face of disasters and climate change. While there has been important progress toward a whole-of-government framework, the achievement has largely been uneven. More needs to be done to improve the overall efficiency and flexibility of SP systems, and accountability in delivering a coherent assistance and protection package through common platforms to those in need. Key among these challenges is an incomplete and ad-hoc data protection and privacy regime. This section will introduce the main components of an integrated SP delivery system and provide a brief status of the current situation in Indonesia. A detailed discussion of priority aspects and opportunities for reform for three of the components (ID, social registry and payments) will follow thereafter.

#### 4.5.1 Integrated SP Delivery System and Current Status in Indonesia

Integrating delivery functions across multiple programs reduces fragmentation, improves coordination and promotes harmonization across SP programs. A seamless flow of information is required, from the moment people are considered eligible or express interest in a program, until the moment they receive a benefit or a service is realized. This ensures that people can access programs, and that household needs are met in a timely manner. While older versions of integrated information systems are monolithic, complex and multi-purpose, newer delivery system architectures are modular, interoperable, support open standards and offer discrete functions through a micro-services approach, underpinned by a clear data protection and consent framework (Figure 4.11).
The benefits of access to identity and building ID systems have been recognized in Indonesia, where an ID credential based on biometrics and a unique identification number is provided to nationals. Foundational ID platforms support verification and authentication of individuals for public and private service delivery, from a whole-of-government perspective. They provide government-recognized ID credentials (not necessarily linked to nationality or citizenship) on the basis of a unique, minimal set of attributes, such as biographic and biometric data, thereby exclusively describing an individual. An integrated identification system, which assigns a unique identifier at birth that is kept throughout life and has almost universal coverage, is considered international best practice. Developing ID systems to provide secure and reliable authentication services enables a “whole-of-government” approach to service delivery by allowing a person to prove “one is whom they say they are” and for interoperability with other government systems. Without government-recognized ID credentials, people are frequently denied access to rights and to public services; the most vulnerable people—those who might otherwise benefit most from SP programs—are the most adversely affected. Reciprocally, governments also struggle to authenticate and to deliver services to the unregistered and unidentified. Identification thus serves as a central building block for the development of an inclusive digital economy and improved human capital outcomes, when based on the principles on identification for sustainable development (Figure 4.12). In Indonesia, the ID credential is based on biometrics and a unique identification number is provided to nationals. The Ministry of Home Affairs (MoHA) supports an ID system (Sistem Informasi Administrasi Kependudukan, or SIAK) that issues a 16-digit unique identification number (Nomor Induk Kependudukan, or NIK) to all registered persons through their family cards (Kartu Keluarga, or KK) and national ID cards (Kartu Tanda Penduduk, or KTP), using biometrics to deduplicate individuals, and to provide authentication services to service providers.
Mirroring the global trend, Indonesia has also made great strides in the development of a social registry (Unified Database, or UDB, now renames DTKS) to assess needs and conditions, and determine eligibility for its SP programs. Globally, there is a trend toward more complete population coverage of social registries, or the equivalent in interlinked administrative databases. This is common practice in many countries such as the Philippines and Chile. Both countries cover much larger shares, up to 75 percent of the population with their social registries. Pakistan’s NSER social registry covers 85 percent of the population. These countries have a wide range of SP programs in place, but similarly cover poor and vulnerable parts of the population that comprise a subset of the social registry. 235

Since the launch of the UDB/DTKS in 2012, its use by the GoI’s SP programs has expanded significantly but not to the full extent possible. Rastra and PKH began using the UDB/DTKS in 2012; PBI-JKN and PIP joined in 2013, and in 2017, BPNT/Sembako beneficiaries were registered using the UDB/DTKS with the aim of ensuring that all PKH recipients could also receive BPNT/Sembako (Figure 4.13). However, while the main targeted social assistance and insurance programs have all used the UDB/DTKS to generate lists of potential beneficiaries, only PKH and PIP have fully adopted the UDB/DTKS standard for use in district quota-generating, initial (welfare-related) eligibility determination, and beneficiary selection and enrolment. 236 Also, for some programs, including PBI-JKN and PIP, the UDB/DTKS is not the exclusive source for beneficiary identification, with important implications for allocative efficiency (see Chapter 2). PBI-JKN, for example, absorbs beneficiaries from a local government variant of the previous program (Jaminan Kesehatan Daerah, or Jamkesda). Similarly, schools are able to recommend additional students for PIP. These practices have led to lower allocative efficiency outcomes compared to in PKH.

Figure 4.13: Evolution of the UDB/DTKS in Indonesia

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236 World Bank (2017a).
The First Generation

1997

The Economic Crisis 1997

The First Generation of Social Security Program has been started through JPS programs, including OPK,ASK, and BLT programs for poor and near-poor households.

The Second Generation

2005 - 2008

From July to September 2005, the GoI conducted PSE05

Starting In October 2005 to October 2006, The GoI introduced Fuel Subsidy Reduction Compensation Program (PKPS-BBM) with an additional UCT program to complement for the previous poverty programs, namely BLT for poor and near-poor households.

2007

In 2007, the GoI implemented CCCT, namely PKH, as a pilot program for the poorest households for the first time.

From May to December 2007, the GoI conducted PPLS08

2008

From June to December 2008, the GoI delivered the second compensation mechanism, including BLT for 2008 Fuel Subsidy Reduction Compensation Program.

The Third Generation

2010

In March 2010, the GoI formed the TNP2K under Vice President’s Office of Indonesia.

2011

BPS Conducted Population Census 2010

BPS Conducted PPLS11

BPS Conducted PODES 2011

2012

TNP2K released PPLS Data and to be processed into UDB

All Poverty Programs that were started in 2005 to use the UDB to select their beneficiaries

BPS conducts PPLS 2011: First poor/vulnerable household data collection

BNPSK uses PPLS and conducts PMT ranking to create and manage the UDB

BPS conducts PPLS 2015: Updating of the UDB, and inclusion of new households

MoSa launches SIKS NG (Social Welfare Information System) containing UDB

Initial transfer of UDB management from TNP2K to MoSa begins

SIKS NG absorbs some MPM functionality

March 2010

BPS conducts Population Census 2010

October 2011

BPS conducted Village Survey (PODES 2011)

June 2012

Social Protection programs start to use the UDB to select poor and vulnerable beneficiaries

June 2015

January 2016

Government pilots MPM and SURT with development partners as potential dynamic inclusion mechanisms into the UDB

First local government led UDB updates collected in SIKS NG

January 2018

September 2019

77% of local governments have sent data to update SIKS NG. SIKS NG begins including PAMS (disadvantaged groups)

The UDB/DTKS covers only the bottom 40 percent of the population, and still faces capacity issues from its latest institutional transition. Until 2017, the UDB/DTKS was housed in the National Team for the Acceleration of Poverty Reduction (Tim Nasional Percepatan Penanggulangan Kemiskinan, or TNP2K), and supported by Mahkota, a DFAT-financed facility. The Ministry of Social Affairs (MoSA) began managing the UDB/DTKS partially in 2017 and fully in 2018. As of 2019, the remaining management practices are being transitioned out of TNP2K into the MoSA. MoSA will house the social registry (DTKS) and offer policy advice to sectoral ministries and local governments. This transition has not yet been accompanied by an adequate transfer of capacity and resources to sustain and further develop the UDB/DTKS.

The UDB/DTKS is rightly moving away from a relative ranking of poverty. Moving to an absolute measure will simplify the process of including more people who are technically eligible to receive benefits. With a relative approach, including a new household would induce reranking of other households, leading to displacement of households that become marginally ineligible, if thresholds are kept strictly fixed. Using an absolute threshold would be simple and would also guarantee poor and vulnerable people’s rights to access SP, independently of coverage quotas and budgetary ceilings.

Digitization of payments for SP programs (especially G2P) is on the rise globally, and this has the potential to significantly increase financial inclusion, particularly among the poor and vulnerable, as well as promote women’s economic empowerment. Social protection beneficiaries tend to be poor, are often women and carry a legacy of financial exclusion. Reaching these “first mile” populations and ensuring their financial inclusion has the promise of being transformational, given the large numbers of people involved: while the civil service wage bill accounts for the greater share of GDP for G2P payments, the quantity of SP beneficiaries receiving G2P payments outnumbers civil servants by 5:1. Between 2010 and 2017, the monetary amount of social transfers in developing countries paid digitally increased by 300 percent, reaching close to US$200 billion. One-quarter of poor countries make some social transfers digitally. According to the Global Payment Systems survey (2016), electronic instruments are by far the most widely used methods for G2P payments (including public sector salaries, pension and transfer payments, cash transfers and social benefits). Fifty-five percent of 103 responding central banks indicated electronic instruments are used for cash transfers and social benefits, compared with 70 percent for pensions and transfer benefits, and 81 percent for public sector salaries. Although more than one-fifth of developing economies use cash for SP, some countries are leapfrogging traditional payment approaches by adopting rapidly evolving financial and technological services to enhance access and minimize costs of administration and provision. Some countries have the capacity to pay G2P recipients directly, rather than, say, through bank accounts. The share paid directly is now over 60 percent in India and close to 90 percent in China and Kenya (close to one-quarter of the payments are made through M-pesa, a mobile money transfer service).

Figure 4.14: A model for government payments including G2P

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237 World Bank (2020c).
238 Many countries and programs neglect what is often referred to as the “last mile” of delivery systems. In fact, given the centrality of people to the effectiveness and efficiency of social protection programs, people should really be considered the “first mile” of the system. World Bank (2020c)
239 Packard et al (2019)
Indonesia’s SP programs deliver payments through a G2P 2.0 model, marking a rapid shift from in-person delivery of cash to payments through bank accounts, which has enabled considerable gains in efficiency and transparency.\(^{242}\) The GoI has also taken important steps toward the development of a single payment distribution channel for social assistance. The G2P 2.0 model can improve the efficiency of payments administration and, if structured properly, it can extend some elements of financial inclusion to beneficiaries. Indonesia has opened up bank accounts for 10 million households served under the PKH CCT program. A 2016 presidential regulation on a financial inclusion road map kick-started the integration of social assistance benefits delivery under a common payment platform. The regulation noted that all social assistance payments were to be channeled via state-owned banks. The regulation led to the establishment of a social assistance payment authority, with benefits and payments unified under a family welfare card (Kartu Keluarga Sejahtera, or KKS). Himbara (Himpunan Bank-bank Milik Negara) currently oversees the creation and management of social assistance beneficiary accounts, and channels different benefit payments into the same account, accessed via a single debit card, the KKS. Indonesia has also joined the ranks of countries with a robust and integrated payments infrastructure, i.e., systems that have adopted the Treasury Single Account (TSA) model, to allow direct transfers from the Ministry of Finance (National Treasury) or the central bank to beneficiaries’ accounts (OM-SPAN). Payment instructions are processed by the central bank, which debits the TSA and credits the beneficiary’s account. Transfers of cash and in-kind transfers for PKH (CCT), PIP (education assistance), BPNT/Sembako (food assistance) and some selected subsidies are made directly from the TSA to beneficiaries’ bank accounts.

But the digitization of payments in Indonesia has been partial, and the provision and contribution of payments for people in remote and underserved areas remains operationally challenging. Banks may not have the incentive or operating margins to cover the cost of delivering payments to families in remote areas, with the introduction of direct transfers to beneficiary accounts. According to banking regulations, banks are allowed to hold beneficiary money in their accounts for 30 days before releasing it into beneficiary accounts. In most cases, this would cover operating costs, but in remote areas such as Maluku...

\(^{242}\) G2P 2.0 refers to the initial stage in the digitization of payments provision, i.e., a single program provisioning payment through a single-provider model. The back-end administration processes between social programs and payment service providers are digitized. See Chapter 6 on Payment of Cash Benefits, Sourcebook on the Foundations of SP Delivery Systems for more information on models of G2P from 1.0 through 4.0.

\(^{243}\) Including BNI, Mandiri, BRI and BTPN.
the 30-day limit could be insufficient to cover the cost of payments delivery. PKH beneficiaries in Maluku noted that when PT Pos delivered payments, it would do so directly to the village at no additional cost to the beneficiary. A potential way to further incentivize banks to deliver payments to people (“the first mile”) may be to increase the number of days that funds are held in Himbara banks; this would generate more revenue through interest generation and should cover the costs of delivering payments in remote areas. Moreover, direct transfers from the government to individual bank accounts require banking institutions to confirm proof of identification and unique ownership of an account through KYC (“know your customer”) and CDD (customer due diligence) processes, which are linked to functionalities offered by foundational identification platforms, that have still to be fully achieved. As of late 2019, however, both BPNT and PKH used the sophisticated OM-SPAN monitoring system housed in the MoF to track the delivery of digital payments. The remaining 14 pure cash transfer programs aimed at families, households or individuals, to varying degrees, use state-owned banks to deliver payments, but generally they follow different procedures in administering payments and make use of different cards to allow beneficiaries to cash out their transfers. The result is a scattered landscape with duplication in payment administration and multiple cards being used by similar groups in the population.

**SP programs in Indonesia tend to follow uncoordinated approaches to G2P payments.** Individual programs such as PKH may contract independently with a single payment service provider within a network of five state-owned banks (Himbara). However, sometimes bank branch or ATM coverage within a certain area varies significantly, leading to sub-optimal accessibility. In addition, beneficiaries are not afforded their choice of provider, nor can they switch to providers who may be closer to them; these are hence considered a ‘single-provider’ approach. While no transaction fees are charged for withdrawal from any of the Himbara ATMs, this does not apply to other banks.

At a systemic level, bank-level interoperability (to allow beneficiaries to cash out their benefit at any bank ATM or agent) has been planned, but is currently not yet implemented. Himbara is taking a step in the right direction by streamlining its own systems, such that Bank Mandiri, BRI and BTPN use BNI’s information systems to deliver and track payments for the purposes of reconciliation. For the programs that use Himbara, and for those that use banks to render payments, the move toward digitized payments into bank accounts poses urgent implementation challenges. For both PKH and Sembako, these modalities are yet to be designed with the beneficiary family’s needs in mind, given that some of them live in remote areas that have low or non-existent network coverage and incur significant travel costs to reach bank branches or payment agents that can cash out benefits. In addition, since bank branches are sparsely distributed in the eastern islands, banking agents incur significant travel costs and time requirements, as they are tasked to travel over the weekend, during non-banking hours, to PKH beneficiaries to cash out their benefits. Moreover, in peri-urban and rural areas, agent liquidity was shown to be a potential constraint to realizing the cash-out of benefits through agents. A recent study confirmed that the current G2P business model is not adequately sustainable for payment service providers, nor has it developed sufficient incentives for agents to provide cash-out services to social assistance beneficiaries. Another issue is that of timely and proactive notification to beneficiaries when cash transfers are expected to be credited to their accounts.

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**Box 4.1: Transitioning from cash to digitized payments provision: need for a human-centered design approach**

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244 TNP2K (2019)
245 World Bank (2018f).
246 PriceWaterhouseCoopers (2019)
A human-centered design (HCD) approach is helpful to make adaptations to payments provision for common intended populations.

Perceiving that the switch to payments directly to recipient bank accounts would pose some challenges, the GoI had an eye on field experience in different places. Field visits revealed a number of insights from the perspective of the payment service provider (state-owned bank, Bank Mandiri, one of the five Himbara banks) and beneficiaries. Interviews with stakeholders and beneficiaries in Buru island, part of Maluku Province, in eastern Indonesia, reveal a typical range of issues:

**Identification:** Many people still do not have NIK-ID cards (especially in mountainous areas). A marriage certificate is needed to obtain a Family ID Card (Kartu Keluarga, or KK), but people can only receive marriage certificates if they have had an official religious ceremony; traditional/informal marriages are not recognized. IDs are required for KYC to open bank accounts. Note that for cash or mobile money transactions, ID credentials may be required to enable the authentication of beneficiaries.

**Access:** ATM machines are in town, over 5 km from the village. They have to arrange shared transportation or walk for a distance to go to the sub-district to then wait in line to receive the cash from the bank or sub-district government offices at cash distribution events. In mid-2019, 57 percent of all PKH district coordinators reported that banking services were not sufficiently available to adequately serve beneficiaries.

**Technical literacy:** Some had never used an ATM card and had to learn to punch in their PIN numbers; many did not change their PIN and some reported forgetting their PIN numbers. PKH district coordinators reported that 65 percent of payment service providers did not provide sufficient education on how to use banking services.

Digitizing payments has the potential to increase both the ownership and use of accounts. However, efforts to digitize G2P payments suffer from shortcomings. A common complaint among those receiving government transfers as digital payments is that the payment products are difficult to use. Recipients have reported that they struggle to get help when they have a question or a problem with their payments. Not only is it important to ensure recipients receive reliable and regular payments, but also to guarantee that transactions are simple and accessible, and fraudulent practices are avoided.

Source: MoSA (2019) and World Bank (2020a)

In Indonesia, social insurance has low compliance rates for contributions due to fragmented registration and contribution systems. To date, registration and contribution payments for SJSN programs are still done through two separate systems (BPJS Healthcare and BPJS Employment), which not only doubles administrative costs but also discourages people from registering themselves, or firms from registering their employees for all four programs. Similarly, contributions are made either by employers or directly by participants through two separate processes whereby each participant is assigned a virtual bank account number to which contributions can be transferred, with the exception of construction workers who are enrolled for the death benefit and work injury programs on a by-project basis. National Social Security Council (DJSN) monitoring dashboard data suggest that, in 2017, about 45.7 percent of JKN non-salaried segment have an outstanding payment contribution. Late contributions is one of the challenges faced by BPJS Employment. In 2017, 114,303 (23.42 percent) business entities did not pay their workers’ contributions on time. For payments by salaried workers, sanctions that are properly enforced could help to improve compliance.

Grievance redress mechanisms (GRM) are considered an important aspect of public service delivery in Indonesia, the provision of which is mandated under Presidential Regulation No. 76/2013. To improve
performance, the GRM should address fragmentation, streamline processes across SP programs, address financial barriers that discourage use and improve awareness. Of the three notable GRM available for SP programs, two (SLRT\textsuperscript{248} and the ‘contact center’\textsuperscript{249}) are managed by the MoSA and one (Lapor\textsuperscript{250}) is for complaints related to public service delivery in general. In addition, BPJS is also setting up GRM to cater for complaints regarding health and employment programs.\textsuperscript{251} Despite these various systems and uptake channels, there are several barriers that hinder utilization. The PKH contact center, for example, received only around 800 complaints in 2018. This number is considered low compared with, for example, the number of calls to the Pantawid program in the Philippines, which can go up to 600 complaints per day during payments. There are a number of measures that would address the constraints faced by GRM at present. First, a strong commitment from all stakeholders to establish a streamlined GRM across all SP programs, to minimize duplication of efforts. Streamlining of GRM processes is essential, including clear and easy-to-follow protocols for recording, follow-up, referral, and feedback and closure of complaints. Second, making complaints should be cheap, if not free, which is even more important in the context of social protection. Third, GRM needs to be well-staffed and the staff need to receive proper training on complaints-handling procedures and protocol. Lastly, public outreach should be intensified, not only to improve awareness on the presence of GRM, but also overall public understanding of the program, on eligibilities and responsibilities, to help create public accountability.

Similar to many other countries, Indonesia operates a host of separate and disconnected information systems that underpin the delivery systems for multiple programs. Indonesia has a number of key SP programs in parallel for social assistance, social security and employment promotion, albeit largely disconnected. Each program creates multiple, parallel systems to assess needs and eligibility for assistance, to make decisions on eligibility and enrolment of beneficiaries, to determine benefits levels, to monitor conditionalities, to ensure compliance, to administer and deliver payments, and to manage grievances. It results in the proliferation of information systems, leading to fragmentation of service delivery and, ultimately, complicates the realization of a cohesive strategy, and coordinated processes and systems across institutions. Many countries develop standalone systems for each social program, to automate processes for managing the operations of social programs. Ideally, these information systems should be designed and operated as cohesive, dynamic, and modular systems with feedback loops that

\textsuperscript{248} The SLRT, or the Integrated Referral Service is implemented by the MoSA with support from Bappenas and Mahkota. The SLRT has functioned both as a GRM and as a citizen interface for multiple government services. The SLRT allows citizens to voice complaints regarding SP programs; those who wish to be included in SP programs, both national and local government executed, can then be referred both by SLRT facilitators and SLRT offices.

\textsuperscript{249} MoSA has launched the ‘contact center’ to unify the GRM for MoSA-executed SP programs, such as PKH, Rastra and BPNT/Sembako. The contact center was launched in early 2018 and can be accessed via multiple media. The contact center also has the ability to refer callers directly to Himbara banks responsible for implementing payments in the complainants’ location. Complaints that are received go through a standard categorization process and are then relayed to different directorates and sub-directorates in MoSA for follow up. General standard operating procedures have been defined for the above process with the opportunity to develop more specific guidelines for different types of complaints.

\textsuperscript{250} The President’s Office (KSP) launched “Lapor” in 2011 with the aim of providing a window through which citizens could voice complaints related to public service delivery in general. The platform allows citizens to voice complaints via multiple ways: logging into the website, sending in an SMS (paid), using an android phone application and using Twitter. The scope of the platform is wide in that any complaint received will be verified and then forwarded to the respective institution responsible for delivery of the public service in question. This includes 34 ministries, 97 non-ministerial agencies, 303 local governments, 116 state-owned enterprises, 130 higher education institutions and 131 embassies around the world. Several complaint resolution and related analyses are posted on the website. KSP Lapor! website.

\textsuperscript{251} SJSN members can file complaints or request information through local BPJS offices, a contact center, e-mail, SMS, and social media accounts. Complaints against SJSN implementation can also be logged through the National Social Security Council (DJSN) which, following its supervisory mandate, has also established a contact center and a whistleblowing system.
automate functional processes and support decisions on eligibility determination, enrolment, level of benefits/service package, and underpin program administration.\textsuperscript{252}

\textbf{Indonesia’s efforts to build an integrated data platform for SP has culminated into “SIKS-NG”, housed in the MoSA’s Data and Information Center.} \textit{Sistem Informasi Kesejahteraan Sosial-Next Generation} (SIKS-NG) aggregates information from each of the key SP programs and others, in combination with the social registry (now called DTKS) into a data platform, with information on socioeconomic data at the household level for several SP programs, as well as data from social welfare agencies on health. SIKS-NG provides a framework for transitioning to a full and integrated data platform for social information systems. But to serve as an integrated social information system, the SIKS-NG will need to enable feedback loops between the beneficiary operations management systems and the social registry, which will help validate the data and improve data integrity. Both Chile and Turkey’s systems have feedback loops from beneficiary operations management systems to the social registry as to who is using those programs.

\textbf{Integration and interoperability of systems across SP programs can help reduce fragmentation, and increase coordination and harmonization across and beyond SP, but requires high-level institutional and governance structures to be in place.} Integration and interoperability are often conflated. Integration is the process of linking component subsystems into one system, so that the data contained in each become part of a larger, more comprehensive system that quickly and easily shares data when needed. An interoperability framework is an agreed approach among organizations that wish to work together toward the joint delivery of services without having to integrate all of their subsystems into one large system. Data interoperability combines data from different sources and provides users with a unified view of these data. Data interoperability does not mean the physical consolidation of databases, but instead it is the ability to share information with other fragmented systems using common standards. It requires higher-level government policies and the use of harmonized data standards across government. While a working group, Pokja Data, currently functions to ensure that different line ministries at the local level can send data to SIKS-NG, there is no strategy at the national level for SP data management and governance.

\textbf{With not even a comprehensive data protection law as yet, Indonesia needs to act on matters related to data sharing, protection and privacy.} While an overarching and unificatory data protection law that comprehensively and specifically assures data privacy and regulates the protection of personal data does not presently exist, notable progress is being made to that effect. Developed largely on the basis of the EU’s GDPR,\textsuperscript{253} a draft law has been substantially fleshed out and is under review by various government authorities. Despite this, however, legislation, previously expected to be passed in late 2019, appears to have stalled.

\textsuperscript{252} World Bank (2020c)

\textsuperscript{253} Regulation (EU) 2016/679 of April 26, 2016 (GDPR).
Box 4.2 Data protection and privacy

SP programs often require an extraordinary amount of personal data. These data can improve the impact of SP programs through more accurate targeting, better integration with programs in other sectors such as healthcare and education and facilitation of adaptive social protection to deal with natural disasters. Data can either come from the beneficiaries themselves or may be shared and validated by other programs, including foundational ID systems and functional registries such as for social insurance, taxation, healthcare, education and labor.

However, there are several risks related to the use and storage of personal data which SP programs should guard against. In many cases, the information that SP programs collect and use (e.g. address, income and assets, health and disability status, and biometrics) is very sensitive because any misuse or breach could expose beneficiaries to harms. Even publication of a list of individual beneficiaries in the name of transparency as is done in some countries, could have unintended consequences for the beneficiaries, such as discrimination, stigma, and identity theft. When SP programs store, use and share such data insecurely and without legitimate purpose and the consent of beneficiaries, these risks increase significantly and can undermine public trust and confidence.

An especially sensitive and difficult issue for SP programs is consent. In developing countries where the beneficiaries of social programs are typically among the poor and vulnerable, traditional methods of establishing consent – signing waivers or consent forms – may be useless where illiteracy is prevalent. In addition, the asymmetric relationship between the program administration and the beneficiary raises serious doubt as to whether the latter actually has a choice if the alternative to providing personal data is to be excluded from the program. Thus, for social protection as well as other government programs that require personal data (e.g., education and health) in exchange for benefits or services, standard methods for establishing consent may not be sufficient.

Importantly, data protection and privacy does not mean keeping data confidential, but instead refers to appropriate consent, control and security of that data. While privacy may refer to the “right to be let alone”, data privacy in this context should be understood as the permissioned use and governance of personal data (as an end), and data protection as the legal, operational, and technical methods and controls for securing information and enforcing rules over access and use (as a means). In practice, this means that data should only be accessed, processed, or shared by and with authorized users for pre-specified purposes that have been agreed, and ideally enshrined in law with appropriate safeguards. The most effective approach to ensuring data protection and privacy is to simultaneously develop comprehensive legal and institutional frameworks and incorporate privacy- and security-enhancing process and technology into SP information.

The majority of countries in Asia and the Pacific do not have general data protection legislation in place (World Bank 2020b). As in India and Pakistan however, Indonesia has recently produced draft legislation which, when passed will help address this gap. This is especially important as Indonesia moves towards interoperability and greater data sharing across administrative units as well as the use of the NIK for biometric authentication and to meet KYC norms for digital payments of cash transfers. A robust legal framework will only be effective there is capacity to monitor and enforce it.
There is also a need to ensure that program delivery designs account for women’s specific needs, strengthen gender impacts and avoid unintended gender-related consequences. Women face unique barriers related to their household, economic and social roles that restrict their access to SP programs, even those that directly target women. Consequently, project designs must account for the specific needs that women have in the way services are delivered, and delivery systems need a human-centered design (HCD) approach that incorporate gender appropriate adaptations. For example, poor digital and financial literacy can complicate women’s adoption of digital payment methods, over manual cash transfers. In this regard, Indonesia is one of the few countries with a reverse gender gap, i.e., women are 5 percentage points more likely than men to have an account, though equally likely to have an inactive account. Explicit design choices need to be made through an HCD approach to ensure that the G2P digitization of SP programs accelerates the closure of the gender gap in financial inclusion. This includes other aspects that ensure proper conditions for women to receive payments, such as: possession of ID and necessary documentation; a bank account; arrangements for safely collecting payments; and processes that are compatible with women’s schedules and other responsibilities. Financial inclusion and inclusion in formal labor markets rely more on formal legal identities, where Indonesian women are typically disadvantaged. A better understanding of the behavioral change required to register for vital records, as well as performance of related initiatives (e.g., mobile clinics that can issue certificates), remains relatively less understood. Text messages and reminders, with applications ranging from delivering information aimed at improving decision-making, to helping individuals overcome behavioral barriers, would also strengthen gender impacts. In training programs, innovations in delivery systems to increase enrolment and reduce drop-out of women can comprise low-cost actions such as providing training schedules compatible with domestic responsibilities or coordinated with the operation hours of childcare facilities. Lastly, program delivery aspects can undermine women’s empowerment if not designed carefully. For example, when payments are made to women for safety net programs using financial institutions, it is important to ensure that the savings accounts are under the name of women; otherwise, the resources intended to be managed by women may end up being under the control of the male adults in the household.

4.5.2 Priority Aspects and Suggestions for Delivery Systems Reform

The GoI has launched several initiatives to build integrated systems and platforms that serve multiple SP programs, and is inching closer to an Integrated Social Protection Delivery Systems framework for delivering SP benefits. However, there are still gaps in both completing the overall components of an integrated SP delivery system and in ensuring effective operation of the existing components. To start with, it is recommended that the GoI pay particular attention to three fundamental areas: (i) the national ID system, (ii) the UDB/DTKS, and (iii) delivery of payments.

4.5.2.1 NIK: Cover all the poor/vulnerable, verify and use by all SP programs

Strengthening ID systems to enable better SP service delivery. A robust ID system is a crucial input for any integrated SP system, enabling the authentication of beneficiaries’ identities when providing services online, and facilitating the sharing of information about beneficiaries (e.g., income, benefit levels) across

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255 World Bank Indonesia Gender Equality for Growth Program (P172182) Program Concept Note.
256 Australia Indonesia Partnership for Economic Governance and Monash University (2017).
257 World Bank Indonesia Gender Equality for Growth Program (P172182) Program Concept Note.
SP programs. The benefits of using the unique ID credential (NIK) for proof of identification are significant. In the Indonesia context, there are three main considerations: (i) when applicants are registered in the UDB/DTKS using a NIK, it enables interoperability between the social registry and various government systems to conduct cross-checks on self-reported data and other administrative sources of data, thereby reducing inclusion and exclusion errors for social assistance and social insurance programs; (ii) beneficiaries of social programs can use their ID credentials to meet KYC requirements to open bank accounts or mobile money accounts for G2P payments, or they can use their ID credentials to authenticate themselves for recurring offline and in-person payments transactions; and (iii) when beneficiaries are enrolled in social programs using a NIK, it enables programs to develop analytics to manage program planning and monitoring, to check for duplication of benefits, and to determine through sophisticated business analytics the adequacy of protection through various programs, as well as coverage of the population, particularly the poor, vulnerable and the aspiring middle class.

To achieve these aims, Indonesia will need to undertake certain reforms. First, it needs to ensure full coverage, especially among the poor and vulnerable. While 95 percent of the population have a NIK in the SIAK system, the MoHA is still focusing on ensuring adequate coverage among poor and vulnerable families, and in the more remote and isolated areas in eastern Indonesia. This could be a reason why the MoSA Data Center found that around 9 percent of those listed in the UDB/DTKS did not have a NIK and an additional 2 percent had an invalid NIK. A similar exercise conducted in 2019 suggests that among PBI-JKN participants, 14 percent do not have a NIK. Strategies such as placing ID registration desks at the point of enrolment, or at the point of delivery of benefits or services for social programs can help include unidentified individuals and households, thus mitigating the risk of exclusion. It is also important to put in place safeguards/redressal mechanisms against the denial of services to the unidentified.

Second, promote the systematic use and verification of NIK for all SP programs. The NIK in Indonesia is not always used and/or verified uniformly by all SP programs. Construction workers, for example, are registered by each project and not individually, implying that the NIK is not a prerequisite for enrolment. For the other social insurance programs administered by BPJS Healthcare and BPJS Employment, while the application process requires a NIK, depending on the program, registration methods and the segment of participants, NIK verification is not always automatic. This is true for social assistance as well. In the case of PKH, 13 percent of 10 million families did not have a NIK verified with the MoHA’s Civil Registry in 2018, in some cases hindering delivery of benefits to the right person. In 2018, JKN participation in DKI Jakarta and Papua was at 166 percent and 141 percent, hinting at issues of double counting, poor data (untimely reporting of death), and unrecorded migration from PBI to non-PBI.

Third, put in place a coherent and consistent policy for authentication. Even when individuals have credentials (NIK, as well as functional credentials such as family welfare cards/KKS and BPJS cards), programs offer diverse and sometimes incompatible authentication methods and practices for service/benefits delivery. For BPJS Healthcare, the unique identification number in the national ID, combined with a crosscheck with the BPJS Healthcare database, is consistently used to authenticate and claim health insurance benefits. Similarly, other social insurance programs, such as work injuries (JKK), survivor benefits (JKM) and old-age savings (JHT), all use the NIK in the national ID cross-referenced with

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259 MoSA (2019)
260 DJSN (2019)
261 For JKN, NIK verification vis-à-vis SIAK happens during the registration process, while BPJS Employment verifies NIK manually in batches.
262 World Bank (2019c)
263 DJSN (2019)
the BPJS Employment database, to verify proof of identity and secure transfer of benefits. However, in some cases, as is the case for the pension program (JP), additional documents are required. Within the BPJS Employment insurance scheme, different segments of the beneficiary groups—construction workers, salaried and non-salaried workers—all go through different national ID verification pathways to utilize the BPJS functional ID to access program benefits. For social assistance, BPNT/Sembako operates through controlled distribution points, such as e-Warong stores and agents, by authenticating beneficiaries using their KKS cards and a PIN number. In summary, beneficiaries of more than one social program may use a variety of authentication methods depending on the program, in the absence of a coherent and consistent policy for authentication of services.

Finally, proof of identification by means of a NIK should not be used as a proxy for assessment of poverty or program eligibility. Presenting an ID does not guarantee entitlement to a benefit or a service. Needs assessments of poverty or vulnerability are a separate and distinct process done through the social registry and should not factor into identification. Accordingly, data collected through the identification process should be minimal, should not contain poverty or socioeconomic information, and should only be for the purpose of verifying whether an individual is who he/she says he/she is.

4.5.2.2 The UDB/DTKS: Expand coverage, build dynamism and adopt widely by all SP programs

The use of the UDB/DTKS has been beneficial but a host of reforms are needed to improve effectiveness, including expanded coverage, introduction of dynamism and moving away from a relative ranking of poverty. Indonesia’s use of the UDB/DTKS to identify eligibility for social assistance has yielded direct improvements, particularly for social assistance. Tohari et al. estimate that the UDB/DTKS improved eligibility and participation in multiple programs substantially, i.e., the chance of participating in three core programs rose by 117 percent.

As a social registry, the UDB/DTKS should double its coverage to 80 percent of the population to serve programs beyond social assistance and contain data covering not just the poor and vulnerable but also the aspiring middle class, who are not yet economically secure and at risk of being pushed into vulnerability or poverty due to shocks. Programs such as PBI-JKN require data on the bottom 40 percent to perform eligibility determination for subsidized premiums. Nevertheless, there is no guarantee that the UDB/DTKS contains a complete and correct set of people in the bottom 40 percent, i.e., it is not certain that the UDB/DTKS does not erroneously include or exclude individuals, families and households within that threshold. Programs that need to conduct eligibility assessments for people who are poor, vulnerable or in the aspiring middle class such as electricity subsidies, skills training or health insurance, for instance, require data beyond those that are currently in the UDB/DTKS. The existence of the “uncovered or missing middle”, i.e., the emerging income group who have not yet accessed social protection programs, illustrates the need for a social registry platform with a wider coverage (Figure 4.15). Greater coverage would also help programs to expand more easily beyond the existing beneficiaries, in response to disasters that could render poor or vulnerable a large share of a population affected by a disaster.

Figure 4.15: Social protection coverage as a proportion of population

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265 World Bank (2019a).
While the question of doubling coverage is an important policy question, there is also an immediate concern about whether the UDB/DTKS covers the right set of people in the bottom 40 percent. Dynamic updates are essential to refresh stale data, and the quality and integrity of data in the UDB/DTKS is essential to ensure accuracy in the process of eligibility assessment. If the UDB/DTKS is made dynamic, any citizen who believes he/she is entitled to receive SP would be able to request eligibility assessment for potential inclusion. Furthermore, integrating dynamic social registry data with geographic information systems can enable adaptive SP approaches to respond quickly to shocks and crises. To address this, it is recommended to invest more in a dynamic data-collection process for all 515 kabupaten/kota, ensuring data standards and processes are in place and observed to ensure the collection of high-quality data. Brazil, for instance, went fully dynamic in 2007, through a system of performance incentives with local governments for keeping the data up to date.

Reform efforts will also need to focus on linking the UDB/DTKS to a wider range of other administrative databases, which can significantly reduce costs associated with inclusion errors. In Pakistan, for instance, the use of a social registry, which includes 85 percent of the population and serves 70 different programs, contributed to savings of US$248 million. In South Africa and Guinea, a similar process saved US$157 million and US$13 million, respectively. In Argentina, linking 34 social program databases to the unique ID number of beneficiaries revealed inclusion errors in eligibility for various social programs. This led to US$143 million in savings over an eight-year period.266

Improving accessibility and coverage will require strengthening local government capacity to interface with people, to register them and to collect data for eligibility assessment. As the GoI is focusing on SIKS NG as the main vehicle through which to achieve both local government-led data updating and verification of UDB/DTKS data and the collection of new records, several improvements can be implemented. Currently, more than 80 percent of all districts have updated at least basic administrative data (location, household composition) via SIKS NG and only a subset has managed to update the full list of variables within the
UDB/DTKS. For instance, all districts, especially those that are underperforming, could be provided a performance incentive to follow a strict set of procedures under supervision in updating UDB/DTKS data, implemented through the new fiscal transfer for SP programs introduced in subsequent government budgets.

4.5.2.3 Payments: Provide choice and convenience; leverage fintech innovations

Transitioning to a modern G2P payment system for SP payments. The GoI has made an important step toward the development of a single payment delivery gateway for social assistance cash and in-kind transfers (such as for PKH, PIP, BPNT/Sembako and some selected subsidies). Further developing a national payments gateway is key to enabling a human-centered design approach for payments. Based on current regulations, all social assistance programs should be using the same payments infrastructure but, in reality, even within the same ministries this is not the case. A payments gateway approach can help with interoperability of payments methods for different programs to the same individual/family/household.

Fintech could also be leveraged to build innovative contribution collections and compliance mechanisms to ensure the fiscal sustainability of social insurance programs, such as JKN. As more people move into the “gig” or informal economy, even in developed countries, it is important to consider how SP programs might offer new opportunities for informal workers to take their benefits and services to-go, irrespective of their employer. In some countries, micro-insurance platforms, mobile schemes and “nudges” are being used to incentivize people to make flexible, voluntary and cashless contributions (see Box 4.3). There is scope to improve the collection of contributions among non-salaried workers by diversifying existing P2G (person-to-government) channels in Indonesia as well. Both BPJS units have started using e-commerce platforms as payment points and with increasing use of mobile money have also tapped into app-based mobile payment systems, such as Ovo, LinkAja, and Go-Pay. These payment methods, however, still require Internet connectivity, which is still a challenge in remote parts of Indonesia.

Box 4.3: Informal sector worker contributions – Mobile first and behavioural nudges

Kenya: The M-BAO Pension Scheme was launched in 2011, promoted by the Retirement Benefits Authority (RBA) along with the National Federation of Jua Kali to expand pension coverage to informal sector workers. It is a voluntary individual account savings plan designed to encourage informal sector workers to save for retirement. A key feature of the scheme is that low-income workers can make small contributions anywhere and anytime using their mobile phones. The minimum contribution is individuals US$0.20 per transaction. Contributions are made using a mobile money account provided by MNOs. Members can make withdrawals after three years from their first contribution, which was structured to provide some level of flexibility to the scheme. It is important to note that this scheme was not launched as a national scheme for the informal sector, but rather as an individual pension scheme sponsored by an association of informal sector workers, and was developed in line with the individual pension scheme regulations in Kenya.

Ghana: In Ghana, a mobile money pension scheme allows people to make small personal pension contributions through their mobile money accounts. Contribution amounts such as GHS 1 daily, GHS 5 weekly and GHS 20 monthly are permitted. The scheme also allows voluntary payments contributions through an automated deduction at a selected frequency through an MTN mobile money account. These contributions are not nudged. About 100,000 people have signed up to the scheme since it was launched.
4.6 Summary and Recommendations

This chapter has described some of the financing and delivery related options that Indonesia could explore to achieve a more inclusive and effective SP system. A well-functioning integrated delivery system is key to providing a guaranteed minimum, and to implement a coherent and efficient set of social insurance programs. Indonesia has launched several initiatives to build integrated platforms to serve SP programs, and to ensure greater coordination and inclusion. As Indonesia’s SP system continues to expand and offer a broader range of programs to its citizens, it will be vital to have a modern and effective delivery system underpinning it. In particular, the social registry should be accessible to all citizens and extending the coverage of the UDB/DTKS to 80 percent of the population would enable use of the social registry for a broader and complete range of social assistance, labor and social insurance programs. A national payments gateway is also key to enable a people-centered design approach for payments, and the GoI should consider leveraging fintech innovations for G2P payments as a viable alternative to delivering exclusively through state-owned banks (Himbara). Finally, a strengthened ID system linked to social protection programs would strengthen service delivery.

Harnessing the advances of the digital age would support implementation of the reforms proposed in this report. Advances in digital technologies are rapidly broadening what governments can do without the intermediate role of employers, or the reliance on easy-to-observe formal sector wages. Indonesia still has some way to go to realize the potential benefits of technology in its SP system, and there is enormous upside to the use of technology to transform most elements of the business processes and delivery of SP programs. Innovations in mobile and digital payments, biometrics, cloud computing, big data and artificial intelligence driven-data analytics could drastically improve the system’s efficacy at service delivery. Technology has the potential to allow the country to take leaps, rather than incremental steps, in more efficiently expanding and improving coverage across the population, overcoming the existing challenges of informality and persistent concentrations of poverty. However, SP delivery systems will need to be interoperable between the various SP programs, as well as with the rest of the GoI’s platforms. The SP system will increasingly rely on all-of-government platforms, including the national ID system, integrated revenue collection with tax and other agencies, common G2P payment platforms, and more integrated front-end citizen services.

The reforms to the SP system will also require greater financial resources and improved financial management. Financing can be achieved by reallocation within existing expenditure and by redeploying resources spent on energy or other subsidies, which remain sizeable and could be more effectively spent on poverty targeted programs. As a first step, existing social assistance spending and spending on price subsidies could be redirected toward the preferred policy package to provide a guaranteed minimum income. Fuel and electricity subsidies made up almost IDR 154 trillion, or 1.2 percent of GDP in 2018. LPG and electricity subsidies comprise the largest budget allocations. However, the poor and vulnerable only consume 15 and 22 percent of these benefits, respectively. The bulk of energy subsidies—39 and 29 percent of LPG and electricity subsidy benefits, respectively—are consumed by the economically secure middle class. Compare this with conditional cash transfer programs, which have been the most efficient in targeting poor and vulnerable households. PKH, for example, allocates 73 percent of program benefits to the bottom 40 percent of the population. Pension and health insurance reform can be a key source of long-term fiscal savings. The large and increasing deficits constitute a key source of fiscal pressure. It is essential to adjust the pension system to the reality of rapid demographic change and to bring it in line
with international standards. Better policy coordination, and more integrated administration and delivery could reduce overlaps, save resources and realign incentives to increase productivity of the labor force. The overall recommendation is to redesign and integrate SP programs (labor market programs, social assistance, and social insurance) into a coherent system that better leverages Indonesia’s capacity to target households in need and thereby achieves fiscal savings.

**In order to adequately expand the reach of its SP system, Indonesia will also need to collect more revenues.** Reforms of the SP system and general revenues system will have to be undertaken in tandem to account for how the net incidence of general revenues impacts household welfare. Reductions in VAT exemptions are a promising way to increase resources, as the current structure of VAT exemptions translates to IDR 90.6 trillion, or equivalently US$21.6 billion (in 2011 PPP terms), which is 0.67 percent of GDP. Revenue generation in this manner, however, would need to be accompanied by some sort of compensation for those in the lower end of the consumption distribution, for whom the additional VAT burden of removing exemptions is the greatest. This should be possible, as the additional revenue would be large enough to amply compensate the poor and could be achieved if the fiscal space created by closing VAT exemptions is utilized more broadly to improve the coverage and/or generosity of some of the existing (poverty targeted) programs that Indonesia already has. Excise taxes on tobacco represents another alternative to raise revenues. Such taxes also offer the additional public health benefit for the poor and, given their higher consumption elasticity, the burden of such a tax would fall more proportionally on the middle class. Again, as in the case of the VAT exemption removal, the size of the potential revenue generated would be large enough to compensate those who bear the brunt of additional excise. Another instrument of tax policy that could be utilized is the personal income tax (PIT). According to latest estimates, PIT accounted for 4.6 percent of GDP in 2018.²⁶⁷ PIT in Indonesia is levied on gross income from all sources less exemptions and deductions (for example, for child dependents, pension income, occupational expenses, or pension contributions). Out of 124 million workers identified in the labor force, only 32 million, or one-quarter of them, were registered in the PIT system. Moreover, of those who were registered, only 9 million were found to have filed their taxes. There was an even smaller number (3.2 million) who actually paid their PIT. In addition, Indonesia has also been regularly increasing the non-taxable income thresholds.

**Progressive universalism calls for gradual expansion in line with the prevailing fiscal space.** Simulations show that successful implementation of some key reforms in the revenue system could generate additional fiscal space of up to 1.8 percent of GDP for spending on priority sectors. The combined impact of additional revenue measures would create space for additional social protection spending of 1.5 percent of GDP on average between 2020 and 2024. While SP spending will need to be reoriented and increased over time, this should be done cautiously with an eye to macroeconomic and fiscal sustainability, and involve enhanced efforts on the revenue side to increase tax and contribution collection and compliance. Existing fiscal constraints imply that SP coverage expansion will have to be gradual, requiring prioritization and sequencing as additional resources become available. However, additional finances should be generated as reforms of the various parts of the system lead to program consolidation, a more efficient delivery network, and spending re-allocation across the system.

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²⁶⁷ IMF (2019)
CHAPTER 5: Protection for All – Toward an Integrated Social Protection System in Indonesia

5.1 Introduction

This report has analyzed the current set of social protection (SP) and risk-sharing policies in place in Indonesia, implemented through a set of social assistance, social insurance, and worker protection policies and programs. It has shown that, while Indonesia has a wide range of social assistance programs, an ambitious social and health insurance policy, and legislation and policy for worker protection, there is inadequate policy, institutional and administrative coordination between social assistance and employment-based contributory social insurance. This has left a coverage and adequacy gap of under-protected people who are ineligible to receive formal social assistance transfers, but for whom formal employment-based worker protection and insurance arrangements are still out of reach.

The coverage and adequacy gaps are particularly significant for the elderly and for informal workers. Both these groups are likely to be in the lower end of the income distribution, and they will continue to constitute large shares of the population and labor force in the coming decades. Social assistance coverage for households without children and for the elderly is below the required minimum amount to ensure adequate protection and consumption. Similarly, while health insurance coverage has expanded rapidly, there is a need to reform the system to make it financially sustainable. The coverage for other risks, in particular pensions, remains very low for a country of Indonesia’s level of income. Even formal private sector workers who are covered will only begin to receive full pensions 30 to 40 years from now, and in the meantime lump-sum payments and partial pensions are not likely to be adequate. Finally, there is a need to better protect workers from job loss and unemployment, as the current severance payment system only appears to provide limited de-facto protection for the majority of workers who lose their jobs.

A number of socioeconomic developments will influence Indonesia’s SP system in the future, including demographic change and a rapidly aging population, the changing nature of work, technological developments, climate change and natural disasters. Informality in Indonesia is currently high (two-thirds of workers are in self-employment, micro and small enterprises), and with the expected changing nature of work and increased use of technology, a significant share of employment is likely to remain informal and atomistic, i.e. taking the form of sole-trader self-employment, employment in micro firms, and family owned micro enterprises. Work arrangements in the informal economy and for the self-employed can be diverse and very fluid—with people moving in and out of jobs with regularity, and sometimes holding several market engagements at the same time. These trends are likely to have significant implications for, and challenge, Indonesia’s prevailing risk-sharing policies and SP system, and emphasize the need for reform to be able to respond to emerging needs in the population and society.

While the suite of programs will need to evolve, the current objectives of SP in Indonesia remain important and relevant. The SP system should continue to play an important function in achieving Indonesia’s growth and development objectives by protecting incomes and assets, enhancing resilience, and supporting the accumulation and acceleration of human capital development. This report argues that to do so in the future the SP system must address three challenges: The first is to ensure that there is a guaranteed minimum protection for all, regardless of where they are in the lifecycle, family composition, and/or geographic location. The second is to meet the demands of the growing elderly population to have a source of income during their old age. The third is to adjust to what will likely remain a highly informal
economy by ensuring that worker protection arrangements are accessible and adequate for all workers, and not just those in formal employment. Furthermore, the SP system of the future should increasingly focus on addressing core priorities, such as disaster risk management and human capital development.

Table 5.1: Trends and social protection system responses

<table>
<thead>
<tr>
<th>Socioeconomic trend</th>
<th>Required SP system response</th>
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<tbody>
<tr>
<td>Falling poverty rates</td>
<td>More targeted programs to combat extreme poverty, and a new focus on preventing people from falling back into poverty.</td>
</tr>
<tr>
<td>Persistent inequality</td>
<td>Extend coverage to vulnerable or “near-poor” populations; address demands for redistribution; promote equality of opportunity</td>
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<tr>
<td>Labor market volatility and high informality</td>
<td>Provide income during times of unemployment; expand program coverage beyond workers in the formal sector.</td>
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<tr>
<td>Aging population</td>
<td>Provide income and care services for a growing number of the elderly; labor market programs to expand access to and productivity of employment to compensate for shrinking workforce.</td>
</tr>
<tr>
<td>Climate change and disasters</td>
<td>Build resilience to and protect from shocks of natural disasters and climate change.</td>
</tr>
</tbody>
</table>

This chapter lays out a vision based on the aspiration, and need, to have a comprehensive and responsive SP system for the Indonesia of the future that builds opportunity and resilience for its people, helps people recover from losses in the wake of shocks, and offers all workers—not just those in formal employment—protection. It further presents concrete options and policy recommendations for how Indonesia can strengthen its SP programs and system to move toward this vision and a system that is responsive to the needs of the future.

5.2 Indonesia’s Social Protection System Provides a Strong Base for Reform

Over the past two decades Indonesia has laid a solid foundation for a comprehensive SP system that includes social assistance, social insurance and delivery systems. The analysis of the current system is summarized in this section.

Over the past 15 years, Indonesia’s social assistance programs have expanded significantly in both function and coverage, and are increasingly becoming a suite of programs that provides a safety net for Indonesia’s poor and vulnerable. However, the social assistance system remains relatively fragmented, and there is limited coordination between programs and inadequate systems in place to ensure that the share of the population that needs it receives a package of support that covers their needs. By design, the social assistance benefit package (PKH, BPNT/Sembako, PIP, and PBI-JKN) for households with children, provides adequate protection (an average 44 percent of median consumption) for the poorest 15 percent of households with children. However, the de-jure implementation still leaves gaps in coverage for some. Poor and vulnerable households without children are only eligible to receive two of the four main programs, including BPNT/Sembako, which constitutes an average of 9 percent median consumption for the poorest 15 percent of households. There is particularly a need for greater coverage of poor and vulnerable elderly, and to introduce more comprehensive support to persons with disabilities. Finally,
despite the wide range of social assistance programs and increasing coverage over the past few years, at 0.7 percent of GDP Indonesia still spends relatively little on social assistance. Chapter 2 described the options to further strengthen the coverage and adequacy of social assistance programs.

**Figure 5.1: Social assistance spending as a share of GDP (%), selected countries, 2019**

![Social assistance spending as a share of GDP (%), selected countries, 2019](image)

Source: World Bank ASPIRE and World Bank staff calculations.
Note: Selection based on data availability and being recent enough. Countries shown are neighboring countries and several other middle-income countries.

**With the start of SJSN in 2014, the SP landscape changed radically.** Five years into implementation of SJSN, the system has already had a significant impact on mitigating the impact of shocks on many Indonesians. Health insurance is now extended to include those who are working in the informal sector, with the GoI paying the premiums for tens of millions of people. The mostly poor beneficiaries made more than 5 million in-patient and 13 million out-patient visits in 2018, and nationally, out-of-pocket health spending has fallen steadily over the past five years. The pension program, which was previously exclusive to public employees, is now also offered by BPJS Employment for private employees, although under the current law only formal sector workers can participate. Tens of thousands of workers have also received benefits for death and work injury. However, a formal wage employment contract is still the basis for the majority of protections afforded by the social insurance programs, and by regulations for minimum wage and severance pay.

**An effective social insurance system ensures that low-income workers have access to effective risk management tools.** The right combination of instruments, subsidized for the poorest, is required to cover losses from livelihood disruptions, sickness, disability, and untimely death. This would entail provision of minimum insurance to all workers and a consideration of subsidized coverage against impoverishing losses. This would complement social assistance by providing coverage against losses that would be too large to cover through direct transfers. Second, a mandated savings and insurance plan would allow for consumption smoothing over the lifecycle. As summarized below, to meet the demands of Indonesia’s future labor market, the current social insurance programs will need further reform.
There has been a dramatic expansion of health insurance coverage over the past decade, achieved by subsidizing the premiums of about half of the population. This is a significant achievement and Indonesia is one of few countries that have implemented these types of subsidies in a national insurance scheme. Nevertheless, 60 million people remain uncovered. Expanding the contribution subsidy to cover this population would bring the total subsidized population to 150 million. At the current premium level, this would cost about 0.5 percent of GDP. This would be in addition to the cost of covering growing deficits in the scheme. A series of measures could help to address the financial sustainability of the health insurance scheme by increasing revenues and improving spending efficiency. These measures were detailed in Chapter 3.

Although many members and their beneficiaries have benefited from them, the SJSN employment programs are now facing challenges that, if not addressed promptly, will impact their performance in the long run. Because of its relatively late start, contributory pension spending as a share of GDP will continue to be lower than many countries at Indonesia’s stage of demographic aging. The coverage for pensions, work injury, and death remains very low for a country at Indonesia’s level of income and, even those private sector workers who are covered will only begin to receive full pensions 30 to 40 years from now. The adequacy of pensions is further adversely affected by the current practice of withdrawing savings from the old-age savings scheme, as well as the valorization method chosen. As detailed in Chapter 3, the existing SJSN system would require a series of parametric reforms to address the current gaps in adequacy and sustainability of Indonesia’s social insurance programs, and—importantly—achieve universal coverage.

The existing system primarily serves formal sector contracted workers. It protects them under the Labor and SJSN Laws while they are employed, through worker injury and death benefits and, in theory, supplies them with severance pay when they are unemployed. However, the majority of the Indonesian labor force is informal and thus not receiving these benefits. Furthermore, while the severance pay is generous de jure, in reality it provides workers with limited protection—only 28 percent of workers entitled to severance pay actually receive it.

The civil service pension scheme has been operating long enough that workers who retire today will have earned pension entitlements throughout their careers and therefore receive full pensions. Replacement rates for civil servants have, however, been falling due to the increased proportion of non-
pensionable allowances, especially for more senior civil servants. For some individuals, the base is so low that, even with a relatively high accrual rate of 2.5 percent, the actual replacement rate can be as low as 20 percent. Moreover, the effective replacement rate is changing every year and varies significantly across workers in different grades.

**Indonesia has launched several initiatives to build integrated platforms to serve SP programs and to ensure greater coordination and inclusion.** These include developing a unified social registry (UDB/DTKS) and enabling dynamic data updates of it, developing a single payments distribution channel for multiple programs, and setting up an ID system based on biometrics and providing a unique identification number (NIK) to all nationals. As Indonesia’s SP system continues to expand and offer a broader range of programs to its citizens, it will be vital to have a modern and effective delivery system underpinning it. In particular, the UDB/DTKS should be accessible to all citizens, and extending the coverage of the UDB/DTKS to 80 percent of the population would enable the use of the social registry for a broader and complete range of social assistance, labor and social insurance programs. A national payments gateway is also key to enabling a people-centered design approach for payments, and the GoI should consider leveraging fintech innovations for G2P payments as a viable alternative to delivering exclusively through state-owned banks (Himbara). Finally, a strengthened ID system linked to SP programs would help to strengthen service delivery.

### 5.3 A Future Consolidated and Coordinated Social Protection System – What to Do and How to Do It?

A rapidly evolving environment, including Indonesia’s demographic profile and the changing nature of work, coupled with persistent informality in the labor market, presents a challenge to the policies and programs that need to be in place to help people manage risks to their lives and livelihoods. It is therefore an opportune time to re-think risk-sharing in the social contract and for Indonesia to evolve its overall SP system to adequately meet the changing and evolving demands for its services. Such a system would offer adequate protection for all, regardless of their employment status. While Indonesia has established solid programs and systems in both social assistance and social insurance, as outlined above, there is a need to further strengthen coverage, implementation and efficiency in both areas and to develop a cohesive system that serves all people in need, not only the richest and poorest members of society. This section discusses the SP system of the future, and the reforms necessary to achieve this vision.

Serving a changing country in a changing world, the future Indonesian SP system should support households and individuals during different states of transition: from unemployment to employment; from poverty and vulnerability to prosperity; from youth to old age; from one job to another; from one location to another; during periods of sickness or injury; or in the aftermath of shocks. In doing so, the system will meet the changing needs of a middle-income country’s population and its expectations that the state and SP system provide adequate protection in old age, support in finding jobs or better jobs, and financial support in the event of shocks. Indonesia’s future SP system should be one that contributes to national wealth and human capital accumulation, responds to new social dynamics and needs, and actively supports an emerging middle-class and expands the tax base. An important element of this system is that it should aspire to be universal and accessible to all the Indonesian population, irrespective of whether they are employed in formal or informal jobs.
To achieve this, the GoI will need a comprehensive package of safety nets, insurance, savings and services that protect people from shocks and gives them the tools to manage risks and uncertainty. The increased risks encountered in the changing nature of work also call for adjustments to worker protection. A new social contract could establish a system that is decoupled from how or where people work, and that: (i) provides its people with a “guaranteed minimum” protection across the lifecycle through a package of programs to most effectively meet it; and (ii) complements this with a coherent set of social insurance programs for consumption-smoothing. The guaranteed minimum could take many forms, and be achieved through one large program, a series of programs or by expanding individual interventions. Each of these modalities presents different comparative advantages and has fiscal, political, and administrative implications.

In Indonesia, where the social assistance system is relatively mature, the establishment of the guaranteed minimum could be achieved by consolidating current programs and expanding social assistance coverage to households without children, especially the elderly. This could be complemented by differential and well-targeted subsidies to cover social insurance premiums and contributions for informal sector workers. Existing social insurance programs could be made more efficient by implementing parametric reforms to the SJSN pension scheme, including a gradual increase in the retirement age, as well as parametric reforms to rationalize the civil service pension scheme and move younger civil servants into the national scheme. The social insurance reforms could also incorporate the current severance pay system by prefunding unemployment savings accounts to be managed together with the existing old-age savings program, and thus introducing an unemployment benefit.

The analysis in this report suggests that Indonesia could move progressively toward a guaranteed minimum and reach more people by tapering the benefits for those higher in the income distribution. This would also reduce the total cost of the reforms. As shown in Figure 5.2, this would entail expanding the needs-based and publicly-financed social assistance package to a larger share of the population. The benefits levels, or the minimum level of protection, should be set so that it provides adequate consumption support and protection against household shocks. Here, the protection floor is set to bring households above the poverty line, with a tapered benefit showing the reduced support to households as their needs decrease when moving up the consumption distribution. The trajectory of programs to offer protection will, as described further below, imply a blurring between the non-contributory and contributory programs over time, and a transition period where the GoI finances a contribution subsidy for social insurance for the poorest, as well as informal workers. This is to address the situation with expected continuation of high informality in the labor market, and to ensure that in the future a much larger share of the population will receive their minimum level of protection through the pension system once they reach old age.

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269 Given the relatively flat welfare distribution between the 40th and 70th percentiles, the GoI could potentially choose to cover some households all the way to the 70th percentile, depending on the objectives it is seeking to achieve.
270 Although the protection floor or guaranteed minimum is envisioned as flat, it does not entail an equal level of benefits in absolute terms; for direct transfers under the tapered conditional cash transfer scheme for instance, the value would be set relative to the distance of an average households consumption to the poverty and vulnerability line across different groups in the population.
Over time, as the economy continues to grow and Indonesia progresses further toward becoming a high-income country, the needs for the social assistance package are expected to decline and over time likely be needed only for a smaller group of people categorized as poor. By 2045, it is expected that the middle class will have increased significantly, and the share of poor and vulnerable households requiring social assistance decreased. At the same time, a larger share of the population will be covered by an adequate social insurance package, achieved through the previous years’ financing of the contribution subsidy for pensions. Universal coverage will thus require a trajectory of programs and a blurring of the line between non-contributory social assistance and contributory social insurance programs, with a transition period where the GoI finances a contribution subsidy for social insurance for the poorest, as well as informal workers. Indonesia is already doing this successfully with the health insurance program (JKN) and could adopt a similar approach for BPJS Employment.

Figure 5.3: Vision 2045

The share of the distribution in each of the consumption levels is illustrative only. While it is expected that the share of the population requiring social assistance will decrease, their benefit levels will likely increase as the economy grows. Thus, the total costs of the future social assistance program will depend on the combination of coverage and benefit levels.
5.3.1 Establishing a Guaranteed Minimum

The policy objective of a core “guaranteed minimum” is to prevent poverty of those vulnerable to/near the poverty line and further impoverishment of people who are already poor, i.e., to provide a basic protection floor for all. In addition, the guaranteed minimum could be designed to promote other objectives such as human capital acceleration, productivity and labor mobility, and disaster response by employing instruments such as CCTs, linkages to employment or skills programs, and by incorporating resilience building and responsive financing mechanisms.

All citizens who are in need should be eligible to receive the guaranteed minimum. The minimum should be fiscally sustainable, set at an appropriate benefit level that guarantees recipients are kept out of poverty but are not disincentivized to work. While the proposed guaranteed minimum would provide universal coverage in principle, benefit payments could be contingent and progressive, meaning that benefits are available when and where needed. Many benefits may not be needed by many people in a given period, or even at all, so what is important is the universality of entitlement to coverage against impoverishing losses. Those who do not suffer such losses may be covered by the guarantee but never receive a payout.

Years of experience have yielded important lessons for how the GoI can provide a robust guaranteed minimum using a coordinated and well-designed combination of programs and instruments. Indonesia has a range of social assistance programs currently operating, which could serve as instruments to achieve a progressive realization of a guaranteed minimum over time. This would entail filling the uncovered gaps along the lifecycle in the current system, especially for the elderly who are currently poor. Furthermore, poor and vulnerable households without children are inadequately protected from risks, as they are currently eligible to receive only Sembako and PBI-JKN programs. Third, considering significant exclusion errors, as well as marginal differences in the levels of consumption between households in the bottom

Packard et al (2019)
quintiles, the current coverage of 15 to 20 percent of the population appears arbitrary and may need to be extended further up the consumption distribution.

As described in Chapter 2, a range of options can be considered to facilitate the guaranteed minimum package in the short run, building on existing policies and interventions. The recommended options include: (i) consolidating cash transfer delivery by integrating the PKH and PIP programs; (ii) increasing the coverage of PKH and Sembako with tapered benefit levels; and (iii) improving protection along the lifecycle and, in particular, for the elderly. The PKH and Sembako programs—as national flagship interventions—could be used to anchor a core minimum. In particular, the Sembako program, which is unconditional in nature, could become the ‘backbone’ of the social assistance system and over time serve the function of a single base transfer program, delivered in cash. Top-ups for various household characteristics or policy objectives could then be added through other programs such as the PKH, an elderly social assistance program, a program for disabled etc.

**Box 5.2: Establishing a minimum guarantee – A new program vs building on current programs**

There are many options for a country that seeks to establish a guaranteed minimum as a basis for its social assistance programs. One option could be to establish an ambitious backbone scheme—a single cash transfer program consolidating all the others. This could then be adapted and scaled according to risks and needs, for example, conditions and top-up transfers for some if needed. However, while it is certainly a possibility, establishing a minimum guarantee does not have to entail dismantling the suite of current social assistance programs and benefits, and replacing them with a new unconditional package.

Instead, it may be more feasible technically and politically to build from what Indonesia has already to implement the minimum guarantee suggested approach. The proposed reform closely mirrors the shape of the existing programs, with the main change being a potential coverage taper phasing out at 40 or 70 percent, instead at 100 percent. In other words, current mistargeting of programs has unintendedly extended coverage across the income distribution, hence facilitating the legitimization or crystallization of higher coverage.

The favored approach in this report is to build on an existing backbone scheme—Sembako—acting as a single cash transfer program and providing the core conduit for the reform. Over time, the GoI should consider providing Sembako benefits in cash rather as vouchers. This backbone program could be adapted and scaled according to human capital objectives (PKH top-ups by verifying conditions), risks and needs (providing more transfers based on household composition, age structure, or disability conditions; or trigger higher benefits/coverage during crises), while maintaining its identity as a single unifying scheme. Such an approach would help reduce coverage gaps between programs, achieve administrative simplification, and reduce transaction costs to access benefits, building already in the impressive reforms achieved so far in Sembako and PKH.

5.3.1.1 Consolidating cash transfers by integrating the PKH and PIP programs

The current PKH and PIP programs serve similar population groups and objectives. Consolidating and integrating the two programs under PKH would strengthen program targeting and delivery, as it would
converge under the much stronger PKH systems. An integrated PKH and PIP would also lead to higher coverage among the poor, and PIP beneficiaries would receive a much more adequate benefit through an increase in the average benefit from 7 to 21 percent of median consumption. Analysis shows that, from an efficiency standpoint, phasing out the PIP program could yield about 0.2 of an additional percentage point reduction in the poverty headcount. Administrative costs in running PIP would also be saved.273

5.3.1.2 Increasing the coverage of PKH and BPNT/Sembako with tapered benefit levels

Given that the welfare distribution in Indonesia is relatively flat, and that about 40 percent of households that are poor in a given year were not poor the year before,274 the vulnerable segment of the Indonesian population is only slightly better off than the poor. Thus, there is ample reason to extend social assistance beyond the current level of coverage. Better protection could be provided by extending current programs, such as PKH and BPNT/Sembako, and adjusting their benefit levels. Ideally, such a package of cash transfers would consist of an unconditional transfer (BPNT/Sembako), with a conditional top-up (PKH).

The value of the extended cash transfer could be anchored to welfare levels and be tapered down the consumption distribution, considering their mean relative position from the vulnerability line. A first tier considers the value of PKH and BPNT/Sembako at existing levels, which are sufficient to bring the median poor households above the poverty line. The second tier views the position of the median vulnerable household with respect to the vulnerability line and determines a package of protection that is sufficient to bring those households just above the vulnerability line. This would significantly reduce the likelihood of these households falling into poverty. In addition, all households in the poorest 40 percent should, by design, already be receiving health insurance fee waivers, which would protect them from falling into poverty through health shocks.

This policy change, combined with the merger of PIP and PKH described above, would render an increased level of protection for households, both with and without children, and could reduce poverty by about 46 percent from the current rate, all else being equal. Vulnerability could decline by about 18 percent, and the Gini reduce by about 1.8 points. These potentially significant impacts would come at a total cost of IDR 124 trillion, a large increase from 2019 spending of about IDR 55 trillion on PKH and BPNT. One approach to manage the required costs would be through a gradual increase in social assistance benefits over time, while continuing efforts to help households exit from the social assistance system and into productive livelihood opportunities.

5.3.1.3 Improving protection along the lifecycle, in particular for the elderly

This report has shown that, while de-jure protection is adequate for families with children, it is insufficient for those without. Given the levels of elderly poverty and the demographic transition in Indonesia, the elderly will be a particularly vulnerable group going forward. For households without children, the guaranteed minimum could be achieved by increasing, potentially doubling, the unconditional and poverty-targeted BPNT/Sembako benefit, from the 2019 level. A doubled BPNT/Sembako benefit would reduce poverty by an additional 0.8 of a percentage point and vulnerability by

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273 An about equivalent amount of the budget could potentially be turned into a graduation bonus to children that continue school between SD, SMP and SMA. This could help the GoI address lingering dropout rates between these levels of school, which are most pronounced for poor and vulnerable families.

274 World Bank (2016a)
0.5 of a percentage point at an additional marginal cost of IDR 11 trillion. The GoI is already considering an increase of 50 percent in the Sembako benefit, and to include a wider spectrum of food items, including local staples, meat, nuts, and breastfeeding substitute food for households with small children. Over time, the GoI may also consider transitioning the Sembako benefit to a cash transfer program, which would promote choice and empowerment, greater flexibility and could generate local economic multipliers. A poverty targeted base transfer delivered in cash would then form the first layer and be the back-bone of a “guaranteed minimum” for all households, regardless of their family composition. Indexing the cash transfer benefit levels to inflation would secure adequate protection in times of economic volatility.

**Special measures would be needed to bring the elderly more comprehensively into the social assistance system and to ensure that they are also protected by a guaranteed minimum.** Because of its recent introduction, the SJSN pension scheme will not provide income in old age for most Indonesians, since middle-aged and elderly people today will not have time to contribute for a sufficient period before they need their pensions.\(^{275}\) For these cohorts, only social assistance of some kind can address their needs. Without additional measures to ensure the poor elderly are covered by social assistance while the contributory scheme matures, the percentage of the elderly living in relative poverty will almost certainly increase. Even if expansion of the purely contributory and matched contributory schemes is successful, there will still be a large stock (and probably future flow) of elderly who will not accumulate an adequate contributory pension prior to retirement. There is therefore an urgent need to extend social assistance to more of the poor and vulnerable elderly. This could be done by categorically targeting this group for the Sembako transfer and/or extending social assistance coverage for elderly, regardless of whether they live in households with children or not.

![Figure 5.4: De jure adequacy of Sembako and elderly social assistance](image)

The path toward achieving the full package of protection, and particularly the guaranteed minimum, will need to be progressive, ensuring that people already in poverty and the most vulnerable to impoverishment have priority. The core of guaranteed minimum protection should be thought of and

\(^{275}\) It is worth noting, however, that they can benefit immediately from coverage for short-term risks such as work injury and death.
designed as a complement, not as a substitute for income from work. The specific shape of the minimum will also need to consider technical, budgetary, and political challenges.

**Value of the guaranteed minimum.** The current value of the combined benefits for the PKH and Sembako programs going to the poorest 15 percent is considered adequate, as it provides transfers sufficient to bring the median recipient household above the poverty line. The poverty line in annual terms is about IDR 22 million and the annual consumption of the median household in the poorest 10 percent is about IDR 19 million. This means that the current estimated annual value of main cash transfers of about IDR 5 million would bring the median household in the poorest 10 percent well above the poverty line. This level of cash transfers would also bring a share of households poorer than the median household above the poverty line.

**How much it costs to provide a guaranteed minimum would vary according to the design choices.** At the maximum, these additional social assistance policy options will cost about 1 percent of GDP, about 0.4 percent more than the existing level of spending for existing programs discussed above (PKH, Sembako and elderly and disability programs)

### 5.3.2 Consumption smoothing through mandated and individually financed insurance programs

The SJSN system will be exceptionally important for Indonesia as the country ages, and will be the country’s primary tool in managing the social and economic consequences of the projected demographic change. Social insurance is also crucial to help individuals and households weather shocks that affect most of the population, including those related to the cost of medical procedures, unemployment, disability, death and old age. A large share of future employment in Indonesia is likely to be undertaken without standard work contracts and thus without the benefits of traditional contributory social insurance schemes or mandated worker protection. A sound pension system would ensure that people have a steady source of income after retirement, protecting them from becoming impoverished, or from needing a younger family member to drop out of the labor force to care for them. Furthermore, the pension system would need to be financially sustainable, with benefit levels matching what can be financed using the revenue collected through the contributions of the working population. Over time, the intention should be for all workers, including the self-employed and those in the informal sector, to be covered against these risks.

To ensure the adequacy of the civil service pension, the earnings base that is used to calculate the pension needs to be redefined. The affordability of the civil service pension scheme is a more immediate issue due to the wave of retirements coming in the next few years. The competing goals of improving adequacy and ensuring fiscal sustainability can be achieved by enacting parametric reforms to the existing scheme and/or longer-term systemic reforms that would apply to new civil servants, such as increasing the earning period for the benefit calculation, pension indexation to inflation, or an increase in the retirement age. In summary, if the GoI wishes to improve pension benefits while keeping the cost of the civil service pension program unchanged, any viable solution will involve increasing retirement ages and changing to inflation indexing. These two changes create the fiscal room needed for benefit improvements, as benefits begin at a later age and benefit increases following retirement are smaller. Once these two changes are made, there are options available for changing the pension program’s design, and financing to make the system fairer, adequate and equitable across generations of civil servants. These were described in detail in Chapter 3.
5.3.3 Tapering benefits and over time blurring the lines between social assistance and social insurance

To achieve the objectives of the SP system, including smoothing consumption over the lifecycle and eliminating old-age poverty, both contributory and non-contributory programs are needed. Spending on social assistance should be complemented with insurance that does not fully depend on having formal wage employment. The aim of this approach would be to expand coverage while giving priority to the poorest people. As this report has shown, a large share of future employment in Indonesia is likely to be undertaken without standard work contracts and, thus, without the benefits of traditional contributory social insurance schemes or mandated worker protection. If Indonesia continues to rely on a traditional contributory social insurance scheme that links coverage with formal labor market status, it will continue to exclude most workers and their families from coverage against short-term risks, and it will lose the race between pension coverage and population aging. Therefore, unless new incentives to encourage voluntary participation in social insurance are introduced, including to cater for “future works”, it is expected that Indonesia will continue to see a relatively low share of workers participating in contributory social insurance schemes in the future.

The needed expansion of pension coverage will also fail to address the short- and medium-term problem of old-age poverty, which is disproportionately high in Indonesia. This can only be addressed by an expansion of social assistance in a way that reaches the elderly. As described above, there is therefore a need to ensure that current and future social assistance, particularly among the elderly, is expanded to ensure a guaranteed minimum package for all, regardless of their place in the lifecycle or how they make a living. In the short term, this would entail expanded social assistance and a potential subsidy for insurance premiums of the poor. In order to achieve the necessary coverage in a context of high informality, the current de-jure distinction between contributory social insurance and non-contributory social assistance would need to be blurred and, over time, potentially fully merged.

Figures 5.2 and 5.3 above show such possible tapering of subsidized insurance with contributory insurance at decile 7, which is based on Susenas 2018, and also that: (i) the aspiring middle class ends before decile 8; and (ii) the rate of coverage of voluntary insurance ticks up markedly at decile 7. Needs based social assistance extends to percentile 70, so as to include disability and extended social assistance coverage for the elderly.

Support for contingent coverage of contributory pensions, combined with expanded social assistance for the elderly. To reach universal social insurance coverage, Indonesia could rely on a combination of self-financed insurance for those who can afford it, with subsidized coverage for those who cannot. The first component would be financed by contributions, while the second would be covered by the budget. This is very similar to the approach that has been taken in Indonesia and many other countries for health insurance, but has only been modestly applied for other parts of social insurance, such as pensions. As with the guaranteed minimum package, the support for contingent coverage can be tapered gradually as peoples’ incomes or consumption rise. Conceptually, subsidizing contributory pensions is relatively straightforward, as long as the benefit target is clearly stated. In the Indonesian context, where there are both defined benefit and defined contribution schemes, subsidized contributions could be applied to either, without creating parallel funds. A seamless system such as this would allow portability regardless

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276 It is worth noting that for the first 15 years, the JP scheme operates as a defined contribution scheme.
of employment status, and would reduce administrative costs relative to having multiple funds. If Indonesia chose to go this way, the elderly social assistance described above and the contribution subsidy for social insurance would exist in parallel for the first few years. Over time, as more elderly are included in the social insurance system, helped by the contribution subsidy, the need for the elderly social assistance program would diminish and costs would reduce.

**Elderly social assistance of IDR 200,000 per month could be indexed to inflation for the poorest 70 percent above the age of 65.** This would be accompanied by a contribution subsidy for pensions for all workers aged 20 to 64. Formal sector workers in large and medium enterprise are currently required to pay 3 percent of their wages as contributions into BPJS. The actuarially fair contribution rate is 6 percent. The GoI could consider increasing the contribution rate to 6 percent for all formal sector workers, and simultaneously opening accounts for all remaining workers aged 20 to 64. It could then contribute 3 percent of the approximate median wage into the accounts of all workers – existing formal sector and workers with newly opened account. This is referred to as the contribution subsidy. To the extent that most existing formal sector workers earn above the median wage the hike from 3 to 6% in contribution rate would mean that most of them would pay more contributions to the JP scheme than they do currently. The advantage of this approach is two-fold (a) this would improve the sustainability of the JP scheme as now most individuals would be paying the actuarially fair contribution rate of 6% (b) by providing the subsidy to all workers the policy avoids any disincentive to formalization due to the subsidy

**The cost of this subsidy would depend on the scope of eligibility, and this policy choice in turn could have an impact on the labor market and, particularly, the size of the informal sector.** Fully subsidizing all adults would be relatively expensive. The cost of subsidizing the bottom 40 percent is estimated to be around 0.28 percent of GDP. The cost of a universal subsidized contribution equivalent to 3 percent of the minimum wage is about 0.71 percent of GDP. Combined with the additional cost of subsidizing the health insurance premium of the remaining uncovered population, the total additional resources required would be around 1 percent of GDP per year. It would cost 0.85 percent of GDP in 2019 to pay for incremental elderly social assistance (0.15 percent) to cover 70 percent of all the elderly, and contribution subsidies for all informal sector workers aged 20 to 64 (0.71 percent). This gradually declines to a total of 0.88 percent by 2050. Some of the potential savings from elderly social assistance being indexed to inflation is being eaten up by the growing share of the elderly.

### 5.3.4 Introducing an Unemployment Benefit

The current worker protection provisions in Indonesia do not contain any form of insurance against the loss of employment, with the exception of a rigid system of severance pay. The introduction of an unemployment benefit would help manage these risks. In Indonesia, a “mixed” unemployment benefit system could integrate current severance payment obligations and the old-age saving system, while reducing the economic burden on workers and employers. The proposition for the “mixed” unemployment benefit system in Indonesia consists of an individual savings pillar and a newly created solidarity fund. Workers and employers would both contribute to the individual savings pillar. This should help to reduce moral hazard and maintain incentives to actively participate in the (formal) labor market. Such a design allows employers to offset (part of) their severance obligations by contributing to workers’ individual accounts, effectively integrating severance payment obligations in the system. Upon depletion of the funds in the individual account, unemployed workers can receive access to the solidarity component based on certain conditionalities. These would involve the participation in active labor market policies, including programs for job counseling, active job search, and skills training. Overall, income protection in case of unemployment would be much more effective and adequate.
5.3.5  Contingent coverage of catastrophic losses

Many shocks result in losses that would overwhelm minimum income guarantees. This includes the costs from health events (lost working time/earnings/costs of medical treatment and medication), disability, death and natural disasters. The potentially impoverishing impacts of these shocks can reach households along the whole welfare distribution. Indonesia already addresses the health shocks through the subsidized premiums of JKN through the PBI. In doing so, it extends contingent coverage against large, catastrophic losses by integrating people who cannot afford premiums into the risk-pooling system with everybody else. As such, PBI-JKN is currently the intersection between social insurance and social assistance in Indonesia. To achieve universal coverage for all, the GoI could extend the subsidy for the remaining 18 percent currently not covered by the system.

Similarly, core social assistance programs could be better adapted for a more effective response to natural disasters. In the aftermath of disaster shocks, such as the recent ones in Lombok and Central Sulawesi, a wide range of households face significant economic losses. Without a systematic and timely response, disaster-affected households face prolonged periods of destitution and may not fully recover from the loss of their livelihoods. Current disaster response assistance in Indonesia is mostly designed and operated separately from the core social assistance programs, and often not timely due to the process for budget reallocation. The country’s SP system can be better adapted to build resilience among the poor and vulnerable population, to better support disaster victims to meet basic needs, and to rebuild their lives back faster. For example, topping up the benefit level of existing social assistance program beneficiaries and temporarily expanding the programs to cover new beneficiaries that are affected by disasters require the program design to become more flexible. In addition, the UDB/DTKS needs to take an innovative approach to ensure swift data collection on a disaster-affected population’s needs assessments.

5.4  Strengthening the SP system’s impact and effectiveness to employ, build and protect human capital

The reforms outlined above would help move Indonesia’s SP policies and programs to a more comprehensive system addressing the ongoing and upcoming demographic and work-place changes. In addition, there is significant scope for Indonesia to use the SP system to advance other emerging priorities and that employ, build and protect human capital.

The SP system can do more to support Indonesia’s ambitious human capital agenda. Human capital will be essential to Indonesia’s future growth and development. The most effective way to acquire the skills demanded by the changing nature of work is to start early. Early investments in nutrition, health, social protection, and education lay strong and necessary foundations for the future acquisition of cognitive and socio-behavioral skills. They also make future skills acquisition more resilient to uncertainty. Early childhood investments are an important way to improve equality of opportunity, can have significant long-term benefits for them, while also benefiting the broader economy, which will reap the cumulative rewards of a more skilled, healthier, and productive labor force. SP programs can be designed to both build and protect this human capital. Furthermore, SP programs provide income support that permits investment in human capital, and prevents and mitigates negative shocks; facilitates access to services that provide human capital; and helps create access to skills development opportunities and better jobs
that increased returns to human capital investments. In Indonesia, the PKH program, BPNT/Sembako and the JKN health insurance are key programs with human capital components. These could be further strengthened and evolved to meet changing needs, for example, by ensuring that PKH supports early childhood education and the BPNT/Sembako food basket promotes a nutritious diet. Other programs that ensure income protection across the lifecycle, such as social assistance and pensions, are also crucial for supporting human capital development.

**Given evolving technologies and demographics, SP programs can also facilitate transitions into the labor force and promote lifelong learning to take advantage of the opportunities created by these trends.** Jobs are required to put human capital to economically productive use. The human capital accumulated during the early years of development through childhood and adolescence is put to productive use in employment. Economic output is determined by the interaction between physical capital, and the quantity and quality of labor. Thus, the gains from human capital can only be realized if people engage in work. Indonesia still has some way to go in creating public employment services and Active Labor Market Programs, and these will be increasingly important going forward. The changing skills requirements associated with new technological developments also mean that the skills that the current workforce learned in traditional schooling will likely need to be updated throughout their working lives through upskilling and reskilling. SP programs can enhance the capabilities of workers or potential workers by improving their skills. Skills training programs help people update their skills or learn new skills throughout their working lives in response to changes in the skills demanded by employers. Programs that improve the capabilities of workers or potential workers can take many different forms, from traditional vocational training courses to self-employment and entrepreneurship training.

**The SP system can address the barriers to deploying human capital faced by persons with disabilities and women.** SP systems have the capacity to help people with disabilities to engage in work, and programs can be designed to not only provide consumption support, but also employment training. With a 50 percent labor force participation rate of women, some of the human capital that young women have accumulated will not be put to use in employment. A major contributor to lower rates of female labor force participation is traditional childrearing roles combined with the high costs of child care and the absence of jobs or access to, or knowledge about, these jobs. Increasing access to jobs can help facilitate disabled and women’s participation in the labor market. Targeted employment and job-matching services can help increase awareness of, and access to, higher paying jobs. Decreasing child-care costs can also facilitate women’s participation in the labor market. In Indonesia, access to public preschool, which itself has been shown to have benefits for child development, increases the likelihood that mothers of age-eligible children will be employed.

**Aged and long-term care systems remain nascent across the developing EAP, but Indonesia, similar to other rapidly aging countries, will need to find an appropriate and sustainable role for the state in an area that has traditionally been the domain of families, communities and the health system.** Rapid aging necessitates a system for elderly care, and while this will require budget outlays, over time increasing the availability of quality social care reduces expenditures on medical care as people substitute more expensive medical care with less expensive social care, as injury rates drop, and as hospital stays and in-patient and out-patient admissions decline. Furthermore, quality social care can increase household earnings as caregivers of elderly or disabled household members are free to enter the labor market.

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277 World Bank (2019d)
279 See World Bank (2016b).
market instead. Proactive aged long-term care policies will be important and will require careful thought, especially regarding their interaction with informal care systems, and formal health and welfare systems.

**Elderly care responsibilities affect the ability of younger household members, particularly women, to engage fully in the labor force.** Elderly care in Indonesia is supplied largely through informal family support. A consequence of this arrangement is that working-aged family members, frequently women, may drop out of the labor force at younger ages to take on caregiving responsibilities. Furthermore, when families take on the financial costs of care and medical expenses, they can divert spending away from human capital investments in younger members. Social insurance and social assistance can increase elderly incomes, and reduce the time and financial burdens of care placed on working-age family members. For example, age-based social assistance programs can directly address poverty among older people, reducing reliance on informal family care and financial support.\(^{280}\)

**Linkages with labor market programs need to be created to encourage social assistance recipients to decrease their reliance on benefits over time.** Social assistance programs can reinforce livelihood effects by adding elements of financial inclusion, entrepreneurship training, and asset transfers, and raise productivity and resilience among informal workers. As a middle-income country, rather than investing in “productive inclusion” or provide livelihoods opportunities directly under SP, Indonesia may want to take the route of more well-developed and integrated SP systems, where social assistance beneficiaries who are capable of working are obliged to actively search for a job if they are to continue to receive benefits. While it is important not to make such work or job search requirements overly burdensome, they are useful in maximizing the efforts that social assistance recipients put into finding work, which itself will be an important factor to help them move sustainably out of poverty. Ultimately, the more systematic use of job search requirements and the referral of social assistance beneficiaries to active labor market programs (ALMPs) will entail greater coherence across the SP system. In Indonesia, this will require further development and prioritization of the currently nascent ALMPs that exist.

**To achieve good outcomes, it is also necessary to address the worker transitions brought about by these technologies.** Ensuring robust demand growth and economic dynamism is a priority: history shows that economies that are not expanding do not generate job growth. Mid-career job training will be essential, as well enhancing labor market dynamism and enabling worker redeployment. These changes will challenge current educational and workforce training models, as well as business approaches to skill building. Another priority is rethinking and strengthening transition and income support for workers caught in the cross-currents of automation.\(^{281}\)

### 5.5 Costs of Updating the Social Protection System

The reforms outlined in this report, and a move toward a more inclusive and effective SP system, would require additional fiscal resources. Indonesia’s current spending on social assistance, at 0.7 percent of GDP, is low by international standards and does not match the GoI’s stated goals of improving the SP system. Similarly, the social insurance scheme is underfunded and of low coverage, and a universal approach would require significant subsidies to expand the non-contributory portion, at least in the short to medium term. Expanding social assistance should proceed at the same pace as the mobilization of required resources, and consider the distributional effects, as well as diverse bases of political support for taxation and revenue generation.

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\(^{280}\) Evans and Palacios (2015).  
\(^{281}\) Mckinsey (2019)
Establishing the guaranteed minimum. The proposed social assistance reforms to establish the guaranteed minimum would, if implemented in their entirety, cost about 0.9 percent of GDP, about 0.4 of a percentage point above the existing level of spending, just for PKH, BPNT/Sembako and PIP.

Health and social insurance reforms. Deficits in the health insurance scheme have been rising over the past few years and totaled about US$1.9 billion, or 0.1 percent of GDP, at the end of 2018. Addressing the remaining coverage gap and improving access will require additional resources of at least the same magnitude. Nevertheless, 60 million people remain uncovered. Expanding the contribution subsidy to cover this population would bring the total to 150 million. At the current premium level, this would cost about 0.5 percent of GDP. This is in addition to the cost of covering growing deficits in the scheme. Ultimately, overall spending levels will have to rise to achieve reasonable levels of adequacy and continue to reduce out-of-pocket spending.

The financial sustainability of BPJS pensions in terms of the deficit can be sustained by increasing contribution rates over time, but this will not happen automatically. At current rates, deficits will appear at about the same time that the scheme begins to mature. One of the reform options proposed is a contribution subsidy for informal sector workers. This approach effectively prefunds the emerging liability that will arise with population aging, and smooths the long transition that Indonesia will face as the formal pension system matures and begins to pay pensions. The cost of the subsidy would depend on the scope of eligibility and this policy choice, in turn, could have an impact on the labor market and, particularly, the size of the informal sector. The cost of subsidizing the bottom 40 percent of non-salaried adults (aged 20 to 64) is estimated to be around 0.22 percent of GDP, while subsidizing all non-salaried workers would cost about 0.54 percent of GDP. The least distortionary and most expensive option would be to subsidize all workers between ages 20 to 64, regardless of whether they are in the formal or informal sector. The cost of a universal subsidized contribution equivalent to 3 percent of the minimum wage is about 0.7 percent of GDP. Combined with the additional cost of subsidizing the health insurance premium of the uncovered population, the total additional resources required would be around 0.8 percent of GDP per year. The costs of the contribution subsidies could be reduced significantly by differentiating the informal poor from the non-poor.

Civil service pensions. Civil service pension spending will increase due to internal demographics and then stabilize in the absence of major reforms, before rising again. Some of the proposed reforms, especially the introduction of a new defined contribution scheme, would lead to higher GoI spending in the short run. In all the reform options, overall expenditures for the GoI would be higher in the next few decades as the GoI would need to pay 10 percent in contributions, but deficits would disappear in the long run.

It will cost a total of 0.88 percent of GDP in 2019 to pay for elderly social assistance to the poorest 70 percent of those above age 65 (0.17 percent), and contribution payments for all workers aged 20 to 64 (0.71 percent) into the BPJS pension. Some of the savings from social pensions being indexed to inflation are being eaten up by the growing share of the elderly (ages 60 to 64) for whom contribution subsidies will need to be paid. The grey line shows what the cost will be if social pensions of IDR 200,000 per month are indexed to wage growth and paid to all those over the age of 65.

Figure 5.5: Estimated social insurance costs (as % of GDP)
The reforms to the SP system will require greater financial resources and improved financial management. The cost to provide a more inclusive and effective social protection system would vary depending on the policy options applied. For the guaranteed minimum, estimates suggest it would cost about 0.9 percent of GDP, (about 0.4 of a percentage point over the existing level of spending of just PKH, Sembako and PIP) to a total of IDR 145 trillion per year for the reforms discussed. In aggregate, the spending requirements on the SP system will be around 2.3 percent of GDP. This is a significant investment relative to total general government revenues of around 14.9 percent of GDP in 2018. Though reforms within the system might slow the rate of required spending growth, Indonesia will have to increase its SP financing in response to demographics, as more resources are needed to pay for pensions and age-related care services and coverage for the poor and “uncovered middle” expands. Existing fiscal constraints imply that SP coverage expansion will have to be gradual, requiring prioritization and sequencing as additional resources become available. One approach to manage the required costs would be through a gradual increase in social assistance benefits over time, while continuing efforts to help households exit from the social assistance system and into productive livelihoods opportunities. Additional finances will likely also be generated as reforms of the various parts of the system leads to program consolidation, a more efficient delivery network, and spending re-allocation across the system.

Table 5.3: Incremental cost of expanding SA and SI coverage as % of GDP under various options

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Program</th>
<th>Reform Scenario</th>
<th>Total</th>
<th>Incremental</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Assistance</td>
<td>PKH* and Sembako</td>
<td>Expanded PKH, Sembako to 40% coverage with tapered benefit levels.</td>
<td>0.77%</td>
<td>0.24%</td>
</tr>
</tbody>
</table>

Source: World Bank staff calculations.
### Social Insurance

<table>
<thead>
<tr>
<th>Benefit Type</th>
<th>Description</th>
<th>SA Contribution</th>
<th>SI Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elderly assistance</td>
<td>Expanded elderly assistance to 70% coverage for elderly</td>
<td>0.17%</td>
<td>0.15%</td>
</tr>
<tr>
<td>Disability assistance</td>
<td>Expanded disability assistance to 70% coverage for people with disabilities</td>
<td>0.03%</td>
<td>0.03%</td>
</tr>
<tr>
<td>Combined SA</td>
<td></td>
<td>0.97%</td>
<td>0.41%</td>
</tr>
<tr>
<td>Work Accident (JKK) &amp; Death Benefit (JKM)</td>
<td>Offer a contribution subsidy of 0.54% of minimum wage* to all adults</td>
<td>0.12%</td>
<td>0.12%</td>
</tr>
<tr>
<td>Pension</td>
<td>Offer a pension contribution subsidy of 3% of minimum wage* to all adults</td>
<td>0.71%</td>
<td>0.71%</td>
</tr>
<tr>
<td>Combined SI</td>
<td></td>
<td>0.83%</td>
<td>0.83%</td>
</tr>
<tr>
<td>SP</td>
<td></td>
<td>1.8%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Health</td>
<td>Health insurance subsidies</td>
<td>0.49%</td>
<td>0.28%</td>
</tr>
<tr>
<td>SA + SI</td>
<td></td>
<td>2.3%</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

**Notes:** * The minimum wage is the observed minimum wage for all workers from the 2018 labor force survey. The minimum 'observed' wage for 2018 that we deduced from the data is IDR 2 million per month. The minimum wages are assumed to grow at the rate of wage growth in the economy. For social insurance estimates: adults in our calculations include all individuals aged 20 to 64. JKK and JKM calculations assume subsidy equal to 0.54 percent of average monthly wage of IDR 2 million paid to all adults/the bottom 40 percent of adults. Note that under current law, JKK/JKM/JP cover only a subset of all adults. An increase in health coverage would involve covering the remaining 60 million individuals. The pension contribution subsidy is equal to 3 percent of IDR 2 million monthly and this subsidy would give future retirees a monthly pension equivalent to IDR 200,000 monthly, today.

### Concluding Remarks

**The GoI’s vision for 2045 is to be a sovereign, fair, and prosperous country, and to move from middle- to high-income status.** An inclusive and efficient SP system will be essential to achieving these ambitious goals, and it will need to operate in the context of technological development, demographic change, changes in how and where people work, and climate-related events such as increased disasters.

This report has shown that achieving Indonesia’s 2045 vision and having a SP system that protects and serves all will require a rethink of the current contractual arrangements. This is urgent, because otherwise it will be difficult to reach the ambitious poverty reduction and inclusive growth targets that have been set out for 2045. To pursue this through an improved SP system would imply: (i) establishing a minimum floor of SP across the lifecycle and determining the package of programs that would most effectively meet it; and (ii) complementing the minimum guarantee with a coherent set of mandated and individually financed social insurance programs. This will require rationalizing current social assistance programs by expanding coverage to households without children, especially the elderly; providing differential and better-targeted subsidies to cover premiums and contributions for informal sector workers; undertaking parametric reforms to the new pension scheme, including a gradual increase in the retirement age; and reforming the current severance pay system with consideration given to prefunding unemployment savings accounts to be managed together with the existing old-age savings program, and allowing for stricter withdrawal conditions on the latter and greater retirement savings. The expansion of pension coverage will not address the short- and medium-term problem of old-age poverty, which can only be addressed by an expansion of social assistance in a way that reaches the elderly. Finally, the whole SP system should have a strong delivery system and a robust governance structure, as well as an adequate and sustainable financing mechanism and an institutional set-up and coordination that promotes a coherent system across SP programs.

**These changes are not minor and they come with significant costs.** They will also impact the social contract and require a continued move toward a system where the state finances those who cannot insure
themselves against current and future shocks, while in the upper layers of the income distribution employers and citizens contribute to insurance mechanisms, such as pensions and unemployment benefits. As such, poverty prevention is essential to the new risk-sharing strategy, and justifies increased contribution subsidies for the poor and to finance these from broad-based taxes, such as VAT. It can be done with the right reforms, such as ending unhelpful subsidies and overhauling taxation policies. This is the right time to think about how to improve social inclusion and social protection. The politic economy of some of the reforms is complex because of the potential trade-offs between, for example, investments in the current generation of workers versus those in future generations. Public spending has to become more efficient, and additional sources of revenue have to be identified to enhance social inclusion. Making these investments today will give Indonesia a head start in ensuring that it protects and promotes all, as it moves toward achievement of its ambitious 2045 targets.
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Annex 1: Assumptions for PROST Projections

Annex Table 1.1: Macro assumptions – same for BPJS (JP scheme) and CSP scheme

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2020</th>
<th>2030</th>
<th>2040</th>
<th>2050</th>
<th>2060</th>
<th>2080</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP growth</td>
<td>5.0%</td>
<td>5.6%</td>
<td>5.6%</td>
<td>3.9%</td>
<td>3.7%</td>
<td>2.5%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Real wage growth</td>
<td>5.0%</td>
<td>4.3%</td>
<td>3.7%</td>
<td>3.7%</td>
<td>3.7%</td>
<td>2.8%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Inflation Rate</td>
<td>3.8%</td>
<td>3.7%</td>
<td>3.6%</td>
<td>3.6%</td>
<td>3.6%</td>
<td>3.6%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Real investment return</td>
<td></td>
<td>8.8%</td>
<td>5.7%</td>
<td>5.3%</td>
<td>4.9%</td>
<td>4.6%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Retirement age (JP scheme)</td>
<td>56</td>
<td>57</td>
<td>60</td>
<td>64</td>
<td>65</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>Retirement age (CSP) in baseline</td>
<td>58</td>
<td>58</td>
<td>58</td>
<td>58</td>
<td>58</td>
<td>58</td>
<td>58</td>
</tr>
<tr>
<td>Real discount rate</td>
<td>2.5%</td>
<td>2.5%</td>
<td>2.5%</td>
<td>2.5%</td>
<td>2.5%</td>
<td>2.5%</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

Demographic assumptions: We use medium variant of UN population prospects 2017. For the civil servant pension scheme we assume mortality rates are 85 percent of the population as evidence has shown that civil servants tend to live longer. The parameter 85 percent was chosen after discussion with counterparts in the MoF and PT Taspen during PROST training in 2016.

Parameters for JP scheme

Baseline year: 2017
Accrual rate: 1 percent
Maximum RR: 40 percent
Contribution rate: 3 percent
Minimum years required to qualify for pension: 15 years
Earnings measure for benefit calculation: Avg. of 15 years for the first cohort retiring in 2030, goes up to avg. of 30 years by 2045
Valorization in baseline: to prices
Min monthly pension: IDR 319,450; Max pension: IDR 3,833,000
Min and max pension: assumed to be indexed to nominal wages
Pension indexation: to prices
Coverage growth assumption: by 2025 all salaried workers in large and medium scale enterprise (viz 16.7 percent of employment) will be covered
Count of contributors as of 2017 = 10.3 million (data received from BPJS)

Parameters for CSP scheme

Baseline year: 2016
Accrual rate: 2.5 percent
Maximum RR: 75 percent of base pay (assumed gross pay is 2.5 times base pay, on average)
Contribution rate: 4.75 percent of base pay + family allowances
Minimum years required to qualify for pension: 20 years
Earnings measure for benefit calculation: final base pay
Min and max pension: assumed to be indexed to nominal wages
**Pension indexation:** to nominal wages

**Hiring assumption:** Hiring freeze until 2022 and then increase as per working age population

**Count of contributors as of 2016:** 4.2 million (data received from client). Data exclude military and police, and include subnational governments

**Count of old age pensioners as of 2016:** 1.5 million

**Count of disabled pensioners as of 2016:** 0.8 million

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### Annex Table 1.2: Options Modeled for Civil Service Pensions

<table>
<thead>
<tr>
<th>Scenarios</th>
<th>Key assumption</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Option 1</strong></td>
<td>Allowances included in pensionable base (allowances assumed to be 60 percent of total pay on average)</td>
</tr>
</tbody>
</table>
| **Option 1a** | Parametric reforms:  
  • Retirement age increase from 58 in 2016 to 65 by 2043 (same schedule as BPJS)  
  • Lifetime average earning with wage valorization  
  • Inflation indexing of pensions |
| **Option1b** | Option 1a + gradual reduction of accrual rate to 1.7 percent by 2043 |
| **Option 2** | Option 1b for existing CS + 20 percent DC for new CS |
| **Option 3** | Option 1b for existing CS + 20 percent of wages for new entrants split between JP and top-up scheme |
Annex 2: Choice of Revaluation of Wages

The choice of revaluation method has significant equity implications. First, there is a question of fairness between individuals with different profiles of earnings across their careers. Second, there may be differences between individuals retiring at different points in time and thus experiencing different rates of economy-wide earnings growth and price inflation during their working lives.

Annex Table 3.1 shows the impact of three different policies: no valorization, and revaluation in line with price inflation, and economy-wide earnings growth, respectively. Annex Table 3.1 considers different ways of measuring earnings to calculate benefits, looking at periods all the way from final year to 30 years. The baseline scenario, in the top panel (w) of 2 percent. Individual earnings (g) are assumed to grow in line with the economy-wide average. The results for pension entitlements are normalized to 100. If the final salary is used to calculate benefits, valorization is irrelevant and the pension is 100. Revaluing the individual’s earlier years’ earnings in line with economy-wide average earnings growth also produces a pension of 100, irrespective of the number of years considered in the benefit calculation. (This result is driven by the assumption that individual earnings grow in line with the economy-wide average.)

The other two policies produce lower pensions once more than just final salaries are used to calculate benefits. For example, prices valorization and a 10-year earnings measure produces pensions 8.5 percent lower than the final-salary or earnings-valorization figure. (This result is driven by the assumption that real earnings grow by 2 percent per year.)

If there is no valorization—the third policy analyzed—then only nominal earnings are used in the benefit formula. The result is significantly lower benefits than under the two other policies. With a 10-year earnings measure, benefits are nearly 18 percent lower than final salary or earnings valorization would deliver. With a 30-year averaging period, the result is a pension that is nearly 45 percent less.

The baseline case is normalized so that benefits with either a final-salary policy or with earnings valorization are 100. Because real earnings are assumed to grow, prices valorization offers lower benefits once a longer period than the final salary is used to calculate benefits. Assuming a positive rate of price inflation means that benefits are lower without valorization than with.

Annex Table 3.1 lower panels show the results for pension entitlements when varying three assumptions for three variables: wage and price inflation, and individual earnings growth.

The first alternate scenario assumes that individual earnings grow 1 percent a year faster than economy-wide average pay (thus, about 3 percent real earnings growth a year for the individual; 5.5 percent in nominal terms). The individual’s average pay is kept the same as the baseline case: so, earnings are about 16 percent lower at the start of the career and about 16 percent higher at the end. The other two variables—price inflation and economy-wide earnings growth—are kept the same as the baseline scenario. Benefits fall with the number of years’ earnings used to calculate benefits under all three policies. With a 30-year period for measuring earnings and wages valorization, benefits are 87 percent of those on a final-salary basis. Prices and no revaluation of earlier years’ earnings again produce benefits less than valorization to wages.
### Annex Table 2.1: Revaluation of earlier years’ earnings: pension entitlements under four scenarios

<table>
<thead>
<tr>
<th>Years included in earnings measure</th>
<th>1</th>
<th>2</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>25</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline scenario:</strong> w=2 percent, p=2.5 percent, g=0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No valorization</td>
<td>100.0</td>
<td>97.8</td>
<td>91.5</td>
<td>82.2</td>
<td>74.1</td>
<td>55.8</td>
<td>61.1</td>
<td>55.8</td>
</tr>
<tr>
<td>Prices valorization</td>
<td>100.0</td>
<td>99.0</td>
<td>96.1</td>
<td>91.5</td>
<td>87.1</td>
<td>83.1</td>
<td>79.3</td>
<td>75.8</td>
</tr>
<tr>
<td>Earnings valorization</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Faster individual earnings growth:</strong> w=2 percent, p=2.5 percent, g=1 percent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No valorization</td>
<td>100.0</td>
<td>97.3</td>
<td>90.8</td>
<td>81.5</td>
<td>73.5</td>
<td>55.3</td>
<td>60.5</td>
<td>55.3</td>
</tr>
<tr>
<td>Prices valorization</td>
<td>100.0</td>
<td>98.5</td>
<td>94.2</td>
<td>87.6</td>
<td>81.6</td>
<td>76.2</td>
<td>71.2</td>
<td>66.7</td>
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<tr>
<td>Earnings valorization</td>
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<td><strong>Higher price inflation:</strong> w=2 percent, p=5 percent, g=0</td>
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**Assumptions**

w=economy-wide average earnings growth, p=price inflation, g=individual earnings growth, relative to average

Source: World Bank Staff calculations with the Apex model, developed by Axia Economics