

Towards a More Resilient Society: Lessons from Economic Crises

Report of the Social Resilience Project 2015-17

Coordinated by Japan National Committee for Pacific Economic Cooperation (JANCPEC)



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Foreword

A series of regional and global financial crises highlighted the need to enhance the resilience of social infrastructure against sudden shocks, particularly for those categorized as vulnerable groups. More recently, a persistent and widening social divide that casts a shadow on the stability of national and global systems presents a serious challenge, and more social policies need to be developed to mitigate this gap.

In response to these challenges within the Asia-Pacific regional context, the Japan National Committee for Pacific Economic Cooperation (JANCPEC) has been conducting the Social Resilience Research Project (SR Project) as a Pacific Economic Cooperation Council (PECC) International Project since 2010. The SR Project aims to shed light on the importance of social security and to closely examine its role in the domestic economy. In addition, the SR Project is the first ambitious attempt by the APEC/PECC family to discuss social policy dimensions, as APEC and PECC have traditionally focused on trade and investment liberalization issues.

The first and second SR Projects have a four-fold focus: pensions, health insurance, unemployment insurance, and macro-analysis. The first final report, entitled "Towards a More Resilient Society: Lessons from Economic Crises," was published in October 2010, and the second final report was published in March 2012. Since 2012, we have attempted to conduct a case study of each Asia-Pacific economy. As the economic and social circumstances in each economy of this region are significantly different, a bottom-up approach is needed to identify the issues and challenges for the future development and reform of social security systems.

In this report, the SR Project 2015-2017 covers Singapore and Indonesia. The studies focus on specific issues in these economies, such as coverage for informal workers and the evolution of social security systems in an age of slow economic growth.

The views expressed herein are the personal views of the individuals indicated, and do not necessarily reflect the views of PECC and The Japan Institute of International Affairs (JIIA). I hope that these inputs will prove useful in showing the way toward resilient societies and sharing best practices among member economies.

December 2018

Yoshiji Nogami Chair, JANCPEC Vice-Chairman, The Japan Institute of International Affairs

An Assessment of Singapore's Ageing Policies for Achieving Greater Social Resilience

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ABSTRACT

This paper assesses Singapore's ageing policies with the objective of examining how these can be reformed to achieve greater social resilience.

The paper uses a framework developed by the American Association of Retired Persons (AARP) and FP Analytics in their 2017 Report "The Aging Readiness & Competitiveness Report 2017"³ to assess Singapore's ageing policies. The framework is structured around four elements: Community Social Infrastructure, Productive Opportunity, Technological Engagement, and Healthcare and Wellness.

The paper finds that Singapore, an affluent and rapidly ageing economy in the Indo-Pacific region, will need to make major reforms of its ageing policies related to each of these elements. By 2030, 27 percent of Singapore's population will be aged over 65 (as compared to 14 percent in 2017), well above the 'super-aged' society level of 20 percent. Both the pace and level of ageing will challenge Singapore's policymakers.

Reforms in ageing policies to enhance social resilience will need to be undertaken in a challenging context, including significantly lower growth rates than those previously achieved, reflecting a mature economy; uncertainties about global trade rules and other arrangements; changing labour market dynamics due to technological change and related factors; and rising aspirations of the Singapore population concerning available labour market opportunities vis-à-vis cross-border workers who currently comprise approximately two-fifths of the labour force, especially concerning more robust old-age income security and healthcare protection. Increasing affluence and educational attainment have also raised the population's inclination towards greater participation in political, economic, and social decisions which affect them.

¹ I would like to thank Chang Yee Kwan and participants in the Social Resilience Project Meeting organized by the Japan Institute of International Affairs (JIIA) in Tokyo on 1 September, 2017, for their constructive comments. However, I remain responsible for the contents of the paper. This paper has been prepared for the JIIA Social Resilience Project.

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³ http://arc.aarpinternational.org/home

A key finding of the paper is that Singapore will need to substantially improve gender equality implications of its ageing policies if social resilience is to be sustained. Gender inequalities are currently found in the use of commercial insurance methods in structuring catastrophic health insurance (the Medishield Scheme), in the Eldercare scheme for longterm care, and in annuity schemes for the pay-out phase of the mandatory provident fund administered by the Central Provident Fund (CPF). Under these principles, premiums are set by gender and age, with women paying more than men, and premiums increasing with age.

Inadequate community social infrastructure also adversely affects women, who constitute an estimated three-fifths of caregivers for the elderly.

The paper argues that a single-tier social protection system based on the use of mandatory savings is increasingly inadequate and inappropriate for a rapidly ageing, affluent economy. Suggested reform directions involve a shift from commercial-based principles in the design of insurance programs to those grounded in social insurance practices designed to address longevity, healthcare, and survivor and inflation risks, among other factors; and an additional budget-financed tier to provide basic income support to the elderly. Some support for caregivers also merits consideration.

Greater transparency of and accountability for the socio-economic and operational aspects of the various elements comprising ageing policy, particularly concerning the CPF and social protection organizations, are increasingly essential for social resilience.

This paper finds that Singapore has the fiscal, institutional, and organizational capacities to undertake the suggested reforms. The main constraint is the unwillingness of policymakers to move from long-held positions which continue to simplistically assume that the suggested reform directions are not required in Singapore. However, the dynamics of changes to Singapore's demographic, social, and economic structures are likely to render a shift in policy position, and the reforms suggested in this paper, essential if social resilience is to be sustained and enhanced.

Key Words: Singapore social protection, social resilience, Central Provident Fund (CPF), social vs. commercial insurance, ageing policies, gender equality.

1. Introduction

This paper provides an assessment of Singapore's ageing policies for achieving greater social resilience. Singapore's policymakers have expressed concern about a growing social divide, which is complicating governance challenges (Ng, J. S., 2018).

There is also a growing recognition that in many economies, including Singapore, that more robust ageing policies must be put in place to support necessary domestic reforms and openness to global markets, technology, and skill-sets. As a successful internationalized global economy, Singapore has particular interest in this aspect of ageing policies.

The paper is organized as follows: Section 2 discusses the changing context in which Singapore's ageing policies to enhance social resilience will need to be designed and implemented. Section 3 provides a brief description of a framework to assess ageing policies developed by the American Association of Retired Persons (AARP) and FP Analytics in their 2017 Report "The Aging Readiness & Competitiveness Report 2017"⁴.

In Section 4, this framework is used as an underlying context, without analysing each of the four elements in detail, to provide an assessment of Singapore's ageing policies, including suggested reform directions and initiatives which could enhance social resilience. The final section provides concluding remarks.

2. The Context for Ageing Policies

Ageing policies in Singapore will need to be developed in a challenging context. Singapore is a high-income, rapidly ageing city-state in the Indo-Pacific region. Its per capita income in 2017 was SGD 79,697, or about USD 57,720⁵. Between 2001 and 2016, Singapore's average GDP growth rate was 5.1 percent, while average real GDP growth during the 2015-17 period was 2.5 percent. Officials expect growth rates to be in the 2 to 3 percent range in the medium term, consistent with Singapore's status as a high-income, rapidly ageing mature economy.

The rapid ageing projected for Singapore may be illustrated by the following figures. In 2017, the proportion of Singapore's elderly population (those aged 65 and older) will match that of those aged 15 years or younger, at 14 percent of the total population. By 2030, those aged 65 and older are projected to be around 27 percent of the population, more than twice the proportion of those aged 15 and younger. This will put Singapore well above the 20 percent level that classifies a society as 'super-aged.' Singapore's total fertility rate (TFR), was 1.2 in 2017, far below the replacement rate of 2.15 children per woman of reproductive

⁴ http://aarpinternational.org/arc

⁵ Unless otherwise noted, the data in this paragraph are adapted from official data obtained from the Central Provident Fund Board, Singapore.

https://www.cpf.gov.sg/members/schemes/schemes/healthcare/eldershield

age. In absolute numbers, Singapore's population aged over 65 will increase from around 0.5 million in 2017 to 0.9 million in 2030, so nearly double in just 13 years, or an increase of 6.2 percent per year. Thus ageing policies will need to address both the level and pace of ageing.

Singapore is a trade-dependent economy, which has established a globally competitive position as a transhipment hub. In 2016, its merchandise trade alone was worth SGD 967 billion, 2.2 times its GDP. There are uncertainties about global trade rules and other arrangements, exemplified by renegotiation of the provisions of well-established trading groups such as the North American Free Trade Agreement (NAFTA) involving the United States, Canada, and Mexico; and Brexit negotiations between Britain and the European Union. There is less enthusiasm for the kind of multilateralism that has been evident globally for the past three decades. China's expressed desire to establish global rules to suit its interests has also added to global uncertainty. The notion of a global trade regime with the World Trade Organization (WTO) playing a central role is increasingly being challenged.

Singapore will also need to adjust to labour market dynamics and technological changes. Singapore's total labour force declined for the first time from 3.673 million in 2016 to 3.657 million in 2017. This trend is expected to accelerate in the coming years (Jamrisko, 2017).

Thus Singapore, which has relied relatively more heavily on increasing resource inputs for growth, will need to pursue policies to enhance total factor productivity (Lim, 2018). This will require substantive changes in current methods of economic, political, and social management, as the productivity puzzle is complex, with many subtle interlinkages.

The Singapore population harbours rising aspirations concerning available labour market opportunities, particularly in comparison to foreign workers, who comprised nearly two-fifths of the labour force in 2017. This rather high ratio is in spite of a liberal approach to granting permanent resident and citizenship status in the past. As a result, the composition of Singapore's population has undergone a subtle change, but with significant implications for governance and sustaining social resilience.

Singapore's policymakers will also need to address rising income and wealth inequalities, and constrained opportunities for upward mobility. A column written by two well-established local economists highlighting constrained opportunities for domestic academic talent (Fong and Lim, 2017) illustrates the perceived lack of opportunities in the tertiary education sector for Singaporeans.

Singapore's unadjusted Gini coefficient for labour income only is around 0.47 (this coefficient ranges from 0 to 1, with a higher value implying greater inequality), and 0.46 after transfers and taxes.⁶

Singapore's official Gini coefficient estimates include only wage income and exclude capital income, which is globally much more unequally distributed than labour income. If capital income were included, the coefficient would be much higher. In Singapore, labour income is around 45 percent and capital income around 55 percent of national income, underscoring the importance of including capital income in measuring the Gini coefficient (Asher and Kwan, 2014). The assumptions used in estimating incidence of taxes and other revenue sources, government expenditures, and transfers to estimate the Gini coefficient also needs to be made explicit, so that analysis can be replicated and fine-tuned.

With Singapore's population becoming accustomed to affluence, the government's implicit social compact of meeting the material needs of the population in return for acceptance of the ruling party's dominant social, political, and economic control needs to be extended to the growing number of elderly. Their expectations revolve around better old-age income and health care security, and better support for caregivers, some of whom are in younger generations. There is also growing aspiration for greater participation in decisions affecting the population.

The above factors suggest a challenging context for designing and implementing ageing policies in Singapore.

3. A Framework for Assessing Ageing Policies

This section briefly describes the framework for ageing policies developed by the AARP and FP Analytics in their 2017 Report "The Aging Readiness & Competitiveness Report 2017"⁷. Each of its four elements is briefly summarised below.

Community Social Infrastructure: This element involves the economy and local communities ensuring that the elderly remain independent, contributing members of the community.

The AARP-FPA report subdivides this element into preventing social isolation, promoting social engagement, and accessibility for the elderly to public amenities and services⁸.

Productive Opportunity: This element is defined to include flexibility in retirement and pension arrangements, targeted support for those seeking to re-enter the labour force,

⁶ Key Household Income Trends, 2016. Available at: https://www.singstat.gov.sg/docs/default-source/defaultdocument-library/publications/publications_and_papers/household_income_and_expenditure/pp-s23.pdf

⁷ http://aarpinternational.org/arc

⁸ http://aarpinternational.org/arc

including as entrepreneurs, and combating negative perceptions about ageing. With rapid ageing, growth in labour supply falls significantly and may turn negative in some economies. Thus, providing productive opportunities to the elderly may represent an avenue to support growth.

Technological Engagement: This element examines the extent to which older adults adopt technology, and ways of promoting digital literacy and accessibility. It also addresses technology-driven products and services for the elderly market and data-mining and analytics to help develop healthcare, wellness, and other products that could assist the aged.

Healthcare and Wellness: This component involves enabling the elderly to extend their healthy lifespans, improving accessibility, affordability, and quality of healthcare for the elderly and near-elderly, supporting formal and informal caregivers, and utilizing new technologies (such as robotics and e-health services that encompass a range of services or systems combining all aspects of healthcare, including domestic and international research and information technology). As longevity increases, addressing the healthcare needs of the over-50s has become an important public policy issue. Addressing this challenge requires not only devising and funding financing instruments such as long-term care insurance, but also creating facilities for institutional care, both day-care and longer-term care.

4. An Assessment of Singapore's Ageing Policies

Singapore's social protection system has traditionally been structured around arrangements for financing housing and old-age needs. The importance of broader integrated ageing policies along the lines discussed in Section 3 has only recently been recognized.

Key Characteristics of Singapore's Current Social Protection System and Suggestions for Reform: Several recent studies have examined Singapore's social protection system in detail or provided a brief analysis of the system (Asher and Kwan, 2018; Asher and Bali, 2014; Ng, K. H., 2015; Lim, 2018; West, 2018). Based on these studies, the key characteristics of Singapore's social protection system may be summarized as follows.

Firstly, people rely overwhelmingly on the mandatory savings scheme administered by the CPF and supervised by the Ministry of Manpower to finance not just old-age needs for regular income and healthcare, but also housing. Established in 1955, the CPF has evolved into a socio-economic organization which affects the welfare of Singaporean households throughout life and facilitates government control over household income and expenditure allocation choices.

The complexity of the CPF, entailing many sub-schemes whose details are regularly revised, has made it difficult even for policymakers to assess the net impact of the scheme as a whole. For others, the task of assessment is made even more difficult by the tendency of policymakers to regard even basic economic data (such as cash balances of members and the ultimate investment allocation of CPF balances, which accounted for four-fifths of Singapore's 2017 GDP of SGD 447 billion) as proprietary rather than a public good to be shared.

In any savings scheme the rate of return on accumulated balances, which harnesses the power of compound interest, affects final accumulated balances significantly compared to contributions. CPF balances attract a managed rate of interest, as the ultimate investment choices made by Singapore's sovereign wealth fund, the Government of Singapore Investment Corporation (GIC), are by law undisclosed. This is inconsistent with global pension management practices.

The low rate of return on mandatory saving is reflected in the following figures for 2009-2016, the most recent period available. During this period the average annual real rate of interest on all CPF balances was 1.68 percent. At this rate it will take over 40 years for member balances to double. This suggests that the power of compound interest is not being harnessed effectively to provide old-age income security for CPF members. Together with high pre-retirement withdrawals for housing and other permitted purposes, this accentuates the inadequacy of resources for old age (Asher and Bali, 2014; Ng, K. H., 2015).

There is some recognition that the low return on CPF balances needs to be addressed. However, policymakers have taken a selective, ad-hoc approach to providing higher administrative returns on small portions of the balances. The above real-rate-of-return estimate takes into account these measures. As the estimate shows, returns are clearly inadequate.

A bolder approach may be needed to improve real rates of return. This would progressively transfer CPF funds from the GIC to the CPF Board, which would manage them (or outsource their management). Such an approach would prioritise fiduciary responsibility to CPF members, and investment policies and performance would be transparent to stakeholders. Transitioning to such an approach would not be easy, and detailed analysis would be required to examine the modalities, along with a gradual transition to the new investment management arrangements. This would also mean discontinuing current provisions enabling members to invest part of their CPF balances on their own, which have been found to be unsatisfactory (Asher and Bali, 2014).

Secondly, as mandatory savings come from wages, the current method assumes a robust macroeconomic and labour market environment accompanied by a relatively young population, characteristics which Singapore no longer exhibits. This method misallocates macroeconomic and old-age risks, as these are more efficiently managed through societal risk-sharing than by households.

Thirdly, Singapore's social protection system exhibits pronounced gender inequalities that disadvantage women. This is particularly relevant given that women in Singapore in 2016 had a life expectancy at age 65 of 22.4 years, as compared to 19.0 years for men. Women therefore need larger resources to cope with old age, but have lower labour force participation rates, and as a group earn less than men, leading to lower CPF balances.

These gender inequalities are accentuated by a pronounced aversion to social insurance principles in the catastrophic health insurance scheme known as Medishield, the long-term healthcare scheme called Eldershield, and an annuity option available through CPF Life which facilitates regular drawdown of accumulated member balances through purchase of an annuity⁹.

Under the commercial insurance principles used in the above schemes, premiums for a given level of benefit increase with age, and women pay higher premiums than men as they live longer. Thus, such principles systematically disadvantage women. With the TFR well below the replacement rate of 2.15 over a prolonged period, gender inequalities under current arrangements will become markedly more pronounced, with significant economic, social, and political impacts.

Another area of gender inequality concerns the treatment of caregivers for the elderly. According to Nabilah (2018), around 0.3 million women outside the labour force said their main reason for not working was family responsibilities, which include caregiving. As around three-fifths of caregivers to the elderly are women, their economic security is being adversely affected. People without siblings who are married with families will find it very challenging to support their elderly parents.

Nabilah (2018) has suggested the following steps to address this issue: initially provide family caregivers with an allowance to recognize the value of their services, then provide automatic basic contributions to individual CPF accounts that have low balances.

Fourthly, Singapore has relied on ad-hoc transfers and case-by-case methodology to structure its very limited social assistance schemes for low-income households. A case-by-case approach, with many fine-print provisions which often severely limit access to benefits by the elderly and poor, raises transaction costs for society. As the elderly population rapidly rises, this approach is likely to become increasingly inefficient and inequitable.

The ad-hoc approach of providing selective transfers to groups deemed relevant at a particular point in time has the advantage of enabling greater control over government expenditure and enhanced socio-political control and management.

⁹ https://www.cpf.gov.sg/members/schemes

However, as Ng, K.H. (2018) has noted, this approach has several disadvantages for constructing a more predictable and adequate social protection system, and for ensuring requisite accountability for how these ad-hoc expenditure measures are implemented. He suggested replacing the ad-hoc approach with more permanent social protection programs which are predictable, adequate, and transparent for beneficiaries, and which are subject to established expenditure management and control processes.

Singapore thus needs to shift away from ad-hoc and targeted measures to a more systematic approach to social assistance. An option worth considering is the introduction of a social pension which is budget-financed. Singapore's IMF- compatible budget surpluses have averaged 6 percent of GDP per year over the past decade. Estimates by Asher and Bali (2014) indicate that hypothetical social pension costs in Singapore for 2020, assuming a benefit level of 20 percent of median annual wage income, would be about 1.2 percent of GDP. For a benefit level equivalent to 15 percent of per capita income, the costs would be 1.4 percent of GDP.

Thus there are no fiscal constraints to introducing a budget-financed social pension in Singapore. In the 2018 budget, Singapore's policymakers indicated that social sector expenditure will need to increase in the future. The proposal is to increase the rate of goods and services tax (GST) to help finance the increased expenditure.

In a well-argued and empirically supported column, Bhaskaran (2018) concludes that "...the better approach to funding rising social spending is to use more of the income from investments and to not raise taxes, be it the GST or some other tax."

His admittedly rough estimates suggest that various taxes and levies paid by the household sector are about 11 percent of GDP, but the equivalent share of the corporate sector is about 6 percent. In Singapore, the share of capital in national income (55 percent) exceeds that of labour (45 percent) by a significant margin (Asher and Bali, 2014). Nabilah (2018) argued that the proposal to raise GST to finance social and other expenditure should be reconsidered, as it will hit low-income families, especially women, the hardest.

Thus, choosing to finance higher social spending through GST would exacerbate already stark income and wealth inequalities. This in turn would further complicate the task of sustaining social resilience.

Recent Ageing Policy Initiatives: The government recognizes the need to take a more comprehensive approach to addressing ageing issues along lines similar to the framework for ageing policies discussed in Section 3.

In 2016, the Ministry of Health published an "Action Plan for Successful Ageing"¹⁰. The plan focuses on employability, lifelong learning, senior volunteerism, health and wellness, social engagement and inclusion, aged-care services to help elderly people at home, housing, transport, public spaces, and research on ageing to understand the needs of the elderly and encourage innovation.

Specific initiatives of the plan include raising the re-employment age, on a voluntary basis, from 65 to 67; setting up a National Silver Academy for elderly people to pursue learning; co-locating eldercare and childcare facilities in housing estates; and expanding community hospital bed numbers and nursing home capacity.

The 2016 report indicates that the plan would be implemented over 10-15 years, with an official cost estimate of SGD 3 billion. Key requirements for the plan to achieve its goals are to translate it into actual budgetary allocations and monitor outcomes in a manner transparent to stakeholders.

The 2018 Singapore Budget proposed consolidating all age-related services under the Ministry of Health in the Agency for Integrated Care (AIC). This has the potential to provide better policy coherence and organizational coordination for integrated ageing policies.

The budget also provides financial incentives for people to stay with or near older parents or siblings with a view to facilitating care of the aged in their homes. This is more feasible in a city-state.

The recent initiatives, while welcome, do not reduce the need to undertake reforms of the traditional social protection system suggested in this paper, particularly to address inherent gender inequalities and the absence of a budget-financed social pension.

5. Concluding Remarks

The analysis in this paper suggests that while policymakers have taken some steps to better integrate ageing policies, more substantive reforms would be needed to substantially improve gender equality. This would involve a shift from commercial insurance to social insurance principles for health insurance and annuity schemes. It would also involve introducing a budget-financed social pension for the elderly.

Additionally, the reforms would entail expanded support for young and old caregivers, three-fifths of whom are women. Less regressive financing methods, rather than contemplated increases in GST, would also assist in improving gender equality.

Singapore is in the midst of organizing the succession of the fourth generation of leadership to undertake governance responsibilities since independence. Some analysts such

 $^{^{10}\} https://www.moh.gov.sg/content/dam/moh_web/SuccessfulAgeing/action-plan.pdf$

as George (2017)¹¹ have argued that while Singapore has taken commendable steps toward leadership renewal, the need for a change in the governance model has been inadequately recognized.

An important aspect of the required change in governance model is to address the tendency of policymakers to regard even basic socio-economic data relating to social protection as a strategic resource, a stance which is used to limit dialogue and channel research in certain directions. To design and implement complex ageing policies for Singapore, more robust multi-directional research efforts are essential.

There are two areas concerning demographic data collection merit consideration by policymakers. First, research mapping biological ageing and chronological ageing could facilitate more nuanced ageing policies. Chronological age refers to the actual time a person has been alive, whereas biological age refers to how old that person seems based on medical tests¹². In fact, different parts of the same person's body may exhibit different biological ages. If biological age and the ageing process are related, some understanding of this relationship could facilitate better ageing policies.

The second area concerns demographic data relating to "prospective age." Sanderson and Scherbov (2007) argued that as individuals live longer, both the traditional chronological concept of ageing, which they term "retrospective age," and a forward-looking concept termed "prospective age" should be used for policy formulation and analysis. While the traditional concept measures how many years a person has lived, "prospective age" measures the number of remaining years he or she is expected to live. With increasing longevity, a fiftyyear-old, who currently has a much longer life expectancy than a person of the same age had in 1990, may well make different decisions about saving, investment, labour force participation, and other relevant economic and personal matters. Differing behavioural decisions in turn have different implications for public policies and social attitudes towards ageing.

Singapore exhibits fiscal, institutional, and organizational capacities to undertake the requisite substantive reforms in its ageing policies. The main constraint is policymakers' unwillingness to reconsider long-held positions, which simply assume that reforms suggested in this paper are not needed. However, analysis strongly indicates that without moving in the directions suggested above, Singapore's ageing policies will have only limited success in meeting the requirements of citizens of an affluent, soon-to-be "super-aged" society.

¹¹ http://www.newmandala.org/lky-legacy/

¹² http://www.azinet.com/aging/aging_theory_introduction.pdf

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Transformation of Social Security System in Indonesia: Aiming for Coverage for All

Nurina Merdikawati¹

1. Introduction

For a long time, the social security platform in Indonesia only catered to formal sector workers and those classified as poor and near-poor. The 'missing-middle' problem was prevalent, where enrollment rates were high among low-income and high-income groups. The former's coverage was financed by taxation, while premiums for the latter were paid by their employers and their own contributions. With the economy characterized by high informality, this left a significant number of people without access to social security schemes. The majority of them had to resort to informal mutual support arrangements, ranging from tapping into their family network resources to local community support, when dealing with adverse events affecting their livelihoods. As such, they were at risk of falling into poverty when faced with unfortunate circumstances in their lives.

Amid a booming economy prior to the 1997 Asian financial crisis, Indonesia tended to sideline the social security protection agenda. While schemes for civil servants, the armed forces, and police officers had already been formulated in the 1960s, contributory social security protection programs for formal private sector employees were only started much later; in 1977 under *Perum. Asuransi Sosial Tenaga Kerja* (Social Insurance for Employment, Astek) and in 1992 under *PT. Jaminan Sosial Tenaga Kerja* (Social Security for Employment Pte Ltd, Jamsostek). Even then, coverage was limited, as small enterprises with 10 or fewer employees were not legally required to enroll their employees in the social insurance programs. This was a significant shortcoming, as small enterprises dominated Indonesia's economy, thus such arrangements left most workers without access to social security schemes.

Indonesia learnt the hard way about the importance of social security when the crisis struck in 1997. Many people lost their jobs in the formal sector and had to find employment in the informal sector to survive, making them susceptible to falling into poverty. In fact, the poverty rate increased from a low point of around 15% at the onset of the crisis in mid-1997 to a high of around 33% towards the end of 1998. This was equivalent to an additional 36

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million people falling into absolute poverty during the crisis (Suryahadi, Sumarto, and Pritchett 2003).

Post-crisis, the economy began to lay the groundwork for expanding social security coverage for all Indonesians. A series of laws have been promulgated, and roadmaps for a newly-integrated social insurance system have been created. In 2014, a unifying scheme began under *Badan Penyelenggara Jaminan Sosial* (Social Security Administrative Bodies, BPJS). BPJS *Kesehatan* (BPJS Health) was tasked with administering universal health coverage, not only for civil servants, the armed forces, police officers, and formal private-sector employees, but also the poor and near-poor financed by general taxation, and with extending coverage to informal workers. In 2015, BPJS *Ketenagakerjaan* (BPJS Employment) became the sole body administering four social security schemes comprising workplace accident benefits, death benefits, pensions, and old-age savings. Such reforms had the ambitious target of achieving universal health coverage by 2019, while the employment social security schemes are expected to cover all formal-sector employees by 2019, with a modest target of increasing enrollment by informal workers.

This report aims to shed light on Indonesia's journey in expanding social protection. While the economy has formed a framework to extend coverage to informal workers, implementation proves to be challenging, especially with the high degree of informality, where informal workers constitute around 60-70% of Indonesia's labor force. Given this, the report seeks to address the following research questions:

- 1. How is Indonesia's social security system evolving with regard to providing coverage to the informal sector?
- 2. What are the challenges that Indonesia is facing and the shortcomings of the current system?
- 3. What can be done to improve the current system in order to strengthen social protection for informal workers?

To address these questions, the report is structured as follows. Section 2 explains how the social security system has evolved in Indonesia, providing a continuum for a social security framework being implemented in the past and present. Section 3 discusses the landscape of the informal sector in Indonesia and provides greater details of initiatives taken to extend social security coverage to informal workers. Section 4 concludes and outlines some policy implications.

2. Social Security System in Indonesia: Past and Present

Social security schemes in Indonesia were already available long before independence in 1945, mostly provided to civil servants during Dutch colonialization. As early as the 1970s, sub-national health insurance schemes began to flourish, paving the way for many small community-based insurance schemes supported by the *Dana Sehat* (health funds) program (Dunlop 2015). In general, there were two types of public intervention for social protection in Indonesia. The first type consisted of targeted efforts to provide social support to the poor and near-poor, such as an ad-hoc social safety net introduced after the crisis and cash transfer schemes. Central and local governments also provided healthcare coverage for the poor and near-poor through the *Jaminan Kesehatan Masyarakat* (People's health security, Jamkesmas) and *Jaminan Kesehatan Daerah* (Sub-national health security, Jamkesda) programs, respectively.

The second intervention was through contributory social insurance and mandatory savings for formal-sector employees and civil servants. Under Law No. 3/1992 on Social Security Law, PT Jamsostek was tasked with managing worker injuries, death, retirement, and health benefits for formal private-sector employees. Before Jamsostek was created, starting in 1977 such programs were administered by Astek, a government-owned insurance company operated under the Department of Labor and Workforce. The schemes largely omitted informal workers and formal-sector workers in small businesses with 10 or fewer employees. Additionally, critics pointed out a lack of transparency, relatively low returns on investment, and low levels of benefits received by workers covered under Jamsostek schemes. For instance, at the stipulated Jamsostek contribution rate, retirement benefits received by a Jamsostek recipient at retirement were exceptionally small, being valued at around 7% of the person's final basic salary after working for 35 years (Leechor 1996). Moreover, Jamsostek had limited capacity to enforce compliance, as it relied solely on labor inspectors being deployed by local government, with an estimated compliance rate of only 40%. In 2001, the estimated active membership of Jamsostek was around 9.3 million, and this declined to 7 million in 2004, mostly due to a shift towards the informal economy or non-complying small enterprises (ILO 2006). By 2013, there were 12 million Jamsostek members in worker injury, death, and retirement benefit schemes (Coordinating Ministry of Social Welfare et al. 2014).

For civil servants, old-age benefits and pension funds were administered by *PT*. *Tabungan dan Asuransi Pensiun* (Old-age savings insurance and pension Pte Ltd, Taspen), managed by the State Treasury. This was set up early on, backed by Law No. 11/1969. Membership was compulsory, and in 1995 the schemes covered about 4 million active members and 1.5 million retirees. In 1997, there were 1.65 million retirees and 743,000 people receiving survivors' pensions (ILO 2006). Meanwhile, *PT. Asuransi Sosial Angkatan Bersenjata Republik Indonesia* (Social insurance for Indonesia's armed forces Pte Ltd, Asabri), managed by the Ministry of Defense, administered old-age benefits and pension funds for police and military officials. The arrangement started as early as the 1960s,

supported by Law No. 6/1966. By 2012, there were 4.55 million contributing members and 2.36 million recipients of Taspen pension funds, and 839,000 contributing members and 318,000 recipients of Asabri pension funds (Coordinating Ministry of Social Welfare et al. 2014). The provision of social security for police, armed forces and civil servants was then standardized by Presidential Decree (*Kepres*) No. 8/1977.

PT. Asuransi Kesehatan (Health insurance Pte Ltd, Askes) provided compulsory health insurance coverage for active and retired workers in the civil services as well as army and police officials, including covered family members as well as veterans and pioneers/fighters of national independence. For police and the armed forces, provision of health care was also supported by their internal police and military hospitals. In 1991, voluntary membership was also offered to employees of state and private companies (Askes commercial).

The law on the National Social Security System (SJSN) was drafted by a task force appointed through the Vice President's Office, created by Kepres No. 22/2002. Representatives from various sectoral ministries involved in social security provision in Indonesia, including the Ministries of Manpower, Health, Social Affairs, Finance, and Development Planning (Bappenas), as well as Coordinating Ministries of Social Welfare and Economic Affairs, were enrolled as members of the task force, while other stakeholders such as employers' associations and labor unions were not included in the drafting team (Arifianto 2006). A key tenet of the draft law was that social security schemes should cover all people in Indonesia, irrespective of their background; rich or poor, formal- or informal-sector workers. Five national social security programs would be created -a health program and four employment programs (workplace accident, old-age savings, pension, and death benefits). In September 2004, parliament approved the drafted SJSN law, giving birth to Law No. 40/2004 signed by then President Megawati Soekarnoputri in October 2004. The newly created SJSN would be overseen by a National Social Security Council (DJSN) consisting of 15 members, who would be directly appointed and responsible to the president. The council members would consist of representatives from the government, business associations, and labor unions, whose responsibilities include formulating general policies for the system.

In November 2011, Law No. 24/2011 on BPJS was passed. The law shed light on the administration of SJSN programs, and mandated the establishment of BPJS Health to administer the SJSN health program and BPJS Employment to administer the SJSN employment programs. Their responsibilities include management of trust funds, enrollment, collection of contributions, provision of benefits to members, and issuance of social security identification numbers. Unlike their predecessors, which operated for profit, BPJS operates on a non-profit basis, returning gains generated by capital investments back into the systems to enhance the welfare of members. A road map for implementation of the SJSN health

program was issued in December 2012, and by May 2014 a roadmap for SJSN employment programs was also issued. BPJS Health started offering the SJSN health program on January 1st, 2014, while the kick-off date for BPJS Employment's operations was July 1st, 2015.

Figures 1 and 2 delineate the targets to be accomplished based on the roadmaps for BPJS Health and BPJS Employment. In early 2014 BPJS Health would start administering a unified health insurance program for three categories of people: (i) poor and near-poor whose fixed contributions would be paid by the government; (ii) those employed in both the public and private formal sectors whose salary-based contributions would be paid by employers and employees; and (iii) those who are non-poor and work in the informal sector, who would pay their own contributions upon enrollment. No later than the end of 2016, all members of Jamkesda schemes individually operated by various sub-national governments would be transferred to BPJS Health. From 2014 to 2019, employers would register their workers and families as members of the BPJS Health program, and informal workers would also register. This also includes foreign residents after six months of work. By 2019, all workers would be covered under BPJS Health, and universal health coverage would be achieved.

Figure 1. Roadmap for universal health coverage



Source: Adapted from TNP2K (2015).

For BPJS Employment, the initial target was to ensure SJSN employment program coverage for all formal-sector employees, to be achieved by 2019. Memberships in the old-age savings and pension funds initially operated by Taspen and Asabri should be transferred to BPJS Employment by 2029 at the latest.

Figure 2. Roadmap for universal SJSN employment programs



Source: Adapted from Coordinating Ministry of Social Welfare et al. (2014).

The following sections, 2.1 and 2.2, explain in greater detail wide-ranging social security programs in Indonesia, before and after the implementation of SJSN. More information is also provided on contribution rates and particular intricacies.

2.1 Overview of past social security system

2.1.1. Social health insurance schemes

Before BPJS Health was created and tasked with the implementation of the National Health Insurance Program (JKN) in 2014, social health insurance schemes in Indonesia were fragmented, mostly according to types of occupation. Table 1 tabulates the different social health insurance schemes pre-JKN.

Poor/Near-poor Jamkesmas		Civil servants/retired civil servants, police/military officials, veterans Askes		Formal en Ja	Informal sector workers/self- employed		
Funding	Fixed premiums of RP 6,500 per member per month contributed by the central government from general taxation	Funding	Employees paid 2% of basic pay, government paid 1% of basic pay	Funding	Employers paid 3-6% of salary depending on employee's marital status; ceiling of Rp 1mn/month	No specific	
Benefits	Comprehen-sive; drugs within formulary covered, no cost- sharing	Benefits	Comprehen- sive; drugs within formulary covered; cost- sharing available when services fall outside basic benefits	Benefits	Comprehen- sive; drugs within formulary covered; cost- sharing available when services fall outside basic benefits	scheme	
Jamkesda							
Funding Benefits*	Provincial/district-level government units from provincial/district-level budgets Typically provided supplementary and complementary coverage						
* Benefits vary by province/district							

Table 1. Social health insurance schemes before JKN

Source: Adapted from The Economist Intelligence Unit (2015).

The poor and near-poor were covered under Jamkesmas, with the government paying the monthly premiums financed by general taxation. Under this scheme and also its predecessor program, Askes for the poor (Askeskin), the coverage increased from 8% in 2001 to nearly one-third by 2011 (Bappenas 2014). Nevertheless, a substantial proportion of the poor and near-poor remained uninsured. In 2011, *Jaminan Persalinan* (Maternity insurance scheme, Jampersal) was introduced as a nationwide program to accelerate reduction of maternal and newborn deaths. The scheme provided free and comprehensive maternal and neonatal care, regardless of income. Providers of pro-poor public insurance programs were generally public, and enlisted private facilities at the primary and secondary levels.

For non-poor, the administrators of social health insurance schemes were state-owned profit-making limited companies. These were Askes for active and retired civil servants, police/military officials, and veterans, and Jamsostek for formal private sector employees.

Benefits for the two schemes were mostly similar, while funding came from mixed contributions shared by employees and the government for Askes, and employers' contributions in the case of Jamsostek. The program offered benefits for a variety of health expenses such as medical, hospitalization, maternity care, and the use of medical equipment. Private companies could opt out of Jamsostek's health scheme in favor of more comprehensive private insurance schemes. There were no specific social health insurance schemes targeted at informal-sector workers or the self-employed.

Jamkesda was mostly run by local governments, and was in place in at least 460 districts in early 2015, an increase from 367 districts in 2010. In 2013, most of the financing for this scheme, around 79%, was contributed by provincial health funding, while the remaining 21% was taken from district health funding (Dunlop 2015). Jamkesda implementation varied considerably across provinces and districts. Such variations could be found in terms of management approach, payment methods, size of contributions, benefits, and participants. In some instances, Jamkesda insured participants who were not covered by Jamkesmas, while in others the entire population was covered in the relevant administrative area. As of May 2014, only 5.9 million of the 31.87 million people participating in the Jamkesda scheme had been listed as participants targeted by the Ministry of Health's Center for Health Insurance Payments for enrollment in the subsequent BPJS Health scheme.

Table 2 shows an estimate of health insurance participation in 2012. Based on a population of 248 million, health insurance coverage was only available to 59.1% of Indonesia's population in 2012, leaving 101.5 million people uninsured. A significant portion of the coverage was paid by the state budget (52% through Jamkesmas) and local government budgets (22% through Jamskesda).

Type of health cover	Total Participants	Percentage (%)
Askes	12,274,520	8.38
Armed forces/police	2,200,000	1.50
Jamkesmas	76,400,000	52.13
Jamsostek	5,600,000	3.82
Jamkesda	31,866,390	21.74
Self-insured	15,351,532	10.48
Askes commercial	2,856,539	1.95
Total	146,548,981	100%

Table 2. Health insurance participation in 2012

Source: Figures withdrawn from TNP2K (2015).

2.1.2. Workplace accident benefits, death benefits, pension and old-age savings schemes

The schemes were offered by three providers: Jamsostek for formal private-sector employees, Taspen for civil servants, and Asabri for the police and armed forces. Table 3 presents a list of insurance schemes offered by the three providers, including the premium rate as a percentage of monthly salary.

		(as % of monthly salary)
Program	Employers	Workers
Jamsostek		
Workplace accident benefits	0.24-1.74	-
Death benefits	0.3	-
Old-age savings	3.7	2
Taspen and Asabri		
Old-age savings	-	3.25
Pension	-	4.75

Table 3. Contributions for Jamsostek, Taspen, and Asabri

Source: Figures drawn from ILO (2006).

Under Jamsostek, formal private-sector employees were eligible for workplace accident benefits, old-age savings, and death benefits schemes. Only the retirement benefits program required contributions from employees, at around 2%, while employers paid contributions to the workplace accident and death benefits programs. The benefits offered were: (i) workplace accident scheme: transportation, medical service expenses, medication, and disability; (ii) life insurance: death benefits and funeral costs; (iii) old-age savings: lump-sum payment according to the employee's total contributions plus interest.

Jamsostek also extended its old-age savings program to informal-sector workers, with a contribution rate of 2% of income, set at a minimum wage level of Rp. 1 million per month. However, enrollment was merely voluntary and uptake was low. Death and workplace accident benefit schemes were also extended to informal workers, with contribution rates of around 0.3% and 1% of monthly salary, respectively. Jamsostek programs were mandatory for companies with over 10 employees or a monthly payroll of Rp. 1 million or more. Private-sector employees were also eligible for severance payments in the case of work termination.

Taspen and Asabri provided lump-sum retirement benefits and pensions with employees' contributions of 3.25% and 4.75% of their salaries, respectively, for civil servants and police/armed forces. Both Taspen and Asabri were designated to pay all of the lump-sum

benefits and 25% of the pension benefits. The remaining 75% of pension costs were paid by the state budget. On death before or after retirement, the monthly pension was paid to eligible survivors.

2.2 Overview of current social security system

2.2.1 Social health insurance scheme

After the implementation of JKN, the schemes previously offered by different organizations were merged into BPJS Health. This national health insurance scheme provides a comprehensive package to all Indonesians, with the only difference being in quality of hospital ward category. Table 4 provides a breakdown of premiums payable by each category of member.

Poor/Near-poor		Civil servants, police/military officials BPJS Hea	Formal private- sector employees	Informal-sector workers/self- employed	
	Fixed premiums	Salary-based	Salary-based	Fixed monthly	
Funding	(Rp. 23,000 per	contributions of	contributions of	premium	
	member per	5% of monthly	5% of monthly	contributions of Rp.	
	month)	salary to be paid by	salary to be paid	25,500/Rp.	
	contributed by	employers (3%)	by employers (4%)	51,000/Rp. 80,000	
	the central	and employees	and employees		
	government from	(2%)	(1%)		
	general taxation				

 Table 4. Social health insurance scheme after the implementation of JKN

Source: Based on Presidential Regulation (*Perpres*) No. 19/2016 as amendment of *Perpres* No. 12/2013 concerning healthcare benefits.

The premiums for poor and near-poor are paid by the central government from general taxation, amounting to Rp. 23,000 per person per month, an increase of close to 20% from the previous amount of Rp. 19,225 before 2016. Members are entitled to class III hospital beds in public hospitals and selected private hospitals on the BPJS list. According to Bappenas (2014), the central government's financing to cover health insurance for 86.4 million poor and near-poor in 2014 was expected to reach Rp. 19.9 trillion (around 0.2% of GDP), an increase from Rp. 6 trillion allocated for financing Jamkesmas in 2011 (around 0.1% of GDP).

Salary-based contributions are applicable for salaried employees, including (i) civil servants and police/military officials, and (ii) formal private-sector employees. Contributions are fixed at 5% of monthly salary, of which 3% is paid by employers and 2% by employees for the former, and 4% is paid by employers and 1% by employees for the latter. The upper limit for monthly salary used for calculating health contributions is Rp. 8 million. Such contributions also cover members' dependents, which include spouse and up to three children. The criteria for children listed as dependents are: (i) not yet married or earning income, and (ii) aged under 21, or 25 if still enrolled in formal education. If employees would like to enroll other family members, including fourth or subsequent children, parents, and in-laws, additional contributions are set at 1% of salary.

Unlike the previous pre-JKN schemes, which had no specific reference to coverage for non-salaried workers who typically work in the informal sector, under the JKN scheme, such workers are eligible to receive health insurance benefits with fixed monthly premium contributions of either Rp. 25,500, Rp. 51,000, or Rp. 80,000. These three amounts are tied to provision of class III, II, and I hospital beds, respectively. The proposed amount for class III services was initially set at Rp. 30,000, but revised by President Joko Widodo and returned to its initial premium level of Rp. 25,500 per month. The amount is still below the recommended revision to Rp. 36,000 proposed by DJSN. The central government therefore allocates additional budget to cover the differences. Meanwhile, amounts for class I and II services were set after premium adjustment from Rp. 59,500 and Rp. 42,500, respectively.

Monthly contributions for informal workers' dependents range from Rp. 25,500 to Rp. 80,000, depending on which class of hospital bed (III, II, or I) members opt for. All BPJS members are able to access a wide range of health services provided by public facilities and, to some extent, private facilities that have registered as JKN providers.

Monthly contributions must be received by BPJS Health no later than the 10th of each month. BPJS Health will further develop effective and efficient mechanisms for collecting dues, particularly from those who work in the informal sector.

The total number of health facilities which have registered as providers of BPJS Health services (as of May 1, 2016) is as follows: 9,812 community health centers (*puskesmas*); 713 armed forces clinics; 569 police forces clinics; 3,434 primary clinics; 4,437 general practitioners' clinics; 1,140 dental clinics; 12 primary hospitals D class; 1,762 hospitals; 106 main/specialist clinics; 1,868 pharmacies; and 925 optical clinics (BPJS Health 2016b).

2.2.2 Workplace accident benefits, death benefits, pension and old-age savings schemes

During the SJSN implementation period, all employment programs are administered by BPJS Employment, covering both private- and public-sector employees, as well as nonsalaried workers, often categorized as self-employed or informal workers. Table 5 tabulates contribution rates as a percentage of monthly salary. Based on *Perpres* No. 109/2013 on phases of membership for social security programs, compulsory enrollment in all four employment programs is stipulated for workers in medium and large enterprises. Small enterprise workers are only mandated to enroll in workplace accident, death, and old-age saving benefits programs. Meanwhile, workers in micro enterprises are only mandated to enroll in workplace accident and death benefit programs.

In all four employment programs, premium rates are similar for public- and privatesector employees. Those requiring contributions from employees are old-age savings (2%) and pension funds (1%). The combined contribution rate (employer and employee) for pension benefits is reviewed and adjusted at least every three years, with the expectation of reaching 8% of monthly pay in total. Based on *Perpres* No. 45/2015 on administration of pension programs, the normal retirement age is initially set at 56, but will increase to 57 in 2019, and by an additional one year every three years thereafter, until reaching 65 (in 2043). For claimants with at least 15 years of contributions at retirement age, the minimum and maximum monthly pension amounts are initially set at Rp. 300,000 and Rp. 3,600,000, respectively, to be adjusted by inflation in future. For those with fewer than 15 years of contributions, payment is a lump sum.

Self-employed and informal workers have to pay their own premiums, set at 1% of salary for workplace accident benefits, 2% for old-age savings, and Rp. 6,800 for death benefits. For the first two programs, benefits vary according to the absolute amount of premiums paid (which depend on declared monthly earnings).

Table 5. Monthly contributions for BPJS Employment

Program	Public- and private	Self-employed/		
	Employers	Workers	informal workers	
Workplace accident benefits	0.24-1.74	-	1	
Death benefits	0.3	-	Rp. 6,800	
Old-age savings	3.7	2	2	
Pension	2	1	-	

(as % of monthly salary unless otherwise specified)

Source: BPJS Employment (2016).

3. Extending the Social Security System to Informal Workers

3.1 Defining and identifying the informal sector

The informal sector is largely defined as all economic activities that are not formally registered with the government and do not pay taxes (Rothenberg 2016). Employment in the informal sector is often characterized by poor working conditions, absence of social benefits such as sick pay, irregular working hours, unstable and unpredictable earnings, and relatively low labor productivity, and is associated with increasing poverty. GIZ et al. (2013) estimated that the average income of households in the informal sector, consisting of 4-5 people, is Rp. 1,508,724 per month. Almost 80% of such households reported a monthly income below the average. Around 13% of informal workers were poor, and as such many were already targeted by the national Jamkesmas health insurance program and the supplemental local government Jamkesda insurance schemes (Monfert, Martin, and Langenbrunner 2013).

Indonesia's National Statistics Office (BPS) defines informal and formal employment by a matrix of employment statuses and main occupations (Table 6). This differs from the conceptual framework of informal employment endorsed by the 17th international conference of labor statisticians in 2003, which uses production unit and job types to distinguish informal and formal employment. The BPS definition will be used primarily throughout this section, unless a different approach is clearly stipulated.

	Main occupation									
Main employment status	Prof- essional, technical & related worker	Admin- istrative & managerial worker	Clerical & related worker	Sales worker	Services worker	Agri- cultural worker	Prod- uction worker	Operator	Laborer	Other
Own-account worker	F	F	F	INF	INF	INF	INF	INF	INF	INF
Self-employed assisted by family or temporary worker	F	F	F	F	F	INF	F	F	F	INF
Employer	F	F	F	F	F	F	F	F	F	F
Employee	F	F	F	F	F	F	F	F	F	F
Agricultural casual worker	F	F	F	INF	INF	INF	INF	INF	INF	INF
Non- agricultural casual worker	F	F	F	INF	INF	INF	INF	INF	INF	INF
Unpaid worker	INF	INF	INF	INF	INF	INF	INF	INF	INF	INF

Table 6. Definition of formal (F) and informal (INF) employment according to BPS

Source: ILO (2010).

Based on the definition from Table 6, the data from BPS showed that the number of formal workers has increased from 29.4 million in 2001 to 49.7 million in 2015, an increase of more than 70%, as also illustrated in Figure 3. This positive trend is also reflected in the number of informal workers, albeit by a smaller increment. In 2001, there were 61.4 million informal workers, and in 2010 the number peaked at 73 million, an increase of 20%. After that, the number declined gradually to 68.2 million in 2015. This decline was not surprising given that most of the jobs created have been in the formal sector. For instance, it was reported that of the total 22 million jobs added to the labor market between 2001 and 2013, more than 80% were considered formal (ILO 2014). As a result, the proportion of informal workers in the total employment has declined from 68% in 2001 to 58% in 2015. The proportion of informal workers in the labor market in Indonesia is lower than in India (68%) and the Philippines (73%), but much higher than in China (33%) and Vietnam (44%) (OECD 2015). Rigidity in the labor market is often cited as a factor contributing to the persistent dominance of the informal sector in Indonesia's economy. Stringent hiring and firing rules as well as large increases in the minimum wage may hurt competitiveness in general, further exacerbating labor market informality and encouraging unregistered micro-enterprises by raising the cost of employing formal workers. Thus, many Indonesians remain in unstable and highly vulnerable working conditions. Without adequate social protection, they are susceptible to impoverishment from catastrophic health expenditures which may lead to an increasing number of poor households.



Figure 3. Number of formal and informal workers in Indonesia (2001-2015)

Source: Author's calculation based on data from BPS.

More than 90% of formal workers are employees, while the remainder consists of selfemployed people assisted by full-time and paid workers. Figure 4 provides more information on the types of informal workers. Among the self-employed, the percentage of those who work on their own (not employing any workers) increased from 28% in 2001 to 30% in 2015. Over the same period, those assisted by family or temporary workers declined from 33% to 27%. Both types contributed to the mass of informal workers in Indonesia, reflecting the large extent of microbusinesses in Indonesia, amounting to 55.9 million microbusiness units in 2012, equivalent to 98.8% of total business units in Indonesia. The sector itself employed 99.9 million workers in 2012 (Coordinating Ministry of Social Welfare et al. 2014). The share of casual workers in the agricultural sector did not change significantly, edging up from 6% in 2001 to 7% in 2015. Meanwhile, the share of casual workers in the non-agricultural sector increased from 4% in 2001 to 10% in 2015. Cuevas et al. (2009) estimated that average monthly incomes for casual workers in the agricultural and nonagricultural sectors were around Rp. 400,781 and Rp. 614,794, respectively. The remaining share of informal workers was absorbed as family or unpaid workers, around 25 % in 2015, or approximately 16.9 million people.



Figure 4. Types of informal workers (2001-2015)

Source: Author's calculation based on data from BPS.

As shown in Figure 5, informal working arrangements were more prevalent in the agricultural sector (51.8%), followed by the trade (25.4%), manufacturing (6.5%), construction (5.8%), and service sectors (4.8%). TNP2K (2015) found that around 31.5% of informal workers worked fewer than 35 hours per week or were nearly jobless and 49.2% did not complete elementary school. Regarding differences across genders, the ILO (2014) found that 57.9% of employed women worked in the informal economy, compared to 50.9% of their male counterparts. Cuevas et al. (2009) further highlighted that women generally received lower pay and were mostly unpaid family workers. Informal employment was also more widespread in rural areas (80%) than in urban settings (23%).


Figure 5. Percentage of informal workers by sector (2013)

Source: Figures drawn from Coordinating Ministry of Social Welfare et al. (2014).

Informal employment is more prevalent in certain provinces, such as the less industrialized province of Yogyakarta (81.9%), as compared to Banten (75.9%) (ADB and BPS 2011). A 2009 informal sector survey conducted in the two provinces showed that formal enterprises also created informal employment, totaling more than 30% of jobs. It also found that those who were informally employed tended to have a lower level of education and receive lower wages than those with formal jobs. Despite absorbing a large number of workers, the contribution of the informal sector to economic output was much lower, around 34.1% in Yogyakarta and 20.2% in Banten. In the case of Yogyakarta, the informal sector contributed more to agricultural production, whereas its contribution was much higher in the non-agricultural sector in Banten. Hence, characteristics of the informal sector and the degree of informal employment vary across Indonesia's provinces, depending on their economic drivers.

3.2 Efforts to provide coverage for informal workers

As mentioned in Section 3.1, the large size of the informal sector poses a great challenge in achieving universal coverage for both health and employment programs administered by BPJS. Bappenas (2014) reported that around 32.5 million informal workers would not be covered by any health insurance schemes in 2014 (not including family members). In order to reach the universal coverage target, especially for the health program under BPJS Health with 2019 as the deadline, the government needs to develop a

comprehensive strategic plan to extend coverage to the sizeable number of informal workers. The subsequent sections will describe in greater detail efforts to reach out to informal workers, before and after the implementation of SJSN.

3.2.1 Initiatives before SJSN implementation

Bappenas conducted a study on the informal economy in 2011-2012 to explore the possibility of extending social security coverage to informal workers. The study was conducted by the University of Indonesia's Demographic Institute, which administered the survey to 1,533 randomly selected respondents from five provinces in Indonesia (GIZ et al. 2013).

GIZ et al. (2013) found that around a quarter of informal workers were unaware of the health protection program. As many as 38% of them did not know how to enroll in such a program. Even for those who were already enrolled, there were significant knowledge gaps in terms of benefit package entitlements. A similar situation was also identified in ILO (2010), where only 60% of surveyed informal workers knew about the Jamsostek program. Such knowledge of the Jamsostek program was higher among respondents residing on the island of Java, as compared to those in the eastern region. Additionally, the results showed that the higher the level of education, the more often respondents knew about Jamsostek. Nevertheless, uninsured respondents from the informal sector conveyed their willingness to enroll in the health insurance program, provided they had more access to information and were convinced of the benefits of the program. When questioned about payment options, more than 55% of respondents preferred direct payments to the administrator (either BPJS Health branches or field officers), of which 67% favored monthly payments while the remainder opted for other frequencies (e.g. quarterly, semi-annually, etc.) which suited their income patterns. ILO (2010) asked respondents about their willingness to pay monthly premiums and found that a quarter of them indicated that they could not pay, while 40% preferred a payment below Rp. 10,000. Another 23.5% were willing to pay between Rp. 10,000 and Rp. 20,000 and around 11% could pay as high as Rp. 20,000 or more per month.

All of these insights from the study were very helpful in launching the new Askesos initiative in 2012, providing work accident and death benefits to approximately 750,000 informal workers (GIZ et al. 2013). To help administer memberships and act as social marketers, intermediary organizations (*Lembaga Pengelola Askesos*, LPA) were engaged, consisting of charity foundations, religious institutions, and other social organizations. In return, LPAs received 12.5% of total premiums collected from Jamsostek. The study also highlighted other potential collaborations with professional associations to act as

intermediaries for premium collection. Additionally, it emphasized providing flexible payment options suited to individual income patterns; for instance, per-harvest payments in the case of farmers.

Before the 2011-2012 informal economy study conducted by Bappenas, Angelini and Hiroshi (2004) conducted a study assessing informal-sector working conditions in several counties in Indonesia and needs for social protection. Following that, the Ministry of Manpower and Transmigration issued Ministerial Regulation No. 24 concerning "the implementation guidance of social security programs for workers outside working relationships" in 2006, which gave Jamsostek leeway to create tailor-made programs for informal workers, as briefly explained in Section 2.1.2. Contribution and benefit amounts were set according to the regional minimum wage, which varied across provinces and districts.

Prior to that, the Ministry of Social Affairs had already launched a pilot program for developing a community-based micro-insurance program for informal workers, called Askesos, in 1996. The program was suspended in 1998 during the nation's political and economic crises and reinstated in 2003. In its implementation, Askesos relied on established community-based organizations (CBOs), making Askesos not a stand-alone program, but a complementary and supporting program to the existing community-based antipoverty initiatives run by the respective CBOs (Suharto 2007). According to the guidelines as summed up by Sirojudin (2013), each CBO was expected to enroll around 200 to 300 informal workers within a three-year period. To be eligible as an applicant, the informal worker should have monthly earnings of no more than Rp. 300,000 and reside within the jurisdiction of the local CBO. The monthly fee was set at Rp. 5,000, and would be stored in a type of savings account and returned to the participant after the three-year period. The benefits offered would be in the form of a temporary set of unemployment benefits that pay a certain amount of money for emergency hospitalization up to 20 days, coverage for work-related injury for a given period of time, or death. Monetary support of Rp. 100,000 would also be provided in the case of illness or work-related injury, available to a member once a year for a total of three times during the three-year implementation period. For death benefits, the pay-out to the surviving family would depend on the length of membership; Rp. 200,000, Rp. 400,000, and Rp. 600,000 after the first, second, and third year of membership, respectively. By 2011, around 1,798 CBOs were participating in the program, providing micro-insurance services to around 350,000 informal workers (Sukoco 2011). According to Sukoco (2011), from 2003 to 2011, total government funding for this program amounted to US\$6 million, with two methods of transfer: (i) direct transfer from central government to CBOs, and (ii) indirect transfer through the provincial office of social affairs, then to CBOs.

3.2.2. Initiatives after SJSN implementation in 2014

The existing framework under BPJS Health and Employment that stipulates compulsory membership for informal workers, as explained in Sections 2.2.1 and 2.2.2, is considered as progress. Relying on contribution-based schemes, however, creates another complexity in ensuring the collection of regular contributions, which may result in high dropout rates. Unlike formal workers, informal workers' income is not stable or regular, as in the case of farmers who have to wait until harvest season to earn their income. Additionally, collecting dues may increase the cost of administration, as informal workers tend to live far away from urban centers that have abundant facilities to access payment channels. The cost of payment collection may even be close to, or higher than, the actual income generated from the contributions paid.

Other economies which have implemented a defined contribution approach, such as the Philippines and Vietnam, have introduced various measures to collect contributions from informal workers that have achieved only partial success. They have tried to improve socialization efforts by providing information about the scheme, including how to register and benefits of participation. They have also increased accessibility by allowing payment through banks, convenience stores, and cell phones, as well as offering flexible timeframes for dues payment. Vietnam also provides subsidies for near-poor informal workers (Aparnaa et al. 2014). South Korea is often cited as a successful example among economies adopting defined contribution schemes. Its centralized governance structure and unified dues collection mechanism that relies on the existing tax system allows South Korea to avoid the administrative burden of collecting contributions from informal workers.

China and Thailand are examples of economies which opt to fund expansion of insurance coverage from taxation. China has sufficient fiscal capacity to rely on taxation to fund expansion of social security coverage due to decades of strong economic growth. Such a policy also aligns with the government's aspiration to induce greater household consumption. On the other hand, Thailand's achievement in attaining universal coverage is more politically motivated, relying on a more pragmatic approach of tax-based contributions, since, in reality, distinguishing poor from non-poor in the informal sector is a very cumbersome process.

Indonesia decided to opt for contribution-based schemes to extend coverage to informal workers, as stipulated in *Perpres* No. 12/2013, which states that "dues from informal sector workers are not covered by the government." Other available options include expanding non-contributory financing from general taxation to the informal sector and a mixed method combining tax-based subsidies with dues. However, these two options for supporting informal workers' dues may create incentives for informalization where it is more cost-

effective for firms to hire their workers under informal arrangements to avoid paying for their health insurance. Moreover, they may undermine the contribution-based system for formal workers. Other issues concern fairness and equity, such as in the case of high-earning informal workers who ultimately receive government subsidies. Furthermore, if government subsidies depend upon a certain income level among informal workers, some groups of people who earn just above the cut-off point will be vulnerable to paying the full fee while concurrently struggling with volatile earnings.

The recently-enacted Perpres No. 19/2016 mentioned that further informal worker enrollment mechanisms would be developed by BPJS Health. This is crucial to answer questions concerning what will happen if they miss monthly payments given their irregular income, and how contributions can be effectively and efficiently collected. At the time of writing, the provisions in Perpres No. 19/2016 and information available on BPJS Health's website¹³ do not delineate different strategies to target informal workers. For instance, there is a fixed clause that contributions should be paid on a monthly basis (received by BPJS Health by the 10th of each month at the latest), which may not be suitable for fluctuating income earned by informal workers. Starting from 1st July 2016, unpaid contributions for more than one month result in temporary cessation of membership. Membership is reactivated if the member resumes contribution payments, including the previous overdue months (for 12 months at most). If a member undergoes in-patient hospital treatment within 45 days of membership being reactivated, he or she is liable for a fine of 2.5% of the total expenses involved multiplied by the number of overdue months, with additional conditions that the overdue period does not exceed 12 months and the maximum fine is capped at Rp. 30 million. While the provision for imposing fines may reduce instances of moral hazard, such rigid arrangements for accommodating only monthly payments – and subsequent consequences of not making such payments – may deter informal workers from enrolling in the program.

Acknowledging the challenges in enrolling informal workers, the Law on SJSN explicitly stated that the universal coverage target would first apply to all formal-sector workers in small, medium, and large enterprises in programs under BPJS Employment. Meanwhile, participation of informal workers will be gradually increased, by adding a minimum of 1.3 million new members by 2015 and 3.6 million new members by 2019, as illustrated in Table 7. According to this projection, by 2019 at least 6% of informal workers will be enrolled as members of BPJS Employment programs.

¹³ http://bpjs-kesehatan.go.id/bpjs/

Type of Workers	2014	2015	2016	2017	2018	2019
Receiving earnings – Informal	29,767,823	29,604,187	29,441,557	29,279,288	29,116,871	28,953,933
As % of total informal workers	44.35%	45.02%	45.71%	46.42%	47.16%	47.93%
Not receiving earnings – Informal	37,347,836	36,155,558	34,969,431	33,790,496	32,619,988	31,459,303
As % of total informal workers	55.65%	54.98%	54.29%	53.58%	52.84%	52.07%
Total informal workers	67,115,658	65,759,745	64,410,988	63,069,784	61,736,859	60,413,236
Total formal and informal workers	115,471,189	116,971,189	118,596,189	120,346,189	122,221,189	124,221,189
Minimum target for informal workers enrolled in BPJS Employment		2%	3%	4%	5%	6%
Minimum target for new members in BPJS Employment from informal sector with compulsory programs of workplace accident and death benefits		1,300,000	1,900,000	2,500,000	3,000,000	3,600,000

Table 7. Projected new memberships in BPJS employment for informal workers from

2014-2019

Source: Coordinating Ministry of Social Welfare et al. (2014).

To increase enrollment from both formal and informal sectors, BPJS offers online services for registering new subscribers and paying out claims. Additionally, they work with retail outlets, state post offices, and banks as payment channels for monthly contributions from members. BPJS Employment routinely releases membership numbers on its website¹⁴. As of April 2016, there were 334,638 firms enrolled in the program, with membership covering 13,892,318 salaried workers, 359,785 non-salaried workers (from the informal sector), and 5,006,029 workers in the construction sector.¹⁵

Similarly, BPJS Health's website also provides real-time statistics on its total membership, which reached 166,738,432 as of May 27, 2016 (roughly 65% of Indonesia's population). Unfortunately, there is no further breakdown that reveals the extent of coverage among informal workers. Such a breakdown is only available in its 2014 financial report, as

¹⁴ http://www.bpjsketenagakerjaan.go.id/

¹⁵ All employers employing construction workers on various schemes (which tend to be short-term contracts) are mandated to enroll their workers in BPJS Employment's workplace accident and death benefits programs.

illustrated in Figure 6. The reported statistics created five categories: (i) poor and near-poor with contributions paid by the government; (ii) salaried workers, mostly categorized as formal sector employees, comprising private sector employees, civil servants, police, and armed forces; (iii) non-salaried workers, mostly categorized as informal workers; (iv) non-workers, which include investors, employers, pensioners, veterans, fighters of national independence, and others who can afford to pay the premium, but not previously listed; (v) Jamkesda (in transition). Total membership in 2014 reached 133,423,653, but still fell short in extending coverage to informal workers, capturing only 13.5% of total workers in the informal sector.





The relatively small proportion of members who are informal workers was also reflected in their contributions paid, which amounted to only Rp. 1.89 trillion in 2014. Table 8 sheds light on total contributions received by BPJS Health and the corresponding compensation paid for health expenses. In 2014, BPJS Health reported a deficit of Rp. 1.94 trillion, as it only generated revenues of Rp. 40.72 trillion from premiums while paying out a total of Rp. 42.66 trillion in claims for health services. In 2015, the estimated deficit reached Rp. 5.85 trillion, causing the government to earmark at least Rp. 5 trillion to cover the deficit. Even after the premium increase announced in early 2016, BPJS Health is expected to continue running a deficit of Rp. 6 trillion by the end of 2016. Such sustained losses year after year raise concerns over the financial sustainability of the universal health coverage program.

Source: BPJS Health (2016a).

Contribution		Compensation					
Premiums received	Amount (in million Rupiah)	Expenses paid	Amount (in million Rupiah)				
Poor/near-poor	19,932,480	Capitation	8,347,850				
Civil servants, police/armed forces, pensioners, and veterans	14,004,670	Advanced outpatient treatment	6,912,247				
Formal sector employees	3,545,229	Advanced inpatient treatment	23,527,325				
Informal workers	1,885,436	Non-capitation, non-case base groups (CBG's)	3,724,375				
Jamkesda (in transition)	1,352,047	Promotion and prevention efforts	146,904				
TOTAL	40,719,862	TOTAL	42,658,701				

Table 8. Contributions received and compensation paid by BPJS Health in 2014

Source: BPJS Health (2016a).

Undersupply of health infrastructure can also pose just as great a barrier to provision of truly comprehensive services. Moreover, poor access and quality of healthcare services can discourage people from complying with mandatory membership and contribution payments, including those informal workers who do not feel they receive value for money (Mathauer, Schmidt, and Wenyaa 2008). In fact, in Cambodia, low perception of healthcare quality in government health facilities has been linked to low enrollment rates of non-poor informal workers in voluntary community-based health insurance schemes, estimated to only cover 2% of the population (Bitran 2013). Similar circumstances were also observed in Vietnam, where informal workers did not perceive that the value of health insurance was commensurate with the cost of enrolment, resulting in low coverage (Wagstaff et al. 2016).

Despite a staggering increase in the number of hospital beds from 159,144 in 2010 to 269,743 in 2014 (Ministry of Health 2015), the number of hospital beds per 1,000 Indonesians was still low at 0.95 in 2012, a rate below the economy's ASEAN peers, such as Malaysia, Philippines, Singapore, Thailand, and Vietnam (Figure 7). By 2014, the ratio had increased to 1.07 hospital beds per 1,000 people. Nevertheless, large variation was observed at the provincial level, where more developed provinces such as DI Yogyakarta, Jakarta, and North Sulawesi enjoyed a high ratio of more than 2 hospital beds per 1,000 people (Ministry poorer province, West Nusa Tenggara, only had 0.64 hospital beds per 1,000 people (Ministry of Health 2015).

Indonesia's healthcare expenditure, at 2.8% of GDP and \$99.4 per capita in 2014, was still one of the lowest in the region, as illustrated in Figure 7. The recent 2016 state budget increased the healthcare budget from Rp. 74.3 trillion in the previous year to Rp. 106.1 trillion, or around 5% of the total budget. More growth is expected in subsequent years due to the current low base of spending, as well as the target of achieving universal healthcare coverage.



Figure 7. Regional comparisons for healthcare infrastructure and healthcare expenditure

Note: Health expenditure per capita is based on 2014 data, while physician and hospital bed data are based on the latest year available.

Source: World Bank, World Development Indicators.

The ambitious target of providing healthcare coverage to all Indonesians will inevitably place enormous strain on the healthcare service provision infrastructure. The lack of readiness of local infrastructure to handle large patient volumes may result in long waiting times and poor quality of care for patients. Hence, ensuring a functioning health service infrastructure and improving the quality of care are keys to expanding membership and fulfilling the promised benefits to all Indonesians.

All in all, the government has acted upon the SJSN Law to provide mechanisms to extend social security coverage for informal workers. Unlike the previous initiatives which ran on a small scale, for short-term periods and/or on a voluntary basis, *Perpres* No. 19/2016 stipulated compulsory enrollment for informal workers. The contributions and benefits are

already formulated and widely publicized. What is still lacking is a strategy to entice participation by non-poor informal workers. Assuming that informal workers will react positively to an arrangement mostly suited to formal workers may not succeed in meeting the ambitious target of achieving universal coverage. It remains to be seen whether there will be creative initiatives down the road to ensure increased participation by informal workers. Additionally, the government has to ensure the financial sustainability of social security programs and continuously address the existing chronic undersupply of healthcare infrastructure while aiming to also deliver quality healthcare services.

4. Conclusion and Policy Implications

Progress is being made toward inclusivity in social security coverage in Indonesia. In the past, the social security system was fragmented, aggravating the 'missing middle' problem and leaving a significant proportion of the population unprotected. Starting in 2014, Indonesia began to unify its social security system and set an explicit target of extending coverage to the economy's sizeable population of informal workers. Unlike the previous attempt, the new SJSN Law enforces mandatory enrollment on not only formal workers, but also informal workers. However, challenges remain in its implementation, given the extensive proportion of informal workers in Indonesia (hovering around 60% of total workforce), who are scattered around the vast territory of Indonesia's archipelago.

For Indonesia to stay on track in its journey to expand the coverage of its social security system, efforts should be made to devise effective mechanisms to reach out to informal workers. It is essential to increase awareness of social protection options by deploying comprehensive social marketing strategies and making continuous efforts to develop communication tools that match preferred information channels for non-members. BPJS should also utilize existing local and community organizations as well as workers' associations, not only to disseminate information, but also to establish joint partnerships to assist in premium collection. Mechanisms for payment should also consider the irregularity of earnings among informal workers.

Local governments can also be involved in increasing the enrollment of informal workers, as seen in Solo's innovative policy (ILO 2010). The city is committed to integrating the activities of thousands of street vendors into city management, thereby formalizing the status of these informal businesses. The local government also facilitated access to social security, then under Jamsostek, and provided subsidies to workers to cover the first five months' premiums. The local government also assisted in the establishment of informal worker associations to facilitate premium collection. Given Indonesia's decentralized

government structure, active involvement of local government can do more to accelerate uptake among informal workers, making universal access to social security programs in Indonesia an achievable task.

Further improvement in ensuring supply-side readiness is crucial, in order to convince existing and potential members of the benefits of enrolling in the system. Quality of care and services is as important as ensuring the availability of hard infrastructure to accommodate the increased number of people accessing health services, given that Indonesia is vying for universal health coverage by 2019.

Going forward, the current system has to be financially sustainable. As mentioned previously, BPJS Health has suffered financial losses since its establishment and required injections from central government coffers. More effective and efficient administration of enrollment, premium collection, and management of registered health facilities under the BPJS program should be in place, along with extensive public awareness and outreach to promote healthy lifestyles. This is relevant as the percentage of deaths from non-communicable diseases has increased in Indonesia, from 50.7% of total deaths in 2004 to 71% in 2014 (Bloom et al. 2015). The leading causes of deaths include cardiovascular disease, cancer, chronic respiratory disease, and diabetes, which undoubtedly require longer and more expensive treatments, putting further financial strain on BPJS Health schemes.

The success of recent social security reform in Indonesia hinges upon the government's ability to address the challenges faced by the current system. Making the final stride to extend protection to informal workers remains the most challenging part of the journey toward achieving universal coverage, as also experienced by other economies. Indonesia can tap into other economies' experiences of managing their social security programs, and learn from their innovative approaches to identify what works and does not work. It is also an area where international cooperation can play a part in providing technical assistance, for instance, or sharing best practices that reflect experiences. This will provide significant stimulus for Indonesia as it pursues the audacious launch of much-needed reform and sets ambitious targets aiming for coverage for all.

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