SMERU

Working Paper

Social Security Reform in Indonesia: An Analysis of the National Social Security Bill (RUU Jamsosnas)

Alex Arifianto

September 2004

For further information, please contact SMERU, Phone: 62-21-31936336; Fax: 62-21-31930850; E-mail: smeru@smeru.or.id; Web: www.smeru.or.id

Social Security Reform in Indonesia:
An Analysis of the National Social Security Bill
(RUU Jamsosnas)

Alex Arifianto

Lembaga Penelitian SMERU
Jakarta
September 2004

Arifianto, Alex

Social security reform in Indonesia: An analysis of the national social security bill (RUU Jamsosnas)/Alex Arifianto. – Jakarta: Lembaga Penelitian SMERU, 2004

37 hal. ; 28 cm.

ISBN 979-98902-3-3

1. Social security

368.4/DDC 21

The SMERU Research Institute, September 2004

Social Security Reform in Indonesia: An Analysis of the National Social Security Bill (RUU Jamsosnas)[1]

Alex Arifianto[2]
The SMERU Research Institute
Jakarta, Indonesia

Abstract

The Indonesian social security program is currently undergoing a fundamental overhaul designed to make the existing system work better for the beneficiaries and to extend social security coverage to more workers, both in the formal and informal sector. The existing scheme has not been successful in its aims to provide adequate social security benefits to beneficiaries because of its low coverage, limited benefits, and low investment returns, combined with poor governance. The government has proposed a plan to convert the current social security scheme, which is based on a provident fund system, into a compulsory social insurance system. The plan is analyzed in this paper in order to examine the possible impact of the proposed scheme on the Indonesian labor market, investment flows, the government budget, and the economy in general.

From this analysis, we can conclude that there are several serious flaws in the government proposal as outlined in the proposed legislation, such as: the proposed scheme could worsen Indonesia's labor market and investment climate, worsen the government's budget deficits, and does not provide room for the private sector to provide social security benefits to Indonesians. Many have concluded that publicly-provided social security schemes are no longer a viable model for workers today. Instead private social security schemes would suit the health and retirement needs of today's workers better than public social security schemes. Given the many problems facing the Indonesian public pension and healthcare system today, Indonesia should seriously consider adopting private social security programs to replace the current publicly-provided scheme.

Keywords: social security, public pension, national health insurance, Indonesia.

[1] The Indonesian Social Security System Bill discussed in this paper was passed by the Indonesian House of Representatives (DPR RI) on September 28, 2004. This paper was written when the bill was still being discussed by DPR RI.

[2] The author would like to thank Dr. Sudarno Sumarto, Dr. Asep Suryahadi, and Bambang Sulaksono for their suggestions and comments, and Daniel Perwira for his research assistance. The views expressed are solely those of the author and should not be attributed to the SMERU Research Institute, its management, or its donor agencies.

EXECUTIVE SUMMARY

The Indonesian government has completed a draft law on the reform of the National Social Security System (also known as Jamsosnas) and it is expected to be approved by the Indonesian Parliament (DPR) later this year. It will replace the existing social security schemes (Askes, Jamsostek, Taspen, and Asabri) that have not been successful in providing adequate benefits to their beneficiaries due to their low level of enrollment, inadequate benefits for participants, and poor governance.

The scheme proposed by the government is very comprehensive, consisting of an old-age pension, National Health Insurance (NHI), death benefits, and worker disability schemes. It will cover all Indonesian citizens, regardless of whether they are formal workers, informal workers, or self-employed.

The old-age pension program is a defined benefit social insurance program which will operate under a *pay-as-you-go* system. The defined benefit of this program is a percentage of an individual's average income from the previous year, between a minimum of 60% and maximum of 80% of the local minimum wage (UMR). Each worker will receive a guaranteed minimum pension of at least 70% of the UMR.

The NHI program is designed to provide comprehensive health benefits ranging from benefits for preventative treatments, such as immunization and family planning, to those which cover catastrophic illnesses, such as heart and kidney diseases. Both public and private health providers would be able to deliver these services, as long as they sign a service contract with the government.

The cost of funding the National Social Security Program would be quite substantial for formal employers and workers who are obliged to make contributions to the scheme in order to receive its benefits. For the NHI program, formal sector workers must pay a 6% payroll tax on their gross income, which would be split equally with employers. Exact contributions from self-employed and informal sector workers will be decided at a later date, as is the case for the contribution rate for the public pension program.

However, it is estimated that the total amount of combined payroll taxes that will have to be paid by formal sector employers and workers will be between 18% to 20% of worker's payroll. Thus, the Jamsosnas scheme could create a substantial burden for formal employers and workers, as they will be the ones responsible for paying for these schemes.

The Jamsosnas bill could make Indonesian businesses even less competitive, since it creates substantial new labor costs for companies. Employers could respond to this law by reducing their workers' salaries to cover the required payroll taxes, thus reducing take-home-pay for workers. They could also reduce the number of workers they employ in order to reduce their business expenses. This could reduce the income of low-middle income workers, who are more likely to fall into poverty as a result of being laid off.

Additionally, there are no known actuarial calculations that serve as a sound basis for determining the contribution levels and the payouts of this scheme, nor have there

been any reliable econometric analyses on the short and long-term impacts of this scheme on the labor market, the competitiveness of Indonesian businesses, and the Indonesian economy in general. Without such analyses, the impact of this scheme on the economy remains questionable and the adequacy of the proposed contribution rates in paying actual program benefits remains doubtful.

The government's plan to subsidize the coverage of low-income persons is also questionable. According to the draft law, Indonesians whose income falls below the UMR will be considered as low-income earners and will therefore be eligible to receive the government subsidy. However, there is a substantial number of Indonesians whose incomes are below the UMR rate, especially those who live in rural areas. If there were too many Indonesians eligible to receive this subsidy, the central government budget could run into a deficit, thus casting doubts on the long-term sustainability of the national social security program.

The scheme also fails to address the problem of the rapidly aging population estimated to begin in the next few decades. Demographic estimates have shown that the Indonesian population aged 55 years and older will rise dramatically in the next few decades, from about 10% of the total population in 2000 to about 30% of the total population in 2050.

The combination of a relatively low minimum retirement age (55 years), low minimum working years to qualify for pension (15 years) and a rapidly aging population is a recipe for disaster for any public pension program, and it seems that this proposed scheme will suffer from such a fate.

Additionally, most of the costs incurred by the NHI scheme would be generated by the elderly. If there are insufficient funds available in the National Health Trust Fund to pay for their care, the NHI scheme could run into serious financial problems.

Also, there is no requirement for service providers to provide health services to all NHI participants who wish to seek treatment in their facilities. Thus, some providers might choose not to sign contracts with the government and therefore not accept patients covered solely by the NHI scheme. If the above assumption were proven correct, both the choice and the quality of treatment available to patients would be severely limited.

Finally, the scheme disregards the role of competition in providing social security benefits for Indonesians, since according to the bill, social security provision would become the sole responsibility of the government, in spite of the fact that most formal sector workers already have adequate health and retirement benefits from their employers. As a result of this monopoly, workers might lose their privately provided health and retirement coverage that might offer better benefits than the Jamsosnas scheme.

Experiences from other countries in the world (especially Europe and Latin America) that have comprehensive social security schemes for their citizens show that publicly-funded social security schemes have often failed due to problems relating to demographic transition, benefit levels that were too generous, not being financially sustainable, and often, poor governance. Many of these countries (such as Chile, Mexico, Poland, the United Kingdom, Sweden, and Australia) have pursued other alternatives in providing social security for their citizens, specifically, by reforming their public social security programs.

Based on these experiences, the provision and financing of social security programs should no longer be the sole responsibility of the government. In the above countries, it has been proven that the private sector can play a positive role in providing comprehensive social security coverage for citizens. This can be achieved through improving the quality of social security services available to the public, introducing competition in the provision of social security programs, and eventually, improving age and health indicators in these countries.

Based on these facts, policymakers should revise the Jamsosnas bill significantly so that it does not create an additional burden for workers and businesses, is financially sustainable, provides adequate benefits to its participants, and promotes the involvement of the private sector in providing the social security coverage to the general public, through individual retirement and medical savings accounts schemes. This should be conducted under the three-pillar paradigm, which has been adopted in various countries, both developed and developing.

The role of the government would be limited to issuing and enforcing appropriate regulations to safeguard the workers' social security savings and to provide publicly-funded social assistance (funded through general tax revenue) to the poorest Indonesians who are no longer able to work (e.g., the elderly and the permanently disabled).

TABLE OF CONTENTS

ABSTRACT i

EXECUTIVE SUMMARY ii

I. INTRODUCTION 1

II. THE CURRENT INDONESIAN SOCIAL SECURITY SYSTEM 2
- 2.1. Current Public Pension Programs in Indonesia 2
  - 2.1.1. The Jamsostek Provident Fund Scheme 2
  - 2.1.2. The Taspen Program for Civil Servants 4
- 2.2. Current Public Health Insurance Schemes in Indonesia 5
  - 2.2.1. The Askes Insurance Scheme 5
  - 2.2.2. The Jamsostek Health Insurance Scheme 6
  - 2.2.3 Community Health Fund and Community Health Maintenance (JPKM) Scheme 7

III. THE PROPOSED INDONESIAN NATIONAL SOCIAL SECURITY REFORM BILL (RUU JAMSOSNAS) 9
- 3.1. An Overview of the Draft Bill 9
- 3.2. Institutional Information 10
- 3.3. A Description of the Public Pension Programs 12
  - 3.3.1. The Old-age Pension Program 12
  - 3.3.2. The Old-age Savings Program 13
- 3.4 The National Health Insurance Scheme 14

IV. AN ANALYSIS OF THE PROPOSED INDONESIAN SOCIAL SECURITY REFORM BILL 16
- 4.1. A General Analysis 16
- 4.2. An Analysis of the Proposed Public Pension Scheme 18
  - 4.2.1. The Old-age Pension Scheme 18
  - 4.2.2. The Old-age Savings Scheme 20
- 4.3. An Analysis of the National Health Insurance Scheme 21

V. CONCLUSIONS AND POLICY RECOMMENDATIONS 24
- 5.1. General Conclusions 24
- 5.2. Reform of the Public Pension Scheme 25
- 5.3. Reform of the National Health Care Scheme 26
- 5.4 Concluding Remarks 27

APPENDIX 28
- Figure 1: A Comparison between Defined Benefit Social Security Schemes vs. Defined Contribution Schemes 28
- Figure 2: The National Social Security System Based On The Three-Pillar System 30

REFERENCES 31

I. INTRODUCTION

Indonesia is in the middle of reforming its existing social security system, in order to make the existing system work better for beneficiaries, increase its benefits, and extend its coverage to more workers, both in the formal and informal sectors. It is recognized that a social security scheme that works well could improve the welfare of the people, especially that of the poor.

Reforming the system is essential in improving the welfare of all Indonesians. With this in mind, Indonesia should choose a reform scheme that maximizes the welfare of all Indonesians, does not create an additional burden for workers and businesses, is financially sustainable, and gives greater autonomy to workers to have a voice in managing their own social security funds.

First, this paper will describe the current national social security system (Jamsostek) and its weaknesses that have caused the scheme to be less than effective in providing social security for Indonesians. Then, the draft of the government's pension reform plan, detailed in the Indonesian Social Security Law and currently being discussed in the Indonesian Parliament (DPR), will be analyzed. Finally, the paper will conclude with several policy recommendations and alternatives to this proposed reform scheme.

II. THE CURRENT INDONESIAN SOCIAL SECURITY SYSTEM

2.1 Current Public Pension Programs in Indonesia

Currently, only about 10% of all Indonesians (both workers and their families) have some form of pension coverage, either from publicly-funded pension schemes or private ones (mostly sponsored by large state-owned enterprises and multinational corporations) (ILO). There are several public pension programs that are sponsored and administered by the government at this time. The two largest programs are the Jamsostek program for private sector workers in the formal sector and the Taspen program for current and retired civil servants and their families.[3]

2.1.1. The Jamsostek Provident Fund Scheme

According to the Indonesian Social Security Law (Law No 3/1992), there are four different social security schemes in Indonesia including: (1) worker injury benefits; (2) death benefits; (3) retirement benefits; and (4) healthcare benefits. The law stipulates that the premiums for worker injury, death, and healthcare benefits are paid entirely by employers, while the retirement benefit premiums are shared by both employers and workers. Worker injury, death, and retirement benefits are invested in a provident fund managed entirely by a state-owned company, PT Jamsostek, while the healthcare program can be contracted out to a private provider if it can be shown that the benefits would be either similar or surpass the benefits provided by PT Jamsostek (ILO, 93).

Table 1. Contributions/Premiums for the Jamsostek Program (% of wages)

Program	Employers	Workers	Total
Workplace Accident Benefits Program (JKK)	0.24 – 1.74 (5 classes)	-	0.24 – 1.74
Death Benefits Program (JK)	0.3	-	0.3
Retirement Benefits Program (JHT)	3.7	2	5.7
Healthcare Benefits Program (JPK)	3 – 6	-	3 – 6
Total	7.24 – 11.74	2	9.24 – 13.74

Source: PT Jamsostek (2001).

[3] In addition to these two schemes, there is also the Asabri pension scheme for members of the armed forces and their families. However, since little public information is available about this scheme, it is not reviewed in this paper.

Table 1 shows the specific social security premiums that have to be paid by both employers and workers. Each employer has to make a contribution of between 7.24 and 11.24% of the total wages paid to their workers. This amount is equal to about one month of a worker's annual salary.[4] In addition, each worker has to contribute 2% of their wages to the retirement benefits program. The Jamsostek program is currently undergoing fundamental reform, which is being undertaken to fix structural problems. The existing social security system has failed to prevent those affected by the Indonesian economic crisis from falling below the poverty line.

This is because in many ways the current system is inadequate. First, it does not cover informal sector workers, individuals who are self-employed, and formal sector workers who are employed by small businesses (with 10 employees or less). This means that the vast majority of Indonesian workers (80% of the total workforce) are not covered by this scheme. In addition, it is also estimated that only about half of the employers required by the Indonesian Social Security Law to make contributions to the scheme are actually making contributions (ILO, 63). Thus, the number of workers that are actually covered by the Jamsostek program is abysmally low.

Additionally, Jamsostek does not create adequate incentives for its members to save for retirement because the benefits received by those who make contributions to Jamsostek are very small. A World Bank study done by Leechor estimates that the total pension payments received by a Jamsostek recipient at retirement is only valued at about 7% of their final basic salary after 35 years of active work (36), while another study conducted by the International Labor Organization (ILO) found that the average value of a Jamsostek pension only amounts to five and a half months of their basic salary or eight and a half months of the current minimum wage (UMR) (ILO, 90). It has been concluded that these workers would earn a better rate of return on their investments if they put their retirement savings into a bank account rather than the Jamsostek scheme.

In addition, the rate of return on investments in the Jamsostek fund is also very low. The ILO found that income from such investments is valued cumulatively at 38% below the level of inflation and 63% less than the average market rate (ILO, 94). This is caused by the fact that the Jamsostek fund is invested mostly in banks – 80% in 1997 and 86% in June 1999 (Perwira et.al.). While such an investment is considered relatively safe, in the long run, it earns less than other investment schemes, such as those invested in stocks, bonds, and mutual funds.

Finally, critics have argued that the management of the Jamsostek fund has not been open and transparent. For instance, it has been found that PT Jamsostek as the sole provider of publicly-funded retirement benefits in Indonesia has failed to provide financial statements and regular progress reports that can be accessed by workers participating in the scheme and the general public (Leechor, 39).

---

[4] Including the requirement for employers to pay a bonus equivalent of one month's wages for the Idul Fitri holiday, employers are required to pay around two months' wages per year in addition to normal salaries.

When we look at the level of benefits received by workers covered by Jamsostek, combined with the low return on investment and lack of transparency, it is no wonder that most Indonesian employers and employees have little faith in the scheme providing social protection for them. The fact that only about half of all employers who are required to participate in the Jamsostek scheme are making contributions to the scheme is testament to the low confidence of employers and employees in the scheme as they instead choose to provide these benefits through the private sector.

2.1.2. The Taspen Program for Civil Servants

The Taspen (Social Insurance and Retirement Savings for Civil Servants) scheme was created in 1963 to provide retirement benefits, death benefits, and retirement savings by providing both a lump sum and monthly pensions for participants or their inheritors. It is hoped that this benefit can provide financial support for members after retirement. This scheme was expanded to include special pension schemes for elderly members, their inheritors, and members who are disabled based upon Government Regulation No. 25/1981 on “Social Insurance for Civil Servants.”

All members of the Taspen scheme are Indonesian civil servants, which is defined as those who are employed as civil servants by either a government official or a government agency, and are paid regular salaries according to the prevailing civil servant salary schedule based upon the central and local government’s budget. Members of the armed forces and the police force are covered under a separate pension scheme called Asabri (Social Insurance for Members of the Armed Forces), which was created on August 1, 1971. Since then, they have not been eligible to receive Taspen benefits.

The civil servants retirement benefits scheme managed by PT Taspen consists of an old-age savings scheme and a pension scheme. Government Regulation No. 25/1981 describes these schemes in the following ways:

- The old-age savings scheme is an insurance program, consisting of a compulsory savings scheme and death benefits for members and their immediate families.
- The pension scheme provides an income to members on a monthly basis, which is set according to the prevailing laws and regulations. It is given to civil servants and/or their immediate families who met the following criteria:
    - Has reached retirement age (currently 56 years).
    - If they died while serving as civil servants, the pension will be given to their spouses or children.
    - If they died after retiring from the civil service, the pension will be given to their spouses or their children who have not reached 25 years of age.

Monthly pension benefits for members amount to 2.5% of their basic salary multiplied by the number of years they served in the civil service. This scheme is mainly funded by the national budget (APBN) but is also funded by contributions from members, which amount to 4.75% of their base salaries.

At present, there are approximately four million civil servants and they contribute up about 8% of the funds for PT Taspen's programs.[5] PT Taspen contributes about 22.5% of the overall expenses, derived from its enormous assets and investment income from member contributions. The rest of the expenses (69.5%) are paid for by the government budget (ILO). However, given the recent increase in civil servant salaries and pension benefits, it is estimated that the Taspen scheme will not be sustainable in the long run. Leechor has predicted that the funds available to pay the full pension benefits of all civil servants will run into a deficit starting in 2006 and without changes in contribution rates, it might become insolvent by 2015 (29).

PT Taspen's financial state has been made worse by the existing laws that restrict the government from providing advanced funding for the Taspen scheme. It is estimated that to fully fund the Taspen pension scheme, an additional 3.25% of civil servants' basic salaries is required. Furthermore, the total contribution from the government for the Taspen pension scheme would be about 66% of the central government's routine budget by 2020. This would certainly have a serious impact on the government's fiscal position (Leechor, 29-30).

Compared to the Jamsostek scheme, Taspen's pension fund provides more benefits for its member, because the value of pensions for members is estimated at 100% of their final salaries after 35 years in the civil service, a rate that is much better than Jamsostek pensions, which only amount to around 11% of members' final salaries after 35 years of work (Leechor, 24). This generous pension benefit was decided upon because the official salaries of Indonesian civil servants are very low. However, the difference in pension benefits has resulted in the perception that the government takes care of its employees when they retired, whereas it does not pay enough attention to the general public.

2.2. Current Public Health Insurance Schemes in Indonesia

According to the 2003 ILO study, only 15% of Indonesians are currently covered by some form of health insurance scheme provided either by the public or private sector. There are three major categories of government-sponsored health insurance: insurance for civil servants and army personnel (Askes), insurance for formal private sector workers (Jamsostek), and community health funds and the Community Health Maintenance Organizations (JPKM).

2.2.1. The Askes Insurance Scheme

About half of the insured Indonesians (around 7% of the population) receive their health insurance through PT Askes, a state-owned enterprise that administers health insurance for civil servants, retired civil servants, army personnel and their dependents.

[5] More specifically, this contribution consists of 4.75% of a civil servant's monthly salary for the Taspen's defined benefit monthly pension scheme and 3.25% of a civil servant's monthly salary for the Taspen's defined contribution compulsory retirement savings scheme.

The Askes program is funded through a 2% payroll deduction from civil servants' salaries. Payments are based on the capitation system,[6] budgeting system and benefits package that are consistent with community health maintenance principles. Health services are provided through a health maintenance organization (HMO) network[7] that is structured to provide promotive, preventive, curative, and rehabilitative treatments.

However, PT Askes feels that the 2% premium is too low and affects the quality of health services for the program's beneficiaries. Hospitals and clinics that become service providers for PT Askes pay for a large portion of the health services provided because the Askes program only reimburses a small amount for the services provided for Askes beneficiaries. Even government subsidies to help these hospitals and clinics treat Askes beneficiaries do not cover all expenses. As a result, the number of services provided for Askes beneficiaries are often quite limited. For instance, most low-ranking civil servants receive the lowest level of inpatient care available (1D class) and it is very difficult for them to obtain access to a good referral system. (Perwira et. al.)

2.2.2. The Jamsostek Health Insurance Scheme

Another 1.3% of Indonesians receive their health insurance from a plan sponsored by PT Jamsostek (another state-owned company) which provides insurance for formal private sector workers. The premium for this scheme is 3% for single employees and 6% for employees who are married. Employers are fully responsible for paying this premium. The benefits are provided to employees, their spouse, and their children under the age of 21 years (up to the third child). In 2000, only about 2.7 million Indonesians were covered by the PT Jamsostek health scheme. This number is quite small given the program's potential, because it is estimated that there are about 100 million people (workers and their families) who could be covered under the Jamsostek law (Law No 3/1992) (ILO, 207).

One cause of the low number of workers registering with PT Jamsostek's health plan is the existence of an opt-out clause that allows companies to join private health insurance schemes provided that the private scheme provides greater benefits than PT Jamsostek's plan. As a result, larger employers tend to opt out of the Jamsostek health scheme altogether and seek private health insurance for their employees. Only small employers with an average of 79 employees participate in the Jamsostek health insurance program. Another cause of the low number is the high level of noncompliance and evasion by companies participating in the Jamsostek program (ILO, 207).

---

[6] A capitation-based reimbursement system is a health service reimbursement system under which healthcare providers receive regular fixed payments for each patient in their care, regardless of the services actually provided to the patient (Rosen, 209).

[7] A Health Maintenance Organization (HMO) is a healthcare provider that offers comprehensive healthcare from an established panel of providers (doctors, midwives, etc) that have signed a contract with this organization and who are paid using a capitation-based reimbursement scheme (Rosen, 533). Common features of HMOs include voluntary membership, comprehensive health services, community rating premiums, and closed system delivery (ILO, 203).

PT Jamsostek subcontracts the provision of healthcare to other parties called "main providers." Many of these parties are JPKM providers (or *badan pelaksana* as they are called in Indonesia) which are insurance carriers, not healthcare providers. Payments to providers (hospitals, doctors and midwives) are not made directly by Jamsostek, but instead are made on a capitation basis to the main providers. This system could lead to inefficiencies and higher costs, as main providers will take a portion of these payments as profits rather than channeling 100% toward actual health services. In addition, since many main providers do not actually own their own health services, they often subcontract health services to third-party providers, leading to higher administrative expenses. It is estimated that about 40% of Jamsostek health insurance contributions are used to cover various administrative costs, which means that a less than substantial amount actually goes to health provisions. Finally, PT Jamsostek has no standard procedure for the selection of main providers. This could lead to abuse by Jamsostek officials in the form of corruption, collusion, and nepotism in the selection of main providers (ILO, 208-209).

Because most health providers in Indonesia are still operating on a fee-for-service basis and capitation-based payments are not common, most providers (both hospitals and doctors) do not want to sign a contract with PT Jamsostek and therefore do not accept Jamsostek health insurance patients. As a result, the actual benefits of this insurance scheme are limited since the choice of providers available to members is limited. In addition, there are a limited number of services covered by the Jamsostek health insurance program. Inpatient services are limited to a maximum of 60 days, with a limit of 20 days for intensive care services. The plan does not cover treatment for various catastrophic illnesses, such as kidney dialysis, cancer treatment, cardiac surgery, and organ transplants; treatment for sexually transmitted diseases, alcoholism, and drug abuse; or any service provided by non-contracted providers (ILO, 209, 211).

In conclusion, the Jamsostek health insurance program has not been successful in attaining its goal to cover all private sector workers in Indonesia. Given the limited number of providers willing to accept the scheme, the lack of health benefits offered, and high administrative costs, it is no wonder that most employers and workers chose to opt out of the Jamsostek scheme and instead choose other private health insurance plans that provide greater benefits.

2.2.3. The Community Health Fund and Community Health Maintenance (JPKM) Scheme

The community health schemes in Indonesia began in the 1970s when the government introduced the village health fund (*dana sehat*). This fund was set up to substitute the decline in the central government's health sector allocation after the fall in oil revenues in the mid 1970s. Their goal is to make local communities self-sufficient and self-reliant in financing their basic health provisions (ILO, 194).

In practice, however, few people contribute to community health schemes. It is estimated that in 1998, only 1.87% of the population were members of community health funds. Even when contributions to community health funds are supposed to be compulsory, many people simply choose not to contribute to the fund and, moreover, enforcement is lax. Factors that are attributed to low enrollment are the low cost of treatment in public health centers (so there is no incentive to join a community health scheme) and the high level of financial assistance given to poor communities to meet healthcare expenses, especially after the 1997/98 economic crisis. Contributions from health fund members are very low, which has resulted in the fund being insufficient to cover even basic health treatments.

Community health schemes also suffer from a high dropout rate (it is estimated that around 90% of participants dropout in the first or second year). Contributions are not collected based on sound actuarial principles and funds are often managed by local government officials with little knowledge of healthcare financing. As a result, community health funds are vulnerable to corruption, collusion and nepotism (ILO,195).

Beside community health funds, the government also encouraged the development of JPKMs, which were modeled on HMOs in the United States. JPKMs were developed based on Law No. 23/1992 and were regulated by the Ministry of Health. They were promoted extensively after the 1997/98 economic crisis. Financial incentives were given to insurance companies, cooperatives, and foundations to establish HMOs in each district. Within months, 354 HMOs had been created, mostly by civil servants, civil servant retirees, or cooperatives. They often did not have experience in managing such schemes, which could have lead to mismanagement. After much criticism and seeing that it was obvious that many of the HMOs would ultimately fail, the government stopped the program after only one year. There were never more than 100,000 members in the JPKM plans (ILO, 195, 203).[8]

We can conclude that the government's efforts to create a community health scheme for the poor so far have been unsuccessful due to the lack of benefits, low cost of treatment at health centers, an unwillingness to contribute to the schemes, and poor management of the various health schemes.

[8] There are indications that the Indonesian Ministry of Health is planning to resurrect the JPKM scheme under the National Healthcare System Bill currently being drafted. At present, copies of this draft law are not publicly available.

III. THE PROPOSED INDONESIAN NATIONAL SOCIAL SECURITY REFORM BILL (*RUU JAMSOSNAS*)

3.1. An Overview of the Draft Bill

According to the Government of Indonesia's Academic Paper on the National Social Security System (GOI, "Academic Paper") the new Indonesian national social security system will be established in accordance with the three-pillar approach recommended by the International Labor Organization (ILO). The first pillar is social assistance for citizens who lack the financial means or access to services to meet their basic needs. This assistance is given to people who are genuinely in need, in the event of natural disasters, social unrest, illness, old age, or loss of employment. It will be financed by the state budget and/or by community (public) funds. The second pillar is a compulsory social insurance scheme, financed by contributions paid by both employers and employees. A person's contribution is related to their income or wage and is based upon society's current minimum standards of living. The third pillar is voluntary private insurance, in which a person may opt to take out additional insurance. The contribution paid by participants varies according to their own risk levels (GOI, "Academic Paper" 5-6).

The Jamsosnas scheme will be run based on the following principles:[9]

- Mutual assistance (*gotong royong*): wealthier participants will assist those who are less fortunate, those with low risks will help those with high risks, and those who are healthier will help those who are sicker;
- Compulsory membership: all Indonesian residents, in stages, will be required to participate in the Jamsosnas scheme;
- Trust funds: the funds collected from participants will be managed by the National Social Security Provider Agencies in a trust fund which will be used optimally for the welfare of all participants;
- Not-for-profit: the management of this trust fund should not be profit oriented and the funds should be used to meet the needs of all participants;
- Openness, risk aversion, accountability, efficiency, and effectiveness: these management principles will become the basis for the national social security program;
- Portability: participants will continue as members of the national social security scheme regardless of their income and employment status, and will continue to receive benefits regardless of their income and their position in the family, as long as they fulfill the eligibility criteria for receiving these benefits.

The scheme proposed by the government is comprehensive and will consist of retirement benefits, healthcare benefits, death benefits, and worker disability benefits.[10] Unlike Jamsostek, which only covers formal private sector workers, Jamsosnas will

---

[9] See the explanatory clauses of the National Social Security Bill (3-4).

[10] The Indonesian government also plans to create an unemployment insurance scheme. However, it has not been included in the current draft of the Jamsosnas bill.

cover all Indonesian citizens, regardless of whether they are formal workers, informal workers, or self-employed.

While the official contribution rates for the different Jamsosnas schemes are still unknown, we could estimate the rates for the Jamsosnas pension and death benefits programs based upon the current rates in the Jamsostek scheme, assuming that that they will not be much different from the existing contribution rates. The contribution rate for the retirement benefits program is estimated to be around 10.75% of one's base salary: 4.75% for the old-age pension program (the current contribution rate for the Taspen pension scheme) and 6% for the old-age savings program (the current contribution rate for the Jamsostek provident fund). Contributions will be shared equally by employers and workers. Finally, the death benefit program is estimated to be the same as the Jamsosnas death benefit scheme (currently 0.3% of one's base salary). From these figures, we can estimate the total cost of the Jamsosnas program (for formal sector workers) will be between 17.29% to 18.80% of a formal sector worker's base salary (see Table 2 below).

Table 2. Estimated Jamsosnas Contributions/Premiums for Formal Sector Workers (% of wages)

Program	Total Jamsostek Contribution Rates	Total Known Jamsosnas Contribution Rates	Total Jamsosnas Contribution Rates (Estimated)
Workplace Accident Benefits Program	0.24 – 1.74 (5 classes)	0.24 – 1.75	0.24 – 1.75
Death Benefits Program	0.3	Unknown (Paid in full by employers)	0.3
Retirement Benefits Program	5.7	Unknown (equal contributions for old-age pension and old-age savings schemes)	10.75 (4.75% for old-age pension and 6% for old-age savings schemes)
Healthcare Benefits Program	3 – 6	6	6
Total	9.24 – 13.74	6.24-7.75	17.29 – 18.80

Source: Author's calculations.

3.2. Institutional Information

A National Social Security Board will be set up to oversee the program. It will consist of 15 members, including five representatives from central government ministries and agencies (Ministries of Health, Manpower, Social Affairs, Social Welfare, and Finance), five from employers' associations (Indonesian Employers' Association - Apindo, Indonesian Chamber of Commerce - Kadin, etc.), and five from labor unions. The members will be appointed for a term of three years, which may be renewed for an additional three years (GOI, "Academic Paper" 16-17; GOI "Draft" sec. 64).

The National Social Security Provider Agencies will manage the Social Security funds on a day-to-day basis. Responsibilities of these agencies will include ensuring workers make monthly contributions to the national social security fund, issuing social security identification numbers to every citizen in Indonesia, and managing the national social security fund. The management of these agencies will be appointed through shareholder meetings (GOI, "Draft" sec. 49).

The National Social Security Agencies will consist of the different social security agencies: PT Jamsostek (which will manage the pension and health insurance programs for formal private sector employees), PT Askes (which will manage health insurance for civil servants), PT Taspen (which will manage the pension program for civil servants) and PT Asabri (which will manage the pension program for those in the armed forces). These institutions will continue to operate their respective programs, without causing any losses for existing participants in their schemes. These institutions will remain for-profit state-owned enterprises (*persero*).[11] However, the bill drafters stated that these companies will receive a special status as special perseros (*persero khusus*), whereby they will be obliged to run the National Social Security programs on a not-for-profit basis and their social security revenues will not be subject to income tax payments (GOI, "Draft" sec. 40- 41). In reality, having *persero* and *persero khusus* legal status at the same time would be contradictory and many legal experts have questioned whether this arrangement would work. In addition to the four existing social security companies, a new company will be created to handle programs for informal sector workers and recipients of the government's social assistance schemes (GOI, "Draft" sec. 78).

In accordance to the regional autonomy policy that was implemented in Indonesia in 2001, the regions will be responsible for administering the National Social Security Program within their own regions through the branch offices of the National Social Security Provider Agencies. Responsibilities delegated to the regions will include collecting contributions, distributing benefits to participants, issuing service contracts to health service providers, and designing a fee schedule for the different services provided by health service providers (GOI, "Academic Paper" 20, 34).

As not all regions will be ready to administer the National Social Security Program at the same time, the scheme will be implemented gradually in the regions, depending on their readiness to administer the program within their localities. Different social security programs will be introduced at different times depending on the needs and readiness of local governments. For instance, the health insurance program will be introduced before the old-age pension program (GOI, "Academic Paper" 33).

[11] The original draft of the National Social Security Bill envisioned that these agencies would be converted into a single social insurance agency, which would have been a non-profit entity. However, this proposal was dropped in a later version of the draft.

3.3. A Description of the Public Pension Programs

The public pension program will comprise of two components in Indonesia: the public pension program and the old-age savings program. Each of these programs will be discussed below.

3.3.1. The Old-Age Pension Program

The old-age pension program is a long-term program where participants make regular contributions so that an additional income is available to offset a reduction in or loss of income after retirement. It is a defined-benefit social insurance program,[12] and it will presumably operate as a partially funded pay-as-you-go scheme.[13] As stipulated in the draft law, this program will only accumulate social security contributions for the first 15 years, and will only start paying pension benefits to retirees after this (GOI, "Draft" sec. 34).

This old-age pension scheme has similar features to the publicly-run pension programs established in most developed countries in Western Europe and North America, and to the monthly pension program run by PT Taspen for retired civil servants and their widows/widowers. The program will be further divided into four components: old-age pensions, disability pensions, widow/widower pensions, and child pensions, (GOI, "Draft" sec. 34).

The defined benefit of the old-age pension should normally be a percentage of the average income from the previous year. The fixed minimum pension under the proposed plan has been set at 70% of the minimum wage. The same benefit level also applies to the disability pension program. Widows/widowers and children will receive a minimum pension of between 40% and 60% of the local minimum wage (GOI, "Academic Paper" 59-60). Widows/widows will continue to receive pension benefits until they die, remarry, or start working full-time. Children will continue to receive pension benefits until they marry, start working full-time, or reach 23 years of age, whichever comes first (GOI, "Draft" sec. 34).

According to the draft academic paper, the contribution level for the pension program will be set differently for formal sector workers and informal sector workers. Contributions from formal sector workers will subsidize the pensions received by informal

---

[12] *A defined benefit scheme* is a retirement plan in which workers are guaranteed a benefit upon retirement, usually based on years of service, age, and final or lifetime earnings. The government/employers are responsible for funding the plan's promised benefits and are liable for the risks associated with the scheme. An alternative is the *defined contribution scheme*, that is a retirement plan in which only the contribution rates and bases of benefits calculations are determined in advance (not the benefit level). The benefit is a direct product of the contributions paid to the investment accounts, plus the return on investments from these accounts. The risks, though not the control, of this pension scheme rest with the workers (ILO, xxii; Weller, 3-4).

[13] A *pay-as-you-go* system is a social security system in which no funds are set aside in advance and benefits for current retirees plus administrative costs are paid out of the current workers' contributions (ILO, "Academic Paper" xxii). A *partially funded pay-as-you-go* scheme means that the system is partially financed in advance to create a reserve fund for future use by retirees but does not pay contributions at the present. After the system matures, it would start paying out pension obligation to retirees and then it could return as a full pay-as-you-go scheme.

sector workers. The paper stipulates that contributions from formal sector workers will be shared with their employers on a 50:50 basis. Employers will be responsible for collecting worker contributions and submitting them to the National Social Security Provider Agency. Informal workers and those who are self-employed will contribute a flat-rate amount to be determined later. The government plans to cover pensions for those who are too poor to contribute to the scheme through subsidies from the state budget (GOI, "Academic Paper" 22; GOI, "Draft" sec. 7, subsec. 5).

The retirement age is currently 55, and a worker who has contributed to the scheme for at least fifteen years will be entitled to receive full pension benefits from the program. These workers, or inheritors if a worker dies before reaching retirement age, will receive monthly pension payments. Workers that retire before reaching the fifteen years' contribution requirement above, will be entitled to receive the accumulated amount of their pension contributions, plus the investment returns, in a lump sum. However, they will not be eligible to receive a monthly pension (GOI, "Academic Paper" 56; GOI, "Draft" sec. 34).

3.3.2. The Old-Age Savings Program

The old-age savings program is a long-term program in which participants will be entitled to receive benefits before or upon reaching retirement age and, in the event of the death of a participant, his or her spouse, children, or official inheritors will be entitled to receive benefits. It will be a compulsory savings program. Thus, it will be similar to the compulsory savings program run by PT Jamsostek for private formal sector workers and their families. In other words, it is a fully-funded, defined contribution pension program similar to the mandatory individual retirement account schemes in countries that have adopted the second pillar recommended by the World Bank (World Bank), with one important exception: according to the draft bill, this pension scheme will be run by a public social security agency instead of private investment companies.

The benefits of this pension plan will be provided as a lump-sum payment if a worker dies, becomes permanently disabled, or retires. If a worker dies or becomes permanently disabled, benefits will go to their inheritors (spouses and children under the age of 23). The total amount of program benefits received by members is the entire amount of their contribution accumulated over the years plus the investment returns on their contribution. At the earliest, workers may start withdrawing money from their account five years before they reach retirement age. They may even use a portion of the money saved in their account as a loan after they have made contributions for a given period of time, the details of which will be stipulated in a future government regulation (GOI, "Draft" sec. 30).

Each member must contribute either a percentage of their income (formal workers) or a flat-rate amount (informal and self-employed workers) to this savings program. Contributions from formal workers will be split equally between themselves and their employers. The National Social Security Provider Agency will be required to provide an annual report to each worker on their accumulated contribution and investment returns. Exactly how the government plans to invest the funds collected by this scheme will be stipulated in a future government regulation (GOI, "Draft" sec. 31).

3.4. The National Health Insurance Scheme

As a part of national social security reform, the government plans to create a National Health Insurance (NHI) program that will theoretically cover health expenditures for all Indonesian residents. It is based on the principles of social justice, social assistance, and universal/compulsory participation (GOI, "Academic Paper" 27). All Indonesian residents will have to contribute to this scheme, including upper-income Indonesians and foreigners working in Indonesia, groups that are presumably already a part of good health insurance schemes.

The program will be implemented in stages, first for formal sector workers and then for informal and self-employed workers. Formal sector workers must pay a 6% payroll tax, split equally with their employers. Retirees will also pay the 6% tax and this will be deducted from their pension. Exact contributions from self-employed and informal sector workers will be decided on at a latter date. The government will pay contributions for those with a low income or who are unemployed (GOI, "Academic Paper" 41). It is unclear whether this will be the responsibility of the central government or the local governments. The law defines "low-income participants" as those whose income is lower than the regional minimum wage (UMR) in the district where they live (GOI, "Academic Paper" 6).

The NHI program is designed to provide comprehensive health benefits, ranging from preventive treatments such as immunization and family planning to treatment for catastrophic illnesses such as heart and kidney diseases (GOI, "Draft" explanation to sec. 13, subsection (1)). The law defines standard health services as primary health services, referral services, and other supporting health services. Primary health services are services that are provided through the government's health service facilities, and include general practitioners, dentists, medical facilities, mother and child health facilities, maternity hospitals, and other primary health facilities (provided by the private sector). For in-patient services, the health benefit is equivalent to health services in class II private hospitals. Referral health services are health services provided by specialists, dentists, hospitals, and other specialist health service facilities. Finally, other health services include prescription drugs, laboratories, and other services (including prenatal-postnatal services) (GOI, "Academic Paper" 24).

The government plans to compensate providers using the capitation-based reimbursement system, mainly through the Diagnosis Related Groups (DRGs) scheme.[14] Services will be delivered by both public and private hospitals and health clinics, as long as they agree to the terms of conditions stipulated in the service contracts they sign with the National Health Insurance Provider Agency (GOI, "Academic Paper" 40). However, there is no requirement for service providers to provide health services to NHI participants seeking treatment in their facilities. Thus, some providers might choose not to sign contracts with the National Health Insurance Provider Agency and therefore not accept patients covered solely by the NHI scheme.

[14] *Diagnosis Related Groups (DRGs)* are categories of illnesses and treatment types defined by the National Health System. They determine how much a hospital/clinic will be paid for an individual's treatment under a capitation-based reimbursement system (Rosen, 331).

The NHI program will be administered by the National Health Insurance Provider Agency, which will be supervised by the National Social Security Board. Its functions will include determining general policy regarding the implementation of the NHI program, selecting health service providers, and making payments directly or indirectly to health service providers for medical services provided to participants (GOI, "Academic Paper" 38). The agency's management will be appointed for a period of five years at the agency's shareholders meetings (GOI, "Draft" sec. 54).

In accordance with regional autonomy policy, the National Health Insurance Provider Agency will establish regional offices. These branches will be set up based on the readiness of the regions to administer the program, although the implementation of the NHI program in the regions will receive higher priority than the other Social Security Programs (GOI, "Academic Paper" 33). Regional offices will have broad authorities in implementing the NHI program in their regions, including the authority to:

1) determine the level of investment of social security funds in the regions;
2) issue service contracts to health service providers; and
3) create fee schedules which will determine the payments to health service providers for the services they provide (GOI, "Academic Draft" 34).

IV. AN ANALYSIS OF THE PROPOSED INDONESIAN SOCIAL SECURITY REFORM BILL

4.1. A General Analysis

Based on the results of our analysis of the current National Social Security Reform draft bill (dated January 16, 2004), we can make the following conclusions. Actuarial calculations which provide a sound basis for determining contribution levels and the real benefits of the scheme have not been included in the draft law, and there have not been any reliable economic analyses on the short and long-term impact of this scheme on the labor market, Indonesia's business competitiveness, and the Indonesian economy in general. In the absence of such analyses, the impact of this scheme on the economy remains questionable and the adequacy of the proposed contribution rate in paying actual program benefits remains doubtful.

The National Social Security Program (consisting of public pension, NHI, workplace injury, and death benefit schemes) would also become a significant financial burden for employers and workers, since they will be expected to contribute between 18% and 20% of workers' wages, which would be a 5% to 7% increase from the current Jamsostek contribution rate. Thus, the Jamsosnas scheme could create a substantial burden for formal employers and workers and could further reduce the competitiveness of Indonesia's business climate, as it creates substantial new labor costs for companies. As a result, there could be significant incentives for employers to shift the cost of these contributions to workers by lowering their take-home pay and benefits and reducing the number of employees, which means that in practice, the total cost of paying for these schemes would be solely born by workers. This could reduce the income of low-middle income workers who rely on this salary.

According to the Jamsosnas academic paper (GOI), contributions from formal sector workers will be set at a much higher rate than that from informal sector workers and the self-employed, since it is assumed that the payroll tax paid by the former group will subsidize the social security benefits of the latter groups. However, the draft bill does not clearly define or explain this cross-subsidization scheme. Thus, the new social security scheme would become less attractive for these workers and the incentives for evasion could be substantial (e.g., switching to the informal sector where the contribution rates are much lower).

It is also questionable as to whether workers who work in the formal sector (one third of Indonesian workers) can fully subsidize those in the informal sector. Experiences in other developing countries show that similar social security programs only cover a small proportion of the workforce. For instance, the Philippines has had a social security program for 45 years and whereas about 72% of the workforce are members of the pension program, only 28% of these workers actually pay their compulsory contributions (Capulong).

In addition, past attempts to collect social security contributions from informal sector workers, both in Indonesia and other developing countries,[15] have shown that it is very difficult, if not impossible. This is because many informal workers are very mobile in terms of their place of work, the type of jobs they undertake, and where they live. Thus, trying to find a particular worker in the informal sector from one month to the next in order to collect their social security contribution is probably a futile exercise. As a result, many informal workers are not covered by any social security scheme, either because tax collectors cannot contact them or because they fail to claim the social security benefits they are entitled to, even though they have made some contribution to the scheme. As a result, informal sector workers continue to be excluded from publicly-sponsored social security schemes, despite many arguing that they are the ones who need social security protection the most.

The program could also have significant managerial and governance problems. Even though the National Social Security Board will consist of representatives of the government, employers' associations and workers, most of the board members will come from government ministries and agencies. Additionally, the proposal does not address the possibility of collusion and nepotism during the selection process, so the government could appoint private sector and labor representatives who support the interests of government bureaucrats. As a result, board members representing employers and workers might not necessarily work in the interests of these groups.

The program will continue to be administered by several state-owned enterprises, which will be established as for-profit corporations and be obliged to contribute to the government's budget. Current social security schemes administered by for-profit state enterprises have failed to provide adequate benefits to beneficiaries because of the small number of people they cover, relatively small benefits, low investment returns, and poor governance. It is doubtful that the new social security scheme will be different from previous government programs if it is administered by the same state-owned enterprises without any fundamental change.

Finally, the government's proposal disregards the role of competition in providing social security benefits to Indonesians, as according to the bill, the government will be solely responsible for social security provision, in spite of the fact that most formal sector workers already obtain adequate health and retirement benefits from their employers. The government alone will continue to make decisions on how the fund is managed, invested, and distributed among beneficiaries, while workers themselves will not be allowed to participate in the decision-making relating to the trust fund, even though it is actually their own money and most Indonesians workers have little confidence in publicly-run social security schemes.

[15] In 2002/03, PT Jamsostek conducted a pilot project that attempted to collect Jamsostek contributions from informal sector workers. However, due to the many difficulties it found in collecting contributions from them, it has now postponed this project. It now states that the responsibility to collect social security contributions from informal sector workers should be done by another government entity (Schroeder-Butterfill, 65).

Evidence from other countries (notably Latin American and Eastern European countries) shows that entrusting the operation of the national social security system to the same party that regulates it (i.e., the government) simply does not work. The government-run social security programs in these countries are always prone to empty promises of generous benefits that the governments are not able to accomplish financially, and continued corruption and abuse of social security funds by officials. This indicates that it is not a good idea for the government to regulate as well as operate the national social security scheme. These functions need to be separated in order to have a truly functional social security system that is beneficial for workers.

4.2. An Analysis of the Proposed Public Pension Scheme

4.2.1. The Old-Age Pension Scheme

The proposed Indonesian old-age pension scheme has been designed as a social insurance system, which will operate as a partially-funded, pay-as-you-go defined benefit program. It will be a compulsory, universal insurance program for all Indonesian residents, regardless of their nationality and working status. As a compulsory insurance program, the scheme will avoid the problem of adverse selection,[16] since no one will be able to opt out of it and choose an alternative pension plan. However, it could suffer from moral hazards,[17] in which workers might cut their savings because they believe they will receive pension benefits when they retire. Thus, overall welfare of workers could worsen with public social security since they may have little private savings to supplement their income from the public pension scheme.

The defined benefit system adopted by the scheme would place significant financial risks on employers and the government, because they might have to be responsible for making additional contributions to the scheme in case it runs into serious financial problems.[18] In the case of Indonesia, there is a high probability of the program running into deficit, because it will offer very generous pension benefits, with a minimum benefit of 70% of the local minimum wage. Since many Indonesian workers, especially those who work in the informal sector, have earnings below the local minimum wage, many of them will receive this guaranteed benefit. Due to the substantial liability, the possibility of serious financial problems in this pension scheme in the future is quite high.

In addition, the fact that the benefits of the old-age pension scheme seem to be determined based upon the minimum wage could create additional demands from workers and labor unions for the government and employers to increase the minimum

---

[16] *Adverse selection* is a situation in which only people who feel the need to be protected from a given risk (e.g., loss of earnings due to death, disease or accident) are willing to obtain insurance, while those who do not feel this need do not. This negates the purpose of insurance, which tries to spread this risk amongst all members.

[17] *Moral hazard* is a situation in which individuals are more willing to pursue riskier activities because participate in an insurance scheme.

[18] Section 42 of the Jamsosnas Bill states that the government could adopt extraordinary actions to maintain the financial solvency of the NSSPA, for instance, bailing out NSSPA if they become financially insolvent or bankrupt.

wage, so that workers can earn higher pension benefits. If the government was to give in to such pressures, it would incur additional pension liabilities in the future, something that could further endanger the government's fiscal position and sustainability in the future, when the time comes for the government to start paying pension benefits. In 2003 and 2004, the local minimum wage (UMR) increased between 10-15% on average. If this trend continues we can expect pension benefits and therefore costs to rise between 10-15%, whereas inflation would be around 6-7% per annum.

In addition, the government's plan to subsidize the coverage of low-income persons is also questionable. According to the draft law, Indonesians whose income falls below the UMR will be considered as "low-income" earners and therefore will be eligible to receive a government subsidy to help cover their Jamsosnas contribution. However, there is a substantial number of Indonesians who earn less than the UMR, especially those who work in the informal sector or are not permanently employed. If there were too many Indonesians eligible to receive this subsidy, the government would have to commit significant resources to cover this subsidy. Consequently, this could put significant financial strain on the government budget. It is not clear whether the government plans to pay for this subsidy using general revenues or other channels such as surpluses generated by the investment of the National Social Security Trust Fund. It is also unclear how the government will allocate this subsidy to the recipients (direct payments to beneficiaries, payments to health providers, etc). If this issue is not addressed, it could become another factor that could raise doubts over the long-term sustainability of the national social security program.

In addition, the proposal seems to fail to take into account that the Indonesian population is aging rapidly. It is estimated that the proportion of Indonesians over 55 years will increase from about 10% of the population in the year 2000 (about 23 million) to about 30% by 2050 (about 100 million) ("Indonesia"). At the same time, the Indonesian population aged 65 years and older will rise dramatically during this period, from 10 million in 2000 (4.5% of the population) to 60.5 million in 2050 (18% of the population) ("Indonesia"). Thus, the elderly will be more of a burden to Indonesian families (and taxpayers) by the year 2050.

The combination of a relatively young retirement age (55 years), low number of working years to qualify for pensions (15 years) and a rapidly aging population, is a recipe for disaster for any public pension program, and it seems that this proposed scheme will suffer from such a fate and become financially unsustainable. Attempts to correct the problem such as raising contributions and cutting pension benefits are only temporary fixes that will make the program less attractive to participants. Eventually, the pension scheme could suffer from a default, which would place significant financial liabilities on the government and employers as well as result in a significant loss of retirement income for workers.

Experiences from other developing countries such as the Philippines show that the liabilities of social security pension funds could be substantial. In the Philippines, the number of new retirees eligible for pension benefits more than doubled in the 1990s. This caused the funds accumulated in the country's social security trust fund to decline significantly, so that it is now predicted that the fund will be completely depleted by the year 2015. If this occurs, the Philippines social security system will run into significant financial problems – the hidden public pension debt is estimated to be about US$21 billion (Rp200 trillion) (Capulong). We could predict that if the same situation occurs in Indonesia, which has a population about three times larger than the Philippines, the Indonesian government and eventually Indonesian citizens, would be obliged to pay a substantial number of new debts that could be up to three times larger than the debt incurred by the Philippines' social security system (around US$ 63 billion or about Rp598 trillion). Since Indonesia has a large amount of public debt (estimated at US$136 billion or around Rp1.292 trillion) as of March 2004 ("Central Bank"), this country cannot afford an extra Rp598 trillion in debt.

Finally, it is estimated that the impact of the proposed Jamsosnas old-age pension scheme on the current Indonesian elderly population would be minimal. Since the system is a partially funded pay-as-you-go scheme, unless they make contributions, the current retirees will not benefit at all. Although it is the current poor retirees that need Jamsosnas old-age pension scheme the most, they do not have the financial resources to contribute to the scheme.

People who retire between when the Jamsosnas pension scheme takes effect and when it will start paying pensions (about fifteen years after its establishment according to the draft law) will also not benefit from the Jamsosnas pension scheme. As stipulated in the draft law (GOI, "Draft" sec. 34, subsection (5)), they will not be eligible to receive a pension. They will only receive the money accumulated in their old-age savings accounts (contribution plus investment earnings).[19] However, in general, only those who retire fifteen years after the Jamsosnas pension scheme has been in place and have made regular contributions to the scheme will receive pension benefits.

Thus, unlike what has been claimed by the proponents of the Jamsosnas bill, the Jamsosnas pension scheme will not be very helpful for current retirees who do not have the resources to contribute to the scheme. However, this group is still vulnerable to old-age poverty, if not more so compared with future retirees that will have participated in the Jamsosnas pension scheme. Consequently, the government might have to establish a separate pension or income support scheme for this group.

4.2.2. The Old-Age Savings Scheme

Since the proposed old-age savings scheme is similar in many ways to the current Jamsostek provident fund scheme (both are fully funded, defined contribution schemes fully paid from workers' contributions), we can look at the experiences of the Jamsostek scheme in anticipating the problems in the new old-age savings scheme. As stipulated in section II, the Jamsostek scheme suffers from a low participation rate, a low compliance rate, low investment returns, as well as poor governance and offers few benefits. These factors have significantly reduced the real value of the Jamsostek scheme as a possible source of income for its participants. Thus, many participants do not regard Jamsostek as a reliable source for their post retirement income.

[19] The only exception is when a worker dies before reaching retirement age or has contributed to the Jamsosnas pension scheme for fifteen years. In these cases, their inheritors (surviving spouse and children) will continue to receive their pension benefits until they die or start working full-time (or for the children, when they reach 23 years of age) (GOI, "Draft" sec. 34, subsection (4) and (7)).

One lesson we could draw from Jamsostek is that without significantly reforming the financial and managerial governance of the current old-age savings program, it is unlikely that the performance, investment return, and benefits of the new scheme will improve significantly. This would make the proposed old-age savings scheme unattractive to participants and, like with Jamsostek today, they would not regard it as a potential source of their old age income and would continue to rely on private voluntary savings schemes.

4.3. An Analysis of the National Health Insurance Scheme

The NHI scheme is the most ambitious of the government's current efforts to extend health insurance coverage to all Indonesians, something that the government has never done before. Given that in the past, the government's involvement in the healthcare sector was minimal, spending only 0.6% of the national GDP on health care in 2000 (UNDP), the proposed NHI scheme is a dramatic expansion.

While the government's efforts to implement this scheme have been commendable, there are several questions that could be raised regarding the proposed plan. First, many questions have been asked about the exact financing of the scheme and whether the benefits offered by the program will be adequate in comparison to the contribution rates one must pay. The 6% contribution rate for the health scheme is higher than contributions in East Asian countries that have adopted similar NHI schemes, such as Thailand and South Korea.[20] This is a substantial financial burden for formal sector workers and their employers, which would significantly reduce their take-home pay, because it is assumed that employers would reduce salaries in order to pay for their share of the payroll tax. It is also questionable as to whether Indonesian workers who work in the formal sector could fully subsidize health insurance for informal sector workers or two-thirds of Indonesian workers.

The types of health services that would be covered by the NHI scheme are also unclear. The government has stated that not all health services will be fully covered by the NHI program, and thus to pay for these services, participants are expected to obtain coverage from private health insurance providers or pay them out-of-pocket (GOI, "Academic Paper" 37). Neither the Jamsosnas draft law nor its accompanying academic paper explicitly state what health services are going to be covered by the program or what services are not going to be covered. There have been suggestions that the NHI scheme will follow the guidelines established by the World Health Organization (WHO). If this is correct, the services covered by the program will be quite limited and many new modern treatments will not be covered by it. In other countries, NHI schemes normally pay for both standard and extra/additional services.[21]

---

[20] For instance, the contribution rate for the NHI scheme in Thailand is only 3% of payroll and the contribution rate for the for the NHI scheme in South Korea is about 4% of payroll. The benefits offered in these countries seem to be much more comprehensive than the benefits to be offered in the Indonesian program. For details, see U.S. Social Security Administration (1999).

[21] However, it must be stated that most of these countries (notably those in Europe and North America) have experienced difficulties in fulfilling the obligation to pay the cost of their national health services in full. Most of them have plans to shift some of the cost of paying for these services by requiring participants to pay some of the costs for more expensive treatments via co-insurance and deductible charges.

Thus, it is reasonable to question whether the Indonesian NHI scheme really provides good value for its participants, given the high contribution rates required to fund it and the low level of benefits offered by the scheme. One estimation (Bird) found that the average benefit for recipients would be around Rp188,000 per person (assuming that only formal sector workers contribute and receive benefits). If the program were extended to include the entire population without contributions from informal sector workers (because their coverage is subsidized through the state budget), then the average benefit would be reduced to Rp52,000 per person, an amount so small that the benefits would be inadequate in paying for the healthcare expenses of NHI participants.

Another valid question is whether all healthcare providers in Indonesia (both in the public and private sector) are willing to participate in the scheme. The draft law does not require all health providers in Indonesia to participate in the scheme. Given that most health providers in Indonesia are paid on a fee-for-service basis rather than a prospective/capitation fee reimbursement scheme, many of them would naturally prefer the former and it is feared that many of these providers would decline to treat patients relying exclusively on the NHI scheme, insisting that they have to pay for the services not covered by the NHI scheme in full before they could be admitted by these providers.

It is feared that most private hospitals and health clinics will not participate in the scheme and thus only public hospitals and health centers will join it, because they are required by the government to do so. If the above assumption is proven correct, both the choice and the quality of treatment available to patients will be severely limited. This is a strong possibility, given that in the past, most health providers were not willing to join the Askes and Jamsostek health schemes due to the fact that they used a capitation-based reimbursement system instead of a fee-for-service system. Providers argued that under such a system, the amount of money reimbursed would be much lower than the actual costs incurred, forcing them to bear substantial losses from providing health services to patients who are members of these schemes.

It is also questionable as to whether the contributions mandated by law at present (6% for formal sector workers) would be sufficient in meeting the future health expenditures of Indonesians, especially if one considers that the Indonesian population will age quite rapidly within the next few decades or so. Since older people tend to generate higher health expenditures than younger people, the cost of providing adequate health care for elderly Indonesians will increase significantly. It is doubtful that the current contribution rate will cover health expenses for all Indonesians during the next few decades. Higher contribution rates would be required, which would increase the burden for workers and employers and could cause the Indonesian economy, already less competitive compared with our neighbors today due to the presence of many legal and illegal taxes and fees, to become even less competitive.

Finally, the current government plan seems to be very ambitious in wanting to achieve universal healthcare coverage for all Indonesians within a very short period of time (less than a decade). While this goal is commendable, realistically, the process to achieve universal health coverage in many countries often takes a very long time. For instance, it took 24 years for South Korea (from 1976 to 2000) to achieve universal health coverage for its citizens (Kwon). Thailand created its NHI scheme in 1990, but only in 1999 was it fully functional, and it will take many years for the scheme to achieve its goal of providing universal health coverage while at the same time also remaining financially sustainable (Asher). Anyone who expects that universal health coverage can be achieved within a short time period is seriously being misled and without taking this fact into account, the process of implementing the NHI scheme in a very short period of time could have disastrous results.

V. CONCLUSION AND POLICY RECOMMENDATIONS

5.1. General Conclusions

Indonesia is at a crucial stage in its attempt to extend social security coverage to Indonesian workers and reform its current social security scheme so that it works better for the workers in the system. The current social security system is not sustainable and has not been successful in providing adequate benefits to participants, thanks to a relatively low rate of worker participation in the scheme, low rate of return on the national social security fund, and poor management of the scheme. Therefore, many parties acknowledge that a fundamental overhaul of the system is badly needed.

The current Indonesian social security reform proposal as stated in the draft of the National Social Security Reform Bill could create a disincentive for Indonesian workers to save, does not treat all workers equally, sets up a benefit level that is too generous and could endanger the fiscal sustainability of the government. In addition, the program does not take into account the country's rapidly aging population, which could put additional fiscal strain on the government, and ignores the potential for poor governance and management. All of these issues could jeopardize the health and retirement prospects of Indonesian workers and could force them to live below the poverty line after they have retired.

In most countries in the world, publicly financed social security schemes are no longer viewed as ideal. Many of these countries have pursued other alternatives to achieve universal social security coverage for their citizens and at the same time maintain competition and choice. Financing and providing social security should no longer be regarded as a government monopoly. There are many cases in which the involvement of the private sector in the provision of social security could positively improve service delivery, promote competition and innovation that would improve social security provision, and eventually, improve health and retirement outcomes for participants.

Many developed and developing countries have introduced reforms to overcome the financial problems inherent in defined benefit pension schemes. Recent reforms adopted in many other countries are built around "three pillars" that provide old-age pensions and health insurance.[22] Indonesia could learn from these international experiences with pension reforms. The three-pillar strategy is based on the following principles:

- The first pillar is a public pillar that provides a social safety net – this resembles existing public pension plans such, as Jamsostek, but it is smaller and focuses on providing a social safety net for the elderly, particularly those whose lifetime incomes were low.

[22] For further details on the three-pillar system, see World Bank (1994).

- The second pillar is a program fully managed and funded by the private sector which handles mandatory retirement schemes and insurance for participants – linking benefits to contributions as in a defined contribution plan. Under a defined contribution plan, a worker's pension is linked to his/her contributions plus the return on investment. This program is fiscally sustainable in the long run as benefits are tied to worker's contributions and therefore avoids pension costs in the state budget.

- The third is a voluntary pillar for people who want a higher income in old age. The three-pillar approach allows private sector participation to diversify risk. Workers and employers have the option to choose a social security program that is suitable for their own needs and wants. The government can design a mandatory social security program but it is not necessary for the government to run the program as a monopoly. The program could be run cooperatively by state enterprises, private sector enterprises, and not-for-profit organizations (NGOs). However, experiences show that the program would earn better returns for its participants if it were run by the private sector. The three-pillar option includes both public and private sector management. This is a safe social policy as it spreads risks among different providers.

The government also plays an important role in two ways:

- First, to ensure implementation and enforcement of necessary regulations and to establish prudent financial regulations for pension funds.
- Second, to provide a separate social assistance program to help the poorest citizens who are no longer able to work. This would be funded through the national budget.

Countries that have accomplished the above reform scheme include Argentina, Chile, and Mexico (developing countries); Croatia, Hungary, Latvia, and Poland (former socialist countries); and Australia, Germany, Sweden, and the United Kingdom (developed countries). In addition, several other countries such as Brazil, China, and India (developing countries); Russia (former socialist country); and Italy, Singapore, and the United States (developed countries) have either planned or have already started to reform their national social security schemes using the above methods. In virtually every country that has adopted the three-pillar social security system, it has been credited in raising economic growth, competitiveness, the saving rate, and program benefits, as well as improving the business climate, and thus has increased the welfare of participants (and citizens).[23]

5.2. Reforming the National Pension Scheme

The current world trends in pension provisions are characterized by a shift from a pay-as-you-go pension scheme to a fully funded one, and from a publicly run system to a privately run one, and from the increasingly recognized economic fact that the government cannot serve as both the regulator and provider of a given public service. As seen in case studies, numerous developing (and developed) countries have successfully reformed their public pension schemes using the three-pillar paradigm, and thus increased worker confidence in the scheme, increased their investment returns, and improved the governance of schemes. Therefore, the Indonesian government should seriously consider changing its public pension scheme into a privately managed pension scheme based on the three-pillar paradigm.

[23] For instance, see Fox and Palmer (1999).

As a matter of fact, Indonesia already has the foundation for an individual retirement account scheme, because, the current provident fund scheme under the Jamsostek program is similar to individual accounts in many ways, since both schemes are fully funded and non-redistributive in nature and have defined contributions. The only major difference is that the provident fund scheme is managed by a government entity (PT Jamsostek), while the individual account scheme is managed by the private sector. While the government scheme has many problems, it is estimated that these problems would be minimized under private management. Additionally, due to the fact that Indonesia already has a defined contribution, fully funded retirement scheme, the transition from public to private management would be smoother compared to countries switching from a pay-as-you-go, defined benefit, publicly managed pension scheme to a fully funded, defined contribution, privately managed scheme. Thus, public pension reform in Indonesia would be less painful than the reform process in most European and Latin American countries, which mostly use the latter pension scheme.

In this private scheme, workers should be given the choice to either manage their accounts by themselves with assistance from a financial management firm or have their accounts managed by their employer. At the same time, appropriate regulations to safeguard workers' investments for their retirement need to be issued and enforced by the government. Such regulations should be kept to a reasonable level to prevent the government from intervening in the management of public pension funds while at the same time should ensure the safety of these funds from possible fraud, waste, and abuse. For this reason, the government should also possess the capacity and political will to enforce these regulations without any biases or prejudices towards any parties in order to maintain worker confidence in the system.

5.3. Reforming the National Healthcare Scheme

The same also goes for national healthcare reform. Instead of requiring citizens to participate in a government-run national health scheme, with high contribution rates but low benefits, that would reduce the country's competitiveness in comparison to neighboring countries, the government should use incentives to induce people to purchase private health insurance. This could include a tax credit to help pay health insurance premiums or a medical savings account plan set up by private financial firms in which workers could save a portion of their salaries, and if they made withdrawals from this account for their healthcare needs, they would not be subjected to any taxes or fees.

Health policy experts have advocated the creation of a public-private partnership in healthcare provision, in which the government delegates some of its responsibilities in healthcare (such as providing health services) to the private (both not-for-profit and for-profit) sector, while maintaining its functions to collect contributions and issue regulations. There are many developing countries that have been successful in creating such a partnership at the same time as achieving near-universal health coverage for their citizens, such as Chile, Columbia, and Venezuela.[24] Another policy that could be pursued by the government is promoting the creation of microhealth insurance schemes and community/occupational health funds for informal sector workers.

[24] For details, see Jutting (2002) and Van Ginneken (2003).

Such policies would help obtain universal health coverage for all Indonesians while at the same time promote competition and innovation in the country's healthcare market as well as increase the competitiveness of the Indonesian economy. This is appropriate because the private sector has already played a major role in the Indonesian healthcare system. Thus, they have to be given a significant role in the country's efforts to achieve universal healthcare coverage.

Finally, since most Indonesian workers still work in the informal sector, special consideration needs to be given to informal sector workers. A universal healthcare coverage scheme should incorporate the needs of informal sector workers living in different regions and settings in Indonesia. Thus, it is preferable for this scheme to be decentralized so that local conditions and needs can be accommodated. It is also preferable for the scheme to be established by a given community or an association of workers in a similar profession (e.g., an association of *becak* drivers, food peddlers, etc.) to create common links between individuals working in such professions/communities. Thus, the scheme would be truly in the interests and needs of the workers/communities.

5.4. Concluding Remarks

In short, the time is right to simultaneously extend social security coverage to both formal and informal sector workers in Indonesia and reform the existing social security system through competition and private sector participation to help Indonesia meet the goal of providing social security provisions for all Indonesian citizens and a system that works better for all Indonesians. If this reform is successfully accomplished, it is hoped that Indonesia will truly become a joyful and prosperous nation as our founding fathers envisioned when they declared independence.

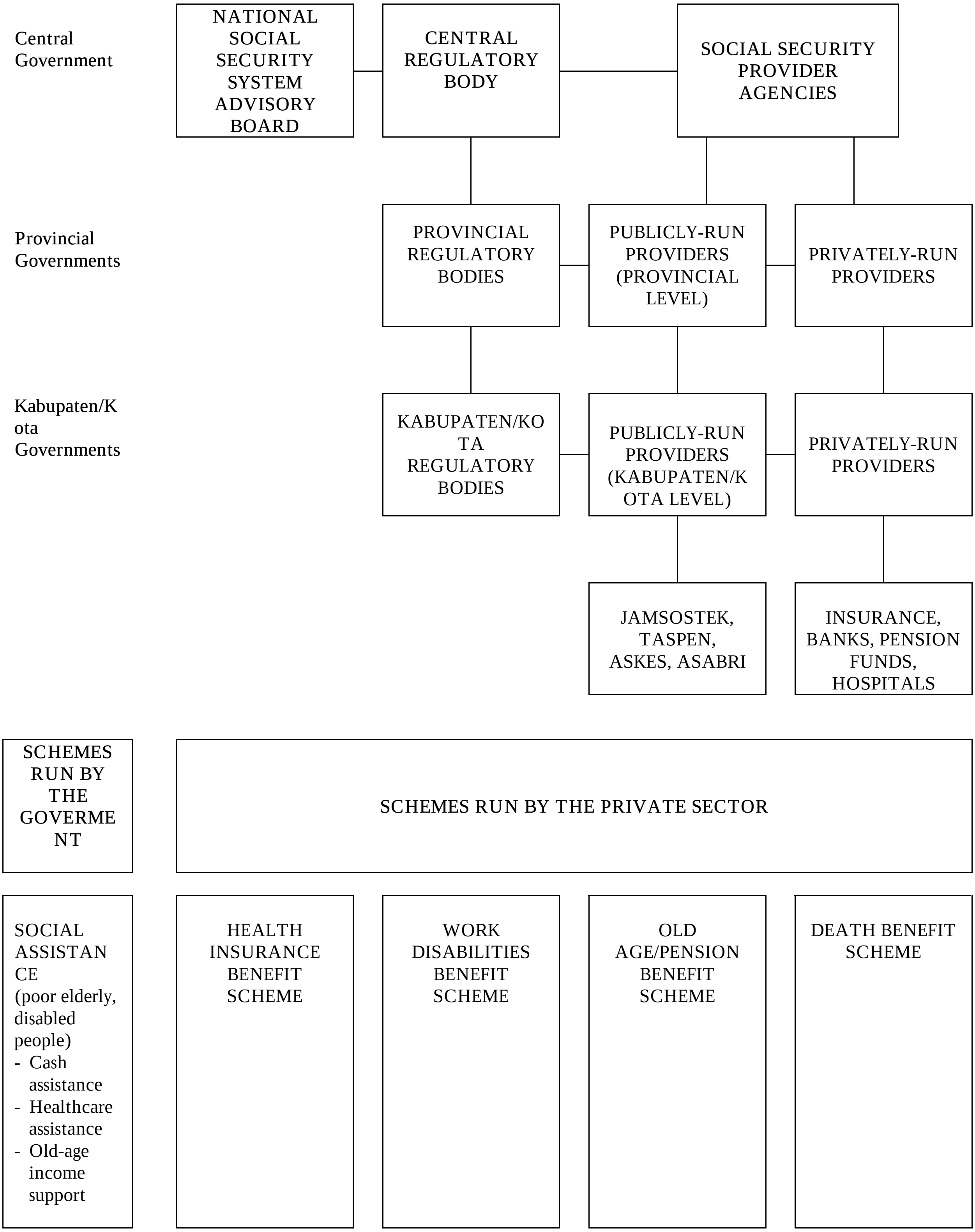
APPENDIX

Figure 1: Comparison Between Defined Benefit Social Security Schemes And Defined Contribution Schemes

Issues	Defined Benefit Social Security Scheme as Proposed by the Jamsosnas Draft Bill	A Hypothetical Defined Contribution Social Security Scheme under the "three-pillar" paradigm
Funding system	Partially funded pay-as-you-go system, which will be funded until the trust fund matures. Then it will revert to a full pay-as-you-go scheme in which current pensioner benefits are subsidized by current worker contributions.	Fully funded system, where pensioner benefits are derived solely from contributions they paid during their working years, plus any investment returns. No intergenerational cross-subsidy.
Who manages the funds/assets	Government monopoly. Role of the private sector is minimal or nonexistent.	Could be administered competitively by government enterprises, the private sector, and the non-profit sector, but it is usually most effective under private sector management.
Aging population	Vulnerable, since the increase in the number of pensioners occurs at the same time as the decline in the number of younger workers. Eventually, the system would not be financially sustainable because it benefits would outweigh contributions.	This problem is largely avoided, because participants fund themselves, so there is no cross-subsidy from the younger generation (workers) to the older generation (pensioners).
Links between benefits and the minimum wage (UMR)	Both are closely interlinked, thus, program expenditure would increase if the minimum wage were increased. Inevitably, the system would not be financially sustainable, because benefits would outweigh contributions.	This problem is avoided, because there is no relationship between the two.
Impact on fiscal sustainability/state budget	Very large, since any subsidies for participants or the program itself would come from the state budget. As a result, the country's fiscal sustainability could be threatened.	No impact, because there is no requirement for the government to pay subsidies to the program, as the program would be funded by participants. However, the government would be responsible for funding the social safety net component (the first pillar). Fiscal sustainability would be largely assured.

Issues	Defined Benefit Social Security Scheme as Proposed by the Jamsosnas Draft Bill	A Hypothetical Defined Contribution Social Security Scheme under the "three-pillar" paradigm
Implicit new debts	The program's expenses could significantly increase the government's debt in the future, which in the end would be passed on to participants through increased contributions/taxation.	Participants themselves would cover any expenses. The government has no obligation to help pay debts/expenses. However, the government would be responsible for funding the social safety net component (the first pillar).
Investment returns	Very low, because usually the funds would only be invested in banks or government bonds which have lower returns. They would also usually only be invested domestically.	Likely to be very high, since participants would be able to choose their own investment scheme according to their needs (i.e., bank deposits, bonds, mutual funds, stocks, etc.). Funds could also be invested abroad.
Program coverage	While officially all citizens would have to participate, in practice only a small number of participants would actually make contributions. Due to the high contribution rate, there would be a tendency for people to avoid paying it by moving to the informal sector.	Usually higher participation rates, because of the low contribution rates and there would be freedom to choose investment managers and instruments according to participants needs.
Impact on investments and economic growth	Largely negative, because high contribution/tax rates would deter investors and in the end reduce economic growth.	Largely positive, because the contribution rate would be relatively low. Funds could be invested in productive sectors, which might increase the investment rate, savings rate, and economic growth.
Impact on labor market	Negative, because it would tend to increase the unemployment rate and force formal sector workers to move to the informal sector.	Positive, because it might stimulate new investments, which would certainly create new jobs.

Figure 2: The Indonesian National Social Security System Based On The Three-Pillar System



WORKS CITED

Asher, Mukul. "Social Security Reform Imperatives: The Southeast Asian Case." Unpublished paper. 20 April 2000. Accessed 27 August 2004 <http://www.fas.nus.edu.sg/ppp/docs/wp/wp02.pdf>.

Bird, Kelly. "The Proposed Social Security Program Law." *Unpublished paper*. Growth through Investment and Trade (GIAT) Project, USAID and Republic of Indonesia, 2003.

Capulong, Rizaldy. "Restoring Actuarial Viability to the Social Security Program." Paper presented at the Bappenas/GIAT Workshop on Options for Establishing a Viable Social Security System. Jakarta, 24 June 2004.

"Central Bank: RI Foreign Debt at US$136.10 Billion as of March." Jakarta Post 7 June 2004. Accessed 7 June 2004 <http://www.thejakartapost.com/detaillatestnews.asp?fileid=20040607124252&irec=4>.

Fox, Louise and Edward Palmer. "New Approaches to Multipillar Pension System: What in the World is Going On?" Presented at the World Bank Conference on New Ideas about Old-Age Security. The World Bank. Washington. D.C., September 14-15, 1999.

Government of Indonesia. "Academic Paper for the Proposed National Social Security System." 10 October version. Jakarta: 2003.

---. "Draft of the National Social Security System Law." 16 January version. Jakarta: 2004.

"Indonesia: Midyear Population by Age and Sex: 2000 to 2050." US Census Bureau International Data Base. 2004. Accessed June 4, 2004 <http://www.census.gov/cgi-bin/ipc/idbagg>.

International Labor Organization. *Social Security and Coverage for All: Restructuring the Social Security Scheme in Indonesia – Issues and Options*. Jakarta: International Labor Organization, 2003.

Jamsostek, PT. "Profil Perusahaan" [Company Profile]. PT Jamsostek: Jakarta, 2001.

Jutting, Johannes. "Public-Private Partnerships in the Health Sector: Experiences from Developing Countries." Extension of Social Security Papers No. 10. Geneva: Social Security Policy and Development Branch, International Labor Organization, 2002 .

Kwon, Soonman. "Achieving Health Insurance for All: Lessons from the Republic of Korea." Extension of Social Security Papers No. 1. Geneva: Social Security Policy and Development Branch, International Labor Organization, 2002.

Leechor, Chad. “Reforming Indonesia’s Pension System.” Policy Research Working Paper No. 1677. The World Bank. Washington, D.C., October 1996.

Perwira, Daniel, Alex Arifianto, Asep Suryahadi, and Sudarno Sumarto. “Perlindungan Tenaga Kerja Melalui Sistem Jaminan Sosial: Pengalaman Indonesia.” [Workers’ Protection Through Formal Social Security System: The Indonesian Experience]. Working Paper. Jakarta: The SMERU Research Institute, 2003.

Rosen, Harvey. *Public Finance*. 5th edn. New York: McGraw Hill, Inc.,1999.

Schroeder-Butterfill, Elisabeth. “Need Analyses Report on Training and Dialogue Programs for Old-Age Provisions in Selected Southeast Asian Countries: Indonesia.” Report prepared for InWEnt (Internationale Weiterbilding und Entwicklung gGmbH), Economy and Economic Policy Division. Germany, 2004.

United Nations Development Program. “Human Development Report: Millennium Development Goals: A Compact Among Nations to End Human Poverty.” Annual Edition. Oxford: Oxford UP, 2003.

United States. United States Social Security Administration. *Social Security Program Throughout the World*. 1999.

Van Ginneken, Wouter. “Extending Social Security: Policies for Developing Countries.” Extension of Social Security Papers No. 13. Geneva: Social Security Policy and Development Branch, International Labor Organization, 2003.

Weller, Christian. “PURE: A Proposal for More Retirement Income Security.” Economic Policy Institute. 2002. Accessed August 27, 2004 <http://www.cepr.net/pages/progressive_agenda/pages/retirement_Income.htm>.

The World Bank. *Averting the Old Age Crisis*. Oxford: Oxford UP, 1994.