THE SOCIAL SECURITY SYSTEM IN INDONESIA: CURRENT INVESTMENT ISSUES AND FUTURE PROSPECTS

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Abstract

This paper will elaborate the benefit of a mandatory employee social security system (Jamsostek) as a basic pension system. The potential of Jamsostek to be the largest investor is significant with which it has power to raise funds through a working society and administers their database. Jamsostek (formerly known as Astek) was founded in 1977 as a state entity which develops employment accident, health care, death and provident fund schemes for employees. Membership of Jamsostek was previously those working for medium to larger scale company's employees, however, recently the top priority to be given is directed toward the extension of coverage across smaller employers. In term of financing the schemes, eligible employers on behalf of their employees pay the contributions to Jamsostek. The current investment policy is conservative in shares because of the investment guidance which has been applied to Jamsostek limits the allocation of fund to shares or other risky financial asets. As a result, the allocation of funds (which account fors about 70% of total funds) is deposited into bank time deposits. Another problem which recently arises in particular for accumulating a long term fund is early withdrawal of provident fund account by the members. It can be met by the members so far as their membership has been at least 5 years and 6 months. The last is that they are undergoing a lavoff from the employer.

1. Background on Jamsostek

Over the past twenty years, the employee social security system (Jamsostek) has been remarkably succesful¹. Jamsostek had been carefully phased and gradually implemented before 1992. Conceptionally, it is a protection system for employees against occupational, sickness, death and old age risks and is a compulsory social security scheme for all the categories of paid workers. In other words, social security benefits are basically designed to provide a lumpsum income support for those having an accident at work, died before age 55 and achieving an retirement age. The amount of benefits provided for employees is much lower than those provided by commercial insurance. The size of the benefits is subject to the contribution rates, gross pay of employees as reported by employers to Jamsostek and promised rate of interests on provident fund. To finance the schemes, both employers and employees make contributions proportionately to the schemes while employers are required to pay the contribution higher than employees.

Top priority for developing social security in Indonesia over that period was given to protect employed people in particular those working for the economic formal sectors but this does not mean to ignore the protection of those working for the informal sector. Employed people must be protected first by Jamsostek because protection of employees closely relates to the promotion of human resources development. Under this concept, employers shall provide their employees with necessary vocational training and basic social security.

Additionally protection of people working in the formal sector is more significant than those working casually in the sense that they are dependent on employment system. Although social security schemes for those working in the informal sectors were undeveloped, people in Indonesia can survive without the financial assistance from the government. A tax-finance social security scheme will not be developed in the near future, however, in place of that, the underground economic sector is still needed to provide more casual jobs. Nevertheless, social security plans as a whole embrace development of a private pension plan.

The legal provision of Jamsostek is Law No. 3 Year 1992². Under the Law, furthermore not only provides work accident, death and provident fund but also provides a health care scheme. A health care program is very typical for any entities organizing social security schemes which include unemployment benefits and family allowance assistance and the provision of a health care scheme is directed to improve the health of employees. Additionally, employees who work for smaller employers feels more secure to join Jamsostek because of a health care scheme. The eligible employers under the Law include those smaller employers having at least 10 persons or a monthly payroll of Rp. 1 Million (about US\$ 425). The aim of which is to extend the coverage of membership across many more small employers including family employers. However, extension of coverage across

smaller employers is still a major problem in Indonesia because of the employer's financial shortage which relates to provide a payroll on an minimum basis.

Before 1992, the coverage of membership was limited to the schemes covering only occupational, death and old age risks. Additionally, coverage of employees was limited to those working for medium to large scale companies. In other words, only employers having industrial relations and those having at least 100 employees as well as a monthly payroll of Rp. 5 million could be covered. And this had brought about inequality in the provision of a basic protection for employees working in the smaller employers as recently there are about 16 million employees more who recently work under the smaller employers have not been protected under Jamsostek. For that reason, Law No. 3/1992 was enacted in order to embrace a broader scope of protection.

Another legal provision of Jamsostek was also Law No. 14/1969 that it was regarding the manpower protection. Under the old law, all employers were obligated to provide a health care for employees and their families but in practice the operation of a health care was not in operation because it was not compulsory. In many cases, there is a great concern for Government ie. the Ministry of Manpower in order for Jamsostek to manage this basic health care scheme. Jamsostek is the only state entity licenced to manage only a floor protection scheme including a primary health care scheme. To operate the scheme, Jamsostek will charter numbers of both public and private hospitals to be operated as Hospital Maintenance Operations (HMOs).

The philosophy of developing a health care scheme under Jamsostek is that of two considerations. The first is that development of a health care is very costly for employers while the participation in private sickness insurance is also very expensive. The second is due to the aim of national development, viz. to focus on the development of a national healthc system. Jamsostek's primary health care scheme is established on referring to the aim of national development.

Health care scheme under Jamsostek is mandatory³ although in practice the coverage of this scheme is subject to optional. In this case, smaller employers have the only option to join a health care scheme because it is relatively cheaper than building a clinic. A mandatory health care scheme is a managed scheme in which Jamsostek administers the membership database and collects contributions from the employers. Part

of the contributions will be paid out to the appointed hospital on a capitation system. A referral system is also applied for those require an advanced medical treatment and specialists.

So far as a primary health care scheme is considered significant for improving health of employees and their families because of a cheaper scheme. The government will support the scheme although it is compulsory. The implementation of employment accident has also been important for employees, employers and the government. Employment accident is as a means of creating the demand for employees protection against occupational and death risks. The impact of this is the increases in the productivity gain of the employees.

Unlike a provident fund, employment accident and a health care as elaborated above are sensitive to a contingencies risk so part of their contributions is reserved. Provident fund is a basic pension component. The government in this case the Ministry of Finance acknowledges Jamsostek's provident fund as a defined contribution plan (DCP) so the investment earnings of that fund is not taxed. Investment sources of Jamsostek are mostly derived from a provident fund and its accumulated interests which account for more than three quarters of the total funds.

The organization of the paper is as follows. The first chapter is to present background on Jamsostek and its potential for the establishment of institutional investor. The second chapter is to highlight progress achieved in term of developing programs and of covering more employees after 1993. The third illustrates the investment pattern of Jamsostek directed to conservative policies and the fourth chapter is the development of future prospects of Indonesian funds and their potential to be larger institutional investors in Indonesia. The fifth chapter is the presentation of Indonesian pension programs which focuses on the coverage of private pension plans and the investment barrier of the plan. A concluding part of the paper is finally presented.

2. Progress Achieved in Jamsostek

The prospect of Jamsostek in the future relied on recent development. It illustrates progress achieved in Jamsostek over 1993-1997. Progress achieved here will be elaborated in term of increasing in the coverage of new employees and the contributions received as well as the benefits paid (see Table 1). The role of Jamsostek in the national development brings about the employers to concentrate more on a vocational training for the development of human resouces. In the year 2000, Indonesia commits itself to develop science & technology and the appropriate development of human resources is required. One of the requirements to be met is a basic protection for all workers.

Jamsostek is expected to provide a basic protection in order for employees to be able to contribute continuously to the development of science and technology. Jamsostek is needed to protect them in the future because recently there are about 16 million paid workers which are not protected by Jamsostek. The potential of Jamsostek's membership will be to cover 16 million paid workers. They are as labor input for the development of science & technology. Additionally, the impact of this coverage can also contribute to the accumulation of pension funds in Indonesia.

It is not surprising that respective employers shall bear social security costs in Indonesia to undertake the security of their employees. Theoretically, because they use employees as an asset of the firm. One crucial reason to develop compulsory social security is expected to cover all paid employees, although the process of coverage across many more smaller employers may be extended in phase.

It is government's concern to make Jamsostek as an integral part of manpower protection and employment sector through the distribution of regional divisions. Nevertheless, Jamostek must be developed as networked organizations in order to embrace the extension of the coverage of new entry across smaller employers, NGO and permanent teaching staff of the private universities. One important reason for giving priority to the extension of this coverage is to create equal protection for all segments. Strategy developed for extending new coverage is an intensive campaign, talkshow and promotion through mass media. Cooperation with the Ministry of Manpower, Regional Divisions of Manpower and Jamsostek as well as local municipalities is also fostered as they have power to enforce employers to join Jamsostek.

MEMBERSHIP IN JAMSOSTER					
DESCRIPTION	1993	1994	1995	1996	1997
1. Labor-force (Million)	81.6	83.7	85.7	87.8	90.1
2. Employment opportunities (Million)	78.8	81.1	83.4	85.7	88.2
3. Unemployment (Million) (1) - (2)	2.8	2.6	2.3	2.1	1.9
4. Number of paid workers (Million)	24.5	25.1	25.7	26.3	27.1
5. Membership of Jamsostek:					
a. Paid employees (Million)	6.3	7.6	9.1	11.0	14.6
b. Employers (Thousand)	48.3	51.6	60.1	68.7	83.1
6. Potential Membership (Million) (4)-(5a)	18.2	17.5	16.6	15.3	12.5

TABLE 1.
LABOR-FORCE, EMPLOYMENT OPPORTUNITIES AND EMPLOYEE
MEMBERSHIP IN JAMSOSTEK

Source: Ministry of Manpower, Central Bureau of Statistics and JAMSOSTEK 1996-2000 (points 4 & 6 modified)

Table 1. presents highlights of Indonesian labor-force, employment opportunities and development of Jamsostek membership in term of covering employees and employers between 1993 and 1997. According to the version of the Ministry of Manpower, Indonesian labor-force are those people whose age vary at between 15 and 55 years, ready for seeking a job and those include attending the school and universities but not in the position to work. Number of households is excluded in this concept. Employment opportunities in Indonesia are those working both for formal economic sector and for underground economy called informal sector.

The percentage composition between numbers of workers working for formal and informal sectors recently is approximately 30% and 70%. In other words, those working for formal sector are called paid workers. Average growth rate of labor force over 1993-1997 is approximately 2.3% and while rate of unemployment on the same period is about 2.7%. This means there are about 2.3 million people seeking a job p.a. that they cannot be absorbed by employment opportunities.

In respect of Jamsostek, the coverage of employees has yet to be extended across the rest of the number of paid workers. Number of paid workers over 1993-1997 is respectively between 24.5 million and 27.1 million that those recently being covered under Jamsostek is about half of the number in particular 1997. Number of paid workers recently uncovered by Jamsostek is the potential of Jamsostek that the number has been decreasing from 18.2 million in 1993 to approximately 12.1 million workers in 1997. The potential number of 12.1 million workers which happen in 1997 is expected to decrease sharply by respectively 8.1 million in 1998, 5.3 million in 1999 and 1.7 million in 2000. So in the 21st century all paid workers are expected to be protected under Jamsostek.

The impact of increased coverage on the accumulated funds is significant. In developing countries like Indonesia, rapid growth of investment assets is merely due to the increases in new coverage and not to be generated by investment earnings, because capital market is not well developed. The investment earnings of the funds is the only return that can bear the promised rate of interests and the operation costs of funds. Capital gain generated by the funds can add directly to the growth of assets because of the international diversification. Recent investment policies direct to make one single asset investment which means that almost 80% of the funds are allocated into bank time deposits although the funds invested are long term in nature. As a result, the fund failed to generate a long term rate of return.

Performance of Jamsostek is seen from its capacity to generate a future income and collect more incoming funds, pay out the benefits quickly for the members and issue a statement of accounts. Highlights of incoming funds and outgoing funds as reflected by the contributions received and the payment of benefits of employment, health, death and provident fund as well as to bear the operation costs of Jamsostek are presented in Table 2 below.

DESCRIPTION	1993	1994	1995	1996	1997*
1 Contributions received	504.2	724.8	883.2	1,110.3	1,429.6
2 Benefits paid	92.6	123.3	210.4	270.9	351.9
3 Operational costs	78.7	89.4	133.7	137.9	165.9
4 Gross surplus	38.5	99.8	81.9	115.4	137.6

TABLE 2. INCOMING AND OUTGOING FUNDS OF JAMSOSTEK (Billion of Pupink)

Source: RKAP, Directorate of Finance & Investment Jamsostek (1997)

3. The Investment Pattern

Investment pattern of the funds in general refers to the diversification of assets both localy and internationally. Investment pattern which focuses on diversification of assets is called a dynamic pattern while those concentrated on one single asset is a static pattern. A static pattern does not refer to strategic planning. The understanding of investment policy is also a form of long term strategic planning. The form of that investment policy can be either aggressive, moderate or conservative and those depend on the investment benchmark. Investment benchmark in Indonesia refers to interest rate on time deposits. Bailey (1991) argued that investment policy comprises the set of guidelines and procedures that direct the long term management of a plan's assets.

However, investment policy of the funds in reality varies from one to another country and, it sometimes does not follow that procedures above. There are many more potential funds in Indonesia in particular private pension plans that they failed to generate future income this is becasue capital market is undeveloped. As a result, the investment benchmark applies to the interest rates on time deposits in the sense that investors will compare to time deposit interest prior to invest in other assets. Investment problems in Indonesia are due to limited asset holdings that although shares and bonds are permited to invest, however, shortage of supply of those assets remain.

According to Thorbecke (1992), there are 6 (six) financial assets recently held by both individual and institutional investors in Indonesia. Those are currency, demand deposits and time deposits (including saving deposits), deposits in foreign currency, foreign bonds and equity.

- a. Currency, demand and time deposits are the deposit instruments held by both individual and institutional investors and intended to secure the funds from a volatility risk. Deposits in foreign currency is a type of time deposits which is designed to protect depositors' capital loss in case of devaluation of rupiah.
- b. Foreign bonds are distinguished from deposits in foreign currency in the sense that the former are deposited or invested abroad, but the latter are held in domestic banks. Holdings of foreign bonds may be considered a capital flight.

c. Equity issued by a firm is defined as total assets - borrowing from banks, government and abroad. Thus, any direct borrowing by firms from households is regarded as an equity holdings of the company and is calculated as a residual in the financial markets.

Because of the limited asset holdings, investment pattern of Jamsostek is a conservative policy in that the allocation of the assets limits to risky financial assets such as shares. Individual investors are free to hold any assets in including foreign currencies, foreign time deposits and other financial instruments. The holding in foreign currencies is designed to protect financial asset holdings of all individual investors against the loss of capital due to the depreciation of Rupiah towards the US Dollar. Jamsostek had benefitted from a windfall profit as a result of holding in foreign currency deposits in 1984.

The allocation of assets refers to Government Regulation No: 28 Year 1996 that it is an investment guidance for Jamsostek. It is not an investment guidance which refers to shares and bonds for long term purposes but preferably to short money market instruments. The regulation states that the allocation of the assets must be directed towards the following assets: bank time deposits, commercial papers and certificate of Bank Indonesia (CBI). Before 1995, investment policies of Jamsostek referred to the Finance Minister's Decrees of 1985, 1988 and 1995 on investment management of pension funds. Investment in domestic shares is tolerated for a maximum allotment to 20% of total investment funds.

Nevertheless, the form of investment guidance for Jamsostek then followed what has been implied for private pension plans. Although the investment pattern was conservative in shares, it does not mean to ignore the significance of investing in shares and recently Jamsostek has learned from the experience of Australian Price Waterhouse and Indonesian mutual funds in early 1995 that the future investment directives would be to include the investment in Indonesian mutual funds.

Dynamic investment philosophy that is to diversify assets of the plan into many countries as the sun usually shines on them somewhere. Recommendation for international diversification is now still under review and it is is considered significant because in the short run the fund does not pay the liquidity. In respect of this, seminar on pension investments was also on the smooth and elaborated that allocation of the fund must be subject to a disciplined top down asset class, country, industry, stock and currency allocation process. In practice, the investment pattern remains conservative because of the conservative investment guidance recently applied to the plan limits the investment in shares.

Many more local pension funds were in cooperation with fund managers to invest in shares. For example, Jamsostek has also set up the investment portfolio in shares, however, the first priority in alloting the funds would be to invest in blue-chip shares such as telecom, bank and electricity shares. In Indonesia, investment diversification still means to distribute assets into a variety of financial products including time deposits and certificate bank of Indonesia.

Under the new regulation, there is a small allotment of funds to be held in nonfinancial assets eg. property. Although, there is freedom to hold any assets both financial and real assets. For individual investors, it is free to hold any assets as Indonesia applies to free capital account. Nevertheless, asset holding of Jamsostek refers to Government Regulation No. 28 Year 1996 which limits the allocation of funds to property.

Conservative investment guidance for Jamsostek means to secure its funds in particular provident fund although it is not a real pension plan. Another consideration to secure the fund is that almost 90% of Jamsostek's funds are in the form of accumulated provident funds plus accumulated interests accrued at total investable funds and the rest were contingencies fund. As a result, almost 80% of the investment funds were directed towards cash deposits and bonds. The aim of this allotment is just to generate a normal rate of return as far as interest rates on time deposits remain high so the market value of assets also increases between 1993 and 1996.

Under article 3, paragraph 1 of the Government Regulation No. 28/1996, the definition of assets of Jamsostek includes (a) investment funds, (b) cash on hands and cash in bank and, (c) contributions receivable. There is another form of investments called land & buildings and corporate shares. Total assets of Jamsostek are also investment funds (which mostly derived from accumulated provident funds) as the funds have accounted for about 95% averagely between 1993 and 1996 (see Table 3).

DESCRIPTION	1993	1994	1995	1996	1997*
1 Total assets	2,068.1	2,726.5	3,436.9	4,430.3	5,812.6
2 Investment funds	1,841.8	2,492.5	3,229.1	4,193.2	5,521.4
3 Investment return	194.3	227.1	320.7	436.9	570.8
4 ROI (3)/(2)	10.5%	9.1%	9.9%	10.4%	10.3%
5 Accumulated contributions of provident funds including interests	1,566.1	1,810.1	2,861.3	3,713.3	4,908.8
6 Contingencies funds	266.1	232.6	266.3	301.1	403.8
7. Funding ratio (1)/(5)+(6)	1.12	1,33	1.09	1.10	1.09

TABLE 3. BRIEF FINANCIAL DATA OF JAMSOSTEK (BILLION OF RP)

Source : Directorate of Finance & Investment (modified) and 1997* estimated.

The obligation of Jamsostek as the administering board to the members is to fulfil the payment of benefits of provident funds, employment accidents, health care and death when they are due. This will be endangered to Jamsostek because of the decreasing funding ratio. Funding ratio declined by 1.09 in 1995 and it was increased only by 1.10 (see Table 3). Under article 4 paragraph 1, Jamsostek is obliged to calculate reserved funds on employment accidents, health care and death called technical reserves (contingencies fund). Provident funds and technical reserves are the main sources of investable funds.

Under the Government Regulation No. 28/1996: Chapter III, article 5 paragraph 1 states that the accumulated contributions of provident funds plus interest credited to the funds and contingencies fund which account for about 95% of the assets must be deposited or invested in the following instruments.

- 1. Bank time deposits and certificate of time deposits
- 2. Certificate of Bank Indonesia (CBI)
- 3. Corporate shares and bonds as listed in Jakarta Stock Exchange
- 4. Unit trust funds
- 5. Corporate equity
- 6. Land & buildings.

Maximum allotment of Jamsostek funds to bank time deposits, CBI and Corporate Bonds is respectively 70% of the investment funds and the rest may be tolerated to a maximum of 10% of the investment funds eg. the placement of funds to corporate shares.

Below are the investment restrictions for Jamsostek. The restrictions are provided under article 6 of the Government Regulation No. 28 Year 1996 which elucidates that the investment of Jamsostek funds must be directed towards the investment in secured financial assets.

- 1. derivatives instrument
- 2. foreign exchange and future trading
- 3. foreign investments
- 4. direct participation in the insurance companies
- 5. any entities owned directly by Board of Directors, Board of Commissioners
- 6. family employers or companies.

Investment restrictions in particular foreign investments are based on the Government policy which was directed towards mobilising domestic savings. All state owned enterprises concentrating on fund industries such as insurance and pension are expected to sponsor the mobilisation of domestic savings. As a result, domestic savings have risen steadily at 27% of GDP between 1989 and 1993 and the impact of that saving mobilisation was the investment funds, although the funds increased by 29% of GDP (Radelet, 1995:64)

The problems of developing capital markets in Indonesia were due to a limited supply of corporate bonds and government bonds. As a supply of those financial assets are limited, the investors particularly pension funds and social security institutions deposited most of their assets into bank time deposits, as investing in overseas countries is not allowed. In addition, as far as the interest rates on bank time deposit remain higher, people remain conservative to invest in capaital market instruments. Depositing in bank time deposits is inefficient in the long run although they provide a higher return in the short run, but in the long rung the return will be eroded by inflation rate (see Table 4).

Key Indicators	1994	1995	1996
GDP Growth	7.3%	7.5%	7.8%
Inflation Rate	9.24%	8.64%	7.0%
Foreign Reserves (\$ Billion)	11.35	13.25	14.50
Prevailing Interest Rates	14.27%	15.73%	15.0%

TABLE 4. ECONOMIC INDICATORS IN BRIEF

Source: JSX (1996) and Central Bureau of Statistics (1997).

Table 4. indicates economic indicators in brief which include economic growth, inflation rate and foreign reserve. Rates of economic growth between 1994 and 1996 were moderate in the sense that it grew respectively by more than 6% p.a. However, inflation rate in Indonesia was considered high at between 7 and 9% p.a. that the rate of nominal return on investment was eroded by the inflation rate. Suppose we take 100% investing in bank time deposits in 1995, the real rate of return on 100% invested in bank time deposits would be (15.73% - 8.64%) 7.09%. In the long run, real rate of return at 7.09% was also depreciated against US\$ (eg. in 1986, US\$ 1 = Rp. 1200.- and recently in 1996 US\$ 1 = Rp. 2,375), because of the currency realignment. However, bank time deposits are still the best investment instruments in Indonesia compared with the scarcity of bonds which are appropriate with the characteristics of Jamsostek funds.

Over the period 1978-1995, the investment policies in practice of Jamsostek had been concentrated on deposit of funds into Government Bank time deposits and Certificate of Bank of Indonesia (CBI). Although there was allotment of funds deposit to private bank time deposit, it is a small portion of allotment. Empirically, the investment pattern was likely to be concentrated on deposits of funds and has yet to be very conservative to invest in any other instrument investments such as bonds and shares. Deposits of funds into bank time deposits are eroded by inflation rate, because of nominal return minus inflation rates. This was calculated using the formula of Irving Fish on nominal and real interest⁴. Inflation rate in 1995 was 8.64% and interest rate on time deposits in 1995 was 16% and the real return on the deposits of funds at 75% into bank time deposits in 1995 was between 3-4% p.a.

Progress in Jamsostek was earmarked by increases in the value of investment funds, viz. from Rp. 3,229.1 billion in 1995 to Rp. 4,193.2 billion in 1996. As a result of the

increases in investment funds, assets of Jamsostek also increased from Rp. 3,436.9 billion to Rp. 4,430.3 billion in 1996. Liabilities side of Jamsostek which include provident funds and technical reserve also increased respectively from Rp. 3,127.6 billion to Rp. 4,014.4 billion in 1996.

Although there was a significant increase in the value of investments in 1996, the investment portfolio of Jamsostek funds over the period 1978-1996 remains unchanged. They have mostly been concentrated on one single financial asset eg. time deposit. This is because there is limitation to invest in overseas countries and or in overseas investment instruments. Empirically, the allotment of Jamsostek funds between 1994 and 1996 was as follows.

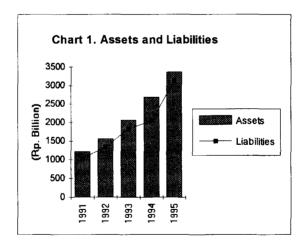
	Type of Investments	<u>1994</u>	<u>1995</u>	<u>1996</u>
1.	Time Deposits including on call	59.8%	57%	58%
2.	Certificate of Bank Indonesia	20%	18%	17%
3.	Bonds	9%	10%	10%
4.	Shares	6%	9%	6%
5.	Equity	2.4%	1.6%	1.5%
5.	Notes & Commercial Paper	2.0%	3.8%	-
6.	Property	<u>0.8%</u>	<u>0.6%</u>	<u>7.5%</u>
		<u>100%</u>	100%	<u>100%</u>

Source: Division of Investment 1996 (modified).

In the case the investment portfolio remains constant until at the end of this century, Jamsostek will suffer from a potential loss, because investment return would be eroded by inflation rate. The targeted investment return of Astek which is maximally at about 13-14 per cent p.a would be considered a threat to set a promise of 10 % interest accrued at the accumulated account of provident funds.

Liabilities are defined as the inclusion of the accumulated provident funds plus technical reserves. Other sources are defined in this context as assets minus liabilities, what we called in theory as surplus of funds which consists of (paid in) capital and retained earnings. Increased surplus indicates that the development of Jamsostek can be overfunded and that surplus can be reinvested in blue chip shares in order to generate capital gains. If surplus increases sharply then the funding ratio tends to rise as the increase of the value of assets is quicker than that of liabilities. It is defined as assets to liabilities ratio. Liabilities here mean to include the summation of contingencies fund to accumulated provident funds.

For illustration, the funding ratio of Jamsostek as provided in Table 3 illustrates financial data of 1993-1997 and the ratio achieved in 1996 was still less than 1.10. However, as seen from Chart 1 that the funding ratio as illustrated by financial data of 1991-1995 was also less than 1.10. This means that surplus has not increased quicker, because no capital gain was generated by Jamsostek both over the period of 1991-1995 and that of 1993-1996. Although no rule of thumb is applied to measure what is the minimum funding ratio, however, the funding ratio of US pension funds in 1990 was about 1.75. The assets of US pension plans have been almost doubled the market value of the liabilities. Nevertheless, it can be concluded that the growth of investment funds in Indonesia is still impacted by the growth of (new) coverage of employees.



Funding ratio of Jamsostek over the period 1991-1995 was relatively low at less than 1.1 except the ratio of 1994. To achieve a target of funding ratio at between 1.3 and 1.5, modern portfolio theory need to be applied for future development of the investment

pattern and strategy. The development of dynamic investment pattern should do the following action (see Cummins, 1977:105-112):

- 1. The investment managers of funds should be able to evaluate the investment in shares and bonds by analysing portfolio risk level (beta),
- The investment managers of funds should be able to do evaluation of overall market by appraising individual stocks and to be able to have information on a longer term economic indicator,
- 3. The investment managers of funds should be able to get access to develop direct investments.

Allotment proposals of funds to the tolerable financial and real assets as mandated to achieve a long term rate of return at between 13-14% p.a. (see Purwoko, 1995:40) as follows.

1. Rupiah time deposits and the likes	35 per cent
2. Government & corporate bonds	30 per cent
3. Corporate shares	20 per cent*
4. Land & buildings	10 per cent
5. Others	05 per cent

Rupiah time deposits would be the first option, however, a proportion of funds allocated to corporate bonds is proposed to increase by 30% of the investment value. Superscript * is a proportion of 20% of Jamsostek funds which are tolerable to be invested in blue-chip shares such as telecom and Bank BNI. The proposal to fix at 20% investment in blue chip share refers to the Government Regulation No. 28/1996 and the Minister of Finance's Decree No. 78/KMK/1995.

4. Future Prospects of Fund Industries

Fund industries in this context are defined as non-banking institutions (NBFIs). Under the Banking Act of 1992, whose main duties are to raise funds from the society as a whole while their core business are related the field of life, endowment, pension and social security schemes. Fund industries in this case include Jamsostek, Government Civiel Social Insurance (Taspen) and Armed Forces Social Insurance Schemes (Asabri). Aim of their establishment is directed towards the mobilization of domestic funds Although the growth of these Jamsostek and Taspen is now in steady compared with other life industries, their investment portfolio remains static over 1977 onward.

Number of fund industries between 1974 and 1984 were 77 and 89. That increased rapidly between 1994 and 1995 by 150 and 171 industries, which resulted in collecting total gross premiums respectively at Rp. 2.25 trillion and Rp. 5.85 trillion (see Table 5 below). By 1995, a variety of insurance companies as fund industries have been in operation which include 105 loss insurance firms, 73 insurance brokers, 56 life insurance firms, 21 adjuster firms, 18 actuarial consulting firms and 5 social insurance institutions. To measure the performance of fund industries in Indonesia, we apply to measure the value of gross premium in term of GDP. Share of fund industries to GDP was still very low at 1.55% compared to any other Asia Pacific Countries, although Indonesia has been higher than fund industries in Turkey. The following are shares of total gross premiums to GDPs of the selective countries (1995).

Turkey	:	0.88%
Indonesia	:	1.55%
Selandia Baru	;	3.11%
Jepang	:	8.64%
Australia	:	9.05%
AS	:	10.28%
Inggris	:	12.92%

Source: Kompas 18 June 1995.

The following are the growth of net premiums of life insurance industries by the classification of organising boards in percentage term (PDBI, 1996).

1.	State owned enterprises	: 50.2%
2.	Private national enterprises	: 41.2%
3.	Joint venture enterprises	: 8.6%

Number of people holding insurance police in Indonesia by 1995 was 15 million or 7.8% of the total population. In 1990, there were only 8 million people holding insurance police. Compared to 1990, people holding insurance police in 1995 have been almost doubled, because of the Insurance Law No. 2/1992 which provides a guarantee on the protection of the insured. Added to the mandatory membership in Jamsostek in 1995, approximately 20 million people in 1995 have been protected by what we called insurance policy and a basic Jamsostek protection. The problem is that not all Jamsostek members are policy holders and those 15 million policy holders are not merely as employees. Of 195 million population, there were only about 10.25% population recently under the protection of life insurance and Jamsostek. That makes sense when contribution of insurance industries to GDP was recognised absolutely low due to the low quality of income as a whole that GDP per capita in 1995 was US\$ 800. There is no other alternative in a way to provide a protection, except through Jamsostek (provident fund) system, although it is as a floor protection.

Performance of insurance industries has been measured by their ability to generate investment return, the collection of net premiums and the accumulation of investible funds as well as to earn a net surplus. The evaluation of insurance industries here is limited to the state owned insurance enterprises (SOEs), recently licensed to organise programs of social insurance, employees social security, health insurance, life insurance and reinsurance as well as commercial credit insurance including export insurance. SOEs in Indonesia have been the only backbone of the national economy and the government is concerned with paying the liquidity over the time.

TABLE 5. PERFORMANCE OF STATE INSURANCE COMPANIES (RF. BILLION)							
	(Net)	Net	Total	Capital	Technical	Invest-	Returns
	Premium	Surplus	Assets		Reserves	ments	
Jamsostek	1,016.4*	86.5	3,370.8	187.1	266.3	3,264.8	385.0
Taspen	353.7	59.3	3,199.0	379.6	0.0	2,894.7	355.2
Askes	292.6	63.8	414.4	179.1	143.9	362.6	42.5
Jiwasraya	247.0	11.5	823.8	38.4	778.7	726.1	75.6
J. Raharja	160.3	55.8	230.9	170.2	46.3	168.5	16.5
Jasindo	118.1	13.2	379.6	93.8	89.2	172.3	19.2
Indore	84.0	17.8	193.7	-108.4	166.1	106.6	9.5
Asabri	52.9	13.0	418.4	91.1	318.8	394.0	44.8
AEI	15.0	48.3	317.0	212.0	99.5	297.7	37.8
AKI	5.0	42.3	606.8	164.0	229.5	506.1	59.3
Total	2,345.0	411.6	9,954.4	1,406.9	2,138.2	8,893.4	979.5

TABLE 5. PERFORMANCE OF STATE INSURANCE COMPANIES (RP. BILLION)

Source : Pusat Data Bisnis Indonesia (PDBI), Centre for Indonesia Business Data 1996. * For Jamsostek, Rp. 1,016.4 billion is gross premium.

Table 5 exhibits 10 state owned enterprises concentrating on social security, social insurance and life insurance as well as loss insurance, called social & insurance state owned enterprises (SISOEs). These establishments reflect a means for the diversification in mobilising the funds outside the banking sector. Those SISOEs are the backbone of the National Economy although their contribution to GDP recently has been less than 5%. The ten SISOEs are employees social security system (Astek), government civil servants' pension & saving plans (Taspen), Government civil servants health care scheme (Askes), social insurance plans for the Armed Forces personnel (Asabri), traffic accident insurance on travelling (Jasa Raharja), life insurance (Jiwasraya), loss insurance (Jasindo), Indonesian re-insurance (Indore), Indonesian credit insurance (AKI) and Indonesian exports insurance (AEI).

TABLE 6. PERFORMANCE OF INSURANCE COMPANIES INCLUDING SOCIAL INSURANCE FIRMS (RP. BILLION)

BOOME INSERTICE FINIS (IG . DILLION)						
	1990	1991	1992	1993	1994	1995
1 Total assets	6,242.0	7,871.9	9,017.3	11,267.2	14,415.4	17,218.9
2 Technical						
reserves	3,543.9	4,111.8	4,605.2	5,638.0	7,887.5	9,587.6
3 Capital	1,630.5	2,321.5	2,120.6	2,555.9	3,162.7	4,172.1
4 Surplus	503.1	543.9	598.6	571.0	568.2	768.3
5 Gross premiums	2,254.7	2,655.6	3,299.8	4,419.4	5,851.2	7,442.2
6 Net premiums	1,684.3	1,968.4	2,413,9	3,047.1	4,047.2	4,770.1
7 Claims paid	1,016.2	1,529.8	1,630.7	2,018.7	2,018.7	2,309.6
7 Investments	4,996.9	6,270.3	7,145.2	8,816.9	10,696.6	13,951.9

Source : PDBI (Centre for Indonesia Business Data) 1996.

Table 6 shows performance of insurance industries which include Jamsostek, Taspen, Asabri and Askes. Factors used to measure the performance of insurance industries as guided by the Ministry of Finance's Directorate of Insurance was presented in Table 5. In practice, the assets, gross premium, surplus, investments and claims paid have been in use. In 1995, the contributions of Jamsostek's assets, investible funds and gross premiums to those of insurance industries respective have been almost 20%, 24% and 21%. This means that one fifth of assets among 171 insurance companies were derived from Jamsostek.

5. Pension Programs in Indonesia

Pension programs in Indonesia vary from one to another. The programs have been concentrated on employees' protection, government civil servants and employers' sponsorship. Although, the understanding of pension funds refers to employers' pension plans but also includes the provident fund organised by Jamsostek. It has now developed very rapidly in the sense that full attention from both local and international fund managers has been paid to Jamsostek's growing funds. Some are concerned with managing funds in the long run. Their concern is related to the growth of covered employees that will affect an increase in assets value. However, one must not forget provident fund as one of pension components.

The appropriate plan which is best for employers in Indonesia is defined contribution plan irrespective of Jamsostek's provident fund or employers pension plans. In fact, provident fund was introduced in 1977 when Astek (recently known as Jamsostek) was given the task to organise the plan while directly collecting the contribution from the employers. The plan is now extended to embrace the family or small employers with a minimum of ten paid employees. Jamsostek's provident fund is manageable easily as the benefits provided for beneficiaries depending upon the accumulation of contribution paid by the employers and employees to the plan plus investment returns on the fund.

The problem of developing defined benefit plans was due to the ageing population but the benefits of Astek's provident fund depend on generating the fund. Life expectancy in Indonesia has risen from 58 to 64 years and rate of fertility automatically declined in 1994. There will be a tendency that life expectation will rise very quickly up to 29% in 15 years to come. It is recently identified as aging population problems which will impact on the development of a defined benefit plan. The negative impact of their respective changes on this plan is that the growing number of old people will be inappropriate with the number of young people as (prospective) pension contributors, so that results a difficulty in financing the future plan. As a result of this difficulty, defined benefit plan remains inappropriate for Indonesia as the ability of the (respective) plans to pay their promise for their members is determined by the sufficiency of its past service liabilities to support its solvency in the long run.

Under Jamsostek's provident fund, although we recognised that its benefit does not seem appropriate to be consumed by the retired employees in the long run because of a basic lumpsum benefit. For that reason, the Government imposed the Law No. 11 Year 1992 on the establishment of private pension plans. The Law has tolerated to any employers having sufficient financial capability in order to develop the plan for their own employees. Under the Law, they may develop either defined contribution or defined benefit plans. There is no law enforcement on whether employers establish the plan or not.

Under the Law No. 11 Year 1992, there are two forms of private pension plans. The first is the funds administered by employers called employers sponsored pension funds (ESPFs). The second is the funds administered by the insurance and banking companies called financial institution pension funds (FIPFs).

In 1996 there are a plenty of employers who ignore to develop pension plans for their own employees. For illustration, there were about 60,000 employers in 1995 which have joined Astek's basic provident fund and only about 2,000 employers now sponsoring the plan for their own employees. Another problem which was related to the reluctance of employers to establish the plan was financial problem. Indonesia has recently intensified a campaign on encouraging employers to provide minimum wages for employees. Those must be in effective since 1995 in certain provinces while removing different wage levels between male and female agricultural workers.

Empirically, a defined contribution plan is the only choice to be taken by employers although they can develop defined benefit plan. In addition, private sector employees prefer to have a lumpsum benefit than annuity benefits. The obligation of ESPFs to the members is to fulfil the payment of pension benefits when they are due. Sponsoring the funds relateds to the investment management of funds. To manage funds optimally, Minister of Finance's Decree No. : 78/KMK.017/1995 on the investment management of the funds states that the allotment of pension funds must be directed towards:

- 1. Bank time deposits and certificate of time deposits
- 2. Corporate shares and bonds as listed in Jakarta Stock Exchange
- 3. Promissory notes
- 4. Corporate equity
- 5. Land & buildings.

Maximum allotment of pension funds to shares, bonds is limited to 20% of the investment funds and the rest may be tolerated to a maximum allotment of 10% of the investment funds eg. the placement of funds to corporate equity.

6. End of the Paper

Jamsostek is fully funded by employers and employees and benefits size depends on the accumulation of contributions plus investment earnings of the funds. The benefits promised in particular a provident fund are subject to the investment earnings, however, problems related to the development of pension plans were empirically faced with two cases, viz. problem of a minimum wage and shortage of fixed investment instruments eg. government bonds. As a result, the investment funds are mostly focused on the short term cash money markets.

Implementation of Jamsostek in Indonesia was to provide a minimal funded basic pension (that is a provident fund scheme payable on a lumpsum basis) for paid employees and or their heirs. As a result, the participation in pension plans in Indonesia can be diversified into mandatory Jamsostek's provident fund; employers-sponsored pension funds (ESPFs) and voluntary individual pension plan for those wishing to make the plan for their own purpose. The growth of Jamsostek's assets has yet to be generated by the long term rate of returns as the recent growth of the assets was merely due to the quick increases in the new coverage.

Jamsostek is one of fund industries in Indonesia that Jamsotek has performed better over the last 10 years compared to the rest of othe fund industries. Fund industries have repidly developed in the 1980s in particular when the legal entities of social insurance instutions, commercial (life) insurance firms and the employee social security (Jamsostek) have been changed to a more commercial basis. Recently there are about more or less 25 million people as members of 171 schemes and the importance of this membership is that they will be protected against their death, accident, sickeness and old age risks. In the future the fund industries are expected to be the largest institutional investors in order to contribute to the development of Indonesian capital markets.

References

- _____ Government Regulation No. 28 Year 1996 on Investment Management of Employees Social Security Programs.
- _____Kompas Daily News on Performance and Insurance Industries, 18 June 1996, p.23.
 - Law No. 3 Year 1992 on Jamsostek, Jakarta.
- Bailey, Jeffery V, Richards & Tierney, Inc., (1991), 'Investment Policy and Missing Link', Probus Publishing Coy, Chicago, Illinois.
- Cummins, J. David, (1977), 'Investment Activities of Life Insurance Companies', Wharton School and University of Pennsylvania.
- Purwoko, Bambang, (1995), 'A Social Security Highlight in Indonesia: an Economic Perspective', PT ASTEK (Persero), Jakarta.
- Purwoko, Bambang, (1996), 'Indonesian Social Security in Transition: an Empirical Analysis', International Social Security Review 1/96, Geneva.
- Radelet, Steven, (1995), 'Indonesian Foreign Debt: Headed for a Crisis or Financing Sustainable Growth', BIES, Vol. 31, No. 3 December 1995.
- Thorbecke, Erik, (1992), 'Development Centre Studies Adjustment and Equity in Developing Countries: Adjustment and Equity in Indonesia.

¹ The first establishment as a mandatory system was in 1977 when the Government promulgated Government Regulation No. 33 Year 1977 on Astek's schemes which are similar to Employee Social Insurance System.

² Definition of Jamsostek's schemes according to the Law No. 3 Year 1992 is as follows:

a. Employment accident scheme provides the employers with the reimbursement of medical costs and transportation expenses from the place of accident to the hospital. Eligibility to accident benefits is

disability and death allowance for any employees suffering from a work related accident or disease and or dead because of accident.

Temporary disability benefits which are eligible for employees include 100% of earnings for the first 4 months and 50% of earnings thereafter.

b. *Provident fund* is a compulsory saving scheme payable for employees having reached age 55 or due to total permanent disability. The benefit and can be withdrawn by the members when they are unemployed after having membership of about 5 years and 6 months. Promised rate of accrued interest is fixed at 10%.

c. Death benefit is contributed by employers at 0.3% of wages and provides a cash payment to the heirs of an employee who died before age 55. Death allowance and funeral fee: Rp. 1.2 million.

d. *Health care scheme* provides the covered employees with medical services and treatment for outpatient, in-patient, maternity, drugs, delivery and other medical services to the members and their families who fall sick.

Rates of Contributions	ontributions : a. Employment Accident (0.24 - 1.74%)						
	b. Provident Fund	(5.7%)					
	c. Death	(0.3%)					
	d. Health Care	(3 - 6%)					
Group of employment	: Group 1. 0.24% of wages (Serv	ices sector)					
accident contributions	ns Group 2. 0.54% of wages (Agriculture & manufacturing)						
	Group 3. 0.89% of wages (General contractor/trading)						
	Group 4. 1.27% of wages (Ship	-bldg & storage)					
	Group 5. 1.74% of wages (Mini	ing & explosives)					
Breakdown of	:	Employer	Employees				
contributions	a. Work accident	0.24-1.74%	-				
	b. Provident fund	3.7%	2%				
	c. Death	0.3%	-				
	d. Health care 3-6%	-					
	(Single employee 39	% & married emp	loyee 6%)				

³ Prior to 1992, a health care scheme was implemented gradually as a pilot project and the operation of this scheme was voluntary between 1986 and 1991.

⁴ The formula of Irving Fist: Real return = (1+Rn)(Po/Pn)-1, where Rn = nominal interest, Po/Pn = purchasing power when inflation rate is fixed at n.