Business Conditions of Life Insurers and the Variable Annuity Market

1 Introduction

This report is the 2004 edition of the Japan Center for Economic Research's annual analysis of the life insurance industry – what has become the white paper of the life insurance industry -- that we have been releasing since the year 2000. The bankruptcy of any life insurer could have grave effects on not only the policyholders but on the financial system as a whole. With the recovery in the stock market this past fiscal year, the life insurers would appear to have regained their health. However, with the aim to report the accurate, current financial conditions of the life insurance industry, in this report we examine and analyze the financial conditions, profitability and the business indicators of the private life insurers, and the Postal Life Insurance (Kampo).

A ban on individual annuity insurance was lifted in October 2002. One product that has been in the spotlight since then is the variable annuity product. We will take a look at the variable annuities, analyze the market and the product itself. In this discussion, we will also examine the framework of the Policyholder Protection Corporation, and its related public funding issues.

2. Financial Results of Life Insurers

2.1 Overview of Life Insurance Companies

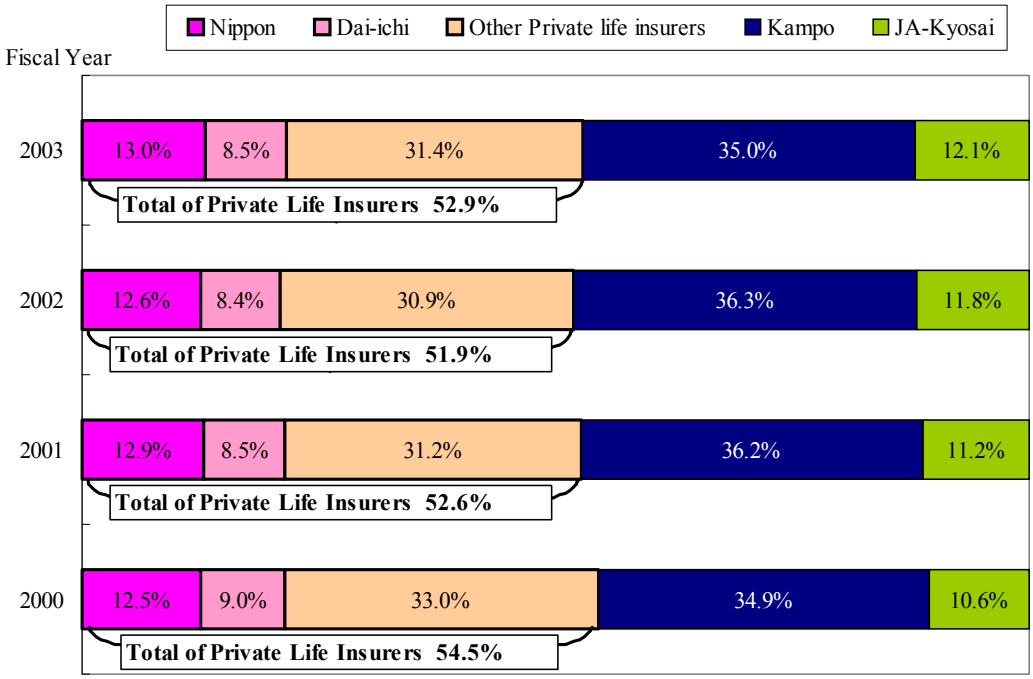
As at September 30 2004, there were 40 private life insurance companies (including branches of foreign life insurers) in Japan. -- 6 mutual companies and 34 stock companies. There are a greater number of stock companies, but the six mutual companies (Nippon Life, Dai-ichi Mutual Life, Meiji Yasuda Life, Sumitomo Life, Asahi Mutual Life, and Fukoku Mutual Life) are all included in the nine major life insurers in Japan. The other three are Mitsui Mutual Life, Taiyo Life, and Daido Life. These nine account for the majority of the current policies in force. Hereafter, we will refer to these nine major domestic life insurers when nine life insurers are mentioned.

Aside from these nine, there are some life insurance companies that related to non-life insurance companies, as well as some foreign capital life insurance companies -- totaling 31. Moreover, outside of private insurers, there is a huge government-run life insurance business called the Postal Life Insurance (Kampo), and also "JA-Kyosai", which is a mutual insurance run by the Japan Agricultural Cooperatives.

2.2 Assets

The total assets of the life insurers as the end of fiscal 2003 (March 31, 2004) totaled 348.8 trillion yen, a slight increase of 0.5% over the previous fiscal year (Figure1). Of the total assets, the private insurers accounted for 52.9%, and Kampo and JA-Kyosai held 35.0% and 12.1%, respectively.

Figure1. Market Share of Life Insurance Business
(Fiscal 2003,Based on Assets)



Source: Disclosure Materials of each company, 2004

The assets of the nine major life insurers on their general accounts at end of fiscal 2003, are broken down and shown in Table 1. On average, 61% of investment assets are held in such fixed return assets as cash and deposits, public and corporate bonds, and loans. Since the bulk a life insurer's liabilities are policy reserves – reserves that are accumulated over the long-term to be paid out in future insurance claims -- their assets need to secure stable income over the long-term. Thus, the share of assets in fixed income vehicles tend to be quite large. The share of public and corporate bonds in their general account assets, fell slightly over the previous year on average for the nine insurers.

Table 1. Breakdown of Assets on the General Account
(As at year-end fiscal 2003)

%

	Cash and Deposits	Bonds	Stocks	Foreign Currency Bonds	Foreign Currency Stocks	Other Securities	Loans	Real Estate	Others	Fixed Return Assets
Nippon	1.1 (-0.1)	33.3 (0.8)	17.0 (3.5)	10.3 (0.3)	2.9 (-0.2)	1.6 (-0.8)	25.6 (-2.5)	4.2 (-0.3)	4.0 (-0.7)	60.0 (-1.8)
Dai-ichi	1.9 (-0.4)	32.4 (-4.0)	14.6 (2.8)	18.1 (2.7)	1.7 (0.3)	0.8 (0.0)	22.5 (-0.4)	4.5 (-0.4)	3.5 (-0.5)	56.8 (-4.7)
Meiji Yasuda	3.9 (0.1)	29.9 (1.1)	13.7 (2.8)	7.8 (2.0)	3.9 (-0.3)	0.5 (-0.1)	32.4 (-1.6)	5.5 (-0.0)	2.4 (-4.0)	66.2 (-0.4)
Sumitomo	1.5 (0.2)	28.2 (-0.6)	7.6 (1.2)	18.9 (1.5)	3.1 (0.1)	0.8 (0.0)	25.9 (-2.1)	6.4 (1.4)	7.6 (-1.8)	55.6 (-2.4)
Mitsui	3.6 (-1.2)	20.9 (-6.9)	8.0 (-0.4)	20.6 (6.0)	4.6 (0.7)	1.5 (0.7)	32.0 (1.4)	5.6 (-0.0)	3.2 (-0.3)	56.5 (-6.6)
Asahi	2.1 (-1.9)	34.9 (3.6)	9.1 (0.8)	14.4 (5.1)	1.7 (0.0)	0.7 (0.1)	24.5 (-6.7)	9.1 (-0.2)	3.6 (-0.7)	61.5 (-5.0)
Taiyo	2.3 (-0.3)	37.8 (0.5)	8.6 (2.6)	11.4 (1.8)	2.1 (-0.2)	1.3 (0.7)	30.7 (-3.7)	2.9 (-0.1)	2.8 (-1.2)	70.8 (-3.5)
Daido	6.1 (-0.6)	42.5 (-9.5)	5.8 (2.3)	7.5 (3.8)	3.0 (0.6)	6.4 (3.1)	19.1 (-1.1)	2.7 (-0.3)	6.9 (1.7)	67.7 (-11.2)
Fukoku	4.8 (-2.9)	41.5 (2.9)	10.9 (2.9)	5.6 (1.8)	2.1 (0.4)	0.6 (0.1)	27.2 (-2.5)	4.0 (-0.4)	3.2 (-2.2)	73.5 (-2.5)
Average	2.3 (-0.3)	32.2 (-0.8)	**12.9** **(2.6)**	13.0 (1.9)	2.8 (0.0)	1.2 (-0.0)	26.5 (-1.9)	4.9 (-0.0)	4.1 (-1.4)	**61.0** **(-3.1)**
Kampo	2.7 (-0.5)	67.4 (0.8)	**4.4** **(1.1)**	3.4 (-0.0)	1.1 (-0.1)	0.0 (0.0)	20.5 (-0.4)	0.0 (0.0)	0.5 (-0.8)	**91.1** **(0.6)**

Notes:

1) Figure in parentheses show the percentage point change in their share of total assets based on fiscal 2002.

2) In the "Others" category are Money in trust, Monetary Claims Purchased, Trading Securities, Deferred Tax Assets and Loan Loss Reserves.

Source: Disclosure Materials of each company, 2004

The share of stock holdings in their assets rose 2.6 percentage points to 12.9% for the nine-company average. This is due not to any kind of active acquisition of stocks on their part, but largely to the recovery in stock prices. The Nikkei Stock Average rose 47% from 7,972 yen to 11,715 yen, between end of March 2003 and end of March 2004. Continuing on a trend from the previous year, investment in foreign public and corporate bonds increased, and grew by 1.9 percentage points year-on-year, making up 13.0% of total assets. Foreign investments, which yield higher interest rates, are very attractive in this environment of very low domestic interest rates.

The main reason behind the difference in the asset composition of Kampo vis-à-vis the private life insurers lies in the fact that Kampo, being a government-run system, is subject to some government-imposed restrictions. The composition of Kampo's assets depends on the investment plans of Kampo funds. As a result, the fixed yield component of their assets -- such as the public and corporate bonds -- accounted for 90.5% of their total assets in fiscal 2003. Although no additional funds were allocated to stocks in fiscal 2003, the share rose by 1.1 percentage points to 4.4% due to price changes in the market. However, this share is still very low compared to the private life insurers.

If we want to ascertain the real assets and real profitability of the individual life insurers, then

unrealized gains and losses on their assets must be properly accounted for. The unrealized gains and losses of the nine life insurers for fiscal 2003 are shown in Table 2. Regarding the unrealized gains and losses on securities and land held, latent losses on land increased by 120 billion yen over the previous year for the nine insurers, while the unrealized gains in securities showed a large growth due to the recovery in stock prices. Although interest rates rose in fiscal 2003 (from 0.70% to 1.44% for the ten year government bond), the unrealized gains in the stock market were great enough to cover any unrealized losses from public and corporate bonds. In the end, only two companies that were left with net unrealized losses.

Table 2. Unrealized Gains and Losses for the Nine Major Life Insurers
(As end year-end fiscal 2003)

billion yen

	Real Estate	Securities				Total of Unrealized Gains
			Stocks	Bonds	Foreign Securities	
Nippon	-181	3,306	2,631	349	330	3,125
Dai-ichi	-141	1,333	1,049	132	159	1,191
Meiji Yasuda	-65	1,089	828	145	106	1,024
Sumitomo	-76	325	196	79	57	249
Mitsui	-166	-27	4	1	-30	-193
Asahi	-79	-24	-5	-10	-10	-103
Taiyo	-9	169	107	14	42	160
Daido	-12	255	131	85	8	243
Fukoku	68	154	131	22	2	222
Total	-661	6,580	5,072	816	663	5,919

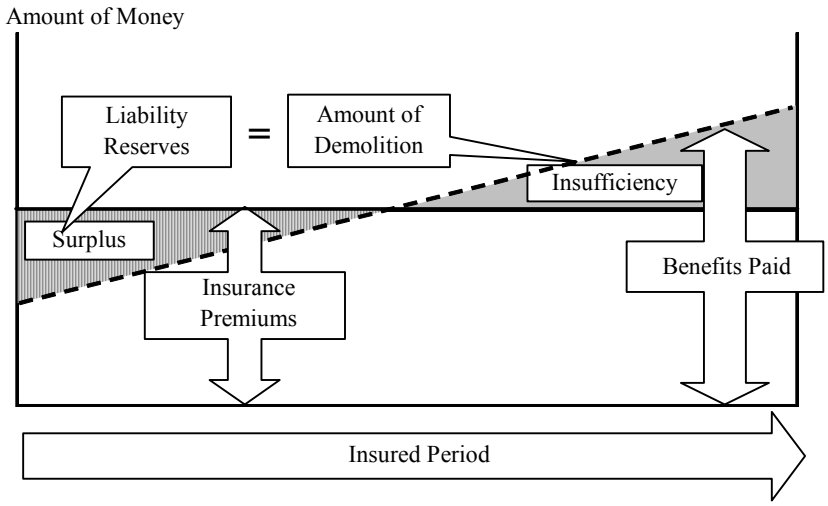
Source: Disclosure Materials of each company, 2004

2.3 Liabilities

Most of the liabilities of a life insurer are the obligations to pay out insurance claims to policyholders. Annual insurance premiums are calculated to be at a flat level every year, at a rate where if mortality rates and assumed interest rates follow their expected paths, then the finances should be balanced in the long run (this is the horizontal line in Figure 2). Soon after the policy is entered into, mortality rates are still low, and so the total insurance premium income will be much greater than the insurance claims paid out, resulting in a surplus. As time goes on, as the insured person ages and the mortality rate rises, the total premium income will be less than the amount paid out in claims. It is at this time the company depends on the accumulated surplus to meet their obligations. The Insurance Business Law stipulates that the excess (the "surplus" in Figure 2) that results from the insurance premium income being greater than claims paid out in the first half of the insured period, must be kept in a "policy reserve" to meet the obligations of the insurance policy in the future. This "policy reserve" accounts for over 90% of the liabilities of the life insurance company.

Other liabilities that we may see in the balance sheets of life insurers are subordinated obligations (corporate bonds, that would be included in the borrowing account) and accrued retirement benefits for employees.

Figure2. Illustration of Policy Reserves (Term Insurance Example)



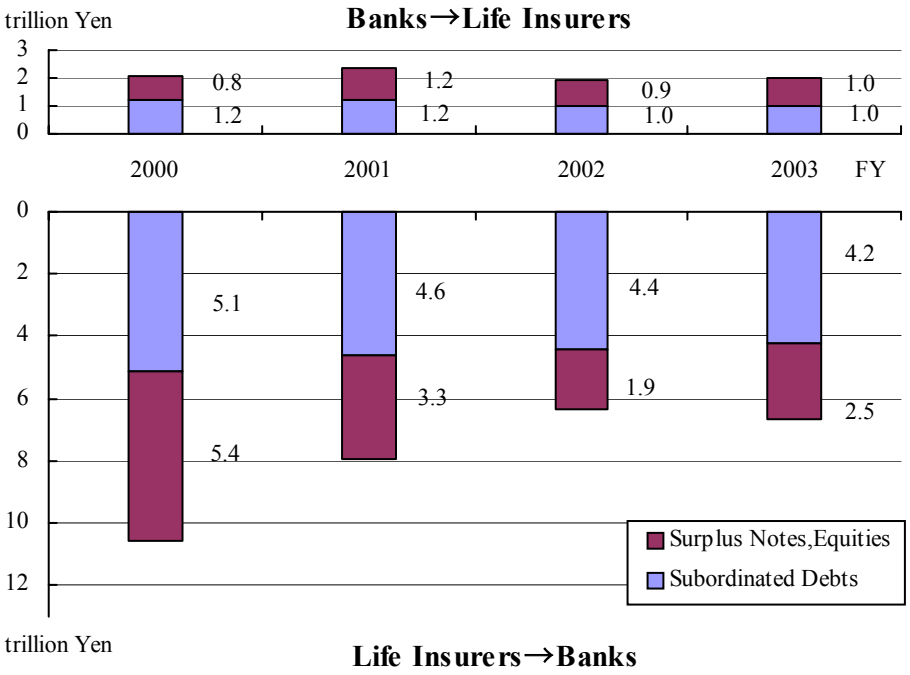
2.4 Capital

A major source of capital of life insurers (such as funds, for example) are the financial institutions. According to published material as at year-end fiscal 2003, banks contributed a total of two trillion yen to the nine major life insurers in funds (capital funds) and subordinated loans.

At the same time, the nine life insurers owned bank stocks at a market value of 2.5 trillion yen, and contributed 4.2 trillion yen to banks in the form of subordinated loans and debentures (Figure 3). Looking at the three years from fiscal 2000, the market value of banks' capital held by life insurers declined in fiscal 2002, but grew again in fiscal 2003. However, this is not to suggest that the increase was deliberate. It was likely merely a reflection of the increase in stock prices.

The amount of subordinated lending (subordinated loans, subordinated debentures, and surplus notes) sourced from banks were only marginally smaller than in fiscal 2002. In the proceedings after the failure of Chiyoda Mutual Life, all subordinated loans were written off as uncollectable. Thus if another life insurer were to fail, then the impact on banks would be enormous. The danger with this cross holding of capital with banks (known as "double gearing") is that if a crisis occurs in either of the two industries, the other would also suffer a very serious blow. This could lead to catastrophic results in the financial system as a whole. Life insurers need to mitigate the risk associated with their credit being concentrated in the banking industry.

Figure 3. Double Gearing of Life Insurers and Banks

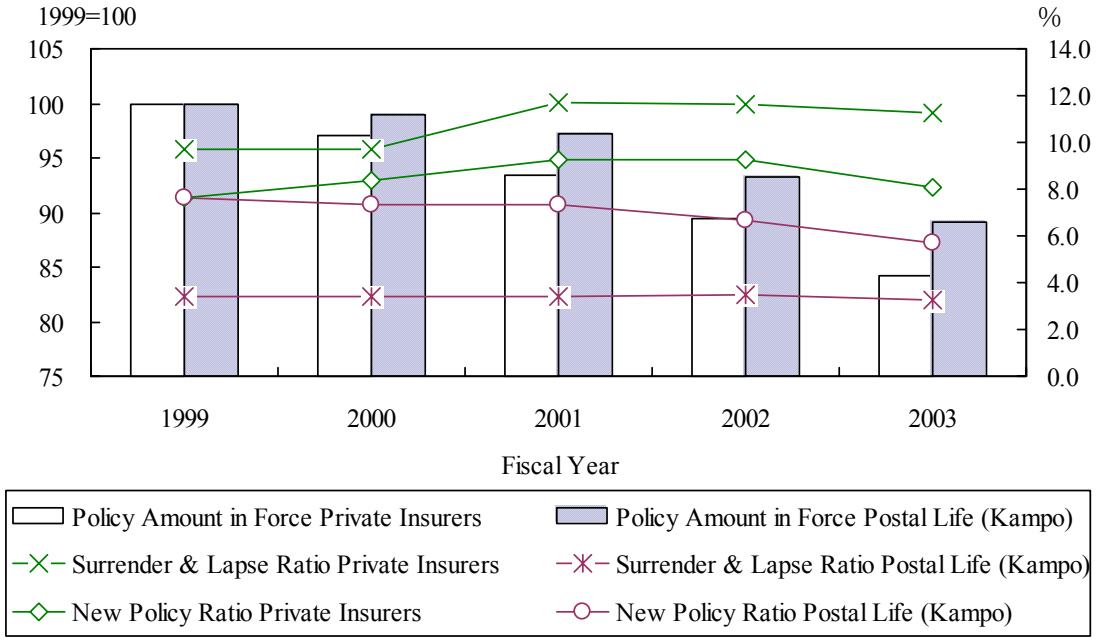


Source: Disclosure Materials of each company, 2004

2.5 **Profits and Losses**

Figure 4 shows the changes in the amount of personal insurance policies that have made up the majority of policies-in-force over the past five years for the insurers. Most of

Figure 4. Sales Results in 5 years



Source: Disclosure Materials of each company, 2004

the life insurers mark a decline in policies-in-force over five years ago. For insurers whose surrender and lapse ratios are higher than their new policy ratios, policies-in-force cannot increase. During the four and a half years since May 2000, five life insurers failed one after another, the crisis in life insurance companies gained lots of attention, and the operating environment of these life insurers greatly deteriorated.

The yields on investment assets, including as well the fluctuation in market value of assets held is shown in Table 3. As stock prices fell from fiscal 2000 to 2002, the market value yield was negative. However in fiscal 2003, this turned to a positive figure for the nine life insurers and Kampo. In particular, the life insurance companies with relatively large stock holdings benefited from the rise in stock prices and their yields improved. As the share of stock holdings in total assets of Kampo is low compared to the private life insurers, their investment yield in fiscal 2003 was lower than that of the private insurers. However, over the entire four years, Kampo has been maintaining a steady market value yield on their assets.

Table 3. Market value yields for the nine life insurers and Kampo

%

	FY1999	FY2000	FY2001	FY2002	FY2003	Average (5 years)
Nippon	5.04	-1.00	-1.27	-0.89	5.03	1.34
Dai-ichi	4.73	-0.65	-1.43	-0.50	4.62	1.32
Meiji Yasuda	3.26	0.00	-0.74	-0.52	4.04	1.19
(Meiji)	2.43	0.58	-1.04	-0.38	—	—
(Yasuda)	4.73	-1.03	-0.21	-0.76	—	—
Sumitomo	3.94	-0.60	-1.07	0.18	2.71	1.01
Mitsui	4.94	-1.74	-1.19	-0.72	1.78	0.58
Asahi	4.40	-1.76	-1.92	-0.68	3.41	0.65
Taiyo	3.89	0.45	-0.55	1.11	4.01	1.76
Daido	2.82	0.58	0.08	1.57	3.32	1.67
Fukoku	3.52	1.06	-0.61	-0.47	4.14	1.51
Weighted Average	4.04	-0.41	-0.92	-0.15	3.67	1.22
Kampo		2.63	1.11	1.20	1.55	1.62

Source: Disclosure Materials of each company, 2004

The factor putting pressure on the health of the life insurers in the negative spread problem. The negative spread amount is the assumed yield on policy reserves guaranteed to policyholders, less the yield on their income assets, then multiplied by the amount of their policy reserves on their general account. Table 4 shows the negative spread amounts, and the amounts as a share of the total general account policy reserves (negative spread ratios). We do not see a notable improvement in the negative spread ratio from fiscal 2002, and for some companies, the share is even growing. The factors behind the prolonged negative spread of the companies are the long-term stagnation of interest rates, and the high average assumed interest rate on their policy reserves. Thus, in order for the negative spread to improve to any notable degree, the yields on their investment assets need to increase considerably, or the assumed interest rate on their policy reserves must decline by a large

margin. Unfortunately, the assumed interest rates on policy reserves are expected to stay at high levels for the time being.

Table 4. Negative Spread Amounts of the Nine Major Life Insurers and Kampo

billion yen

	FY2002		FY2003	
	Negative Spread Amount	Share of Total General Account Policy Reserves	Negative Spread Amount	Share of Total General Account Policy Reserves
Nippon	320	0.93%	290	0.83%
Dai-ichi	250	1.06%	217	0.91%
Meiji Yasuda	104	0.49%	99	0.48%
Sumitomo	224	1.25%	201	1.16%
Mitsui	80	1.23%	68	1.08%
Asahi	88	1.41%	98	1.73%
Taiyo	43	0.72%	30	0.51%
Daido	20	0.40%	13	0.26%
Fukoku	38	0.91%	42	0.98%
Kampo	792	0.69%	1,857	1.65%

Source: Disclosure Materials of each company, 2004

Next, we estimated the "economic profits" from each insurer's Income Statements in Table 5. Economic profits can be defined as the change in the net assets of the company on a market value basis, provided there were no dividends paid, increases in capital or some repayment of capital in that period. This is an indicator of each company's real profitability in one operating year. If economic profits are negative, this means that real capital has declined.

We also define "insurance-related income" as the income that would be earned from insurance policies under an environment of zero operating expenses and a market value yield that is equal to the assumed rates of interest. This is equivalent to the total of the life insurers' mortality profits and additional premiums. "Investment related profits and losses" is defined as investment profit on an income basis, with market value assessed investment profits taken into account. This reflects not only the amount of the negative spread amounts as publicized by the life insurers, but all investment-related gains and losses such as capital gains and losses, and changes in the unrealized gains and losses on assets. When this is a negative figure, this means that the company is in a negative spread situation on a market value basis.

Table 5. Economic Profits of the Nine Major Life Insurers

billion yen

	Total for 9 major life insurers		
	FY 2001	FY 2002	FY 2003
Insurance Income	5,997 (3.79)	5,663 (3.73)	5,478 (3.59)
Operating Expenses, Other Gains/Losses (-)	3,023 (1.91)	2,669 (1.76)	2,462 (1.61)
Investment-Related Gains/Losses	-6,209 (-3.92)	-4,573 (-3.01)	2,104 (1.38)
Economic Profit	**-3,260** (-2.06)	**-1,613** (-1.06)	**4,901** (3.21)

Notes:

1) Figures in parentheses are shares of total assets

2) Insurance Income = Mortality Profits+ Equivalent Amount to Additional Premiums
= Basic Profit + Negative Spread Amount + Operating Expenses

3) Investment Gains/Losses =Negative Spread Amount + Changes in Unrealized Gains/Losses on Assets + Capital Gains/Losses + Other Investment Gains/Losses

4) Economic Profit = Insurance-Related Income + Investment-Related Profit/Loss – Operating Expenses + Other Gains/Losses – Corporate Taxes etc. – External Outflow Amount

Source: Disclosure Materials of Life Insurers, 2004

In fiscal 2003, due to the improvement in investment-related gains and losses, all nine life insurers marked positive economic profit figures, totaling 4,901 billion yen. Most of the improvement can be explained as being due to capital gains and the impact of any improvement in the negative spread is very small. The negative spread declined by about 110 billion yen for the nine major insurers, and the capital gains and losses improved by 6,678 billion yen. Most of the companies were able to cover their negative spread amounts with their investment gains, including capital gains.

The marked improvement in capital gains and losses over the previous period is due to the increase in unrealized gains on stocks thanks to the recovery in the stock market, and the decrease in the losses from revaluation of securities. However as each company is struggling to sell new policies, their insurance-related profits have been flat, or are on a decline. The effects of any reductions in operating expenses have been limited. We could thus say that their financial situation is one that is vulnerable to stock price changes.

3 Health of the Sector

3.1 Real Excess Liability Standards

The indicators that supervising authorities rely on to measure the health of the private life insurers are Real Excess Liability and Solvency Margin Standards. These standards were introduced so that the supervising authorities can monitor the health of the private life insurers, and if some companies have problems with their soundness, then they can issue an administrative order to that company to preempt a failure. The indicator used to measure the real excess liability standard is real net assets which is found by computing assets at their market values and then subtracting from this the real liabilities. When this is a negative figure, or can clearly be expected to mark a negative figure, then an administrative order can be issued. For the nine major life insurers, their real net assets are as found in Table 6.

Until the end of fiscal 2002 and due to the lackluster stock market, each insurer marked a large decline in their real net asset amount. Thanks to the recovery in the stock prices in fiscal 2003, real net assets rose between 20-80% over the previous year. However, if we real net asset amounts for the four years, we see that they have been declining throughout, (albeit to varying degrees), and the recovery in fiscal 2003 was not adequate to make up for the deterioration of the past three years.

Table 6. Real Net Asset Amounts and their Shares of Total Assets of the Nine Major Life Insurers

billion yen

	Nippon	Dai-ichi	Meiji Yasuda	(Meiji)	(Yasuda)	Sumitomo	Mitsui	Asahi	Taiyo	Daido	Fukoku
Mar-00	8,274	3,940	3,274	2,170	1,104	1,930	730	1,051	820	728	522
Net Asset Ratio	19.1%	13.1%	12.2%	12.9%	11.0%	8.1%	7.2%	9.3%	11.6%	12.7%	11.3%
Mar-01	7,211	3,151	2,792	1,937	855	1,520	379	571	680	619	471
Net Asset Ratio	16.4%	10.0%	10.1%	11.1%	8.3%	6.4%	3.9%	5.1%	9.4%	10.5%	9.8%
Mar-02	5,968	2,410	2,331	1,628	702	980	278	394	456	471	375
Net Asset Ratio	13.2%	8.1%	8.7%	9.5%	7.2%	4.3%	3.4%	5.1%	6.7%	7.9%	7.9%
Mar-03	5,077	2,062	1,952	1,362	590	844	118	236	341	515	316
Net Asset Ratio	11.6%	7.1%	7.6%	8.4%	6.2%	3.9%	1.5%	3.6%	5.2%	8.6%	6.7%
Mar-04	6,608	3,103	2,688	—	—	1,178	211	350	452	633	474
Net Asset Ratio	14.6%	10.5%	10.6%	—	—	5.6%	2.8%	5.4%	7.1%	10.5%	9.5%
Y-Y change	30.1%	50.5%	37.7%	—	—	39.5%	79.4%	48.0%	32.4%	22.7%	50.0%
Change of Net Asset in 4 Years	**-20.1%**	**-21.2%**	**-17.9%**	**—**	**—**	**-38.9%**	**-71.1%**	**-66.7%**	**-44.9%**	**-13.1%**	**-9.2%**
Deferred tax assets in Mar-04	749	422	455	—	—	250	79	120	73	91	64

Source: Disclosure Materials of Life Insurers, 2004

Some of the deficiencies with the real net assets measure are that 1) it includes deferred tax assets 2) the estimated contribution to the Life Insurance Policy Protection Corporation – a certain expense in the future -- is not deducted from the figure 3) the profits and losses from derivatives trading are not reflected and 4) the valuation measures for land are too lax. In this discussion, we adjust for these problems and put forth a more rigorous, adjusted real excess liability standard.

We estimated each company's adjusted real net assets under our evaluation standards (Table 7) and found that none of them were negative. However, there were three companies whose ratios of adjusted real net assets to total assets were lower than 4%. Moreover, the companies whose

adjusted real net assets were not much smaller than their publicized real net assets, had large deferred tax assets. Deferred tax assets are considered to be less "capital-like" than other forms of capital.

Table 7. Adjusted Real Net Asset Amounts (as at end fiscal year-end 2003)

Adjusted Real Net Asset Ratio	Under 0%	0〜4%	4〜8%	8〜10%	Over 10%
Number of insurers (total 9)	0	3	3	2	1

Attrition Rate from Disclosed Net Asset	Under 20%	20〜30%	30〜40%	40〜50%	50〜60%	Over 60%
Number of insurers (total 9)	3	3	1	0	2	0

Source: Disclosure Materials of Life Insurers, 2004

3.2 Solvency Margin Standards

The solvency margin ratio is a standard by which the supervising authorities monitor life insurers, and is found as follows:

Solvency Margin Ratio = (Amount equivalent to shareholder's equity / Total risk * 0.5) * 100

In Japan, when this ratio falls below 200%, the Financial Services Agency (FSA) will implement their Early Corrective Measures.

Some deficiencies with the Solvency Margin Standards are 1) The recent volatility in stock and land prices are not adequately reflected in the price fluctuation risk – a component of "Asset Management Risk" and 2) the standard assumes that the insurance company is a going concern.

With these issues in mind, we make some corrections to the publicized solvency margin ratios and calculate their "adjusted solvency margin ratios". In order to give the corrections some objectivity, we adopt the RBC (Risk Based Capital) Standard methodology.

(1) Objective to the Adjusted Solvency Margin Ratios.

We attempt to bring the Japanese solvency margin ratios as close as possible to the RBC standards. First we assess all assets – such as securities held and land -- by their market values as much as possible. By doing so we are adjusting the numerator, the solvency margin, for unrealized gains and losses. Then we adjust the figure for our standards. For example, we assume that the companies will make loss loan provisions at the same rate, depending on classification of the bad loan. As for the denominator, we raise the risk coefficient of the risk of losses caused by price fluctuations up to RBC standards so that changes in asset prices are captured. Furthermore, we focus on the solvency of the company in the event of failure, and thereby correct the solvency margin ratio to liquidation standards, that is, eliminate all items that do not have any liquidation value.

(2) Results of Analysis of Adjusted Solvency Margin Ratios

Because we are using US RBC standards for our adjusted solvency margin ratios, we also classify our estimation results by the same RBC rates used as administrative guidelines for government intervention purposes. There are two major points where the RBC standards differ from the ones where Japan's Early Corrective Measures will be implemented. First, in Japan, if the solvency margin ratio is 200% or higher, then the life insurer is viewed as being healthy and no corrective measure is taken. However with the RBC standards in the US, if the ratio is above 200% but below 250%, then a trend analysis must be conducted. If the analysis shows that shareholder's equity is on a rapidly declining trend, then the same measures will be taken for the company as if the ratio were under 200%. Second, in Japan, if the solvency margin ratio is below 0%, then the supervising agency can order the company to be reconstructed or even issue a liquidation order, but in the US, this measure can be taken when the ratio is below a much higher ratio of 70%.

In Table 8, we show the distribution of the adjusted solvency margin ratios. As at fiscal year-end 2003, there was only one company whose ratio was low enough to require action at the company level (150-200%), and only one company where action was required at the supervising agency level (100-150%). According to RBC standards, if a company falls to a solvency ratio that requires company action, then an RBC planning document must be submitted to the insurance supervisory body. If action is required at the supervisory level then the insurance supervisory body would conduct an examination, and a business improvement order will be issued.

At fiscal year-end 2002 (ending March 31 2003), there were only four companies whose ratios were above 250%, and so we can say that the life insurers have shown a general recovery of strength this fiscal year. However, they are still very weak by US standards.

Table 8. Distribution of Adjusted Solvency Margin Ratios

	Under 0%	0～70%	70～100%	100～150%	150～200%	200～250%	Over250%
Number of insurers (total 9)	0	0	0	1	1	0	7

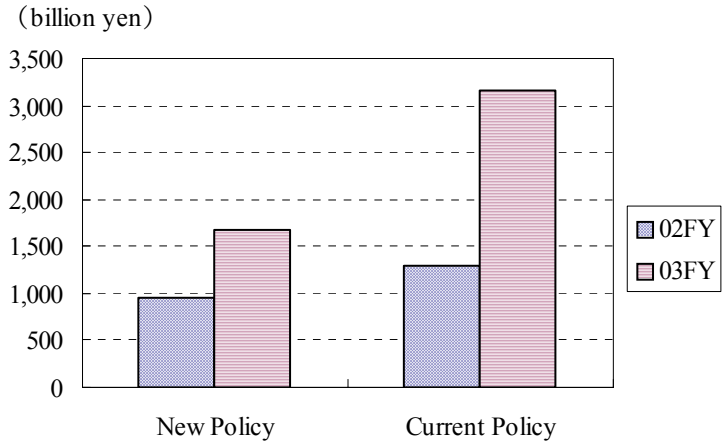
Source: Disclosure Materials of Life Insurers, 2004

4. The Variable Annuity Insurance Market in Japan

4.1 Overview of Variable Annuity Insurance Market

Of the 40 life insurance companies conducting business in Japan, 20 companies were offering variable annuity insurance products as at fiscal year-end 2003. That is, half of the life insurers have entered into this market. In fiscal 2003, the policies in force of variable annuity insurance grew at a brisk rate of 143.2% over the previous fiscal year (figure 5) and an interesting characteristic to this is that many policies are being signed over bank counters.

Figure 5. Total Policy Amount of Individual Variable Annuity Policies (All company total)



Source: The Life Insurance Association of Japan

4.2 Characteristics of the Variable Annuity Insurance Product

Traditionally the big seller in individual pension insurance was the "fixed annuity type" product. The amount to be received in annuity payments was fixed when the policy was signed. Thus, the insurance company would assume the investment risks (i.e., stock price declines, interest rate fluctuations), but since the amount paid as an annuity is fixed, it would not be adjusted for inflation.

As opposed to this scheme, with variable annuity insurance, the payments made can be invested under the insurer's separate account. The policy holder assumes the investment risk, and depending on the investment performance of the separate account, the reserves, the surrender value, the maturity benefit, and if there is a death benefit, then the death benefit can rise or fall. As the funds are invested in stocks and foreign-currency denominated assets, the income might be greater or, depending on the markets, lower than the total premium payments made.

However, the major reasons why these variable annuities are gaining in popularity can be summarized as follows: 1) there are minimum guarantees on the maturity benefit, and death benefit, and many products pass only a limited investment risk to the policy holder, 2) Under the ultra-low interest rate environment that we are in now, people are looking for investment assets that are even marginally advantageous to them, and 3) There are tax breaks with this product that are better than with other financial products such as investment trusts.

The minimum guarantee features available with this product can be divided into four types, as shown in Table 9. Different products may have one or more minimum guarantee features.

Table 9. Minimum Guarantee Features of Variable Annuity Product

1)Guaranteed Minimum Maturity Benefit This provides the policyholder with a minimum maturity at the end of the contract from their first premium payment, protecting the policyholders' funds.
2)Guaranteed Minimum Death Benefit This provides a minimum guaranteed amount to be paid to the policyholder should he die during the term of the contract.
3)Guaranteed Minimum Surrender Benefit Guarantees a minimum surrender value to the policyholder.
4)Guaranteed Minimum Income Benefit This ensures that some funds invested in a special account may be converted to an annuity at a guaranteed rate.

Source: "Accumulating Policy Reserves for Minimum Guarantee Risk s in Variable Annuities", Institute of Actuaries of Japan

In the case of 2), the minimum death benefit guarantees that a minimum amount will be paid even if your investments are running a negative return. (Many of them guarantee the premium payments that have been paid in.) If your investments are performing well and your accumulation increases, then your death benefit would increase accordingly. From the policyholder's viewpoint, there is only a limited risk, (excluding policy cancellations). This investment risk is then shifted back from the policyholder to the insurance company.

In the case of the minimum guaranteed death benefit, there is also the Ratchet death benefit (the "Stepped Up" benefit). With this, the amount of the minimum guaranteed death benefit is reviewed periodically and the highest accumulated amount at past reviews, would become the new minimum death benefit. The Ratchet type product is a variation of a look-back option. The look-back option is a type of option where the optimal value becomes the value where the option is exercised, in the case of a call it would be the lowest price and for a put, it would be the highest price. In insurance, the latter one would apply. Normally for this type of attractive option, the premium (the option purchase price) is quite a bit higher than other types. In the case of this insurance product, the insurance premiums should also be higher by the same degree. However, if this is not being reflected in the premiums, then the insurance company would have to absorb this additional cost.

For costs associated with variable annuities, there are investment expenses and insurance-related expenses. As for investment expenses, the costs are fees payable to the investment company, securities custody fees, etc. Insurance-related expenses would include costs incurred from entering into and maintaining policies, costs required to guarantee "guaranteed death benefits" etc. The total of these expenses would be about 1.8% - 3.4% per year.

If we assume for a moment that the investment income is zero, and we estimate the accumulated costs only, they would be 16.6-29.2% of the principal in ten years. In fifteen years, it would be 23.8-40.5% and in twenty years, 30.5%-49.9%. If the rate of profit is not at least at or above these rates, then assets cannot grow to an amount greater than premiums paid in. When insurance is sold at a bank counter, there is a commission paid by the life insurer to the Bank. In order to motivate the Banks to make sales, the commission has recently increased and is now at 3-6%.

4.3 The Implications on Policy Reserves of Minimum Guarantee Benefits

As we have seen in the above discussion, one of the reasons that this variable annuity insurance market has expanded so rapidly is that the minimum guarantee benefits are an attractive feature that can take many forms. So long as the investment returns are good, and the reserves are growing, this positive performance can be reflected in the guaranteed death benefit and the maturity benefit of the policyholder. However when the reserves do not grow, and are lower than the amount of the minimum guarantee benefits, then the insurance company must absorb the difference, thereby assuming the downward risk of price changes.

In the US, when the stock market crashed in 2002, many life insurance companies were found to be short in their policy reserves, forcing some companies to withdraw from the variable annuity market. Currently some reinsurers are also withdrawing from taking on the risk of guaranteeing the principal of variable annuities.

In Japan, the insurers are mitigating this risk by keeping self-imposed policy reserves for minimum guarantees, enhancing their solvency margins, or using reinsurance or hedging. However, there is no clear standard in their policy reserves that must be met. Thus, the Financial Services Agency (FSA) has begun to create policy reserve standards as they apply to variable annuities. In August 2004, the FSA publicized a draft of regulations for accumulating reserves, and solvency margin standards as they relate to the risk of providing minimum guarantees. At the Japan-US Insurance Talks that were held in August 2004, the US side requested these rules be designed so that they are not a great burden to the life insurance industry. The American Council of Life Insurers made the point to the FSA that stringent regulations would "not be an improvement for policyholder protection or convenience as it would result in an excess capital reserve".

Policy reserves are calculated based on assumptions made about assumed rates of interest and mortality rates, and are liabilities for paying out future insurance claims. Although having smaller reserves would lead to greater profits for the insurer at the time the policy is entered into, the insurer could be left with insufficient reserves to fulfill the policy, should the profits be distributed as shareholder dividends. In order for the policy to be continued in the future, it is imperative that the required reserves be accumulated.

5. Financing the Life Insurers Policyholders Protection Corporation of Japan

5.1 Role of Life Insurers Policyholders Protection Corporation of Japan

The Life Insurers Policyholders Protection Corporation of Japan (the Policyholders' Protection Corp.) was established in 1998 as the body to provide financial aid so that the life insurance policies of a failed life insurer can smoothly be transferred to another life insurance company. The objective of the body is to protect insurance policyholders and maintain the credibility of the life insurance industry when a life insurer fails.

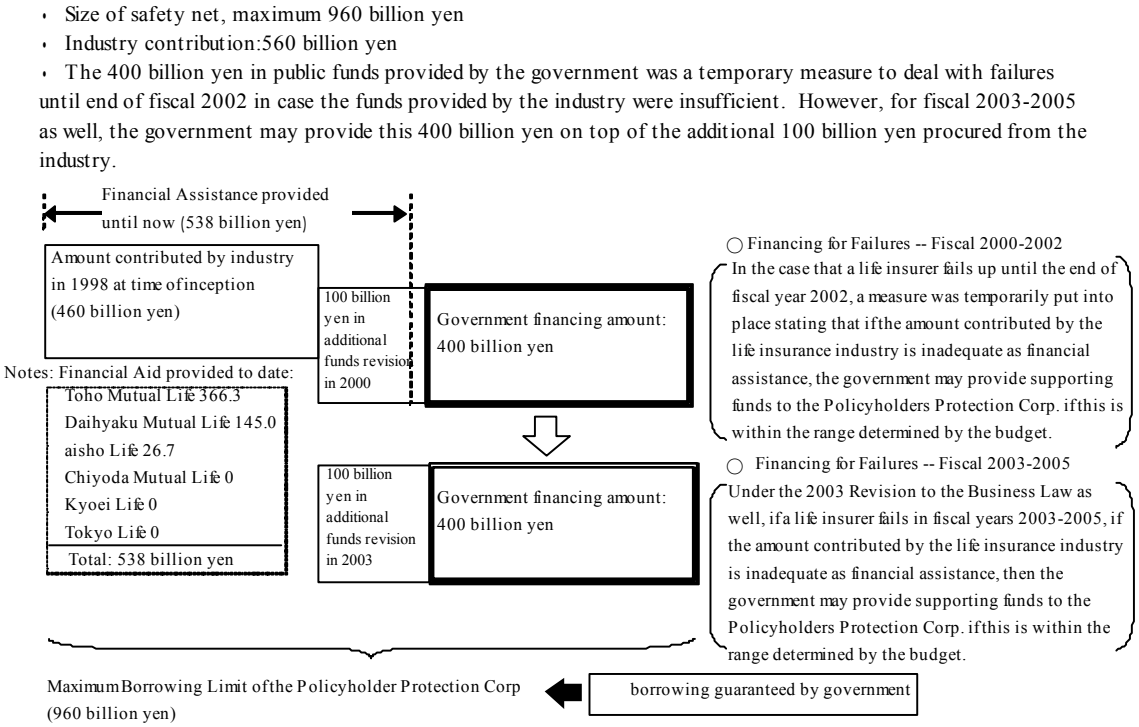
Prior to this safety net was the Policyholders' Protection Fund. Their funds, however, were quickly depleted after the first life insurance failure, and so there was a need to establish another, more robust, safety net, and the Policyholder Protection Corporation was established to take over the role of the Fund. In case a life insurer fails, the Policyholder Protection Corp. would supply funds to a company offering to acquire the failing life insurer if one exists, or if no acquirer exists, then the Policyholder Protection Corp. would take the failing life insurer as its own subsidiary, and honor

their policies under the succeeding subsidiary. Otherwise the Policyholder Protection Corp. could honor those policies itself, and until the failed insurer reopened for business, would pay out claims made on the policies, and would participate in the reorganization proceedings.

5.2 Financing the Policyholders' Protection Corp. and its Activities to Date

The Policyholders' Protection Corp started with available funding of 460 billion yen, and all life insurance companies that were conducting business in Japan were required to participate and contribute funds. The industry as a whole was obligated to accumulate up to 46 billion yen a year until the financial support for life insurers that filed up to the end of fiscal year 2000 would be completed. Once this was concluded, they were also required to accumulate 40 billion yen a year until the funds totaled 400 billion yen. However, 366.3 billion yen was drawn for the failure of Toho Mutual Life in June of 1999, and so additional funding had to be procured. The burden on the industry was increased to a total 560 billion yen when in 2000, the Insurance Business Law was revised to include 400 billion yen of public sector funding plus an additional contribution of 100 billion yen from the life insurers. As we see in Figure 6, 960 billion yen in funds have been procured all together.

Figure 6. Safety Net of Private Life Insurers



Source: Japan Center for Economic Research, 2004, Fukao

Since then, Daihyaku Mutual failed in May of 2000, requiring 145 billion yen, and Taisho Life's failure in August required 26.7 billion in financial aid, leaving only 22 billion yen remaining of the contributions from the life insurance industry. Bankruptcy proceedings up to the failure of Taisho

Life were in accordance with the Insurance Business Law. After the failure of Chiyoda Life in October 2000, Company Reorganization Proceedings under the Special Reorganization Law were followed. By requesting the acquiring insurance company to pay for the goodwill, no funds of the Policyholder Protection Corp. were used (Table 10).

The 400 billion yen was only temporarily made available by the government until the end of fiscal 2003. However, under the revision of the Insurance Business law in 2003, a provision was put into place for three years until the end of fiscal 2005 (end of March 2006) whereby another 100 billion is made available by the life insurance industry, and 400 billion is provided by the government to make an additional 500 billion. Together with the original 460 billion brings the total to 960 billion.

Table 10. Past Life Insurer Failures

	Nissan	Toho	Daihyaku	Taisyo	Chiyoda	Kyoei	Tokyo
Proceedings Type	Insurance Business Law	Insurance Business Law	Insurance Business Law	Insurance Business Law	Reorganization Proceedings	Reorganization Proceedings	Reorganization Proceedings
Proceedings Start Date	Apr-97	Jun-99	May-00	Aug-00	Oct-00	Oct-00	Mar-01
Completion	Oct-97	Mar-00	Apr-01	Mar-01	Apr-01	Apr-01	Oct-01
Excess liabilities (billion yen)	300	650	320	36.5	595	689.5	73.1
Financial Aid Provided by Policyholder Protection Corp etc (billion yen)	200	366.3	145	26.2	nil	nil	nil
Reduction of Policy Reserves	0%	10%	10%	10%	10%	8%	0%
Goodwill(billion yen)	123.2	240	147	7	about 320	364	32.5
Assumed Rates of Interest							
Before Failure	3.75-5.50%	4.79%	4.46%	4.05%	3.70%	4.00%	4.20%
After Failure	2.75%	1.50%	1.00%	1.00%	1.50%	1.75%	2.60%
Early Surrender Charge	7 years (15-3%)	8 years (15-2%)	10 years (20-2%)	9 years (15-3%)	10 years (20-2%)	8 years (15-2%)	10.5 years (20-2%)
Acquirers	Life Insurance Association	GE Capital (US)	Manulife (Canada)	Yamato Life, SoftBank	AIG (US)	Prudential (US)	Taiyo Life, Daido Life
Transferee companies or New company Names	Aoba Life	GE Edison Life	Manulife	Azami Life (now Yamato	AIG Star Life	Gibraltar Life	T&D Financial Life

Notes:

1)Nissan Life financial assistance received from Policyholder Protection Corp.

2) GE Edison Life was sold to AIG in August 2003, creating AIG Edison Life.

Sources: "Notice on changes in terms and conditions of policies", Each Insurer,

Fukao, Japan Center for Economic Research 2002

Others

5.3 Funding Issues

With the revision to the Business Law in 2003, financing has been secured until the end of fiscal 2005, but there is no decision made for subsequent funding. Of the funds contributed from the life insurance industry, 538 billion yen has already been spent on Toho Mutual Life, Daihyaku Mutual Life and Taisho Life. As the funds currently contributed are to be used to repay borrowings, the safety net cannot be sustained without government support.

The question is who should bear the burden of the losses incurred from failures, and how can this burden be balanced among the paying parties. Funding provided from the insurance companies would otherwise be dividends to be paid out to the policyholders of healthy insurers. If the funding source is the government, then the burden is paid by all the citizens. Although the losses from failure should clearly be borne by the policyholders of the failed life insurer, as far as we can see from past failures, this is too large a burden to be borne by them alone (Figure 7). Under a life

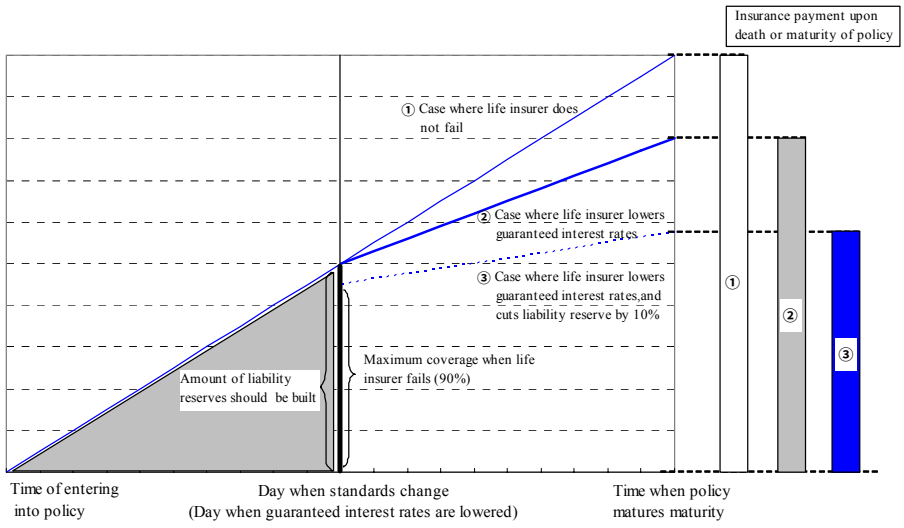
insurance failure, although 90% of policy reserves are guaranteed, the assumed interest rate is reduced, and a high early surrender charge is levied.

Unlike the case of policy reserves there are no clear standards as to how much the assumed interest rate can be lowered, and how hefty the early surrender charges can be. If we assume that the assumed rates of interest should fall to current market rates, then the negative spread would be eliminated, there would be an insurance-related income of 2% of the total assets every year, and in ten years insurers would earn income of 20% of total assets. The acquiring life insurance company's depreciation of goodwill would be on their own expense, but if this profit is used for depreciating goodwill, then this cost is borne by the policyholder. If the early surrender charge is put at 20% over ten years, then even if all policies are cancelled when the company fails, the surrender values would be reduced by 20%.

If we assume the above, then regardless of whether the policies are cancelled when the company fails, then up to 30% of the excess liabilities could be covered by the policyholders because the policy reserves would be cut by 10%. It is up to the discretion of the Policyholders' Protection Corp. how much of a reduction in assumed interest rates, and how much of an early surrender charge should be tolerated, and how much financial assistance to provide. Thus, depending on the conditions of the failure, the burden on the policyholder could conceivably be quite large.

Moreover, the role of the Policyholders' Protection Corp is a conflicting one. To protect the interests of the policyholders, then a larger financial contribution would be required of itself. If they hold back on providing financial aid, then this may not protect the policyholders.

Figure 7. Illustration of Burdens on Policyholders of Failed Insurer (Case of Endowment Insurance)



Source: Fukao, Japan Center for Economic Research 2003

When life insurance companies fail, an excessive cost is borne by the policyholder. The reasons the costs become so high often have to do with a lack of administrative supervision. For example, the failed insurer may not have been quickly handled, the indicators used by the administrative supervisors may not have been stringent enough, the early corrective measures may not have been implemented early enough, etc. First we need to establish standards for a limit of how much the

assumed interest rates can be reduced, and how much the early surrender charge can be. Then, to ask the policyholders of the failed life insurer to bear the cost, arbitrariness needs to be eliminated, and transparency must be assured. Then for costs that exceed a reasonable amount, the administrators should take some responsibility for the failure and turn to the government for support -- without turning to the funds contributed by the insurance industry.

6. Conclusion

Fiscal 2003 saw a large improvement in stock prices accompanying the economic recovery, and so as far as financial conditions go, it would appear as though the crisis situation that occurred at the end of the previous fiscal year for life insurers has been removed. However, the total policies-in-force and the income from insurance premium continue to be lower than the previous year. Even more serious than this is the prolonged negative spread situation. The market value yield, (that is the real investment yield reflecting unrealized gains and losses of assets), increased by a wide margin in fiscal 2003 thanks to the recovery in the stock market. Yet, on the other hand, each life insurer's assumed interest rate on their policy reserves continues to be high at 3-4%. Unless the long-term interest rates – that are now around 1.50% -- rises rapidly, the negative yield situation will not be alleviated any time soon.

As for variable annuities, there are advantages to the product such as tax breaks and minimum guaranteed benefits that guarantee capital, making it an attractive product and explains why the market has grown. However, it has recently been highlighted that there is no standard for accumulating policy reserves against these minimum guaranteed benefits, a necessary condition to having a healthy management. Although we are seeing some movement towards developing these rules, these need to be quickly determined so that the policyholders are adequately protected.

As for the safety net of life insurance, although funding for the life insurance policyholders' protection corporation has been procured up to fiscal 2005, it is unclear as to from where it will be sourced beyond that. As a result, we are seeing much debate on who – the policyholders, the insurance industry or the government – should take on how much of the burden. In failure proceedings until now, the policyholder has been forced to bear the brunt of the burden. What we need to learn from the past is that if the supervisory authorities prolong the lives of life insurance companies that are performing poorly, then someone, be it the policyholders, the industry (that is, the policyholders of healthy companies) or the government (that is, the general public) will have to bear a large burden. Supervisory authorities need to take appropriate action towards those companies that may be heading for failure. The FSA needs to tighten up the current monitoring standards, and move to a stricter administrative supervision. We believe that this will lead to the advancement of the life insurance industry as well as benefit the life insurance policyholder.