

Private Sector Life Insurance Companies and the Mutual Insurance Business of the Agricultural Cooperatives (JA-kyosai)

1. Introduction

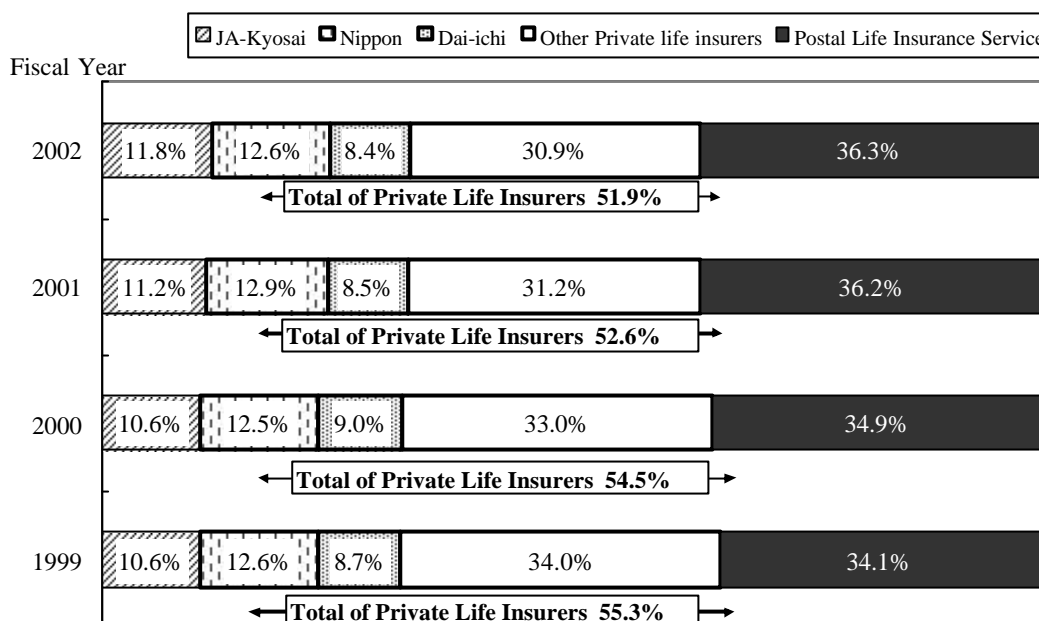
This report is the 2003 edition of the analysis of the life insurance industry that the Japan Center for Economic Research has been conducting since the year 2000 – the white paper of life insurers. The bankruptcy of a life insurer is something that would have grave effects on not only policyholders but also on the financial system as a whole. We, with the vision of reporting the accurate current condition of the life insurance industry, examine the financial conditions, profitability and the business indicators of life insurers. Of the reforms made to the Insurance Business Law in August 2003, we conduct a detailed analysis of the most controversial item, the scheme to lower the guaranteed rates, and make some suggestions as to what the supervising authorities of life insurers should be doing. Furthermore, in this report we analyze not only the large private sector life insurers, but we also analyze the Japan Agricultural Cooperatives' mutual insurance business (JA-kyosai) that holds the greatest share by assets in the mutual aid business, a bordering industry to life and non-life insurance.

2. Financial Situation of Life Insurers

2.1 Comparison of Private Sector Life Insurers and JA-kyosai

JA-kyosai is the name for all the mutual insurance businesses in the Japan Agricultural Cooperatives. Legislation in 1954 enabled them to expand throughout Japan and by June 1, 2003, there were 941 agricultural cooperatives (JAs) that were engaged in this business. The central organization for this business is called the National Mutual Insurance Federation of Agricultural Cooperatives (Zenkyoren). By underwriting reinsurance from each JA, they are the true entities responsible to the policyholders. In the year 2000, Zenkyoren absorbed the mutual insurance federations that were established in the prefectures. The assets held by Zenkyoren total 40.9443 trillion yen in fiscal 2002. This is second to only the largest private sector life insurer, Nippon Life Insurance Co. with 43.6865 billion yen (Figure 1.) . In principle, only those members of the cooperatives can use the services of JA-kyosai. However, besides the regular members (4.54 million people engaged in agriculture and bought shares of JAs and their families) there are also people who can become associate members only by buying a share of the agricultural cooperative (currently 3.87 million people). Moreover, even if no share is bought by the person, these non-members can be insured respective up to 20% of the policy amount of the normal members and associate members, and so there is practically no restriction on who can use the service. Furthermore, regarding the insurable amounts or the content of the insurance, there is no noticeable difference between private sector insurers and JA-kyosai. Also, JA-kyosai can offer both life and non-life insurance under the Agricultural Cooperative Society Law, on the other hands, private sector insurers is prohibited from doing the same by the Insurance Business Law.

Figure 1. Market Share of Life Insurance Business
 (Fiscal 2002, Based on Assets)



Source: Disclosure Materials of each company, 2003

2.2 Assets

The breakdown of assets of the top ten life insurers and JA-kyosai according to their financial statements of fiscal year 2002 (ending March 31, 2003) is given in Table 1. If we look at the average of the top ten insurers, 64% of their investment assets are in fixed yield assets; deposits, public and corporate bonds, loans and other fixed yield. Since most of the liabilities of life insurers are liability (or policy) reserves – that are accumulated over the long-term to be paid out in future insurance claims -- the investment of their assets should be in instruments that provide a stable income over the long-term, and thus the share of their assets in fixed income investments are large. As for JA-kyosai, this share is 91.1% and much higher than that of the private sector life insurers. Since there is little difference with private insurers in the legislation dictating the amount of stocks JA-kyosai can hold, we view this preference for fixed yield instruments as an active choice on the part of JA-kyosai.

Although not all ten insurers are the same, on average, the share of public and corporate bonds in their investment assets has risen on average by 3.2 percentage point over the previous year. The outstanding bonds held have also risen over fiscal 2001. The yield on 10-year bonds (newly issued) has fallen from 1.39% at fiscal year end 2001, to 0.7% at fiscal year end 2002. Thus, we believe the portion of bonds evaluated at market value has caused unrealized gains to rise. The share of public and private bonds in the investments of JA-kyosai has grown to 78.6% and risen over fiscal 2001. We believe this is due to their further buying Government Bonds with tenure of over ten-years. We also see that for JA-kyosai, their share of Local Government Bonds is 23.3% and higher than the average of the major ten insurers of 14%.

Table 1. Share of Asset Types in Total Assets
 (End of Fiscal 2002)

	Cash and Deposits	Bonds	Stocks	Foreign Currency Bonds	Foreign Currency Stocks	Other Securities	Loans	Real Estate	Others	Total	Fixed Return Assets	Foreign Currency Assets
Nippon	1.2 (0.0)	32.4 (3.1)	13.5 (-4.2)	10.0 (1.7)	3.1 (-0.8)	2.4 (0.5)	28.1 (-0.9)	4.5 (-0.0)	4.7 (0.5)	100.0	61.8 (2.2)	12.1 (0.6)
Dai-ichi	2.3 (0.2)	36.4 (0.5)	11.9 (-4.4)	15.4 (3.9)	1.5 (0.2)	0.8 (0.3)	22.9 (-0.0)	4.9 (-0.5)	4.0 (-0.2)	100.0	61.5 (0.7)	13.9 (3.3)
Sumitomo	1.3 (-1.6)	28.8 (4.8)	6.4 (-4.0)	17.4 (4.2)	3.0 (-0.5)	0.8 (-0.2)	28.0 (-1.2)	5.0 (-0.1)	9.4 (-1.4)	100.0	58.0 (2.1)	10.0 (4.1)
Meiji	3.5 (-0.6)	33.2 (5.0)	12.3 (-4.4)	6.2 (-0.1)	2.6 (-0.8)	0.2 (-0.0)	31.6 (0.1)	6.3 (0.1)	4.1 (0.7)	100.0	68.3 (4.5)	7.8 (-1.3)
Yasuda	4.1 (1.1)	21.5 (2.2)	8.6 (-2.5)	5.1 (-3.0)	6.9 (0.4)	1.2 (-0.1)	38.1 (1.2)	4.2 (-0.2)	10.4 (0.8)	100.0	63.7 (4.5)	11.2 (-1.6)
Mitsui	4.7 (-3.6)	27.8 (1.0)	8.4 (-3.1)	14.6 (5.7)	3.9 (1.0)	0.8 (0.2)	30.6 (-1.3)	5.6 (-0.1)	3.5 (0.2)	100.0	63.1 (-3.8)	13.4 (4.9)
Asahi	4.0 (-1.8)	31.2 (10.6)	8.3 (-4.2)	9.3 (0.2)	1.6 (-0.7)	0.6 (-0.1)	31.3 (-5.1)	9.4 (1.2)	4.3 (-0.1)	100.0	66.5 (3.7)	6.4 (-1.5)
Taiyo	2.6 (0.4)	37.3 (-0.2)	6.0 (-2.6)	9.6 (2.3)	2.3 (-0.3)	0.6 (0.2)	34.4 (0.2)	3.0 (0.2)	4.0 (-0.2)	100.0	74.3 (0.4)	11.9 (2.8)
Daido	6.7 (0.9)	52.0 (0.7)	3.5 (-1.7)	3.6 (-1.9)	2.4 (-0.1)	3.4 (1.2)	20.2 (0.1)	3.0 (-0.1)	5.3 (0.8)	100.0	78.9 (1.7)	3.3 (-2.0)
Fukoku	7.7 (-2.2)	38.6 (6.3)	8.1 (-1.8)	3.8 (0.6)	1.7 (0.1)	0.5 (-0.0)	29.7 (-1.4)	4.4 (-0.1)	5.4 (-1.4)	100.0	76.0 (2.7)	4.0 (0.7)
Average	2.7 (-0.5)	33.0 (3.2)	10.3 (-3.8)	11.1 (2.0)	2.8 (-0.3)	1.3 (0.2)	28.4 (-0.7)	5.0 (-0.1)	5.5 (0.0)	100.0	64.0 (2.0)	10.8 (1.4)
JA-Kyosai	2.4 (-1.6)	78.6 (1.8)	1.3 (-0.4)	3.2 (0.3)	0.6 (-0.0)	0.6 (0.1)	10.2 (0.4)	0.4 (-0.0)	2.7 (-0.6)	100.0	91.1 (0.6)	3.8 (0.4)

Notes:

- 1) Figure in parentheses show the percentage point change in their share of total assets based on fiscal 2001.
- 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, 2003

Regarding assets held by the life insurers, restrictions on their holdings of domestic stocks and foreign securities, etc. exist. As holdings of domestic stocks fell by 3.8 percentage points to 10.3%, holdings of foreign public and corporate bonds rose by 2.0 percentage points to 11.1%, overtaking the size of stock holdings. The reason the share of stock holdings has declined for the third consecutive year is the stock market had seen a downturn (25.6% decline in TOPIX), and because life insurers have been selling their stocks because the prices have been too volatile. From JCER’s calculations, the 3.8 percentage point decline in the share of stock holdings to assets is: 3.3 points due to the decline in prices, and 0.5 points due to disposal of holdings. For JA-kyosai, their stock holdings total only 1.3% of their assets, extremely low proportion. Thus their asset structure is much less likely to be affected by fluctuations in stock prices.

Furthermore, the rise in the foreign public and corporate bond holdings of the ten major life insurers is likely due to their active investment in foreign bonds seeking higher yields, since the domestic market interest rates were so low in fiscal 2002. Moreover, if the exchange risk of this investment in foreign bonds is hedged by derivatives, the cost of the hedging is not reflected in the “basic profits” of the insurer; consequently, the basic profits are inflated by this amount.

In order to examine the real assets and the real profitability of these companies, we need to conduct an analysis that reflects the unrealized losses in the assets. Table 2. outlines the unrealized

gains and losses of the ten major life insurers at the end of fiscal 2002. The data shows that due to the sluggish stock market and the decline in land prices, four companies have overall unrealized losses, whereas JA-kyosai has overall unrealized gains of over 3 trillion yen at year-end fiscal 2002. The unrealized gains on their public and corporate bonds that account for almost 80% of their assets were boosted by the ultra-low interest rates in fiscal 2002, whereas the fact that their stockholdings are so low kept them unaffected by the decline in the stock market.

Table 2. Unrealized Gains on Asset
(End of Fiscal 2002)

100 million yen

	Real Estate	Securities			Total of Unrealized Gains	
			Stocks	Bonds		Foreign Securities
Nippon	-1,344	20,671	6,690	10,280	4,279	19,328
Dai-ichi	-1,308	4,946	-1,514	4,992	1,609	3,639
Sumitomo	-477	8	-3,041	2,350	1,010	-469
Meiji	-642	4,670	37	3,090	1,539	4,029
Yasuda	-113	-200	-558	735	-360	-314
Mitsui	-1,574	-1,001	-2,180	652	651	-2,575
Asahi	-468	-1,627	-2,133	434	128	-2,095
Taiyo	-59	359	-629	891	120	300
Dido	-128	1,779	36	1,768	50	1,651
Fukoku	739	169	-503	616	85	908
Total	-5,374	29,775	-3,795	25,807	9,111	24,401
JA-Kyosai	227	31,263	525	30,041	875	31,490

Note: NIKKEI 225 Level is NIKKEI 225 that unrealized gain on stocks is 0

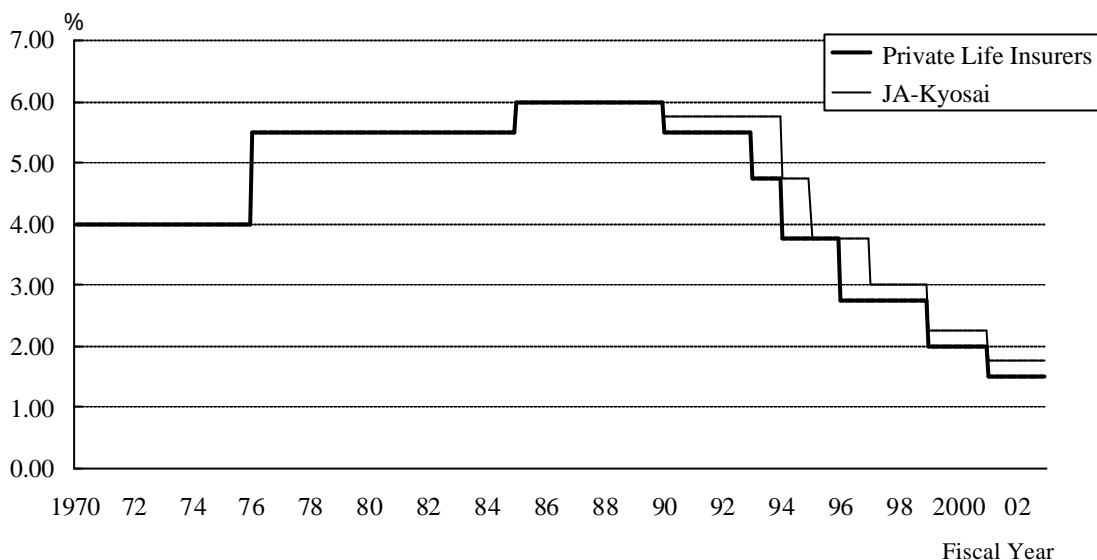
Source: Disclosure Materials of each company, 2003

2.3 Liabilities

The amount paid on a life insurance policy will generally rise as the insured person becomes older. As a result, in the first half of the insured period, the benefits paid will be less than the insurance premiums, whereas in the latter half, the benefits paid will be higher. However, insurance premiums are calculated so that if the death rates and interest rates follow their expected paths when the premiums are calculated, the balance over the insured period should be zero. Thus, life insurers must accumulate liability reserves at every fiscal year end to ensure that they are able to fulfill their obligations according to the insurance policies. Insurance premiums are calculated using 1) expected mortality rates, 2) guaranteed rates, and 3) expected operating expense ratios. Of these, the guaranteed rates are the rates by which the insurance company will discount the premiums based on their expectations of what the investment returns on their assets will be. In Figure 2, we see the guaranteed rates of the private sector life insurance companies. These peaked in the late 1980s at about 6%, and this fell gradually to 1.5% by fiscal 2002. From the figures we were able to obtain from JA-kyosai from 1990, it is obvious that JA-kyosai's guaranteed rates are also gradually

declining, but as a whole, their rates are about 0.25% higher than those of the private sector insurance companies. And for fiscal 2002, the rate was 1.75%.

Figure 2. Change of Guaranteed Rates



Source: Financial Services Agency and Zenkyoren

Table 3. shows, for the ten major life insurers, the share of liability reserves by year policies were sold. In fiscal 2002 the policies with high guaranteed rates are 68.7%, whereas those after 1996 are 31.3%. Policies entered into in the past with the high guaranteed rates have hardly been reduced, whereas the more recent policies with the lower guaranteed rates have more policy cancellations. Even the case of JA-kyosai, although their liability reserves are not published, we believe that as in the case of private life insurers, they also have a large number of policies from when the guaranteed rates were high. As the guaranteed rates continue to be at a high rate, and actual interest rates have been very low for an extended period, the life insurers and JA-kyosai are in a “negative yield” situation in which their interest income every year is insufficient to cover their guaranteed rates. This is the main factor deteriorating their business.

Table 3. Liability Reserves by Year Policy Sold

Fiscal Year Policy Entered into	Guaranteed Rate	Total for 10 Major Life Insurers					
		Fiscal 2001	Share of Total	Fiscal 2002	Share of Total	Change in Amount over Previous Period	Rate of Change
Up to Fiscal 1980	4.00 ~ 5.00	69,338	7.3	63,160	6.7	-6,178	-8.91
Fiscal 1981-1985	5.00 ~ 6.00	101,335	10.7	97,519	10.3	-3,816	-3.77
Fiscal 1986-1990	5.50 ~ 6.00	235,860	24.9	233,426	24.7	-2,434	-1.03
Fiscal 1991-1995	2.25 ~ 5.75	275,670	29.1	256,163	27.1	-19,507	-7.08
Total, Up to Fiscal 1995		682,203	72.0	650,267	68.7	-31,936	-4.68
Fiscal 1996-2000	1.50 ~ 2.90	225,629	23.8	214,972	22.7	-10,657	-4.72
Fiscal 2001	1.50 ~ 1.85	39,533	4.2	39,146	4.1	-387	-0.98
Fiscal 2002	1.00 ~ 1.50			41,596	4.4	41,596	
Total from 1996 and after		265,162	28.0	295,714	31.3	30,552	11.52
Grand Total		947,365	100.0	945,982	100.0	-1,384	-0.15

Notes:

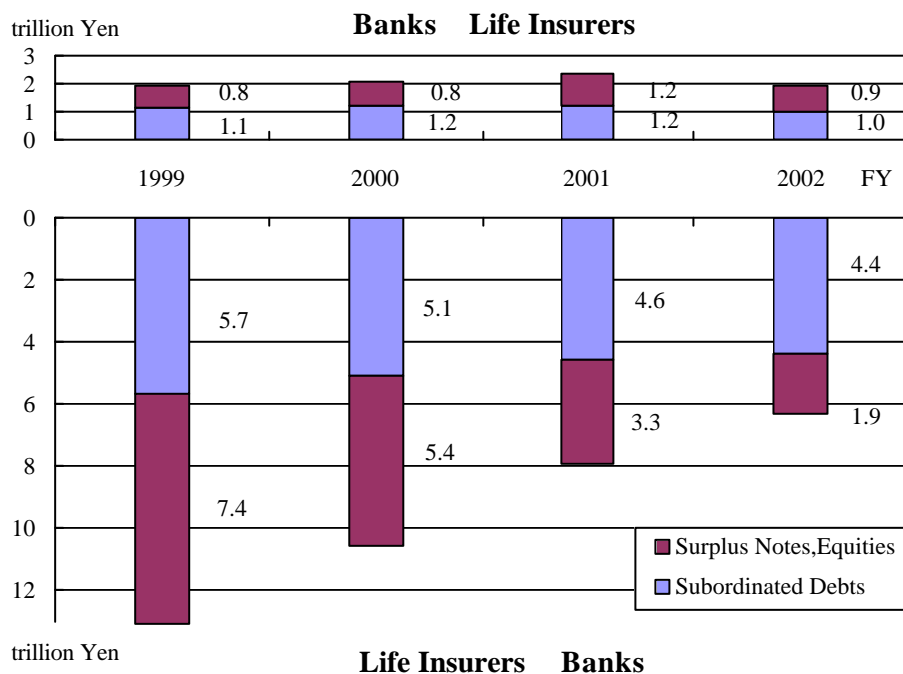
- 1) For the amount of liability reserves, these are the liability reserves for individual insurance and for individual annuity insurance.
- 2) For guaranteed rates, these are the major guaranteed rates corresponding to the liability reserve by fiscal year that policy was sold.

Source: Disclosure Materials of each company, 2003

2.4 Capital

The capital of private sector life insurers is composed of such items as surplus notes, subordinated loans and subordinated bonds, etc. that are contributed mainly from banks and other financial institutions. At end of fiscal year 2002, banks had been the source of surplus notes and subordinated loans to the ten major life insurers to the order of 9.1 trillion yen. At the same time, the ten life insurers held 1.8 trillion yen in bank shares at market value, and had extended to the banks 4.4 trillion yen in subordinated debts and bonds. Here, we examine the cross-holdings of capital for fiscal 1999-2002. In Figure 3., we see that the ten major life insurers are reducing their exposure to banks gradually year-by-year. Although the value of bank stocks held by the life insurers has fallen by 1.4 trillion since fiscal 2001, this is likely due to the decline in stock prices. At the same time, the ten life insurers have reduced their subordinated loans by 1.2 trillion yen over fiscal 2001. This is probably because the subordinated loans that matured in fiscal 2002 were not rolled over.

Figure 3. Double Gearing with Banks



Source: Disclosure Materials of each company, 2003

However, regarding life insurance companies that do not have adequate capital accumulation, as their exposure to banks continues to be great, if the banks record large losses, the risk that the effects it would have on the insurance companies would be enormous. The issue with the cross

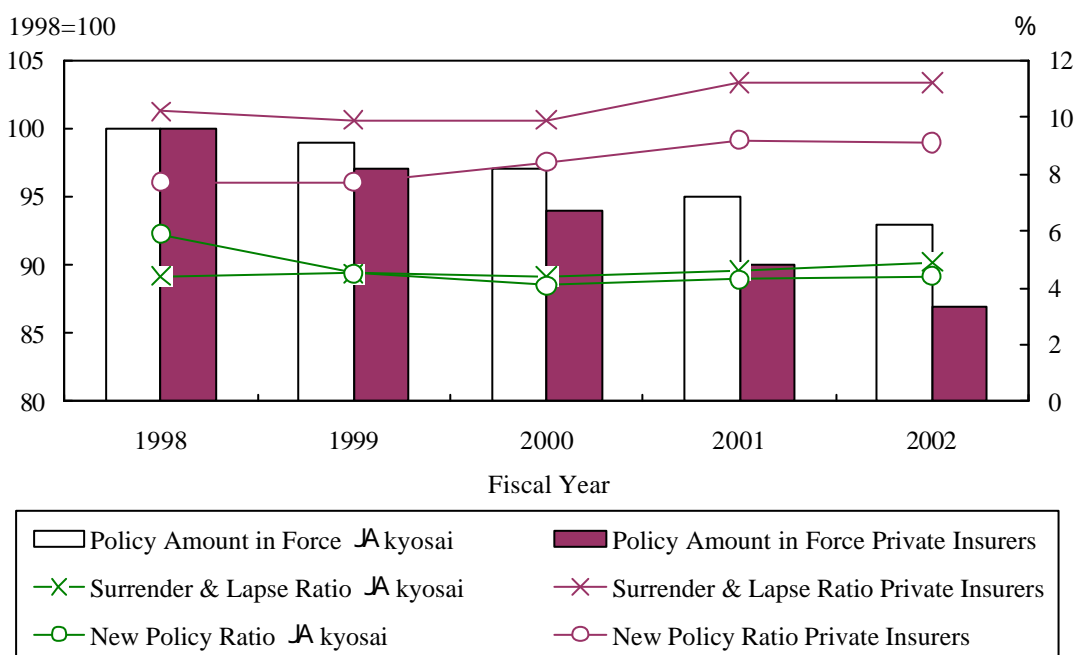
holdings between banks and life insurers of each other’s capital is that if there is uncertainty in the conditions of one business, the risk exists that it will shake the entire financial system. It is necessary that each life insurer continue to reduce their exposure to banks.

Zenkyoren is owned by members of such organizations as Japan Agricultural Cooperatives, Norin-chukin Bank and the Federation of the Japan Agricultural Cooperatives Group. Zenkyoren does not have cross holdings of capital with banks as the private life insurers do.

2.5 Profit/Loss Situation

Figure 4. shows that of the amount insured of the policies in force has declined in the past five years for most life insurers. From Figure 4., we observe that the surrender and lapse ratio is at a high level and there is not enough new business to compensate for the loss, so the amount insured of policies in force has been declining. The main reason for this is that since Daihyaku Mutual Life Insurance Company went bankrupt in May 2000, several other life insurers also went under and the operating environment of all life insurers has been deteriorating. However, for JA-kyosai, the amount insured of the policies in force (for individuals), although shrinking, is declining at a less rapid rate than it is for private life insurers. Because the majority of those buying policies of JA-kyosai are members and associate members, the surrender and lapse ratio is kept at a relatively low level.

Figure 4. Sales Results in 5 Years



Source: Disclosure Materials of each company, 2003

The yield on asset investment -- that reflects the changes in market price of asset holdings -- is shown in Table 4. The market-value yield for seven out of the ten life insurers was negative. In addition, the weighted average of the ten companies was negative for the third consecutive year. The decline in unrealized gains on stocks and land is reducing the market value yield. For JA-kyosai,

on the other hand, the share of stocks in their total assets is lower than of the private life insurers, and since the unrealized gains in public and corporate bonds have risen, their market value yield is a positive figure.

Table 4. Market Value Yield

	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	Average (6 years)
Nippon	1.69	1.29	5.04	-1.00	-1.27	-0.89	0.79
Dai-ichi	0.51	2.09	4.73	-0.65	-1.43	-0.50	0.77
Sumitomo	0.25	1.33	3.94	-0.60	-1.07	0.18	0.66
Meiji	0.13	0.64	2.43	0.58	-1.04	-0.38	0.39
Yasuda	0.99	1.39	4.73	-1.03	-0.21	-0.76	0.83
Mitsui	2.46	0.18	4.94	-1.74	-1.19	-0.72	0.63
Asahi	0.90	1.19	4.40	-1.76	-1.92	-0.68	0.33
Taiyo	0.03	1.13	3.89	0.45	-0.55	1.11	1.00
Daido	2.35	2.27	2.82	0.58	0.08	1.57	1.61
Fukoku	0.29	2.72	3.52	1.06	-0.61	-0.47	1.07
Weighted Average	0.96	1.42	4.04	-0.41	-0.92	-0.15	0.81

Source: Disclosure Materials of each company, 2003

In Table 5., we estimated the Economic Profit of the companies from their published Income Statements. *Economic Profit* is defined as the increase or decrease in net assets on a market value basis, assuming no dividends were paid out, no increases in capital and no buying back of capital stock. This measure shows the real profitability of the companies for one business year and when the figure is negative, this means that real capital is being reduced. Insurance Income is defined as the profits earned from insurance policies when Operating Expenses are zero and the market value yield is equal to the average guaranteed rates. This is equivalent to the total of the life insurers’ mortality profits and additional premiums. *Investment Gains/Losses* are defined as investment profit on an income basis, with market value assessed investment profits reflected. This reflects all investment-related profits and losses such as the amount of the negative spreads (yields) as published by life insurers, plus the changes in the unrealized gains and losses on assets and capital gains and losses. When this is a negative number, this means that they company is in a negative spread situation on a market value basis.

Table 5. Economic Profits of Private Life Insurers and JA-kyosai Federation

100 millions yen, % in parentheses

	Total for 10 major life insurers			JA-Kyosai
	FY 2000	FY 2001	FY 2002	FY 2002
Insurance Income	61,711 (3.72)	59,969 (3.79)	56,625 (3.73)	12,023 (2.94)
Operating Expenses, Other Gains/Losses (-)	28,530 (1.72)	30,233 (1.91)	26,693 (1.76)	1,455 (0.36)
Investment-Related Gains/Losses	-57,526 (-3.47)	-62,092 (-3.92)	-45,733 (-3.01)	7,563 (1.85)
Economic Profit	-26,342 (-1.59)	-32,599 (-2.06)	-16,127 (-1.06)	17,715 (4.33)

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 and Zenkyoren, 2003

In Table 5., we showed the total of each type of profits/losses for the ten life insurers and the weighted averages of the shares of total assets. The Insurance Income to Total Assets is quite steady at the 3.7-3.8% level. However, the total of Operating Expenses and Other Gains/Losses as a share of Total Assets was around 1.7-1.9%. When we deduct the Operating Expenses and Other Gains/Losses as a share of Total Assets from the Insurance-Related Income to Total Assets, we find the Negative Yield Ratio that the company can bear on a market-value basis. If this rate can be kept to about 2%, the Economic Profit will be zero. However, when we look at the Investment Gains/Losses over the past three years, the Negative Yield Ratio on a market value basis has been above 3%. As a result, the weighted average amount of economic profit for the ten major life insurers has been negative for the past three years. This would mean that the real capital of these companies has been declining year-by-year.

However, when we estimate the economic profit for JA-kyosai in fiscal 2002, we found it was roughly a positive 1.7 trillion yen (Table 5.). We believe this is due to four main factors: 1) the lapse and surrender ratios are relatively low compared to the private insurers because the JA-kyosai

organization is a cooperative, 2) their structure is much less sensitive to changes in stock prices because 90% of their assets are held in fixed return type investments, 3) income related to their non-life insurance business is also included in the economic profit for JA-kyosai, and 4) the Operating Expenses of Zenkyoren are reflected, but not of JA Cooperatives that are the main selling body of the policies.

3. Analysis of Financial Health of the Sector

3.1 Net Assets of Private Insurers

The indicators that the supervising agencies use to measure the health of the business of private insurers are Net Assets and Solvency Margins. Standards were introduced so that the supervising agency can monitor the health of private life insurers before they fail, and if they find some companies are less than sound, then supervising agencies can issue an administrative order to that company.

To attain this figure, we take assets at market value and then subtract from this. When this is a negative figure, or can clearly be expected to mark a negative figure, then an administrative order can be issued. We look at the net asset amount of the ten major life insurers (Table 6.), and we see that at end of fiscal 2002, none had a negative asset amount. However, we do see that for all the companies, this figure is on a declining trend.

Table 6. Disclosed Net Assets of Private Insurers

	Nippon	Dai-ichi	Sumitomo	Meiji	Yasuda	Mitsui	Asahi	Taiyo	Daido	Fukoku
Mar-00	82,737	39,400	19,300	21,697	11,040	7,300	10,510	8,200	7,281	5,220
Net Asset Ratio	19.1%	13.1%	8.1%	12.9%	11.0%	7.2%	9.3%	11.6%	12.7%	11.3%
Mar-01	72,114	31,505	15,200	19,368	8,550	3,791	5,710	6,800	6,189	4,710
Net Asset Ratio	16.4%	10.0%	6.4%	11.1%	8.3%	3.9%	5.1%	9.4%	10.5%	9.8%
Mar-02	59,676	24,099	9,800	16,283	7,022	2,778	3,936	4,556	4,712	3,748
Net Asset Ratio	13.2%	8.1%	4.3%	9.5%	7.2%	3.4%	5.1%	6.7%	7.9%	7.9%
Mar-03	50,774	20,616	8,444	13,623	5,896	1,176	2,363	3,412	5,154	3,161
Net Asset Ratio	11.6%	7.1%	3.9%	8.4%	6.2%	1.5%	3.6%	5.2%	8.6%	6.7%
Y-Y change	-14.9%	-14.5%	-13.8%	-16.3%	-16.0%	-57.7%	-40.0%	-25.1%	9.4%	-15.7%
Change of Net Asset in 4 Years	-38.6%	-47.7%	-56.2%	-37.2%	-46.6%	-83.9%	-77.5%	-58.4%	-29.2%	-39.4%
Deferred tax assets in Mar-03	6,757	3,984	2,622	3,206	1,516	764	991	795	876	536

Source: Disclosure Materials of Life Insurers, 2003

Some of the problems regarding this net assets measure is that 1) deferred tax assets are not included, 2) estimated contribution to the Life Insurance Policy Protection Corporation – a certain expense in the future -- is not deducted from the figure, 3) profits/losses from derivatives trading are not reflected, and 4) evaluation standards for land are too lax. In this exercise, we adjust for these problems and put forth a more rigorous adjusted real excess debt. After recalculating each company’s adjusted net assets, we found that they were at least 20% lower than the published net asset amount for all the life insurers. Furthermore, for one company, the adjusted net assets were negative (Table 7.). We find that for net assets of life insurers as well, there is a great dependence on

deferred tax assets, an “asset” with few asset-like qualities.

Table 7. Distribution of Adjusted Net Asset (Mar-2003)

Adjusted Real Net Asset Ratio	Under 0%	0 ~ 4%	4 ~ 8%	8 ~ 10%	Over 10%
Number of insurers (total 10)	1	4	4	1	0

Attrition Rate from Disclosed Net Asset	Under 20%	20 ~ 30%	30 ~ 40%	40 ~ 50%	50 ~ 60%	Over 60%
Number of insurers (total 10)	0	4	2	1	1	2

Source: Disclosure Materials of Life Insurers, 2003

3.2 Solvency Margin Standards for Private Sector Insurance Companies

The solvency margin ratio is the standard by which the Japanese supervising agency monitors life insurers, and can be determined as follows:

$$\text{Solvency Margin Ratio} = (\text{Amount equivalent to shareholder's equity} / \text{Total risk} * 0.5) * 100$$

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

Solvency Margin Standards, however, have some deficiencies: 1) recent volatility in stock and land prices inadequately reflect the risk of losses caused by price fluctuations – a component of “Asset Management Risk”, and 2) The standard assumes that the insurance company is a ongoing concern.

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

(1) Objective of finding Adjusted Solvency Margin Ratios.

We attempt to bring the Japanese solvency margin ratios as close as possible to the RBC standards. We assess market values for such assets as securities and for land as much as possible and by doing so adjust the numerator, the solvency margin, for unrealized gains and losses. In addition, for the rate of reserves for bad loans, we impose the average rate of the major Japanese banks over the entire sample. 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, since we are focusing on the solvency of the company in the event of failure, we remove all items that do not have any liquidation value, and correct the solvency margin ratio to liquidation standards.

(2) Results of Analysis of Adjusted Solvency Margin Ratios

As we are using RBC standards in the US for our adjusted solvency margin ratios, we take the estimation results and classify them using the government intervention guidelines for RBC ratios.

There are two major points whereby these standards differ from the implementation rules of Japan’s Early Corrective Measures. In Japan, if the solvency margin ratio is above 200%, then the life insurer is viewed as being healthy. However with the RBC standards in the US, even if it is over 200%, if it is 250% or under, 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%. Furthermore in Japan if the solvency margin ratio is below 0%, then the supervising agency can issue a reconstruction or liquidation order, but in the US, this can be done when the ratio is below 70%.

From Table 3-8, we see that one company has an adjusted solvency margin ratio of below 0%, and one whose ratio was under 70%. Under RBC standards the authorities would be taking control of the companies and either reconstructing or liquidating them. Further, by RBC standards, only four out of the ten major life insurers have ratios above 250% where no action would be required by the government. Compared to the US standard, the FSA’s solvency margin ratios are still inadequate.

Table 8. Distribution of Adjusted Solvency Margin Ratios (Mar-2003)

	Under 0%	0 ~ 70%	70 ~ 100%	100 ~ 150%	150 ~ 200%	200 ~ 250%	Over250%
Number of insurers (total 10)	1	1	0	1	1	2	4

Source: Disclosure Materials of Life Insurers, 2003

3.3 Indicator of Financial Health of JA-kyosai.

Solvency Margin standards are also used as indicators of the financial health of the JA-kyosai. These are applied to Zenkyoren. Unlike for the private life insurers, this is enforced by the administrative directive of the Ministry of Agriculture, Forestry and Fisheries that basically follows that of the Insurance Business Law. As the JA-kyosai is involved in both life and non-life insurance businesses that are prohibited under the Insurance Business Law, the methods of calculation have to be adjusted. However, because no standards by which an administrative order such as the implementation of the Early Corrective Measures would be issued, the standard is very uncertain.

This measure has the same problem as it did for private life insurers by allowing for all deferred tax assets to be included. Thus, applying the same method we did earlier, we find the adjusted solvency margin ratio for the JA-kyosai, using the liquidation standard. However, as it difficult to remove the effects of the non-life insurance businesses from the numerator, we do not conduct a comparison with the private life insurers.

Table 9. shows the adjusted solvency margin ratios as found through this calculation. In fiscal 2002, their published solvency margin ratio was at 753%, but after our corrections, it rose to 862.8%. This is because when public and corporate bonds were assessed at market value, a huge unrealized gain resulted and the solvency margin increased. Even after the large deductions of the deferred tax assets and the equivalent value of the tax effects, and even after the risk coefficients in the denominator were corrected, the solvency margin ratio rose. Also, JA-kyosai is exempt from being a member of the Life Insurance Policy Protection Corporation and making contributions to the corporation. Thus the solvency margin ratio was not pulled down by the deduction of this figure as it

was for the private life insurers.

Table 9. Disclosed and Adjusted Solvency Margin Ratios of JA-kyosai

	Fiscal 2000	Fiscal 2001	Fiscal 2002
Disclosed	589.0	696.9	753.0
Adjusted	657.4	666.4	862.8

%

Source: Disclosure Materials of Zenkyoren, 2003

Next, as the published Zenkyoren net asset amount is measured by the same standard as the private life insurers, we calculated the adjusted net asset amount using the JCER adjustment method (Table 10.). As a result, the published net asset amount was adjusted downwards by about 9.5%, but the adjusted net asset amount was 6.6821 trillion yen and 16.32% of total assets.

Table 10. Disclosed and Adjusted Net Asset of JA-kyosai

	Fiscal 2000	Fiscal 2001	Fiscal 2002
Disclosed	60,804	57,675	73,862
Adjusted	-	51,141	66,821

100 million yen

Source: Disclosure Materials of Zenkyoren, 2003

From the above, we see that JA-kyosai appears to be highly solvent. In other words, we can say that JA-kyosai is in good financial health. We believe that the stability of JA-kyosai is attributable to a number of factors: 1) Because they are a mutual insurance organization, there is no sudden or large-scale inflow or outflow of members and so the policies in force are quite steady; 2) because they are permitted to engage in both life and non-life businesses, a deterioration in business in one arm may be compensated by the other; and 3) because 90% of their assets are in fixed income instruments, their asset composition allows them to have a stable income, and they are not affected by stock prices.

However, this financial health is judged only by the financial conditions of Zenkyoren. JA-kyosai is made up a two-tiered operation of the Japan Agricultural Cooperatives (JA), and Zenkyoren, so it would be important to know the financial conditions of JA as well before making this kind of statement. Unlike Zenkyoren, JA’s financial statements are not disclosed and so management lacks transparency. Therefore, although Zenkyoren appears to be in “good financial health”, their relative health could be lost in the JA Mutual Insurance Business as a whole. For this reason, JA needs to compile their own financial statements under the recognized accounting standards in Japan. Then, the financial statements of JA-kyosai as a whole should be released including the financial conditions of the mutual insurance operations of JA as well.

Moreover, with less than transparent evaluation standards, the stability of JA-Kyosai’s management cannot be guaranteed. For this end, the Ministry of Agriculture, Forestry and Fisheries needs to take actions: establish strict standards for JA-kyosai’s disclosure (penalizing any misstatements), establish standards for indicators to measure their financial health, and take action

and make administrative orders when these measures indicate trouble.

4. Scheme to Lower Guaranteed Rates of Interest under Revised Insurance Business Law

4.1 Revision of the Insurance Business Law

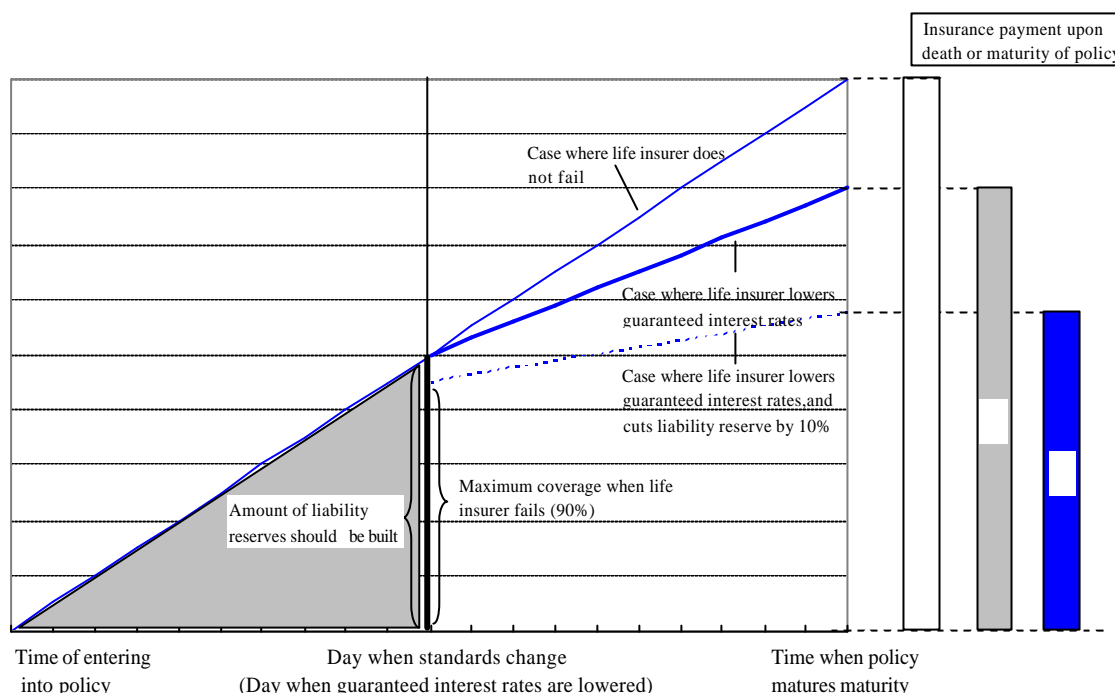
Life insurance companies continue to be in negative yield situations as the low interest rate environment continues, and they have large amounts of policies in force with high guaranteed rates. In August of 2003 the Insurance Business Law was revised to accommodate life insurers who were finding it difficult to continue their business. This is a scheme that would allow life insurers to lower their guaranteed rates and change the terms and conditions of their policies if the life insurers requested. As we will see, this kind of change in terms and conditions of policies could have also been executed under existing bankruptcy proceedings under the Insurance Business Law or the Bankruptcy Law.

4.2 Effectiveness of Lowering Guaranteed rates

Figure 5. depicts a lowering of guaranteed rates, taking the case of endowment life insurance. Life insurer will build up their liability reserve to pay on claims from policyholders. The source of these reserves is the premiums from policyholders discounted by the guaranteed rates, etc. Therefore, as a result, as we see in Figure 5., changing the terms and conditions of the policy is equivalent to reducing the amount of the refund upon termination of the policy (when a policy is terminated before it matures), or to reducing the amount of the policy that was promised to the shareholder that would be paid upon death (or maturity). From the perspective of the life insurer, changing the conditions of the policy such as the guaranteed rates, may improve the negative yield for the company. However, from the perspective of the policyholder, if the amount insurance amount is to be reduced, then they are in effect bearing the burden of the negative yield.

According to the supervising agency, the objective of this arrangement is to protect the policyholder. However, from the perspective of policyholder “protection”, there are still many issues that would need to be resolved.

Figure 5. Diagram of Lowering Guaranteed rates
 (For Endowment Life Insurance)



Note: The day the standards change in is when the insurer fails.

Source: Financial Services Agency

4.3 Issues with the Revised Insurance Business Law

This scheme of lowering guaranteed rates has some of problems: 1) only those policyholders who own policies that have high guaranteed rates of interest would be affected; 2) whether the company is a mutual company or a stock company, it is difficult for the interests of the policyholders to be reflected in this arrangement; 3) There is a high likelihood that rather than the surplus notes and subordinated debt contributed by banks be written off, the amount insured and the refund upon termination of the policy will be reduced. These are examined in-depth below.

4.4 Comparison of Procedure under Existing Bankruptcy Law and with Revised Business Insurance Law

1) From the preceding paragraph, under the Revised Insurance Business Law, only those policyholders whose policies promise high guaranteed rates will be subject to changes in their policies. If the life insurer fails under the existing Bankruptcy Law all policyholders will be subject to the same changes made to the terms and conditions of their policies, and all creditors of the same priority will be treated equally.

2) Under the scheme of the Revised Business Law, changes in the terms and conditions of the insurance policies will be determined by, in the case of a mutual company, their Policyholders' Representatives Meeting, and in the case of a stock company by a special resolution of the Stockholder's meeting. In the case of a mutual company, representatives of policyholders that make up the Policyholders' Representatives Meetings often have interests in the company outside of their

policies such as through cross shareholdings and lending to the company, and are likely to be more concerned with these matters than their policies. On the other hand in the case of stock companies, the stockholders -- whose interests generally differ from those of policyholders -- will be the ones at the stockholders' meeting determining the changes in the terms and conditions of the policies. In either case, the interests of the actual policyholders will not likely be adequately reflected. On the other hand, procedures taken through the Bankruptcy law, which are legal proceedings, will have the involvement of the Courts and will entail a strict inspection of assets. Those that have claims in reorganization , etc, will form a creditors meeting and decide on the changes to the terms and conditions of the policies.

3) With the Bankruptcy Law, the credits will be classified by priorities as determined by law. Normally, claims from policyholders will be of higher priority than other general claims such as surplus notes and subordinated debts, and so these will all be written off. When Chiyoda Life and Kyoei Life failed and went through these proceedings according to the Bankruptcy Law, all surplus notes and subordinated debts were written off. This system is designed to have surplus notes, stocks, and subordinated debts act as a cushion for the policyholders and lessen the loss on them, and is seen as a scheme that protects the policyholders. Moreover, as the Courts will conduct a thorough examination of the reorganization plans made in this process, there is little risk of disputes about exemption from claims, etc. However, under the Revised Insurance Business Law, it is likely that the surplus notes (or stocks, for stock companies) and subordinated debts will not be written off, and the changes in the terms and conditions of the policies will be take precedence over these write-offs.

4.5 Bankruptcy Proceedings from the Perspective of Policyholder Protection

With the scheme to lower the guaranteed rates under the legal revision, it is likely that the surplus notes and subordinated debts of the insurance company are left untouched with the amount insured of the policyholder being reduced to take priority. Thus this measure is far from one to protect the policyholders and more than one to protect the banks and other financial institutions that are large contributors to the surplus notes and subordinated debts of the life insurance companies. From the perspective of policyholder protection the proceedings under the Bankruptcy Law would be more appropriate. The Bankruptcy Law allows for surplus notes, stocks and subordinated debt to act as a cushion for the policyholders and will be written off before the insured amounts will be reduced, and so serve to protect the policyholders.

We see no additional advantage to the policyholder of the legal revision allowing insurers to lower their guaranteed rates. For those life insurers that need to lower their guaranteed rates, it would be less of a burden on the policyholder if the Bankruptcy Laws were to be applied instead. Moreover, it should go without saying that in order to avoid this kind of bankruptcy, the FSA needs to review their standards for implementing Early Corrective Measures, and their practical standards for cash flow analysis, and strengthen their supervision framework so that they can more quickly identify those life insurers that are in financial trouble,

5. Conclusion

The real profitability of life insurers has been largely reduced these past few years due to a very severe external environment with low interest rates, a stagnant stock market, and the decline in

asset values such as for land. Economic profits, which measure the real profitability of these companies, were negative for nine out of the ten major life insurers in fiscal 2002. If we do not see an improvement in the business environment, the situation is so serious that there may be further life insurers going under.

In August 2003, the Insurance Business Law was revised. This scheme allows those insurers that are expected to have trouble continuing their business, to make a request and change many of their basic rates of their policies in force. Under this revision, surplus notes, stocks and subordinated debts will likely not be able to function as a cushion to policyholders when the life insurers are in financial trouble.

What is desired of the FSA is not a revision of the Business Law such as this one, but to better supervise the life insurers by tightening up the current standards used for measuring solvency margins, and real excess debt. Furthermore, it is very difficult to know the real financial health from the information in their disclosure material of life insurers. If they are requiring the insurers to be responsible to their policyholders then it should be a condition for each of the life insurers to release more detailed, relevant information about themselves.

From this analysis, we have found that the JA-kyosai that is allowed to also engage in the non-life insurance business is very strong compared to the private sector life insurers. Their lapse and surrender ratios are very low compared to those of life insurers, and the policies in force are stable at high levels. Their assets are over 90% invested in fixed return vehicles, and their financial situation is not easily affected by changes in stock prices. However, some issues remain with JA-kyosai: 1) financial statements are not released for the JA Cooperatives, and 2) no clear standard by the supervising agency (Ministry of Agriculture, Forestry and Fisheries) to supervise Zenkyoren exists.