# Financial Overview of Life Insurance Companies in Fiscal 2002

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#### 1. Introduction

In fiscal 2002, life insurers struggled due to a combination of three onerous problems: (1) the continued decline in business in force, (2) slumping stock market, and (3) persistent ultra-low interest rates. Recognizing the growing severity of the situation, the Diet recently revised the Insurance Business Law to enable life insurers to cut guaranteed yields on life insurance policies.

# 2. Overall Performance of Life Insurers

Major performance indicators for the 42 life insurers are shown in Figure 1.

		w busine			ness in f		Income	from pr	emiums	Asse	ots under	r mgt.	В	asic pro	fit
	¥ tril.	olicies & a Growth			olicies & a Growth	Share	¥ tril.	Growth	Share	¥ tril.	Growth	Share	¥ bil.	Growth	Share
Major & 2nd-tier (10)	99.3	-6.6%	80.0%	1,097.7	-4.2%	85.9%	19.52	-8.3%	75.5%	151.77	-4.2%	84.4%	1,999.3	-3.6%	93.0%
Traditional (12)	100.0	-6.4%	80.5%	1,102.4	-4.2%	86.2%	19.70	-7.8%	76.2%	152.71	-4.1%	84.9%	1,994.3	-4.0%	92.8%
Foreign (18)	14.0	2.3%	11.3%	120.5	-2.2%	9.4%	4.58	29.0%	17.7%	21.73	4.6%	12.1%	109.5	-18.9%	5.1%
Non-life insur. affil. (10)	6.0	21.5%	4.8%	27.6	12.2%	2.2%	0.97	38.2%	3.8%	2.76	43.8%	1.5%	21.4	-3.2%	1.0%
Non-insurance affil. (2)	4.2	-9.9%	3.4%	28.0	5.1%	2.2%	0.61	-5.4%	2.4%	2.63	10.8%	1.5%	24.4	-9.0%	1.1%
Total (42 companies)	124.1	-4.5%	100.0%	1,278.5	-3.5%	100.0%	25.86	-1.6%	100.0%	179.83	-2.5%	100.0%	2,149.6	-4.9%	100.0%
(For reference)															
Postal life insurance	18.8	-8.6%	(15.1%)	196.7	-3.8%	(15.4%)	14.32	-5.8%	(55.4%)	125.75	-0.7%	(69.9%)	_	_	_
Zenkyoren	16.2	2.7%	(13.1%)	233.0	-2.5%	(18.2%)	3.41	2.2%	(13.2%)	40.94	4.6%	(22.8%)	464.0	-1.1%	(21.6%)

Figure 1	Major Performance Indicators
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Notes: 1. Life insurers are grouped into the following categories.

10 major & 2nd-tier: Nissay, Daiichi, Sumitomo, Meiji, Yasuda, Mitsui, Asahi, Taiyo, Daido, Fukoku.

12 traditional: 10 major & 2nd-tier companies, plus T&D Financial, Yamato.

18 foreign: AFLAC, Gibraltar, AXA Group, GE Edison, Alico Japan, AIG Star, ManuLife, Prudential, Aoba, ING, Mass Mutual, AXA, Hartford, Credit Suisse, PDA, Skandia, Zurich, and Cardiff.

10 non-life affiliates: Tokio, Sompo Japan Himawari, Mitsui Sumitomo Kirameki, IOI, Nipponkoa, Nichido, Fuji, Mtsui Sumitomo Citilnsurance, Kyoei Kasai Shinrai, Sompo Japan DIY.

2 non-insurance affiliates : Sony, ORIX.

2. Postal life insurance (Kampo): For new business and business in force, individual annuities are calculated using annual amounts; shares are expressed as a ratio to the total of 42 insurers.

 Zenkyoren (National Mutual Insurance Federation of Agricultural Cooperatives or JA Kyosai): New business and business in force do not include individual annuities. Assets under management and basic profit include non-life insurance portion.
Source: Compiled from financial statements. For the ten major and second-tier private life insurers, new business decreased 6.6%, while business in force declined for the sixth straight year by 4.2%. For foreign life insurers, net business in force decreased 2.2%.

Notably, the share of premium income accounted for by foreign life insurers has been rapidly approaching the 20% level, advancing to 17.7%. This premium growth is attributed to growth of third sector insurance (including cancer, medical, and personal accident insurance not classified as either life or non-life insurance), and to the start of variable life insurance sales at banks in October 2002.

While life insurers affiliated with non-life insurance companies enjoyed new business growth of 21.5%, we should note that this growth follows a 17.9% decline in the previous fiscal year.

# 3. Condition of the 10 Major & 2nd-Tier Insurers

#### (1) Negative Spread Loss Remains Above 1 Trillion Yen

Life insurers continued to suffer losses due to the negative spread between the guaranteed yield and investment return (basic yield).

	FY 2002	FY 2001	Change
1 Average scheduled interest rate	3.37%	3.55%	- 0.18%
② Basic yield	2.44%	2.56%	- 0.12%
3 Negative spread (2 $-$ 1)	- 0.92%	- 0.98%	0.06%
④ Liability reserve	¥125.2 tril.	¥126.4 tril.	-
$(5)$ Negative spread amount $((3 \times (4)))$	¥1,172.3 bil.	¥1,249.7 bil.	– ¥77.4 bil.

#### Figure 2 Negative Spread Situation

Note: The basic yield is the ratio of net investment income of the basic profit to the liability reserve.

While the average guaranteed yield had been reduced approximately 0.1% every year, the reduction in fiscal 2002 was larger at 0.18%. This is attributed to a reduction in the guaranteed yield for group pensions (mainly from 1.5% to 0.75%).

While the negative spread (calculated as basic yield minus guaranteed yield) edged down to -0.92% from -0.98% in the previous year, the loss from the negative spread remained high at over \$1 trillion.

#### (2) Downtrend in Basic Profit

Basic profit, introduced in fiscal 2000 for life insurers, is an indicator of core profit from insurance and investment operations, and excludes capital gains and nonrecurring items.

			(Unit: ¥ billion)
	FY 2002	FY 2001	Change
A. Basic profit	¥ 1,999.4	¥ 2,074.3	- 3.6%
B. Negative spread (interest loss)	– ¥ 1,172.3	– ¥ 1,249.7	-
C. Expense profit & mortality gain	¥ 3,171.7	¥ 3.324.0	- 4.6%
B ∕ C (%)	37.0%	37.6%	- 0.6%

Figure 3 Basic Profit

# (1) Basic profit is declining

Basic profit decreased 3.6% from the previous year. As explained above, the decrease would have been greater if not for the cut in guaranteed yield for group pensions. Excluding the effect of this cut (estimated at \$120 billion), the decrease was -9.4%.

Basic profit is almost equivalent in value to the sum of the three sources of profit (expense profit, mortality profit, and interest profit). Thus deducting the negative spread loss from basic profit leaves the sum of expense profit and mortality profit. The ratio of the negative spread loss to the sum of expense profit and mortality profit remains at 37%.

# (2) Basic profit tends to be overstated

Basic profit tends to be overstated because it contains items that are treated as profit for accounting purposes, but that actually have specific uses and cannot be retained as surplus. For example, mortality profit from group term insurance must be returned almost in full to policyholders; otherwise, policy renewal itself would be threatened.

Moreover, foreign bond investment has increased recently to take advantage of the spread between domestic and foreign interest rates. Foreign bond investment tends to boost basic profit because only returns are reflected in basic profit, while hedging costs are treated as a capital loss. For the ten private life insurers, the weight of foreign bonds rose from 9.2% of invested assets to 11.1%, exceeding the 10.3% weighting for stocks. The hedging cost, estimated by multiplying a hedging cost ratio of 1.5% (the U.S.-Japan interest rate spread for 3-month instruments) to the ¥15 trillion in average foreign bond holdings, amounts to approximately ¥230 billion.

Thus not only the trend but composition of the ¥2 trillion basic profit must be considered.

#### (3) Profit by source

The Financial Services Agency recently released aggregate data on profit by source for the 42 life insurers up to fiscal 2001.

Two patterns emerge from the data: expense profit is declining sharply, while mortality profit remains stable. With regard to the declining expense profit, while companies are striving to reduce expenses and increase efficiency, a lower loading (apportioned to expenses), combined with a decline in business in force, causes income to decrease more rapidly than expenses.

				(Unit: ¥ billion)
	FY 1999	FY 2000	FY 2001	FY 2002
Profit from 3 sources	2,261.7	2,048.8	1,976.7	2,096.7
Expense profit	1,143.3	999.9	789.7	703.9
Mortality profit	2,517.7	2,519.5	2,706.7	2,690.6
Interest profit	- 1,399.3	- 1,470.6	- 1,519.8	- 1,297.8
Other loss	- 463.3	- 1,091.0	-1,329.1	n/a
Surplus	1,798.4	957.8	647.6	n/a

Figure 4	Profit by	Source
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Sources: Data to fiscal 2001 is from Financial Services Agency (May 23, 2003). Data for fiscal 2002 is from *Nikkei Shimbun*, July 18, 2003.

#### (3) Net Profit and Its Uses

Though important, basic profit is not the only type of profit that concerns life insurers. Particularly in times when asset prices are plunging, capital gains and extraordinary gains become important as well. Figure 5 presents a broad picture of these items, and also shows how much of the resulting net profit is applied to the retained surplus or returned to policyholders.

When capital gains and losses are included, the basic profit of \$2 trillion decreases to \$303 billion. Moreover, after adjustment for extraordinary items, the profit decreases further to \$111 billion. For this reason, as in fiscal 2001, companies have decreased their liabilities such as the contingency reserve and reserve for price fluctuations of securities investment (item B), and used the funds to pay dividends (item C).

Of course, the reserve for price fluctuations of securities investment exists for the purpose of serving as a buffer against risk. However, its continued use in this way is unsustainable.

Looking at the composition of dividends, we see that most are mortality profit dividends for group term insurance, while dividend payments for individual policies have been plunging.

		(L	Jnit: ¥ billion)
	2002	2001	Change
① Basic profit	1,999	2,074	- 3.6%
② Capital gain	1,311	1,346	- 2.6%
③ Capital loss	- 3,007	- 2,719	10.6%
Basic profit + Net capital gain	303	701	- 56.7%
④ Loss from real estate disposal	- 156	- 211	- 26.1%
⑤ Bad loan writeoff	78	- 90	-
6 Corporate & resident tax	- 98	- 145	- 32.6%
🗇 Tax adjustment	83	143	- 42.0%
(8) Retirement benefit cost (extraordinary loss)	- 121	- 121	0.0%
(9) Other	21	- 224	-
A. Net profit (total of $(1 \sim 9)$ ) *	111	54	107.4%
Increase in contingency reserve	- 144	- 134	7.6%
Increase in price fluctuation reserve	- 137	- 176	- 22.3%
Capital increase	- 3	- 51	- 94.2%
B. Change in retained surplus	- 284	- 361	- 21.4%
C. Provision for policyholder dividend reserve	395	415	- 4.8%

Figure 5 Net Profit: Components and Uses

Notes: \* Net profit values are prior to changes in contingency reserve and reserve for price fluctuations of securities investment. Numbers are rounded to nearest billion yen.

# (4) Indicators of Stock Deteriorate Due to Falling Asset Prices

The TOPIX stock price index fell 24% from 1,060.19 at end of fiscal 2001 to 802.14 at the end of fiscal 2002 (daily average for March 2002). Since shareholdings at the start of fiscal 2002 are estimated at \$20.4 trillion, the 24% decrease translates into a loss of \$4.9 trillion.

The solvency margin ratio for the ten private life insurers decreased 58 points, from 628.2% to 570.0%. Factors causing this decrease are analyzed in Figure 6. The main cause is a decline in domestic stock prices (-92 points), while an increase in unrealized gains for bonds is offset by a loss for foreign stocks.

Figure 6	Factor Analy	vsis of the	Decline in	Solvency	Margin Ratio
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(Unit:	Percentage points)
Numerator	- 135
Capital on balance sheet	- 18
Other unrealized gains from securitie	s – 92
Domestic stocks	- 92
Bonds and foreign stocks	0
Unrealized gains from land x 85%	- 10
Other	- 15
Denominator (risk reduction)	77
Decrease in solvency margin ratio $(628.2\% \Rightarrow 570.0\%)$	- 58

With regard to the denominator, many life insurers aggressively reduced their shareholdings and reduced risk exposure, increasing the solvency margin ratio 77 points. (Some insurers use derivatives to reduce the risk of stock price fluctuations).

Another stock indicator, real net assets (assets at fair value minus real liabilities) for the ten insurers fell  $\frac{22.21}{1.46}$  trillion (16.1%) from  $\frac{13.67}{1.46}$  trillion.

Entering fiscal 2003, stock prices have shown signs of correction, while the long-term interest rate temporarily rose to 1.4%.

Despite the negative impact on bond prices, higher interest rates would increase income gains and be welcomed by life insurers as long-term investors. But interest rate concerns are exaggerated for two reasons. First, considering the GDP growth rate in the future, interest rates are not likely see the levels of the high growth era, rising only about 2% at most. Second, even if the interest rate rises 2%, the impact on bond investments would not be excessive compared to the downside risk for stock investments. Domestic bond investments of the ten private insurers amount to \$48 trillion, with a duration of approximately five years. A 2% increase in the interest rate would thus decrease the value of bondholdings by \$4.8 trillion. By comparison, for the stockholdings amounting to \$15 trillion (at the end of fiscal 2002), an equivalent decrease would occur with a 2,500-point decline in the Nikkei Stock Average (\$15 trillion x 2,500 / 8,000 = \$4.7 trillion).

# 4. Condition of Postal Life Insurance (Kampo)

The Postal Services Agency was reorganized into a public corporation called Japan Post on April 1, 2003. We compared the financial and business condition of the postal life insurance system (Kampo) in its final year before the conversion with that of the ten private life insurers, and observed the following characteristics.

# (1) Downtrend of business in force becomes clear

Whereas business in force peaked in fiscal 1996 among the ten private insurers, the peak was delayed for Kampo to the end of fiscal 1998, and the downtrend has become clear only recently.

For Kampo, business in force declined 3.8%, approximately the same rate as for the ten private insurers at 4.2%. Although lapses and surrenders did not increase, maturities have been rising while the new business ratio (ratio of new business for the year to business in force at the start of the fiscal year) has been falling.

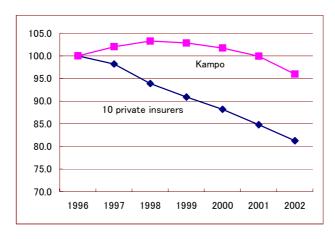


Figure 7 Business in Force (End of FY 1996 = 100)

Incidentally, partly because its main products have a savings component, Kampo enjoys a lower lapse and surrender ratio than private insurers. Private insurers thus need to find ways to improve their persistency rate.

	New business ratio		Lapse & surrende	
	2002	2001	2002	2001
10 private insurers	9.0%	9.3%	9.4%	9.6%
Kampo	6.7%	7.3%	3.4%	3.5%

#### Figure 8 New Business Ratio and Lapse and Surrender Ratio

Notes: New business ratio = New business / Business in force at start of fiscal year (for individual insurance). New business includes increases by conversion.

Lapse and surrender ratio is for individual insurance and annuity.

(2) Income yield is declining faster than for private insurers

This is attributed to the fact that the interest rate spread between redeemed bonds and reinvested bonds is larger than for the private sector.

	10 private	e insurers	Kampo		
	FY 2002	FY 2001	FY 2002	FY 2001	
Average guaranteed yield	3.4%	3.6%	3.3%	3.5%	
Income yield	2.4%	2.6%	2.2%	2.5%	
Negative spread rate	- 0.9%	- 1.0%	- 1.1%	- 1.1%	

#### Figure 9 Income Yield

While Kampo currently has a larger negative spread rate than the private sector, its average guaranteed yield will decline faster due to the large proportion of endowment insurance with a 10-year maturity.

#### (3) Unrealized loss from stock investment exceeds private insurers

The larger unrealized loss is attributed largely to the fact that Kampo began stock investment in fiscal 1987, when the bubble economy was reaching its peak.

	(Unit: ¥ trillion)			
	Market value	(% of holdings)	Book value	Unrealized gain/loss
10 private insurers	14.1	9.3%	14.5	- 0.4
Kampo	4.1	3.4%	9.6	- 5.5

Figure 10 Domestic Stock Investment

# (4) Conversion to Japan Post

Basically, existing Kampo assets and liabilities were transferred to Japan Post at fair value. Looking first at assets, the fiscal 2002 financial statement shows that the transfer of assets at fair value generated an appraisal loss of \$3 trillion yen (\$6.4 trillion unrealized loss for designated money in trust for independent management, and \$3.5 trillion unrealized gain for other securities available for sale).

To compensate for the loss, funds were added to the retained surplus (capital account) from the following sources: (1) the reserve for price fluctuation was fully depleted (¥1,056 billion), (2) the contingency reserve was decreased (¥918 billion, leaving ¥814 billion), (3) the funding method for the liability reserve was changed (¥700 billion, according to interviews), and (4) assets were sold (¥200 billion). Thus capital losses from stocks in previous years were funded from the retained surplus so that Japan Post could start off Kampo with no unrealized loss.

However, on the liability side, since a fair value method had been adopted for the liability reserve, funding has been conservative compared to the private sector. Specifically, all policies with a guaranteed yield higher than 2.85% were reevaluated at a 2.85% yield, resulting in an additional reserve funding of \$9 trillion. This magnitude of additional funding was possible largely because Kampo is not subject to taxation. If private life insurers were to do the same thing, they would face significantly higher funding costs due to taxation. Thus in the interest of fairness, private insurers deserve greater preferential tax treatment.

Overall, Kampo has grown based largely on preferential tax treatment and state guarantees that give consumers a sense of safety. However, following on the private sector, business has

recently begun to slow down and is showing signs of weakness. As we explain below, Kampo is starting to feel the burden of low interest rates along with private insurers.

# 5. Low Interest Rates and the Viability of Savings-Based Products

Low interest rates are not only causing negative spreads, but threatening the viability of savings-based products. This also applies to Kampo, whose mainstream endowment insurance products are in some cases paying out less in benefits at maturity than total premiums paid in. While this is partly due to the payment of death benefits, the product is unmistakably losing its appeal to policyholders with a savings objective. (Incidentally, according to the Japan Post website, the cumulative number of new policies for April-June 2003 decreased 15.3% from the same period one year earlier. This decline is no doubt related to the above circumstances.)

Moreover, savings-based products offered by the private sector also face a bleak future. The current guaranteed yield of 1.5% for life insurance policies is unsustainable and will have to be reduced again in the future. In fact, for new policies since fiscal 1996, the valuation rate for liability reserves has been legally stipulated under the standard valuation rate method. The valuation rate (which is calculated based on the risk-free bond rate) is predicted to decline to 1.0% or 0.75% by April 2005. If the guaranteed yield is reduced accordingly, savings-based products will become extremely uncompetitive.

# 6. Conclusion

The life insurance business is struggling in a very severe environment. While the excessive stock market decline in fiscal 2002 may see a correction, no relief appears in sight with regard to the ultra-low interest rates and downtrend of business in force. Despite expense-cutting efforts, expense profit is predicted to continue shrinking as loading declines. Mortality profit is also predicted to suffer as the core insured population decreases in the medium term.

Amid these conditions, life insurers must strive to increase business in force by boosting persistency rates, and improve efficiency through a radical overhaul of the business structure. To accommodate the aging population, we predict the business model will be transformed from one centered on protection products, to one that provides a variety of protection services for all of life's needs. In addition, while continuing to emphasize the role of the sales force, companies must make investments to enhance service networks.

With regard to the recent legislation to reduce the guaranteed yield, we note in passing that the legislation does not address the structural problem in which the negative spread loss is being compensated with by the mortality profit of young persons. While this matter lies beyond the scope of this paper, we end with a brief comment on the guaranteed yield.

To put the guaranteed yield in better perspective, we compared it against the standard valuation rate method. Figure 11 plots the guaranteed yield and standard valuation rate from 1976. Through the benefit of hindsight, we can see some interesting implications.

First, the standard valuation rate did not signal an increase when the guaranteed yield was raised in 1985. The decision to increase the guaranteed yield was apparently affected by the high stock price levels at the time. Moreover, the guaranteed yield was not reduced until much later than the timing suggested by the standard valuation rate.

Second, even if the guaranteed yield had been set at the lower standard valuation rate of 4.25% from 1976 to 1987, the magnitude and speed of the subsequent decline in interest rates to the 1% range suggests that a negative spread would have occurred anyway.

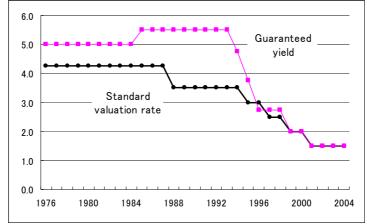


Figure 11 Comparison of Guaranteed Yield and Standard Valuation Rate

Note: For policies with a term of over 20 years.