



SOCIETY OF ACTUARIES

Article from:

# International Section News

March 2002 – Issue No. 27

## Korean Life Insurance Market 1998-2000: Years Of Restructuring

by Chi Hong An and Laird D. Zacheis

*Note from SOA Editor: the following article was written for the September 2001 issue of Milliman Global Insurance. It is reprinted with permission.*

*From the Editor of Milliman Global Insurance: In May 2001, an international group of 22 consulting and actuarial firms announced the formation of Milliman Global, a worldwide platform for serving the insurance, employee benefits and healthcare industries. Along with the new organization comes a new logo and new names for many of our key newsletters, including this publication — Milliman Global Insurance. This publication (replacing Insurance International) continues our commitment to providing valuable articles on current insurance issues. We hope you find this publication of interest and welcome your comments or suggestions. Feel free to email your comments to steven.schreiber@milliman.com.*

*Author's Note: The Asian economic crisis, which reached Korea in late 1997, provided the landscape for restructuring that allowed some Korean companies to excel while forcing others to close down. Strong growth in exports, due in part to the depreciation of the Korean currency, resulted in a remarkable recovery in the Korean economy. The government has accumulated significant foreign currency reserves and paid off International Monetary Fund (IMF) bailout loans in advance. While the stock market continues to fluctuate, the economy is substantially stable.*

**T**he Asian economic crisis also provided similar opportunities for restructuring the Korean life insurance industry. Companies that entered the crisis from a position of strength emerged even stronger, while less strong companies were left seriously weakened. In 1995, there were 33 Korean life insurance companies. Today there are 23, with the prospect of fewer companies by the end of 2001. This article reviews the experience and restructuring that has taken place in the industry since the Asian economic crisis reached Korea. It also discusses the recent trends of the life insurance industry.

### Merger & Acquisition Activity

Between 1998 and 2000, there were several attempted acquisitions of life insurers by foreign companies. However, aside from government interventions, only one transaction has been completed to date. Domestic companies have actively sought both foreign capital and foreign expertise to facilitate the necessary restructuring.

The life insurance market is beginning to open to both non-Korean competitors and, within Korea, financial institutions other than life insurers.

Fiscal year (FY) 1998 (starting April 1, 1998) began with the announcement that MetLife was considering an investment of over US \$1 billion to take over the troubled Korea Life. As talks between MetLife and the regulators slowly progressed, numerous other parties, both foreign and domestic, were rumored to be making bids. Ultimately, the regulators could not

find a satisfactory bid, and consequently chose to nationalize Korea Life. Nevertheless, the perception was that Korea was more amenable to foreign capital and domestic restructuring, and merger and acquisition (M&A) activity, together with significant restructuring, began in earnest.

The years 1999 and 2000 witnessed the most active period of restructuring and merger and acquisition (M&A) in the history of the Korean life insurance industry. Allianz acquired First Life (Jeil) after an auction process, completing the one acquisition of a solvent company in the Korean industry in a manner typical of western M&A. Several insolvent companies (KukJe, BYC, Coryo, TaeYang) were acquired by financially strong companies (Samsung, Kyobo, Allianz Jeil, Hungkuk, respectively). The government arranged these acquisitions as the first stage of the restructuring plan after the currency crisis.

As several of the chaebols (Korean business conglomerates) expressed interest in entering the life insurance industry to expand their presence in the financial sector, the government proposed that the chaebols be allowed to set up life insurance companies by taking over (and infusing capital into) the insolvent companies. Hyundai (via Hankuk and Josun) and LG (via Hansung) entered the insurance industry in this way. SK, one of the financially strongest chaebols, acquired Handuk and Kookmin, putting it in the top six, in terms of assets. Kumho Group took over Dongah Life to become the fifth largest insurance company. This was the second stage and the

**Table 1**  
**Restructuring and M&A Activities**  
**(billions of won)**

	Asset				M&A Activity
	FY98	FY99	FY00 (Dec)	Increase (F00 / F98)	
Samsung	36,376	44,846	48,444	33.2%	Considered IPO
Kyobo	20,677	22,194	23,671	14.5	Considered IPO
Korea Life	13,076	15,499	17,338	32.6	Nationalized, reported "for sale"
Jeil	3,827	3,968	4,252	11.1	Acquired by Allianz
Hungkuk	3,404	3,446	3,508	3.1	Reported "for sale"
Dongah	1,430	1,971	N/A	N/A	Acquired by Kumho
Daishin	1,149	1,413	1,051	-8.5%	Reported "solvency problem"
Handuk	792	692	N/A	N/A	Acquired by SK
Hanil	408	354	195	-52.2	Allowed to restart operation
Hyundai	1,197	1,267	935	-21.9	Being transferred to Korea Life
Kookmin	925	1,240	N/A	N/A	Acquired by SK
Kumho	561	490	2,530	27.1	Considered JV with foreigners
Lucky	509	393	378	-25.7	Acquired Hansung Life
Pacific	738	859	N/A	N/A	Acquired by Tongyang
Shinhan	1,905	1,816	1,720	-9.7	
SK	867	863	2,790	8.0	Acquired Handuk & Kookmin
Dongbu AXA	545	559	534	-2.0%	AXA is leaving JV
New York	40	38	37	-7.5	Korean partner left JV
MetLife	516	568	625	21.1	Korean partner left JV
Samshin	886	772	490	-44.7	Being transferred to Korea Life
Tongyang	1,452	1,623	2,809	28.3	Tongyang bought out JV
Youngpoong	36	63	61	69.4	Manulife left JV
AIA	31	48	77	148.4%	
France	48	44	44	-8.3	Reported "JV with Hana Bank"
ING	146	258	550	276.7	20% acquired by H&CB Bank
LINA	64	84	110	71.9	
Prudential	104	203	348	234.6	

end of the restructuring plan initiated by the government after the Asian economic crisis.

The regulators recently declared three-medium sized companies—Hyundai, Samshin, and Hanil—non-viable due primarily to the large realized losses from the default of corporate loans to the Daewoo group and other insolvent companies. Several life companies expressed interest in purchasing these companies with the govern-

ment's promise to make up the losses. However, the deals fell through. As a result, Hyundai and Samshin are transferring their policyholders to the nationalized Korea Life. Hanil, however, recently succeeded in recouping the loans made to its related chaebol and was permitted to open new business operations.

It should be noted that these activities were largely driven by the government, not by market princi-

ples. However, future changes in the marketplace will be driven by market principles, as the entrance of additional chaebols into the life insurance industry will change the long-term landscape of the industry. The industry is in the process of restructuring into a group of large, local companies supported by chaebols, and a group of foreign companies supported by multinational insurers. The medium or small local companies will experience a more

*Korean Life Insurance Market  
1998-2000: Years of Restructuring  
continued from page 25*

competitive market for products and capital. The survival of these companies will depend heavily on differentiated products targeted for niche markets, and their ability to raise capital to meet solvency requirements. Hence, medium-sized companies are likely acquisition targets of multinational companies with large capital bases.

Among the joint ventures, Manulife and Allstate withdrew from their partners, while MetLife and New York Life bought out their partners' shares. AXA's departure from its joint venture with DongBu Life is further indication of the difficulties foreign and local companies have experienced with joint ventures.

Table 1 on page 25 summarizes recent growth in assets for Korean life insurance companies and recent restructuring activity. The companies are typically segmented into (1) the Original Six that began operations following the Korean War; and (2) New Korean, (3) Joint Venture and (4) Foreign, all of which began operations after the market opened in 1989. The Original Six continue to dominate

the industry in terms of revenues, income and assets.

### Regulatory and Accounting Changes

The industry crisis spawned numerous regulatory responses aimed at hastening the industry's recovery and improving its strength against future economic shocks. In January 1999, the Financial Supervisory Services (FSS) was established, through the consolidation of the roles of the Banking Supervisory Authority, the Securities Supervisory Board, and the Insurance Board. The establishment of the FSS was designed to facilitate the cleanup of troubled financial institutions, and to improve capital adequacy and the transparency of financial statements for banks and insurers.

Beginning in fiscal 1999, life insurers were required to mark assets to market, under an approach similar to US GAAP FAS 115 treatment. Trading securities are now marked to market in the income statement, while unrealised gains or losses on investment securities now flow through the equity

account. This prevents insurers from hiding losses in subsidiaries.

Under IMF recommendations, life insurers were required in FY 1998 to hold net level policy reserves instead of the historical minimum of seven-year Zillmer. At the same time, life insurers were allowed to establish a deferred acquisition cost (DAC) asset equal to the unamortized 7-year Zillmer allowance, thus creating a net liability equal to the old minimum standard. Of those companies who held reserves in excess of 7-year Zillmer at fiscal yearend 1997, all except Samsung took the opportunity in 1998 to reduce net liabilities by establishing the full DAC, to offset losses on the investment side.

Also based on recommendations from the IMF, the FSS is instituting a minimum-required capital standard for life insurers based on the European Union formula: generally, 4% of general account individual liabilities plus 0.3% of net amount at risk. Under current FSS guidelines, this standard will be fully phased in by the end of FY 2003. It is notable that the FSS formula excludes any capital requirement on group

**Table 2**  
**Reported Capital & Surplus**  
(billions of won)

Fiscal Year	Original Six	New Korean	Joint Venture	Foreign	Total	Original Six Excluding Korea Life
1993	754	178	126	61	1,119	
1994	844	(195)	58	35	742	
1995	582	(811)	(112)	41	(299)	
1996	700	(1,437)	(234)	45	(926)	630
1997	778	(2,123)	(337)	38	(1,644)	698
1998	(2,361)	(2,354)	(228)	23	(4,919)	296
1999	1,120	(1,205)	(197)	46	(235)	2,742
2000(Dec)	653	(920)	(53)	110	(210)	2,205

pension liabilities. Also, this standard for required capital does not specifically reflect asset-related risks. The recent failures of life companies in Korea were largely related to exposure to defaults in corporate loan portfolios and heavy stock and real estate investments. Some question whether this formula is adequate to identify troubled companies in Korea.

In April 2000, the assumed interest rates in pricing were liberalized. But the FSS now prescribes an interest rate ceiling for the calculation of policy reserves, to prevent inappropriate assumptions. In 2000, the ceiling was set at 6.5% for participating products and 7.5% for non-participating products; in 2001, rates were reduced to 5.5% and 6.5%, respectively.

Historically, reserve calculations on interest-sensitive products were based on the guaranteed surrender value interest rates, which typically approach the ultimate interest rate in three to five years. Regulators, concerned that the level of reserves in early policy years were not adequate, mandated the use of ultimate interest rates for new business beginning in 2000.

### Profitability Levels

The reported capital of the industry declined each year from 1993 to 1998.

Table 2 on page 27 indicates that this decline is not confined to a particular group of companies, but

was felt within three of the four industry sectors. The improvement in reported capital in 1999 was mainly due to stock market performance and capital injections by government and shareholders. To meet stronger government solvency requirements, insurance companies tried to raise capital through affiliated companies and new investors. Initially, the regulators allowed subordinated debt to count as capital for solvency margin purposes. To meet solvency requirements, several life companies issued sub debt to each other or to affiliated companies. However, the FSS became concerned that the solvency problems of several companies would spread to the entire industry and responded by disallowing certain sub debt.

During FY 2000, the Korean stock market lost close to half of its

value. This event, combined with low interest rates and declining profitability of saving products with high guarantees, resulted in many companies not improving their capital position as of yearend 2000.

The government currently plans to inject 2,100 billion won into Korea Life to cover net value losses associated with the two non-viable companies being merged into Korea Life, and then to put it up for sale. Once this infusion of capital is made, the industry is expected to finally be in a solvent position in total.

The profitability of the Korean life insurance industry dramatically improved in 1999, excluding Korea Life and Dongah Life, which accounted for losses of 814 billion won and 378 billion won, respectively. For example, Samsung reported a 310 billion won profit.

Fiscal Year	Original Six	New Korea	Joint Venture	Foreign	Total
1992	98	(7)	0	(4)	88
1993	123	(10)	19	(4)	128
1994	113	(389)	(113)	(3)	(393)
1995	(31)	(646)	(169)	(6)	(852)
1996	17	(713)	(149)	(14)	(859)
1997	101	(768)	(155)	(24)	(845)
1998	(2,947)	(910)	(136)	(28)	(4,021)
1999	(828)	(145)	(27)	20	(981)
2000(Dec.)	(702)	(194)	2	50	(844)

Fiscal Year	Original Six	New Korean	Joint Venture	Foreign	Total
1993	18,458	4,202	1,310	83	24,053
1994	20,454	5,549	1,640	106	27,749
1995	25,807	7,340	2,021	120	35,288
1996	28,550	7,398	2,075	140	38,163
1997	37,127	9,476	2,187	166	48,956
1998	37,898	6,381	1,880	231	46,390
1999	35,092	4,402	1,810	391	41,695
2000 (Dec)	32,061	2,785	1,411	630	36,887

*Korean Life Insurance Market  
1998-2000: Years of Restructuring  
continued from page 27*

Fiscal Year	Pure Endowment	Protection	Endowment	Group	
1996	39%	41%	10%	11%	
1997	21	50	18	11	
1998	17	58	13	11	
1999	12	61	15	12	
2000(Dec.)	10	69	15	6	

This was attributed to the improved productivity of its sales force and capital gains from trading investments. While the profitability of domestic companies reduced significantly in 2000, foreign insurers, led by Prudential and ING, further improved their profitability. It should be noted that most foreign companies do not invest in the stock and real estate markets, and instead rely on large mortality gains from products such as whole life.

The Korean life insurance industry as a whole has not been profitable over the last seven fiscal years, and may not be profitable for several more years, because of structural problems such as high operating costs and high dividend guarantees on participating policies. With the move to non-participating protection products with higher margins, the profitability of the industry is expected to improve over time.

A better indication of industry profitability perhaps can be obtained by focusing on specific areas of experience. Current indications, including 1999 and 2000 (Dec.), suggest that surrender rates are now falling for most insurers and mortality and morbidity rates remain stable. These trends will

improve the financial health of the industry.

#### Marketing and Product Mix

Industry growth subdued during 1998 and 1999, as insurers focused their efforts on financial and product restructuring. Table 4 shows the premium income for the industry from 1993 through December, 2000. From 1997 to 1999, the Original Six insurers experienced a decrease of 5% in premiums, while the joint venture insurers experienced a decline of 17%, and the New Korean insurers lost 54% of premium income. The foreign companies, on the other hand, continued to grow with an increase of 236%.

The results of the first nine months of 2000 show large increases in premium income for all segments of the industry, except the New Korean. As consumers paid more attention to the financial health of life insurers, the Original Six insurers and foreign companies took advantage of better financial conditions to increase their market share. Even though the foreigners' market share is still less than 2%, in terms of premium income, their average growth rate during the last four years (including the currency crisis)

was 150% per year. The foreigners' market share for new policies through nine months of FY 2000 is about 8%.

The fall in average premium per in-force policy is consistent with the shift across the industry from savings-type to protection-type policies, depicted in Table 5. Long term, the shift toward protection business should be beneficial to the industry because protection products:

- o are longer term and more stable than the pure endowment savings vehicles,
- o better fit consumer needs (several of the foreign companies, in particular, have focused on needs-based selling of long-term protection products such as whole life), and
- o allow a higher level of profitability at lower risk than the indexed short-term savings products.

In response to the losses suffered during the Asian economic crisis, as well as the weakening of the chaebols, there is an increased emphasis among the leading life insurers on product profitability, asset-liability management, and

financial management. We expect future product development to focus on products that pass through investment and other company experience, while avoiding the legal limitations on profits on par policies.

### New Product Development

As described in the previous section, the shift toward protection products has been strongly felt in the market. Among the protection products, the whole life product is receiving attention from both consumers and life insurers.

Foreign companies, such as Prudential and ING, developed and initially dominated this market through alternative distribution channels with a well-educated male sales force. With high persistency compared with other products in the industry, they made this market profitable, mainly because of large mortality gains and acquisition expense loadings sufficient to cover expenses. As other domestic and foreign companies begin to employ this strategy, it will be interesting to see whether this market continues to be profitable in the future.

Most companies are developing non-participating savings products as a strategy to improve profitability and capital levels. Current regulatory guidelines specify that a minimum of 90% of all pre-dividend profits on par policies must be returned to policyholders. Shareholders, on the other hand, are responsible for all of the losses from participating blocks, as long as a company has positive retained earnings. Under this rule, it is difficult for a company accumulate enough capital through participating business to meet solvency margin requirements.

The development of interest-sensitive products was intended to cope with fluctuating interest environments. Historically, public index

rates, which reset only on semi-annual basis, were used to define the crediting rate on savings products, but these rates could become quickly outdated, as market interest rates change dramatically. As a result, several life companies began using internal index rates to reflect new interest levels sooner. They claim that these new indices are beneficial to policyholders, as they will be more market responsive.

### Asset Liability Management

In the past, Korean life companies have not adhered to a strict discipline of matching cash flows of assets and liabilities. In part, the asset-liability mismatch in the industry is a result of inadequate availability of long-term fixed income securities in the Korean capital markets.

The asset-liability imbalance impacts the sales strategy of many Korean life insurers. For example, if a company expects high cash outflows in the future, it may motivate its sales forces to sell saving products to improve cash inflow. This strategy was employed by many of the domestic life companies at the time of the Asian economic crisis. As a result, companies sold large blocks of single-premium policies with little consideration of asset-liability management. Maturities in invested assets supporting this business are significantly shorter than the maturity structure of the liabilities. As interest rates declined in recent years, this block of business depressed the profitability of the life insurance industry.

This situation significantly reduced the profitability of savings products and forced life companies to re-price all major products over the last year. With consistent improvements in persistency rates and shifts to protection products, life companies predict the duration of liabilities will lengthen. Several

companies tried to extend the duration of investments by launching personal loans, collateralized by residences, and investing in long-term treasury bonds.

Another industry approach is investing in stocks as long-term assets. Under recent revisions to accounting standards, fluctuations in the stock market will directly affect the capital/surplus position of the company. Insurance companies must confront the challenge of stabilizing future income patterns while making long-term equity investments.

Because a limited number of chaebols have historically dominated the Korean economy, it has been difficult for life companies to avoid concentration risk in their investment portfolios. Most of the recent failures in life companies were related to their exposures to the Daewoo group and other insolvent chaebols. Currently, the Hyundai construction group is facing solvency problems. The total exposure of the life industry to Hyundai is not clear, but could potential cause further damage to the financial health of the industry.

### Conclusion and Industry Outlook

Much of the restructuring necessary to ensure the continued viability of the Korean life insurance industry appears to be well underway. The industry absorbed the effect of measures to strengthen reserve bases and to force quicker recognition of future investment losses. Even though several loan defaults and real estate write-downs were incurred in the last three years, future deterioration of investment quality is still possible. One industry credit researcher predicts that the potential corporate loan defaults for only the companies listed in the Korean stock market will be 75 trillion won. Defaults of corporate loans may

*Korean Life Insurance Market  
1998-2000: Years of Restructuring  
continued from page 27*

continue to be a large burden to life insurance companies in the future.

The recent entry of additional international players such as Allianz and others, should stimulate competition within the market and hasten the development of new products and sales channels. Other foreign insurers, such as Prudential and ING, show that targeting niche markets with efficient distribution channels can be profitable in the Korean market. It should be noted that another critical factor of the foreign successes is strong management and financial control, which has proven to be more difficult in joint ventures.

ING, Allianz, and Prudential are active in other financial industries, such as banking, trust, and investment banking, as part of overall bancassurance strategies in Korea. With leading experience in bancassurance operations in their own countries and a much larger

base of capital, these companies are expected to play bigger roles in the Korean financial marketplace in the future. Because domestic life companies have had limited access to other financial industries, due to strict regulations and lack of capital, they will have a disadvantage in exploring opportunities in this new market.

Many of the smaller domestic life companies were absorbed by other entities during the last two years, and there will be more pressure toward this trend in the coming years. The life insurers that remain, however, will likely emerge stronger and more profitable, if the following restructuring is pursued:

- o Product profitability management
- o Focused marketing management and extension into new distribution channels

- o ALM and investment strategy
- o Financial management focused on improving and stabilizing the bottom line (as opposed to top line or asset base growth)

As life insurers in other countries have discovered, the Korean life industry must design products and distribution systems that meet customer needs and provide adequate return on capital, or it will ultimately lose its market to more innovative financial players.

*Chi Hong An is an actuarial consultant in the Seoul and Chicago offices of Milliman Global. Laird Zacheis is a consulting actuary in the Chicago office Milliman Global. For more information, please contact Chi Hong at (+1) 312-499-5654 or (+82) 2-2198-2193 or Laird at (+1) 312-726-0677.*

## ICA Meets in Cancun

The 27<sup>th</sup> International Congress of Actuaries ICA 2002 will take place in Cancun, Mexico from Sunday, March 17 to Friday, March 22 2002. The congress will not only offer a wonderful opportunity to enjoy the marvels of the Caribbean and to discover one of the oldest archeological sites in the world, but it will be, above all, an unsurpassed occasion to meet a large number of actuaries from different countries.

The Congress is divided in two parts. The first part will focus on P&C insurance, Health and Social Security. The second part will essentially deal with topics related to Life, Pension and Financial Risks. The Health related topics will be discussed within the framework of the first International Health Seminar, which will be an integral part of the Congress (more information on this seminar is provided in a separate article).

To provide greater flexibility to Congress participants, and to guarantee that each participant chooses the option that best suits his/her professional interests, there are three registration choices:

1. Full Congress
2. First Part of the Congress
3. Second Part of the Congress

The scientific programme of the Congress will include both plenary and parallel sessions. Plenary sessions will focus on topics of general interest to the profession, and parallel sessions will focus on specific topics of interest to each particular area of specialty.

For more information on this event, please take a look at the website of ICA 2002 at [www.ica2002.com](http://www.ica2002.com). The site includes detailed information on the Congress.

See you in Cancun!