Performance Analysis of Korean Life Insurance Companies

By Seung Goo Roh

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ABSTRACT

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At the end of 1997, Korea was forced to seek assistance from the IMF due to a serious shortage of foreign currencies. Rapid environmental changes in the insurance industry have made the business prospect of life insurance companies unfavorable and complicated. As an effort to understand the situation, this study analyses the business performance of Korean life insurance companies.

The aim of this study is to analyze the key factors driving the performance of life insurance companies and develop optional strategies for newcomers. A Model Company with capital of 10 billion won was hypothesized to make this analysis more efficient. The five years business operations of newcomers were analyzed for the purpose of making hypotheses. The influence of changes in the performance drivers was analyzed by the use of profit forecasting.

The following 6 management factors are important in influencing the performance of life insurance companies:

- Persistence Ratio,
- Operating Expense Rate,
- Average Premium,
- Productivity of Solicitors,
- Active Solicitor Rate,
- Investment Yield Rate.

Though there have been many discussions on the challenges of insurance companies, they have been few empirical studies analyzing detailed data. The results of this study propose the following to improve the performance of Korean life insurance companies.

First, the importance of mid or long-term business analysis should be recognized.

Second, the influence of the changes in business factors on financial performance is very significant.

Third, the combined effects of changes in management factors are greater than the sum of the effect of individual changes.

Fourth, the six business factors can be improved. Those factors are the indices of sound business operations.

Fifth, it is necessary to train the specialists who can analyze insurers' business operations and better predict the environmental changes in their future.

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Chapter 1. Introduction

1. Background and Objectives

The liberalization of the Korean life insurance industry was implemented in 1986. A market that had been closed for over thirty years and monopolized by six domestic companies was opened to foreign and domestic life insurance companies. Within four years after market liberalization, the entry of eleven foreign companies was permitted under the legal status of joint venture, subsidiary, or branch. Also, fourteen domestic companies entered the market. A very tightly controlled market has been transformed into a highly competitive market, albeit still controlled by the government. As a result of these rapid, changes many Korean life insurance companies, especially the new entrants suffered from huge deficit and low productivity.

At the end of 1997, Korea was forced to seek assistance from the IMF due to a serious shortage of foreign currencies. The IMF suggested an overall reform of the Korean economy as a condition for providing assistance. This involved closing of insolvent financial institutions, liberalization of trade, and industrial restructuring. As part of the financial reform, the Korean government enacted the financial reform bill and issued the decrees and regulations. The Financial Supervisory Board was organized to unify all financial supervisory functions that had been dispersed among the separate supervisory offices, enabling a comprehensive and efficient oversight of banks, security firms, insurance companies, and other financial institutions.

In the process of rapid financial reform, four life insurance companies (BYC, Taeyang, Coryo, and Kookje) were ordered to close due to insolvency. Several of them tried to solve their financial difficulties by inducing foreign capital or increasing their capital base.

Only a small number of newcomers will probably survive under the IMF bailout program. It is, therefore, of interest to examine what are the real problems in the situation of Korean life insurance industry and what are the factors affecting their performance. The aim of this study is to analyze the main factors affecting the performance of life insurance companies in Korea. Although the new entrants adopted different strategies, all of them suffered from huge financial deficit and low productivity. Thus a comparison of performance between new entrants and the existing major companies is useful to find out the differences in their strategies.

For this purpose, a Model Company, with initial capital of 10 billion won, was used to find the effects of the change of management factors and forecast future financial performance.

2. Organization of the Thesis

This study consists of 6 chapters. Chapter 2 is a brief overview of the Korean life insurance industry. Chapter 3 examines the performance of Newcomers and analyzes the sources of profit. Chapter 4 set out a Model Company to find out the key performance drivers and forecast the management factors affecting performance. Chapter 5 discusses the possible strategies for Newcomers.

Chapter 6 summarizes the key finding and managerial implications of the study.

Chapter 2. Overview of Korean Life Insurance Industry

1. Comparison between Insurance and Banking

One of the specific features of the insurance business is risk management. Risk management is often contrasted with the management of money or means of payment, which is the specific field of the banker.

The insurer's risk management means that this risk is the object, in the proper sense, of the contract. The risk is integrated in the payment of the premium. The insurer manages the occurrence of an uncertain event. If the event does not materialize so much the better; if it does, it is provided for and its price predetermined in advance. A bank may also have to face the occurrence of unforeseen events, but that occurrence is not the object of the bank contract. Such unforeseen occurrences may be passed on in the "price of banking services", but only subsequently to their happening.

In life insurance, however, there is another particular specificity that has often been stressed: the long-term nature of the contracts. Compared with the long periods involved in life insurance, banks are more accustomed to dealing in relatively short periods. The long-term horizon used by life insurers is reflected in the terms of life insurance policies, some of which are entered into for a complete life. This characteristic, bound up with the long-term protection of personal assets, has generally, prompted lawmakers to accord tax benefits to people concluding such contracts (often dependent on the observance of a minimum period). ¹

Moreover, the general social and economic role of insurance has led to the establishment by the authorities of specific control bodies and regulations for this particular business. This also applies to the banking world, perhaps even more so. Banks play a special part in the viability of a country's monetary and financial system. These features set these two sectors apart from the others and also distinguish them from one another to the extent that the depositor, for example, is essentially protected in his right of direct ownership and the insured person in his right to a future claim.

¹ Insurance and other financial services, OECD, 1992, p103

As a protection against the risks that the uncertainty of this inversion implies, insurers build up reserves as part of their risk management strategy and use statistical and more particularly actuarial tools in order to reduce as far as possible the uncertainty. Banks may also be prompted to form reserves but this is generally after the materialization of the risk.

Nowadays, several types of life insurance policies related to far shorter periods, and risk management has widened to cover many financial activities but, above all, theoretical thinking has revealed the similarity of the basic concepts of the two sectors of activity. It is argued that the insurance market shares with the financial market, the function of allocating the risks relating to the future wealth of economic agents. It is being understood that an insurance contract represents a conditional claims issued by the insurer and acquired by the insured person, that every financial transaction involves a risk, or that every guarantee issued could be replaced by an insurance policy.²

Financial innovations have merely heightened the likeness between the two activities by blurring the frontiers between them. This effect has been caused by the development of complex forms of contract, the "dissociation" of certain types of risk with the invention and increasing use of specific financial claims (options, fixed-term securities), an increase in negotiability and the globalization of financial markets. Banking is the management of financial risk. And although insurers also do this, it is not all they do. The insurer manages the random factor, uncertainty, and accident.

A bank does not manage the randomness of death or personal and material accident. It manages risks to financial assets. At this level, the field of the insurer is far wider.

2. Brief History of Korean Life Insurance Industry

Modern domestic life insurance began with the Chosun Life Insurance Company in 1921. Due to the Japanese occupation, however, the company was never able to

² Insurance and other financial services, OECD, p105

prosper. Other life insurance companies were also unable to thrive due to the Korean War and turmoil in the country. It was not until the 1960s that the industry was able to develop. In 1962, the new government strove to attain industrialization and recognized life insurance as an important vehicle for capital formation. Laws were enacted and designed to encourage capital formation through life insurance. These laws became a driving force behind the rapid growth of Korean companies.³

This growth may be attributed to the role of Korean life insurance as savings institutions rather than as insurance in the western sense.

The purpose of life insurance in Korea is primarily for savings. Life insurance companies are in direct competition with banks. Western life insurance companies also use life insurance for cash flow purposes, but the basic underlying themes are different. Western life insurance companies are protection-oriented while Korean life insurance companies are saving-oriented.⁴

Another difference between the two systems is the economic structure. In the West, the economic structure is a credit-based system, but in Korea, it is a cash based system. People in Korea usually have cash readily available. During occasions, such as weddings, funerals, or casualties, friends and family offer congratulatory or condolence money. Such money is used in place of life insurance for expenses.

A. 1945 ~ Mid 1970s

The major 6 companies were established in this period.

< Table 1> Year of Establishment of Major Life Insurance Companies

Year	Company	Year	Company
1946	Korea Life	1957	Samsung Life
1950	Hung Kook Life	1958	Kyobo Life
1954	First Life	1973	Dong Ah Life

The Korean government enacted major insurance laws, such as Law of Insurance Business and Law of Insurance Marketing Regulation.

³ I Soo Joe, "The Korean Life Insurance Market". Journal of American Society of CLU (Jan. 1989), p63

⁴ Suzanne E. Andora, "The investment behavior and marketing strategies of foreign companies in the Korean life insurance market". 1990, p17

In 1962, the Korean government established the 5 year industrialization plan. To achieve the plan, the government needed large amount of internal capital, and recognized the importance of life insurance companies. Therefore, it designated life insurance companies as major financial institutions and protected them from other financial institutions.

During this period the share of life insurance companies in financial market was small. And the main product of life insurance companies was group policy, which was primarily used by government.

In 1958, individual insurance surged as a main product. Especially, educational insurance policy was the most important product. After the 5.16 military coup, government enacted a compulsory saving law, called National Saving Law. The Law was enacted to encourage internal capital formation through financial institutions, including life insurance companies. Everyone should save some portion of their income through financial institutions, but they chosen the institution by group.

Therefore, every life insurance company had group life insurance products and emphasized group policy.

B. Late 1970s ~ Mid 1980s

The Korean government set entry barriers to protect the infant life insurance industry, so major life insurance companies were able to improve their position in the financial market. During this period, major companies enjoyed rapid growth with annual growth rate of over 30 percent.

Rapid economic development and improvement in GNP per capita enlarged the life insurance market, especially individual insurance policies.

During this period, life insurance companies changed their marketing strategy dramatically, from group insurance product to individual insurance product, and from saving policy to coverage policy. The share of life insurance companies in total financial market was enlarged very rapidly.

C. Late 1980s ~ 1997

The Korean government played a significant role in the life insurance industry. As a result of government policy, the industry expanded rapidly, but also a highly inefficient. Government regulation of asset management and premium rates has inhibited the industry's efficient development in terms of quality of service and international competitiveness.

In this period, the Korean government allowed more autonomous management and freer competition among life insurance companies. The government permitted the entry of 26 life insurance companies. There were 6 domestic companies located in Seoul, 8 domestic companies located in major regional cities, 7 joint venture companies with foreign partners, and 5 foreign branches.

In this period, all life insurance companies sought internal efficiency to achieve sound financial performance. Each company introduced special products and differentiated their strategies.

As a result, financial performance improved rapidly and some companies were able to achieve global competitiveness.

D. Period under the IMF bailout system (1998 ~ present)

Under the IMF bailout system, almost all-financial institutions had to restructure their operations. The Supervisory Board shut down 4 insurance companies in August (Kookje, BYC, Coryo, and Taeyang Life Insurance), which were merged with the major life insurance companies.

Another $5 \sim 7$ companies sought foreign investors to improve their solvency margin and financial deficit.

3. Characteristics of Korean Life Insurance Industry

A. Structural Characteristics

1) Customer - Supplier Relationship

The majority of individual life insurance sold is done on a personal relationship between solicitors and customers. With regard to group insurance, a strong customer-supplier bond exists between a client company and the insurance company. Therefore, unless newcomers have strong connections with established companies, it is difficult for newcomers to form such relationship.

So every Korean life insurance companies have tried to keep a large number of sales force. This special relationship was strong entry barrier.

2) Channels of Distribution

The distribution system is a method of transferring the products from the insurance company to the customer. In Korea, the distribution channels are highly controlled. The available systems are the agency system, and the branch office system. Unlike the Western countries where "independent" agents can be employed by many firms in Korea, the agent is tied to only one insurance company.

All Korean life insurance companies develop their sales organizations on the basis of territory. Most companies have several regional offices, each of which can provide services to local policyholders. Under the control of the regional offices are several branch offices. The branch offices control the sales offices assigned to them. Each solicitor works for a sales office.

Korean life insurance companies heavily rely on female sales force. As of December 1998, registered life insurance solicitors in the field totaled 251,022. Among them 236,914 were female, only 14,108 were male.⁵ The female solicitors are usually housewives and work on a part-time basis.

By law, a Korean solicitor can represent only one company. Therefore, all life insurance companies adopted a growth strategy of opening as many sales offices and recruiting as many solicitors as possible. Life insurance companies believed that once they attain the size where economies of scale could take effect, they could gain many advantages in competition.

However, with this success also came many problems.

The first problem is a low persistency ratio. Persistency refers to the percentage of policies that are in force at the end of a specified period, usually twelve months. The solicitors' method of selling is based on a personal relationship — selling policies to families and friends. Unfortunately, after the solicitor exhausts all of her contacts, she quits. Most solicitors never develop a market or system, and therefore the lapse and surrender rate is very high. In December 1998, the accumulated face amount of lapse and surrenders was 198,913 billion won⁶ (US \$ 165,761 million, 1 US \$ = 1,200 KRW).

3) Industry Concentration and Collusive Agreements

The Korean life insurance market is unique in that it serves as a long-term savings institution. During the massive growth of the economy, 1962 –1986, domestic and foreign companies were forbidden from entry.

After the forced market opening, domestic and US companies were allowed entry, but encouraged to sell primarily protection-oriented products, so as to function purely as insurance companies. The "Big 6" (also known as the "Six Sisters" or "Major Companies") still monopolize the market.

Therefore in doing an appraisal of the industry, the "Big 6" Korean companies monopolized the sales of savings-oriented products. This is in part due to their vast sales force and forty years of experience.

The "Big 6" include Samsung Life Insurance Co., Kyobo Life Insurance Co., Korea Life Insurance Co., First Life Insurance Co., Hung Kuk Life Insurance Co., and Dong Ah Life Insurance Co.

Table 2 shows the "Big 6" in terms of size (total assets).

The total assets of major companies were US \$ 66 billion, accounting for 85.3 percent of total life insurance industry in December 1998.

⁵ Monthly review of Korean Life Insurance Industry, Feb. 1999. p140

⁶ Monthly review of Korean Life Insurance Industry, Feb. 1999. p88

The total assets of the big 3 companies were more than 75 % (75.8 percent). Average assets of newcomers were lower than 1 percent of the total amount.

< Table 2 > Total Assets of Big 6 Companies (December, 1998)

(Unit: 100 million Won, %)

Company		Share	
Samsung	348,131	(US \$ 29,011 million)	37.7
Kyobo	204,255	(US \$ 17,021 million)	22.1
Korea	147,816	(US \$ 12,318 million)	16.0
First	38,400	(US \$ 3,200 million)	4.2
Hung Kuk	33,628	(US \$ 2,802 million)	3.6
Dong Ah	16,120	(US \$ 1,343 million)	1.7
Sub total	788,350	(US \$ 65,695 million)	85.3

Source: Monthly Review of Korea Life Insurance, Feb 1999, Life Insurance Association Exchange rate 1 US\$ = 1,200 KRW

B. Basic Actuarial Concepts

Life insurance premium is calculated by three rates, that is, expected mortality, expected interest rate, and expected expense rate. MOF regulated the range of expected interest rate. Thus the premium of each companies are very similar if the coverage amount is the same.

But after 2000, all rates will be liberalized, and the premium will be different among companies.

1) Expected Mortality Rate

Expected mortality is the insured person's expected average lifetime. So the insurer can calculate the sum of benefit during the specific period and the total amount is divided to all policyholders. It is the risk premium. Nowadays insurance companies use the Third Experience Mortality Table.

2) Expected Interest Rate

It is the basic interest rate of insurance companies. Because life insurance products are usually long-term products, the rate is lower than bank's interest rate.

At present, basic interest rate is 7.5 percent per year. But some products use different rates. For example, non-participating insurance products use 9.0% per year and some saving insurance products use floating rate.

3) Expected Expense Rate

It is the rate of added cost. To operate mange the insurance companies, each company uses lot of money, such as wage of employees and advertising costs. So insurance companies add some expenses to premium. Supervisory Board limits the range of added expense rate.

Premium = Risk premium + Claim premium/Interest rate + Expense

4) Policy Reserves

Policy reserves, which are required to meet the liabilities of policyholders and beneficiaries in case of claims, lapses, surrenders, dividends, and other payments, consist of the premium reserves, unearned premiums, the reserve for outstanding claims, and the dividend reserve.

These reserves are calculated and accumulated at each fiscal year end. At the end of FY 1997, policy reserves amounted to 90,592 billion won, an increase of 9.8% over the previous year.

C. Investment

1) Portfolio of Assets

The Korean government regulates the scope of life insurance companies' portfolio by law. For instance, insurance companies cannot buy a non-listed stock without the allowance of MOF.

< Table 3 > Assets Portfolio of Life Insurance Companies (Dec. 1998)

(Unit: 100 million won)

	Amount	Composition
Cash & Deposit	96,684 (US \$ 8,057 million)	10.5%
Securities	347,166 (US \$ 28,931 million)	37.6%
. Loan	350,717 (US \$ 29,226 million)	38.0%
Real Estate	83,700 (US \$ 6,975 million)	9.1%
Others	44,715 (US \$ 3,726 million)	4.8%
Total	922,982 (US \$ 76,915 million)	

Source: Monthly Review of Korea Life Insurance, Feb. 1999, Life Insurance Association

(Exchange rate: 1 US \$ = 1,200 KRW)

2) Regulation

Companies' financial investment strategies do not vary so much due to the strict investment guideline dictated by MOF.

The guidelines of MOF are varied upon government's purpose.

Current investment regulations are as follows:

- Deposits
 - deposits with financial institutions
 - call loans
 - beneficiary certificate
- Bonds
 - government bonds-issued by state owned companies or financial institutions
 - corporate bonds
- Stocks
 - listed stocks (domestic and foreign)
 - not to exceed 30 percent of total assets
- Loans
 - unsecured loan must not exceed 30 percent of total assets
- Real Estate
 - not to exceed 20 percent of total assets
- Foreign Securities
 - not to exceed 20 percent of total assets
- Others
 - can not guarantee all kind of debt
 - can not borrow any kind of money from any other financial institution without the permission of MOF
 - dividend for shareholders should be approved by MOF

D. Assets

The assets of life insurance company consist of reserve fund and capital.

The growth rate of total assets peaked in the late 1980s.

Insurance companies have been considerably reshaping their investment patterns over recent years.

On the whole, they have had to face a number of factors prompting them to be more active than they used to be in investing their available funds. Facing keener competition from other insurance companies as well as from other businesses, they had to offer higher returns on insurance products.

< Table 4 > Yearly Total Assets & Operating Assets

	Total As	ssets	Operating	Assets
Fiscal Year	Amount (billion won)	Growth Rate	Amount (billion won)	Growth Rate
1984	5,314	44.2%	5,103	30.3%
1985	6,922	30.2%	6,696	31.2%
1986	9,133	31.9%	8,800	31.4%
1987	12,248	34.1%	11,810	34,2%
1988	17,067	39.3%	16,501	40.4%
1989	22,644	32.7%	21,805	32.1%
1990	31,002	36.9%	29,611	35.8%
1991	38,826	25.2%	36,652	23.8%
1992	45,155	16.3%	42,302	15.4%
1993	50,200	11.2%	46,762	10.5%
1994	57,681	14.9%	53,917	15.3%
1995	69,677	20.8%	65,484	22.1%
1996	83,289	19.5%	78,738	20.2%
1997	90,921	9.2%	86,181	9.5%

Source: Life Insurance Fact Book, Life Insurance Association

In order to ensure efficiency and soundness, asset management of life insurance companies is subject to the Insurance Business Law, Enforcement Decree, Enforcement Regulations, and the Insurance Supervisory Regulations, all of which deal with control of assets under management, investment items, and limits on certain asset classes. Loans, securities, real estate, and deposits are the tools of life insurance companies' investment.

Loans have always formed a major part of the insurance companies' investment, though diminishing as time has passed. And the portion of cash and deposit increased rapidly. After Nov. 1997, when the IMF bailout started, the rate of lapse and surrender increased dramatically. Especially, the rate of lapse and surrender peaked in Feb. 1998. So to respond to customer's request, almost all life insurance companies' had to deposit a large portion of money in banks or trust companies.

The composition of asset portfolio is shown in table 5:

< Table 5 > Asset Portfolio

(Unit: 100 million won)

	Marcl	n 1988	March	1998
	Amount	Composition	Amount	Composition
Cash & Deposit	8,850	7.2%	135,837	14.9%
Loan	70,023	57.2%	417,695	45.9%
Real Estate	9,598	7.8%	73,480	8.1%
Securities	29,634	24.2%	234,796	25.8%
Others	4,375	3.6%	47,401	5.3%
Total	122,480	100.0%	909,209	100.0%

Source: Life Insurance Fact Book, Life Insurance Association

E. Income & Expenditures

- Income

The income sources of life insurance companies consist of 2 main parts: premium received and investment income. The growth rate of premium varied upon companies' marketing strategies.

< Table 6 > Yearly Premium Received & Investment Income

(Unit: 100 million won)

	Premium I	Received	Investment	Income
Fiscal Year	Amount (100 million)	Increasing Rate	Amount (100 million)	Increasing Rate
1984	30,847	33.0%	4,583	54.4%
1985	38,872	26.0%	6,870	49.9%
1986	55,159	41.9%	9,522	38.6%
1987	72,941	32.2%	15,331	61.0%
1988	93,791	28.6%	21,638	41.1%
1989	118,656	26.5%	24,215	11.9%
1990	160,436	35.2%	31,231	29.0%
1991	193,771	20.8%	39,626	26.9%
1992	226,414	16.8%	47,204	19.1%
1993	240,534	6.2%	49,049	3.9%
1994	277,495	15.4%	55,750	13.7%
1995	352,880	27.2%	65,301	17.1%
1996	381,634	8.1%	75,836	16.1%
1997	489,559	28.3%	90,959	19.9%

Source Life Insurance Fact Book, Life Insurance Association

Life insurance companies maintained the following four principles of investment, although they were not written in any kind of laws:

- Principle of Liquidity
- Principle of Stability
- Principle of Profitability
- Principle of Publicity

Competition exerted pressure to maximize the profitability of each product, with a potential corresponding increase in risk. As a result, investment operations undertaken by insurers developed more in line with activities of other financial intermediaries, and recently involved the use of new types of financial instruments (traded options, warrants, currency and interest rate swaps, etc.).

Although some of these instruments can help cushion certain risks inherent in any investment activity, they may also give rise to new sources of risk which need to be factored in the overall assessment of risk exposures and in the application of supervisory tests.

Convergence, in the form of an increase in the financial component of insurance products or an increase in the competition from other businesses, whether financial or otherwise, has thus had a direct influence on insurance companies' investment and steered it in the direction of more profitable but higher-risk financial products. Their investment has therefore changed from traditional high-stability instruments to more volatile financial instruments.

Expenditures

The main parts of life insurance companies' expense were claims paid, lapses & surrenders, and operating expense.

The portion of each part quite varied by companies' strategies. For example, newcomers spent much money to operating expense, while the "Big 6" spent lots of money to claims paid.

The yearly claims paid and operating expenditures are shown in table 7:

< Table 7 > Yearly Claims Paid and Operating Expenditure.

	Claims	Paid	Operating Ex	penditures
Fiscal Year	Amount (100 million)	Growth Rate	Amount (100 million)	Growth Rate
1984	14,728	47.5%	4,450	9.5%
1985	24,898	69.1%	5,518	24.0%
1986	34,579	38.9%	6,541	18.5%
1987	48,233	39.5%	8,294	26.8%
1988	57,229	18.7%	10,578	27.5%
1989	72,212	26.2%	14,082	33.1%
1990	90,940	25.9%	18,713	32.9%
1991	128,350	41.1%	24,746	32.2%
1992	175,881	37.0%	30,691	24.0%
1993	197,830	12.5%	36,106	17.6%
1994	199,446	0.8%	51,088	41.5%
1995	224,042	12.3%	64,190	25.6%
1996	245,451	9.6%	68,331	6.5%
1997	411,760	67.8%	71,753	5.0%

Source: Life Insurance Fact Book, Life Insurance Association

F. Sales Organization and Sales Force

The sales organizations of Korean life insurance companies were structured as Regional Home Offices(RHO), District Offices(DO), Branch Offices(BO), and Sub-Branch Offices(SBO).

The number of offices was 10,341 branch offices as of March, 1998. The yearly employment and sales organizations are shown in table 8:

< Table 8> Employment and Sales Organizations

(Unit: person, office)

Fiscal		Solicitors		Director,	Sales	Organizati	ions
Year	Female	Male	Total	Employee	RHO	ВО	Total
1993	279,047	17,442	296,489	50,991	982	10,625	11,607
1994	321,673	17,126	338,799	54,477	1,087	11,438	12,525
1995	331,597	17,609	349,206	57,768	1,157	13,662	14,819
1996	307,612	16,354	323,966	56,120	1,174	12,387	13,561
1997	278,357	15,041	293,398	49,110	1,038	10,341	11,379

Source: Life Insurance Fact Book, Life Insurance Association

Chapter 3. Performance Analysis of Newcomers

1. Review of Current Profit of Newcomers

Almost all profit of the Korean life insurance industry was shared by "Big 6"due to economy of scale. So all newcomers suffered from accumulated deficits, even though they could use deferred account.

The current profits of each group are as follows:

< Table 9 > Status of Profit** (by Groups)

(Unit: 100 million won)

Group*	1993	1994	1995	1996	1997
Major	1,228	1,126	- 313	1,060	1,007
Domestic	172	- 3,053	- 3,129	- 2,841	- 2,833
J/V	192	- 1,135	- 1,695	- 1,488	- 970
Local	- 269	- 832	- 3,310	- 3,629	- 2,047
Foreign	- 40	- 31	- 59	- 160	-237
Total	1,283	-3,925	- 8,506	- 7,058	- 5,080

Source: Annual Life Insurance Statistics, Insurance Supervisory Board.

- * classification of each groups
- major (6): Samsung, Kyobo, Korea, First, Hungkuk, Dongah
- domestic (6): Daishin, Pacific, Kookmin, Handuk, Hankuk, Shinhan
- J/V (7): Dongbu, Tongyang, Kolon, Coryo, Samshin, Youngpoong, Kohap
- Local (9): Hansung, Josun, Kumho, SK, Kukje, Doowon, BYC, Taeyang, Hanil
- Foreign (5): Prudential, Netherlands, France, LINA, AIA

In 1993, all domestic insurance companies recorded profit, but it was not real profit. They deferred much of their expenditure through deferred account. The Insurance Business Law permitted that some portion of expenditure could be deferred within 5 years after company establishment.

We should analyze the real problems of newcomers that are why they recorded such high deficit? Their capital was less than their annual deficit.

And how could they maintain their operation? So we start to examine the current situation and problems.

^{**} announced closing profit

2. Income Structure of Newcomers

A. Premium

< Table 10 > Premium Received by Newcomers

(Unit: 100 million won)

	1993	1994	1995	1996	1997
Individual Premium (growth rate)	43,263	54,020 (24.9%)	65,484 (21.2%)	63,302 (- 3 3%)	75,778 (19.7%)
Group Premium (growth rate)	12,688	18,931 (49.2%)	29,331 (54.9%)	32,831 (11.9%)	42,512 (29.5%)
Total Premium (growth rate)	55,951	72,951 (30.4%)	94,815 (30.0%)	96,133 (1 4%)	118,290 (23.0%)

Source Annual Insurance Statistics, Insurance Supervisory Board.

Group premium was the growing vehicle. To enlarge their market share, newcomers tended to rely on group policy, of which average premium was higher than individual, and marketing cost was lower than individual's. The average annual growth rate of group premium was 47 percent.

< Table 11 > Composition of Premium Received

(Unit 100 million won)

	1993	1994	1995	1996	1997
Initial Premium (growth rate)	17,350	22,302 (28.5%)	36,319 (62.9%)	33,167 (- 8.7%)	56,913 (71.6%)
Sequential Premium (growth rate)	38,601	50,649 (31.2%)	58,496 (15.5%)	62,966 (7.6%)	61,377 (- 2.6%)
Total Premium (growth rate)	55,951	72,951 (30.4%)	94,815 (30.0%)	96,133 (1.4%)	118,290 (23.0%)

Source: Annual Insurance Statistics, Insurance Supervisory Board.

To keep their growth, every insurance company emphasized the importance of sequential premium, but newcomers were not. Insurance industry was characterized by economies of scale. So to obtain proper scale, the marketing strategies of newcomers gave too much emphasis on new business.

Average annual growth rate of sequential premium of newcomers was 11.8 percent. It was lower than Major Companies, which was 13.7 percent.

And the growth rate of sequential premium dropped rapidly from 31.2% to - 2.6%.

< Table 12 > Premium Received by Group

(Unit: 100 million won)

	1993	1994	1995	1996	1997
Domestic	25,525	32,812	43,445	45,526	63,124
(growth rate)		(28.5%)	(32.4%)	(4 8%)	(38.7%)
per company	4,254	5,469	7,241	7,588	10,521
Joint Venture	13,100	16,398	20,211	20,752	21,866
(growth rate)		(25.2%)	(23.3%)	(2.7%)	(5.4%)
per company	1,871	2,343	2,887	2,965	3,124
Local	16,494	22,676	29,953	28,454	31,636
(growth rate)		(37.5%)	(32.1%)	(- 5.0%)	(11.2%)
per company	1,833	2,520	3,328	3,162	3,515
Foreign	832	1,065	1,206	1,401	1,664
(growth rate)		(28 0%)	(13.2%)	(16.2%)	(18 8%)
per company	166	213	241	280	333
Total	55,951	72,951	94,815	96,133	118,290
(growth rate)		(30 4%)	(30.0%)	(1 4%)	(23 0%)
per company	2,072	2,702	3,512	3,560	4,381

Source. Annual Insurance Statistics, Insurance Supervisory Board.

Growth rate of premium was related to the size of sales force.

Growth rate of domestic companies was the highest among all newcomer groups. To examine this relationship more precisely, we should check the size of the sales force.

< Table 13 > Sales Forces of Newcomers

(Unit: person)

	1993	1994	1995	1996	1997
Domestic	57,616	61,270	59,780	47,068	35,493
(growth rate)		(6.3%)	(-2.4%)	(-21.3%)	(-24.6%)
per company	9,603	10,212	9,963	7,845	5,916
Joint Venture	23,338	25,488	24,051	24,480	16,779
(growth rate)		(9 2%)	(-5.6%)	(1.8%)	(-31 5%)
per company	3,334	3,641	3,436	3,497	2,397
Local	34,773	40,291	39,582	30,078	21,096
(growth rate)		(15.9%)	(-1.8%)	(-24.0%)	(-29.9%)
per company	3,864	4,477	4,398	3,342	2,344
Foreign	1,103	1,009	1,465	1,405	1,674
(growth rate)		(-8.5%)	(45 2%)	(-4.1%)	(19.1%)
per company	221	201	293	281	335
Total	116,830	128,058	124,878	103,031	75,042
(growth rate)		(9.6%)	(-2.5%)	(-17.5%)	(-27 2%)
per company	4,327	4,743	4,625	3,816	2,779

Source: Annual Insurance Statistics, Insurance Supervisory Board.

Premium received grew nearly 30% during '93 to '97, but the average number of sales force declined rapidly. Internal efficiency of newcomers improved in that period.

In 1997, all life insurance companies reduced their sales force rapidly. Economic turmoil forced economic efficiency to all life insurance companies. Under the IMF bailout system, every financial firm should achieve internal efficiency; otherwise they would be expelled from the market. Life insurance companies were no exception.

< Table 14 > Productivity of Sales Forces

(Unit: person, policy)

	1993	1994	1995	1996	1997
Domestic	57,616	61,270	59,780	47,068	35,493
New Business	1,708,271	1,779,840	1,694,849	1,527,639	1,509,770
Productivity	29.6	29 0	28.4	32.5	42.3
Joint Venture	23,338	25,488	24,051	24,480	16,779
New Business	901,486	920,004	878,481	882,755	773,200
Productivity	38 6	36 1	36 5	36.1	46 1
Local	34,773	40,291	39,582	30,078	21,096
New Business	877,901	1,130,246	1,153,036	979,376	1,886,189
Productivity	25.2	28 1	29 1	32.6	89 4
Foreign	1,103	1,009	1,465	1,405	1,674
New Business	90,460	101,240	93,453	99,132	131,211
Productivity	82 0	100 3	63 8	70.6	78 4
Total	116,830	128,058	124,878	103,031	75,042
New Business	3,578,118	3,931,330	3,819,819	3,488,902	4,300,370
Productivity	30.6	30.7	30 6	33 9	57.3

Major	179,659	210,782	224,328	220,935	218,356
New Business	8,075,308	8,622,666	10,067,922	10,203,880	12,818,703
Productivity	44.9	40.9	44.9	46 2	58 7

Source: Annual Insurance Statistics, Insurance Supervisory Board.

The productivity of newcomers was lower than major companies, but the gap narrowed rapidly.

B. Investment Income

The asset of newcomers increased every year. In 1997, total asset of newcomers was nearly 15,597 billion won: one fifth of the major's.

Investment income of newcomers was 1,562 billion won.

< Table 15 > Assets and Investment Income of Newcomers

(Unit million won)

	1993	1994	1995	1996	1997
Domestic	1995	1774	1773	1990	1997
Assets	3,660,295	4,527,734	5,952,161	7,356,541	7,994,588
(growth rate)	3,000,293	23 70%	31 46%	23.59%	8.67%
per company	610,049	754,622	992,027	1,226,090	1,332,431
Income	307,105		492,645	598,879	
	307,103	366,726 19.41%	34.34%	21 56%	782,032 30 58%
(growth rate)	9 200/				
Ratio of profits*	8.39%	8.10%	8.28%	8 14%	9 78%
per company	51,184	61,121	82,108	99,813	130,339
Joint Venture			2 22 4 4 4	0.510.046	2 444 242
Assets	1,983,818	2,492,826	3,006,464	3,512,046	3,444,910
(growth rate)		25.66%	20 60%	16.82%	-191%
per company	283,403	356,118	429,495	501,721	574,152
Income	162,293	228,039	245,075	322,144	409,710
(growth rate)		40.51%	7 47%	31.45%	27 18%
Ratio of profits*	8.18%	9.15%	8 15%	9.17%	11.89%
per company	23,185	32,577	35,011	46,021	68,285
Local					
Assets	2,434,694	3,323,451	4,018,262	4,549,989	3,871,350
(growth rate)		36.50%	20 91%	13.23%	-14.92%
per company	270,522	369,272	446,474	505,554	645,225
Income	171,992	229,859	294,328	366,642	379,649
(growth rate)		33 65%	28 05%	24.57%	3.54%
Ratio of profits*	7.06%	6.92%	7 32%	8.06%	9.81%
per company	19,110	25,540	32,703	40,738	63,275
Foreign					
Assets	151,254	198,543	248,807	279,041	286,080
(growth rate)		31.26%	25 32%	12.15%	2.52%
per company	30,251	39,709	49,761	55,808	57,216
Income	12,175	15,368	19,701	22,961	26,202
(growth rate)		26.23%	28 19%	16 55%	14 12%
Ratio of profits*	8.05%	7.74%	7 92%	8.23%	9 16%
per company	2,435	3,074	3,940	4,592	5,240
Total					
Assets	8,230,061	10,542,554	13,225,694	15,697,617	15,596,928
(growth rate)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	28.10%	25 45%	18 69%	-0 64%
per company	304,817	390,465	489,841	581,393	678,127
Income	653,565	839,992	1,051,749	1,310,626	1,597,593
(growth rate)	555,565	28 52%	25.21%	24.61%	21.89%
Ratio of profits*	7.94%	7 97%	7 95%	8 35%	10.24%
per company	24,206	31,111	38,954	48,542	69,461
per company	24,200	21,111	30,334	70,572	37,701

Major					
Assets	41,970,188	47,138,477	56,451,032	67,591,159	75,323,980
(growth rate)		12.31%	19 76%	19 73%	11 44%
per company	6,995,031	7,856,413	9,408,505	11,265,193	12,553,997
Income	4,251,362	4,735,031	5,478,372	6,273,019	7,498,266
(growth rate)		11.38%	15.70%	14.51%	19.53%
Ratio of profits*	10.13%	10 04%	9 70%	9 28%	9.95%
per company	708,560	789,172	913,062	1,045,503	1,249,711

Source. Annual Insurance Statistics, Insurance Supervisory Board.

^{*} ratio of profit = investment income / assets x 100

The asset of newcomers increased during the early '90s, but in 1997, the growth rate became negative. The underlying reason was the shut down of 4 companies, which were merged to major companies. But the growth rate of investment income was still rising. Under the IMF bailout scheme, the average interest rate rose rapidly. And over half of total assets were invested into loan, and therefore, yield rate of working asset rose.

The investment strategy of foreign companies differed from other newcomers. For example, foreign companies' main investment target was bond, especially government bond. So the annual yield rate of working asset was lower than other newcomers'. And because foreigners put priority on stability, some never invested in stocks. The marketing strategy of foreigners was also more conservative than others' strategies. Thus the annual growth rate of asset was lower than domestic companies.

3. Expenditure Structure of Newcomers

A. Claims Paid & Refund

The structure of expenditure of newcomers was different from that of majors. Because they were established very recently, the amount of policies in force was much lower than the major's. Thus the portion of claims paid was lower, but the portion of operating expenses was higher than the major's.

The structure of claims paid of newcomers was also different from that of major's. It depended on the structure of premium, and newcomers were too heavily relying on group policies. Thus the portion of group claims was higher than majors'. Some foreign companies were different from others, and the portion of claims paid was quite lower than others'. Their marketing strategy emphasized pure endowment policies. So the portion of death benefits was the highest.

Usually the largest portion of expenditure of newcomers was operating expense. The operating expense was the underlying reason of their huge deficit. So we should examine the structure of expenditure of newcomers.

< Table 16 > Claims Paid, Refunds & Dividends

Newcomers

(Unit. million won)

	1993	1994	1995	1996	1997
Claims Paid	489,084	793,623	1,511,437	1,457,991	1,904,817
-Individual	147,318	286,937	422,409	528,395	628,867
-Group	341,766	506,686	1,089,028	929,596	1,275,950
(growth rate)		62 27%	90.45%	- 3 54%	30 65%
Refunds	2,721,663	3,077,900	3,958,323	4,695,176	9,091,195
-Individual	2,060,284	2,679,005	3,269,805	3,572,525	5,567,643
-Group	651,379	398,895	688,518	1,122,651	3,523,552
(growth rate)		13 09%	28.60%	18 62%	93.63%
Dividends	40,376	38,881	71,967	91,703	116,713
-Individual	6,557	9,444	13,425	15,933	29,841
-Group	33,819	29,437	58,542	75,770	86,872
(growth rate)		- 3.70%	85.10%	27.42%	27.27%
Total	3,251,123	3,910,404	5,541,727	6,244,870	11,112,725
-Individual	2,214,159	2,975,386	3,705,639	4,116,853	6,226,351
-Group	1,026,964	935,018	1,836,088	2,128,017	4,886,374
(growth rate)		20.28%	41 72%	12 69%	77.95%

Source: Monthly Review of Korean Life Insurance, Life Insurance Association

Newcomers

(Unit: million won)

	1993	1994	1995	1996	1997
Domestic	1,566,553	1,762,176	2,357,879	2,706,002	5,383,190
-Claims Paid	188,859	301,077	465,681	575,927	789,022
-Refunds	1,357,157	1,443,242	1,861,300	2,090,390	4,541,397
-Dividends	20,537	17,857	30,898	39,685	52,771
(growth rate)		12.49%	33.80%	14 76%	98.94%
J/V	816,188	893,045	1,199,052	1,312,996	2,127,325
-Claims Paid	139,618	179,777	339,631	332,690	459,202
-Refunds	666,275	703,832	843,439	960,820	1,642,893
-Dividends	10,295	9,436	15,982	19,486	25,230
(growth rate)		9.42%	34.27%	7 13%	62.02%
Local	844,099	1,210,481	1,928,836	2,161,824	3,497,861
-Claims Paid	156,618	307,666	698,394	539,229	641,767
-Refunds	678,261	891,607	1,205,863	1,590,834	2,819,012
-Dividends	9,220	11,208	24,579	31,761	37,082
(growth rate)		43 41%	59.34%	12.08%	61.80%
Foreign	24,283	44,702	55,960	64,048	104,349
-Claims Paid	3,991	5,103	7,731	10,145	14,826
-Refunds	19,968	39,219	47,721	53,132	87,893
-Dividends	324	380	508	771	1,629
(growth rate)		84.09%	25.18%	14 45%	62 92%
Total	3,251,123	3,910,404	5,541,727	6,244,870	11,112,725
-Claums Paid	489,084	793,623	1,511,437	1,457,991	1,904,817
-Refunds	2,721,663	3,077,900	3,958,323	4,695,176	9,091,195
-Dividends	40,376	38,881	71,967	91,703	116,712

Source: Monthly Review of Korean Life Insurance, Life Insurance Association

< Table 17 > Claims Paid, Refunds & Dividends

Majors

(Unit. million won)

	1993	1994	1995	1996	1997
Claims Paid	2,851,456	3,078,229	3,504,856	3,569,820	4,560,520
-Individual	1,682,764	1,675,330	1,472,120	1,345,183	1,600,225
-Group	1,168,692	1,402,899	2,032,736	2,224,637	2,960,295
(growth rate)		7.95%	13.86%	18 54%	27.75%
Refunds	13,261,711	12,580,942	12,928,058	14,262,900	24,852,675
-Individual	11,338,657	11,331,796	11,311,738	12,484,555	18,953,721
-Group	1,923,054	1,249,146	1,616,320	1,778,345	5,898,954
(growth rate)		- 5 13%	2.76%	10 33%	74 25%
Dividends	418,697	375,034	429,590	467,463	650,076
-Individual	293,823	280,034	294,449	308,903	450,768
-Group	124,874	95,000	135,140	158,560	199,308
(growth rate)		- 10 43%	14.55%	8 82%	39.06%
Total	16,531,864	16,034,206	16,862,503	18,300,183	30,063,272
-Individual	13,315,246	13,287,160	13,078,307	14,138,641	21,004,714
-Group	3,216,618	2,747,046	3,784,195	4,161,542	9,058,558
(growth rate)		- 3 01%	5.17%	8 53%	64 28%

Source. Monthly Review of Korean Life Insurance, Life Insurance Association

Claim was related to policy underwriting. If a company had a severe underwriting system, the claims paid could be reduced. Because newcomers lacked these systems, the claims paid increased faster than the majors'. The growth rate of newcomers was higher, especially in 1995 when the claims paid was almost double than 1994.

In 1997, all life insurance companies suffered from large amount of refund, because economic turmoil made people unable to sustain their policies. Amount of payment increased by 64 percent for majors and 78 percent for newcomers.

To reduce all kinds of policy payment, life insurance companies had to strengthen their underwriting system, which could prevent adversary selection and moral hazard. Therefore, every company had to educate their special underwriters.

But perfect sale in the initial stage was more important. If a company could sell policies more perfectly, the loyalty of policyholders and the persistence ratio would be improved.

B. Operating Expense

One of underlying reasons for newcomers' poor performance was excess operating expense. All life insurance companies should spend expected expense. But at the initial years, life insurance companies should establish their sales organization, such as branches, sales persons, or sales managing teams. For this purpose, they needed excess initial investment money. Therefore Insurance Business Law permitted the deference of operating expense within 5 years.

< Table 18 > Operating Expenses vs. Premium

NT.		
Newcomers		

(Unit: million won)

	1993	1994	1995	1996	1997
Domestic	467,480	836,893	891,943	855,175	822,309
(growth rate)		79 02%	6.58%	- 4.12%	- 3 84%
Premium	2,552,491	3,281,227	4,344,520	4,552,578	6,312,445
Percentage*	18.31%	25 51%	20.53%	18.78%	13.03%
J/V	229,841	420,505	453,417	493,095	467,048
(growth rate)		82.95%	7 83%	8.75%	- 5.28%
Premium	1,310,002	1,639,825	2,021,109	2,075,158	2,186,595
Percentage*	22.89%	25.64%	22.43%	23.76%	21 36%
Local	240,594	308,620	513,377	477,067	431,484
(growth rate)		28 27%	66.35%	- 7.07%	- 9.55%
Premium	1,649,423	2,267,600	2,995,345	2,845,376	3,163,576
Percentage*	14 59%	13.61%	17 14%	16 77%	13 64%
Foreign	30,108	34,821	44,816	61,200	87,495
(growth rate)		15.65%	28.70%	36 56%	42.97%
Premium	83,153	106,405	120,497	140,236	166,342
Percentage*	36.21%	32.72%	37 19%	43 64%	52.50%
Total	968,023	1,600,839	1,903,553	1,886,537	1,808,336
(growth rate)		65 37%	18.91%	- 0.89%	- 4.15%
Premium	5,595,069	7,295,057	9,481,471	9,613,348	11,828,958
Percentage*	17 30%	21.94%	20 07%	19.62%	15.29%

Source: Monthly Review of Korean Life Insurance, Life Insurance Association

The growth rate of operating expense of newcomers reduced sharply. The expense percentage of each group was different. The percentage of foreign companies was the highest, but the surplus of expenses depended on expected expense rate. For example, the expected expense rate of endowment policy was higher than other types of policies.

So the commission of endowment policy was higher than other policies. Usually commission of group policies was the lowest.

To reduce operating expense, companies should achieve higher productivity.

^{*} Expense / Premium X 100

< Table 19 > Operating Expenses

Majors

(Unit: million won)

	1993	1994	1995	1996	1997
Expense	2,642,570	3,508,003	4,515,465	4,946,517	5,366,970
(growth rate)		32.75%	28.72%	9.55%	8 50%
Premium	18,458,307	20,454,428	25,806,557	28,550,046	37,126,904
Percentage*	14 32%	17 15%	17 50%	17.33%	14.46%

Source Monthly Review of Korean Life Insurance, Life Insurance Association

The expense rate of major companies did not reduce as much as newcomers. So the gap between majors and newcomers was narrowed. In 1997, major's expense rate was 14.46% and newcomers' was 15.29%.

To analyze the surplus of expense, we should examine the gap between expected expense and actual expense as shown in Table 20:

< Table 20> Expected Expenses vs. Actual Expenses

(Unit: million won)

	1993	1994	1995	1996	1997
Newcomers					
Expected	914,174	1,296,145	1,483,411	1,566,549	1,632,146
(growth rate)		41.78%	14.45%	5.60%	4.19%
Actual	968,023	1,600,839	1,903,553	1,886,537	1,808,336
(growth rate)		65.37%	18 91%	- 0.89%	- 4.15%
Percentage*	105.89%	123.51%	128.32%	120.43%	110.79%
Surplus	- 53,849	- 304,694	- 420,142	- 319,988	- 176,190
(per company)	- 1,994	- 11,285	- 15,561	- 11,851	- 6,526
Majors					
Expected	2,853,162	3,779,792	4,683,438	5,316,379	6,027,667
(growth rate)		32.48%	23.91%	13.51%	13.38%
Actual	2,642,570	3,508,003	4,515,465	4,946,517	5,366,970
(growth rate)		32.75%	28.72%	9.55%	8.50%
Percentage*	92 62%	92.81%	96 41%	93 04%	89 04%
Surplus	210,592	271,789	167,973	369,862	660,697
(per company)	35,099	45,298	27,996	61,644	110,116
Total					
Expected	3,767,336	5,075,937	6,166,849	6,882,928	7,659,813
(growth rate)		34.74%	21.49%	11 61%	11 29%
Actual	3,610,593	5,108,842	6,419,018	6,833,054	7,175,306
(growth rate)		41.50%	25.65%	6.45%	5.01%
Percentage*	104.34%	100.65%	104.09%	99 28%	93.67%
Surplus	156,743	- 32,905	- 252,169	49,874	484,507
(per company)	4,750	- 997	- 7,641	1,511	14,682

Source: Monthly Review of Korean Life Insurance, Life Insurance Association

^{*} Expense / Premium X 100

^{*} Actual Expense / Expected Expense X 100

In 1997, business expenses increased 5.0% a 1.5% point decrease from the previous year's 6.5%, reflecting the efforts of life insurance companies to curtail business expense.

The sum of newcomers' expense deficit was nearly 1,275 billion won during the 5 years, and the annual deficit of each company was 9.5 billion won.

However, the sum of majors' expense surplus was over 1,681 billion won, and the annual surplus of each major company was 56 billion won.

Insurance companies' expense surplus is related to the structure of premium and sales productivity. The growth rate of expected expense was reduced from 35% to 11%. But the growth rate of actual expense was reduced faster. Therefore, the overall expense surplus of life insurance companies improved, even though newcomers were still in deficit.

Because the surplus of expenses derived from expected expenses, all life insurance companies should spend below expected expenses. Even though a life insurance company spent more than expected expense, they should pay tax about that exceeded expense.

To get better financial performance they should be concerned about the expected expenses. Furthermore, they should be concerned about the structure of operating expenses, such as new business expense or maintenance expense.

To reduce actual expense, they should pay attention to sales person's productivity and growth rate of expected expenses. However, because Insurance Development Institute limited the rate, every company should be more concern about the actual expenses.

The expected expense and actual expenses of each group were examined in more detail.

The growth rate of expected expenses for each group was increasing, although the rate kept declining. Local and domestic group declined dramatically, but foreign companies still kept on increasing their loading rate.

< Table 21 > Expected Expenses vs. Actual Expense

Newcomers

(Unit. million won)

	1993	1994	1995	1996	1997
Domestic					
Expected	451,157	646,560	728,301	759,181	789,837
(growth rate)		43.31%	12.64%	4.24%	4.04%
Actual	467,480	836,893	891,943	855,175	822,309
(growth rate)		79.02%	6.58%	- 4.12%	- 3.84%
Percentage*	103.62%	129.44%	122.47%	112.64%	104 11%
J/V					
Expected	245,625	344,556	391,870	425,658	415,607
(growth rate)		40 28%	13.73%	8 62%	- 2.36%
Actual	229,841	420,505	453,417	493,095	467,048
(growth rate)		82.95%	7 83%	8 75%	- 5.28%
Percentage*	93.57%	122.04%	115 71%	115.84%	112.38%
Local					
Expected	193,348	272,479	323,887	327,658	352,293
(growth rate)		40.93%	18.87%	1.16%	7 52%
Actual	240,594	308,620	513,377	477,067	431,484
(growth rate)		28.27%	66 35%	- 7.07%	- 9 55%
Percentage*	124 44%	113 26%	158.50%	145.60%	122.48%
Foreign					
Expected	24,044	32,550	39,353	54,052	74,409
(growth rate)		35 38%	20.90%	37.35%	37.66%
Actual	30,108	34,821	44,816	61,200	87,495
(growth rate)		15.65%	28.70%	36 56%	42.97%
Percentage*	125.22%	106.98%	113.88%	113 22%	117 59%
Total					
Expected	914,174	1,296,145	1,483,411	1,566,549	1,632,146
(growth rate)		41.78%	14.45%	5 60%	4 19%
Actual	968,023	1,600,839	1,903,553	1,886,537	1,808,336
(growth rate)		65 37%	18.91%	- 0.89%	- 4.15%
Percentage*	105 89%	123 51%	128.32%	120 43%	110.79%

Source: Monthly Review of Korean Life Insurance, Life Insurance Association

Actual expenses declined very sharply, in 1997, and the growth rate of actual expenses was -4.15%. Although their premium received was increased, the actual expense was reduced.

All newcomers recorded expenses deficit, but the gap reduced as time went by. The gap between loading and actual expense was reduced from 23.51% to 10.79%.

^{*} Actual Expense / Expected Expense X 100

< Table 22 > Expected Expenses

(Unit: million won)

	1993	1994	1995	1996	1997
Newcomers	914,171	1,296,141	1,483,407	1,566,549	1,632,149
(growth rate)		41.78%	14 45%	5 60%	4.19%
Individual	877,790	1,247,520	1,412,174	1,461,234	1,498,626
Percentage*	96.02%	96 25%	95.20%	93.28%	91.82%
(growth rate)		42.12%	13 20%	3.47%	2.56%
Group	36,381	48,621	71,233	105,315	133,523
Percentage*	3 98%	3 75%	4.80%	6 72%	8.18%
(growth rate)		33 64%	46 51%	47 85%	26 78%
Majors	2,853,161	3,779,793	4,683,439	5,316,378	6,027,667
(growth rate)		32 48%	23.91%	13 51%	13 38%
Individual	2,697,048	3,624,625	4,471,493	4,998,132	5,587,822
Percentage*	94 53%	95 89%	95 47%	94 01%	92.70%
(growth rate)		34 39%	23.36%	11 78%	11.80%
Group	156,113	155,168	211,946	318,246	439,845
Percentage*	5 47%	4 11%	4 53%	5 99%	7 30%
(growth rate)		-061%	36 59%	50 15%	38.21%
Total	3,767,332	5,075,934	6,166,846	6,882,927	7,659,816
(growth rate)		34 74%	21.49%	11 61%	11 29%
Individual	3,574,838	4,872,145	5,883,667	6,459,366	7,086,448
Percentage*	94.89%	95.99%	95 41%	93.85%	92.51%
(growth rate)		36 29%	20.76%	9 78%	9 71%
Group	192,494	203,789	283,179	423,561	573,368
Percentage*	5.11%	4.01%	4.59%	6.15%	7.49%
(growth rate)		5.87%	38.96%	49 57%	35 37%

Source Monthly Review of Korean Life Insurance, Life Insurance Association

The portion of group policies' expected expense was rising, because the growth rate of group policy was higher than the individual's.

^{*} expected expense/ sum x 100

Chapter 4. Forecasting Performance of the Model Company

We examined the current situation of Korean life insurance industry, especially the financial performance. Now, we should set the Model Company and forecast the impact of management factors. We will identify the key management factors for improving financial performance

1. Key Performance Drivers

A. Income

1) Premium

Factors affecting premium received of insurance companies are the size of solicitors, productivity of sales person, average premium of new business policy, and persistence ratio.

Premium =

Number of Solicitors(ⓐ) x Average Productivity per Solicitors(ⓑ) x Average Premium per New Business Policy(ⓒ) x Persistence Ratio(ⓓ)

- Solicitors

The amount of premium received largely depends on the size of solicitors. Therefore, every company spent a lot of money to recruit and educate new sales persons, because the size of solicitors was directly related to the company's market share.

Working ratio is the percentage of working solicitors among all registered solicitors. The average ratio is below 80 percent.

The productivity of sales person depends on the educational system and commission system.

The active solicitors of newcomers were one tenth of those of major's. The number of solicitors of newcomers declined from 40% to 26% during this period.

< Table 23 > Active Solicitors

(Unit: person)

	1993	1994	1995	1996	1997
Newcomers	116,830	128,058	124,878	103,031	75,042
Percentage	39 40%	37.80%	35.76%	31.80%	25 58%
(growth rate)		9.61%	- 2 48%	- 17.49%	- 27.17%
per company	4,327	4,743	4,625	3,816	3,263
Majors	179,659	210,741	224,328	220,935	218,356
Percentage	60.60%	62.20%	64.24%	68.20%	74.42%
(growth rate)		17.30%	6.45%	- 1.51%	- 1 17%
per company	29,943	35,123	37,388	36,823	36,393
Total	296,489	338,799	349,206	323,966	293,398
(growth rate)		14.27%	3 07%	- 7 23%	- 9.44%

Source. Monthly Review of Korean Life Insurance, Life Insurance Association

Average Productivity per Solicitor

< Table 24 > Productivity

(Unit: million won, person)

	* average number of solicitors, ** unit policy number					
	1993	1994	1995	1996	1997	
Newcomers						
-Solicitor*	109,106	122,444	126,468	113,955	89,037	
initial no.	101,382	116,830	128,058	124,878	103,031	
closing no.	116,830	128,058	124,878	103,031	75,042	
-N. B.**	3,578,118	3,931,330	3,819,819	3,488,902	4,300,370	
productivity	32.79	32.11	30.20	30 62	48.30	
growth rate		9.87%	- 2.84%	- 8.66%	23.25%	
-Premium	5,595,069	7,295,057	9,481,471	9,613,348	11,792,958	
productivity	51.28	59 58	74 97	84.36	132.45	
growth rate		30.38%	29.97%	1 39%	22.67%	
Majors						
-Solicitor*	185,003	195,200	217,535	222,632	219,640	
initial no	190,346	179,659	210,741	224,328	220,93	
closing no.	179,659	210,741	224,328	220,935	218,350	
-N B.**	8,075,308	8,622,666	10,067,922	10,203,880	12,818,703	
productivity	43.65	44.17	46.28	45 83	58.30	
growth rate		6.78%	16.76%	1.35%	25.63%	
-Premium	18,458,307	20,454,428	25,806,557	28,550,046	37,126,904	
productivity	99.77	104.79	118.63	128.24	169.03	
growth rate		10 81%	26 17%	10.63%	30.04%	
Total						
-Solicitor*	294,109	317,644	344,003	336,586	308,682	
initial no	291,728	296,489	338,799	349,206	323,966	
closing no	296,489	338,799	349,206	323,966	293,398	
-N. B.**	11,653,426	12,553,996	13,887,741	13,692,782	17,119,073	
productivity	39.62	39.52	40.37	40.68	55.46	
growth rate		7 73%	10.62%	- 1.40%	25.02%	
-Premium	24,053,376	27,749,485	35,288,028	38,163,394	48,955,862	
productivity	81.78	87 36	101.05	113.38	158.60	
growth rate		15 37%	27.17%	8.15%	28.28%	

Source: Monthly Review of Korean Life Insurance, Life Insurance Association

In 1997, average productivity was 4.6 policies per person in a month and average premium received was 13.2 million won per month.

Even though the productivity of newcomer's solicitors improved, the gap between majors and newcomers was not reduced. Because major companies enjoyed their reputation, they could increase capable solicitors easily. When consumers choose insurance companies, they tend to choose the more reliable companies.

Average Premium per New Business Policy

Usually the premium per policy increases in portion to growth in income.

But the average premium of each company was different because the marketing strategy impacted the amount of new business premium.

Average Premium = ① $\times P1 + ② \times P2 + ③ \times P3$

①:sales ratio of endowment policies, P1: average premium of an endowment policy ②:sales ratio of pure endowment policies, P2 average premium of a pure endowment policy ③:sales ratio of insurance against death, P3: average premium of a death insurance policy ① + ② + ③ = 1

< Table 25 > Average New Business Premium

Newcomers

(Unit: million won)

	March 1994	March 1995	March 1996	March 1997
Endowment*	(14.01%)	(10 02%)	(8.38%)	(17 78%)
No of Contract	39,539	28,964	21,222	41,242
Amount of Contract	990,087	660,901	495,390	966,693
Ave. Amount	25 04	22.82	23 34	23.44
Initial Premium	41,079	34,053	37,101	41,555
Ave. Premium	1.039	1 176	1.748	1.008
Pure Endowment.	(45.48%)	(49.31%)	(48.99%)	(32.75%)
No. of Contract	128,367	142,479	124,120	75,950
Amount of Contract	8,198,054	10,093,914	9,198,907	5,686,105
Ave. Amount	63 86	70 85	74.11	74 87
Initial Premium	25,596	28,147	29,366	15,691
Ave. Premium	0 199	0 198	0.237	0.207
Death Insurance.	(40.51%)	(40.67%)	(42.63%)	(49 47%)
No. of Contract	114,326	117,528	107,985	114,725
Amount of Contract	2,688,662	3,418,438	3,629,071	3,519,317
Ave. Amount	23.52	29.09	33 61	30 68
Initial Premium	4,700	5,405	5,352	7,437
Ave Premium	0.041	0 046	0.050	0.065
Total	(100%)	(100%)	(100%)	(100%)
No. of Contract	282,232	288,971	253,327	231,917
Amount of Contract	11,876,803	14,173,253	13,323,368	10,172,115
Ave. Amount	42.08	49 05	52.59	43.86
Initial Premium	71,375	67,605	71,819	64,683
Ave. Premium	0.253	0.234	0.284	0.279

Source: Monthly Review of Korean Life Insurance, Life Insurance Association

^{*} portion of each policies

(Average Premium & Portion of Newcomers)

Average initial premium of endowment policy was 1,243 thousand won, and monthly premium was about 104 thousand won.

Initial premium of pure endowment policy was 210 thousand won.

Initial premium of death policy was 49 thousand won.

The portion of death policy was 43%, pure endowment was 44%, and endowment was 13%.

< Table 26 > Average New Business Premium

Majors

(Unit. million won)

	March 1994	March 1995	March 1996	March 1997
Endowment*	(10.70%)	(9 34%)	(9 80%)	(13 30%)
No. of Contract	59,037	62,536	85,085	116,219
Amount of Contract	1,500,650	1,381,333	2,461,538	3 674,475
Ave. Amount	25 42	22.09	28 93	31.62
Initial Premium	91,102	102,909	134,826	107,122
Ave. Premium	1.543	1.646	1.585	0 922
Pure Endowment.	(53 23%)	(48.75%)	(33.58%)	(28.85%)
No. of Contract	293,683	326,424	291,247	252,175
Amount of Contract	21,124,033	25,624,573	25,099,576	24,256,575
Ave. Amount	71.93	71.89	86 09	96.19
Initial Premium	138,049	124,210	146,636	84,388
Ave. Premium	0.470	0.381	0.503	0 335
Death Insurance.	(36.07%)	(41.91%)	(56.61%)	(57.85%)
No of Contract	199,019	280,657	491,091	505,693
Amount of Contract	4,613,219	9,500,055	19,567,314	18,782,873
Ave. Amount	23 18	33.85	39.84	37.14
Initial Premium	7,865	11,522	23,146	28,859
Ave. Premium	0.040	0.041	0.047	0.057
Total	(100%)	(100%)	(100%)	(100%)
No. of Contract	551,739	669,617	867,423	874,087
Amount of Contract	27,237,902	36,505,961	47,128,428	46,713,923
Ave. Amount	49.37	54.52	54.33	53.44
Initial Premium	237,016	238,641	304,608	220,369
Ave. Premium	0 430	0 356	0.351	0.252

Source Monthly Review of Korean Life Insurance, Life Insurance Association

(Average Premium & Portion of Majors)

Average initial premium of endowment policy was 1,424 thousand won, and monthly premium were about 119 thousand won. Initial premium of pure endowment policy was 422 thousand won. Initial premium of death policy was 46 thousand won.

^{*} portion of each policies

The portion of death policy was 48%, pure endowment was 41%, and endowment was 11%.

Persistence Ratio

Persistence ratio is the probability of policy maintenance.

Empirically, average 13th month's persistence ratio is about 55 percent. But it depends on the type of policy. Usually the ratio of death insurance is higher than other types.

2) Investment Income

Investment income depends on the amount of working asset and yield ratio.

Formula

Investment Income =

(Initial Working Asset + Premium Received) x Yield Rate

< Table 27> Working Asset (WA) & Yield Ratio

Newcomers

(Unit: 100 million won)

	1993	1994	1995	1996	1997
Initial WA	47,731	61,425	83,804	111,163	138,172
(growth rate)		28.69%	36.43%	32.65%	24.30%
Premium Received	55,951	72,951	94,815	96,133	118,290
Investment income	6,536	8,400	10,518	17,698	15,976
Yield Ratio	12 6%	12.5%	11.8%	17.1%	12.5%

Source. Monthly Review of Korean Life Insurance, Life Insurance Association

Majors

(Unit: 100 million won)

	1993	1994	1995	1996	1997
Initial WA	375,274	406,192	455,364	564,510	649,212
(growth rate)		8.24%	12.11%	23.97%	15.00%
Premium Received	155,610	204,545	258,066	285,500	371,269
Investment income	42,514	47,350	54,784	62,730	74,983
Yield Ratio	16 0%	15.5%	15 4%	14.8%	14.7%

Source: Monthly Review of Korean Life Insurance, Life Insurance Association

Today, life insurance companies earn about 80 percent of their income from premium payments and about 20 percent from investment earnings.

If insurers earn more money on their investment, they can lower the price of their products.

If an insurance company's investment earnings are not as high as those of other companies are, the insurer might have to charge higher premium rates for its products and, possibly, lose customers to companies with lower premium rates.

On the other hand, the insurer must balance the pressure to earn high levels of investment income with the need to guarantee that their investments are relatively safe from the risk of financial loss.

The growth rate of newcomers' investment income was nearly double that of majors'. But the yield rate of newcomers was lower than that of majors.

B. Expenditure

1) Claims Payment

Actual claims payment is calculated by the following formula:

Formula

Claims Payment =

Actual Risk Rate x Average Amount of Contracts + Dividends

- Actual Risk Rate

The actual risk rate of each company depends on underwriting skill. If an insurance company has skillful underwriters, the average actual risk rate may be lower than other companies. But training skillful underwriters is a time consuming task.

- Average Amount of Contracts

Life insurance companies must pay back their policyholder when the accidents occur. The amount of payment is decided by the amount of contracts. If a policyholder contracted a policy, say in the amount of 10 million won, and the accident occurred at the last months, the insurer must pay the expected claims.

- Dividend

To be competitive, insurers try to maintain a liberal dividend policy while building surplus as a cushion against poor investment and

mortality experience. How much of the annual operating gain should be retained rather than paid in policy dividend is a matter of judgement, particularly considering that conservative actuarial assumptions and valuation methods overstate reserves and understate surplus.

Insurers want to maintain stable dividend payments. Therefore, no fixed relationship exists between operating gains and dividends. However, any clear and lasting trend in gains must be reflected in dividends paid.

Contributions to surplus result from three sources: ① excess interest earnings,② mortality savings and ③ expense savings. So the contribution plan is called the three-factor system. For any block of policies the amount contributed to surplus is calculated by crediting the block of policies with

- (1) the aggregate reserve at the beginning of the year
- (2) the excess of aggregate expense loadings over incurred expenses
- (3) interest earned for the year on items (1) and (2) and debiting the block of policies with
 - (1) the aggregate reserve at the end of the year
 - (2) the aggregate mortality cost experience.

2) Surrenders

The type of insurance contract determines the surrender value of each policy. Generally, surrender value of death insurance policy is lower than endowment policy.

3) Operating Expense

The largest part of operating expense is commission, which is paid to solicitors. Operating expenses are divided into two parts;

Direct Cost

It is connected with premium or expected expense, such as commission for solicitors or management cost of sales branches.

- Indirect Cost

It is not connected with expected expense or premium, but with the Size of employee. So indirect cost is computed by the number of employees and average wage.

C. Surplus or Deficit

Surplus is could be calculated as the gap between income and expenditure.

D. Adding Amount of Reserves

Reserves should be accumulated annually for payment, and insurer should reserve some money for valid policy at the end of fiscal year. So every insurer should accumulate some money through the obliged way by government.

E. Profit or Loss

2. Assumptions of the Model Company

To analyze the impact of management factors, we set a Model Company with initial paid-in capital 10 billion won. The major assumptions of management factors are as follows.

A. Income

1) Premium Received

- Solicitors

Solicitors are all female sales persons, and the number of solicitors in the Initial year is 1,000. The monthly growth rate of solicitors is 13%.

The average turnover ratio of solicitors is 11 percent per month.

The average working solicitor is 80% of the total number.

<Table 28> Number of Remaining Solicitors at Selected Month

(Unit: person)

	12 th month	24th month	36th month	48th month	60 th month
Solicitors	1,243	1,577	2,000	2,536	3,217

Calculation Example

	9801	9802	9803	9804	9805	9806	9807	9808	9809	9810	9811	9812
01	1000	890	792	705	627	558	497	442	394	350	312	278
02		130	116	103	92	82	73	65	58	51	46	41
03		100	132	118	105	93	83	74	66	59	52	46
04				135	120	107	95	85	76	67	60	53
05					138	123	109	97	87	77	69	61
06	1					141	125	111	99	88	79	70
07							144	128	114	101	90	80
08								146	130	116	103	92
09									149	133	118	105
10										152	136	121
11											155	138
12												158
Total	1000	1020	1040	1061	1082	1104	1126	1149	1172	1195	1219	1243

Bold is newly recruited solicitors (ratio is 13% of previous month solicitors)

Remaining ratio is 89% of the number of previous month

- Average Productivity per Solicitors

We assume that the average productivity per solicitor is 4.5 new business per month. * Monthly average of new business per solicitor was 4.6 policies.

- Average Premium Per New Business Policy

The portion of endowment policy is 20 percent and average monthly premium is 100 thousand won. The portion of pure endowment policy is 30 percent and average monthly premium is 200 thousand won. And the portion of death insurance is 50 percent and average monthly premium is 65 thousand won.

Thus the average premium per policy is:

$$0.2 \times 100,000 + 0.3 \times 200,000 + 0.5 \times 65,000 = 112,500$$

Persistence Ratio

Persistence ratio of the 13th month was assumed to be 54% and the 25th month was assumed to be 29%. Therefore, the premium received was reduced by 54%, if another contracts do not exist.

<a>Table 29> Persistence Ratio at Selected Month

(Unit: %)

	13th month	25 th month	37 th month	49 th month	61st month
Ratio	54.04	29.20	15.78	8.53	4.85

2) Investment Income

Yield ratio of working asset is assumed as 10% annually. Initial working asset is paid-in capital(10 billion), and the portion of working asset is 95% of the total asset.

B. Expenditure

1) Claims Paid

- Actual Risk Rate

Because the average actual mortality rate is lower than the expected rate, actual mortality rate of the Model Company is assumed to be 60% of expected mortality rate at the first year. The rate in the second year is assumed to be 70% and the rate after the third year is assumed to be 80%

The assumed rates are as follows;

Year	1 st year	2 nd year	3 rd year	4th year	5 th year
Rate	0 001872	0.002414	0.003103	0.003616	0.004162

- Average Amount of Contract

The amount of claims is determined by the accident. For instance, if a policyholder was injured by a car accident, he will receive accident benefits. Usually, accident benefits are bigger than other benefits. But the accident benefits are always the same regardless of duration.

While the other benefit, such as maturity claims, is increased by the duration, and the amount of benefit is regulated by the amount of contract.

The amount of endowment and pure endowment policies are 15 million won respectively, and death insurance is 20 million won. The average amount of contract contains accident benefit, surrender claims, and refunds.

< Table 30 > Amount of Contract by Year

(Unit: won)

Year	12 th month	24th month	36 th month	48th month	60 th month
Amount	5,392,815	7,015,476	8,868,455	11,039,678	13,470,506

- Dividend

Interest dividend and mortality dividends are assumed to be 9% annually. And other dividends are not payback to policyholders.

2) Surrenders

- Surrender ratio

< Table 31 > Surrender Ratio of Selected Months

Ye	ear	12 month	24 month	36 month	48 month	60 month
R	atio	0.0375	0.008333	0.0075	0.006	0.004833

- Refunds of Surrenders

Usually, premium of death insurance consists of risk premium and expected expense. So if a death insurance policyholder want to refund his policy, the refund value is very low, sometimes zero.

But the premium of endowment policy consists of savings premium and a small portion of risk premium. So the refund of surrender of endowment policy is larger than death insurance policy.

The refund rates are as follows,

Year	12 months	24 months	36 months	48 months	60 months
Rate	25%	50%	60%	75%	95%

rate = refund / accumulated premium

3) Operating Expense

- Direct Cost

The commission of each policy is assumed to be 27.081% of premium at the initial year, and 0.0144% of premium after the 2nd year.

- Indirect Cost

One sales office has 20 solicitors, and one sales branch has 11 sales offices.

< Table 32 > Forecasting of Sales Organization

	lst year	2 nd year	3 rd year	4th year	5th year
Branch	5	7	9	11	14
Office	62	80	99	126	160
Solicitor	1,237	1,577	2,000	2,536	3,217

Operating cost of each branches are assumed that the average operating cost of sales office is 40 million won per year and that of sales branch is 120 million won per year. The number of employees of sales organization is assumed that the total number in each sales office has 2 persons, and sales branch has 10 persons.

The employees at head quarters are assumed that 100 person at the initial year and the growth rate of employees in HQ is 10 percent annually. The average wage of employee is 25 million won and salary of directors is 75 million won per year.

< Table 33 > Forecasting of Employees

T	1 st year	2 nd year	3 rd year	4th year	5 th year
Director	3	3	3	3	3
Employee	274*	336	409	495	606
Total	277	339	412	498	609

^{*} employees of HQ: 100,

employees of sales organization: $5(branch) \times 10 + 62(office) \times 2 = 174$

< Table 34 > Forecasting of Wage

(Unit: million won)

1st year	2 nd year	3 rd year	4th year	5 th year
225	225	225	225	225
6,417	7,708	9,388	11,429	13,938
6,642	7,933	9,613	11,654	14,163
	225 6,417	225 225 6,417 7,708	225 225 225 6,417 7,708 9,388	225 225 225 225 6,417 7,708 9,388 11,429

C. Policy Reserve

Policy reserve is calculated by the surrender value. It is the minimum reserve for policyholder. And the amount of reserve is different by the type and time.

We assume the reserve rates are as follows;

Year	1st year	2 nd year	3 rd year	4 th year	5 th year
Rate	45%	55%	65%	80%	95%

3. Forecasting Performance of the Model Company

Based on the former assumptions, we forecast the management performance of the Model Company for 5 years.

< Table 35 > Forecasting of Model Company's Profit

(Unit 100million won)

	1st year	2nd year	3rd year	4th year	5th year
Income	298	765	1202	1667	2198
Premium Received	286	731	1125	1535	2005
Investment income	12	34	77	132	193
Expenditure	247	503	792	1192	1746
Death	3	11	25	48	87
Surrender	26	138	310	565	930
Expense	172	270	339	425	533
Others	46	85	117	153	196
Surplus	51	262	411	476	451
Reserve	78	248	417	592	790
Profit	- 27	14	- 6	- 116	- 339

Premium received increased from 28.6 billion won to 200.5 billion won, with the annual growth rate of 120%. The portion of investment income increased from 4% to 9%.

Surplus increased from 5.1 billion won to 47 6 billion won. But it declined in the 5th year. The amount of policy reserve increased from 7.8 billion won to 79 billion won.

The profit of Model Company was declined from the 4th year and the amount of deficit in the 5th year was huge, almost 3 times of paid-in capital.

To develop strategic options, we should forecast the performance under different circumstances. We found 6 important management factors affecting performance, that is persistence ratio, operating expense rate, average premium, productivity of solicitors, active solicitor rate, and investment yield rate.

We forecast the performance when changing management factors by 10% from the current situation.

A. Persistence Ratio

< Assumption : improve current persistence ratio by 10% >

We assume the persistence ratio was 54% in the 13th month and 29% in the 25th month. We take the strategy, which improve persistence ratio, such as change in commission system or collection system. We could improve persistence ratio from 54% to 64%.

After improving the persistence ratio, the aggregated deficit of Model Company was reduced from 47 billion won to 31 billion won. Premium received was increased from 28.6 billion won to 30 billion won in the 1st year. As a result the growth rate was improved from 4.9% to 20.9%. At the 5th year, premium received increased from 200 billion won to 242 billion won.

< Table 36 > Profit of Model Company (after change in persistence ratio)

(Unit: 100million won)

	1st year	2 nd year	3 rd year	4th year	5th year
Income	312	845	1387	1983	2668
Premium Received	300	708	1298	1822	2422
Investment income	12	37	89	161	246
Expenditure	254	534	857	1312	1946
Death	4	12	29	58	107
Surrender	28	151	347	641	1063
Expense	175	281	353	443	555
Others	47	90	128	170	221
Surplus	58	311	530	671	722
Reserve	83	279	496	733	1007
Profit	- 25	31	34	- 62	- 285

Policy reserve changed rapidly from 8.3 billion to 100.6 billion won and investment income also increased rapidly. But the expenditure increased relatively less. Surrender expense increased from 93 billion to 106 billion in the 5th year (growth rate: 13.9%). As a result, the aggregated deficit improved sharply from 47 billion to 31 billion won.

Moreover, the improvement of persistence ratio induced more sustainable profit after 5th year. Thus, improving persistence ratio seems to be the most important strategy of new comers.

B. Operating Expense Rate

< Assumption : reduce current operating expense rate by 10% >

We change the commission system in the way that initial commission is reduced and commission after the 2nd year increases. The commission rate of the initial year was reduced from 27.081% to 20.081% and the rate of the 2nd year was increased from 0.0144% to 5.0144%.

Total operating expense was reduced from 174 billion won to 158 billion won. The reduction rate was 9.1%. After reducing operating expense, the aggregated deficit of the Model Company was reduced from 47 billion won to 25 billion won.

< Table 37 > Profit of Model Company (after change in commission)

(Unit: 100million won)

	1st year	2 nd year	3rd year	4th year	5th year
Income	299	769	1210	1679	2214
Premium Received	286	731	1125	1535	2004
Investment income	13	38	85	144	210
Expenditure	224	467	755	1152	1700
Death	3	11	25	48	87
Surrender	26	138	310	565	930
Expense	152	238	308	391	492
Others	43	80	112	148	191
Surplus	75	302	455	527	514
Reserve	78	248	417	592	790
Profit	- 3	54	38	- 65	- 276

To reduce direct cost, we should focus on the effectiveness of commission. For example, if we emphasize on new business policy, we should increase initial commission. But it also could bring bad persistence ratio because solicitors could neglect small commissions that occur from the 2nd year premium.

Moreover, solicitors might promote policy surrender.

Therefore, we should balance between persistence ratio and commission rate.

Large amount of initial investment, such as rent for an office, recruit of sales solicitors, or hire of sales managers characterize the insurance industry. Almost all of newcomers suffered from these initial investments.

To reduce commission, we should seek lower cost sales system, such as TM (Tele-Marketing) or DM (Direct Marketing). If we could totally change the sales system from solicitor system to agent or DM system, we could save a lot of commission.

Reducing management cost, such as branch cost or office-managing cost would be one of the best way to reduce operating cost. If we could increase the size of sales office by 10%, the number of solicitors that belongs to one sales office becomes 22 persons, and the number of sales office in one branch becomes 12.

If we could reduce both parts, that is management cost and commission, we could obtain better financial results.

< Table 38 > Profit of Model Company (after change in both parts)

(Unit. 100million won)

	1st year	2 nd year	3rd year	4th year	5th year
Income	300	770	1212	1683	2220
Premium Received	286	731	1125	1535	2004
Investment income	14	39	87	148	216
Expenditure	216	455	742	1135	1677
Death	3	11	25	48	87
Surrender	26	138	310	565	930
Expense	144	228	296	376	473
Others	42	79	111	146	187
Surplus	84	315	470	548	543
Reserve	78	247	417	592	790
Profit	6	68	54	- 43	-247

Even though the money saved from the reduction of management cost was smaller than other cost, the deficit was reduced from 25 billion won to 16 billion won.

Moreover, savings in management cost could induce more effective cost management skills. So newcomers should focus attention on the structure of management cost and commission system.

C. Average Premium

< Assumption : increase current average premium by 10% >

We assume the average premium per policy was 112,500 won.

If we increase the average premium by 10% (112,500 \Rightarrow 123,750), the profit of the Model Company would increase dramatically.

The aggregated deficit of Model Company was 18.8 billion won.

The profit in the 2nd year increased from 1.4 billion won to 5.6 billion won and the profit in the 3nd year changed from a deficit of 0.6 billion won to a profit of 5.7 billion won.

Even though the amount of surrender refund increased from 197 billion won to 217 billion won, the growth rate of premium received was larger than that.

The sum of premium received changed from 568 billion won to 625 billion won.

< Table 39 > Profit of Model Company (after change in average premium)

(Unit: 100million won)

	1st year	2 nd year	3rd year	4th year	5 th year
Income	328	842	1325	1838	2425
Premium Received	315	804	1238	1688	2205
Investment income	13	38	87	150	220
Expenditure	260	539	851	1285	1886
Death	3	11	25	48	87
Surrender	28	152	342	622	1023
Expense	180	286	359	450	565
Others	49	90	125	165	211
Surplus	68	303	474	553	539
Reserve	78	248	417	592	790
Profit	- 10	55	57	- 39	- 251

D. Productivity of Solicitors

< Assumption: increase current productivity by 10% >

We assumed the productivity per solicitors was 4.5 per month.

If we could improve the productivity of solicitors from 4.5 to 4.95 per month, the deficit of the Model Company could be reduced.

The aggregated deficit of the Model Company was 42 billion won.

Premium received increased from 568 billion won to 625 billion won and the policy reserve also increased from 212 billion won to 234 billion won.

The effect of reducing deficit occurred from investment income; investment income was increased from 45 billion won to 51 billion won.

The deficit was reduced from 47 billion won to 42 billion won.

To raise the productivity of solicitor, we should improve the educational system. If we employ market segmentation strategy to the sales system, the productivity of solicitors would be increased.

To achieve the target productivity, marketing strategy is an important tool.

< Table 40 > Profit of Model Company (after change in productivity)

(Unit: 100million won)

	1st year	2 nd year	3rd year	4th year	5th year
Income	328	842	1324	1837	2423
Premium Received	315	804	1238	1688	2205
Investment income	13	38	86	149	218
Expenditure	262	540	854	1289	1894
Death	4	12	27	52	95
Surrender	29	151	342	622	1023
Expense	180	286	359	450	565
Others	49	91	126	165	211
Surplus	66	302	470	548	529
Reserve	85	272	458	651	869
Profit	- 19	30	12	- 103	- 340

E. Active Solicitor Rate

< Assumption : increase current active solicitor rate by 10% >

We assumed the active solicitor rate was 80% of the total number.

If we improve the active rate of solicitors from 80% to 90%, the aggregated deficit of the Model Company is reduced from 47 billion won to 41 billion won.

Premium received increased from 568 billion won to 639 billion won and the policy reserve increased from 212 billion won to 239 billion won.

Thus, income and expenditure increased simultaneously; the effect of reducing deficit occurred from investment income.

Investment income increased from 45 billion won to 52 billion won.

To raise the active rate of solicitors, we should introduce some incentive system.

< Table 41 > Profit of Model Company (after change in active rate)

(Unit: 100million won)

	1st year	2 nd year	3rd year	4th year	5th year
Income	335	861	1355	1880	2480
Premium Received	322	822	1266	1727	2255
Investment income	13	39	89	153	225
Expenditure	264	549	869	1314	1932
Death	4	12	28	54	98
Surrender	29	155	349	636	1046
Expense	181	290	364	457	573
Others	50	92	128	168	215
Surplus	71	312	486	566	548
Reserve	88	278	469	666	889
Profit	- 17	34	17	-100	- 341

F. Investment Yield Rate

< Assumption : increase current investment yields rate by 10% >

We assumed the investment yield rate was 10%.

If we improve the investment yield rate from 10% to 11%, the aggregated deficit of the Model Company is reduced from 47 billion won to 42 billion won.

< Table 42 > Profit of Model Company (after change in yield rate)

(Unit 100million won)

	1 st year	2 nd year	3rd year	4th year	5th year
Income	300	769	1211	1682	2221
Premium Received	286	731	1125	1535	2004
Investment income	13	38	86	148	217
Expenditure	247	504	792	1191	1746
Death	3	11	25	48	87
Surrender	26	138	311	565	930
Expense	172	270	339	425	533
Others	46	85	117	153	196
Surplus	52	265	419	491	475
Reserve	78	248	417	592	790
Profit	- 26	17	2	- 101	- 315

G. Summary

Table 43 summarizes the results of changing management factors.

< Table 43 > Profit of Model Company

(Unit: 100million won)

		1st year	2 nd year	3rd year	4th year	5th year
Basic Mo	del	-27	14	-6	-116	-339
Persistence	Profit	-25	31	34	-62	-285
Ratio	Ratio	7	121	667	47	16
Operating	Profit	6	68	54	-43	-247
Expense Rate	Ratio	122	386	1000	63	27
Average	Profit	-10	55	57	-39	-251
Premium	Ratio	63	293	1050	66	26
Productivity	Profit	-19	30	12	-103	-340
of Solicitors	Ratio	29	114	300	11	0
Active	Profit	-17	34	17	-100	-341
Solicitor Rate	Ratio	37	143	383	14	1
Investment	Profit	-26	17	2	-101	-315
Yield Rate	Ratio	4	21	133	13	7

After analysis of each management factors' impact on performance, we should develop the optional strategy for newcomers

Chapter 5. Strategies for Newcomers

In order to grow in the Korean market, a substantial amount of available cash is necessary. Newcomers cannot borrow money from banks in Korea, and it is difficult for Newcomers to increase their paid-in capital allotment.

Therefore, we use the results of the previous chapter, in order to find the optional strategies for Newcomers. Before developing the optional strategies, we should examine the feasibility of implementation of each performance drivers.

1. Improving Performance Drivers

A. Improving Persistence Ratio

At present, the average persistence ratio of Korean life insurance companies is below 54% at the 13th month. If we could improve the present persistence ratio by 10%, we could get another 15% profit.

Although every top manager has emphasized the persistence ratio, the improvement rate was quite low, because a lot of effort and money is needed to improve persistence ratio. So if we do not change the fundamentals of the sales system, we could not get the desired results in the near future.

The strategies, which improve persistence ratio, include collecting premium from individual bank accounts, or developing the underwriting system.

The strategy that emphasizes persistence ratio is needed to get more profit. But the impact is relatively smaller than expected.

Therefore, we assume the persistence ratio will be improved very slowly.

B. Improving Productivity

Average productivity of solicitors will be improved rapidly, because of strong emphasis on productivity placed by FSB(Financial Supervisory Board). But the improvement rate of productivity will be slower than expected, because the educational systems of Newcomers are less effective than the Majors'.

So Newcomers should improve their recruiting and educational system for solicitors.

C. Improving Average Premium

The average premium will rise from the present level, because every consumer needs more benefits and longer coverage period. But competition among life insurance companies will be fierce. And regulation on policy premium will be reduced in the near future (FSB announced all regulation on premium will be dismissed by 2001)

Therefore, to survive under the competitive environment, Newcomers cannot raise the premium. The strategy that raises the average premium has a limitation.

But if they have special skills in developing new products, they could raise the premium.

D. Improving Investment Yield

After joining the OECD, the Korean financial market has been opened to foreigners. It ,also provided Korean life insurance companies opportunities to invest in foreign bonds, such as TB, Yankee Bonds, or Samurai Bonds. Under the deregulated environment, companies should place more emphasis on the foreign markets in order to get more investment income.

To get more capital income, companies should invest in riskier assets.

FSB has emphasized risk management system. So if Newcomers want to invest riskier assets, they should set the rules and keep the rules. If they ignore the importance of risk management, they could face a dangerous situation, such as Barings or Yamaichi Securities.

E. Improving Active Solicitor Rate

By changing active solicitor rate, we could not earn sufficient profit, because the more active solicitors are, the more insurance companies pay commission. So we should maintain the balance between the pay system and marketing strategies.

2. Strategic Options for Newcomers

A. Model 1.

B.

(Assumption)

	Basic Model's Assumption	Assumption
Persistence ratio	54%(13 th month) 29%(25 th month)	Improving by 5% in each month
Productivity	4.5 policies per month	5.0 policies per month
Average Premium	112,500	123,750
Investment yield	10% per year	9% per year
Active Rate	80% of registered solicitor	90% of registered solicitor

(Result)

< Table 44 > Profit of Model 1

(Unit: 100 million won)

	1st year	2 nd year	3 rd year	4th year	5th year
Income	416	1104	1772	2492	3317
Premium Received	403	1058	1664	2301	3030
Investment income	14	46	101	191	287
Expenditure	302	660	1065	1633	2424
Death	4	14	34	66	120
Surrender	27	198	452	828	1368
Expense	203	326	423	532	660
Others	57	111	157	207	268
Surplus	115	444	707	859	893
Reserve	101	329	569	824	1116
Profit	14	114	138	35	-223

The profit of model 1 is improving significantly, but the deficit in the 5th year is still larger than the paid in capital. The result shows that the effect of each management factors are smaller than the collective effect of management factors.

Therefore, top managers should try to improve certain management factors simultaneously, and keep all management factors' effectiveness from declining.

C. Model 2.

(Assumption)

	Basic Model's Assumption	Assumption Improving by 2.5% in each month		
Persistence ratio	54%(13 th month) 29%(25 th month)			
Productivity	4.5 policies per month	4.7 policies per month		
Average Premium	112,500	118,125		
Investment yield	10% per year	9.5% per year		
Active Rate	80% of registered solicitor	85% of registered solicitor		

(Result)

< Table 45 > Profit of Model 2

(Unit: 100million won)

	1st year	2 nd year	3rd year	4th year	5th year
Income	351	917	1458	2038	2701
Premium Received	338	877	1366	1078	2464
Investment income	13	40	92	160	237
Expenditure	271	573	914	1389	2049
Death	4	12	29	56	102
Surrender	31	165	374	683	1126
Expense	186	300	377	473	593
Others	51	97	135	177	228
Surplus	79	343	544	649	651
Reserve	88	285	486	698	939
Profit	-9	59	. 58	-49	-288

Even though the profit of Model 2 is smaller than Model 1, the result of improving management factors is larger than expected.

The best way to improve profit is by controlling of expenditures.

So the strategies adopted by ordinary top managers in Korea, such as focus on market share or improving premium received, are inadequate.

They should focus more on improving their expenditure structure.

3. Performance Improvement Measures

Until fairly recently, the insurance industry was stable and predictable, and the majority of insurers maintained profitable operation by continuing traditional industry practices. The industry was heavily regulated and faced little competition from other types of financial institutions and other countries.

However, recent rapid changes in the Korean life insurance industry proved that the business environment of insurers could be quite unstable. As a result of deregulation of the financial services industry, insurers now face competition from advanced companies, such as Prudential, ING, and Metropolitan Life Insurance Company.

Now, we consider efforts designed to control administrative and distribution expenses. Administrative expenses can be controlled by means of downsizing, reengineering, and outsourcing.

A. Controlling Administrative Expenses

On average, administrative expenses make up about 6.7 percent of an insurer's total yearly expenditures. Particularly when insurers recorded deficit, reducing these expenses can considerably improve profitability.

Downsizing

It is a reduction in the size of a company's work force. In theory, downsizing should be used for eliminating non-essential employees or positions, thus reducing the company's expenses without damaging the company's operating effectiveness.

Reengineering

It is sometimes confused with downsizing. Many companies have used the term reengineering to try to put a positive face on their efforts to downsize. In fact, reengineering need not involve any downsizing at all. Reengineering can be defined as the comprehensive and systematic analysis and redesign of an organization's work processes with a goal of dramatically increasing customer satisfaction and dramatically improving efficiency.

Outsourcing

It is another example of an approach for reducing expenses, as well as for concentrating on core competencies. Outsourcing is the practice of hiring an outside vendor to perform a business function. The main benefit to be derived from outsourcing is cost savings.

B. Mergers and Consolidations

One of the more notable responses by insurance companies to changes in the business environment within the past ten years has been an increase in the number of insurance company mergers and consolidations.

C. Combating fraud

One approach insurers are taking to reduce expenses is to vigorously combat fraud. By successfully combating fraud, insurers can decrease unnecessary expenses

D. Achieving revenue growth by focusing on core competencies

Strategic intent

A company's strategic intent is a brief, precise, ambitious, and motivational expression of the company's long-term corporate goal or reason for being.

Although similar to a mission statement, a strategic intent is generally more hard-hitting and to the point, more difficult for the organization to achieve and more motivational; a strategic intent should make the company's employees excited to come to work each day. ⁷

Core competencies

It is a set of skills that provides an organization with a competitive advantage in several products or markets.

By concentrating on core competencies, organizations can further improve their expertise in those areas, and thus increase their ability to provide value to the customer. By providing more value to the customer, organizations can improve their revenues. Additionally, because core competencies are transferable to new products and markets, organizations can improve their revenues by using their core competencies to create new products and to serve new markets.⁸

⁷ LOMA, Managing for Solvency and Profitability in Life and Health Insurance Companies, 1996 p673

⁸ LOMA, Managing for Solvency and Profitability in Life and Health Insurance Companies, 1996.p675

Chapter 6. Conclusions

Each insurance company establishes its own major long-term corporate goals and the broad, overall courses of action that the company will follow to achieve those objectives. For most insurers, these major objectives focus on four issues; (1) meeting current and prospective customer' needs for products and services, (2) maintaining solvency, (3) enhancing profitability, and (4) being a responsible corporate citizen.

In many insurance companies, these objectives work in concert with one another. At other times, they conflict. One crucial challenge of operating an insurance company is to meet all these goals, despite their often conflicting nature. The management team of an insurance company approaches this task by pursuing carefully chosen strategies designed to maintain an appropriate balance among the four objectives.

As we discussed the challenges associated with managing the financial affairs of an insurance company, this thesis takes the viewpoint of the company's top management. This viewpoint is important because, for insurance companies, different parties use different processes and standards to evaluate an insurer's financial position. Despite differences, the concern shared by all parties examining an insurer's financial affairs is to evaluate the insurer's success in enhancing profitability while protecting solvency.

The concept of enhancing profitability is a particularly slippery one for insurance companies, because even within the insurance industry, not all companies employ the same terms when referring to profits and profitability.

One aspect of enhancing profitability is to earn profits for the entire firm. In most business contexts, the word profit is used to refer to the excess of revenue over expenditures. Interpreting the term profitability in connection with insurance companies can be difficult. Profitability refers to a business firm's degree of success in generating returns to its owners. Thus, the term profitability has a broader meaning than does the term profit; profitability refers both to generating profits and increasing wealth.

Every insurer must be profitable over the long run in order to succeed. Furthermore, an insurer's profits must be substantial enough to satisfy several needs. Over the long term, profits must satisfy the following needs:

- (1) Profits must provide a suitable return to allow a company to reward its owners for the risk they take by investing money in the company In stock companies, owners are rewarded through stockholder dividend and increases in the value of the company's stock.
- (2) Profits must enable a company to build up enough capital and surplus to ensure the company's ability to ① pay current and future benefits for existing contracts, ② safeguard the owners' investment in the company, and ③ support the costs associated with writing new business. Because of the costs associated with selling insurance and the reserve funds that must be established when a policy is sold, new insurance business unlike new sales in most other business typically results in an initial statutory loss rather than a profit.
- (3) Profits must provide a company with enough resources to allow a company to change and grow with the times. Companies need such resources in order to fund long-term investment projects, called capital investment projects. For an insurance company, capital investment projects include development of new products, new information systems, new distribution systems, new businesses, and other items needed for survival.
- (4) Profits must provide a company with sufficient resources to cover any expenses that may not be explicitly included in the company's pricing assumptions.

We discussed the effects of management factors and forecasted the financial results of each situation. The purposes are (1) to analyze management factors affecting life insurance company's performance, (2) verify the optional strategies for Newcomers, and (3) to examine the other key factors to profitability.

These assumptions were derived from various data. Due to Korea's unique insurance industry structure, evidence indicates that under the current situations

the Newcomers should strike the right balance between productivity and operating expenses.

After reviewing the impact of these management factors on performance, we found that productivity, expenses, and marketing strategies are the three most important variables for improving performance.

Companies should also focus on human resources. The more they invest in human resources, the better the financial results.

Finally, Newcomers should increase their size because the life insurance industry requires economies of scale in operations.

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