

# HISTORY OF THE CHINESE ACTUARIAL PROFESSION

By Xie Z.

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## **Abstract**

The Chinese actuarial profession is young but it is developing fast. As in other countries, the origins and development of the actuarial profession in China were driven by the demands of the insurance industry. The statutory responsibilities of the actuarial profession for life insurance were specified in the first version of the China Insurance Law in 1995. The scope of the actuarial profession was expanded to the property/casualty and reinsurance areas in 2003. Efforts are being made to expand the scope of the actuarial profession to the pensions and social security areas. For the time being, however, the Chinese actuarial profession is still limited to and concentrated in the insurance industry.

The experience of developing the actuarial profession in China has shown that education is the foundation, that a legal position and statutory roles are essential, that practice standards are the core and that the organizational structure and governance determine the future of the profession.

The paper provides a historical perspective on building the actuarial profession in an emerging insurance market.

## **Keywords:**

Actuarial profession; China

# **HISTORY OF THE CHINESE ACTUARIAL PROFESSION**

**By Xie Z.**

## **1. INTRODUCTION**

The goal for the Chinese actuarial profession is to serve the insurance industry and society with a high level of professionalism and technical skills. To reach this goal, the actuaries and other interested parties inside and outside of China have been working hard on the following issues towards a high standard profession:

- (1) getting statutory roles through insurance laws and regulations;
- (2) promoting the education, examination and qualification recognition system;
- (3) building the ethics and standards of actuarial practice, and
- (4) designing the organizational structure and governance for the forming actuarial society.

The following contents record the activities in the development of actuarial profession in China around the dimensions mentioned above.

## **2. EDUCATION AND QUALIFICATION RECOGNITION**

### **2.1 Early actuarial activities in China**

In June 1912, the first life insurance company was formed with national capital in Shanghai; it was the largest domestic life insurance company before the establishment of the People's Republic of China in 1949. An English gentleman Mr. Defries was the company's actuary; he was requested to train two actuarial assistants, Mr. Zhou Dalun and Mr. Chen Shidu (names spelt according the Chinese pronunciation). Mr. Zhou was promoted to be the company-actuary after Mr. Defries went back to England to join the war and died later. Mr. Zhou was therefore the first recorded Chinese actuary. But Mr. Chen was the first Chinese who completed the United States' actuarial examinations and obtained the ASA qualification. Later, Mr. Chen went to work in Hong Kong.

On 20 October, 1949, the new government of the People's Republic of China formed the People's Insurance Company of China (PICC) in Beijing. Later, October 1958, the government stopped PICC's domestic business and only kept its international business. The Chinese government decided, in 25 April 1979, to revive PICC's domestic business, after the end of the Culture Revolution and the decision of Open door policy.

In April 1982, during the two year's preparation period for reviving PICC domestic insurance business, PICC published a training textbook for its internal use, Life Insurance Actuarial Mathematics, edited by Mr. Tao Shenghan who was a senior manager of PICC, holding an ASA qualification by attending actuarial examinations before 1949, and also working as the chief actuary of PICC during the 1950's.

From September to November 1982, PICC organized the first internal training program on life insurance in Xi'an. Mr. Wu Tongyuan and Mr. Cai Zhongyi from the PICC Shanghai branch were invited to teach in the training program. Mr. Wu taught topics including actuarial science, while he was appointed by PICC to be the actuary for its overseas business. He was instrumental in promoting and training many actuarial talents in China.

During the period from 19 November 1983 to 19 May 1984, PICC had sent Mr. Wan Feng and Mr. Wang Yongchang to AIA headquarters in Hong Kong to learn actuarial practices

# HISTORY OF THE CHINESE ACTUARIAL PROFESSION

By Xie Z.

under the guidance of Mr. Dominic Lee, AIA actuary. In the summer of 1987, PICC held the first national actuarial training seminar in Qingdao. The seminar lasted for forty days and Mr. Wan was the main instructor for life actuarial theory and practices. Later 1988, Mr. Wan published the first Chinese actuarial textbook (“The Fundamentals of Life Actuarial Mathematics”) based on his lecture notes used in Qingdao seminar.

In May 1985, a delegation of senior officials from Chinese financial colleges and universities visited the United States. One of the purposes of the visit was to investigate the role of actuaries in the insurance industry and actuarial education. Upon their return to China, actuarial courses and programs were set up in the colleges administered by the People’s Bank of China.

In September 1986, PICC sent Mr. Li Zhenghuai to England to learn actuarial science and practice; the training lasted more than four years. During the four-year study period, Mr. Li attained a master degree on actuarial studies from the City University and spent much time in the insurance industry in London. After his return to China in 1990, Mr. Li participated in several important tasks of building actuarial profession in China.

## 2.2 The introduction of overseas Actuarial Education Systems

In the spring of 1987, a delegation from Nankai University visited the United States. They specifically visited the Department of Risk Management and Insurance of the Temple University where Professor Kailin Tuan taught. The delegation investigated the program design of actuarial curriculum there and planned to establish the first graduate program of actuarial science at Nankai University, Tianjin.

On October 18, 1987, the Society of Actuaries (SoA) held its annual conference in Montreal, Canada. During the conference, the board of directors of the Society of Actuaries discussed and approved a proposal by professor Kailin Tuan to assist China in developing actuarial education. One month later on November 18, 1987, the president of the Society of Actuaries, Mr. Ingraham and professor Tuan visited the Nankai University and entered into an agreement (“Letter of Agreement on Program for Jointly Cultivating Chinese Actuarial Graduate Students”) with the University to develop jointly the actuarial program for graduate students.

In 1992, with the assistance of Manufacturers Life Insurance Company of Canada, the Society of Actuaries opened its first examination center in Nankai University. The first exam was held in November that year. From then on, the Society of Actuaries continued to set up other test centers in Fudan University at Shanghai, Hunan College of Finance and Economics at Changsha, The People’s University of China at Beijing, Zhongshan University at Guangzhou, China University of Science and Technology at Hefei, Shanxi College of Finance and Economics at Xi’an, and Pingan Insurance Company at Shengzheng. There were eight test centers in all.

In 1993, mainly with the efforts of Mr. Dominic Lee, chief actuary of AIA, the Society of Actuaries set up its test center in Shanghai. The next year, AIA and Fudan University jointly established the “AIA-Fudan Actuarial Center” to provide part-time actuarial training classes. This center produced most SoA fellows in China including the first FSA, Mr. Bo Weiming in 1998. Mr. Lee also helped to set up similar training centers for Zhongshan University, China University of Science and Technology, and Beijing University. These training facilities helped China to develop a group of ASAs and FSAs. In addition, AIA established an

# HISTORY OF THE CHINESE ACTUARIAL PROFESSION

By Xie Z.

actuarial education fund providing actuarial training for Chinese university teachers in its Hong Kong head office. Up to December 2005, there were more than 50 FSAs from these centers.

In 1993, sponsored by the British Eagle Star Life Assurance Company, the Institute of Actuaries (“IoA”) established an actuarial training and test center at the Central Institute of Finance and Banking (now the Central University of Finance and Economics) in Beijing. This marked the entry of British actuarial education into China. Later, in 1998, IoA also set up another training and test center in the Shanghai University of Finance and Economics. As of December 2005, there were nine qualified fellows of the Institute of Actuaries (or the Scottish Faculty of Actuaries) (Zhao Xiaoqiang, Li Mingguang, Cai Huajie, Li Ming, Zhang Ge, Jiang Nan, Yin Wenjian, Jin Peng, Wang Lifeng). A few candidates also passed all the examination courses and to be qualified FIA when they meet work experience requirement.

In March 1998, sponsored by Nippon Life, the Institute of Actuaries of Japan simultaneously established two test centers, in the Southwest University of Finance and Economics in Chengdu and in China Finance College at Beijing. This marked the entry of the Japanese actuarial profession into China. The first exam was held from December 15-20, 1998. Due to the language barrier and relatively weaker international recognition, the Japanese actuarial system did not create a major impact in China.

In 2001, the Institute of Actuaries of Australia (IAAust) sponsored and organized a group of Australian actuaries and teachers to teach the Actuarial Control Cycle course in several Chinese universities (Southwest University of Finance and economics, Shanghai University of Finance and Economics, People’s University of China, China University of Science and Technology etc.). Currently, the Institute of Actuaries of Australia is working with the People’s University of China, Beijing University, and Shanghai University of Finance and Economics to translate the textbook of IAAust: Understanding Actuarial Management---the Actuarial Control Cycle.

## 2.3 The Chinese Actuarial Exams

In September 1997, the Insurance Department of the People’s Bank of China (PBOC) and the British Eagle Star Life Assurance Company held the seminar on “Actuarial and Life Insurance Regulation” in the city of Urumqi in Xinjiang province. A senior official of the People’s Bank of China announced that China was to establish its own actuarial examination system and to set up the Society of Actuaries of China.

On November 13-14, 1997, Mr. Wei Yingning, deputy director of the Insurance Department of PBOC, presided over the first meeting in Beijing to prepare the Chinese actuarial profession. The syllabus of the Chinese Actuarial Examination and a plan to write textbooks were decided during this meeting (see Figure 1).

On July 16, 1999, the China Insurance Regulatory Commission (CIRC, formed in 1998) issued Bulletin No.9 to declare that the first Chinese actuarial exam would be held on October 6 the same year. More than sixty of candidates were selected to attend the special one-day examination. These candidates were either having passed the SoA or the IoA 100 series courses or having held a master degree of actuarial studies before 1996.

# HISTORY OF THE CHINESE ACTUARIAL PROFESSION

By Xie Z.

**Figure 1: 1997 Chinese Actuarial Exam Curriculum**

Number	Name of Course	Number	Name of Course	Credit
	Associate Exam courses		Fellow Exam Courses	
01	Mathematics Foundation I	011	Financial Management of Insurance Company	30
02	Mathematics Foundation II	012	Insurance Regulation	30
03	Compound Interest Math	013	Individual Life Insurance and Annuity Actuarial Practice	30
04	Life Actuarial Mathematics	014	Social Security	20
05	Risk Theory	015	Asset Liability Management	20
06	Foundation of Mortality Table	016	Advanced Non Life Actuarial Practice	20
07	Life Insurance Actuarial Practice	017	Group Life Insurance	20
08	Non Life Actuarial Math and Practice	018	Accident and Health Insurance	20
09	Foundation of Macro Economics	019	Advanced Investment	20
		020	Pension Plans	20
		021	Actuarial Profession Continuing Education (PD)	50

Footnote: For advanced courses, 20 credits are optional.

On December 5-6 in 1998, the Chinese actuarial taskforce held the fourth meeting in Kunming, Yunnan Province. Wei Yingning, Li Zhenghuai, Dominic Lee, Danny Chung, the CIRC actuarial division, and a group of experts from various universities participated in the meeting. The participants reviewed the draft material for the actuarial exams and discussed other issues relevant to the construction of actuarial profession in China. This meeting officially established the actuarial exam system.

In September 1999, CIRC invited Li Zhenghuai, Danny Chung and Peter Luk as advisors to design the first Chinese actuarial exam, especially the matters related to exam questions and grading.

On October 9, 1999, the CIRC held its first Chinese actuarial exam in Beijing. The exams lasted for one day, with one exam given in the morning and another one in the afternoon. The exams given were life insurance actuarial practice and insurance related regulation. The vice chairman of CIRC, Mr. Wu Xiaoping inspected the examination. A month later, on November 20, CIRC published a passing list of forty- three candidates who had successfully taken the exams in October 9, for their names see Figure 2.

# HISTORY OF THE CHINESE ACTUARIAL PROFESSION

## By Xie Z.

**Figure 2: Chinese Actuaries through Chinese actuarial exams**

Exam Year	Number	Names
1999 (Special Exams)	43	Fu Anping, Ding Chang, Zheng Yunyu, Zhan Zhaolan, Li Mingguang (FIA) , Huang Wenjun, Bao Hongjian, Gong Xingfeng, Lin Hong (FSA), Dick Wan, Shen Chengfang, Wang Longgen, Chao Xiaoqiang (FIA), Cui Dan, Liu Kaijun, Li Xiufang, Yang Zhicheng, Chen Weihua, Ren Guangtong, Zhao Jianxin, Chen Bin, Li Zhiyuan, Niu Zengliang, Lu Wanchun, Hong Linde (FSA), Huang Shenping, Hu Ming (FSA), Tan Ning, Yu Yaonian (FSA), Li Jun, Qi Meizhu, Wang Zhengying, Zhang Sheng, Lou Daoyong, Yao Zhongzhi, Liu Junyi (FSA), Chen Haifeng, Huang Zhenguo, Zhou Xixian, Cai Lianhe, Yu Xuefeng ,Ying Xiaosong, Kin Mark (FSA)
2004	7	Xiang Yu (FSA), Zhang Shensong, Zhu Rendong, Wan Shenyu, Jiang Shen, Liu Zanguo, Li Peng
2005	5	To be confirmed

On December 4-5, 1999, CIRC held an actuarial seminar in Dalian. On the seminar, CIRC presented the certificates to the forty three recognized Chinese actuaries. The actuarial taskforce was reorganized and a leadership team was formed to lead the actuarial tasks. The Director of the new taskforce was Mr. Wu Xiaoping. The new taskforce also consisted of two vice directors, Wei Yingning and Li Zhenghuai. The team members included: Fu Anping, Zhan Zhaolan, Kin Mark, Shen Chenfang, Li Mingguang and Zheng Yunyu. Under the leadership team, there were two working groups: the Actuarial Education team was led by Fu Anping, Li Xiufang and Bao Hongjian; and the Actuarial Practice Standards Team was led by Zhan Zhaolan, Hong Lingde and Liu Kaijun.

In September 2000, the first six textbooks for the Chinese actuarial qualification exams were published by the Nankai University Publisher and organized by CIRC. The publication was financially sponsored by several foreign insurers including Swiss Re, Aegon, and Prudential Life Insurance Companies.

On December 15–17, 2000, CIRC held associate level actuarial exams with six subjects on the exam syllabus. The exams took place in Beijing, Tianjin, Shanghai, and Wuhan simultaneously. With credit exemption to SoA and IoA actuarial examinations, there were two candidates who attained the associate title in the associate level examination in year 2000.

# **HISTORY OF THE CHINESE ACTUARIAL PROFESSION**

**By Xie Z.**

In September 2004, the Chinese actuarial exams were held in eleven test centers including one in Hong Kong. The exams included the entire Chinese actuarial exam curriculum and marked the completion of the Chinese actuarial exam system. There were seven new Chinese actuaries, see Figure 2.

In 2005, the Chinese actuarial exams were extended to two exam reasons, one held in May and the other in November. The May exam was on associate level only and the November exam was on both associate and fellow levels. By the end of 2005, it was estimated that there were another five Chinese actuaries to be recognized.

### **3. STATUTORY RULES BY LAWS AND REGULATIONS**

In October 1991, the People's Bank of China formed a leadership taskforce led by Mr. Qin Daofu, Mr. Li Jiahua and Mr. Wang Enshao to draft the China Insurance Law. As a member of the working team, Mr. Fu Anping, newly graduated from the Master Degree Program of Actuarial Studies at Nankai University, was responsible for the part concerning solvency regulation and actuarial issues. The China Insurance Law came into effect on October 1, 1995. Article 119 clearly required life insurance companies to employ actuarial professionals recognized by the regulator, as well as implementing an actuarial reporting system.

On January 13, 2000, CIRC issued the "Regulation on the Administration of an Insurance Company". Article 7-3 even required that a national life insurance company needed to employ at least three qualified actuaries, and a regional life insurance company needed to employ at least one recognized by CIRC. However, this requirement was removed in the June 2004 version of the insurance regulation, due to its inconsistency with the development at that time of the Chinese actuarial profession.

On October 28, 2002, in its thirtieth meeting of the Ninth People's Congress of China promulgated the updated version of the Insurance Law. The new version has been effective since January 1<sup>st</sup>, 2003. Articles 121 and 122 expanded the requirements of actuaries and actuarial report from the life insurance area to the P&C and the reinsurance areas.

On November 2, 2000, the China Securities Regulatory Commission issued the information disclosure requirements for listed insurance companies. For a stock insurance company to acquire additional capital through issuing new shares, an actuary should be involved in the process. For example, in its "Listed Company Information Disclosure Requirements, Article 4-3", an insurance company needs to disclose the name of the actuarial firm, responsible actuary, and actuarial consulting fees. The Article 20 states: An insurance company needs to include an actuarial report as part of its prospectus. Due to this regulation, the China Life Insurance Company, PICC Property Insurance Company, and Ping-An Insurance Company hired consulting actuaries for raising oversea capital.

### **4. ACTUARIAL PRACTICE STANDARDS**

#### **4.1 The Chinese Life Insurance Mortality Table**

In late 1992, the People's Insurance Company of China (PICC) issued a schedule for the construction of the Chinese Life Insurance Mortality Table requested by PBOC. The project was to be carried out in 1994. Having been trained in actuarial studies in UK for more than four years, Mr. Li Zhenghuai, then the vice director of the PICC Actuarial Office, was

# HISTORY OF THE CHINESE ACTUARIAL PROFESSION

By Xie Z.

technically responsible for the implementation of this project. On June 10, 1996, the People's Bank of China published the "Notification for Application of the Chinese Life Insurance Mortality Table, CL(1990-1993)". The table (CL1990-1993) was effective April 1, 1997 and was to be used as the basis for pricing, reserving as well as the calculation of surrender values.

In August 2003, CIRC held the first taskforce meeting in Hangzhou to discuss the revision of the CL(1990-1993). The taskforce decided to start a regular work plan of investigation and analysis on the China's life insurance mortality experience, and to complete the revision of the CL(1990-1993) in three years. In September 2003, CIRC distributed the Hangzhou meeting minutes to every life insurance company and asked those companies to do the related preparation work. The Committee also published the "Notification of Mortality Investigation for the Chinese Life Insurance Mortality Table", and asked each insurance company to report to the Commission on the results of its mortality investigation on a regular basis.

On 12 November 2005, CIRC organized a special meeting for the judgment and approval of the project work of the revision of the Chinese Life Insurance Mortality Table, CL(2000-2003). The invited experts include Mr. Jiang Zhenghua (vice president of People's Congree), Mr. Wei Yingning (vice chairman of CIRC), Mr. Li Deshui (Director of the National Statistics Bureau) and other experts. The CL(2000-2003) was accepted and approved by the experts group.

## 4.2 Actuarial Standards and the Actuarial Reporting System

In late 1995, PBOC formed a research team to establish the "Actuarial Reporting System for the Chinese Life Insurance Business". The project was led by Mr. Ma Mingjia and Mr. Wei Yingning. Research members included Li Zhenghuai (group head), Fu Anping, Gong Xinfeng, Zhan Zhaolan, Chi-Fai Yam (HK), August Chow (HK) and Johnny Wong (HK). Completed in October 1997, the research provided technical support for PBOC to issue a series of policies on actuarial administration.

In October 1997, PBOC formed a taskforce and started the project of "China Actuarial Profession Construction". Mr. Chen Yuan, vice governor of PBOC, was appointed the honorary director and Ma Mingjia the executive director. Other key members were Wei Yingning, Li Zhenghuai, Fu Anping and Zhan Zhaolan. The project consisted of three parts: 1. preparing for the establishment of the Society of Actuaries of China; 2. setting up an actuarial reporting system; 3. setting up a Chinese actuarial examination and qualification system.

On December 1-5, 1997, the taskforce of the Chinese actuarial profession held its second meeting in Guangzhou, focusing on actuarial standards for life insurance, including the premium and product pricing, reserving and cash value calculation.

On January 20, 1998, PBOC issued "Report System for Technical Reserve Valuation by Life Insurance Companies".

In 1999, a year after the establishment of the China Insurance Regulatory Commission ("CIRC"), CIRC continued to issue a series of actuarial related standards and guidance notes. The one related to the actuarial standards of the conventional life insurance products was the most symbolic note which was commonly named "Note No. 90".

# HISTORY OF THE CHINESE ACTUARIAL PROFESSION

By Xie Z.

On March 24, 2003, CIRC issued the Administration of Minimum Solvency Margin and Regulatory Indicators for Insurance Companies (CIRC [2003] No.1). The regulation requires each insurance company to submit CIRC an audited annual solvency report and un-audited quarterly solvency report starting from 2004.

In May 2003, CIRC promulgated another actuarial standard relating to non-traditional life insurance products. The regulation had detailed standards for bonus distribution, pricing, reserving, and expense charges for with-profits, unit-linked and universal life products.

In December 2003, the CIRC started the research project of “Insurance Statutory Accounting Principles” to build and improve solvency regulation and supervision. The project included issuing a series of insurance accounting standards in evaluation of insurers’ assets and liabilities, as well as calculating statutory reserves, risk-based solvency capitals etc. By the end of 2005, there have been seven exposure draft standards issued.

As the development of Chinese actuarial profession started from the life insurance industry, the main activities promoting the profession had been led by the Life Insurance Department of the China Insurance Regulatory Commission (CIRC). With the implement of the China Insurance Law (2003), the statutory actuarial requirement was extended to Nonlife insurance. An actuarial office was also formed in the Property Insurance Department of CIRC in 2005. Since the Society of Actuaries of China (SAC) has not been formally established (waiting for the approval by the Ministry of Civil Affairs of China), CIRC has been responsible for issuing actuarial regulation and practice standards. Figure 3 is a list of actuarial related regulations and relevant guidance notes.

**Figure 3: Actuarial Related Regulation issued by Regulators**

<b>Regulator</b>	<b>Name</b>	<b>Issue Number</b>
People’s Bank of China	Chinese Life Insurance Mortality Table, CL(1990-1993)	[1997] No. 217
	Report System for Technical Reserve valuation by insurance companies	[1998] (NA)
	Insurance Company Monitoring Indicators (Experimental version)	[1998] No. 432
China Insurance Regulatory Commission (CIRC)	Insurance Statutory Returns	[1999] No. 55
	Actuarial Standards for Conventional Life Insurance Products	[1999] No. 90
	Administration of Minimum Solvency Margin and Regulatory Indicators for Insurance Companies	[2003] No. 1
	Actuarial Standards for Non-conventional Life insurance products	[2003] No. 67
	Regulation of product approval and filing for Life insurance	[2004] No. 76

# HISTORY OF THE CHINESE ACTUARIAL PROFESSION

By Xie Z.

	Actuarial Work Notification for P&C Insurance Companies	[2004] (P&C, No. 145)
	Administration Rules of Technical Reserves of General Insurance Business (Experimental version)	[2004] No. 13
	Actuarial Reports	[2005] No.??
China Securities Regulatory Commission	Public Company disclosure requirements No. 3 --- Content and format of report for acquiring capital by insurance companies	[2000] No. 76

## 5. ORGANIZATIONAL ESTABLISHMENT

### 5.1 Preparatory Work

Before the establishment of the China Insurance Regulatory Commission, the People's Bank of China (PBOC) had been the single supervisor for the financial services industry and responsible for the development of the Chinese actuarial profession. PBOC continued the work even during the busiest period of preparation for establishing the China Insurance Regulatory Commission (CIRC). In April 1998, in preparation for the establishment of the China Insurance Regulatory Commission, the actuarial taskforce was transferred its leadership from PBOC to the China Insurance Institute (CII). Mr. Pan Lufu, President of CII, took charge of the actuarial taskforce and carried on the planned activities until the formation of CIRC.

On November 18, 1998, the China Insurance Regulatory Commission (CIRC) was established in Beijing. Being under the Life Insurance Department, the Actuarial Division immediately took over the responsibility of coordinating and promoting the actuarial profession in China.

On December 4-5, 1999, CIRC organized an actuarial seminar in Dalian. The actuarial taskforce was re-organized and its leadership transferred back from CII to CIRC. The Director of the new taskforce was Mr. Wu Xiaoping, vice chairman of CIRC. The new taskforce also consisted of two deputy directors, Wei Yingning and Li Zhenghuai, and 6 members, Fu Anping, Zhan Zhaolan, Kin Mark, Shen Chenfang, Li Mingguang and Zheng Yunyu. The taskforce led two divisions: the Actuarial Education (Fu Anping, Li, Xiufang and Bao Hongjian) and the Actuarial Practice Standards (Zhan Zhaolan, Hong Lingde and Liu Kaijun).

### 5.2 China Actuarial Work Committee

For various reasons, the goal of establishing the Society of Actuaries of China was not achieved very soon after the meeting in Dalian. But it was impossible for CIRC and CII to handle all the activities of promoting the profession in the long run. As a transitional purpose, the actuarial working committee was formed under the newly approved association, the China Insurance Company Association (CICA). It was registered as an committee of CICA, named in Chinese as China Actuarial Work Committee, and keeping the English name as the (preparing) Society of Actuaries of China. Most of actuarial activities have been carried out

# HISTORY OF THE CHINESE ACTUARIAL PROFESSION

By Xie Z.

in the name of China Actuarial Work Committee or SAC in English.

On July 9, 2001, the China Actuarial Work Committee was formally approved by the Ministry of Civil Affairs as a subsidiary of the China Insurance Company Association, (“CICA”) which was established on November 18, 2000. Mr. Li Mingguang was elected as the director, Bao Hongjian and Shen Chengfang as deputy directors, and Liu Donghong was the secretary of the SAC.

The China Actuarial Work Committee gradually took over the numerous tasks led by the life insurance department within the CIRC. Their tasks especially related to the organization of the annual actuarial examinations and the annual conference of Chinese actuaries, the formation of rules of professional conduct and external coordination and exchange.

In September 2005, on the sixth Annual Conference of Chinese Actuaries, CIRC officials announced that the application documents for an independent society of Chinese actuaries had been submitted the Ministry of Civil Affairs of China and the approval was expected. It was also for this reason that there was need to elect the sixth China Actuarial Work Committee which would be replaced by the coming Society of Actuaries of China.

**Figure 4: List of Actuarial Working Committee Members**

	Director	Deputy Director	Committee Members
1 <sup>st</sup> Year	Li Mingguang	Bao Hongjian, Shen Chengfang	Li Xiufang
2 <sup>nd</sup> Year	Bao Hongjian	Shen Chengfang, Lin Hong	Li Xiufang, Yang Zhicheng, Liu Kaijun, Cui Dan, Ren Guangtong, Huang Wenjun
3 <sup>rd</sup> Year	Lin Hong	Shen Chengfang, Li Xiufang	Zhan Zhaolan, Huang Wenjun, Liu Kaijun, Cui Dan, Yang Zhicheng, Liu Junyi
4 <sup>th</sup> Year	Shen Chengfang	Li Xiufang, Zhan Zhaolan	Liu Junyi, Chen Haifeng, Yu Xuefeng, Zhao Xiaoqiang, Li Jun, Chen Bin
5 <sup>th</sup> Year	Li Xiufang	Zhan Zhaolan, Chen Bin	Zhao Xiaoqiang, Yu Xuefeng, Hu Ming, Cheu Li Jun, Chen Waihua, Chen Haifeng
6 <sup>th</sup> Year	Same as the 5 <sup>th</sup>		

### 5.3. The Annual Conferences of the (preparing) Society of Actuaries of China

On December 2-3, 2000, the First Annual Conference of Chinese Actuaries was held in Hainan. The participants included about forty Chinese actuaries, invited oversea actuarial professionals and CIRC officials. The main discussions surrounded the revision of the mortality table CL (1990---1993), existing statutory minimum solvency margin standards, regulatory indicators, as well as the development of actuarial profession in China.

On August 1-4, 2001, the Second Annual Conference of Chinese Actuaries was held in Xinjiang. The participants consisted of twenty nine credentialed Chinese actuaries (including associates), executives from the Chinese life insurance companies, guest actuaries from Hong Kong and the United States, and CIRC officials including vice chairman Wu Xiaoping,

# HISTORY OF THE CHINESE ACTUARIAL PROFESSION

By Xie Z.

director and deputy director of CIRC Life Department, Chen Wenhui and Fu Anping. Mr. Wu made a speech and presented the certificates to the first two actuarial associates of the year 2000. The actuarial working group also discussed organization and election issues.

On September 26-27, 2002, the Third Annual Conference of Chinese Actuaries was held in Lijiang, Yunnan Province. CIRC officials including vice chairman Wu Xiaoping, and executives from the life insurance regulatory department, P&C insurance department and accounting department attended the meeting. The participants included Chinese actuaries, overseas guest actuaries, insurance company representatives, representatives from university and from the Ministry of Civil Affairs of China. Similar to the previous one, Wu Xiaoping made a speech and presented the certificates to the new Chinese actuarial associates. The meeting agenda included insurance accounting principles, life insurance management in the low interest rate environment, bank insurance, management of with profit life products, and the actuarial report system for general insurance.

On September 26-28, 2003, the Fourth Annual Conference of Chinese Actuaries was held in Chendu, Sichuan Province. The theme of the conference was “Actuarial Profession: the responsibilities and missions”. Mr. Wei Yingning, vice chairman of the China Insurance Regulatory Commission, attended the conference and delivered an important speech. The subjects discussed in the general meeting were insurance regulation, company management, actuarial professionalism and actuarial education. The subsections of conference discussed issues relating to actuarial practice. A draft document named “Administration of Actuarial Professionals in Life Insurance” was presented in the conference.

On September 27-29, 2004, the Fifth Annual Conference of Chinese Actuaries was held in Xi’an. The conference was sponsored jointly by the China Actuarial Work Committee and the International Association of Actuaries. There were 250 participants including overseas actuaries, specialists, insurance industry leaders, and university representatives. The theme of the meeting was “Globalization of Actuarial Profession: Exchange, Cooperation, and Development”.

On September 28-29, 2005, the Sixth Annual Conference of Chinese Actuaries was held in Qingdao. The theme of the meeting was “Scientific Development and Value Creation”. There were around 300 participants including domestic and overseas actuaries, insurance industry leaders, and university representatives.

## 5.4 The Regular Meeting of Chinese Actuarial Experts

On September 25, 2003, a day before the Fourth Annual Conference of Chinese Actuaries, Wei Yingning, vice chairman of China Insurance Regulatory Commission held the first “Regular Meeting of Chinese Actuarial Experts” in Chendu. The meeting attendants included Wei Yingning, Chen Wenhui, Fu Anping, Wang Zhichao, Li Zhenghuai, August Chow, Peter Luk, Dominic Lee, Lin Hong, Danny Chung, Kinchung Chan, and Shen Chenfang. Mr. Tang Weiming was one of invited experts but was not able to attend the meeting. CIRC organized the meeting and decided to hold four meetings every year, and to discuss the most important issues relating to the Chinese actuarial profession and insurance practice. The issues include:

- (1) The establishment of the Society of Actuaries of China and the setting up of an actuarial spokesperson system. Li Zhenghuai led the effort.
- (2) The revision of current actuarial reporting, Dominic Lee led the effort.

# HISTORY OF THE CHINESE ACTUARIAL PROFESSION

By Xie Z.

- (3) The improvement of the actuarial examination system and the update of exam syllabus. Li Xiufang led the effort.
- (4) The revision of the “Chinese Life Insurance Mortality Table”. Wang Zhichao led the effort.
- (5) Establishment of periodic reporting system. The leaders should prepare to report the status of their project at the next meeting to make sure the project would be finished as planned.

On January 18, 2004, vice chairman Wei Yingning attended the second “Regular Meeting of Chinese Actuarial Experts” in Hainan. The progress of the research items identified in the first meeting in Chendu were discussed and evaluated. Sheng Chenfang provided the status of the China Actuarial Work Committee. The theme of the meeting was to further the tasks identified in the first meeting.

On July 29, 2004, the third “Regular Meeting of Chinese Actuarial Experts” was held in Sichuan. The main purpose of the meeting was still the establishment of the Society of China Actuaries. Li Zhenghuai updated the status of the projects for which he was responsible. Wei Yingning attended the meeting and provided a vision of developing actuarial profession by privatizing actuarial work and using realistic actuarial organization.

On September 10, 2004, Li Zhenghuai (responsible for establishing the Society of China Actuaries) held a working committee meeting in Shanghai. The participants included Bao Hongjian, Dominic Lee, Liu Donghong, Liu Kaijun, Lou Daoyong, Shen Chenfang, and Zheng Yunyu. The main purpose of the meeting was to brainstorm the ideas of developing the Society of China Actuaries and to prepare the paper work to submit to the Ministry of Civil Affairs of China for the setting up of the Society of China Actuaries

On November 4, 2004, the Fifth China Actuarial Work Committee Meeting was held in Tianjing. The establishment of the Society of Actuaries of China was further discussed.

## **5.5 Establishment of Non-life Actuarial System and Related Activities**

The process of establishing the Chinese actuarial profession for life insurance industry provided valuable experiences for promoting actuarial system for general insurance. The most successful work was having caught the opportunity of revising the China Insurance Law (1995) in 2002 and to legitimize the statutory rules in the revised China Insurance Law (2003).

On February 8, 2002, Mr. Ma Yongwei, former chairman of CIRC, made a speech at the National Conference of Insurance, emphasizing that CIRC should strengthen the foundation of actuarial work. Especially, the CIRC would start to promulgate actuarial guidelines for non-life insurance regulation. It also required insurance companies to gradually establish the non-life actuarial reporting system and to develop qualified actuaries.

On March 14-15, 2002, the director of the Finance and Accounting Department of CIRC, Mr. Ma Xueping, organized an “Insurance Statutory Accounting Principle Specialist Meeting” in Shenzhen to discuss the preparation work for setting up statutory accounting principles for insurance regulation and supervision.

# **HISTORY OF THE CHINESE ACTUARIAL PROFESSION**

**By Xie Z.**

On April 23, 2002, the Shanghai University of Finance and Economics signed an agreement with Casualty Actuarial Society in U.S. to establish a test center in Shanghai.

On April 25-26, 2002, the China Actuarial Work Committee and the Society of Actuaries of Hong Kong jointly organized the International Actuarial Forum of China in Xiamen. Mr. Ma Yongwei, CIRC commissioner made a special speech about “Strengthen the actuarial profession, and promote the healthy development of China insurance industry”. He systematically presented the development and the future plan for promoting actuarial profession in China.

On September 23-24, 2002, CIRC organized another international workshop on non-life actuarial practice in Beijing. The vice commissioner of CIRC, Mr. Feng Xiaozhen delivered a speech in the meeting. This was the first actuarial seminar on P&C actuarial techniques in China.

The above mentioned activities all happened before and during the revising period of the China Insurance Law (1995). It is believed that these promoting activities substantially supported achieving the statutory rules in the China Insurance Law (2003). With this legislative support, a series action was then taken towards actuarial profession for general insurance industry of China.

On February 4, 2004, The Property Insurance Department of CIRC issued a “Bulletin of Strengthening Actuarial Work for Property Insurance Companies” (2004, No. 145) to require actuarial certifications starting July 1, 2004.

On April 24, 2004, CIRC Property Insurance Department organized a meeting in Beijing to discuss setting up actuarial examinations on casualty actuarial division. The participants included representatives from insurance companies and universities.

On August 3, 2004, CIRC announced an invitation on its website for bidding the responsible persons for editing textbooks for actuarial exams on general insurance. The three listed textbooks included 05G: Actuarial Mathematics, 07G: Pricing of General Insurance Products, and 08G: Technical Reserves for General Insurance.

On December 15, 2004, CIRC issued “The Administration Rules of Technical Reserves of General Insurance Business (Experimental version)” ([2004] No.13). The guidance notes for implementing this administration rules were also issued two weeks later. This symbolized the official beginning of establishing the non-life actuarial reporting system for insurance companies in China.

In September 2005, two of the associate level subjects of casualty actuarial examinations were added into the existing Chinese actuarial examination system, 06G (Principles & Practice of General Insurance) and 08G (Technical Reserves for General Insurance). The first five fundamental subjects (01---05) are common for both life and non-life actuarial directions.

In November 2005, an actuarial division of the Property Insurance Department of CIRC was formed and Dr. Ding Peng was appointed as the division head. It was proposed that the casualty actuarial division should be set up in the Society of actuaries of China.

# HISTORY OF THE CHINESE ACTUARIAL PROFESSION

By Xie Z.

## 6. EXCHANGE AND COLLABORATION

### 6.1 Overseas Support Activities

In spring, 1994, a group of American Chinese actuaries organized an actuarial club (“The American Chinese Actuarial Network”) and published a newsletter in the United States. The purpose of this club was to promote communication and the development of actuarial education and profession in China. The main activities of the network stopped in 2000.

In January 1997, with the proposal and assistance by a group of Chinese FSA, including Yuan Chang, August Chow, Li Zhenghuai, Dominic Lee and Danny Chung, SOA established its Asian Committee in Hong Kong to promote actuarial activities in Asia. Later in September 1998, the Asian Committee of SOA was further separated as two committees: the Greater China Committee (GCC) and the Southeast Asia Committee (SEAC).

In early 1999, the International Association of Actuaries (IAA) established the Chinese Committee under the IAA Consulting and Assistance Committee chaired by Mr. Stuart H. Leckie, the former President of the Actuarial Society of Hong Kong. The second chairperson was Mr. Kin Chung Chan.

In April 1999, the Institute of Actuaries based in the United Kingdom added Actuarial Communication as part of its actuarial exams. To assist Chinese candidates, it decided to provide a Chinese version of the Communication Paper. Chinese candidates had a choice of selecting the English version 201 or Chinese version 211.

In July 1999, the insurance company AMP and Macquarie University jointly set up the “AMP-Macquarie University China Fellowship Scheme”. It sponsored 3 to 4 actuarial teachers from Chinese universities to visit Australia for 8 weeks, 4 weeks at the Actuarial Department of Macquarie University and 4 weeks in AMP. Ten Chinese teachers visited Australia between 1999 and 2001. The scheme has been adjusted to sponsor actuarial postgraduates since 2002.

On October 15, 2000, the SoA and CAS Boards jointly decided to provide special discounts in the subscription and exam fees to actuarial exam candidates in developing countries. Chinese students only need to pay US\$50 for SoA/CAS courses 1-4 and US\$100 for courses 5-6. The Institute of Actuaries likewise makes special arrangements for low membership and examination fees for Chinese students, with examination fees set at 20% of the normal full rate.

### 6.2 External Exchange Activities

On June 7-12, 1998, eight delegates from the PBOC Insurance Department, China Insurance Institute and four Chinese universities attended the 26<sup>th</sup> International Congress of Actuaries in Birmingham, UK.

In September 1999, eight delegates including Pan Lufu, Li Zhenghuai, Fu Anping, and others officials from CIRC, China Insurance Institute and Nankai University attended the SOA 50<sup>th</sup> annual conference in San Francisco. The Chinese delegation also had a special meeting with members from the IAA China Committee for discussion about cooperation. During the conference, Li Zhenghuai attended the SoA Council Meeting as an observer to learn about the SoA decision-making procedures.

# HISTORY OF THE CHINESE ACTUARIAL PROFESSION

By Xie Z.

On October 7-12, 2001, Bao Hongjian, director of the China Actuarial Committee, and some CIRC officials attended the 11<sup>th</sup> East Asia Actuarial Conference held in Hong Kong. The theme of the meeting was globalization of actuarial profession. There were about four hundred and ninety representatives from East Asia actuarial organizations who exchanged ideas on more than sixty papers. The items discussed included the scope of the actuarial profession; continuing education, and other hot topics relating to the actuarial profession.

On March 17-23, 2002, a group of nineteen delegates from China insurance industry and universities attended the 27<sup>th</sup> International Congress of Actuaries in Cancun, Mexico.

From 2001 to 2005, the 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> Asia Pacific Conference of Actuarial Profession and Education Leaders, sponsored by the IAA Fund, had been held in Kuala Lumpur, Malaysia in 2001, in Manila, Philippines in 2003, and in Bali, Indonesia in 2005. Delegates from actuarial educators from universities and professionals from the industry had participated each conference, and had effectively improved the international collaborations with other actuarial associations.

## 6.3 Actuarial Activities in Shanghai

Although Shanghai was not the first city to promote actuarial activities, its contribution to developing the Chinese actuarial profession is undeniable. Shanghai developed the largest number of Chinese actuaries; the Shanghai Insurance Association through its Actuarial Work Committee established the close collaboration between actuarial education and the insurance industry; through its first Chinese actuarial journal and other publications Shanghai furthered the process of China's actuarial exchange; Shanghai also improved the quality of actuarial research and applicability by developing collaborative actuarial research. For these reasons, it is necessary briefly to describe the actuarial activities in Shanghai.

In the fall of 1994, Fudan University and AIA jointly established "The AIA-Fudan Actuarial Center". Since then, the center has been providing part-time training courses and offering scholarship to hundreds of candidates and made significant contribution to the development of actuaries with high caliber actuaries. The center produced China's first Fellow of the SoA. It also produced the largest number of FSAs in China.

In June, 1997, the Shanghai University of Finance and Economics compiled the first Chinese actuarial magazine, "Actuarial Communications" and still continues to publish it semi-annually. The magazine was initially sponsored by British Eagle Star Life Insurance Company. Eagle Star was later acquired by Zurich Financial Services Group and Zurich ended the sponsorship in December 2001 after three years of financial assistance. Starting in 2002, the Samsung Fire and Marine Insurance Company of Korea continued the sponsorship.

On May 22, 1998, the Shanghai Insurance Institute announced the establishment of its Actuarial Committee. It initially consisted of 3 universities and several insurance company members, and more than 50 individual members. Professor Shang Hanji of the Fudan University was the committee director. Dr. Xie Zhigang of the Shanghai University of Finance and Economics and Li Ming from Shanghai Branch of the China Life Insurance Company were the deputy directors. The purpose of setting up this committee was to promote communication and collaboration between universities and the insurance industry. The "Actuarial Communications" published by the Shanghai University of Finance and Economics became the exchange medium for the Actuarial Work Committee.

# **HISTORY OF THE CHINESE ACTUARIAL PROFESSION**

**By Xie Z.**

In September 1998, sponsored by Eagle Star Life Insurance Company, Shanghai University of Finance and Economics established a reference center on insurance and actuarial science. It has the richest collection of actuarial literature in China. It has been sponsored by Swiss Re Life & Health after Zurich Financial Service Group ended the sponsorship.

In September 1998, the British Eagle Star Insurance Company and Shanghai Insurance Institute jointly set up an annual Actuarial Award for three years for those who made significant contributions to actuarial education, research and practice during the previous year. The awards were announced in 2000, 2001, and 2002. From year 2004, Swiss Re continued this actuarial award.

In January 1999, the National Science Foundation of China sponsored the actuarial research project (No. 19831020), “Insurance Information System and Actuarial Mathematics”. The project was funded with one million RMB in 3 years. Several Chinese universities and the Software Research Institute of the China Science Academy were involved. Professor Hanji Shang from Fudan University was the project leader.

On September 17, 1999, Tillinghast-Towers Perrin donated its Actuarial Software—TAS to Fudan University for actuarial education. The Mathematics Department of Fudan University named its computing laboratory as “Fudan-Tillinghast Towers Perrin Actuarial Laboratory”. Later, Deloitte Touche Actuarial and Management Consulting Company also donated its renowned software (Prophet) to the Shanghai University of Finance and Economics.

On October 9-10, 1999, the Actuarial Committee of the Shanghai Insurance Institute organized “The Roundtable Meeting of Chinese Actuarial Education”. Fifteen university representatives attended the workshop, exchanging their experiences and discussing the future directions and possible cooperation.

On April 20, 2000, Swiss Re Life & Health signed a sponsorship agreement with Fudan University to set up the “Fudan-Swiss Re Research Fund”. According to the agreement, Swiss Re donated 1.2 million RMB to Fudan University for actuarial research and education activities. Swiss Re entered the agreement with Fudan University again in March 2003 to donate 1.5 million RMB in the period 2003 to 2006.

From July 25 to August 5, 2000, the Sino-French Mathematics Research Institute organized a special seminar of “Theory and Practice of Actuarial Science” in its regular mathematical seminar serials in Fudan University. Two years later, on July 8-12, 2002, it chose actuarial as its main topic again for its meeting. The institute offered French’s experiences in the actuarial practice, research, and education areas.

On January 12-15, 2001, the 2<sup>nd</sup> Asia Pacific Conference of Actuarial Profession and Education Leaders was held in Kuala Lumpur, Malaysia. The themes of the conference were actuarial responsibilities for protecting public interests and the trend of international actuarial education. Professor Shang Hanji and Xie Zhigang attended the meeting. In the meeting, Shang Hanji, Xie Zhigang and representatives from Taiwan and Hong Kong expressed desire to set up a Hong Kong-Taipei-Shanghai annual actuarial seminar.

On April 5-6, 2001, the International Actuarial Association (“IAA”) and the European Actuarial Society (“The Groupe Consultatif”) jointly held the “International Conference of Actuarial Education” in Estoril, Portugal. IAA’s core education outline was discussed and the

# **HISTORY OF THE CHINESE ACTUARIAL PROFESSION**

**By Xie Z.**

status of the development of actuarial education by country was shared in the meeting. Professor Xie Zhigang made a presentation on the Actuarial Education in China.

On September 21-23, 2001, the first “Shanghai - Hong Kong - Taipei Actuarial Symposium” was held in Shanghai, organized by the Actuarial Committee of the Shanghai Insurance Institute and jointly hosted by Fudan and Shanghai University of Finance & Economics (SUFU). Through continuous effort, the second symposium was successfully held in Taipei on June 14-19, 2004.

## **7. OUTSTANDING ISSUES IN DEVELOPING THE ACTUARIAL PROFESSION IN CHINA**

In the last ten years, great progress has been made on the establishment of an actuarial profession in China, especially in the areas of attaining statutory rules through legislation and regulation, education and training, setting up standards of practice, organizational structure, and the exchange and collaboration with international actuarial associations. These outstanding achievements not only provided an excellent foundation for the future development of the actuarial profession in China, they also contributed greatly to the experiences of the development of an actuarial profession in other developing countries.

However, there are still many outstanding problems need to be solved to further the development of the actuarial system in China. To briefly mention a few items that the author believes most urgent:

- (1) While waiting for the official approval for establishing the “ Society of Actuaries of China” by the Ministry of Civil Affairs of People’s Republic of China, the China Actuarial Work Committee should be working actively as same as an established society, including the coordination work for the approval of SAC and international collaboration.
- (2) As a potentially important actuarial organization, the Chinese actuarial profession will closely collaborate with the International Association of Actuaries (IAA). However, due to the conflict of the name being used for the registered name of the actuarial association from Taiwan area in IAA, this became a very complicated and sensitive issue. Actuarial professionals seem to avoid this issue. As a temporary step to the final solution, an “observer” status for the Society of Actuaries of China may be practical.
- (3) To form and to sustain a high actuarial profession in the society, the professional society can not be organized on volunteer and part time basis in the long run. It is therefore necessary to set up a special fund for the development of the Chinese actuarial profession. It will improve the current status of only having one staff member, completing each individual task by an individual sponsor and temporary volunteers.
- (4) To develop a strategic plan for the Chinese actuarial profession. Several special committees and taskforces should be formed according to the strategic plan. For example, the education system designed in 1997 should be seriously reviewed and updated by an education & examination committee.

# **HISTORY OF THE CHINESE ACTUARIAL PROFESSION**

**By Xie Z.**

- (5) It has been worrying about the Chinese actuarial profession were developing independently through life insurance direction, casualty direction, pension & social securities direction and so on. It is even to form several actuarial associations without close collaboration and consistency. Many people, including the author, are not keen to see this image but this should be made clearly written in the strategic plan for developing the profession.

## Notes:

1. The author drafted this document for the Society of Actuaries of China (in preparation) to present to the 28<sup>th</sup> International Congress of Actuaries. The preparation of this draft has been furthered by many colleagues, and their assistance is greatly appreciated.