國立政治大學亞太研究英語碩士學位學程

International Master's Program in Asia-Pacific Studies College of Social Sciences National Chengchi University



Student: Liu, Hsuan-Yu Advisor: Chiang, Chia-Hsiung, Ph. D.

> 中華民國 109 年 01 月 January 2020

ABSTRACT

China started to promote the development of the insurance industry in 2014 and actively incorporated Internet insurance into the national development focus. However, 3 years later, in 2017, Internet life insurance only accounted for about 3.7% of the insurance market, while life insurance premiums accounted for about 70% of the insurance market. The proportions of the two are still very different. Therefore, this study will take the Internet insurance as the background and focus on the life insurance part, and integrate and analyze the data of the development of the Internet insurance industry. This study mainly explores the reasons why China promotes the development of Internet insurance, and finds out the obstacles that the personal insurance industry is currently facing. Also, this study will analyze the impact of Internet insurance on insurance intermediaries and the problems that Internet insurance faces in the future. This study finds that due to the adoption of official rates and extensive development (crude management) at the beginning of the development of China's insurance industry, problems such as misleading sales, homogeneity of products, and placing focus on quantity rather than quality in the insurance market will arise in the future. And it will be necessary to take advantage of Internet insurance to break through the current difficulties faced by insurance development. The results of this study show that Internet insurance has encountered development bottlenecks due to the current lack of fully Internetized insurance products and insufficient capital investment in platforms. Therefore, although it will not have a considerable impact on the insurance intermediary market in the short term, this study still

recommends that insurance institutions should continue to collect and analyze big data related to Internet insurance, maintain service quality, and continue to understand consumer needs in order to provide customers with Launch differentiated products and create insurance value. The results of this study can be used as a reference for the future development of Internet insurance in China, and assist related research in further analysis.

Keyword: Internet insurance, Life insurance, China's insurance industry development, Insurance intermediaries, Insurance sales channels, Online insurance purchase, Internet insurance, E-commerce insurance



摘要

有鑑於中國 2014 開始推動保險業發展並積極的將互聯網保險納入國家發展重點, 但3年後的 2017 互聯網人身保險占保險市場約3.7%,人身保險保費占保險市場約70%, 占比仍相差懸殊。因此,本研究將以互聯網保險為背景,並聚焦在人身保險部分,對互 聯網保險業發展進行資料的整合與分析。主要探討中國推動互聯網保險發展的原因,並 找出人身保險業目前發展中的阻礙,後續深入分析互聯網保險對保險中介的沖擊以及互 聯網保險發展中的問題。研究發現,中國保險業發展之初因採取官定費率與粗放式發展, 導致日後保險市場中產生銷售誤導、產品同質化、重量不重質等問題,需借助互聯網保 險的優勢來突破目前保險發展的困境。研究結果顯示,互聯網保險因目前缺乏完全互聯 網化的保險產品與平台資本投入不足而遇發展瓶頸,因此短期內暫不會對保險仲介市場 產生相當沖擊,因此建議保險機構應繼續對互聯網保險相關之大數據進行收集、分析, 維繫服務品質並持續了解消費者需求,才能為客戶推出差異化的產品,創造保險價值。 本研究結果可供未來探討中國互聯網保險發展之參考,協助相關研究作進一步分析。

關鍵字:互聯網保險、人身保險、中國保險業發展、保險中介、保險銷售渠道、網路投保、網路保險、電子商務保險

4

TABLE OF CONTENTS

Chapter 1 Introduction
1.1 Research Motivation7
1.2 Research Questions
1.3 Scope and Limitations and of the Research11
1.4 Research Structure12
Chapter 2 Literature Review
2.1 Internet Insurance of US
2.2 Internet Insurance of Japan
2.3 Insurance Industry in China and Internet
2.4 Expansibility of Internet Insurance in China
2.5 Current Problems Facing the Development of Internet Insurance in China
2.6 Global Insurance Market
Chapter 3 The Necessity of Internet Insurance for China's Life Insurance Industry
3.1 The Development of China's Life Insurance Industry
3.2 Contradictions and Conflicts in the Development of China's Life Insurance Industry
3.3 Characteristics and Assistance Power of Internet Insurance
Chapter 4 Internet Insurance and Insurance Intermediary Market
4.1 The Role of Internet Insurance in the Insurance Intermediary Market
4.2 Differences between Internet insurance and Traditional Insurance Intermediaries59
4.3 The Impact of Internet Insurance in the Insurance Intermediary Market
4.4 Problems Facing the Development of Internet Insurance
Chapter 5 Conclusion
5.1 Summary of Research Findings80
5.2 Suggestions and Recommendations
References

LIST OF FIGURES

Figure 4-1 Schematic Diagram of the Traditional Insurance Intermediary	57
Figure 4- 2 Schematic Diagram of Internet Insurance	58
Figure 4- 3 Schematic Diagram of the Internet Insurance Intermediary	59
Figure 4- 4 Schematic Diagram of Traditional Insurance Intermediaries	62

LIST OF TABLES

Table 2- 1 Global Premiums by Business	27
Table 2- 2 Global Premiums by Market	28
Table 2- 3 China's Insurance Premium	29
Table 2- 4 Global Insurance Depth	30
Table 2- 5 China's Insurance Depth	30
Table 2- 6 Global Insurance Depth	31
Table 2- 7 China's Insurance Density	31
Table 3-1 Chronology of China's Life Insurance Industry	39
Table 3- 2 Statistics on Life Insurance Complaints	46
Table 3- 3 Personal Insurance Industry Complaints Statistics	48
Table 3- 4 Total Number of Complaints in the Insurance Industry	49
Table 4-1 Insurance Premiums and Internet Insurance Premiums	67
Table 4- 2 Premium Structure of Insurance Intermediaries	68
Table 4-3 Statistical Table of Premiums on the Internet Insurance Platform	70
Table 4- 4 Life Insurance Premium - Product Structure	71
Table 4- 5 Internet Insurance Product Structure	72
Table 4- 6 Life Insurance Premium Statistics- Main Product Structure	74

Chapter 1 Introduction

1.1 Research Motivation

If differentiated by the subject matter of insurance, insurance can be divided into personal insurance to protect "people" and property insurance to protect "objects." The personal insurance for "people" includes life insurance, health insurance, cancer prevention insurance and accident insurance. If differentiated by the coverage time and payment conditions, personal insurance includes term insurance, lifelong insurance, endowment insurance, annuity insurance and investment-linked life insurance. The life insurance companies we know are all personal insurance companies. That is, people are the subject matter insured by the insurance. The so-called life insurance is actually personal insurance.

The modern insurance prototype of China was born in the early 1800s. At that time, the Qing Dynasty's insurance industry was operated by foreign investors known as insurance associations or insurance agencies, and it was mainly designed for business and trade. After the founding of People's Republic of China, the People's Insurance Company of China was established in 1949. The insurance business was suspended in 1958, and was resumed in 1979. Since then, the Chinese insurance industry has developed for forty years before it looks like what it is today. Revence increased from 460 million RMBs in 1980 to 381.162 billion RMBs in 2018, with an average annual growth rate of 27.47%. The insurance density increased from 0.47 RMBs/per person in 1980 to 2,724.464 RMBs/per person in 2018, and

the insurance depth increased from 0.1% in 1980 to 4.22% in 2018.

Today's information technology has become a new driving force for China's economic development. The strong rise of the digital economy has enabled the Chinese insurance industry to carry out digital transformation through adoption and exploration of the technology. It is hoped that this will drive business model innovation, and Internet insurance is an area in which China believes that growth is relatively rapid and its development pace is relatively stable.

Property insurance and personal insurance are separate sectors in China's insurance industry. In terms of personal insurance, in 2012, Internet personal insurance premiums accounted for 8.85% of total internet insurance premiums. In 2014, this ratio rose to 41.2%. In 2017, it reached 73.7%. In terms of traditional insurance, from 2012 to 2015, the proportion of personal insurance premiums to total insurance premiums has remained at 65%. In 2016, the proportion of personal insurance premiums in 2017 was 73.12%. The proportion of Internet personal insurance premiums in 2017 was 73.12%. The proportion of Internet personal insurance premium increases by 64.9% between 2012 and 2017, showing the largest growth rate. In addition, whether it is Internet insurance or traditional insurance, the proportion of personal insurance premium has shown an increasing trend year by year.

China issued "Several Opinions on Speeding up the Development of Modern Insurance Service Industry" (referred to as "New Ten Articles") in 2014. It clarifies that the insurance industry is a key industry in modern time, and the development of InsurTech based on the principle of market orientation will improve the level of protection and quality of service. In the following year (2015), the Insurance Regulatory Commission (hereinafter referred to as the "CIRC") issued "Interim Measures for the Supervision of the Internet Insurance Business" and released "Outline of the Plan for Development of China's Insurance Industry during the 13th Five-Year Plan" in 2016 to carry out development of internet insurance. Obviously, China has further considered the possibility of expanding the insurance industry. China aggressively promotes the development of the insurance industry. But why is China particularly focused on internet insurance?

The numbers are very interesting. In the personal insurance industry, the traditional life insurance premium in 2017 was 267.436 billion yuan, and the Internet personal insurance premium was 135.279 billion yuan, accounting for 95.2% and 4.8% of the total personal insurance premium, respectively. This gap makes people wonder about it. Traditional life insurance has a certain market share. How does the development of internet insurance now benefit the traditional life insurance industry?

Internet insurance is a challenge for the insurance industry because it will lead the insurance industry to a revolutionary development. Internet insurance has an absolute advantage in cost control and big data development. But life insurance is not a general commodity. Its coverage and terms are technical, and it is not easy to sell directly to consumers over the cloud. The development of information technology, the popularity of the internet, and the development of the digital economy are not enough to support the

sustainability of internet applications in life insurance. China's insurance industry has developed for nearly forty years. Is the life insurance industry facing the dilemma of farther development? The traditional life insurance industry relies mostly on the intermediary market for sales. Will the development of internet insurance now have an impact on the intermediary market?

China's insurance industry (especially the personal insurance industry) has faced bottlenecks in development in the context of extensive market expansion. The resulting "misleading sales" is the most prominent problem reflected in the life insurance market, and high compensation and high leverage have led to insufficient solvency of insurance companies. However, extensive development is formed by the insurance industry under certain historical, and it has certain inevitability. At the beginning of the development of China's insurance industry, there were few market players and insufficient competition. There was room for extensive expansion. However, with the rapid growth of Chinese economy and the continuous improvement of the insurance system, the insurance market has been transformed from a seller's market to a buyer's market, and has begun to be consumer-oriented. Therefore, it is no longer possible to develop the insurance industry by means of market expansion (especially it is the life insurance industry is China is currently promoting).

This resend explores the impact of internet insurance on China's life insurance industry to understand the main dilemmas of China's life insurance industry faces and how it can benefit from the development of internet insurance. What is the impact of internet insurance on the intermediary market of the insurance industry? In addition to factors such as application of big data and information security technologies, does internet insurance have other potential problems? This research will try to find out answers to these questions.

1.2 Research Questions

The main issues discussed in this study include:

- 1. Understand the main difficulties that China's personal insurance industry fares. What kind of benefits can the development of internet insurance bring to China's personal insurance industry fares?
- 2. What is the impact of the development of internet insurance on the intermediary market?
- 3. What are other potential problems in developing internet insurance in China?

1.3 Scope and Limitations and of the Research

This research on internet insurance mainly focuses on the personal insurance market. The intermediary market discussed is an intermediary market for the sale of personal insurance, in which the supply side is a life insurance company and the demand side is a consumer who has a demand for personal insurance. The study covers the period of 2012 to 2018, but the official statistics of China's Internet insurance are not complete. Some of the data for 2017 is missing. Hence, the relevant information will be limited to 2016. In the process of collecting, sorting and analyzing secondary data. Relevant sources of information for this study on internet insurance in China, include journal articles, research reports, international organization reports, government publications, official agency websites, and online media.

1.4 Research Structure

This thesis is divided into five parts. The first chapter illustrate research motivation, research questions, literature review, scope and limitations. The literature review in Chapter 2 explains the origin of the Internet, the advantages and disadvantages of Internet insurance, and the development of Internet insurance in the United States and Japan. After that, the chapter also explores why China chose to use the Internet to develop the insurance industry and the expansibility of Internet insurance in China, and explains the problems facing China's Internet insurance. Finally, the chapter compares the insurance development data of global emerging markets / advanced markets with those of the Chinese insurance market to understand the current situation. The third chapter explore how the life insurance industry in China is experiencing difficulties in its development and explains how internet can benefit the life insurance industry. The fourth chapter states the difference between traditional life insurance and internet insurance from the perspective of industry chain. In addition, it also explains the state of internet insurance in China according to the two major parts of sales channels and premium structure, and compares it with the intermediary market of traditional life insurance to understand its scope of influence. Finally, provide conclusions and recommendations for this study.

Chapter 2 Literature Review

2.1 Internet Insurance of US

Electronic Insurance in the United States is actually Internet insurance, which uses the Internet and information technology to render and distribute insurance services. The specific meaning of Internet insurance is to provide insurance through insurance policies, and all the requests, suggestions, contracts, and negotiations are conducted online. Internet insurance is a model that speeds up and simplifies the process of distributing policies and paying claims online. (Institute of Interdisciplinary Business Research, 2012)

However, the insurance industry has been a bit cautious about applications of Internet on insurance, and has always lagged behind other peers in the financial service sector, especially in terms of marketing products directly to consumers on social media. (National Association of Insurance Commissioners, 2013)

Today, the insurance industry has become a complex industry involving many different products and services. Considering the development of Internet insurance, it is undeniable that the expected benefits include:

(1) The transaction costs can be reduced. Internet insurance reduces administrative costs and improves data management through business automation processes. Through the direct sale of insurance policies, Internet insurance can directly reduce commissions payable to insurance intermediaries. Meanwhile, the advantage of cloud services lies not only in the fact that it can enhance further communication with customers, but also certain self-service capabilities that cloud services are equipped with, including receiving reports, requests, settlements, change notifications, insurance terms, insurance policies, etc. Such features of cloud services have a certain degree of influence on the costs borne by insurance companies.

- (2) In light of the speed and flexible interactive functions of the network to provide more competitive products, Internet insurance is more able to create value for customers with its improved transparency and services, rather than just its sale power. With the Internet, companies are able to deliver highly personalized, high-quality information to a large audience in ways unimaginable. (Effective processing of information is a key factor of Internet insurance in creating values for insurance companies.)
- (3) In the highly competitive market, insurance premiums can be reduced owing to reduced costs, so that more potential customers can be attracted to expand the market faster, thereby increasing the revenues.
- (4) Internet insurance offers opportunities for new and existing intermediaries.

However, in the United States, the ideal of fundamentally changing basic business processes and removing traditional insurance intermediaries through Internet insurance has not yet been realized. There are many special factors that make Internet insurance difficult:

 Sales contest has created obstacles for insurance companies in various states. Generally speaking, Internet insurance and insurance intermediaries are in a mutually competitively relationship. Online sale as a feature of Internet insurance has mitigated or dissolved the relationship between insurance intermediaries and customers, thereby neutralizing online sales efforts devoted by insurance intermediaries. (It is difficult to reduce costs.)

- (2) Due to the extension of life expectancy, changes in tax laws and the availability of better investment options, fewer and fewer consumers are considering buying insurance of any type. One of the main reasons lies in affordability. Customers think that insurance premiums are too expensive in the long run. (The insurance industry is experiencing a slow growth in insurance premiums over the long term. The growth rate in 2016 was only 1.4%, and the actual growth rate in 2017 fell to 0.5%, showing a decrease of 0.9%). LIMRA (2019).
- (3) It is hard to standardize claim settlement as it involves a large number of investigations for the final decision to be made. Meanwhile, this process usually involves individuals and companies that do not have a contractual relationship with the insurer.
- (4) Technical problems may hinder the development of Internet insurance in the future. Internet insurance is susceptible to increased sensitivity to technical failures. In addition to power outages, system failures, and capacity bottlenecks on servers, the ongoing networking trend also increases the risk of virus infection and hacking, which could severely disrupt the entire production process. System availability will be a key factor in the success of online insurance companies.
- (5) Many information technologies are used to automate rather than fundamentally change the existing business processes, partly because the industry lacks standards to reliably

exchange information, and customers seem to have concerns about the security of data, especially the extremely sensitive data contained in financial transactions. And these concerns have made Internet insurance face many difficulties.

- (6) Regulatory obstacles make the development of Internet insurance face many more difficulties. In the United States, insurance companies that intend to sell policies nationwide must obtain licenses in all 50 states.
- (7) The electronic signature is also an issue. Although many states are passing legislation to legalize electronic signatures, it still remains a question whether the electronic signatures attached to electronic applications and/or policies are legally sufficient to form enforceable insurance contracts in other states. Regulatory disparities and lack of standards are among the most significant challenges facing the insurance industry.

Internet insurance is not all good news for insurance companies. Newly established insurance companies can avoid the long and expensive process of establishing traditional sales channels. Existing insurance companies and traditional insurance intermediaries will face increasing pressure from competition due to the emergence of competitors and the reduction of information costs. So, they will use financial and Internet services under third parties' business and brand names to add insurance products to the collection of existing items, so that insurance products that can be standardized, easily consulted, and rated can be sold over the Internet. As much advice is needed and it is difficult to compare returns and prices for complex insurance products that can be traded at high prices, it is not very suitable to sell such products through the Internet. And this is when insurance intermediaries can give full play to their advantages and provide more financial management and risk consulting services.

However, if the customer already has a wealth of expertise in the relevant products and risk management, the Internet can still be used as a marketing tool despite complexity and high transaction volumes of the relevant products. (Swiss Reinsurance Company Institute, 2000)

Today, insurance trends have shown that the future of the insurance industry will be based on a digitally-integrated ecosystem, in which all participants will work together to provide a seamless customer experience. Insurance companies are increasingly using more customer-centric technologies that allow for more customization and personalization. To this end, insurance companies should interact with customers in real time, offer customized services, and provide health and lifestyle advice at the same time.

Right now, insurance intermediaries are working to improve interactions with customers through Internet channels and adopt big data to enable their channel partners to focus on more value-added tasks. Meanwhile, the emphasis on accelerating the underwriting process and making sales intuitive and straightforward has improved the customer experience for insurers who embrace this concept.

2.2 Internet Insurance of Japan

In Japan, the application of Internet insurance has deepened to the level of artificial intelligence, and AI has replaced the original underwriting and claims process. This not only simplifies the traditional management model, but also further reduces management costs and prevents fraud (Lynn, T., **Mooney**, J.G., **Rosati**, P., **Cummins**, M 2019). On the other hand, information technology is also used in the medical and health fields to digitize health care and care systems and facilitate the collection of information on health insurance. (**Kodama**, Mitsuru 2018)

Japanese Internet insurance accounts for about 2% of the Japanese market share (FALIA, 2016). The market share of Internet insurance rose sharply from 0.2% in 2000 to 4.5% in 2012, but fell sharply to 2.2% in 2015. Although Internet insurance is expected to be a strong sales channel, it has not received the support of consumers in Japan. (Uchino Hayanari, 2017). In Japan, the most common channel for purchasing private insurance is through salespeople at life insurance companies. Such sales account for 60% of the Japanese market share (Japan Institute of Life Insurance 2017).

Although Internet insurance significantly reduces labor costs and expenses, and has the same security but insurance costs lower than traditional face-to-face insurance, the development of Internet insurance remains slow in Japan owing to the following reasons:

(1) Consumers prefer to discuss insurance products face to face with a sales agent with

insurance expertise.

- (2) An insurance company that has sold insurance through the Internet since its establishment usually has a short life span. The financial status and social recognition of such companies are not necessarily high. As a result, Internet insurance coverage remains low. (Ichiro Sasaki, 2013)
- (3) The income of younger people is usually not lower and their demand for insurance is lower than that of middle-aged people. These middle-aged and elderly people with a larger power of consumption are the target customers of insurance agents. (PwC, 2015)

Even without support from the market, Japan still continues to develop Internet insurance in light of the main considerations as follows:

- (1) As the proportion of the labor factor required for future work decreases, effective contracts will also decrease, and areas with shrinking markets will increase. In the future, we can see the necessity to effectively operate and maintain the insurance industry. In order to improve the sustainability of the insurance business, it is imperative to enhance the sustainability of the business within 20 years, and maintain and expand the effective business volume while the profit margin declines.
- (2) Due to the increased burden of medical and nursing expenses, social insurance costs per capita will also increase. There are concerns about increased social insurance premiums. And conversely, the ratio of premiums paid to private insurance companies might decrease. The social insurance premiums on the rise will definitely affect the future life insurance market.

- (3) Owing to the aging of the population and the decline in average insurance claims, Japan are considering the full introduction of small, short-term insurance products related to healthy life expectancy. Such insurance offers flexible options and the premiums can be determined based on healthy life expectancy. Market development will accelerate towards smaller and shorter-term products. (Uchino Hayanari, 2017)
- (4) Right now, insurance companies are promoting the sale and development of suitable products for younger people that are more capable of using the Internet.

(5) The insurance industry will enter an era where customers can choose their own products because of technological advances. (Eventually, customized products will be realized.) Consumers who understand the risks covered by insurance, such as death and survival risks, will actively choose insurance products that match their own risks. This means that personal insurance needs will be more diverse. The Internet can collect individual-specific data at any time, so that insurance products can be generated, assumed, and created based on the risks that individuals face. Even though it is currently difficult to personalize customized products, the highly developed AI will be definitely used to judge risks and products in the future.

In the future, customers' dynamic raw data and the number of customized products will both increase dramatically. The factors that affect whether competitiveness can be enhanced include: the need for development capabilities, the need for productivity, and the efficiency of the entire supply chain from intermediate and backup execution and customer follow-up services to front-end operations. However, if other companies outside the insurance industry are good at collecting dynamic data and bearing the risks associated with life insurance, the value chain of the life insurance industry itself will be constrained. Therefore, for Japanese insurance companies, long-term strategies, including those for business model reforms, cross-industry restructuring, and overseas business expansion, will become even more important.

If any progress in the application of artificial intelligence (AI) in big data is made in the future to realize the personalization and customization of products for individual customers and the diversification of insurable risks (terms, types, etc.), the chances that an actuary will assume various risks will be reduced. It's undeniable that early response and product lineups that match the cost of each sales channel could be the source of a complete reorganization.

2.3 Insurance Industry in China and Internet

Due to the evolution of internet technology, the traditional industrial chain has been subverted and consumer demand has been changed. In order to further connect with online customers, the insurance industry will add an internet model to provide more services when interacting with customers (Wang Wei, 2017). Zhang Shun-yi & Xie Xiang-ying (2017) pointed out that the popularity of internet in China's and the increase in the number of internet users have led to the potential demand for insurance in these online communities. In addition, the scope of internet communication exceeds the limits of territorial space. The phenomenon of pan-connect, decentralization, and flattening has led to the integration of internet to the insurance industry (Huang Fang, 2015).

Allianz Insurance (2015) further clarifies that the future of China's insurance industry is closely related to the internet. Due to urbanization in China potential, insurance customers will live in cities or suburbs. Their lifestyle and consumption patterns are tilted towards multiple choices, and their preferences often change. In the past, insurance companies were to build consumer trust and reduce insurance complexity through face-to-face interaction. However, in the environment dominated by smartphones and social networks, it is becoming less and less difficult to act in person, because human interaction are carried out in virtual space. (Han Gui-xin, 2016; Wang Bin & Nie Yuan-kun, 2015) Thanks to the internet, a variety of different online communities are created. The members of these online communities who have the potential to purchase insurance policy will share the experience of products, services and consumption with others, thus forming a strong consumer power and mastering discourse power. (Li Hui-ze, 2015) The combination of China's insurance industry and the internet will enable insurance companies to gain a foothold in the diversified -'hengch consumer insurance market.

Therefore, the future growth of the insurance industry depends on the ability of digital customer service and immediate responses to customer needs (Yuan Feng, Liu Ling & Shao Xiang-li, 2018). Insurance companies will frequently observe their customer satisfaction and customer needs. This means that business opportunities and customer base will be the key drivers of business growth. In the past, insurance companies were not used to communicating with flexible online communities, but now they must do so (Allianz Insurance, 2015).

2.4 Expansibility of Internet Insurance in China

Internet insurance is a new commercial channel, with new customer groups and new insurance needs. It can strive for more room for growth in the insurance market. It not only reduces operating costs, enhances core competitiveness, but also promotes new business models (Wang Yan-yuan, 2015; Huang Fang, 2014). Therefore, in the future, the insurance industry will likely continue to expand its business through internet insurance, and will begin to innovate and supervise management of insurance products on this new sales channel. Even the entire insurance ecosystem will use internet as a basis to break through and transform insurance business (Luo Sheng, 2017). Bai Feng (2014) states that insurance companies must embark on the road of combining products with sales and services. Internet insurance has expanded business operation and service methods of insurance companies, so that the connotation and value of insurance companies can be reflected in the sales and service links. Therefore, internet insurance is an important sales channel and has a large market space. Yang Zhen-hua (2015) believes that because internet insurance is sold online, commission cost for online sales is almost zero. It only needs to be built and invested in the early construction stage, so it is worth investing. Shang Ying-han (2015) emphasizes that the development of internet insurance will help broaden the sales channels of the insurance industry. Zhang Xue-mei (2017) points out that due to the serious homogenization of insurance products in China, promoting the development of Internet insurance will help reduce product prices, reduce information asymmetry, facilitate product innovation, and improve service quality for insurance companies.

In addition, the degree of market competition in China's insurance industry is positively correlated with the market size (Huang Kai-zhuo & Jia Shi-bin, 2016). According to the Internet Insurance Industry Development Report published by the Insurance Association of China, in 2016, investment-linked insurance in internet insurance has jumped up to become the number one of insurance sales. In internet insurance, competition increased in 2016, and the scale of premiums further increased 12.54% compared to 2015. Internet has become an important channel for some insurance companies to break through the bottleneck and achieve premium growth. According to Wang Wei (2017), various short-term financial insurance products are suitable for internet insurance sales due to the difficulty of internetization and high standardization. Wang Jing (2017) says that internet insurance development has the advantage of increasing the size of premiums.

2.5 Current Problems Facing the Development of Internet Insurance in China

When purchasing Internet insurance, the customer's first personal privacy, that is, network information security. If the insurance company can provide perfect protection for the customer information, the customer can provide personal information with peace of mind when conducting online interaction and insurance. This will help insurance companies reduce the risk of adverse selection, but at present, the ability of insurance companies to control network information security still needs to be strengthened (Yang Ze-yun, 2014). Que

Feng-hua (2016) and Zou Yu (2017) explain that in Internet insurance, the insured has the obligation to truthfully inform. This involves information about the insured's physical condition, disease history, address, and personal occupation. Therefore, policyholders will have higher requirements for personal privacy. At present, the personal privacy of Internet insurance is seriously violated. This also makes insurance companies interested in entering the Internet insurance industry always cautious in consideration of network information security. (For example, in 2014, 43% of Internet users encountered network security problems). Network information security can be said to be a pre-requisite for protecting privacy in Internet insurance. How to avoid these risks has become a problem for many insurance companies. Rui Chen-yao, Sun Jia-he & Liu Chang (2018) point out that if network information security is not guaranteed, there will be further risk of asset loss and money laundering.

The ability to use big data is a key factor in whether insurers can provide low-cost, differentiated goods and services (Li Hong-kun & Li Zi-kai 2014). Insurance companies have weaker ability to collect big data and generally lack comprehensive big data collection systems and big data analysis capabilities. This will affect the insurance company's brand promotion model, sales channel expansion, decision-making accuracy, profit-making space and the immediacy of services (Yan Ze-ying, 2013). Yuan Feng, Liu Ling & Shao Xiang-li (2018) also state that insurers must understand the customer's consumption characteristics and individual needs through big data. This is of great significance to improving the competitiveness of insurance companies and promoting the innovative development of

Internet insurance.

2.6 Global Insurance Market

It can be expected that in the next ten years, the growth of global insurance premiums will still be driven by emerging Asian countries, especially China (Munich Re Economic Research, 2017). Although China's per capita GDP has reached US \$ 8,827 (World Bank, 2017), the development of the insurance industry is still in its initial stage, and the premium density and depth have not reached the world average level. Compared with advanced countries, there is still a gap in the development of China's insurance industry. This section will introduce the global insurance profile with a focus on emerging and advanced markets to understand the current level of development in China's insurance industry.

From 2010 to 2016, from the global life and property insurance premiums, we can roughly see the growth trend of premiums. The growth rate of life insurance is unstable, and the growth rate is less than that of property insurance. And the life insurance market share decreased from 58% in 2010 to 55.3% in 2016, but the life insurance market share is still larger than the property insurance market share. Property insurance premiums increased from 41.9% in 2010 to 44.7% in 2016.

Year	Duginogg Tuno	Life insurance	Property insurance	Total
i eai	Business Type	premium	premiums	Total
2010	Amount	2,520	1,819	4,339
2010	Proportion	58.08%	41.92%	100%
2011	Amount	2,627	1,970	4,597
2011	Proportion	57.15%	42.85%	100%
2012	Amount	2,621	1,992	4,613
2012	Proportion	56.82%	43.18%	100%
2013	Amount	2,608	2,033	4,641
2015	Proportion	56.19%	43.81%	100%
2014	Amount	2,655	2,124	4,779
2014	Proportion	55.56%	44.44%	100%
2015	Amount	2,534	2,020	4,554
2015	Proportion	55.64%	44.36%	100%
2016	Amount	2,617	2,115	4,732
2016	Proportion	55.30%	44.70%	100%
Source: S	Swiss Re Institute	2011-2017 Sigma	is l	
	0		University	
		al Changeh		

Table 2-1 Global Premiums by Business (Unit: Billion USD)

Table 2-2 shows the premiums of emerging markets and advanced markets from 2010 to 2016. It can be understood that premiums in emerging markets have a steady growth trend, while advanced markets are in a state of stagnation or negative growth.

Year	Market Type	Emerging-Market	Advanced Market	Total
	Amount	650	3,689	4,339
2010	Proportion	14.98%	85.02%	100%
	Amount	700	3,897	4,597
2011	Proportion	15.23%	84.77%	100%
2012	Amount	723	3,890	4,613
2012 Proportion		15.67%	84.33%	100%
2012	Amount	788	3,853	4,641
2013	Proportion	16.98%	83.02%	100%
2014	Amount	839	3,939	4,778
2014	Proportion	17.56%	82.44%	100%
2015	Amount	850	3,704	4,554
2015 Proportion		18.66%	81.34%	100%
2016	Amount	934-	3,799	4,733
2016	Proportion	19.73%	80.27%	100%

Table 2-2 Global Premiums by Market (Unit: Billion USD)

Source: Swiss Re Institute 2011-2017 Sigma

Table 2-3 shows an overview of China's insurance premiums from 2010 to 2016. It can be found that life insurance premiums started to grow rapidly after 2014 and reach the market share over 70% in 2016, while the market share of property insurance was below 30%.

			,	
Year	Business	Life insurance	Property insurance	Total
Туре		premiums	premiums	10001
2010 Amount		1,063,233	389,564	1,452,797
2010	Proportion	73.19%	26.81%	100%
2011	Amount	972,143	461,782	1,433,925
2011	Proportion	67.80%	32.20%	100%
2012	Amount	1,015,700	533,093	1,548,793
2012	Proportion	65.58%	34.42%	100%
2013	Amount	1,100,998	621,226	1,722,224
2015	Proportion	63.93%	36.07%	100%
2014	Amount	1,303,143	720,338	2,023,481
2014	Proportion	64.40%	35.60%	100%
2015	Amount	1,628,755	799,497	2,428,252
2015	Proportion	67.08%	32.92%	100%
2016	Amount	2,223,460	872,450	3,095,910
2010	Proportion	71.82%	28.18%	100%
2017	Amount	2,674,635	983,466	3,658,101
2017	Proportion	73.12%	26.88%	100%
2019	Amount	2,724,654	1,077,008	3,801,662
2018	Proportion	71.67% en	28.33%	100%

Table 2- 3 China's Insurance Premium (Unit: Million RMB)

Source: China Insurance Regulatory Commission (CIRC)

Table 2-4 shows the global insurance depth. Depth of insurance refers to the ratio of a country's total premiums to that country's gross domestic product (GDP). It is an indicator to measure the development degree and potential of a country's insurance market. We can observe that the insurance depth of advanced markets has declined year by year after 2010, while the insurance depth of emerging markets has increased year by year. In contrast,

emerging markets do have development potential.

	2010	2011	2012	2013	2014	2015	2016
Emerging-Market	2.99	2.73	2.65	2.72	2.71	2.92	3.20
Advanced Market	8.65	8.58	8.59	8.27	8.15	8.12	8.00

Table 2- 4 Global Insurance Depth (Unit:%))

Source: Swiss Re Institute 2011-2017 Sigma

Table 2-5 shows the insurance depth of China from 2010 to 2018. Compared with the global insurance depth in the figure, China's insurance market is ahead of emerging markets but lagging behind advanced markets. Compared with advanced markets, there is still room for development.

		10.010			• • • • • • • • • • • •			
2010	2011	2012	2013	2014	2015	2016	2017	2018
3.53	2.94	2.88	2.90	3.16	3.54	4.18	4.46	4.22

Table 2-5 China's Insurance Depth (Unit:%)

Source: https://www.ceicdata.com

Table 2-6 shows the global insurance density from 2010 to 2016. The insurance density is the total premiums of a country divided by the population of the country, which is the average annual premium expenditure per person, representing the degree of development of the insurance industry in the country, as well as the strength of insurance awareness among people in the country. From the table, we can observe that although the development of the

insurance industry in emerging markets is far less than that of advanced markets, the insurance density has been increasing year by year, while the insurance density in the advanced markets has been decreasing year by year. In 2010, there was a 30-fold gap between the two. In 2016, there was a 24-fold gap between the two.

	2010	2011	2012	2013	2014	2015	2016
Emerging-Market	110.10	117.80	120.20	129.20	135.60	135.00	149.00
Advanced Market	3526.70	3711.60	3677.30	3620.80	3666.30	3439.60	3505.00

 Table 2- 6 Global Insurance Depth (Unit: USD)

Source: Swiss Re Institute 2011-2017 Sigma

The Table shows China's insurance density from 2010 to 2018. As it shows an overall upward trend, the insurance expenditures exceeded RMB 2,000 in 2016, and reached RMB 2,700 in 2018. People's insurance expenditures are getting larger and larger than those in emerging markets, but there is still a roughly 10-fold gap between China and advanced market.

Table 2-7 China's Insurance Density (Unit: RMB)

2010	2011	2012	2013	2014	2015	2016	2017	2018
1083.44	1064.26	1143.83	1265.67	1479.35	1766.49	2239.02	2631.58	2724.47

Source: https://www.ceicdata.com

Compared with advanced markets and emerging markets, China's insurance market surpasses emerging markets and lags behind advanced markets. Since China is already the third largest insurance market in the world, China's development of the insurance industry will help raise the level of development of the insurance industry, which is an important indicator for China to manage risks and improve its financial system. (Xu Xiaohua & Jiang Ming, 2018).



Chapter 3 The Necessity of Internet Insurance for China's Life Insurance Industry

3.1 The Development of China's Life Insurance Industry

After China established the People's Insurance Company of China in 1949, the insurance business was shut down in 1958 and reinstated in 1979. Regarding the development process, the establishment of the Insurance Law of the People's Republic of China in 1995 was a major watershed. Before 1995, it was mainly the period of expansion of the insurance industry, which broke the monopoly market and carried out the separation of the property insurance business and the personal insurance business. After 1995, China's insurance market carried out institutional changes, and the China Insurance Regulatory Commission (CIRC) was established to manage the insurance market, laying the foundation for the subsequent entry into the WTO. The development process of China's insurance industry has not been going well, and the problem of insufficient solvency has broken out, but owing to such issues, China has built a consummate insurance market system. After that, the insurance industry gained attention and became one of the development priorities. The key details are as follows:

1949-1995

China established the first insurance company in China in 1949, the People's Insurance Company of China (hereinafter referred to as "PICC"), and began to restrict the development of foreign-invested insurance companies. The insurance companies were nationalized and transformed from private enterprises, which was approximately completed in 1956. In 1958, when the People's Commune and the Great Leap Forward began, the insurance industry was forced to suspend operations. Until 1979, the State Council of China decided to gradually resume its domestic insurance business, and the insurance industry was officially launched.

As the insurance industry was nationalized, the insurance premium rate was uniformly formulated by PICC. At that time, the insurance business basically only provided the property insurance. The monopoly of PICC was broken in 1985 when the Xinjiang Production and Construction Corps - Agriculture and Animal Husbandry Insurance Company (the Predecessor of China United Property Insurance Company) was established in 1985. Later, Pacific Insurance Company (1986) and Ping An Insurance Company (1988) were established, and then the pilot operations were opened to the outside world. In 1992, the first foreign-invested insurance company, (AIA) American International Assurance Co. Ltd. was established in Shanghai to introduce the agency system. In 1993, the State Council repositioned the financial system, began to establish a legal person (corporate) management system, adhered to the principle of separation, and gradually required the insurance industry to separate operations. At this time, in addition to property insurance, the insurance market also had the liability insurance, life insurance and credit insurance.

During the period from 1980 to 1987 after the reinstatement of the insurance industry, the insurance industry funds were not used for other purposes and were deposited directly into the bank. However, with the establishment of a number of insurance companies, the government began to relax the restrictions on the use of insurance funds in 1987-1995. And only when the insurance company had insufficient solvency could it increase the capital. There were few provisions on the operating standards of insurance companies, and there were no penalties for violations. Therefore, in the absence of professional and effective management, insurance companies blindly invested in real estate, securities, and even engaged in much borrowing. The use of insurance funds was out of order, resulting in a large number of bad debts and overdue repayments, which made the assets of insurance companies deteriorate and forced the government to strictly control the use of insurance funds. And this was the indirect cause of insufficient solvency later in the insurance industry.

1995 - Now

China began to promote the reform of the insurance system. In 1995, China issued the first Insurance Law of the People's Republic of China, which clearly stipulated the separate operations of life insurance and property insurance, and constituted a basic legal basis for the insurance industry. The external pilot cities were expanded from Shanghai to Guangzhou and Beijing, and as foreign insurance companies were allowed to enter the Chinese insurance market by means of Sino-foreign joint ventures, a large number of separate insurance companies were established. In 1996, PICC completed the institutional reform and established the PICC (Group) with the property insurance, life insurance and reinsurance companies under its leadership. As the development of the insurance market was scaled up, in order to maintain market order, in 1998, the China Insurance Regulatory Commission was established to supervise and manage the insurance market, with the main focus placed on regulating the market behavior and constructing a solvency supervision system (to separate the insurance businesses under the jurisdiction of the People's Bank). After China joined the WTO in 2001, the insurance industry entered a period of rapid development. Influx of foreign

insurance companies and insurance companies in the form of Sino-foreign joint ventures were established, and market participants continued to increase. In 2003, PICC and China Life Insurance Co. were listed in Hong Kong and the US in the group business operation model.

The uses of the insurance funds for this period from 1995 to 2003 were strictly prescribed. 40%~60% were used in fixed income channels such as bank deposits, treasury bonds and financial bonds, as well as investment projects approved by the State Council. Insurance funds were prohibited and restricted from entering investment channels such as real estate and medicine industries with relatively high investment income. Therefore, investment channels for insurance funds were narrow and investment efficiency was low. And from May 1996 to February 2002, the People's Bank of China repeatedly cut the benchmark interest rate (where the one-year time deposit rate is cut from 10.98% to 1.98% gradually). This caused the life insurance industry to bear huge interest-loss losses owing to products sold during the period of the central bank's high benchmark interest rate, as those products promised to give customers an annualized rate of return of more than 10%, while the annualized rate of return for some policies was as high as 15%, and the insurance period was about 20 years. In addition, the People's Bank of China began to impose a personal income tax of 20% on the interest income of savings deposits in November 1999, resulting in very limited income from insurance funds in bank deposits. The investment income of government bonds, financial bonds and corporate bonds also fell sharply, and the spread loss of insurance companies even worsened.

Although the regulations had been continuously improved since 2003, so that the

investment method had been gradually adjusted to broaden the use of insurance funds, direct investment in the stock market was allowed, and indirect investment was made in national key infrastructure through investment plans, and even overseas investment was allowed eventually, the insurance bubble with insufficient solvency had taken shape since 1997. In 2004, the pressure on the solvency of insurance companies such as China Insurance Company, Pacific Insurance Company and Xinhua Life Insurance began to emerge. For the first time, the China Insurance Regulatory Commission issued warnings against insurance companies with insufficient solvency.

In 2006, China issued "Several Opinions on the Reform and Development of the Insurance Industry" (hereinafter referred to as "Several Opinions") with the goal to build a modern insurance industry with sufficient solvency and comprehensive competitiveness, and begin to actively build a sound insurance market system. In 2008, the "Provisions on the Administration of the Solvency of Insurance Companies" were issued to establish a basic risk management framework, which shifted the original focus from the solvency to risk control. In 2010, "Interim Measures for the Administration of Insurance Funds" were issued to specify the uses of insurance funds and risk management. In 2012, the China Insurance Regulatory Commission issued the "Plan for the Building of China's 2nd Generation Solvency Supervision System" (referred to as the 2nd Generation Plan), which clearly changed the scale orientation that was originally based on solvency to risk prevention and control, and constructed risk prevention. Then, in 2014, the State Council issued "Several Opinions of the State Council on Accelerating the Development of Modern Insurance Service Industry" (hereinafter referred to as "New Several Opinions") and insisted on developing insurance

business in the "market-led, policy-guided" environment. As clarified by the New Several Opinions, the insurance industry is a key modern industry, and emphasis must be placed on the importance of risk management, insurance technology practices, consumer rights and insurance services. The "Interim Measures for the Supervision of the Internet Insurance Business" were issued in 2015, and the "13th Five-Year Plan for the Development of China's Insurance Industry" was issued in 2016, both of which required the implementation of Internet insurance development, which laid the foundation for the development of Internet insurance.

In March 2018, the State Council of China consolidated the responsibilities and duties of the China Insurance Regulatory Commission (CIRC) and formed the China Banking and Insurance Regulatory Commission (CBIRC). The responsibilities and duties of the China Insurance Regulatory Commission (CIRC) were transferred to the People's Bank of China, and the China Insurance Regulatory Commission (CIRC) was no longer retained. Nowadays, although China's insurance market is no longer monopolized by a single company, state-owned insurance companies are still the main players in the market and they maintain control over the market.

Year	Development Focus
1949 -	The People's Insurance Company of China was established.
	China's first insurance institution unified the insurance premium rate and formed a
	state-owned monopoly.
1950~1956	The insurance industry was undergoing nationalization.
-	The public-private partnership was used to integrate the property rights of private
	insurance companies.
1957~1978 -	Domestic insurance business was completely shut down.
1979 -	The domestic insurance business was gradually restored.
	Back then, there was only one insurance company: People's Insurance Company of
	China.
1985 -	The "Interim Regulations on the Administration of Insurance Enterprises" were
	promulgated.
	It only required that the insurance company should increase the capital when the
	solvency was insufficient, and there were fewer provisions on the insurance
	company's operating activities, and there was no penalty for violations. (The
	supervision of solvency in China's insurance industry was started, and the
	market-based insurance supervision was implemented.)
-	The Xinjiang Production and Construction Corps - Agriculture and Animal
	Husbandry Insurance Company was established.
	The Xinjiang Production and Construction Corps - Agriculture and Animal
	Husbandry Insurance Company (Predecessor of China United Property Insurance
	Company) broke the original situation of monopoly by the original PICC. China
	began to set up various insurance institutions and reformed the insurance system.
1986 -	The Pacific Insurance Company of China was established.
1988 -	The Ping An Insurance Company of China was established.
	The PICC, Pacific, and Ping An formed a triad.
1992 -	(AIA) American International Assurance Co., Ltd. set up a branch office in
	Shanghai.
	The agency system was introduced, and China's insurance industry was gradually

Table 3-1 Chronology of China's Life Insurance Industry

	opened to the outside world.					
1993 -	The State Council promulgated the "Decision on Financial System Reform."					
	The legal person (corporate) management organizations, foreign insurance					
	companies, Sino-foreign joint venture insurance companies began to develop.					
1994 -	Tokio Marine & Nichido Fire Insurance Co., Ltd. set up a branch office in					
	Shanghai.					
1995 -	The first Insurance Law of the People's Republic of China was promulgated.					
	It was clearly stipulated that the life insurance and the property insurance would b					
	separated.					
	In the same year, the pilot cities were opened to the outside world, expanded from					
	Shanghai to Guangzhou and Beijing, and foreign insurance companies were RRI					
	to enter the Chinese insurance market by means of Sino-foreign joint ventures.					
1996 -	The "People's Insurance Company of China (Group)" was established.					
	The PICC completed the restructuring of the organization, with property insurance					
	life insurance, and reinsurance companies under its leadership. (It was preparing for					
	overseas listing)					
-	The "Interim Provisions on Insurance Agents" and "Interim Provisions o					
	Insurance Management" were promulgated.					
	An insurance separation management system and an intermediary supervisio					
	system were established. (At this time, the solvency of the insurance industry wa					
	in crisis, and a bubble was formed.)					
1997 -	The "Procedures for the Administration of Insurance Agents" were promulgated					
	(Trial Implementation)					
1998 -	The China Insurance Regulatory Commission (CIRC) was established.					
	The main focus was placed on standardizing the market behavior and constructin					
	a solvency supervision system (separating the insurance business items under th					
	jurisdiction of the People's Bank).					
1999 -	The "Notice on Issues related to Life Insurance Business" was promulgated.					
	Provisions were made for personal insurance terms and rates.					
-	The People's Bank of China began to impose personal income tax at 20% of					
	interest income from savings deposits.					
	It was ended in August 2007.					

-	The China Insurance Regulatory Commission (CIRC) implemented the policy of
	capping the assumed interest rate of the life insurance products at 2.5%.
2000 -	The management regulations on the insurance company's minimum solvency and
	regulatory indicators were fully implemented.
2001 -	China joined the WTO.
-	The "Regulations on the Administration of Insurance Agencies" and the "Regulations on the Administration of Insurance Brokerage Companies" were promulgated. Intermediaries were regulated.
2002	
2002 -	The insurance law was amended.
	In response to the participation in the WTO, part of the Insurance Law was revised.
2003 -	The "China Life Insurance (Group) Company" was established.
	Other insurance companies began to promote the shareholding system
	transformation.
-	PICC-Property Insurance Subsidiary and China Life Insurance CoLife Insurance
	Subsidiary were listed in Hong Kong and the United States under the group
	business operation model.
2003 -	The management regulations on the insurance company's minimum solvency and
	regulatory indicators were promulgated.
	Specific provisions on solvency were specified.
2004 -	For the first time, the China Insurance Regulatory Commission warned against
	insurance companies with insufficient solvency.
	Insurance companies such as China Insurance Company, Pacific Insurance
	Company and Xinhua Life Insurance began to suffer the pressure on the solvency
	and most of them were life insurance companies.
2006 -	"Several Opinions on the Reform and Development of the Insurance Industry'
	were promulgated. (Several Opinions)
2008 -	The "Regulations on the Management of Solvency of Insurance Companies" were
	promulgated.
	A regulatory framework based on risk management was established.
2009 -	The insurance law was amended.

	responsibilities and duties of insurance supervision.							
-	The "Regulations on the Administration of Insurance Companies" were promulgated.							
	The management of intermediaries was strengthened and regulatory requirements							
	for the insurance market operators were clarified.							
-	The "Regulations on the Supervision of Professional Agencies in the Insurance Industry" were promulgated.							
-	The "Regulations on Insurance Brokerage" were promulgated.							
2010 -	The "Insurance Fund Use Management and Implementation Method" was promulgated.							
	There were clear provisions on the forms of use of funds, risk management and supervision.							
2013 -	The "Notice on Matters related to the Reform of the General Life Insurance Rate							
	Policy" was promulgated.							
	The assumed interest rate for the ordinary life insurance was determined by the							
	individual insurance company. The 14-year policy of capping the assumed interest							
	rate of the life insurance products at 2.5% was ended.							
2014 -	The "Several Opinions on Speeding up the Development of Modern Insurance							
	Service Industry" (New Several Opinions) were promulgated.							
	The insurance industry was specified as a key development industry.							
2016 -	The "Interim Measures for the Supervision of the Internet Insurance Business" were issued.							
	It laid the foundation for the development of Internet insurance.							
-	The "13th Five-Year Plan for the Development of China's Insurance Industry" was							
	issued							
	to accelerate the development of the modern insurance industry.							
2018 -	The China Banking and Insurance Regulatory Commission (CBIRC) was							
	established.							
	The responsibilities and duties of the China Insurance Regulatory Commission							
	(CIRC) were transferred to the People's Bank of China.							

Source: Data organized by this Study

3.2 Contradictions and Conflicts in the Development of China's Life Insurance Industry

China's insurance industry has developed for nearly 40 years, with rapid growth and expanding market size. The insurance density increased from 0.47 RMBs/person in 1980 to 2631 RMBs/person in 2017, and the insurance depth increased from 0.1% in 1980 to 4.4% in 2017. The life insurance premium income and asset size increased from 1,100.998 billion RMBs and 68,25.007 billion RMBs in 2013 to 2,724,65 billion RMBs and 1,4608.748 billion RMBs in 2018. The number of life insurance institutions increased from 1 at the beginning of 1979 to 91 at the end of 2018.

We have found some factors contributing to the achievements of the life insurance industry today. Those factors have also become the main causes of the delay in the future development, including: long-term implementation of the official rate, extensive operations (crude management), and valuing sales rather than service. Problems such as serious product homogeneity, uneven quality of insurance intermediaries, misleading sales, difficulties in obtaining claims, difficulties in increasing the number of employees, and imperfect product structure have emerged. Among them, the problem of misleading sales is the most prominent. This study will gradually explain the current contradictions and conflicts in the insurance industry and the parts to be improved.

The so-called official rate in the development of the life insurance industry stemmed from the implementation of the policy of capping the life insurance products by the China Insurance Regulatory Commission (CIRC) in June 1999. Since then, it had been maintained at the upper limit of 2.5% for 14 years and the customized assumed interest rate was not available until August 2013. The assumed interest rate was the annual rate of return assumed by an insurance company for the policy based on the forecast of the future capital utilization rate when the insurance company was pricing an insurance product. It was equivalent to the rate of return provided by the insurance company to consumers. When the assumed interest rate was higher, the price of the insurance product was lower. Therefore, with the long-term implementation of the official rate, the rate of life insurance products did not need to be set by professional actuaries. Owing to the lack of demand for actuarial talents and the late start of China's insurance industry, it was found that there was a huge gap between the supply of and demand for actuarial talents based on statistical data when the life insurance industry was gradually opened up in the future. The long-term lack of professional talents and technology not only hindered the innovation of life insurance products, but also caused a serious issue of Chengchi Unive product homogeneity.

Extensive operation (crude management) mainly relied on the establishment of branch offices and business bases, and sought business growth by means of extension and expansion. However, due to the homogeneity of products in the market, insurance companies provided high dividends and high commissions for life insurance products in order to compete in the market. They believed that the pursuit of cash flow could increase the total assets of the life insurance industry, without considering that the high yield of premiums would be reduced and profits would be eroded due to high dividends and high commissions. Moreover, due to the large amount of cost investment due to the extension and expansion, the overall profitability was declining, and the income from the use of insurance funds was not good. These conditions had prevented insurance companies from achieving business objectives of minimizing risk and maximizing returns.

Extensive operation (crude management) could help insurance companies quickly capture the market. With attention paid to "quantity rather than quality," the quality of intermediaries was uneven. In order to obtain the high commissions, they used the capital appreciation/gains and dividends that the product could bring as the sales focus, and concealed the important information of the insurance contract in the sales process by failing to fully explain the exclusion of responsibility and inducing the policyholder to sign such contracts without full disclosure of information. In the event of an insured event, the dispute continued to occur. This also created problems that made it difficult to obtain claims due to misleading sales. In addition, as the quality of intermediaries was uneven, insurance companies failed to fully grasp the front-end information, and issues such as data distortions, fraudulent claims, and increased management difficulties also occurred. These misunderstandings have caused consumers to have negative impressions and even aversions against insurance companies, and as the social status of intermediaries in the Chinese insurance market is not high, staff increase also faces a dilemma. That is, even if the staffing was increased, it would not be easy to improve the quality of personnel, so that they could explain the professional insurance content, understand consumer appeals, and provide insurance products that meet the needs.

We can understand the actual situation from the content of complaints filed from 2013 to 2018. Among them, only data from January to March (one season) in 2015 were available, and the statistics obtained from January to March were slightly different from the statistics obtained from April to November in 2016:

Year	2013		2014 正文	治	2015		2016	
real					(January-March)		(January-March)	
Complaint	Quantity	%	Quantity	%	Quantity	%	Quantity	%
I. Disputes on								
Contracts with	8893	64.20%	11919	69.34%	2221	68.98%	2654	79.44%
Insurance	0093	04.2070	11919	09.34%	2221	08.9870	2034	/9.44%
Companies		Z	\mathcal{V}					
1. Surrender	3608	2(050/	4911	29 570/	808	25.000	1082	22 200/
Disputes	3608	26.05%	4911	28.57%	808	25.09%	1082	32.39%
2. Underwriting	0144	1.5.400/	8/	10.450/	620	10.050/	0.54	11.100/
Disputes	2144	15.48%	3344 he	19.45% NGCN	620	19.25%	374	11.19%
3. Claims /								
Payment	1901	13.72%	2248	13.08%	529	16.43%	830	24.84%
Disputes								
4. Preservation	(70)	4.000/	0.47	5 510/	175	5 420/	170	5.220/
Disputes	678	4.89%	947	5.51%	175	5.43%	178	5.33%
5. Insurance								
Contract	5(2)	4.060/	1(0	2 720/	20	2 7 (0 /	100	5 (00/
Disputes and	562	4.06%	469	2.73%	89	2.76%	190	5.69%
Other Disputes								

 Table 3- 2 Statistics on Life Insurance Complaints (Unit: Case)

II. Violation of Laws and Rules by Insurance Companies	4712	34.02%	5097	29.65%	977	30.34%	676	20.23%
1. Sales Violations	4643	33.52%	4994	29.05%	947	29.41%	672	20.11%
2. Finance Violations	27	0.20%	24	0.14%	2	0.06%	3	0.09%
3. Violation of Laws and Regulations	42	0.30%	79	0.46%	28	0.87%	1	0.03%
III. Insurance Intermediary Contract Disputes	28	0.20%	37 37	0.22%	6	0.19%	9	0.27%
IV. Insurance Intermediary Violations	219	1.58%	136	0.79%	16	0.50%	2	0.06%
Total	13852	100%	17189	100%	3220	100%	3341	100%

Source: China Insurance Regulatory Commission (CIRC) http://bxjg.circ.gov.cn/web/site0/tab5246/

Complaint	Quantity	Proportion
I. Disputes on Contracts with Insurance Companies	9833	88.40%
1. Insurance Contract Change (Preservation)	1228	11.04%
2. Underwriting	568	5.11%
3. Contract Terms	54	0.49%
4. Revisit Survey	5	0.04%
5. Claims	2871	25.81%
6. Sales	4377	39.35%
7. Renewal Service TX	151	1.36%
8. Continued Receipt Service	432	3.88%
9. Others	147	1.32%
II. Violation of Laws and Rules by Insurance Companies	1259	11.32%
1. Insurance Contract Change (Preservation)	61	0.55%
2. Underwriting	99	0.89%
3. Contract Terms Z	4	0.04%
4. Revisit Survey	5 5	0.04%
5. Claims	86	0.77%
6. Sales	961	8.64%
7. Continued Receipt Service	18	0.16%
8. Renewal Service	5	0.04%
9. Others	20	0.18%
III. Intermediary Agencies Suspected of Contract Disputes	18	0.16%
IV. Intermediary Agencies Suspected of Violating the Law	13	0.12%
Total	11123	100.00%

Table 3- 3 Personal Insurance Industry Complaints Statistics from April to November in2016 (Unit: Case)

Source: China Insurance Regulatory Commission (CIRC)

http://bxjg.circ.gov.cn/web/site0/tab5246/

It could be found that "Disputes on Contracts with Insurance Companies" accounted for more than 60%. It almost increased year by year, and exceeded 80% in 2016. From 2013 to 2015, claims disputes and surrender disputes accounted for the highest proportions, ranking among the top two. In 2016, claims disputes and sales disputes accounted for the highest proportions. (There were no statistics on "surrender" disputes in 2016.) Contracts and claims disputes arise from different perceptions of insurance coverage and are related to misleading sales that result in subsequent surrender disputes. However, due to the lack of comprehensive statistics on the current life insurance industry in China, is the intermediary not fully explaining the exclusion of responsibility and concealing the important information of the insurance contract? Or is the customer not honestly telling his/her physical conditions?

In terms of total complaint cases, in addition to 2018, the rest of the years show an increasing trend year by year, and the number of cases for years of 2011, 2015, 2016, and 2018 is calculated based on part of the data for those years:

Year	2011 (January-June)	2012	2013	2014	2015 (January-March)	2016 (until the end of November)	2017	2018 (January-March)
Number of Cases	4115 About 8200 in a year	15268	21000	28000	5439 About 21600 in a year	25873 About 28000 in a year	93111	22651 About 90000 in a year

Table 3- 4 Total Number of Complaints in the Insurance Industry

Source: Yearbook of China's Insurance, China Insurance Regulatory Commission (CIRC) http://bxjg.circ.gov.cn/web/site0/tab5246/

Extensive operation (crude management) that focused on "sales rather than services" led to the asymmetry of insurance information, the disconnection between supply and demand and the low quality of service, so that the real needs of consumers could not be understood. This also indirectly hindered the innovation of insurance products. Under the vicious circle of misleading sales and difficulty to obtain claims, the market needed to maintain market share through more high-paying investment policies. Due to the limit of the 2.5% ceiling on the assumed interest rate from 1999 to 2013, the investment-type product market had expanded rapidly, and the imperfections in the product structure of the market were deepened to make the insurance market sell the investment-type commodities as most of its products. When the return on investment of insurance funds was not good as expected, and the commitment to high dividends and high rewards needed to fulfilled, the problem of insufficient solvency would eventually break out. Therefore, in the case of weak public insurance awareness and the need to improve, China needs to promote and educate the public through policy support and media promotion. It is more difficult to raise people's awareness and acknowledgment of insurance according to market mechanisms.

3.3 Characteristics and Assistance Power of Internet Insurance

In the future, insurance companies will use Internet insurance technology as the basis for development, and business thinking models will continue to break through, and more innovation will emerge until the entire process has undergone transformation. After observing the concept of Internet insurance, we can find that Internet insurance is a diversified and rich, constantly changing and complex industrial model. From its characteristics, we can see how Internet insurance can help the life insurance industry for now.

Digitization. Data is at the core of the development of Internet insurance. Big data is used to quantify customer behavior preferences, collect and analyze personal information, and accurately identify customer groups and conduct risk pricing. If the credit information system is perfect, the application of big data can reduce the risk of information asymmetry.

Interactivity. Consumers can freely choose the products of different insurance companies and perform horizontal comparisons to learn more about various insurances. Consumers can even directly consult insurance companies for insurance, claims and payment issues. This increases the interactive information exchange between the two parties and helps improve customer experience and trust. The proper use of digitalization and interactivity can improve the efficiency of insurance company management and Internet insurance services and generate economies of scale.

Differentiation. The development of Internet insurance towards the three major areas of

intelligence, networking, socialization, etc. will generate differentiated characteristics of Internet insurance. Due to different customer risks, preferences and needs, insurance companies can develop suitable types of insurance for different customer groups. The different types of insurance between customer groups also result in product differentiation and create different business service content and customer experience. Differentiation will also make insurance prices different due to different customer risks and habits. Insurance companies can use big data resources to understand customer situations and set differentiated rates. The advantage of differentiation is that it can be distinguished from competitors, form market segments, and maintain the competitive advantage of insurance companies.

Contextualization. Internet insurance uses big data and personal risks to classify subdivided insurance types, and makes insurance go deeper into life, prompting insurance companies to understand the risks and needs that people face on different occasions and backgrounds. In addition to accumulating accurate risk pricing capabilities, it can better design insurance types that meet modern needs.

Fragmentation. The fragmentation of Internet insurance has two implications:

First of all, the traditional insurance protection content is complex and affects the underwriting conditions after online application is filed. Insurance companies must separate the original protection content into individual, independent insurance products before they can move such insurance products to online sales. Second, the Internet itself has mobile and social attributes. If the Internet is used in insurance, it means that customers can use their sneaker time for insurance purchase, customer experience and feedback.

Transparency / Sharing. Traditional insurance has an intermediary agency system, and

insurance intermediaries need to actively seek out target customers. Internet insurance happens to be on the opposite end. Insurance products are sold externally through the online platform. Potential customers with insurance needs can actively inquire product content on the online platform according to their own needs, and independently complete the insurance purchase and payment process. Therefore, the insurance company must clearly present the premiums, terms and exclusions, and make public the insurance purchase / payment / claims / preservation service process for customers to make comparisons. Transparency is also a shared service. The above information is not limited to a specific space or time. It allows customers to access such information. For customers, this is not about ownership of such information, but the right to use the information. The right to use is an experience. Customers can experience information sharing online, and sharing means volume and multiplication.

Diversification. There are two explanations. From a business model perspective, Internet insurance uses the Internet platform as a trading space. In addition to the official website of insurance companies, insurance intermediaries and Internet insurance companies, there are also different industry players such as third-party e-commerce operators participating in the operations of online platforms. Operators no longer come only from the insurance industry, and platform operators are diversified. Another explanation is that diversification represents the diversification of Internet insurance sales channels, which means that there are many different online platforms that can sell insurance products.

Small Amounts, High Frequencies, and Simpleness. It shows that Internet insurance can turn complex products to online sales, so the relevant commodities often have the characteristics of "Small Amounts." At present, most small commodities provide short-term protection and require higher underwriting frequencies, which helps insurance companies to establish high-frequency relationships with customers. Internet insurance can communicate with customers, review and understand customer needs through the characteristics of small amounts / high frequencies. The content of protection must also be simple. The easier it is for the customer to understand, the easier it is for customers to buy the insurance, and the more it can create high-frequency relationships.

The characteristics of digitalization, interactivity, differentiation, contextualization, fragmentation, transparency and sharing, diversification, small amounts / high frequencies / simpleness of Internet insurance can solve the problems caused by intermediary sales, reduce the cost of sales, strengthen and maintain customer relations, reshape the market image, strengthen the control over front-end business processes, and bring new opportunities for China's insurance market that is facing the development bottleneck. In fact, many existing difficulties in China's insurance industry stem from the fact that sales channels, products, and services cannot meet the growing diversified needs of the masses, and they cannot cope with the open market competition, which further affects the sustainable operation of insurance companies.

The products and services of the insurance industry directly interact with consumers through sales channels. The ultimate goal is to achieve accurate risk pricing and improve profitability. The characteristics of Internet insurance are related to sales channels, products, and services. It can also provide relevant data to improve the long-standing lack of statistical data in the insurance industry. This is also one of China's priorities to promote the development of the insurance industry: that is, to promote the scientific development of the insurance industry. Analysis with statistical data and relevant market indicators can strengthen the grasp of front-end information and improve management difficulties. Internet insurance itself is like a bridge. It has the function of an intermediary market, which can connect the relationship between insurance companies and consumers, and directly provide products and services. In addition, the bad habits accumulated by the insurance industry over the years can also be reformed through Internet insurance.



Chapter 4 Internet Insurance and Insurance Intermediary Market

In the development process of China's insurance industry, as there is no suitable method to improve the problems caused by insurance intermediaries, China's insurance industry instead intends to carry out internal reforms and deepen its connection with consumers through Internet insurance. This also poses a relative challenge to the traditional sales model dominated by insurance intermediaries. Instead of dealing with insurance intermediaries, Chinese consumers can approach insurance companies directly through Internet insurance. Internet insurance is obviously a quick and trouble-free way for consumers. However, after all, China has only been promoting the development of Internet insurance for less than 4 years. The market share of Internet insurance is very different from that of traditional insurance intermediaries. At present, there is no product innovation in Internet insurance, so the product structure is not significantly different from the traditional intermediary market. Moreover, Internet insurance still faces problems such as increased costs, product homogeneity, moral hazard and adverse selection, and insufficient capital investment. At present, in China, only simple and standardized insurance products can be sold through Internet insurance. More complex products that require detailed understanding require the assistance of traditional insurance intermediaries. Therefore, in a short time, Internet insurance will not be able to replace traditional insurance intermediaries. This chapter will introduce the compositions and differences between the Internet insurance market and the market dominated by insurance intermediaries, and explain the problems facing Internet insurance.

4.1 The Role of Internet Insurance in the Insurance Intermediary Market

Internet insurance is the Internet + insurance industry. It emphasizes the use of Internet technology to reconstruct the industry model of the insurance industry, and also promotes the consolidation and improvement of the insurance intermediary market (insurance association of China, 2017). In the past, insurance companies provided consumers with professional insurance intermediaries to help consumers understand the products. Those professional insurance intermediaries then provided services such as underwriting, future consulting, insurance content changes, and claims services (Figure 4-1). Insurance intermediaries had the necessary professionalism and ethics to assist consumers in buying suitable insurance, and they returned consumer opinions and actual market conditions to insurance companies. Insurance companies adjusted product structures in a timely manner based on feedback from insurance intermediaries to maintain operational efficiency.

Insuranc

Insuranc



Figure 4-1 Schematic Diagram of the Traditional Insurance Intermediary

Internet insurance was originally only a link in the insurance intermediary market and belonged to the forefront of sales channels, but then it changed the industry model of the entire insurance industry. Insurance companies participate in Internet insurance, providing customers with pre-sales consulting, in-sales insurance, after-sales claims and changes, and provide customers with a good online experience (Figure 4-2). During the interaction, consumers would provide personal information, and insurance companies would obtain relevant data for analysis, and conduct risk pricing and product innovation for different customers. Strictly speaking, Internet insurance does not refer to sales channels in the insurance intermediary market. Instead, it means that insurance companies could operate the entire pre-sale, sale and after-sales insurance services in the cloud through Internet insurance.

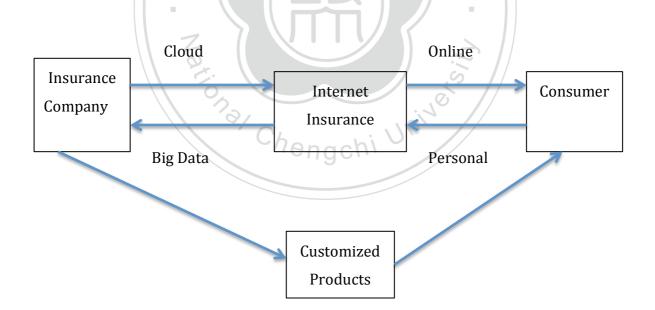
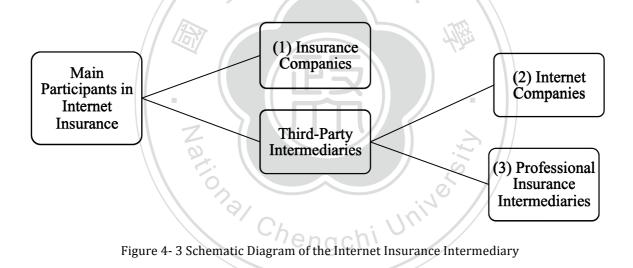


Figure 4-2 Schematic Diagram of Internet Insurance

4.2 Differences between Internet insurance and Traditional Insurance Intermediaries

Internet insurance is a combination of Internet technology and insurance services. In Internet insurance, insurance institutions use the Internet and mobile communications technologies to provide insurance services and conclude insurance contracts through proprietary network platforms and third-party network platforms. Internet insurance participants are at the forefront of Internet insurance, and they all cooperate in the insurance industry chain. The market entities are diversified and the development is rapid (Figure 4-3).



(1) Insurance companies participate in Internet insurance through the official website, APP or self-built Internet company model, providing online consultation, insurance and follow-up claims, preservation and other services. Insurance companies have strong advantages in product development, replication, and pricing due to their discourse power, product research and development capabilities, and risk control in the industry. Insurance companies have rich

and complete product items that can meet the different needs of customers, and the combination of online and offline services can bring one-stop services. However, the contextualization is far less extensive and diverse than that of third-party intermediaries, and the interaction is far lower than that of third-party intermediaries. It is fatal as it is not easy to establish brand value and customer loyalty.

(2) Internet companies work with insurance companies. These e-commerce companies actively participate in the business layout of Internet insurance by virtue of platform traffic, settlement and credit advantages. With the insurance demand derived from the platform, we can, by the way, sell insurance products to improve operational efficiency and revenues, so that consumers can enjoy efficient, simple and secure Internet products. In addition to the brand effect and various sales channels, insurance companies do not generate traffic themselves. By cooperating with existing Internet companies, they can obtain huge traffic and achieve a win-win situation.

Internet companies do not have experience in traditional insurance intermediaries. But, their thinking and technology of the Internet can provide innovation power for Internet insurance. Therefore, Internet companies are the core strength of insurance technology. They can solve the problems of poor customer experience, higher costs for laying branches, slower product updates, and lower resource allocation efficiency in the traditional insurance industry. Internet companies can combine technology and innovation, use different scenarios to develop innovative business models and Internet insurance products, and then monetize the traffic. These are the biggest competitive advantages of Internet companies.

(3) A professional insurance intermediary agency refers to an online sales platform built by

insurance intermediaries, which can act as an agent for customers in insurance claims. The reason why these insurance intermediaries participate in Internet insurance is that the current insurance industry has a relatively low level of operations through the Internet, and customer resources are in the hands of insurance intermediaries. In addition, Internet insurance may become the main sales channel of insurance companies in the future. Therefore, professional insurance intermediaries can participate in Internet insurance based on their customer resources and full understanding of the products, obtain comparative advantages at lower customer acquisition costs, and provide insurance information and sales services. These professional insurance intermediaries provide solutions for insurance demanders through insurance price comparison, product improvement and customization, and policy claims services.

Professional insurance intermediaries also have certain disadvantages, especially those derived from the online insurance sales and price comparison platforms. However, they also cannot completely solve the complex and non-standardized characteristics of the content and terms of the insurance product itself, resulting in information asymmetry between customers and insurance products. Most of these institutions do not have the ability to develop products and licenses to issue products.

In the Internet insurance industry chain, their companies are small, which leads to the scattered customer resources, offline service capabilities incomparable with traditional insurance companies, mismatch with Internet companies in terms of online traffic, and weak bargaining power.

Traditional insurance intermediary: The traditional insurance intermediary refers to the path that insurance products take from insurance companies to customers during the transfer of goods. According to whether the insurance company directly underwrites the relevant insurance policies, the **traditional insurance intermediaries** can be divided into the direct intermediary and the indirect intermediary (Figure 4-4)

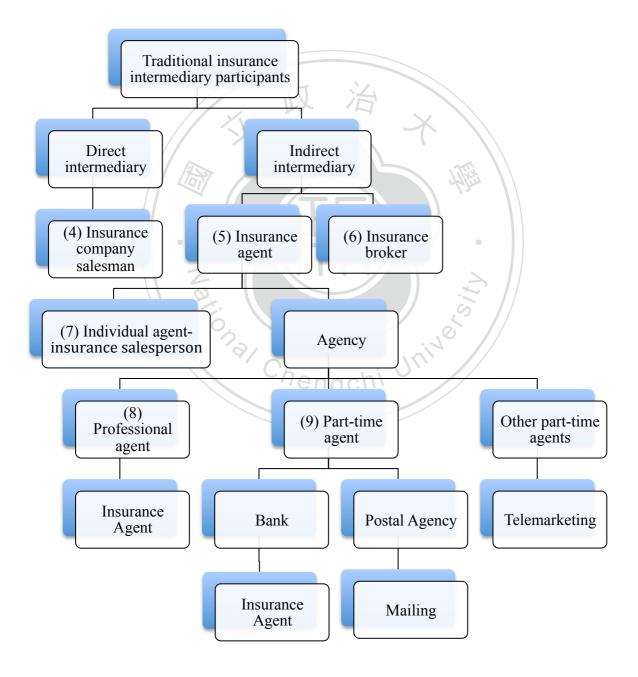


Figure 4- 4 Schematic Diagram of Traditional Insurance Intermediaries

Direct insurance refers to purchasing insurance directly from an insurance company, through the insurance company's business personnel. In this process, consumers will only have contact with the direct channels of the insurance company without any third-party assistance in the middle.

(4) Insurance company salesman. An insurance company salesperson is a person who has obtained a qualification certificate issued by the China Banking and Insurance Regulatory Commission hereinafter referred to as the "CBIRC"), who sells insurance products, provides insurance services, and collects fees or commissions for insurance companies.

Indirect intermediaries allow insurance agents and insurance brokers to plan appropriate protection content, and then assist consumers to purchase insurance from insurance companies. Insurance agents are divided into individual agents and institutional agents. Institutional agents are subdivided into professional agents (insurance agents) and part-time agents (banks, postal agencies, etc.)(Gao Lip-ing, 2016).

(5) Insurance agent. An insurance agent is a unit or individual that handles insurance business on behalf of an insurance company within the scope authorized by the insurance company and collects agency fees from the insurance company. Insurance agency also refers to the act of acting as an insurance agent within the authority of the insurance company for the benefit of the insurance company, and the legal liabilities arising therefrom shall be borne by the insurance company.

(6) Insurance broker. An insurance broker is a person who negotiates an insurance contract with an insurance company on behalf of the insured and collects commissions from the insurance company. An insurance broker collects insurance premiums from the insured on behalf of the insurance company, or is entrusted by the insured to settle claims with the insurance company when an insurance accident occurs. An insurance broker is an insurance intermediary independent of an insurance company. Entrusted by the insured or insured, an insurance broker can handle insurance, renewal, change of insurance content, settlement of claims, and management of insurance files, etc., and can sell insurance products for multiple insurance companies.

(7) An individual agent refers to an individual who is entrusted by the insurer (insurance company) to handle insurance business within the scope authorized by the insurer, and collects an agency handling fee from the insurer. Individual agents may sell insurance products on behalf of insurance companies, but may not handle corporate property and group insurance business, nor may they engage in personal insurance agency business part-time without the authorization of insurance companies.

(8) Professional agencies are established with the approval of the China Banking and Insurance Regulatory Commission in accordance with relevant laws and regulations such as the "Insurance Law" and "Administrative Law." Professional agents are entrusted by insurance companies to act as insurance agents for insurance business within the scope of authorization. An insurance agency can be established in the form of a partnership, a limited liability company, or a company limited by shares.

(9) A part-time agency refers to a unit entrusted by the insurer to designate a person that handles insurance business for an insurance company while engaging in its own business. A part-time agent can act as an agent to sell insurance products and collect premiums, but only a part-time agent can only represent companies directly related to the industry. Party and government agencies and their functional departments shall not concurrently engage in insurance agency business. (CIRC)

Through the above, we can find that Internet insurance enables insurance companies to provide insurance consulting, product information and other services through the Internet platform, allowing consumers to actively consult, compare and evaluate and decide whether to purchase insurance. This service can be interpreted in the way that insurance companies are providing professional value for consumers, so that consumers can obtain the professional information they need. Therefore, the focus is on whether consumers can have a good customer experience in the process, and whether insurance companies can truly grasp the needs of different customers, provide differentiated services, and create value for consumers. This is very different from traditional insurance intermediaries. Insurance intermediaries are proactively providing product information to customers, selling insurance to consumers and providing related assistance such as claims settlement and contract changes after underwriting.

Therefore, the difference between Internet insurance and traditional insurance intermediaries is that Internet insurance is demand-oriented and consumers dominate the market. Consumers' insurance needs are generated through contextualization. Consumers then decide whether to purchase insurance products after experiencing the professional value of Internet insurance companies. The traditional insurance intermediary is supply-oriented. The insurance company-product supplier dominates the market, provides products to consumers through intermediaries, and allows consumers to generate demand. The after-sales service is the added value.

Therefore, with a simple and transparent interaction process, Internet insurance can directly satisfy customer needs and truly create value for customers, instead of being reduced to a sales channel that sells products for the benefits of insurance companies. This is the difference between Internet insurance and insurance intermediaries, and this creates a market space over the long term.

取

4.3 The Impact of Internet Insurance in the Insurance Intermediary Market

2014 is a year in which China begins to promote the development of Internet insurance. It is also a year of large-scale rectification of the intermediary market. The bad habits and problems accumulated in the development of the insurance industry are almost related to insurance intermediaries. Therefore, insurance intermediaries are regulated and it is hoped that the use of Internet insurance will stimulate the innovation of the sales model of the insurance industry.

Since some of the businesses included in Internet insurance directly overlap with insurance intermediary business, this section will observe and compare the premiums (market shares), premium structures and product structures of Internet insurance and insurance sold by traditional intermediaries from the perspective of sales channels. The premium status of life insurance and Internet life insurance in 2012-2017. In terms of double premiums, traditional insurance intermediaries far exceed Internet insurance, and they have almost increased year by year (Table 4-1).

The period between 2012 and 2016 was a period of rapid growth in Internet premiums. In terms of the proportion of Internet premiums, in 2016, Internet premiums exceeded 60% (to 65.61%) of total premiums. In 2017, Internet premiums exceeded 70% of total premiums and officially reached 78%. However, in 2018, the proportion of Internet premiums dropped to 75.37%. Meanwhile, traditional life insurance premiums presented different trends. Except for the slight decline in premium share in 2013 (63.93%), the premium share in other years has shown steady growth and has been maintained at around 60%. In 2016, the premium ratio officially exceeded 70% (and reached 71.82%).

Both sides have seen growth in premiums in 2016. In 2017, only the Internet life insurance premiums fell and there were certain bottlenecks in development. From the above perspective, it is clear that China's policy support to promote the development of the Internet life insurance in 2014 was effective, and the advocacy of insurance return protection was also effective. In addition, the total premium of Internet insurance in 2017 was about 5% of the total premium (about 7% in 2016). Internet insurance failed to have a market share advantage, and why the Internet life insurance premiums in 2017 fell significantly remains to be explored.

Year	Personal insurance premiums	Total insurance premiums	Proportion of personal insurance premiums	Internet personal insurance premiums	Total Internet insurance premiums	Proportion of Internet personal insurance premium
2012	10,157	15,487.93	65.58%	9.8	110.74	8.85%
2013	11,009.98	17,222.24	63.93%	54.5	318.42	17.12%
2014	13,031.43	20,234.81	64.40%	353.2	858.97	41.12%
2015	16,287.55	24,282.52	67.08%	1,465.6	2,233.96	65.61%
2016	22,234.6	30,959.1	71.82%	1,796.77	2,298.99	78.15%
2017	26,746.35	36,581.01	73.12%	1,383.2	1,835.29	75.37%
2018	27,246.54	38,016.62	71.67%	1,193.2	41799 -	-

Table 4- 1 Insurance Premiums and Internet Insurance Premiums(Unit: Hundred Million RMB)

Source: China's Internet Insurance Industry Development Report in 2017

On the whole, the insurance market share is increasing, but the premium structures of various sales channel are different. Obviously, the premium structure of the insurance intermediary market is dominated by the two insurance sales channels of individual agents and part-time agents, and the sales channels of individual agents are ahead of those of part-time agents (Table 4-2). The extensive development (crude management) of China Insurance has a far-reaching impact. The main forces driving China's insurance industry include individual agents (insurance salespersons) with an advantage in the number of people and part-time agents with an advantage in the number of service bases.

As of 2015, statistics on insurance intermediaries showed that there were 1,719 professional agents, 210,000 part-time agents (180,000 financial institutions/personnel and 30,000 non-financial institutions/personnel), 445 insurance brokers, and 6 million insurance salespeople.

Although individual agents have their market share, the issues in which the quality of insurance intermediaries is uneven and the sales are misleading are mostly caused by individual agents and part-time agents. The China Banking and Insurance Regulatory Commission had continuously strengthened the restrictions and management regarding this part, which caused a significant slowdown in the growth of the number of insurance agents in recent years, but it had also caused difficulties in increasing staff. Therefore, the threshold for entry of insurance agents was relaxed in 2015. In fact, China has a vast territory, and insurance companies would face the high cost of building their own sales bases and teams. They are not as flexible as insurance agents/intermediaries with geographical advantages. If they can abide by professional norms, they will have a great opportunity to make consumers buy the insurance.

Insurance Intermediary	20	16	2017		
(4) Insurance company salesman	1,462.96	6.76%	1,705.77	6.57%	
(7) Individual agent - insurance salesperson	9,914.48	45.84%	12,999.79	50.07%	
(8) Professional agent	120.3	0.56%	179.28	0.69%	
(9) Part-time agent	9,648.27	44.61%	10,613.6	40.88%	
Other part-time agents	356.76	1.65%	280.93	1.08%	
(6) Insurance broker	124.17	0.57%	184.51	0.71%	
Total	21,626.94	100.00%	25,963.88	100.00%	

Table 4- 2 Premium Structure of Insurance Intermediaries (Unit: Hundred Million RMB)

Source: The 2016-2017 Yearbook of China's Insurance.

The premiums structure of Internet Insurance Platform reflects that insurance companies are unable to gain consumer favor through their official websites (Table 4-3). For example, in 2014, the total premium of the Internet life insurance was 353.2, of which the insurance premium for insurance bought through the insurance company's official website was 17.75, accounting for 5.03%. The insurance premiums for insurance bought through other platforms were 335.43, accounting for 94.97%. It could be seen that most consumers would not buy insurance on the official website of the insurance company, but would apply for insurance through the platforms of other Internet companies and professional intermediaries.

This means that consumer demand for insurance is generated in different scenarios and is delivered through multiple channels. That contextualization and diversity are the advantages of Internet insurance. In addition, Internet insurance is not a threat to insurance intermediaries at this stage as it has not yet seized the market share of the insurance intermediary market as expected by the market (Table 4-1).

Meanwhile, as we compare the market share of Internet insurance with the market share of insurance intermediaries (including individual agents and part-time agents), we find that the market share of Internet insurance in 2016 and 2017 only accounted for 1.8% and 1.1% of that of insurance intermediaries (including individual agents and part-time agents). Moreover, as the annual growth rate of Internet insurance premiums in these two years has been negative, Internet insurance has temporarily failed to seize the market share of insurance intermediaries.

 Table 4- 3 Statistical Table of Premiums on the Internet Insurance Platform

 (Unit: Hundred Million RMB)

Year	Official Website o	f the Insurance Company	Ot	her
2014	17.75	5.03%	335.43	94.97%
2015	41.8	2.80%	1,423.8	97.2%
2016	86.5	4.80%	1,710.1	95.2%
2017	153.4	11.10%	122.98	88.9%

Source: China's Internet Insurance Industry Development Report from 2014 to 2017

In addition to helping us understand market preferences, understanding the current product structures and market shares of related products in the insurance market can also help us understand the sales status of insurance intermediaries and whether there are any major products. We understand that from 2016 to 2017, insurance intermediaries most often sold general life insurance and participating life insurance. In 2016, the two accounted for 49.55% and 32.97%, respectively. Among them, ordinary life insurance increased by 51.51% in 2017 (Table 4-4).

The health insurance market share was 14.82% in 2016, but fell to 12.88% in 2017. As the development of China's insurance market is not yet mature, the general public is not clear about the content of health insurance. This also provides an opportunity for the insurance industry to promote / expand protection-oriented products.

As the insurance market has long been flooded with investment-oriented commodities, the structure of insurance products is unbalanced, and the insurance protection purchased by the public is seriously inadequate, which has become a problem that the CBRC strives to improve. The CBRC has been working hard to declare the goal of returning insurance to protection, which has improved the market's product structure considerably.

-'hengchi

		20	16	2017		
	Ordinary life insurance	10,288.55	49.55%	12,848.13	51.51%	
Life insurance	Participating life insurance	6,846.24	32.97%	8,375.69	33.58%	
	Investment-linked insurance	3.86	0.02%	3.91	0.02%	
	Universal Life Insurance	234.2	1.13%	115.36	0.46%	
Accident insurance		314.96	1.52%	387.2	1.55%	
Health insurance		3,077.83	14.82%	3,213.8	12.88%	
Total		20,765.64	100.00%	24,944.09	100.00%	

Table 4- 4 Life Insurance Premium - Product Structure

(Unit: Hundred Million RMB)

Source: The 2016-2017 Yearbook of China's Insurance

Internet insurance has no advantage in terms of market share, but in terms of product structure, Internet insurance clearly differs from the structure of products promoted by insurance intermediaries.

According to the product structure of Internet insurance, half of the insurance products were life insurance, accounting for more than 55% (Table 4-5). In 2014, universal life insurance accounted for 57.9%. In 2016, investment-linked life insurance accounted for 59.56%, all of which were investment-type insurance. This also means that investment-linked insurance products are easily standardized and suitable for sales on the Internet. In addition, the proportion of pension insurance had increased, reaching 33.4% in 2017.

In either the insurance intermediary market or the Internet insurance market, the product structure is dominated by life insurance, with life insurance accounting for half of the total. And the ordinary life insurance is preferred in the insurance intermediary market, while the investment-linked insurance is much emphasized in the Internet insurance market.

Tuble 1 5 methet instructed Floudet Structure (Omt. 70)							
Insurance Type		2014	2015	2016	2017		
Life insurance	Investment-linked life insurance	16.10%		59.56%			
	Universal Life Insurance	57.90%	×	19.19%			
	Term life insurance	-	-	0.12%	57.70%		
	Whole life insurance			1.95%			
	Endowment insurance	L L		10.62%			
	Participating life insurance	13.40%		8.56%			
Annuity		6.00%	F	13.77%	33.40%		
Health		1.30%	0.70%	1.77%	4.30%		
I	Accident insurance	5.30%	2.70%	1.30%	4.60%		

Table 4- 5 Internet Insurance Product Structure (Unit: %)

Source: China's Internet Insurance Industry Development Report from 2014 to 2018

hengchi

And then, we further observe the main product structures of the entire insurance market: The commodity structure of the insurance market mainly includes three commodities in 3 categories: life insurance, accident insurance and health insurance. The premiums for the three types of insurance increase year by year. However, it is worth noting that the market share of life insurance premiums declined and the market share of health insurance increased (Table 4-6). This means that the increased demand for health insurance will benefit insurance intermediaries. The reasons include: the content of health insurance is usually more complicated than that of life insurance, the underwriting process requires more risk assessment, and professional insurance intermediaries are needed to further help explain the contents to consumers as the insurance products are not easy to standardize. Such demand is not easily replaced by Internet insurance.

Although the development of Internet insurance poses no threat to the current insurance intermediary market and has little impact in the short term, insurance intermediaries still need to improve their own business management level, in order to subsequently drive the development of the industry and promote the transformation of the insurance industry.

Year	Life insurance		Accident insurance		Health insurance		Total
2007	4,463.75	88.60%	190.1	3.77%	384.16	7.63%	5,038.01
2008	6,658.37	89.41%	203.55	2.73%	585.45	7.86%	7,447.37
2009	7,457.38	90.27%	230.04	2.78%	573.97	6.95%	8,261.39
2010	9,679.51	91.04%	275.35	2.59%	677.46	6.37%	10,632.32
2011	8,695.59	89.45%	334.12	3.44%	691.72	7.12%	9,721.43
2012	8,908.05	87.70%	386.18	3.80%	862.76	8.49%	10,156.99
2013	9,425.14	85.61%	461.34	4.19%	1,123.49	10.20%	11,009.97
2014	10,901.68	83.66%	542.56	4.16%	1,587.17	12.18%	13,031.41
2015	13,241.52	81.30%	635.56	3.90%	2,410.47	14.80%	16,287.55
2016	17,442.21	78.45%	749.88	3.37%	4,042.49	18.18%	22234.58
2017	21,455.57	80.22%	901.32	3.37%	4,389.46	16.41%	26,746.35
2018	20,722.86	76.06%	1,075.55	3.95%	5,448.13	20.00%	27,246.54

 Table 4- 6 Life Insurance Premium Statistics- Main Product Structure (Unit: Hundred Million RMB)

Source: Official Website of the China Insurance Regulatory Commission (CIRC)

4.4 Problems Facing the Development of Internet Insurance

The insurance industry wishes to transform the insurance through the Internet. It mainly hopes to achieve accurate risk discrimination. Based on customer historical records, behavior characteristics, specific scenarios and other data, actual needs can be analyzed to launch suitable products to further realize product customization and differentiated pricing. Next, in terms of underwriting and claims, big data and statistical models can be used to realize the ability to identify high-risk customers, and risk control can be taken early in the underwriting phase. In terms of claims, it can realize the function of identifying fraud and can automatically filter suspicious cases.

Sadly, most insurance companies currently only use Internet insurance as a sales platform, which is no different from traditional insurance. From the perspective of sales product structure, investment-oriented products are the majority, and long-term life insurance accounts for a small proportion. Long-term life insurance is the yardstick for market evaluation of insurance companies, which shows that the development of Internet insurance is still insufficient. Therefore, Therefore, in addition to the use of big data and information security issues, this section will try to explain the reasons that may cause the delay in the development of Internet insurance, as well as the problems that need to be addressed and resolved. The cost of obtaining big data has increased. Massive data comes mainly from third-party Internet platforms. Internet insurance requires such data for support. At the same time, it reduces the cost of publicity and operations, thereby improving the efficiency of Internet insurance business. However, even if the insurer reduces the above costs, it is still a difficult question whether the back-end has a system corresponding to a third-party platform. Furthermore, third-party operators also hope to gain their own advantages in the insurance field. As the development of Internet insurance deepens, the requirements for data will also increase when mature business models are formed. Authorization by third-party platform operators is required to obtain data, but this part of the cost will be increased.

Product homogenization. Due to the virtual nature and contractual nature of Internet insurance, barriers cannot be formed through patents, and homogeneity problems are also easy to form. At present, the focus of Internet insurance industry players is to enhance service value, provide differentiated products through differentiated services, understand customers during the service process, and provide products that meet customer needs and characteristics. However, the homogeneity of products will cause price competition between operators, which will cause similar problems to the homogeneity of insurance products.

Moral Hazard and Adverse Selection - The professional knowledge of underwriting and claims is s related to subjective and objective experience, so it is difficult to effectively handle it through informationization and systemization. This makes various insurance companies lack the technology to identify moral hazard and adverse selection issues on

Internet insurance, so that innovations in the health insurance and long-term life insurance products with relatively complicated terms, more medical terms, and medical examinations become relatively scarce, which hinders the subsequent development of Internet insurance.

Increased operating costs make it difficult to pursue model standardization / automation services. Traditional insurance often requires customers to apply through relevant staff, and to reflect the underwriting results to customers after a period of internal audit, and there is no so-called immediacy. However, Internet insurance presents services anytime, anywhere, and has become a standard naturally. This is a challenge to the process and operational thinking of Internet insurance, because the current Internet insurance can only implement a small number of services based on mobile functions and has not yet been fully developed. There are still many rules and complex judgments online, which require manual operations offline. Therefore, Internet insurance currently uses human-intensive scale effects to improve operational efficiency. However, it is necessary to know how to use technology to create low-cost environments and expand business scale in the future, as this is a challenge that management has to face. The higher the operating efficiency and the lower the cost, the more competitive the product price will be in the market.

Lack of Insurance Products fully based on the Internet. At present, most insurance companies' websites can only serve the functions of online inquiry. As most insurance products are more complex products, it is difficult for customers to complete the insurance purchase process online without the help of insurance company personnel, and it is also difficult for insurance companies to achieve instant automatic underwriting. Due to the consideration of risk control, there are hard rules for manual underwriting for more complex products or products with higher insurance sum, which makes it difficult to carry out online insurance transactions immediately and conveniently. At present, among the companies that carry out online insurance, the products that can truly realize comprehensive online insurance transactions are only the products with low sums and simple underwriting processes, such as personal accident insurance and travel insurance. It can be seen that although online insurance is a convenient and simple way to buy the insurance, the actual online insurance transaction still faces great difficulties.

Insufficient Capital Investment in the Platform. Although only the initial capital investment is required, the construction, maintenance, product promotion, and customer cultivation of/for/from the Internet insurance platform require high capital. As insurance companies cannot ensure that the investment will realize any benefits, they are conservative in the investment of funds to build such online platforms. At present, the Internet insurance system and interface functions are not perfect, and there are other problems such as imperfect payment systems and low reliability of authentication on the Internet. This has greatly affected the enthusiasm of consumers to buy insurance on the Internet. Many consumers even voluntarily give up in the process of purchasing insurance by themselves on the Internet because they cannot guarantee that they can complete the insurance purchase process correctly.

Chapter 5 Conclusion

5.1 Summary of Research Findings

China has incorporated Internet insurance into the important projects of national development, which has caused many scholars to study and explore its development space. In order to understand the impact of Internet insurance development on China's insurance industry, this study attempts to answer the following questions: First, what are the main difficulties faced by China's life insurance industry? Second, what kind of benefits can the development of Internet insurance bring to China's life insurance industry? And what is the impact of the development of Internet insurance on the intermediary market? Finally, is there any other potential problem in developing Internet insurance?

The cause of the development of China's life insurance industry is also a hindrance or cause of today's sluggish development. With a long-term implementation of official rates, there will be no difference in insurance rates, let alone risk pricing. This has led to a lack of professionals, a deficiency of product homogeneity, and impeded product innovation. Extensive operation (crude management), expansion of bases with a focus on quantity rather than quality, significant investment costs and the practices that focus on service quantity rather than the quality leads to uneven quality of insurance intermediary staff, serious misleading sales, constant claims disputes, and finally causes difficulties in increasing the number of employees in insurance companies and imperfect product structures in insurance markets.

Internet insurance itself has the following characteristics: Digitalization, which can quantify customer behavior preferences. Interactivity. Information-based communication can aid in a good customer experience. Differentiation. Customers have different preferences and needs that in turn form the market segments. Contextualization. The risks of customers in different situations are understood. Fragmentation. The content of the protection provided by insurance products is brief, so that customers can use their sneaker time for understanding the relevant products and insurance purchase. Transparency and Sharing. Public information sharing is ensured. Diversification. Platform operators and sales channels are diversified. Small Amounts / High Frequencies / Simpleness. The sum insured is low, the underwriting frequency is high, and it is easy to understand the insurance content. If these characteristics are used properly, they will become an advantage of Internet insurance, which will help the insurance industry improve the current problems met, and aid in the collection of relevant insurance data through Internet insurance. This will make up for the long-standing lack of statistical data in the insurance industry and help China's insurance industry reform and transformation in the long run.

The market share of Internet insurance from 2014 to 2017 reached 5%, of which the Internet life insurance part only accounted for 3.7%, facing development bottlenecks. Although the development of Internet insurance is mature, it will seize the insurance market share against insurance intermediaries and pose a certain challenge to the insurance intermediary market, but for the time being, it will not have a considerable impact on the insurance intermediary market. The reason is that in addition to network security issues and big data application capabilities, most of the Internet insurance big data acquisition and sales channels are conducted through third-party platforms, and the back-end operation model is not easy to standardize and automate. These factors increase operating costs. In addition, insurance companies are manually underwriting more complex products, so the immediacy is lacking, and the underwriting and claims processes cannot be informationized / systematized. This easily leads to problems of moral hazard and adverse selection, and indirectly reflects that insurance products that are not fully Internetized have been put on the market. It is conceivable that, given the virtual nature and contractual nature of the Internet, there are also situations where products are homogeneous in the market.

More importantly, most insurance companies currently only use Internet insurance as a sales platform, which is no different from traditional insurance. The above are the factors that form the bottlenecks of the development of Internet insurance.

5.2 Suggestions and Recommendations

hengchi

At present, the support of big data is still deficient in the insurance market. Extensive development (crude management) has led to a serious lack of relevant statistics for the sales front end. Failure to understand the needs, preferences, and risk attributes of customers not only results in the inability to generate suitable customized services for customers, but also the inability to conduct valuable interactions with customers. The biggest difference of

Internet insurance is that it cannot be oriented towards goods sales. Consumers will find providers who can provide solutions for themselves and purchase their services according to their needs rather than being led by products. Buying insurance products is just one of the processes used to solve consumer problems. Therefore, this study suggests that, as China's Internet insurance is still in the early stages of development, the industry shall continue to collect big data and try to address the high cost of data collection. Due to China's vast geographic scope, it is difficult for insurers to collect big data across the country on their own. Therefore, they must cooperate with various Internet companies or other related operators. If the cost is too high, insurers will be hindered from understanding customer needs, and it will be difficult to provide customers with value-based services and customized products. This will affect the subsequent development and innovation of Internet insurance.

The birth of Internet insurance only signifies the beginning of value services for insurance companies. The most challenging issue for the insurance industry lies in the question as to how to continuously provide value services to customers in light of the birth of Internet insurance.

References

- Arora, A. (2003). E-Insurance: Analysis of the Impact and Implications of Ecommerce on the Insurance Industry. Cass Business School Faculty of Actuarial Science & Statistics.
- Brown, J. R., & Goolsbee, A. (2000). Does The Internet Make Markets More Competitve Evidence From The Life Insurance Industry. National Bureau of Economic Research.

http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.23.7820&rep=rep1&ty pe=pdf

- Cand, G. (2015). Foreign Experience in Internet Insurance Operation. Bulletin of Taras Shevchenko National University of Economics, 3(168), 55-62
- Costello, G. I., & Tuchen, J. H. (1998). A Comparative Study of Business to Consumer Electronic Commerce within the Australian Insurance Sector. *Fournal of Information Technology*, 153-167.
- Dumm, R. E., & Hoyt, R. E. (2002). Insurance Distribution Channels: Markets in Transition. 38th Annual Seminar of the International Insurance Society, Singapore. https://pdfs.semanticscholar.org/152e/f5f3b3ca390938b2c17454f5144eeb2fea7 1.pdf

Foundation for the Advancement of Life & Insurance Around the world. (2016). Overview of Life Insurance Industry in Japan.

http://www.falia.or.jp/assets/pdf/japan_risk/2016110verview_of_Life_Ins.pdf Foundation for the Advancement of Life & Insurance Around the world.

(2017). Overview of Life Insurance Industry in Japan.

http://www.falia.or.jp/assets/pdf/japan_risk/2017090verview_of_Life_Ins.pdf

Garven, J.R. (2000). The Role of Electronic Commerce in Financial Services Integration, *North American Actuarial Journal*, 4(3), 64-70.

Garven, J.R. (2002), On the Implications of the Internet for Insurance Markets and Institutions, *Risk Management and Insurance Review*, 5(2), 105-116.

Rakovska, G. (2001). E-Commerce Business Models for Insurance: Application to U.S. and European Markets. Center for Risk Management and Insurance Research.

Georgia State University.

- Grossman, M., & McCarthy, R. V., & Aronson, J. E. (2004). E-Commerce Adoption in the Insurance Industry. Management Faculty, Bridgewater State University.
- Institute of Interdisciplinary Business Research. (2012). *Interdisciplinary Journal of Contemporary Research in Business*, (4)8, 640-647
- Life Insurance Marketing and Research Association. (2019). Insurance Barometer Report.

https://www.tbrins.com/uploads/9/5/9/7/95973204/2019_insurance_baromete r_study.pdf

Life Insurance Marketing and Research Association. (2019) Top-10 Technology Trends in Life Insurance: 2019

https://worldinsurtechreport.com/wp-content/uploads/sites/4/2019/10/Life-In surance_Trends_2019.pdf

- Munich Reinsurance Company. (2018). Insurance Market Outlook for 2018/2019. https://www.munichre.com/topics-online/en/economy/insurance-markets/outlo ok-2018-2019.html
- National Association of Insurance Commissioners. (2013). State of the Life Insurance Industry: Implications of Industry Trends.

https://www.naic.org/documents/cipr_home_130823_implications_industry_tren ds_final.pdf

National Association of Insurance Commissioners. (1998). The Marketing of Insurance Over the Internet.

https://www.naic.org/store/free/MOI-OP.pdf

Organization for Economic Co-operation and Development. (2017). Technology and Innovation in the Insurance Sector.

https://www.oecd.org/pensions/Technology-and-innovation-in-the-insurance-sec tor.pdf

- Robert, N. M. (2008). Online Insurance. Handbook of Consumer Finance Research https://ahmadladhani.files.wordpress.com/2009/10/handbook_of_cfr.pdf
- Swiss Reinsurance Company Institute. (2000). The Impact of E-business on the Insurance Industry: Pressure to Adapt Chance to Reinvest, No.5, 10-31.
- Swiss Reinsurance Company Institute. (2017). Technology and Insurance: Themes and Challenges.

https://www.swissre.com/dam/jcr:85c4ccde-50b7-41cf-a2df-d365cc35a6f4/expe rtise_publication_technology_and_insurance_themes_and_challenges.pdf

- Svetlana, V. (2016). Insurtech: Challeges and Development Perspectives, International Journal of Innovative Technologies in Economy, No.3(5), 35-42
- Word Economic Forum. (2017). Beyond Fintech: A Pragmatic Assessment Of Disruptive Potential In Financial Services.

http://www3.weforum.org/docs/Beyond_Fintech_-_A_Pragmatic_Assessment_of_D isruptive_Potential_in_Financial_Services.pdf

- William R. H (2003). Method and system for Providing online insurance information. The Handbook of Insurance Economics.
- Kevin, L. E., & Jacquiline, K. E., & Alan, D. E. (2002). Issues in Marketing Online Insurance Products: An Exploratory Look at Agents' Use, Attitudes, and Views of the Impact of the Internet. *Risk Management and Insurance Review*, 5(2), 117-134
- 5 Ways Big Data Is Making a Splash in the Insurance Industry. (2015). https://www.smartdatacollective.com/5-ways-big-data-making-splash-insurance-industry/
- 中國保險年鑑編委會. (2010). 吳定富主席在保監會系統深入學習實踐科學發展觀活動總結大會上的講話. 中國保險年鑑, 1-7.
- 中國保險年鑑編委會. (2011). 吳定富主席在保險業情況通報會上的講話. 中國保險年鑑, 3-10.
- 中國保險年鑑編委會. (2012). 吳定富主席在半年保險監管工作會議上的講話. 中國保險年鑑, 1-61.
- 中國保險年鑑編委會. (2013). 項俊波主席在 2013 全國保險業監管工作會議上講話. 中國保險年鑑, 1-8.
- 中國保險年鑑編委會. (2014). 項俊波主席在 2014 全國保險業監管工作會議上講話. 中國保險年鑑. 1-8.
- 中國保險年鑑編委會. (2015). 項俊波主席在 2015 全國保險業監管工作會議上講話. 中國保險年鑑. 1-10.
- 中國保險行業協會.(2016). 互聯網人身保險市場運行情況報告.

http://www.iachina.cn/art/2017/6/21/art_124_1680.html

中國保險行業協會. (2017). 中國互聯網保險行業發展報告. 中國財經出版社 中國保險行業協會. (2016). 中國互聯網保險行業發展報告. 中國財經出版社

鄭佛. (2017). 國內外互聯網保險發展及模式淺析. 河北金融, (6). 42-56 魏華林, & 黃余莉. (2012). 我國壽險營銷方式轉變研究. 保險研究, (4), 72-78. 魏倩雨. (2016). 美英日互聯網保險發展及對上述的啟示. 商業經濟研究, (5), 182-184 鄧俊豪, & 何大勇, & 胡瑩, & 陳本強, & 程軼, & 石得, & 張耀麗. (2015). 互聯網+時

代,大數據改良與改革中國保險業.

https://hybg.cebnet.com.cn/upload/dsjybx.pdf 羅勝. (2017). 三維度定義互聯网保險. 中國保險, 7-11. 羅勝. (2016). 保險業須從互聯网的戰略高度應對大數据的到來_在首屆中國互聯网保險

大會上的講話. 上海保險, 17-20.

闕鳳華. (2016). 淺析互聯網保險消費者權益保護的法律風險. 上海保險 8月, 56-59.

韓貴鑫. (2016). 基于心流體驗理論的移動互聯網環境下消費者在線購買意願影響因素 研究. 山東大學.

鄒宇. (2017). 互聯網保險的風險及防範措施. 中國工會財會 12 月, 43-45.

謝美玲. (2018). 我國互聯網保險產品的創新問題研究. 現代商業, 28-29.

賴靜宜. (2017). 金融科技下保險業之發展與挑戰. 政治大學.

陳勁. (2017). 金融科技讓保險更有溫度. 中國金融, 54-55.

陸定國. (2014). 我國互聯网保險發展研究. 西南財經大學.

郭殊涵. (2017). 互聯网保險的發展与創新.金融經濟, 59-62.

趙健航. (2016). 大數据對互聯网保險的影響研究. 西南財經大學.

溫龍華. (2016). 互聯网時代下壽險營銷推行員工制研究. 廣東財經大學.

湯英漢. (2015). 增長與震蕩_中國互聯網保險特征分析, 中國保險. 16-19.

楊澤云. (2014). 基于大數据的保險產品創新. 青海金融 8 月, 30-32.

楊振華. (2015). 壽險投資_借助互聯網技術. 中國保險, 32-36.

黃開琢. 賈士彬. (2016). 我國人身保險市場競爭程度和市場規模關系研究. 保險研究 (12), 25-36.

黄芳. (2015). 我國互聯网保險可持續發展研究. 對外經濟貿易大學.

閆澤瀅. (2014). 大數據時代下保險公司之變. 上海保險第4期, 43-44.

張哲綺. (2014). 互聯網保險實踐運行中若干問題探討. 上海保險, No.3, 21-24.

張青枝. (2012). 中國銀行保險銷售模式的困境与求解. 宏觀經濟研究, (2), 56-62.

張順益, & 謝向英. (2017). 互聯网保險產品開發問題研究, (17), 167-172.

張雪梅. (2017). 我國互聯网保險產品創新研究. 安徽大學.

張麗. (2016). 互聯网_保險_背景下我國壽險企業營銷模式轉型研究. 河南大學 張登宇. (2016). 我國互聯网保險運營監管問題研究. 蘭洲財經大學. 馬新,& 周濤. (2011). 壽險業電子化服務創新初探. 保險研究, (10). 99-103.

高麗萍. (2014). 我國壽險公司營銷渠道轉型研究. 復旦大學.

孫佳琪. (2014). 國內外險企大數据應用案例對比分析与啟示. 廣東財經大學.

袁峰, & 劉玲, & 邵祥理. (2018). 基于前景理論和 VIKOR 的互聯網保險消費決策模型. 保險研究, (3), 67-75.

芮晨瑤, & 孫嘉禾, & 劉暢. (2018). 我國互聯網保險的現狀_模式及存在問題. 金融觀察,

43-45.

施建祥. (2010). 我國壽險資金投資結构的最优比例研究. 浙江工商大學.

侯旭華,& 彭娟. (2018). 互聯网保險保費收入增長制約因素与對策研究. 金融與經濟,

78-81.

柳歡. (2015). 安永_2012 全球保險消費者調查報告_翻譯報告. 寧波大學.

殷曉蓉. (2002). 阿帕對於聯合國的貢獻及其內在意義. 現代傳播(1)

保險知識大講堂-中國保險監督管理委員會

http://124.127.203.180/web/site47/tab4312/

周華林,& 鄭金龍, (2014). 人身保險產品費率政策改革后產品創新效率分析_以平安人 壽平安福保險產品為例. 金融評論, (2). 82-125.

易珊梅. (2014). 我國互聯网保險研究. 保險職業學院學報, 25-30.

汪演元. (2015).從我國互聯網保險的歷史軌跡看發展趨勢.保險職業學院學報(29). 38-42. 沙伶娜. (2011). 我國壽險公司償付能力的實証研究. 復旦大學.

李紅坤,& 李子晗. (2014). 我国保险业与互联网保险融合动因、困难与策略. 安徽商貿 職業技術學院學報, No.4, 32-36.

李紅坤. (2014). 國內外互聯网保險發展比較及其對我國的啟示.金融研究, No.10, 77-83. 李慧澤. (2015). 傳統保險与互聯网保險融合研究. 廣東財經大學.

吴培. (2014). 談互聯网保險. 遼寧大學.

何得旭,& 董捷. (2015). 中國的互聯网保險_模式_影響_風險与監管. 上海保險(11),

64-67.

何葉. (2017). 互聯网保險發展影響因素研究. 安徽財經大學.

安聯保險集團研究團隊. (2015). 未來的保險客戶_基于互聯网及相關技術的調查報告.

史思遠. (2014). 我國互聯网保險創新型產品研究. 廣東財經大學.

保險研究, (9), 23-38.

白峰. (2014). 壽險產品的發展趨勢. 中國保險, 41-43.

王丹華. (2013). 中國保險監管制度變遷研究. 吉林大學.

王妲. (2017). 互聯網保險經營效率研究. 中央財金大學.

王靜. (2017). 我國互聯网保險發展現狀及存在問題. 中國流通經濟, (31). 86-92.

王斌, & 聶元昆. (2015). 移動互聯網環境下的消費者行為模式探析. 視角, 42-44.

方正証券. (2016). 互聯網保險行業專題研究報告, 17-19.

互聯網保險業務監管暫行辦法

https://baike.baidu.com/item/互联网保险业务监管暂行办法

上海保監局. (2015). 國外互聯网保險發展的理論与實踐. 上海保險

佐々木 一郎. (2013).インターネットチャネル選択のデータ分析. 生命保険論集第 190号

190 与

http://www.jili.or.jp/research/search/pdf/D_190_3.pdf

大沼 八重子. (2019). 生命保険販売におけるインターネットチャネルの現状. 共済総 研レポート No165

https://www.jkri.or.jp/PDF/2019/Rep165onuma.pdf

内野逸勢.(2017).20年後の生命保険業界の行方.大和総研.

https://www.dir.co.jp/report/research/capital-mkt/it/20171013_012369.html PricewaterhouseCoopers. (2015). Insurance 2020:デジタル化の加速 - デジタル フロ

ントランナーになるための近道

https://www.pwc.com/jp/ja/japan-knowledge/archive/assets/pdf/insurance202 0-digital-front-runner1502.pdf

Chengchi Universi