

Analysis of China's Insurance Industry based on SCP Paradigm

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Abstract

This article analyzes the organization of China's insurance industry based on the SCP (market structure-market behavior-market performance) paradigm. Among them, market structure is expressed by market concentration, product differentiation and market entry and exit barriers; market behavior is expressed by pricing behavior, advertising behavior, and merger behavior; market performance is described by resource allocation efficiency and scale structure efficiency. Through the analysis of the above indicators, it explores the current problems of my country's insurance industry and gives corresponding structural optimization measures.

Keywords

China's Insurance Industry; SCP Analysis Framework; Structural Optimization.

1. Topic Selection Background and Realistic Reasons

1.1. The Budding of China's Insurance Thought

Chinese culture has a long history, "the old have some support, the strong have some usefulness, the young have some strengths, and the widows, widows, loneliness and the sick, all have the support" reflects the profound historical background contained in my country's insurance thought. During the reign of the feudal dynasty, the traditional concept of "emphasizing agriculture and restraining business" was highly respected, making the development of commercial insurance stagnant for a long time. In China, the trade activities of various foreign banks have increased day by day, and some foreign businessmen hope that they can be guaranteed to avoid risks. At the same time, some Chinese intellectuals with advanced ideas also proposed insurance ideas, which laid the foundation for the development of China's insurance industry.

1.2. The Tortuous Process of China's Insurance Industry

After the founding of New China, the People's Insurance Company of China (China's first insurance company) was established, which not only broke the monopoly of insurance companies in other countries in China, but also opened the curtain for the development of China's insurance industry. However, forced by the social conditions at the time, from 1958 to 1979, China's insurance business all pressed the pause button, thus missing the 20-year development period.

In the 1980s, correct judgments and decisions ushered in new development opportunities for the Chinese insurance industry: The promulgation of the "Insurance Law of the People's Republic of China" in 1995 made the insurance industry move towards legalization; the establishment of the China Insurance Regulatory Commission in 1998 enabled China's insurance industry to move forward in a scientific, institutionalized, and standardized manner; the emergence of the China Insurance Association in 2000 promoted the self-discipline development of the main body of China's insurance industry and the formation of a stable operation pattern. Nowadays, the insurance industry in China has gradually transitioned from

a market-based form of supervision to a modern insurance regulatory framework featuring "three pillars" of corporate governance, market conduct supervision, and solvency. Although the 2020 new crown epidemic has reduced the demand for auto insurance, credit guarantee insurance and other insurance types, national health protection awareness has greatly increased, some businesses and management have been forced to go online, and online insurance sales have shown vigorous vitality.

1.3. Research Significance

Although the development of China's insurance industry started late and had a bumpy course, with the joint efforts of the Party Central Committee, the government and all sectors of society, it has embarked on a road of insurance development with Chinese characteristics, and has a significant impact on China's society, economy, politics, culture and other aspects have a profound impact. If we can explore the development of the insurance industry from the perspective of industrial organization, find the reasons for the gap between the insurance industry in China and the insurance industry in developed countries, and tap the huge potential of the insurance industry, we can achieve the goal of transforming from a big insurance country to a strong insurance country, and its related effects will surely promote the steady development of China's economy.

2. Understanding of the Insurance Industry and SCP

2.1. The Connotation of Insurance

Insurance refers to the commercial insurance behavior in which the insurant pays insurance premiums in accordance with the contract, and the insurer assumes the liability for compensation for losses caused by accidents that may occur in the contract, or the insured bears the liability for payment of insurance premiums in the event of an accident.

From an economic point of view, insurance is a financial arrangement for sharing accidental losses; from a social point of view, insurance is an important part of the social economic security system; from a risk management point of view, insurance is an effective measure of risk management.

2.2. SCP Paradigm

The SCP analysis framework is a method of studying industrial organization created by the Harvard School. Its formation has mainly gone through two stages: the first stage is that Bain's "Industrial Organization" published in 1959 proposed a "structure-performance" model that inferred the effects of competition from market structure. He believes that judging whether an industry is competitive cannot only be based on market behavior or market performance, but should also be based on several factors of the industry's market structure, such as market concentration and entry barriers. In the second stage, Scherer proposed a complete model of "market structure-market behavior-market performance" in "Industrial Market Structure and Market Performance" published in 1970. He believes that market structure first determines market behavior, and then market behavior determines market performance. More emphasis on the importance of market behavior, believes that only through the analysis of market behavior of different market structures can determine the effect of the market.

3. Analysis of Market Share of China's Insurance Industry

3.1. International Horizontal Comparison

As of the end of 2019, China's insurance industry ranked seventh in the world with total premiums of \$163,047 billion, accounting for 4.01% of the global market share. On July 22, 2019, Fortune Chinese Network released the 2019 Fortune Global 500 list. A total of 129

Chinese companies were on the list, and two insurance companies, PAIC and CLIC, ranked in the top 100.

3.2. Domestic Vertical Comparison

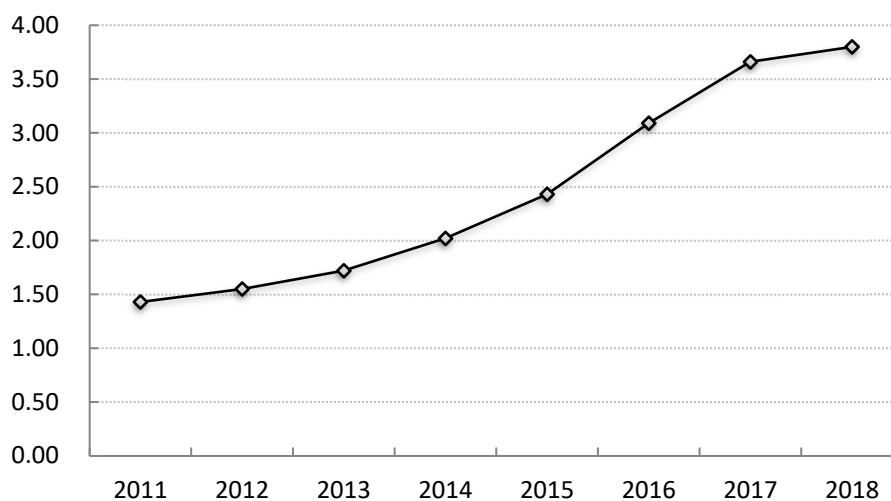


Figure 1. 2011-2018 China's original insurance premium income (trillion yuan)
[Source: China Statistical Yearbook]

The data in Figure 1 shows that the original insurance premium income of the insurance industry in 2018 was 3801.662 billion yuan, a year-on-year increase of 3.92%. In 2017, the original insurance premium income of the insurance industry was 3,658,101 million yuan, a year-on-year increase of 18.16%. In other words, the year-on-year growth rate of original insurance premium income in 2018 slowed by 14.24 percentage points. It can be seen from this that although the growth rate of China's insurance industry premium income has slowed down, the overall trend is still on the rise.

4. Analysis of the Market Structure of China's Insurance Industry

The market structure refers to the characteristics and forms of the market relationship of enterprises. This article analyzes the market structure of China's insurance industry from three dimensions: market concentration, product differentiation, and entry and exit barriers.

4.1. Market Concentration Analysis

Market concentration is used to indicate the relative scale structure of buyers or sellers in a particular market or industry. The main measurement indicators include industry concentration, Lorenz curve, Gini coefficient, Herfindahl-Hirschman index and entropy index. This article mainly analyzes the following three indicators.

4.2. Industry Concentration

Industry concentration is the sum of the market shares of n (usually $4 \leq n \leq 8$) companies with the largest market share in the industry. Analyze the relevant data from 2011 to 2016, as shown in Figure 2:

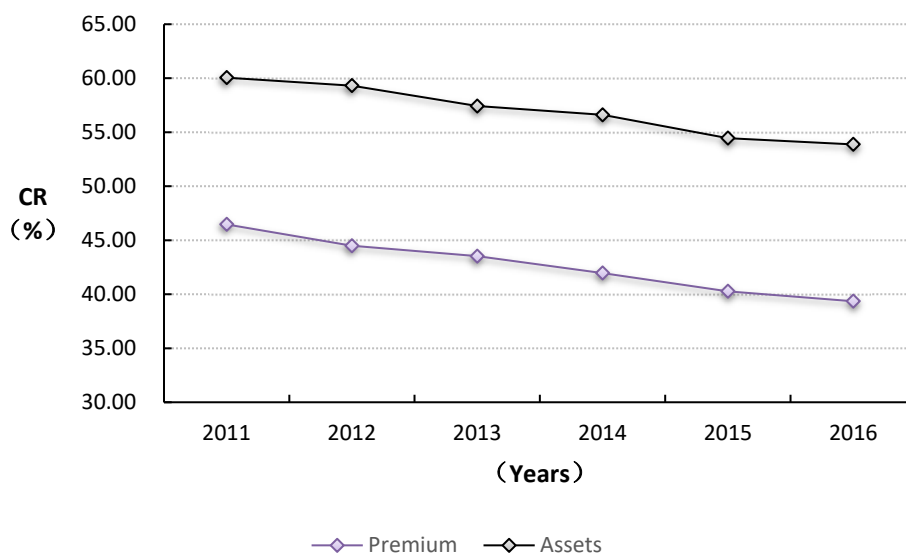


Figure 2. 2011-2016 China's insurance industry concentration index CR4 trend [Source: "China Insurance Yearbook"]

It can be seen from CR4 in Figure 2 that the industry concentration of insurance premiums and assets is in a downward trend. The industry concentration of insurance premiums CR4 is in the oligopoly type IV, and the industry concentration of assets CR4 is slightly higher than the insurance premiums and is in the oligopoly type III. It can be seen from the trend that in recent years, the state has played a positive role in the regulation of the insurance market, resulting in a downward trend in market concentration.

4.3. Herfindahl-Hirschman Index (HHI Index)

The HHI index is the sum of the squares of the market shares of all companies in a particular industry market. The higher the HHI value, the higher the market concentration of the industry. Analyze relevant data from 2011 to 2016, as shown in Figure 3:

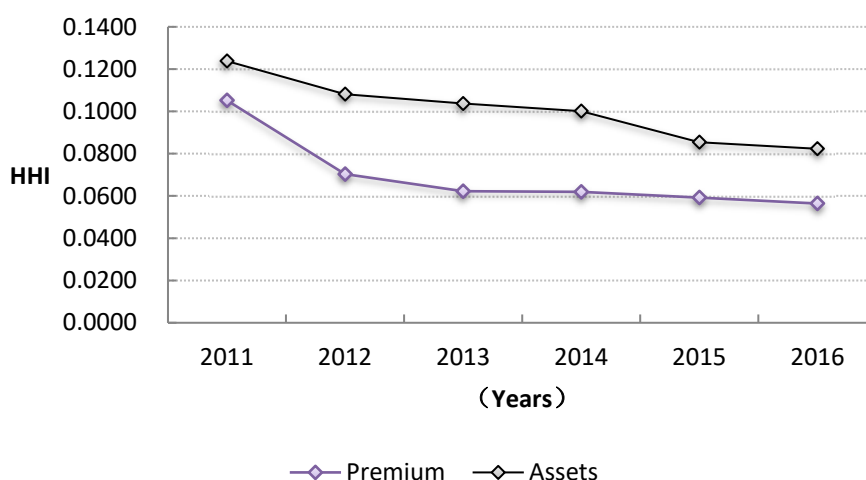


Figure 3. 2011-2016 my country's insurance industry HHI index trend [Source: "China Insurance Yearbook"]

According to the trend in the figure, it can be seen that the high concentration of China's insurance industry has been greatly improved overall. The HHI index of insurance premiums and assets has been declining, gradually turning from monopoly to competition. Although the

concentration is on a downward trend, under the macro background of the development of China's socialist market economy, the insurance industry still needs to continue to optimize its structure.

4.4. Entropy Index (E Index)

The E index has the meaning of average amount of information. The smaller the E value, the higher the market concentration. Analyze the relevant data from 2004 to 2013, as shown in Figure 4:

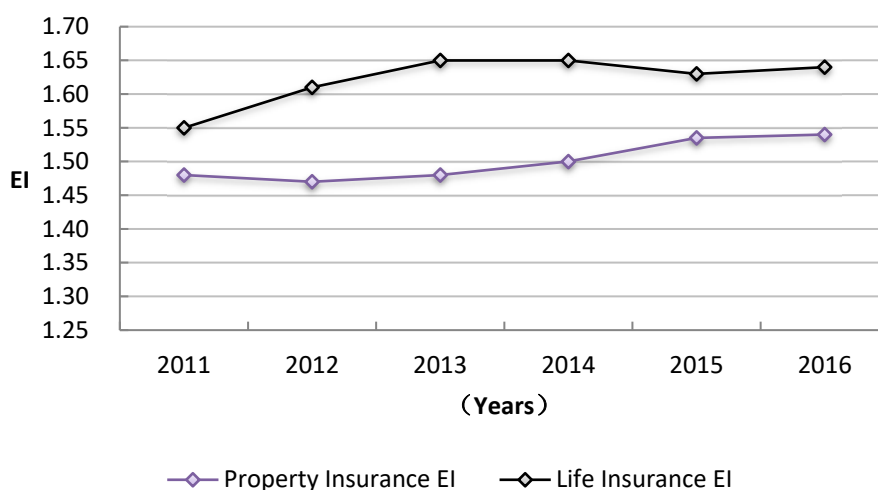


Figure 4. EI Index Trend of my country's Insurance Industry from 2004 to 2013
[Source: "China Insurance Yearbook"]

In 2011, the E-index of property insurance and personal insurance were 1.48 and 1.55 respectively; by 2016, the E-index became 1.54 and 1.64 respectively, showing an overall upward trend. The rise of the E index represents a decline in the market concentration of the insurance industry.

It can be seen that the conclusions obtained from the above measurement indicators are overall the same. That is to say, China's insurance industry is an oligopoly market type, and the market concentration has shown an overall downward trend in recent years.

4.5. Product Differentiation Analysis

At present, homogenization is a major problem facing my country's insurance industry. China's insurance products are mainly divided into two categories: property insurance products and life insurance products. The problem of insufficient differentiation is closely related to product innovation, service innovation, and shareholder orientation.

From the product point of view, although on the surface it is "Millions of Medical Insurance", what is behind it is the lack of innovation capabilities of insurance companies. These products rely on replication and lack actuarial and service capabilities. Although they are conducive to the formation of a broad market, they are not conducive to long-term sound development. From the perspective of service, the general insurance company's sales channels are banking and insurance, so making product purchases more convenient can form a certain degree of differentiation. The commission is the expenditure for establishing the bancassurance channel. The more the expenditure, the easier it is to form product differentiation. Below we will analyze the degree of product differentiation by selecting 13 insurance companies, as shown in Figure 5:

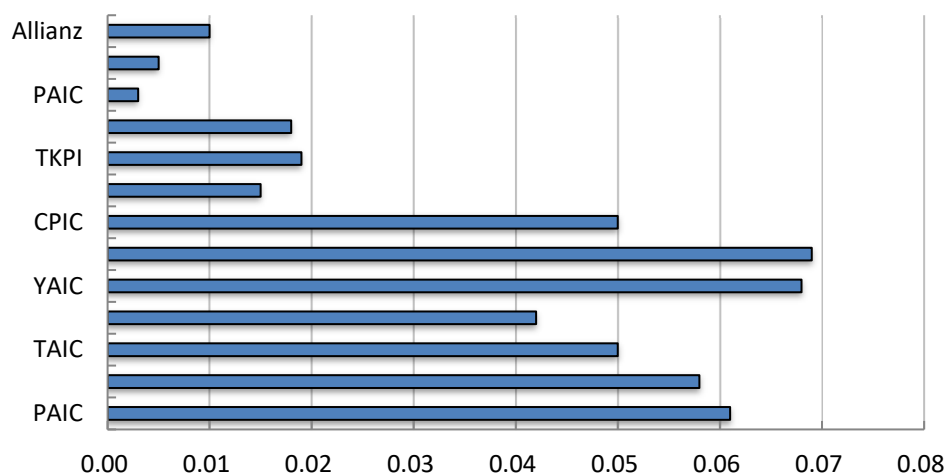


Figure 5. The ratio of commission expenses to premium income
[Source: China Statistical Yearbook]

It can be seen from the figure that there is a big difference between the proportions of these 13 insurance companies, indicating that to a certain extent, product differentiation is closely related to how much insurance companies invest in the bancassurance channel.

Starting from the shareholders, under the purpose of "insurance companies are actually financing", in order to quickly collect premiums in the fierce market competition, product homogeneity has become inevitable. Therefore, the profit pursuit of shareholder investment and the profit orientation of enterprise survival are the fundamental reasons for the lack of differentiation in current products.

4.6. Analysis of Barriers to Advance and Retreat

The barriers to entry in the insurance industry have a dual role: one is to protect the development of insurance companies, especially Chinese-funded insurance companies, and is an important part of the barriers to entry in the existing insurance industry; the other is a very high policy barrier, which has maintained the long-term and highly concentrated market pattern of the insurance industry. The Chinese Insurance Law stipulates that the minimum registered capital for the establishment of an insurance company is 200 million yuan, and it must be paid-in currency capital. This amount is much higher than the amount required by general enterprises. In addition, the separate business model is also one of the factors restricting access to the insurance industry. Exit barriers are generally manifested in four aspects: sunk cost barriers, dismissal costs barriers, combined production barriers, and government policies and regulations barriers. The current exit barriers of China's insurance industry are mainly due to high legal and policy barriers.

The above analysis shows that the structure of China's insurance market is still relatively concentrated, but showing a gradual decline. The degree of differentiation of insurance products is very low, lack of product innovation, and only through sales services to form a certain degree of differentiation. The policy barriers to entry and exit of the insurance industry have also reduced the pressure of competition in the insurance market.

5. Analysis of Market Behavior of China's Insurance Industry

Market behavior refers to the behavior that an enterprise adopts to continuously adjust its behavior in order to achieve its goals in the market, such as maximizing profit and higher market share. Under normal circumstances, market structure determines market behavior, and market behavior in turn affects market structure. Through structural analysis, we can find that

China's insurance market is still concentrated. Therefore, we choose to analyze the market competition behavior of companies:

5.1. Pricing Behavior

At present, lowering the price of insurance products has become the main means of competition for most companies. There are three specific methods: high handling fees, high rebates, and wide coverage. However, no matter what kind of competition means, it not only disrupts the normal order of the insurance market, but also increases the operating risks of insurance companies and ultimately harms the interests of consumers.

The formation of a vicious price war is mainly caused by the current highly concentrated market structure of the insurance industry. As analyzed in the previous article, the current product homogeneity in China's insurance industry is relatively serious, and the only way to differentiate is to look at the convenience of purchasing products. And the more insurance companies with larger assets, such as PAIC and CLIC, the more capable they are to open up more bancassurance sales channels and thus obtain more premium income. Therefore, under the current market structure, some insurance companies with smaller assets can only attract customers by lowering the prices of insurance products. In this way, the insurance industry has fallen into the "quagmire" of vicious price competition.

5.2. Advertising Behavior

Advertising is a form of non-price competition that companies often use in the market. For companies, the most direct function of advertising is information disclosure. In industrial organization, commodities are divided into "a priori" and "posterior". For a posterior product, consumers can only determine its quality after consumption, and insurance is a typical posterior product. The insured must pay a certain premium and when the risk actually occurs, before they can understand the quality of the company's service.

Therefore, advertising is very important for an insurance company's product promotion. Under normal circumstances, companies tend not to introduce the products themselves to consumers, but to deepen consumers' impressions by repeatedly emphasizing the company name and brand name. For example, in television stations, newspapers, and street insurance advertisements, the names of companies are basically promoted. Few insurance companies advertise certain insurance products. Next, I select major insurance brands for analysis, as shown in Table 1:

Table 1. Insurance advertising investment

	Advertising investment (billion yuan)	Year-on-year growth (%)
CLIC	41.42	0.02
PAIC	32.70	1.05
CPIC	32.70	1.05
NCI	58.43	0.03

Data shows that the four major listed insurance companies spent 27.035 billion yuan in advertising and publicity expenses in 2017, with an average daily average of 74.07 million yuan, an increase of 11.90% year-on-year. As can be seen from the above table, these insurance companies, as leaders in the insurance industry, guarantee an equal proportion of their advertising every year, and the advertising effect is very obvious. However, for most SMEs, due to insufficient funds, they cannot effectively promote their advertisements.

5.3. Merger Behavior

Enterprise merger refers to the organization adjustment behavior of two or more enterprises on a voluntary basis by signing a contract in accordance with the law and combining them into one enterprise. Corporate mergers are a "double-edged sword" with both positive and negative effects. Mergers in the insurance industry can produce economies of scale, economies of scope, and brand-name effects, but they may also lead to monopoly in the insurance industry. International mergers in the insurance industry are not uncommon, but under the strict supervision of the China Insurance Regulatory Commission, the insurance industry's regional and insurance competition has not reached a state of fierce competition, so mergers are rarely considered.

6. Market Performance Analysis of China's Insurance Industry

Market performance refers to the final economic results of price, output, cost, profit, product quality, variety, and technological progress formed by a certain market behavior in a certain market structure. For the measurement of the overall market effect, a single economic indicator is not suitable. Therefore, we need a series of diversified, multi-level and multi-directional goals to refer to, such as the efficiency of industrial resource allocation, the efficiency of industrial scale structure, and the status of industrial technological progress. This article mainly discusses the first two aspects.

6.1. Resource Allocation Efficiency of Industry

Beginning in 2012, the supervision of asset activities in the domestic financial industry began an unprecedented round of changes, presenting a new development trend combining practical breakthroughs and deregulation. In this process, asset management in various financial fields has undergone tremendous changes. Therefore, after 2012, the efficiency of China's insurance asset allocation has increased significantly. In 2015, the efficiency of China's insurance asset allocation reached 0.8406. This was mainly due to the expansion of insurance asset allocation channels and the relaxation of proportional restrictions, which effectively saved resources. Up to now, the resource allocation efficiency of China's insurance industry has reached a reasonable level.

6.2. The Efficiency of the Scale Structure of the Industry

First, the scale and structure of the Chinese insurance industry is not very reasonable. As far as life insurance is concerned, the scale of PICC and CLIC is relatively large, and other companies are difficult to match, and the hierarchical structure is unreasonable. Secondly, insurance companies have a single function and cannot meet market demand. Take life insurance as an example. At present, each insurance company focuses on a few limited types of insurance, and providers of medical insurance and elderly care insurance that the public needs are relatively rare.

7. Structural Optimization of the Insurance Industry

Through the research of my country's insurance industry based on the SCP paradigm, we found that the insurance industry has the following problems: First, the structure of China's insurance industry is not yet reasonable, and there are several dominant phenomena; secondly, the current homogeneity of insurance products is serious, and products need to be emphasized. Innovation; Finally, the point that needs to be solved urgently is that there is a hidden price war. In response to the above problems, market-based pricing should be achieved as much as possible, because the premium rates and products generated by market-based pricing are more in line with consumer needs, which will increase market share and improve market

performance. The improvement of market performance will strengthen the government's confidence in opening up the market. Market barriers can be gradually reduced, and more market players can participate in competition in the insurance industry.

Secondly, expand the scale of company assets and improve the industrial organization structure. The ideal market structure should be that there is an appropriate oligopoly, but the strength of each company is equal, mutual restraint, and common development. However, in the current market structure of the insurance industry, there are two dominant patterns-PAIC and CLIC. This has caused some small companies to struggle to survive, which is not conducive to the stability of the market structure. Therefore, we can consider diversifying the equity structure to expand the asset scale of insurance companies.

Thirdly, gradually relax business control appropriately and integrate innovation into insurance products. It can be seen from the above analysis that the current insurance products tend to be homogenized, so insurance companies should increase their investment in product innovation. However, due to the strict approval of insurance products by the China Insurance Regulatory Commission, its ability to innovate is limited. Therefore, based on the current situation, we can start from two aspects: on the one hand, insurance companies should actively develop new products in line with market demand; on the other hand, the regulatory authorities should appropriately relax the control of new products on the market and simplify the listing procedures.

Finally, expand the international business of insurance companies and enhance their international competitiveness. At present, China's insurance industry is only a sub-market of the global financial industry market. Therefore, the domestic insurance market should improve its own level, improve operating efficiency, and actively expand international business to be in line with the global insurance industry.

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