



# The Impact of Covid-19 on Chinese Insurance Market

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**Abstract.** In 2020, the Covid-19 spreads around the world, this research focuses on the influences of Covid on the Chinese insurance market. By using theoretical and data analysis, this study finds that this pandemic has negative impact on the market in the short term. There is a sharp decrease in the total premium collected for both social and commercial insurance. However, they rebound in the midterm, when China has control over the spread of the epidemic and resurgence of social activities. In the long term, Covid has a positive effect on the insurance market. People have reduced their prejudice against insurance after the Initiatives of insurance companies in times of this crisis. Furthermore, market is aware of their high dependence on offline sales and imperfection of online platforms. In addition, it also increases the demand of public to purchase insurance.

**Keywords:** China · Covid-19 · insurance market · negative effect · positive effect

## 1 Introduction

Covid brought the complete lockdown of China, ban on travel and public gatherings. People's behavior and their views on things strongly affected during this pandemic. There was research of Covid's impact on equity markets, various energy sector and socioeconomic factors and household spending and consumption [1], while there were fewer studies on the insurance market. This study explores how Covid impact Chinese insurance market in the short-term, midterm and long term and whether the impact is different for social insurance and commercial insurance. Theoretical and data analysis has been used. Studying the Phenomenon of the epidemic, insurance companies can provide better measures to deal with sudden outbreaks of pandemic and improve on any possible problem exposed.

## 2 Analysis the Chinese Insurance Market

### 2.1 Background

The insurance industry in China is divided into social insurance and commercial insurance [2]. Social insurance protects individuals from economic hazards (such as unemployment, old age, or disability) and government takes in part. Social insurance mainly

includes social endowment insurance, social medical insurance, unemployment insurance, maternity insurance, and work-related injury insurance. Commercial insurance is profit based and cover a more border range than social insurance. There are two kinds of commercial insurance: property insurance and personal insurance [1]. The backbone of country's multi-level social insurance system is the social insurance, and commercial insurance acts as supplement to social insurance [2].

## 2.2 Negative Short-Term Effect on Social Insurance

China's Social Medical Insurance (SMI) as a representative for social insurance. It was the first one affected by Covid in the social insurance. The data from National Health Security Administrate shows that the income of SMI from January to May in 2020 decreased by 6.82% compared to the same period in 2019 (nearly 62.7 billion RMB). The income decrease of SMI resulted from the 6.86% decrease of income for Basic Medical Insurance for Urban Employees (BMIUE) and 6.77% decrease of Basic Medical Insurance for Urban and Rural Residents (BMIURR) which are the components of SMI [2].

The decrease in the income of BMIUE and BMIURR caused mainly by the decrease in salary and company's layoffs during this pandemic. The strict quarantine policy to fight Covid-19 put a lot of pressure on business operation. Many firms must cut employees' salary and lay off employees to survive. Based on cell phone records and location tracking, it found that from late January 2020 to the end of September 2020, the pandemic increased the unemployment rate by 27–63% [3]. However, for BMIUE, its premium is distributed by employers and employees at the rate set by each Union District [4]. The drops in salary and increase in unemployment rate would directly reduce the total premium collected for BMIUE, half of the premium would be reduced for each company which announced by National Healthcare Security Administration in February 2020. For BMIURR's premium, participating members pay part of the premium, and the remaining is subsidized by a special fund supported by state and provincial government. Compared to BMIUE, the premium paid, and benefit are smaller. As a result, the majority insurer who choose BMIRR are people with relatively low income or even no income, or people with relatively good health condition. During the Covid, this cohort chose to suspend their contact in the short term when there were in unsatisfied economic condition. Overall, the economic stagnation of Covid caused the reduced salary and increase unemployment rate led to the decrease income of SMI.

## 2.3 Negative Short-Term Effect on Commercial Insurance

The financial reports of five listed commercial insurance companies that account for nearly 60% of the market share, their income dropped -82.17%, -69.40%, -71.20%, -64.80% and -67.40% respectively on a month-on-month basis. There is average 71% of income dropped in a month-on-month basis. China Personal Insurance Company Limited's income in Feb is 345 billion RMB. China Taiping Insurance Holdings' income in Feb is 213.06 billion RMB. New China Personal Insurance Company Limited's income in Feb is 88.05 billion RMB. People's Insurance Company of China's income is 323.04 billion RMB. Ping An Property & Casualty Insurance Company of China's income

**Table 1.** The performance of China's Five Major Publicly Listed Commercial Insurance Companies in February

Company Name	Income in February (billion RMB)	Income on a Month-on-Month Basis
China Personal Insurance Company Limited	345	-82.17%
China Taiping Insurance Holdings	213.06	-69.40%
New China Personal Insurance Company Limited	88.05	-71.20%
People's Insurance Company of China	323.04	-64.80%
Ping An Property & Casualty Insurance Company of China	465.74	-67.40%

Source: each company's monthly financial report (Edited by the author)

in Feb is 465.74 billion RMB [2] (Table 1). The sharp decrease in income indicated that there is a strong negative effect of Covid for commercial market. Furthermore, the negative impact for the year-on-year growth rate of monthly premiums of property and personal insurance are comparatively the same. The fixed effect model using monthly 29 provincial panel data of first quarter of 2018, 2019 and 2020 shows the rate dropped 3.08% and 3.33% respectively [1].

For property insurance, car insurance which take nearly 62.91% of the total income of property insurance had a decline [2]. The quarantine policy brought down both freight traffic and people's demand for purchasing new car. The volume of cargo transportation insurance business has declined. The sharp decline in new car sales due the suppression of customer demand has reduced the sales of new motor vehicle insurance business; auto insurance revenue has shown a significant negative growth trend in the short term [5].

For personal insurance, Life insurance premium accounts for about 80% of total personal insurance income, its month-on-month decrease was 77.3% and the year-on-year decrease was 31.1% [2]. The reason is mainly due to how insurance company sell insurance in China. In terms of sales channels, the offline sales are still the main channel for insurance product sales, accounting for close to 60% [5]. Affected by the epidemic, various regions are closed, various roads are closed with limited personnel mobility, insurance agents or salesperson could not communicate with the potential customers. The high dependency on the offline business directly led to a sharp drop in new orders. In addition, the second largest sales channel bancassurance was affected by the delays in bank branch business, reduced passenger flow, and unwillingness of customer managers to communicate with customers, business development was hindered, and premium contributions declined.

### 3 The Recovery for Both Social and Commercial Insurance in the Mid Term

People's Daily states that 99% of national enterprises and over 80% of private small and medium enterprises had already resumed their own production until 15th of April" [9]. As the recovery of the economy, the reduced salary and unemployment rate which is the two components of SMI would be back to the normal level. In addition, the income of BMIUE has quarterly increase from 308.17 billion RMB to 648.68 billion RMB and BMIURR has first quarter's increase from 262.1 billion RMB to 474.6 billion RMB. The income from SMI would rebound in the mid-term. Once the epidemic was under control, people could go to work. Both freight traffic and people's demand for purchasing new car could be back to level before Covid. The income of car insurance also rebounded. For personal insurance, salesperson could conduct face to face conversation, the offline sales channel back to normal.

#### 3.1 The Positive Long-Term Effect for Whole Insurance Market

Firstly, Covid changed people's the perception of the insurance industry. Before the covid, the public had a low degree of goodwill and trust in the insurance industry. During the pandemic, insurance donations of medical staff and volunteers in the insurance industry to fight the epidemic, comprehensive and rapid insurance claims, zero deductibles and cancellation of waiting periods, opening of green channels, providing advance payments. At the same time, the industry's total donations and materials to overseas reached 30.569 million yuan [5]. Those action improved insurance company's image.

Secondly, the insurance company realize their lack of online channel. This epidemic forced the insurance company to put more focus on the improvement of the online platform. The 2020 Insurance Barometer Study found only 41% prefers in-person sales in 2020 [6]. This figure indicated how important the online platform. Promoting the construction and improvement of online insurance as soon as possible can help the insurance industry develop faster.

Thirdly, Covid increase insurance demand. There is a sharp increase in willing can also prove by the increased in Commercial Long-Term Care Insurance. Before the covid, 25.8% of respondents shows their purchase intentions, after the Covid, this figure rise to 37.6% [10].

Besides, more confirmed COVID-19 cases are linked to higher insurance income per capita. Table 2 shows this positive correlation, model takes number of cases cumulated, GDP, income, Deposit and Lockdown as variables, per capita insurance revenue as the dependent variable. \*\* indicates 5% significant level, \*\*\*indicates 1% significant level. From the table, it shows one unit increase in cumulative confirmed case is associate with 0.896 Yuan per capita insurance revenue with 5% level of significance [7].

This increase in demand also can be proved by the increase research frequency on health insurance in Baidu. Taking the Baidu search index for "health insurance" keywords as an indicator of public's willingness to purchase health insurance (Hiw), OLS regression constructed including variable of cumulative case in China (Sev), the

**Table 2.** Covid-19 and insurance demand [7]

variables	Insure_cum		Insure_add	
	(1)	(2)	(1)	(2)
Case_cum	3.38***	0.896**		
Case_add			1.033***	0.308**
GDP		0.275***		0.018
Income		1.424***		0.426***
Deposit		0.76***		0.168***
Lockdown		68.02		36.004**
Observation	482	482	241	241
R-squared	0.433	0.828	0.455	0.772

**Table 3.** Data for Baidu index model

Variable	Sev	Med	Hat	Hiw(-2)
Coeff	0.0001	0.0004	$6.64 * 10^{-6}$	0.652
P value	0.015	0.233	0.017	0.000

positive coefficient of cumulative case (0.0001) shows that the epidemic has a positive impact on individual’s willingness to apply for insurance [8], when cumulative case increases by 10000, the search index doubled than before. This increase in demand can potentially increase the sales of insurance in the long term (Table 3).

$$\begin{aligned}
 \text{Baidu index model: Hiw}(t - 1) = & C_0 + C_1\text{Hiw}(t - 2) + C_2\text{Sev}(t) \\
 & + C_3\text{Med}(t) + C_4\text{Hat}(t) + u(t) \tag{1}
 \end{aligned}$$

### 4 Discussion

The decrease in total premium income for insurance is unavoidable in the short term, but the magnitude for this decrease can be smaller. Chinese insurance market has few measures to prevent the impact of this kind of pandemic which results this huge decrease. For example, for commercial insurance, the product line is not rich enough, the guarantee is not comprehensive enough, and there are too many restrictive clauses [5]. Their insurance market should put more effort on the design of the insurance policy.

Another problem has also been exposed during the Covid. There is insufficient publicity by insurance companies. People has little knowledge about the insurance product and their purpose. Public’s basis towards the insurance market is mainly due to their ignorance for insurance. During the covid, media put more attention to the health insurance which improved understanding of health insurance, people are more willing to insure

[8]. Insurance company should pay more attention to media promotion, use a variety of information platforms like WeChat and Weibo to popularize insurance knowledge and promote insurance products. In this way, the awareness of insurance products will further enhance individual's willingness to purchase insurance.

## 5 Conclusion

The study outlines the phenomena caused by the epidemic in Chinese insurance market. In the short term, the growth rate and revenue amount for both commercial insurance and social insurance had a great decrease. For social insurance, the reason is mainly due to the unsatisfactory economic condition. Taking SMI as an example, many companies had trouble in making profit, they cut salary and laid off employees. People was unable to pay for BMIUE and BMIURR, so the income for SMI declined. For commercial insurance, there is decrease in car insurance for property insurance and less sales in offline sales for personal insurance. The drops of car insurance were caused by the reduced volume of public transport and reduced sales of new motor vehicle insurance business. The smaller offline sales amount is the aftermath of quarantine policy. In the midterm, as the condition for Covid was better, people could go to work and carried out some daily activities. The income gained for insurance company rebound to the level before Covid. In the long term, better image of insurance to the public, attention to online platform and increase demand of people on insurance contribute to the future development of the insurance market. In addition. This study suggests Chinese insurance market should have better policy design prepare for the possible epidemic next time. Besides, more effort should be put on the popularization of insurance product knowledge. However, this research is more focus on what happened, the detail solution for how insurance market should apply is not explored. If detailed suggestion can be given, it will give a great support on Chinese insurance market when encounter the epidemic in the future.

## References

1. Wang Y, Zhang D, Wang X, Fu Q (2020) How does COVID-19 affect China's insurance market? *Emerg Mark Financ Trade* 56(10):2350–2362. <https://doi.org/10.1080/1540496x.2020.1791074>
2. Xia Y, Li S, Meng K (2020) The impact of the COVID-19 on the insurance industry in China. *Front Econ Manag*, 28–44. [https://doi.org/10.6981/FEM.202012\\_1\(12\).0006](https://doi.org/10.6981/FEM.202012_1(12).0006)
3. Barwick PJ, Deng Y, Huang X, Li S, Li T (2020) COVID-19 pandemic and unemployment: evidence from mobile phone data in China. *SSRN Electron J*. <https://doi.org/10.2139/ssrn.3755371>
4. Meng Y, Zhang X, Han J (2019) The impact of medical insurance programmes on the health of the insured: evidence from China. *Int J Health Plann Manage* 35(3):718–734. <https://doi.org/10.1002/hpm.2931>
5. Sun W, Yang L, Wang M, Liu C (2020) The impact of the new crown pneumonia epidemic and the transformation and development of the insurance industry: short-term and long-term perspectives. *Econ Manag Sci*. <https://kns.cnki.net/kcms/detail/detail.aspx?dbcode=CCJD&dbname=CCJDTEMP&filename=BXLS202105001&v=PjPydynOCs%25mmd2B8uw4oA4Trg8IyL636SLCbUMGYghkPFDV4GtW%25mmd2BK1r5VRZeHctL1CtY>

6. (2020) Facts + Statistics: Life insurance III. <https://Www.Iii.Org/Fact-Statistic/Facts-Statistics-Life-Insurance>. Accessed 28 Aug 2021
7. Qian X (2021) The impact of COVID-19 pandemic on insurance demand: the case of China. *Eur J Health Econ* 22(7):1017–1024. <https://doi.org/10.1007/s10198-021-01344-7>
8. Zhang J (2020) The new crown pneumonia epidemic has increased residents' willing to apply for health insurance?—empirical research based on Baidu index. *Econ Manag Sci*. <https://doi.org/10.3969/j.issn.1003-9031.2021.04.002>
9. (2021) People's Daily. [http://www.gov.cn/xinwen/2020-04/17/content\\_5503281.htm](http://www.gov.cn/xinwen/2020-04/17/content_5503281.htm). Accessed 8 Sept 2020
10. Xu X et al (2020) Does COVID-2019 have an impact on the purchase intention of commercial long-term care insurance among the elderly in China? *Healthcare* 8(2):126

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