ISSN 2959-6130

Impact of COVID-19 on the Effectiveness of Financial Management of Insurance Companies in Mainland China

Tiffany Jin[1,*] and Zihan Chen[2]

[1] The Stony Brook School, Long Island, 11790, USA, tiffany.jin2007@gmail.com
[2] Hefei Ansheng Thomas School, Hefei, 230088, China, 1994099573@qq.com
*corresponding author

Abstract:

The COVID-19 pandemic starting in 2019 has brought significant disruption and turbulence to the global economy, specifically the financial sector. At the same time, the increased awareness of risk in businesses, governments, and individuals should alleviate this disruption to the insurance industry. However, the general trend of the Chinese insurance industry varies among companies, specifically into three types: companies with healthy financial conditions and positive subsidiary expansion, unhealthy financial conditions and negative subsidiary expansion, and unhealthy financial conditions and positive subsidiary expansion. By studying five listed prominent insurance companies in China using qualitative methods, researchers found a general relation between the financial metrics of an insurance company and the subsidiary expansion number, but this relationship isn't inclusive. The cause of this variation is the difference in choosing a risky or prudent financial strategy and the adaptation to digital transformation.

Keywords: COVID-19, Crisis, Insurance, Expansion, Financial Strategy.

1. Introduction

A crisis is an unstable and upheaval period where decisive decisions and changes will happen, and it tends to both positively and negatively influence companies depending on their industries. One particularly interesting industry is that of the insurance market, wherein crisis tends to accentuate perceived risk with the potential to increase the demand for insurance products, yet on the other hand, also create short-term financial pressures that can inhibit supply-side innovation. Thus, even though the demand for insurance products may increase, insurance companies may differ in their response to the crisis and its effect depending on variations in their capacity.

For instance, Prudential, as an insurance giant, rapidly adapts its digital transformation after the COVID-19 pandemic with its profound financial position and digital infrastructure. In doing so, they introduce new products specifically dealing with pandemic conditions, like more flexible life insurance options and specific COVID-related risks influence, and successfully get through the shock. However, smaller regional insurers mainly tried to maintain their solvency and stay in business rather than innovate due to their restricted resources. Hence, they can't take the drastic increase in customer demand and their market share is likely taken by bigger and more flexible competitors. Furthermore, researchers still need to understand whether and how insurance companies expand their operations in the face of crises. These are important research gaps to address, as such knowledge might allow insurance companies to better prepare for and respond to crises. This article will employ qualitative research to explore company-level variation among insurance companies in response to crises. We examine the interaction between the financial structure of five listed insurance companies in mainland China, the COVID-19 crisis, and the companies' expansion from 2018-2023. Our study contributes to existing theories of organizational responses to crises.

The paper consists of five sections: section 2 is a literature review focusing on previous relevant studies; Section 3 is the hypothesis, which explains the implications of the two theories; Section 4 deals with the research methodology of the article; Section 5 analyzes the results and discussion; and section 6 includes the conclusions.

2. LITERATURE REVIEW

The impact of the crisis on financial and operation performance has long been the main field of study in academia worldwide, diverse and in-depth studies have been done by scholars, resulting in extensive outcomes. For instance, Alvarez et al. (2014) discuss the relationship between the environmental and financial performance of businesses during the global economic crisis. The result shows that during times of crisis, the synergy between environmental and financial performance increases [1]. The COVID-19 epidemic is the largest health crisis after the Infectious Atypical Pneumonia pandemic in the 21st century. Specifically, the epidemic has a tremendous impact on the insurance industry, since insurance plays a vital role during times of crisis. The insurance industry provides financial protection and risk management solutions for individuals, companies, and governments. Hence, when the actual and perceived risk inflates during the COVID-19 epidemic, the demand for insurance products, specifically health insurance in mainland China, increases. In recent years, the COVID-19 pandemic has disrupted China's economic growth normalization. Even though China maintains a strong current account surplus, the capital flows are volatile under COVID-related restrictions, especially regarding the labor market and consumer price inflation (World Bank Group, 2022) [2]. Pulawska K (2021) finds that the COVID-19 pandemic has severely influenced the European insurance industry, which impacts the market stability in Europe, and brings up concerns about the solvency of insurance companies. Pulswaska attributes this phenomenon to the unbalanced number of claims and insurers's capital and solvency stability caused by COVID-19. The researcher evaluates the financial statement data of 27 insurance companies across Europe from 2010 to 2020 and concludes that the pandemic has a distinct negative influence on the European insurance industry. Specifically, German and Italian insurance companies face a decrease in return on assets (ROA); Belgian, French, and German insurance sectors face a decrease in solvency ratio during the pandemic [3].

Furthermore, in China, the pandemic has a negative relationship to the insurance demand in the short term, while a positive relationship to the insurance demand in the long term (Cai, 2022). [4] Tang Liu's (2023) study shows that affected by the epidemic, China's insurance industry is mainly facing four major financial risks: First, financing risk, the epidemic compressed the demand for insurance, adversely affecting the source of income and the pressure on capital replenishment; second, investment risk, the epidemic led to increased volatility in the financial market, affecting the insurance company's investment returns; third, operational risk, the epidemic restricted the expansion of the insurance company's offline business, which lowered the operating efficiency and increased claims expenses; and the fourth is the income distribution risk, the decline in premium income squeezed the profit level and reduced the dividend-paying capacity. [5]

Both Chinese and foreign studies have shown that the COVID-19 pandemic negatively influences insurance industries. Meanwhile, it is unclear whether and how insurers expanded their business operations during this period. On one hand, Insurance demand would increase after the pandemic in the long term (Cai, 2022) [4]. Therefore, it is possible when the demand increases, if insurance companies apply an effective financial strategy, a healthy financial structure and growth in subsidiary companies can be seen. On the other hand, Insurance demand decreases after the pandemic in the short term (Cai, 2022) [4] and insurance companies face various financial risks (Liu, 2023) [5].

3. RESEARCH METHODOLOGY

This section aims to provide an overview of the methodology adopted in this study. We analyzed the annual reports of five listed and well-known insurance companies, Ping An Insurance, People's Insurance of China, Xinhua Insurance, Pacific Insurance, and Life Insurance, from 2018 to 2023. First, the research question 'The impact of COVID-19 on the effectiveness of financial management of insurance companies in mainland China' was clarified: specific questions or hypotheses were identified to guide data collection. Select the qualitative and quantitative methods to be used based on the research question. Next, determine the use of data collection methods. Collect data from financial reports and CSMAR and implement tabular data collection methods. A representative sample was selected from the overall population of gearing ratios, return on investment, operating margins, and basic earnings per share growth rates. Process and clean the data after collection to ensure accuracy and consistency. Develop a conceptual framework to illustrate the relationship between variables.

For each insurer that opened a new subsidiary globally each year, data was collected using the CSMAR website and archived data, as well as tabular methods. Overseas subsidiaries and Chinese subsidiaries and their registered capital were also collated for each year, and then complete data were obtained. These data can provide a clear idea. After collecting the data, it is possible to analyze the situation of each company before and after COVID-19 more accurately. The most important are the 14 individual pieces of data for each company for each year, some of which can be found in the company's annual report, but others need to be calculated manually. Some of these data can be found in the company's annual report, but others need to be manually calculated. These 4 figures are gearing ratio, return on investment, operating margin, and basic earnings per share. The operating cost ratio is calculated as [operating costs divided by operating income] multiplied by 100%] and the basic EPS growth rate is calculated as [(current basic EPS minus previous basic EPS) divided by previous basic EPS] multiplied by 100%].

4. RESULTS

4.1 Statistic Presentation

The following charts are a collection of metrics data that visualize the financial structure and expansion measure of each insurance company. A range of analytical methods were considered to ensure that robust empirical results were obtained. Therefore, the next sections are divided into line graph statistics, descriptive statistics, and correlation analysis. Be able to capture the characteristics of the data and its distribution.

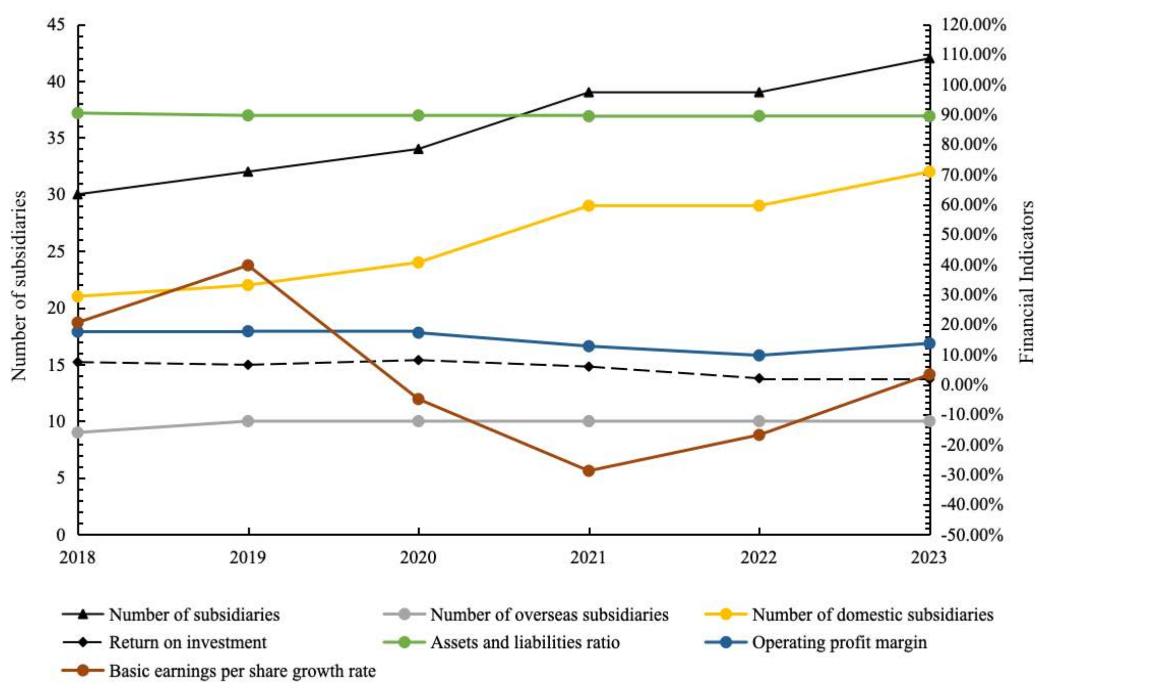

Figure I Ping An Insurance Company of China

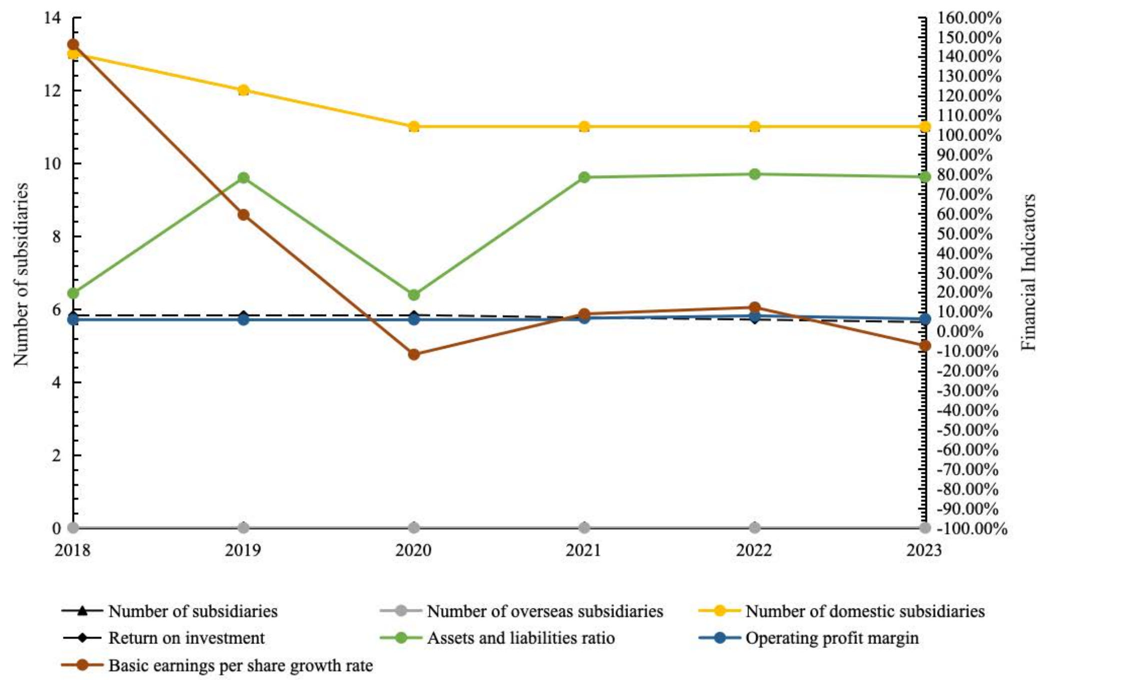

Figure II The People's Insurance Company of China

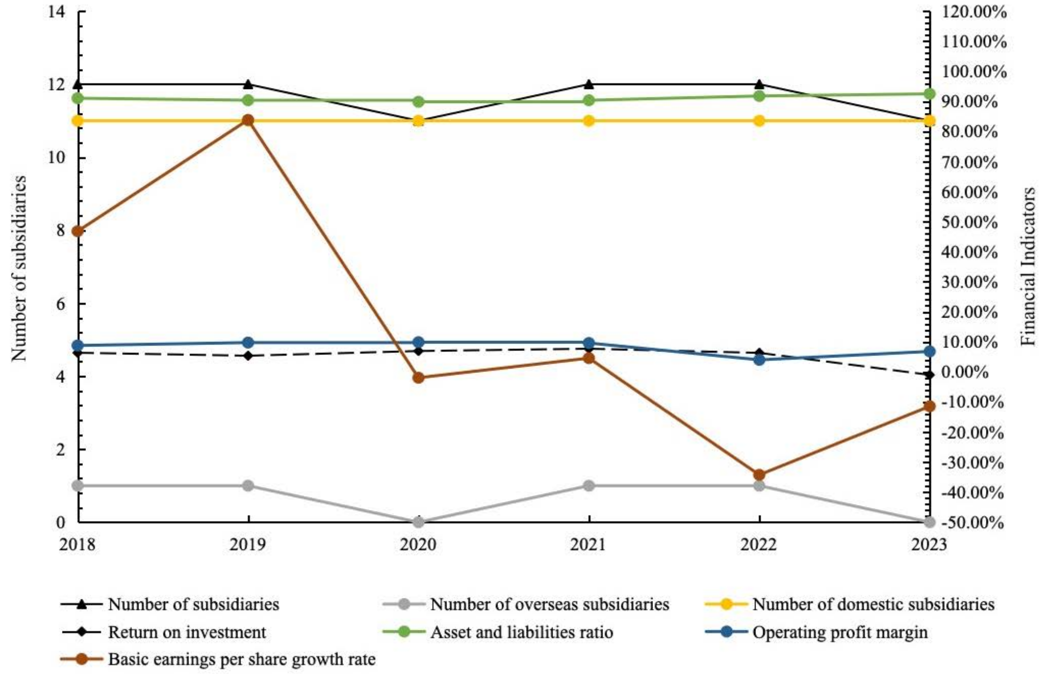

Figure III China Xinhua Insurance Company

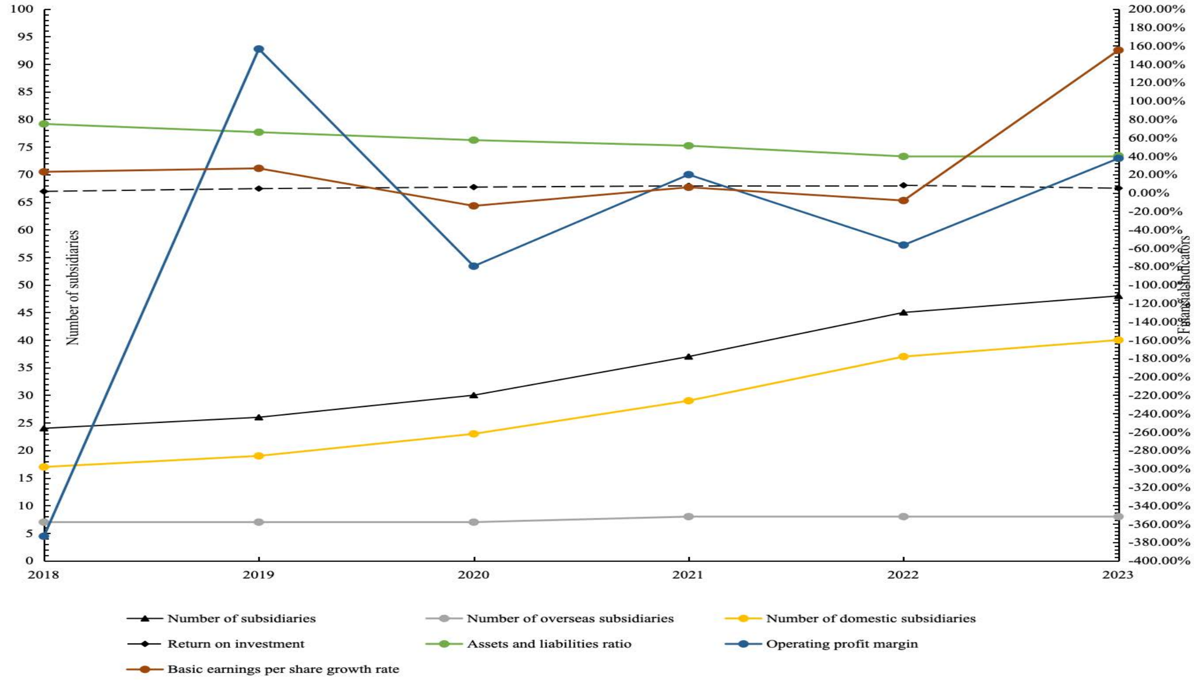

Figure IV China Pacific Insurance Company

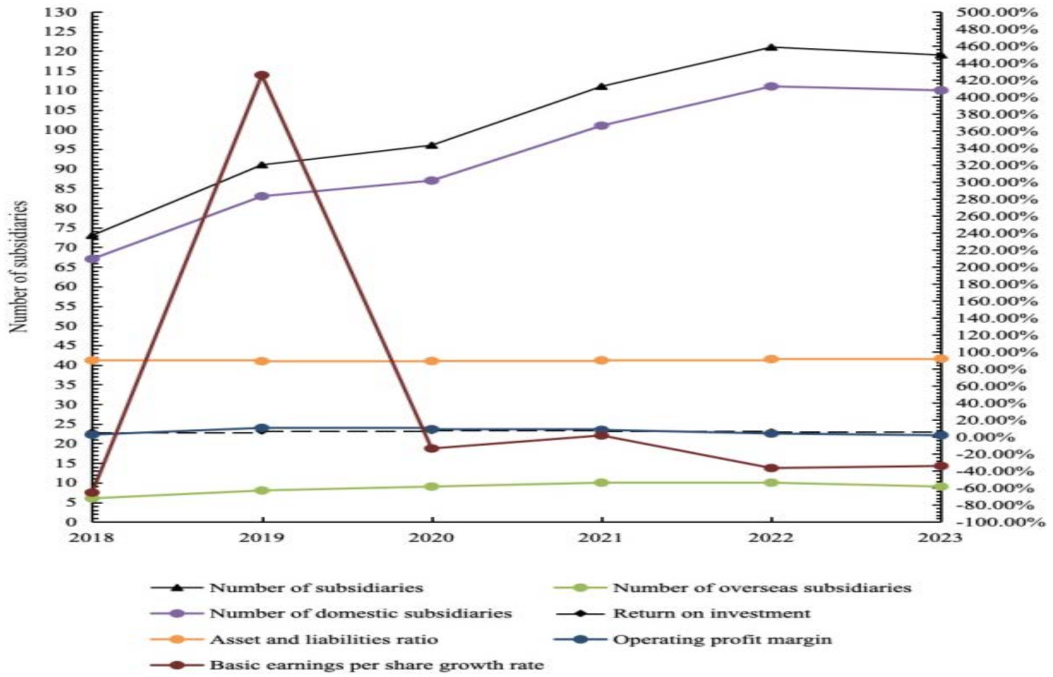

Figure V China Life Insurance Company

4.1.1 Healthy Financial Condition and Growth

Figure I and Figure IV above demonstrate Ping An Insurance of China and China Pacific Insurance Company's financial structure under COVID-19.

The graph showcases the two company's resilience and long-term strategy. Both companies have a healthy financial condition and an expansion of subsidiary companies, this section will specifically examine their financial health using Ping An Insurance of China as an example. The number of overall subsidiaries has a more drastic increase in post-COVID years especially from 2020 to 2021, compared to pre-COVID years. The number of domestic subsidiaries seeks a similar trend of increase, while the number of overseas subsidiaries each year remains constant post and pre-COVID. This indicates that the expansion is likely exclusive to mainland China. Furthermore, the assets and liabilities ratio has a constant decrease from pre to post-COVID. From a significantly high ratio of 74.99% in 2018, which is above 60%, seen as risky, to eventually 40.44% in 2023, which is in the range of 30%-60%, indicating Ping An's condition is healthy and normal. Ping An's basic earnings per share growth rate is in a dangerous range. There is a significantly unstable growth, with the highest rate up to 39.70% but the lowest down to -28.77%. The return on investment rate steadily declines to a dangerous range below 3% during 2022 and 2023, post-COVID, from a relatively healthy rate from 2018 to 2021. The operating profit margin remains in a relatively constant and healthy range along with a notable decline, showing no significant influence from COVID-19. In general, Ping An Insurance Company of China implements an effective financial strategy resulting in healthy financial conditions and expansion, particularly in mainland China.

4.1.2 Unhealthy Financial Condition and Decline

Figure II and Figure III above demonstrate The People's Insurance Company of China and China Xinhua Insurance Company's financial structure under COVID-19.

The two figures shown above demonstrate the financial health condition, resilience, and long-term strategy of the two companies, both of them having a bad financial condition and a negative expansion of subsidiary company numbers. This section specifically examines China Xinhua Insurance Company. The number of subsidiary companies of Xinhua has fluctuated from 2018 to 2023 but generally has a decreasing trend. Its foreign subsidiary company number remained 0 over the six years, implying that the company mainly focuses on expansion in mainland China. Moreover, Xinhua's assets to liabilities ratio constantly stays in a constantly high and dangerous range with every year's data over 89%. The high assets-to-liabilities ratio demonstrates that the company is relying too much on loans and is at high risk of not being able to pay off, showcasing high instability. The basic earnings per share growth rate has experienced significant fluctuation, from an enormously high rate of 46.82% in 2018 and also growing to 83.86% in 2019, to a dangerous range of negative growth in 2020. Furthermore, not much improvement has been made in adjusting this rate, since it stays at -11.43% in 2023. Meanwhile, Xinhua's return on investment rate fluctuated between 2018 to 2022 but drastically dropped to a significantly dangerous rate of -0.98% in the year 2023. Both fluctuation and drastic drop indicate an unhealthy return on investment. Xinhua's operating profit margin remains in a fairly healthy range, but fluctuation. It showcases the efficiency and profitability of the company, but dropped in the year 2022, from 9.62% to 4.02%, which is drastic. Overall, China Xinhua Insurance Company is under an unhealthy financial condition, and seeks a negative expansion rate of subsidiary companies, mainly due to the instability and the lack of funds and financial flexibility caused by unhealthy financial conditions.

4.1.3 Unhealthy Financial Condition and Growth

Figure V above demonstrates China Life Insurance Company's financial structure under COVID-19.

The figure above demonstrates the financial health condition, resilience, and long-term strategy of China Life Insurance Company, an outlier in the research. China Life Insurance Company has an unhealthy financial condition but showcases the greatest growth rate of subsidiary expansion in all five companies being studied. As shown, China Life's subsidiary companies have always been on an increasing trend, with both domestic and foreign growth, indicating a balanced expansion strategy. The assets to liabilities ratio of China Life has remained in a dangerous and high range from 89.02% to 92.02%. This implies high risk but also provides companies with sufficient funds and financial flexibility. The return to investment rate has remained in a healthy range but at a decreasing rate. Additionally, the operating profit margin has fluctuated. From a dangerous rate of 2.65% to a healthy and profitable range in 2019-2021, but then return to a dangerous range starting from 2022. This fluctuation indicates a decline in operational efficiency and profitability. The basic earning per share growth rate for the majority of the time has been in a highly dangerous range from -65.49% to 1.69%, but it has drastically increased in 2019, yielding 426.64% growth. In general, China Life Insurance Company has an unhealthy financial condition but seeks the most growth in subsidiary expansion.

4.2 Findings and Discussion

Through careful data collection, the study finds that generally there is a positive and direct relation between the financial health condition of a company and its growth in subsidiary expansion. Where a healthy company tends to increase the number of its subsidiary companies, and an unhealthy company would demonstrate a decline. This is due to the stability, profitability, and financial flexibility that a healthy financial structure provides, and these qualities are essential for enabling the opening of new subsidiary companies. For instance, China Pacific Insurance Company has a relatively healthy financial condition under the shock of COVID-19 and seeks expansion. Specifically, it significantly reduces its assets to liabilities ratio from a dangerous rate of 74.99% in 2018, pre-COVID, to a healthy range of around 40% after COVID-19, which helps the company to increase its return on investment rate and stabilize its operating profit margins. Additionally, CPIC not only positively develops digital transformation, improving its efficiency, but also diversifies its health and life insurance product in address to the increase in insurance demand during the pandemic. These measures, with the prudent expansionary strategy, enable CPIC to expand its subsidiary number from 24 in 2018 to 48 in 2023. On another hand, Xinhua Insurance Company did not seek a subsidiary expansion after the pandemic due to its high leverage and inability to adapt to the new economic environment. Unlike other companies like CPIC which rapidly developed digital transformation and diversified their insurance product, Xinhua did not. Therefore,leads to reduced investment returns and declining profitability. All these financial stress and the negative earnings per share that emerge after COVID, Xinhua is not able to pursue subsidiary expansion.

However, during the research, China Life Insurance Company stands out with its massive subsidiary expansion while having an unhealthy financial condition. China Life Insurance Company achieves this through its risky financial and expansion strategy and also its unique features. Along with other companies, which all experienced an increase in basic earnings per share ratio in 2019, China Life has a 4 times greater increase. However, in the year after, China Life's basic earnings per share ratio dropped to a dangerous range, and in 2023, its ratio became the lowest of all five companies in the study. This highly fluctuating ratio demonstrates a risky financial strategy. Moreover, its own feature of being one of the biggest state-owned insurance companies in China enables it to receive government support during COVID-19, providing China Life with sufficient funds when implementing its expansionary plan. China Life has also been dominating the insurance market in China for decades, it has adapted to a big scale with a strong market presence and resources, which also contribute to its ability to expand. Lastly, China Life has also developed digital transformation plans that promote efficiency and provide better customer service, while also neutralizing the negative impact of operational drawbacks that COVID has brought.

5. CONCLUSION

In this study, researchers collect and analyze data from CSMAR and the annual report of each insurance company to showcase the health condition of the five listed insurance company's financial structure and measure the number of each firm's subsidiary companies. By doing so, researchers concluded that there is a generally positive relationship between the financial health condition and the subsidiary expansion rate of insurance companies, but a risky financial strategy may also lead an unhealthy insurance company to have a massive expansion of subsidiaries. This study is significant because it addresses a research gap in how special industries like the insurance industry expand their operations under the shock of a crisis. A crisis like the COVID-19 pandemic is likely to happen again, and this research provides information for future insurance companies in crisis in economic stability and recovery. Therefore, insurance companies should focus on adjusting their financial health condition, especially their return on investment and assets to liabilities ratio, in the face of crisis, while also adopting innovative strategies like digital transformation and diversifying their products according to the condition of crisis. Meanwhile, the researchers recommend future research in related regions to include other dimensions of expansion measurement, for instance, revenue. Furthermore, there are some limitations in this study, like the lack of variety for growth measurements and the limited number of insurance companies being studied. Future research should implement more dimensions of measurement and include more insurance companies.

AUTHOR'S CONTRIBUTION

Tiffany Jin- Abstract, Introduction, Literature Review, Findings and Discussion, Conclusion

Zihan Chen- Methodology, Result, Data Table, Reference

ACKNOWLEDGMENTS

Thanks, Evan and Rita for all the support during the process.

References

[1] Isabel, G. & Isabel, M. & García, S. & Cléber da, S. (2013). Climate Change and Financial Performance in Times of Crisis Business Strategy and the Environment. 23, 361–374.

[2] The World Bank Group. (2022). Special Topic-Real Estate Vulnerabilities and Financial Stability in China.202-522-2625.

[3] Puławska, K. (2021). Financial Stability of European Insurance Companies cduring the COVID-19 Pandemic. Risk and Financial Management.

[4] Cai, M. Y. (2022). A study of the impact of the new crown epidemic on the demand for commercial health insurance in China.Economics and management science in insurance.

[5] Qian, X. H. (2021). The impact of COVID 19 pandemic on insurance demand: the case of China.22.1017-1025.

[6] Liu, T. N. (2023). Study on Financial Risk Management of A Insurance Companies under The Impact of COVID-19.