Evaluation of Financial Competitiveness of the Listed Insurance Companies

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Abstract. This paper through the combing of the relevant literatures of financial competitiveness of enterprises, combined with the financial characteristics of the insurance industry, build an index system to evaluate the financial competitiveness of listed insurance companies. Through the method of factor analysis, we extracted and defined two main factors, solvency and operation capacity, then scored each insurance company’s competitiveness from these two main factors aspects to reflect the development conditions of their financial competitiveness. After all, from the aspects of optimizing the assets scale and the investment portfolio, nurturing business growth, and moderate debt management, we propose countermeasures to enhance their financial competitiveness.

1. Preface

As a financial industry, insurance industry plays an important role in dispersing risks in the development of economy. By the end of 2018, four insurance companies of PAIC, CLIC, CPIC and NCI have been listed successfully. The development of insurance companies in China has begun to take shape. However, compared with the insurance industry in developed countries, China's insurance industry is faced with many problems such as small scale, unstable profit, single business type and insufficient development momentum. Therefore, this paper studies the financial competitiveness of the insurance industry, proposes more targeted suggestions for its financial competitiveness, and enriches relevant research.

2. Analysis of financial competitiveness of listed insurance companies in China

From the birth of the first insurance company after the Opium War to now, China's insurance companies have begun to take shape. With the listing of NCI in 2012, there were four listed insurance companies in China. According to the data of statistical yearbook of insurance industry, the premium income of the four listed insurance companies for three years basically shows an upward trend every year. But NCI growth has been steady, with a slight dip in 2015. In terms of total assets, the growth rate is basically stable. But in 2016, due to the impact of the unstable capital market, the net profit of the four companies has almost fallen sharply. Generally speaking, China's listed insurance companies' premium income and the scale of insurance assets are constantly expanding, but the rise of profits is not obvious. One reason is that its high cost makes it difficult to increase its operating profit. Second, the instability of equity capital investment, resulting in the violent fluctuations of investment returns. All of these indicate that their operating financial indicators are not optimistic, and they should constantly strengthen and cultivate their financial competitiveness.
3. Factor analysis of financial competitiveness of listed insurance companies in China

3.1 Construction of evaluation index system of financial competitiveness of insurance companies.

By referring to relevant studies and literature, this paper will select financial indexes into three levels. The first level is to study the overall financial competitiveness indicators. The second level is the four ability indexes for evaluating financial competitiveness. According to the definition and evaluation principle of financial competitiveness, four indexes including solvency, asset quality, profitability and development ability, which are selected to evaluate the financial competitiveness of the four listed insurance companies. The last level is a representative financial index reflecting the corresponding secondary indicators.

3.2 Factor analysis

3.2.1 Moderation test

Using SPSS19.0 data processing, it was found that the value of KMO was 0.543, greater than 0.5, and the correlation between variables was strong, which was suitable for factor analysis. And the p value of Bartlett sphericity test showed 0 (that is significance in the table), which was less than 0.05, again proved that the correlation between variables, suitable for factor analysis.

3.2.2 Extract common factor

According to the total variance interpretation chart, the eigenvalue of the first factor was 4.671, and that of the second factor was 1.755. The eigenvalues of the first two factors were 58.384% and 21.939% respectively, and the cumulative variances of the first two factors were 80.323%. After factor rotation, the cumulative variance remained unchanged, still 80.323%, indicating that the first two factors basically retained the information of the original indicators. Because the eigenvalues of the first two factors were greater than 1, and the cumulative contribution rate of the first two factors was 80.323%, more than 70%, the first two factors were extracted as the main factors. At the same time, the gravel map showed that the selected two principal components have retained most of the financial information, so this paper extracts two principal factors for analysis.

3.2.3 Factor naming

The rotating component matrix showed that factor 1 (F1): cash ratio, premium receivable turnover rate, return on net assets, return on total investment, premium growth rate and total asset growth rate all have higher loads on factor 1. The loads were -0.934, -0.912, 0.814, 0.843, 0.874 and 0.856. So we named factor 1 as management capability factor.

Factor 2 (F2): Self-retained premium rate and asset-liability ratio had higher loads on factor 2, and the loads were 0.864 and 0.868. Therefore, we named factor 2 as solvency factor.

3.2.4 Single factor score

Using factor regression analysis, the factor score coefficient matrices of four listed insurance companies were obtained, and two main factor score calculation formulas were constructed as follows:

\[
F_1 = -0.064X_1 + 0.016X_2 - 0.199X_3 + 0.2X_4 + 0.168X_5 + 0.177X_6 + 0.188X_7 + 0.189X_8 \\
F_2 = 0.478X_1 + 0.501X_2 - 0.043X_3 + 0.103X_4 + 0.207X_5 + 0.130X_6 + 0.011X_7 - 0.132X_8
\]

3.2.5 Financial competitiveness score

The weighted sum score of the two main factors was the financial competitiveness score of the insurance company in this year under the index system. The weight was the proportion of variance contribution rate of each factor to variance contribution rate of all factors (0.58384, 0.21939). Therefore, the financial competitiveness score function constructed in this paper was as follows:

\[
F = \begin{pmatrix} 0.58384F_1 + 0.21939F_2 \end{pmatrix} / 0.80323 \\
F_{\text{Total}} = \begin{pmatrix} F_{2017} + F_{2016} + F_{2015} \end{pmatrix} / 3
\]

Substituting the scores of two factors into the function, we can get the scores and total scores of four listed companies each year for three years, as shown in Table 1.
Table 1  Ranking table of financial competitiveness of four listed companies

<table>
<thead>
<tr>
<th>Name</th>
<th>Every Year's Score</th>
<th>Total Score</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAIC (2017)</td>
<td>-1.216020514</td>
<td>-1.11752</td>
<td>1</td>
</tr>
<tr>
<td>PAIC (2016)</td>
<td>-1.144138819</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAIC (2015)</td>
<td>-0.992414434</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLIC (2017)</td>
<td>-3.898051913</td>
<td>-3.60462</td>
<td>2</td>
</tr>
<tr>
<td>CLIC (2016)</td>
<td>-3.577910842</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLIC (2015)</td>
<td>-3.337899041</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPIC (2017)</td>
<td>-4.328080282</td>
<td>-4.24275</td>
<td>3</td>
</tr>
<tr>
<td>CPIC (2016)</td>
<td>-4.05705649</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NCI (2017)</td>
<td>-5.714273936</td>
<td>-7.05794</td>
<td>4</td>
</tr>
<tr>
<td>NCI (2016)</td>
<td>-7.393535717</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NCI (2015)</td>
<td>-8.066016039</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

By scoring the financial competitiveness of the four listed insurance companies, the higher the final score of each insurance company, the stronger the financial competitiveness shown by the two main factors. From the above calculation results, we can see that Ping An has always been in the leading position and performed well. The higher the score of the two main factors, the stronger the ability expressed by the data of eight financial indicators. For example, NCI has the highest solvency factor score, and its solvency performance in financial competitiveness is strong.

4. Policy proposal

4.1 Expand enterprise scale and increase scale efficiency

From the total score of financial competitiveness, it can be seen that the final rankings of the four listed insurance companies are in complete agreement with their market share and asset size. This also reflects that in China's insurance industry, companies with larger scale and higher market share are easier to obtain brand effect, win the favor of the consumer market; easier to get lower unit costs and achieve economies of scale. Therefore, all the insurance companies, especially the two smaller listed insurance companies, China Pacific Insurance and Xinhua Insurance, should constantly improve their asset size to occupy the market. Especially in the aspect of premium income, they can occupy the insurance market by enriching insurance categories, accurately locating target users, improving sales ability and enhancing brand effectiveness, which can reduce the unit cost and improve profitability for financial competitive advantage.

4.2 Based on operating efficiency, maintaining reasonable liabilities

From the above empirical results, we can see that the variance contribution rate of the operating ability factor is more than 50%. It can be seen that the operating ability has a significant impact on the financial competitiveness of insurance companies, and even has absolute influence in the sample of this paper. Due to the particularity of the insurance industry, the liability scale and asset scale of the insurance enterprises must comply with the regulations of China Insurance Regulatory Commission, and all insurance enterprises will guarantee a certain cash holding scale. Therefore, on the basis of maintaining this cash ratio, insurance companies with large liabilities and relatively loose sales credit conditions, such as Ping An Insurance, China Life Insurance, should increase its solvency to maintain a safe business scope and control its business risks. Enterprises with small liabilities and relatively conservative sales credit conditions, such as China Pacific Insurance and Xinhua Insurance, should increase the scale of their liability operations to reduce capital cost and improve profitability. However, the scale of liabilities must be controlled within a reasonable range to guarantee the solvency of the enterprise. Due to its small market share and weaker anti-risk ability, it is better to maintain a larger size of realisable assets and control business risks through prudent investment.
4.3 Optimize the portfolio and enhance the risk-resisting ability

Since 2016, the capital market has been in a continuous downturn, and the rate of return on investment of insurance companies has also dropped dramatically, thus affecting the growth of their profits. This reflects the overall trend of the insurance industry, which is greatly affected by the fluctuations of the capital market. However, it's also worth noting that Ping An has a remarkable performance here because it still achieved growth in earnings per share even with the decline in earnings per share among all insurers in 2016. Therefore, Ping An's comprehensive financial strategy has reference significance for all insurance companies. In particular, China Life should reasonably allocate its investment portfolio and disperse risks so as to get rid of the impact of financial competitiveness decline caused by capital market fluctuations.

4.4 Develop their own potential, improve the growth ability.

Having a good enterprise development ability can make insurance enterprises obtain a strong momentum of development, improving market expansion ability and expected revenue. From the empirical results, we can also see that because of its excellent development ability, China Pacific Insurance and Xinhua Insurance can maintain the continuous improvement of financial competitiveness even under the background of declining investment returns and narrow the gap between China Ping An and China Life. Therefore, insurance companies should continue to reach their potential and improve the ability of investment income from operating income. This requires it to continue to raise premium income from various perspectives. Ping An and China Life should try to tap potential customers in China, increase publicity to enhance people's insurance consumption awareness and expand income. China Pacific Insurance and Xinhua Insurance should expand their market share, develop more types of insurance products, increase their premium income through joint insurance, and maintain a higher rate of premium growth to improve growth. Finally, each insurance company should increase its own asset size, obtain more assets through various channels of financing to improve the ratio of investable assets, enhance the growth of assets and enhance its financial competitiveness.

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References


