

## Study on Evaluation System of Sustainable Development Capability of Chinese Property and Casualty Insurance Enterprises

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### Abstract

It is important but difficult for evaluating sustainable development capability of Chinese property and casualty insurance enterprises. From the perspective of core capability and based on previous study about factors and capability structure model, the paper builds up the first grade indexes of the evaluation, which include financial capability, learning and innovation capability, environment capability, management capability and corporate governance capability. Furthermore, the present study proposes the second grade indexes of first grade indexes.

**Key words:** Sustainable development; Evaluation; Core capability

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### INTRODUCTION

The U.S. sub-prime mortgage loans triggered a global financial crisis, which, dealt a heavy blow to the global economic development. Overall, the Chinese economy has maintained steady growth during this period. In 2008, however, it was also affected by the financial crisis, which

caused a sharp decline of the economy. Its impact on the financial enterprises was of great concern. The insurance industry, according to related data analysis, was mainly influenced in the following three aspects:

(1) Chinese insurance institutions suffered direct investment loss in overseas markets. Currently, because of the sharp decline in the stock market and other financial markets, any institution that had overseas direct investment has suffered a loss.

(2) The ups and downs of the capital markets has a significant negative impact on the use of funds of the insurance companies. Large fluctuations might be good opportunities for speculators, but it is absolutely a bad investment environment for insurance companies. Insurance funds need stable and healthy market environment. In addition, it also affects the underwriting business. To a large extent, investment depends on international and domestic market conditions. Investment and underwriting will be adversely affected in volatile overseas and domestic financial markets, especially when competition for underwriting is already very intense.

(3) Insurance demand plummeted. The whole economy declined and caused the number of unemployed to increase, leading to a reduction in income and a sharp drop in corporate profits. Exports activities slow down. Companies, families and individuals are less willing to purchase insurance and their insurance buying power also goes down. On the other hand, the distrust of the insurance industry also causes a decline in people's willingness to buy insurance.

The previous study analyzed in details the connotations, impact factors and capability structure model of sustainable development of Chinese property and casualty insurance companies. But the validity evaluation was not conducted. Therefore, based on the design principles of the index system, this article attempts to build the index system for sustainable development capability, based on previous analysis results of the factors.

## 1. LITERATURE REVIEW

The evaluation of the sustainable development capability is a difficult and crucial aspect of theoretical research. Few studies exist on this issue. Professor Robert C. Higgins, American financial expert, put forward the concept of sustainable growth rate from a financial point of view for the first time (Robert, 1998). It is common for national economy to use green GDP or sustainable income NNP as the core indicators of macroeconomic statistics instead of GDP. Chen Yao et al deduced from this fact that in those enterprise statistical indicator systems whose center is sustainable development, indicator of current period profit rate should be deducted appropriately. A new indicator, "sustainable earning power", should be used as the core of evaluation. Based on that, a comprehensive evaluation index system of sustainable development of enterprises can be built (Chen & Ma, 2002). Wu Yingyu et al analyzed the influencing factors of the sustainable development of enterprises. They believe that enterprise sustainable competitiveness evaluation index system should mainly include financial, market, technology, management, information, and environment indicators. Using the Analytic Hierarchy Process, they established the enterprise sustainable competitiveness comprehensive evaluation model (Wu, 2003). Based on the dynamic variation of the competitiveness factor score relative to time, Yin Ziming et al created the enterprise sustainable development indicators to evaluate the capability of sustainable development of enterprises (Yin, Yu & Chu, 2003). Wang Aihua et al constructed an evaluation index system for sustainable development levels, including a set of indicators such as environmental benefits, economic efficiency and social benefits. They also analyzed and explained each indicator (Wang & Cuan, 2000). In addition, Zhao Wei built an evaluation index system for sustainable development capabilities for machinery industrial enterprises. The system includes target indicators and supporting indicators. An evaluation methodology was also proposed, including the evaluation model of economic development, a single indicator model and the comprehensive evaluation model (Zhao, 2002). From the aspects of entrepreneur factors, product chain factors, enterprise capability factors and macro environmental factors, Hou Heyin et al built an evaluation index system for sustainable development capabilities for high-tech start-ups (Hou & Wang, 2003). Yu Chen et al constructed an evaluation index system from the aspects of the state of the economy, human resource conditions, technical conditions, and harmonious conditions. They also explained each indicator (Yu, 2001).

The evaluation of sustainable development in existing research literature is mostly done through the points of view such as scale of business and growth of financial results. These indicators are rather comprehensive and reflect the overall development of the enterprise within

a period of time in the past. They provide multi-angle information for the evaluation of enterprise development, but there are also some deficiencies. For example, the relationship between the growth of various factors and enterprise development cannot be determined quantitatively. It also cannot explain the deeper relationship between enterprise development capability and operating efficiency and capital structure. None of the above evaluation methods considered two important indicators, corporate independent innovation capability and balanced development capability. In addition, some indicators are difficult to quantify and thus cannot facilitate practical application. Therefore, enterprise sustainable development capability evaluation research remains to be further deepened.

## 2. BUILDING INDEX SYSTEM OF SUSTAINABLE DEVELOPMENT CAPABILITY OF CHINESE PROPERTY AND CASUALTY INSURANCE ENTERPRISES

### 2.1 Index System Design Principles

The evaluation index system of sustainable development capability of the property and casualty insurance companies consists of various elements that support sustainable development. Whether the various index elements can be summarized and abstracted comprehensively, scientifically and reasonably will directly affect whether the design and construction of the index system is scientific and reasonable. A few basic principles must be followed.

**(1) The Scientific Principle.** This principle is reflected in the correctness of the understanding of the concept of sustainable development capability of the property and casualty insurance companies, the completeness of evaluation index system design, logical rigor of model and method and accuracy of the analysis of parameters and factors.

**(2) The Systematic Principles.** Sustainable development capability for of the property and casualty insurance companies is a capability system. It consists of capability elements in all aspects and all levels of the companies' development. Also, the various resources, internal and external conditions are continuously being integrated. Therefore, the design of the index system must follow the systematic principle, taking into account the relevance, integrity and objectiveness of various factors related to the sustainable development capability of the property and casualty insurance companies.

**(3) The Principle of Combining Qualitative and Quantitative Evaluation.** Generally, there are two types of index designs of the evaluation of sustainable

development capabilities. One type is display indicators, used to indicate the result of the sustainable development capability. Another type is analysis indicators, used to explain the cause of sustainable development capability. In the design of these two types of indicators, the paper must follow the principle of combining qualitative and quantitative analysis. Qualitative and quantitative evaluation index are both needed for sustainable development capability. This will enable people to have an abstract grasp of the sustainable development capability, while being able to quantitatively analyze the sustainable development capability.

**(4) The Principle of Combining Static and Dynamic Analysis.** Sustainable development capability of property and casualty insurance enterprises is a dynamic process. It is not comprehensive only to examine it from a static point of view, which cannot reflect the law of motion of the sustainable development capability. Therefore, it is necessary to analyze the evaluation of sustainable development capability from a dynamic point of view, and reveal the evolution of the law of the sustainable development by combining static analysis and dynamic examination. Thus, the evaluation system requires both static indicators to reflect the current state of the development capability, and dynamic indicators to reflect the trends of sustainable development potential

**(5) The Principle of Comparability and Practicality.** Comparability means that the evaluation index system should have universal statistical significance. The evaluation from the index system can be compared in time and space, so as to maintain the horizontal and vertical comparability of the evaluation results. Practicality means the design of the evaluation system must be feasible and can be applied in operation.

**(6) The Principle of Focus.** There are many indicators that can be used to build the measurement system of innovation performance of property and casualty insurance enterprises. Using many indicators can improve the evaluation accuracy to a certain extent, but selecting too many indicators will overwhelm key elements. Therefore, the design of the index system should focus on the main aspects and the essential characteristics, making the important indicators of innovation performance of high-tech enterprises stand out. We need to use fewer but better indicators to express what we want to evaluate.

## **2.2 Design of the Evaluation Index System of Sustainable Development Capability of Chinese Property and Casualty Insurance Enterprises**

### **3.2.1 Core Competency Indicators**

After investigating more than 10 property and casualty insurance companies and studying opinions from economic analysts, financiers, capital investment experts, university professors and experts, four major categories of extremely unique elements are selected to evaluate core competency. They are financial capability, learning

and innovation capability, environmental capability and management capability.

#### **2.2.1.1 Financial Capability**

By evaluating financial statements, financial capability reflects the consolidated financial position, operating results and cash flows. Financial position indicates the asset balance status in a certain period of time. It is the most direct indicator of business operations. Operating results are the corporate income performance at the end of the year. It is the most direct indicator of the effectiveness of business operations. Cash flow reflects whether the company has adequate cash at the moment. It is an indicator of business continuity. They can be grouped into three major indicators, profitability and operation capability, solvency, capital flow sufficient rate.

##### **(1) Evaluation Indicators of Profitability and Operation Capability.**

a) Total assets: the sum of the company's current assets, long-term investments, fixed assets, intangible assets and other assets. It is an absolute number that indicates the size of the company.

b) Premium income: the total economic gains of the sale of products, services and transferring the right of use of assets. It is an absolute number that indicates the size of the insurance company's market size.

c) Total profit: the sum of operating profit, investment profit, subsidy profit, operating income and non-operating revenue, minus non-operating expenses. It reflects the company's profits or losses. Losses are marked with "-". It is an absolute number that is a positive index.

d) Net assets: Net assets should be positive. The more net assets a company has, the stronger its economic strength. It is an absolute number that is a positive index.

e) Net assets profit margin = net profit / net asset value  $\times 100\%$ .

The normal range:  $> 0$ . Net assets profit margin evaluates the profitability of net assets and the relationship between net profits and net assets. It is a positive index.

f) Operating income margin = net profit / operating income  $\times 100\%$ . The normal range:  $> 10\%$ . Operating income margin evaluates how much net profit the insurance companies can get for every 100 RMB of operating income.

g) Owners' equity growth rate = (Owners' equity by the end of the year - owners' equity by the end of the previous year) / owners' equity by the end of the previous year  $\times 100\%$ .

Normal range:  $> 0\%$ . It is a positive index.

h) Premium income growth rate = (this year's premium income - prior year's premium income) /  $\times 100\%$ . For companies in operation for more than three years, the normal range is between  $-33\%$  to  $33\%$ ; for companies in operation for fewer than three years, the normal range is:  $> -10\%$ . Premium income growth rate is used to evaluate business development. If fluctuations of this value go outside the normal range, it might indicate a

business policy or management system change and there are unstable factors in the business development. It is a positive index.

i) Rate of return for the use of funds = net income / average capital employed  $\times 100\%$ . In the formula, net income = interest income + investment income Normal range:  $> 3\%$ . Rate of return for the use of funds is mainly used to evaluate the effectiveness of the use of funds.

j) Cost ratio = Operating costs / premium income  $\times 100\%$ . Cost rate is the ratio of operating costs and premium income, reflecting the cost of insurance companies in a certain period of time. It is a reverse indicator.

k) Capital utilization rate = total investment / total assets  $\times 100\%$ . Capital utilization rate refers to the ratio of the total investment and all assets in a certain period of time, reflecting how much the company uses funds in a given period.

## (2) Solvency evaluation

a) Gross premium volume ratio = (premium income + reinsurance premium income)  $\div$  (recognized assets - recognized liabilities)  $\times 100\%$ . The normal range of the value is less than 900%. If the difference between recognized assets and recognized liabilities is zero or negative, the index value is 999%.

b) Quick ratio = liquid assets  $\div$  recognized liabilities  $\times 100\%$ . Liquid asset is the net recognized value in the "Cash and Investment Assets Subtotal" item of the recognized asset sheet. Recognized liabilities are the amount in the "Recognized Liabilities Subtotal" item in the recognized liabilities sheet. The normal range of its value is greater than 95%. If quick ratio is zero or negative, its value is 999%.

c) Retained premium volume ratio = retained premium for the year / (received capital + common reserve fund)  $\times 100\%$ . Retained premium = premium income + reinsurance premium income - reinsurance cost. The normal range of its value:  $\leq 400\%$ . Retained premium volume ratio is mainly used to monitor the volume of the retained premiums. According to the provisions in Article 98 of the Insurance Law, "The retained premiums of the year of a property and casualty insurance companies shall not be more than four times the sum of the capital plus common reserve funds." The higher this indicator is, the lower the company's ultimate capacity to resist risks. When calculating this indicator, if the "undistributed profits" of the company owners are negative, they should be deducted from the item of "Received capital plus Common Reserve Fund". If the value of this indicator exceeds 400%, the Insurance Regulatory Commission of China will order the company to lower the indicator to prescribed ranges by replenishing capital, reducing business volume or expand reinsurance proportions.

d) Combined ratio = combined claim expenses / (retained premiums this year - unearned liability reserve

slip)  $\times 100\%$ . Combined claim expenses = claim expenses this year + outstanding claims reserve escrow - reversal of outstanding claims reserve + reinsurance claims settlement = the expenses - reinsurers' share of reinsurance claims - recovery income. The normal range of the value:  $< 65\%$ . Combined ratio is mainly used to evaluate the claim expenses. The sum of this indicator and combined expenses should not be over 100%. If it is over 100%, it means the insurance underwriting profit is negative.

## (3) Evaluation indicators of the capital adequacy ratio

a) Recognized asset-liability ratio = recognized liabilities  $\div$  recognized assets  $\times 100\%$ . The normal range of the index value is less than 90%.

b) Premium receivable rate = all premium receivable / annual premium income  $\times 100\%$ . The normal range of the value:  $< 8\%$ . This is used to evaluate premium receivable status. On the accrual basis, if premium is not received after the insurance policy takes effect, it should be counted as premium receivable. After premium is received, operating expenses, business taxes, surcharges and advance reinsurance premiums need to be paid. If premium receivable rate is high, cash flow and financial stability of the insurance companies will be affected.

c) Reserve growth rate = (Current reserve balance - the previous period reserve balance) / the previous period reserve balance  $\times 100\%$ . This indicator reflects the insurance company's ability to grow, and is used to evaluate the growth of newly established property and casualty insurance companies. Generally speaking, the normal range of its value is  $> 5\%$ . This indicator is mainly used to evaluate reserve changes of insurance companies.

d) Current ratio = current assets / current liabilities  $\times 100\%$ . The normal range: 90% to 120%. This indicator is mainly used to evaluate the liquidity of the assets of the insurance companies. If it is too low, liquidity and ability to pay is low. If it is too high, it means poor use of funds.

### 2.2.1.2 Learning and Innovation Capability

The core competence is the accumulation of specific business expertise in corporate investment and learning behavior. The internal logic relationship between core competency and technological innovation is: corporate new technology, new products, new methods stems from technological innovation, while improving product efficacy, implementing differentiation strategy and reducing costs cannot be done without technological innovation. Technical capability and innovation capability are direct indications of the level of corporate technology and core competence. They reflect the special advantages that a company has relative to its competitors. They also determine the company's competitive position and profitability.

In the era of knowledge economy, the business environment of property and casualty insurance companies often experience significant changes. Companies must

continue to learn in order to maintain core competencies. Therefore, the companies must improve learning capability, use systematic thinking, transcend themselves, improve mental models, establish a common vision and adopt team learning to form a learning organization. This will allow the company to continue to acquire new knowledge and new capabilities, enabling the company to adapt to the changing environment. The ultimate goal of the learning capability is to improve staff skills and their ability to absorb and process insurance information. Learning capability's affecting factors include employee loyalty, employee satisfaction, employee development, staff efficiency and staff training. Specific indicators are employee turnover rate of key positions, improvement rate of front-line employee satisfaction, premium income per capita, underwriting expenses per capita, job performance pass rate, staff trainings per capita.

a) Employee turnover ratio of key positions = the number of employees leaving key positions / total number of employees leaving key positions  $\times$  100%. The indicator reflects the business culture.

b) Improvement rate of front-line employee satisfaction = (front-line employee satisfaction this year - last year front-line employee satisfaction) / front-line employee satisfaction last year  $\times$  100%. Employee satisfaction can be transformed into quantitative values by surveying the employees. The indicator reflects the business culture.

c) Premium income per capita = premium income / total number of employees  $\times$  100%. The indicator reflects the income per capita of companies.

④ Underwriting expenses per capita = total underwriting expenses / total number of employees  $\times$  100%. Where: underwriting expenses = operating expenses + handling fee expenses + commission expenses. Normal range: <20%. This indicator is used to evaluate business expenses per capita. It reflects the relationship between underwriting costs and the number of employees. It is a reverse indicator.

d) Job performance pass rate = the number of qualified employees / total number of employees  $\times$  100%. The indicator reflects employees performance of the company.

e) Staff trainings per capita = total number of staff trained / total number of employees  $\times$  100%. This indicator reflects training coverage of the company.

Innovation capability is the innovation of products and technologies. Vigorously developing new insurance products is particularly important when insurance products are gradually becoming market-oriented. It can improve the growth of insurance business and promote business development. In the same time, the development of insurance products means not only designing new insurance products to meet the market demand, but also improving existing insurance products. Currently, international property and casualty insurance companies mainly develop comprehensive packages of insurance

products and various liability insurance products. Chinese insurance companies should strengthen the innovation of these products. Also, they need to develop accident insurance products, health insurance products and agricultural insurance products based on Chinese domestic conditions. In technological innovation, the management mode of modern insurance companies should be based on electronic and information technology, taking full advantage of the unique advantages of information interactivity and convenience provided by the Internet. The companies should publish information, recruit employees and provide consulting on the Internet. A joint information inquiry system can be established. When conditions are ripe, large-scale sales of insurance products can be done online. The specific indicators of innovation capability include proportion of R&D staff, proportion of R&D funding, growth rate of R&D funding, proportion of premium income of new insurance products and development rate of new insurance products.

a) Proportion of R&D staff = number of staff directly engaged in R&D / total number of employees  $\times$  100%. The indicator reflects the structure of the R&D personnel quality.

b) Proportion of R&D funding = amount of R&D funding / total cost  $\times$  100%. The indicator reflects the emphasis the company places on innovation.

c) Growth rate of R&D funding = (amount of R&D funding of this year - amount of R&D funding of last year) / amount of R&D funding of last year  $\times$  100%. The indicator reflects the emphasis the company places on persistent innovation.

d) Proportion of premium income of new insurance products = premium income of new insurance products / premium income  $\times$  100%. The indicator reflects the status of new insurance products among all products.

e) Development rate of new insurance products = number of successfully developed new insurance products / total number of developed new insurance products  $\times$  100%. The indicator reflects the success rate of new insurance products.

### 2.2.1.3 Environment Capability

Environment capability is an important factor affecting the formation of enterprise's core competence. In order to be successful, the enterprise must be able to meet the needs of specific customers in certain markets. A different judgment on the external market environment will lead enterprises to adopt different strategic positioning, thus affecting the formulation of marketing strategies as well as various resources invested. Environment capability is the enterprise's ability to create, understand and respond to external market environment. It consists of market expansion capability and marketing capability.

(1) Market expansion capability is the company's ability to develop and influence external market and convert market potential to profit. Its affecting factors

include market mechanisms, quality of marketing personnel, public relations and coordination capability. For market mechanisms, the paper mainly considers the effectiveness of market mechanisms and market systems, and whether it can help the company to better promote marketing capabilities. Quality of marketing personnel measures whether marketing staff have sales ability and experience to successfully recommend insurance products. Public relations and coordination capability is the company's ability to coordinate the relationships among various environmental elements. The specific indicators include number of new customers, premium income from new customers.

a) Number of new customers refers to the total number of new customers, which reflects the market expansion capacity.

b) Premium income from new customers refers to the total premium income from new customers, which reflects market expansion scale.

c) Per capita marketing revenue = premium income from new customers / number of sales employees  $\times$  100%. The indicator reflects the efficiency of sales. Apparently the higher unit premium income from new customers, the better is.

(2) Marketing capability refers to the ability to publicize and market products. The indicators include financial capability indicators like premium income and premium income growth rate, as well as product market share, product premium growth rate, product cancellation rate, public reputation.

a) Product market share = premium income of the product / industry premium income of the product  $\times$  100%. The indicator reflects the size of the product income on the market.

b) Product premium growth rate = (product premium income this year - product premium income last year) / product premium income last year  $\times$  100%. The indicator reflects the vitality of the product.

c) Product cancellation rate = cancelled premium value / (long-term insurance liability reserves by the end of last year + long-term insurance premium income this year)  $\times$  100%. The indicator reflects the vitality of the product.

d) Public reputation = number of people relying on the company or like the company during surveys / total number of people surveyed  $\times$  100%. The indicator reflects the corporate image in the minds of the public.

#### 2.2.1.4 Management Capability

Management is the company's intellectual activity to effectively integrate limited resources under certain organizational environment. Management decisions such as business portfolio and resource allocation can form core competence. The company's technological innovation activities, evolution of company's organization form and cultivation of corporate culture are all directly related to business management activities. In order to enhance

core competence, it is necessary to improve management capability. Management capability is the company's ability to organize, communicate, integrate, and develop and process management elements. It can be examined by analyzing strategic management capability, coordination and integration capability and customer management capability.

(1) Strategic management capability is the ability to determine and implement market positioning and development direction. The indicators include: strategic decision-making capability, strategic planning capability and strategic control capability.

a) Strategic decision-making capability is the business managers' ability to understand and judge business long-term development prospects and industry competitive dynamics.

b) Strategic planning capability is the internal awareness of the long-term development prospects and industry competitive dynamics.

c) Strategic control capability refers to the ability to execute corporate strategic planning.

The above three indicators are qualitative indicators and can be evaluated through surveys.

(2) Coordination and integration capability measures the communication frequency and effectiveness among internal departments. The indicators include communication frequency and communication effects.

a) Communication frequency reflects the number of times departments communicate with each other and exchange information. Generally it can be measured with the number of meetings.

b) Communication effects reflect the effectiveness of the exchange among departments. It can be measured through departmental peer assessment.

(3) Customer management capability is the company's ability to meet customers' interests. The indicators include: customer satisfaction, customer complaint frequency, customer retention (renewal rate), frequency of claims, and claim settlement efficiency.

a) Customer satisfaction reflects customers' overall satisfaction of the company. It can be evaluated with customer satisfaction surveys.

b) Customer complaint frequency = total number of customer complaints this year / 12  $\times$  100%. This indicator reflects the number of monthly customer complaints.

c) Customer retention rate = the number of customers who actually renewed / number of customers who should renew  $\times$  100%

d) Frequency of claims = total number of claims this year / 12  $\times$  100%. This indicator reflects the number of monthly claims.

e) Claim settlement efficiency = total claim settlement processing time this year / total number of claims this year  $\times$  100%. The indicator reflects the average processing speed of claim settlement.

In summary, the four forces of financial capability, learning and innovation capability, environment capability

and management capacity constitutes the core competence of the property and casualty insurance companies. Environment capability is the direct source of the company to gain competitive advantage. Financial and management capabilities are the guarantee to improve business efficiency. Learning and innovation capability cultivates the company's potential profitability and potential core competence. The four forces are interdependent. They interact with each other and grow together, ensuring the source of core competitive advantage and continued business growth, and promoting the improvement of core competence.

### 2.2.2 Governance Indicators

Corporate governance is a series of institutional arrangements. It is a kind of system efficiency produced to coordinate the company as a whole. From an external point of view, corporate governance is contractual arrangements to define the relationship between shareholders and manager responsible for the business operation. From an internal point of view, the main corporate governance body includes shareholders' meeting, board of directors, management authorities and middle management. The core of corporate governance is the Board of Directors, whose responsibility is to ensure the sustained operation of the company. It also supervise company management and safeguard company interests.

The specific indicators of corporate governance capability include:

a) Proportion of shares held by the largest shareholder = number of shares held by the largest shareholder / total number of shares × 100%

Shareholders' meeting is the rights body of the company. The Board of Directors is the day-to-day decision-making body of the company. The largest shareholder is often the company's controlling shareholder. The proportion of shares held by the largest shareholder is of decisive significance to the company rights. Based on the size of the proportions, there are two types of controlling shareholders. One is absolute

controlling shareholder (holding more than 50% of the shares) and relative controlling shareholder (holding less than 50%). The lower the proportion of shares held by the largest shareholder, the more positive effects corporate governance can have on the company performance.

b) Proportion of internal board directors = number of internal directors / number of board members × 100%

If the proportion of internal shareholders is too high, it will lead to adverse consequences of the internal control. Appropriate proportion of internal shareholders will help to coordinate the interests of the internal and external shareholders. Some Chinese property and casualty insurance companies were restructured from former wholly state-owned companies. Internal shareholder ratio is rather large. In recent years, the China Insurance Regulatory Commission strengthened regulations on insurance companies. More and more companies are increasing the external shareholder ratio. This improves the governance structure. It is a negative indicator when the value is 1, otherwise it is a positive indicator.

c) Proportion of major shareholders participating in management = number of shareholders participating in management / number of senior managers

This paper argues that if the largest shareholder participates in management, it is more prone to the internal control problem. Small shareholders' interests are easily hurt. Therefore, it is a negative indicator.

d) Size of the Board of Directors = number of members of the Board of Directors

The size of the Board and business performance is correlated, but the correlation is not significant, showing a weak negative correlation.

## 2.3 Summary of the Evaluation Index System of Sustainable Development Capability of Property and Casualty Insurance Enterprises

The analysis of sustainable development capability evaluation index system in 3.2 is summarized as follows, as shown in Table 1.

**Table 1**  
**Evaluation Index System of Sustainable Development Capability of Property and Casualty Insurance Enterprises**

Primary indicators		Secondary indicators
Evaluation Indicators for Sustainable Development Capability of the Property and Casualty Insurance Enterprises	Financial Capability	Total assets, premium income, total profits, net assets, net assets profit margin, operating income margin, owners' equity growth rate, premium income growth rate, fund income rate, cost rate, fund rate, size of gross premium rate, speed ratio, retained premium scale, integrated loss rates, recognized asset debt ratio, receivables ratio, reserves growth rate and current ratio
	Learning and Innovation Capability	Turnover rate of key positions, front-line employee satisfaction improvement rate, per capita premium income, underwriting expenses per capita, job performance pass rate, per capita staff trainings, proportion of R&D personnel, proportion of R&D funding, R&D funding growth rate, premium income rate of new insurance product, development rate of new insurance products
	Environment Capability	Number of new customers, premium income from new customers, per capita market expansion income, product market share, product premium growth, product cancellation rate, public reputation
	Management Capability	Strategic decision-making capability, strategic planning capability, strategic control capability, frequency of communication, departmental communication effectiveness, customer satisfaction, frequency of customer complaints, customer retention rate (renewal rate), claim frequency and efficiency of claim settlement
	Corporate Governance Capability	Proportion of shares held by the largest shareholder, proportion of internal board directors, proportion of large shareholders participating in management, size of the Board of Directors

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## CONCLUSIONS

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Based on previous structural model of influencing factors of sustainable development capability of Chinese property and casualty insurance enterprises, this article constructs the evaluation index system of sustainable development capability from the core competence perspective. It combines scientific, systematic, qualitative and quantitative evaluation, utilizes static and dynamic analysis, pays attention to comparability and practicality, and focuses on key aspects. Financial capability, learning and innovation capability, environmental capability, management capability and corporate governance capability are the primary indicators of the evaluation index system. However, the article does not address evaluation methods, therefore, using of the index system to select appropriate evaluation methods for effective evaluation is the focus of future research.

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