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IMPROVING OF RISK MANAGEMENT AT THE ENTERPRISES

УДОСКОНАЛЕННЯ УПРАВЛІННЯ РИЗИКАМИ

ПІДПРИЄМСТВА

УСОВЕРШЕНСТВОВАНИЕ УПРАВЛЕНИЯ РИСКАМИ

ПРЕДПРИЯТИЯ

Управління бізнес-ризиками в контексті комплексного підходу розглядається у категорії: інформаційний ризик, спричинений недостатнім, ненадійним та некоректним збором інформації; екологічний ризик, включаючи природні фактори навколишнього середовища та соціальні фактори, ризик процесу.

Увага приділяється питанням управління ризиками китайських акціонерних компаній, які призводять до частих ризикових подій, включаючи надмірну концентрацію структури власності, незалежність ради директорів, створення відділу контролю ризиків.

Розглядаються заходи щодо підвищення рівня управління ризиками, як прийняття інформаційних технологій, прийняття рішень, управління персоналом, обслуговування обладнання, зовнішній нагляд та підзвітність.

Управление бизнес-рисками в контексте комплексного подхода рассматривается в категории: информационный риск, вызванный недостаточным, ненадежным и некорректным сбором информации; экологический риск, включая природные факторы окружающей среды и социальные факторы, риск процесса.

Внимание уделяется вопросам управления рисками китайских акционерных компаний, которые приводят к частым рисковым событиям, включая чрезмерную концентрацию структуры собственности, независимость совета директоров, создание отдела контроля рисков.

Рассматриваются меры по повышению уровня управления рисками, как принятие информационных технологий, принятия решений, управления персоналом, обслуживание оборудования, внешний надзор и подотчетность.

Business risk management in the context of an integrated approach is considered in the category: information risk caused by insufficient, unreliable and incorrect information collection; environmental risk, including natural environmental factors and social factors, process risk.

Attention is paid to the issues of risk management of chinese stock companies, which lead to frequent risk events, including excessive concentration of ownership structure, independence of the board of directors, setting up a risk control department.

Measures to improve the level of risk management, as information technology adoption, decision-making, personnel management, equipment maintenance, external supervision and accountability, are considered.

Ключові слова: ризик, управління ризиками, підприємство.

Ключевые слова: риск, управления рисками, предприятие.

Key words: risk, risk management, enterprise.

Statement of the problem. With the continuous development of science and technology, economy and culture of human society, the living environment of human beings has been greatly improved, but for enterprises, the situation is just the opposite. due to the change of social and economic structure, the progress of science and technology and the emergence of a large number of multinational companies, the environment faced by enterprises is changing rapidly, and the risk has been everywhere. Risk not only accompanies every moment of enterprise operation, but also exists in every link of enterprise production and operation process [1].

Formulation purposes of article (problem). Deepen sound recommendations for improving of risk management at the enterprises.

The main material. Referring to relevant literature, the business risk model mentioned has the highest recognition of risk management impact indicators in the industry. The indicators included in the model are risk factors extracted by the management. A detailed reference is provided in Table 1.

Table 1 -Risk index system

First level indicators	Secondary indicators
Environmental risk	Disaster losses, competitors, customer needs, technology improvement, regulatory efforts, sensitivity, laws and regulations, shareholder relations, financial markets, capital politics, industry changes
Operational risk	Customer satisfaction, human resources, product development, efficiency, production capacity, performance gap, cycle, supply, channel effectiveness, partners, obsolescence / depreciation, compliance, business interruption, environmental protection, health and safety
Authorization risk	Leadership, rights / constraints, outsourcing, performance incentives, change response, communication
Technical risk	Relevance, system integrity, contact path, availability
Financial risk	Price and interest rate, financial instrument, currency, equity, commodity, cash flow, opportunity cost, liquidity, default, credit and guarantee
Credit risk	Management fraud, unauthorized use, employee / third party fraud, breach of contract, corporate reputation
Decision information risk	Organizational structure, portfolio of business categories, life cycle, financial report evaluation, budget and planning, pricing, contract commitment, assessment (Management), resource allocation,

	reporting compliance, tax, environmental monitoring, valuation, planning, consistency, accounting information
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Source: built by authors based on [1, 2].

Business risk management: an integrated approach divides risks into three categories:

(1) Decision information risk refers to the risk caused by insufficient, unreliable and wrong information collection when enterprises make various kinds of decisions, such as strategic decision-making, business decision-making changes and financial decision-making improvement.

(2) Environmental risk, including natural environmental factors and social environmental factors, refers to the risk that these factors change and bring adverse situation to the enterprise.

(3) Process risk refers to the risk caused by problems in the company's own office process or production process, such as credit risk, business risk, financial risk and technical risk [3].

The risk management ability of securities companies has been improved. In terms of organizational structure, many securities companies have gradually attached importance to and established particular risk supervision organizations and risk management committees to strengthen project audit and risk management, significantly reducing decision-making mistakes. In terms of system construction, the gradual improvement of the risk management system of domestic securities companies ensures the company's long-term development to a certain extent. In less than 30 years, China's securities industry has established an essential risk management system, and the overall risk management ability has been dramatically improved.

But compared with the rapid development of business, the speed of risk management ability is not enough to keep up with business development. There are still problems in the governance of securities companies. There are a series of issues in the risk management of China's securities companies, which lead to the frequent occurrence of risk events [4].

(1) Excessive concentration of ownership structure. Ownership structure refers to the construction of ownership type and share proportion. It is the most critical factor affecting the formation of corporate governance. Different owners will take additional actions to maximize their interests, impacting corporate governance and affecting its operation. This is the basis of corporate governance.

Different from the situation in other regions, the particular case of China's securities companies is that the concentration of ownership structure is related to the state-owned nature of shareholders, and the control right of state-owned components is monopolistic in securities companies shown as table 2.

Table 2-The proportion of state-owned shares in securities companies

Company type	The shareholding ratio of the biggest shareholder	The shareholding ratio of the top five stockholders	The shareholding ratio of the top ten stockholders	The ratio of The largest shareholder is state-owned enterprise	The ratio of the largest shareholder is privately-owned enterprise
Listed company	34%	59%	69%	67%	33%
Unlisted company	58%	90%	96%	80%	20%
Average	53%	84%	91%	77%	23%

Source: built by authors based on [1, 2].

(2) On the independence of the board of directors. The board of directors is the standing body of the shareholders' meeting, which is responsible for the company's daily decision-making and the supervision and management of the management. Most of China's securities companies have established the independent director system, and the governance ability of the board of directors has been improved compared with before. However, the internal directors still occupy the dominant position in the board of directors, and there are still problems in the external supervision mechanism [5].

(3) Setting of risk control department. Despite the rapid development of China's securities industry, many securities companies have gradually realized the importance of risk management. They have established their risk management

organizational structure to be responsible for the management of various risks. However, some companies are weak in the administrative construction of risk management system, and there is no department primarily accountable for risk management.

The event of Everbright Securities has caused severe economic losses to Everbright Securities and has a powerful negative impact on China's capital market. The risk of Everbright Securities has the characteristics of universality and relevance.

This chapter reviews the whole process of the event from the event as the starting point. According to the operation of the event, the paper summarises the defects in risk management of Everbright Securities and makes a corresponding analysis.

Everbright Securities Co., Ltd. was founded in 1996 and is one of the first three innovation pilot companies approved by CSRC. In 2009, Everbright Securities issued 520million shares for the first time and listed on the Shanghai Stock Exchange. The company's major shareholder, China y Group Corporation, is a company funded and established by the Ministry of Finance of China. The total holding ratio of the Ministry of Finance and the State Council is 84.3%, which occupies the absolute holding position. shown as figure 2-1. Property relationship between company and controller [6].

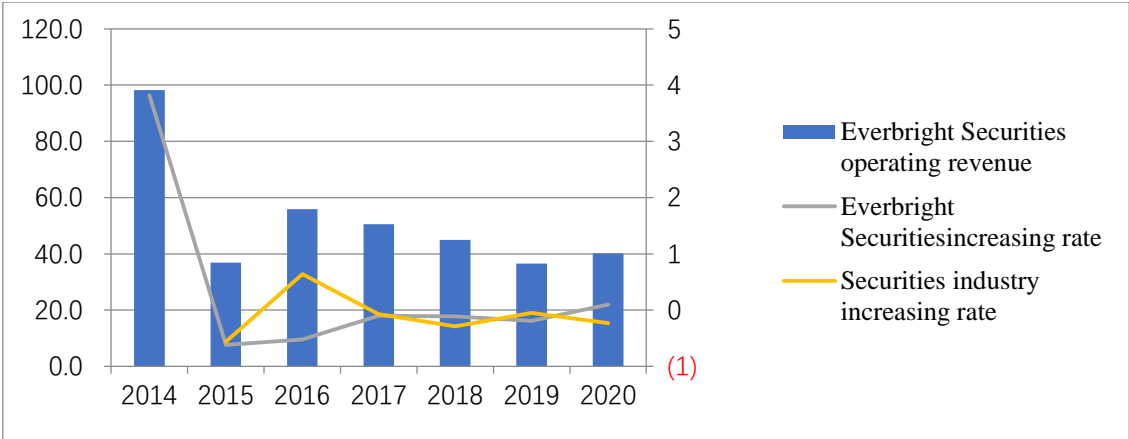


Figure 1 -Revenue and growth rate of Everbright Securities,

2014 - 2020 yy.

Source: built on the own author's research

Similar to the operating revenue, after experiencing the profit level of 47.3 billion CNY set in the bull market in 2014, the net profit of Everbright Securities decreased significantly. In 2019, the company realised a net profit of 10.3 billion CNY, a year-on-year decrease of 19%, lower than the average level of 16% in the industry.

From the perspective of business structure, Everbright Securities has a small proportion of brokerage business compared with the industry. In 2019, the main brokerage business accounted for 54% of the operating revenue, which is lower than the average level of 66% in the market (figure 2).

From the current situation of risk management of China's securities companies and the incident of Everbright Securities, we can see that China's securities companies are still fragile in risk management. Facing the increasingly complex risk impact of the securities industry, securities companies should strive to improve their risk management ability.

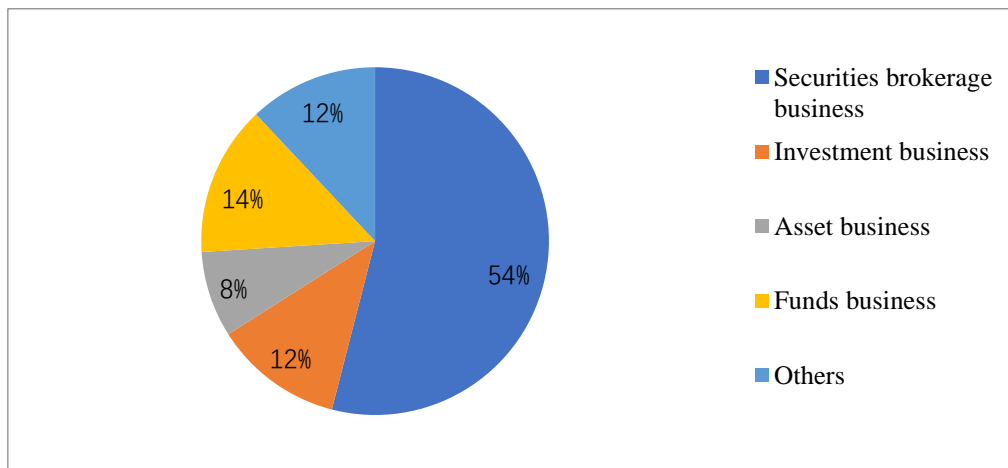


Figure 2 -Revenue structure of Everbright Securities company, 2019 y.

Source: built on the own author's research

This chapter combined with the comprehensive management standard of securities companies and the advanced experience and practice of Goldman Sachs in risk management:

(1) Improve information system. The defect of the strategic trading system is the direct cause of the trading accident of Everbright Securities. Behind it, there are many problems in the information technology strength and information technology management process of Everbright Securities. The development of science and technology has dramatically improved securities companies' operation efficiency and brought new security challenges. A safe and reliable information system can provide efficient brokerage, position management, clearing and delivery of securities companies to improve the timeliness and effectiveness of risk management [7]. It is an integral part of the company's core competitiveness. The securities market of European and American countries has an early development history, and the Information Technology Department of European and American investment banks is relatively mature in organizational structure, technology system construction and application. The Information Technology Department of Goldman Sachs has more than 8000 employees, one of Goldman Sachs' largest departments. Its scale exceeds many professional IT companies, and it is also one of the most critical departments of Goldman [8].

There are many management measures such as information technology plan making, decision-making implementation, personnel management, equipment maintenance, external supervision and accountability. We can improve the management orientation of information technology, integrate information technology resources, strengthen information technology risk management, and guarantee the safe and efficient operation of the company's business [9].

(2) Improve the skills of IT personnel. In recent years, China's securities companies have improved in information technology construction, and the total number of IT employees has exceeded 15000 [10]. However, in 2018-2019, there is a downward trend in capital investment, and the proportion of IT investment in

total income is less than 5%. Investment in the information technology system of China's securities companies still needs to be improved.

A securities company shall have sufficient IT personnel to meet the needs of the implementation and management of information technology and provide information technology support for various companies' businesses. Therefore, securities companies should increase the investment of resources, provide reasonable salary for information technology personnel. In addition to increasing investment in resources, departments should also establish a transparent responsibility system.

There are some problems in the strategy trading system of Everbright Securities, such as program call error and quota setting failure, which are the direct causes of the event. From information security, securities companies should fully consider the possible new risks for the latest information technology system. When the business department puts forward the information technology project plan, the risk control department should understand the implementation background of the project and carry out a risk assessment on important information system projects. Formulate a unique risk management plan.

Information system risk assessment is helpful to fully explore and understand the potential risks, defects and weaknesses of the system. The technical department and business department should take feasible technical and business risk control solutions according to the risk control department's risk management requirements. Before the formal operation of the critical information system, we should also fully assess the risks that may be faced under various extreme circumstances to ensure that the corresponding backup plan and emergency plan have been formulated. The critical information system should be tested in detail before the formal operation, including system function test, system performance test, and network performance test. Establish the project's internal test specification and management process and classify the importance of IT project testing. IT testing should involve business departments and eliminate self-

design, self-implementation and self-reporting of IT departments. The actual test results shall be reviewed and confirmed by the relevant departments and personnel to test products to specific departments and individuals.

The key system of the company can enter the formal operation stage only after the test results reach the technical indicators proposed by the company. We can consider small-scale switching operation first for the vital system transformation and switch to the new information system only after the results are satisfying.

(3) Risk information monitoring. At present, most of China's securities companies have established a risk control system, but there are still many deficiencies in the specific implementation. In the case of Everbright Securities, we can see that the strategy Trading Department of the company only relies on its business departments to monitor. It is not included in the unified central risk control system, so there are significant risk prevention and control problems. As a famous investment company in the world, Goldman Sachs has advanced management experience in risk monitoring. Goldman Sachs adopts various risk analysis and reporting systems according to the transaction and risk characteristics of different businesses. Taking the securities trading business as an example, all global trading businesses of Goldman Sachs adopt a unified trading system for transaction bookkeeping and pricing analysis. Each trader can master the relevant risk indicators in real-time through the platform [10].

Improve risk management organization design. In the risk management of Goldman Sachs, setting up a reasonable risk management structure plays an important role. Its risk management organizational structure is mainly divided into three levels: first, the board of directors and the risk committee under the board of directors are the highest level of risk management of the company, which are responsible for approving the company's risk management policies and implementation, and accepting the approval from independent control and support departments Chief risk officer's report on corporate risk. Secondly, at the

management level, the company's management committee comprises the CEO, the chief risk officer and other senior managers, which is the highest organization of the company's risk management, by authorizing the examination and approval of the company's business activities.

Everbright Securities has an internal risk management department. As the person in charge of risk management, the general manager reports directly to the president of the company. It lacks the necessary independence, so it is difficult to coordinate the risk information management of various departments. Foreign investment banks generally have a chief risk officer in the company to coordinate risk management activities and conduct comprehensive management. At Goldman Sachs, the chief risk officer directly reports the company's risk information to the board of directors and puts forward risk management suggestions [7].

Conclusions from this study and prospects for further exploration in this direction. In China's financial system, the securities industry plays a vital role in resource allocation and wealth management. Due to the characteristics of the sector, securities companies are faced with a variety of complex risks. Effective risk management is the basis for the development of the company. With the rapid growth of all kinds of new business and the change of economic environment, the requirements of securities companies in risk management are higher and higher. The supervision of external institutions and the construction of internal risk management are the two guarantees for securities companies to prevent risks and develop healthily.

This paper focuses on the analysis of the risk events of Everbright Securities Company. It points out the severe defects in the risk management of Everbright Securities Company, including information system, risk monitoring and reporting, risk emergency mechanism, management organization structure and governance mechanism. Based on summing up the problems of risk management in China's securities companies and the outstanding problems exposed by

Everbright Securities, this paper puts forward measures and directions to improve the risk management of China's securities companies combined with the experience of Goldman Sachs. In the development process, Everbright Securities Company adapts to the current development situation of China's securities industry. In terms of development strategy and business selection, Everbright Securities Company is more targeted, making Everbright Securities have strong profitability and growth ability. However, in essence, the imperfect risk management system, imperfect mechanism, unclear rights and responsibilities of the organization, and failure of risk management are the critical factors causing the Everbright Securities incident.

Combined with the Everbright Securities incident, the defects of Everbright Securities Company's management system are the leading causes of risk accidents. In the process of risk management, Everbright Securities needs to consider many aspects. A series of problems, such as improving information system, risk emergency, risk transmission and so on, is the key to enhance the effect and quality of risk management of Everbright Securities.

Everbright Securities should combine the actual situation, pay attention to the advanced experience of other securities companies, improve the level of information system management, risk management department construction, governance structure and so on. To prevent and manage the risk, reduce the probability of risk, and effectively deal with the damage and impact of risk. Everbright Securities Company's risk events have a significant effect on the development of securities companies. A series of punishment measures of CSRC to Everbright Securities Company reflect the determination of China to regulate the behaviour of the securities market and promote the sound development of the securities market. In the development process, securities companies must attach great importance to risk management and be able to deal with the problems in specific work, reduce risks and achieve their long-term development and progress goals.

REFERENCES

1. Anne-Marie Godfrey. Hong Kong Securities and Futures Commission (SFC) highlights operating, control and compliance deficiencies in asset management industry. *Journal of Investment Compliance*, 2018, 19 (1).
2. Isharyanto, Husodo J. A., Madalina M. The legal risk to sustainable role of State-Owned Enterprises management in Indonesia. *IOP Conference Series: Earth and Environmental Science*, 2021, 724(1).
3. Yanenkova Iryna, Nehoda Yuliia, Drobyazko Svetlana, Zavhorodnii Andrii, Berezovska Lyudmyla. Modeling of Bank Credit Risk Management Using the Cost Risk Model. *Journal of Risk and Financial Management*, 2021, 14(5).
4. Zhou Wenyong, Huang Qiong. Risk Management of Community Sports Based on AI Technology. *Journal of Physics: Conference Series*, 2021, 1852(4).
5. Ojeka Stephen A., Adeboye Alex, Dahunsi Olajide. Does Audit Committee Characteristics Promote Risk Management Practices in Nigerian Listed Firms. *Accounting and Finance Research*, 2021, 10 (2).
6. Pork cutout futures provide new risk management tool. *Southwest Farm Press*, 2021.
7. Self-Regulatory Organizations; The Depository Trust Company; Fixed Income Clearing Corporation; National Securities Clearing Corporation; Order Approving a Proposed Rule Change To Modify the Clearing Agency Model Risk Management Framework. *The Federal Register / FIND*, 2020, 85(102).
8. Tao Xu, Jianxin You, Yilei Shao. Efficiency of China's Listed Securities Companies: Estimation through a DEA-Based Method. *Mathematics*, 2020, 8(4).
9. A Study of the Capital Regulation of Securities Companies in Korea. *Korean international accounting review*, 2020, 89.
10. Christopher O. Cox. *Decision Making in Risk Management: Quantifying Intangible Risk Factors in Project*. CRC Press: 2021, 17.