7.2 Risk Management

7.2.1 Implementation of Risk Management

Risk Management Structure

To supervise the effectiveness of the risk control mechanism, Mega Securities has the Board of Directors as the highest decision-making unit for risk management. The Board of Directors is responsible for approving risk management policies and procedures, overall risk appetite, and appointing the Risk Management Committee to supervise daily risk management affairs. The Risk Management Committee has been established under the Board of Directors to supervise the establishment of the risk control mechanism and ensure the implementation of the risk management policy. The convener of the Committee is the chairperson. The other members are composed of the Director and General Manager, the Chief Risk Officer, and other department heads . The Committee is responsible for supervising the implementation of risk management business, deliberating the risk management policies, annual risk management objectives, the Articles of Incorporation of the Risk Management Committee, and risk management rules, and reviewing the overall risk appetite or risk limit. The Risk Management Committee convenes at least one meeting every quarter, and the meeting minutes shall be reported to the Board of Directors. Extraordinary meetings may also be convened as needed for business needs or for emergencies. The Risk Management Office is responsible for meeting affairs.

Risk management measures

For Mega Securities, the risk management policy is approved by the Board of Directors, which clearly defines the risk management objectives and regularly monitors the implementation. The Board of Directors also approves the risk management rules to address major financial and non-financial risk categories, such as market, credit, liquidity, operational, climate, and others according to the three lines of defense mechanism of the business departments, the Risk Management Office, the Legal Affairs and Compliance Office, and the Audit Office. We have defined the management principles for the six risk types, and regularly review the risk management mechanism, risk appetite, and risk management priority through assessment reports, scenario analyses, and stress tests to establish response strategies, control objectives, internal control systems, and procedures. The procedures and clear attribution of responsibilities can be incorporated by each business department into individual management regulations to effectively manage the Company's various operational and sustainability risks. In addition, in order to effectively respond to the risks brought about by climate change, Mega Financial Holdings has incorporated climate change risk management into the risk management policies and guidelines. Mega Securities has also been approved by the Board of Directors to add a climate risk management policy to its risk management policy and add the emerging risks to its risk management rules.

Risk management education and training

Mega Securities encourages employees to participate in internal and external risk management-related education and training in accordance with the Group's policy. By doing this, we are able to enhance employees' risk awareness and establish a risk management culture to facilitate the effective implementation of risk management policies. In addition, in accordance with the "Procedures for the Risk Management Evaluation of Subsidiaries" established by the Group, the number of people who participate in the risk management education and training of Mega Securities each year will be correlated with their performance. In 2023, a total of 25,218 person-times from Mega Securities participated in risk management-related training courses, and the total number of training hours reached 66,387 hours. The topics included laws and risk trends and aspects related to anti-money laundering (AML) and counter-terrorist financing (CFT), climate change information disclosure for the securities industry, and low-carbon transformation path planning - carbon rights and carbon pricing.

7.2.2 Emerging Risk Assessment and Response

As the financial environment becomes increasingly complex, in addition to the existing risk assessments, Mega Securities also incorporates emerging risks into the scope of risk management. Questionnaires were distributed to each department to assess major emerging risks, and major emerging risks were listed as important issues in Mega Securities' risk management, and major risk issues (including emerging risks) were monitored.

STEP 1

Risk identification

For the definition and scope of emerging risks, the five categories of economic (A), environmental (B), geopolitics (C), social (D), and technology (E) in the Global Risks Report 2023 of the World Economic Forum (WEF) were referred to, and 25 emerging risk factors were identified.

STEP 2

Risk assessment

A questionnaire was used to evaluate the risk factors according to "likelihood of occurrence" and "degree of impact". The top three "risk sensitivities" (likelihood of occurrence and degree of impact) in each category were selected, totaling 15 emerging risk factors, creating an emerging risk matrix.

STEP 3

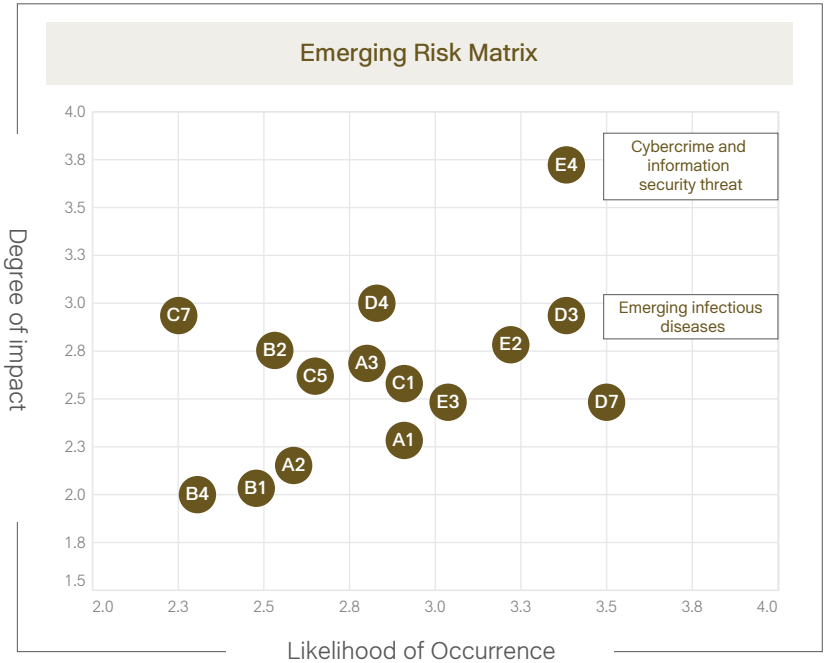
Risk response

In response to the above selection of the top two emerging risks in the next 3 to 5 years, namely "cybercrime and information security threats" and "emerging infectious diseases", relevant countermeasures are proposed.

STEP 4

Risk report

The identification results of emerging risks are reported and disclosed in the Sustainability Report.



Risk type	Emerging risk factors	Likelihood of occurrence (1-5)	Degree of impact (1-5)	Risk sensitivity = Likelihood of occurrence x Degree of impact (1-25)	Ranking by risk type
A Economic risk	A1 Emerging debt crisis	2.85	2.31	6.57	2
	A2 Industry or supply chain adjustment	2.54	2.15	5.47	3
	A3 Illegal economic activities	2.85	2.62	7.44	1
B Environmental risk	B1 Climate adaptation or mitigation failure	2.46	2.08	5.11	2
	B2 Natural disasters and extreme weather	2.54	2.77	7.03	1
	B4 Natural resource crisis	2.38	2.00	4.77	3
C Geopolitical risks	C1 Geopolitical conflicts	2.85	2.62	7.44	1
	C5 Weapons of mass destruction threat	2.62	2.62	6.84	2
	C7 Terrorist attack	2.31	2.92	6.75	3
D Social risk	D3 Emerging infectious diseases	3.38	2.92	9.89	1
	D4 Misinformation and false information	2.85	3.00	8.54	3
	D7 Shortage of human resources	3.46	2.54	8.79	2
E Technology risk	E2 Digital gap and incomplete service	3.31	2.77	9.16	2
	E3 Information monopoly	2.92	2.46	7.20	3
	E4 Cybercrime and information security threat	3.38	3.69	12.50	1

Risk factors	Emerging infectious diseases	Cybercrime and information security threat
Risk description	The global impact of the pandemic has increased the possibility of large-scale emerging infectious diseases with shortened cycles, resulting in an impact on Mega Securities due to social unrest. • Normal scenario: There is no significant threat to emerging infectious diseases of Mega Securities over the next 3 to 5 years. 1.The company operates normally, and the system recovery time is less than the tolerable interruption time (4 hours). 2. Employee mental health, and the employee turnover rate is maintained within 12%. 3. The operation of the investment company and customer repayment are normal, and there is no investment or credit loss. • Extreme scenario: There are multiple outbreaks of emerging infectious diseases (such as new variant viruses) in the next 3 to 5 years, and the occurrence cycle is shortened to once a year, affecting Mega Securities. 1. Operations are interrupted for more than 4 hours due to an outbreak of a disease. 2. Employees may suffer from mental health damage due to being infected, and the employee turnover rate may reach 15%. 3. The operation of the investment company or the non-performing loan repayment of customers may cause investment and credit losses up to 10% of the net worth.	With the development of network technology, the world faces high information security risks. As a result, Mega Securities may be affected by hacker attacks. • Normal scenario: There is no significant threat to the information security of Mega Securities over the next 3 to 5 years. 1. Social engineering drills are held at least twice a year to raise employees' information security awareness and prevent personal information from leaking. 2. Vulnerability scans are performed every year to make improvements based on vulnerabilities to prevent system disruption due to hacker intrusions. 3. Penetration tests are conducted twice a year to continuously strengthen the information security system to prevent financial losses caused by hacker invasion. • Extreme scenario: Mega Securities suffers from repeated hacker attacks and ransomware implantation over the next 3 to 5 years, resulting in system interruption, financial losses, and leakage of personal information. 1. Less than twice a year of social engineering drills may result in insufficient information security awareness among employees and lead to personal information leakage. 2. Failure to perform vulnerability scans every year may lead to vulnerabilities that may be exploited by hackers to conduct attacks and cause system disruptions. 3. Penetration tests conducted less than twice a year may indicate insufficient system protection, which may lead to financial losses due to hacker attacks and ransomware implantation.

Risk factors	Emerging infectious diseases	Cybercrime and information security threat
Impact on Mega Securities	Multiple outbreaks of emerging infectious diseases over the next 3 to 5 years may lead the government to adopt a lockdown policy, hinder economic development, and cause long-term health damage, causing Mega Securities to face: 1. Operational interruption: Due to the impact of an outbreak of a disease, the service capacity of physical operating sites may be reduced or temporarily closed, while digital services such as websites or apps may also be overloaded due to the rapid increase in demand for contactless services, and operations may be interrupted for more than 4 hours. 2. Mental health damage: Performance pressure and remote working cause confusion between work and daily life, resulting in increased long-term psychological pressure on employees of Mega Securities, contributing to a decrease in work efficiency and an increase in the turnover rate, which exceeds 15%. 3. Investment and credit losses: The situation of an outbreak of a disease is higher than expected, affecting the operations of the investment company and customers' repayment ability, resulting in investment losses of Mega Securities or customer defaults. In extreme cases, the loss may be over 10% of Mega Securities' net worth.	Repeated hacker attacks over the next 3 to 5 years may cause system interruption, financial loss, and leakage of personal information, and expose the Group to: 1. Leakage of personal data: Due to insufficient information security education and training for employees, hackers may intrude into the Company's system and network through phishing emails and steal customers' personal data, causing Mega Securities to face claims from customers and penalties from the competent authorities. 2. System disruption: A hacker attack may result in disruption or temporary closure of core systems, servers, websites, and other services. As a result, Mega Securities cannot operate normally, leading to an operating loss of over NTD 5 million. 3. Financial loss: As a result of ransomware implanted by hackers, Mega Securities may face a ransom of more than NTD 10 million, or be forced to replace related information system equipment, resulting in a significant increase in costs.

Risk factors	Emerging infectious diseases	Cybercrime and information security threat
Countermeasures	1. Uninterrupted operations plan: Mega Securities has launched an uninterrupted operations plan; a continuous operation and system recovery team has been formed to conduct drills at least twice a year to ensure its ability to respond in the event of a crisis. 2. Enhanced health protection: Mega Securities offers employees care leave and isolation leave to reduce the risk of the spread of infectious diseases in the workplace. 3. Control and manage high-risk industries susceptible to an outbreak of a disease: Mega Securities monitors the status of various industries on a daily basis to avoid excessive concentration in the industry and ensure that liquidity is not in jeopardy. For the establishment of industry quotas, in addition to considering the market value of the industry and the credit status of the listed companies, we also request Mega International Investment Services to evaluate industry trends. To reflect the global economy, corporate operations, and market information in a timely manner, Mega Securities makes rolling adjustments to industry quota every six months for control. In December 2023, the risk exposure of Mega Securities to the tourism and department store sector susceptible to COVID-19 was NTD 581 million, or 3.06% of net worth, and within the 30% limit.	1. Enhance information security awareness: To raise colleagues' awareness of information security and prevent personal data leakage due to phishing emails, Mega Securities conducts social engineering drills at least twice a year. To reduce information security risks, Mega Securities conducts a personal data inventory every year to protect the rights and interests of customers. 2. Continuity testing: In order to provide comprehensive and uninterrupted services, Mega Securities conducts annual vulnerability scanning and business continuity drills every year to ensure that important systems can continue to provide services and the effectiveness of the backup system. Security incident notification and response drills are also performed to restore normal operations as soon as possible. 3. Strengthen the information security system: In order to strengthen the information security defense capability, Mega Securities conducts two penetration tests every year, and has introduced the ISO27001 information security management system and built the information security monitoring center.

7.2.3 Capital Adequacy Management and Level 3 Asset Management

Capital adequacy management

In order to effectively manage the capital adequacy ratio of Mega Securities, the Capital Adequacy Management Rules of Mega Securities have been formulated in accordance with the requirements of the Risk Management Rules. According to the Capital Adequacy Management Rules, the authorized capital adequacy ratio of Mega Securities shall not be less than 150%, and the capital adequacy ratio target and early warning indicators are listed as annual risk management objectives. The monitoring results are reviewed regularly and reported to Mega Holdings. In addition, to establish a capital adequacy assessment process and maintain an appropriate proprietary capital structure, while taking into account business development and risk control to improve the efficiency of capital utilization, Mega Securities has formulated the Capital Adequacy Management Enforcement Rules to implement the capital strategies of senior management. The relevant information is reported to the competent authority.

1. Objectives of capital management

Mega Securities adopts the advanced method to calculate the capital adequacy ratio in cooperation with the competent authorities, and regularly calculates and reports the capital adequacy ratio of Mega Securities in accordance with the Regulations Governing Securities Firms. The management objective of Mega Securities' capital adequacy ratio shall not be less than 250%. When the early warning value of 270% is reached, it is necessary to convene the Risk Management Committee to discuss the proprietary positions held by the business departments and make adjustments. The capital adequacy ratio will be adjusted to exceed the warning indicators.

2. Capital management policies and procedures

Evaluate the overall risk tolerance and the suitability of risk management by calculating the operating risk equivalent amount (including credit risk, market risk, and operational risk equivalent amount) and qualified capital, which are used as the basis for adjusting risk positions and risk management policies.

3. Capital adequacy ratio

The capital adequacy ratio of Mega Securities as at December 31, 2023 and 2022 were 349% and 459%, respectively.

4. Market risk management policies

To effectively control market risks, the Company plans the authorized limits, loss limits, risk value limits, and other related quantitative indicators of each department and product line based on the capital adequacy ratio, and controls the limits of various market risks through the risk management system. Each department conducts operations (or disposes of) according to the Market Risk Enforcement Rules to effectively control market risks.

According to the characteristics of the overall position and each product line of Mega Securities, early warning and loss stop mechanisms shall be defined in the Risk Management Rules, and appropriate Risk Management Enforcement Rules shall also be established for each department. The content should include the authorization structure and report of each level, the process and operation content, transaction scope, market risk measurement method, market risk limit and

approval level, and handling method for exceeding the limit, etc., and are implemented.

Assess the product lines that need to be hedged, and check daily whether the operation is within the scope of authorization. In addition, in response to emergencies, the Company conducts hedging operations for interest rate and equity derivatives to reduce position losses caused by abnormal market fluctuations. The Risk Management Office analyzes data such as various financial instrument positions, assessed gains and losses, analysis of sensitive risk factors, and stress testing on a regular or unscheduled basis, and reports to the chairman and the general manager as a reference for business decision-making.

(1) Measurement techniques and limits of market risk

We establish a quantitative risk model to measure risks. In addition to the basic position/nominal limit and profit/loss information, the model also covers risk factor analysis and VaR calculation and management. To effectively control market risks, the Company plans the authorized limits, loss limits, risk value limits, and other related quantitative indicators of each department and product line based on the capital adequacy ratio, and controls the limits of various market risks through the risk management system. Each department conducts operations (or disposes of) according to the Market Risk Enforcement Rules to effectively control market risks.

(2) Sensitivity analysis

In addition to stress testing, sensitivity analyses of changes in various market risk factors can be conducted for each product line of the Company's proprietary parts, and simulate and assess the impact on the overall net asset value when there is a change of 1% in foreign exchange rates, 1% in interest rates and 1% in stock prices.

Valuation process for level 3 fair value

For Mega Securities to carry out fair value valuations for Level 3 financial instruments, the valuation department must first confirm with the Verification Department about the valuation model, parameters used, parameter sources, and calculation methods. Moreover, whether the data sources are independent and reliable must be confirmed and unscheduled calibration performed, with evaluation model, and adjustment of parameters and calculation methods adjusted to ensure that the evaluation results are reasonable. (For relevant details, please refer to pages 152-157 of the 2023 annual report of Mega Securities.)