



## Identifying and Prioritizing the Constituent Factors of the Governance System of Holdings Based on Risk Appetite

**Mohammadtaghi Abolhassani**

Department of Business Management, Ra.C., Islamic Azad University, Rasht, Iran.  
mo.abolhassani@iau.ac.ir

**Ebrahim Chirani**

Department of Business Management, Ra.C., Islamic Azad University, Rasht, Iran.  
(Corresponding Author).  
echirani@iau.ac.ir

**Gholamreza mahfoozi,**

Department of Accounting, Faculty of Management and Economics, University of Guilan, Rasht, Iran  
ghmahfoozi@guilan.ac.ir

**Fraydoon Rahnamay Roodposhti**

Department of Financial Management, SR.C., Islamic Azad University, Tehran, Iran.  
rahnama@iau.ac.ir

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### ABSTRACT

The present research was conducted with the aim of identifying and prioritizing the constituent factors of the governance system of holdings based on risk appetite. In terms of purpose, this research is applied; in terms of data type, it is sequential mixed (qualitative–quantitative) with an exploratory approach; in terms of data collection method, in the qualitative section, it is qualitative content analysis with a thematic analysis approach, and in the quantitative section, it is descriptive–correlational. In the qualitative section, the statistical population consisted of all theoretical experts (university professors in the fields of financial management, accounting, and economics) and practical experts (senior financial managers of holdings). For calculating the validity of the questionnaires, content validity (Lawshe forms) and construct validity (convergent and discriminant) were applied, and for reliability, Cronbach's alpha coefficient, composite reliability coefficient, and McDonald's omega used. The results indicated the instrument was valid and reliable. Finally, data analysis conducted in the qualitative section using thematic analysis with the approach of Braun and Clarke (2012) via Maxqda-2018 software, and in the quantitative section using descriptive and inferential statistics (confirmatory factor analysis) via SmartPLS-V3 software. The findings indicated that the governance system of holdings based on risk appetite comprises the dimensions of organizational structure, decision-making processes, risk management, information transparency, and social responsibility. Prioritization of the dimensions and components of the governance system of holdings based on risk appetite showed that the highest priority among the dimensions, respectively, belonged to decision-making processes, social responsibility, organizational structure, information transparency, and risk management.

**Keywords:** Governance system, Holding companies, Risk appetite, Risk management, Information transparency



## 1. Introduction

In today's complex and changing world, holdings are regarded as key entities in the global economy. With increasing competition and economic pressures, understanding and managing risk has become one of the essential requirements for success in this field. According to a World Bank report, more than 70 percent of large companies, due to the lack of proper risk management, have faced serious financial problems—demonstrating the necessity of establishing a strong and integrated governance system in holdings (World Bank, 2022).

Also, in the study by Oterholm (2024) entitled *"Risk Appetite at the Strategic and Operational Level"*, the importance of risk management at different organizational levels is emphasized, showing that significant differences exist in risk-related behaviors after improving governance systems and clarifying risk appetite statements.

On the other hand, in a study conducted by Seraj and Bagheri (2023), it was determined that strong corporate governance can have a positive and significant relationship with company returns. These results indicate that attention to the governance system of holdings, in line with risk management and the optimization of their economic performance, appears necessary. Furthermore, Li et al. (2021), in a study on predicting the risk of financial distress using governance system criteria, concluded that weak corporate governance can harm shareholder interests and may lead to business collapse. These findings emphasize the importance of examining the relationship between risk and governance structures in holdings.

To better understand the research topic, several key concepts must be clarified. First, "corporate governance system" refers to a set of principles and rules that determine how companies are managed and supervised. This system includes the structure of the board of directors, shareholder rights, and auditing methods, and can have a direct impact on the financial performance and risk-taking of companies. In fact, a strong governance system can help reduce risk and increase returns, thereby assisting companies in the optimal management of their resources.

The second key concept is "risk", which in this research is divided into two types: market risk and credit risk. Market risk refers to price fluctuations and market changes, while credit risk refers to the

likelihood of non-repayment of capital and financial problems arising from the counterparty's inability to fulfill its financial obligations. Understanding these two types of risk and how they affect holdings helps managers make better decisions in the context of risk management.

The third concept is "risk appetite", which reflects a holding's willingness to accept risk in order to achieve its strategic goals. This concept helps managers make investment decisions based on the organization's acceptable level of risk and ultimately influences the performance and success of the holding.

In the current era, economic and competitive complexities in global markets have introduced holdings as key entities in managing resources and investments. These holdings face multiple challenges in risk management, and the lack of proper management of these risks can lead to financial losses and missed investment opportunities. For example, in the study by Azad and Pourzamani (2022), it was shown that governance system control variables have a significant impact on the efficiency and risk of companies. Similarly, Pazhouhi et al. (2022) highlighted the effect of credit and market risks on stock prices in the banking industry, indicating the importance of paying attention to risk management in holdings. For this reason, establishing a strong and integrated governance system based on risk appetite in holdings is essential—not only to effectively manage risks but also to increase returns and financial performance.

The existing challenges in this field, especially in holdings, require serious attention and careful research. The first fundamental challenge in the field of "governance systems of holdings based on risk appetite" is the lack of specific and integrated frameworks for risk management. Many holdings still address risk management in a scattered and unsystematic way, which can lead to incorrect decisions and financial losses (Azad & Pourzamani, 2022). This challenge becomes more evident in unstable economic conditions and makes the need for a unified and strong governance system even more necessary.

The second challenge is the insufficient understanding and awareness of the concept of risk appetite among managers and decision-makers. Pazhouhi et al. (2022) showed that in many cases, managers are not adequately aware of the acceptable

risk level of their organization, leading to either excessive risk-taking or excessive risk-aversion—both of which can result in poor performance and reduced profitability. Therefore, training and raising the awareness of managers in this area is of particular importance.

Another challenge is the mutual impact of different risks on each other in holdings. Given the complex structure of holdings, risks directly and indirectly affect each other; consequently, identifying and accurately assessing these interactions requires a comprehensive and integrated model (Shariatmadari & Nahavandi, 2020). This challenge is particularly evident in times of economic crisis and sudden market changes, hence the need for attention to this issue in future research.

Various factors influence the “governance system of holdings based on risk appetite.” One of these is the board of directors’ structure and its role in supervising risks. Research shows that independent boards consisting of experienced members can help improve decision-making processes and risk management in holdings (Erin & Aribaba, 2021). With their diverse perspectives and expertise, these boards can better identify risks and develop effective strategies for managing them.

In addition, organizational culture and the manner of risk management within holdings are of high importance. Specifically, institutionalizing a risk culture and encouraging the sharing of information regarding risks can improve the overall performance of the holding (Gorovoy & Grigoryev, 2024). This organizational culture should be such that all members of the organization—from managers to employees—feel responsible and committed to risk management and participate in decisions related to risks.

Existing literature on “holding governance systems” and “risk appetite” shows that most research has focused on the effects of corporate governance and board structure, but has not widely addressed the relationship between these factors and risk appetite. For example, Pazhouhi et al. (2022) examined the effect of risk on stock prices but did not provide a deeper understanding of risk appetite and its role in the governance systems of holdings. Likewise, Nikoukhah et al. (2024) found that existing models still do not fully meet the real needs of holdings. These weaknesses in the current literature highlight the need for further research into the challenges and issues

related to “governance systems of holdings based on risk appetite.”

Many holdings, due to the absence of a specific framework for risk management, face serious financial and operational problems. This situation can lead to reduced profitability, loss of large investments, and ultimately a threat to the financial stability of holdings (Ebrahimi Sarou Aliya & Tamalaki, 2020). Moreover, the lack of an effective governance system can undermine shareholder trust and reduce the market value of holdings.

The negative consequences of this situation can also manifest in cultural, social, and economic aspects. Culturally, inadequate risk management can create a negative organizational culture in which employees avoid taking reasonable and innovative risks. Socially, reduced holding performance can lead to fewer job opportunities and public dissatisfaction. Economically, improper risk management can lead to reduced economic growth and the emergence of larger financial crises.

Training and increasing the awareness of managers and employees in the field of risk appetite and its management should be prioritized. This training can include workshops and specialized courses in risk management and corporate governance. On the other hand, strengthening organizational culture and encouraging the sharing of risk-related information can improve decision-making processes and enhance the efficiency of the governance system. Creating managerial structures that allow employee participation and feedback can help managers make better decisions and foster continuous improvement in the governance systems of holdings. With such measures, holdings can effectively manage their risks and achieve higher profitability and financial sustainability.

Considering the issues discussed, the present research seeks to identify and prioritize the constituent factors of the governance system of holdings based on risk appetite.

## **2. Methodology**

### **Type of Research:**

In terms of data type, this research is a sequential mixed method (qualitative–quantitative) with an exploratory approach. In terms of data collection method, in the qualitative section, it employs

qualitative content analysis with a thematic analysis approach, and in the quantitative section, it is descriptive–correlational.

**Population and Sample (Size and Sampling Method)**

**Qualitative Section:**

In this section, the statistical population includes all theoretical and practical experts who are recognized as primary sources in the field of governance systems of holdings and risk appetite. These experts include university professors in the fields of financial management, accounting, and economics—who, with their academic knowledge and scientific experience, contribute to a deeper understanding of the various dimensions of this subject—as well as senior financial managers of holdings, who, as practical representatives from the real world, offer valuable insights and experiences regarding the challenges and opportunities in the governance systems of holdings.

The sample size in this section was selected based on the principle of saturation. Accordingly, 20 experts were considered as participants—meaning that interviewees number 21 and 22 did not provide any new information. This number was chosen precisely and in proportion to the research needs.

The sampling method in the qualitative section was purposive non-random sampling. This method allows the researcher to select individuals who possess specific knowledge and expertise in the research subject.

**Quantitative Section:**

In this section, the statistical population consists of all financial experts of holdings, recognized as key agents in the process of decision-making and implementation of governance systems. These experts, with diverse specializations in financial management and risk analysis, play a central role in applying and implementing governance system solutions in holdings.

Kline (2023), in his book *Principles and Practice of Structural Equation Modeling*, states that for simple models, a minimum sample of 100 people and for more complex models, at least 200 people is required. Furthermore, in most published articles and books regarding the minimum sample size—when the statistical test is confirmatory factor analysis or

structural modeling—he recommends a minimum of 200 respondents (Goodboy & Kline, 2017). In any case, it must be considered that a larger sample size increases statistical power, accuracy, and the generalizability of results.

Accordingly, the sample size in this section was set at 240 people, selected using the quota purposive non-random sampling method. This method allows the researcher, considering the specific characteristics of the statistical population, to select a set number of financial experts from various holdings for data collection.

The sampling method in this section is quota purposive non-random sampling, which enables the researcher to sample from different groups of financial experts.

**Data Collection Tools, Validity, and Reliability**

**Qualitative Section:**

In this section, the research utilized **semi-structured interviews**. The questions were derived from the research topic and objectives. In individual interviews with participants, for the preliminary examination, two interview questions were used—these were derived from the research topic and objectives and are presented in Table 1. In addition to the following questions, the researcher also posed supplementary questions alongside each main question during the interview to better understand participants’ experiences.

**Table 1 – Interview Questions with Experts**

Row	Question
1	In your opinion, what indicators does the governance system of holdings have?
2	In your opinion, what indicators can this governance system based on risk appetite have?

To calculate instrument validity in the qualitative section, alignment with the literature, researchers, and participants was used; and to calculate reliability, accurate recording of the research process and intra- and inter-researcher alignment were applied. The findings indicated that the instrument was valid and reliable.

**Quantitative Section:**

The quantitative phase of the research involved a researcher-made questionnaire derived from the qualitative section. This questionnaire included 61 items measured on a five-point Likert scale ranging from *very low* to *very high*, for the purpose of prioritizing the identified dimensions and components. The questionnaire was distributed both online and in person, and respondents were asked to state their opinions about each item.

To calculate the validity of the questionnaires, content validity (Lawshe forms) and construct validity (convergent and discriminant) were used; and to calculate reliability, Cronbach’s alpha coefficient, composite reliability coefficient, and McDonald’s omega were applied. The results showed that the instrument was valid and reliable.

**Data Analysis Method**

**Qualitative Section:**

The method of data analysis in the qualitative section was theoretical coding, specifically using MAXQDA software, as one of the effective methods in thematic analysis. This analysis was carried out based on the views of Braun and Clarke (2012).

**Quantitative Section:**

In the quantitative section, based on the research questions, descriptive and inferential statistical methods were used.

- a) Descriptive Statistics: In the descriptive part, to describe demographic characteristics—such as age, gender, education, and work experience—percentages, frequencies, tables,

and charts were used; and to describe research variables, mean, standard deviation, skewness, and kurtosis were calculated using IBM SPSS-27 software.

- b) Inferential Statistics: In the inferential part, to prioritize the factors constituting the governance system of holdings based on risk appetite, confirmatory factor analysis (measurement model) was performed using SmartPLS-V3 software.

**3. Findings**

In this section, the research data are analyzed and evaluated using scientific methods. Initially, data preprocessing is reviewed.

**a) Statistical Description of Data**

This part examines the statistical description of the data in four stages:

1. Descriptive statistics of demographic characteristics in the qualitative section.
2. Descriptive statistics of demographic characteristics in the quantitative section.

**Descriptive Statistics of Demographic Characteristics — Qualitative Section**

In this research, and in the table below, based on the data collected through interviews with participants, the descriptive statistics of demographic characteristics in the qualitative section—including type of expertise (theoretical or practical), expert position, field of study, age, gender, and relevant work experience (employment history/teaching experience)—are presented:

**Table 2 – Descriptive Statistics of Demographic Characteristics of Participants (Interviewees) in the Qualitative Section (Target Group: 20 Experts)**

Demographic Characteristic	Category	Frequency	Highest Frequency	Lowest Frequency
Age	Under 40 years	2	Above 50 years	Under 40 years
	40–45 years	4		
	46–50 years	6		
	Above 50 years	8		
Relevant Work Experience	Under 7 years	3	Under 7 years	Above 20 years
	7–13 years	4		
	14–20 years	6		
	Above 20 years	7		
Gender	Male	14	Male	Female
	Female	6		
Type of Expertise	Theoretical	4	Practical	Theoretical

Demographic Characteristic	Category	Frequency	Highest Frequency	Lowest Frequency
Field of Study	Practical	16	Financial Management	Economics
	Financial Management	9		
	Accounting	6		
	Economics	5		

In this study, the demographic characteristics of the sample included age, relevant work experience, gender, type of expertise, and field of study.

- **Age:** Participants were divided into four age groups. The “above 50 years” group, with 8 people, had the highest frequency; the “under 40 years” group, with 2 people, had the lowest. The other groups were “40–45 years” with 4 people and “46–50 years” with 6 people.
- **Work Experience:** The “above 20 years” group, with 7 people, had the highest share; the “under 7 years” group, with 3 people, had the lowest. The other groups were “7–13 years” with 4 people and “14–20 years” with 6 people.
- **Gender:** Males, with 14 participants, formed the majority; females, with 6 participants, were in the minority.

- **Type of Expertise:** The “practical” group, with 16 people, was the majority; the “theoretical” group, with 4 people, was the minority.
- **Field of Study:** “Financial Management” had the highest share with 9 people, followed by “Accounting” with 6 people and “Economics” with 5 people.

**Descriptive Statistics of Demographic Characteristics — Quantitative Section**

In this part, the descriptive statistics of the demographic characteristics of the quantitative section—including age, gender, education, and work experience—are summarized for the target group of the research in the statistical population. Based on the data collected through questionnaires, the following table presents the results:

**Table 3 – Descriptive Statistics of Demographic Characteristics of All Financial Experts of Holdings (Sample Size = 240 Respondents)**

Demographic Characteristic	Category	Percentage	Frequency	Highest Frequency	Lowest Frequency
<b>Age (years)</b>	Under 30	21	50	41–50	Under 30
	30–40	26	62		
	41–50	29	70		
	Above 50	24	58		
<b>Gender</b>	Male	61	146	Male	Female
	Female	39	94		
<b>Education</b>	Bachelor’s	27	65	Master’s	Bachelor’s
	Master’s	39	93		
	Ph.D.	34	82		
<b>Work Experience (years)</b>	Under 5	11	26	11–15	Under 5
	5–10	23	55		
	11–15	47	113		
	Above 15	19	46		

In this study, the demographic characteristics of 240 financial experts of holdings were examined in four categories: age, gender, education, and work experience.

- **Age:** The “41–50 years” group, with 29% (70 people), had the highest frequency; followed by “30–40 years” with 26% (62

people), “above 50 years” with 24% (58 people), and “under 30 years” with 21% (50 people).

- **Gender:** Males, with 61% (146 people), had the largest share; females, with 39% (94 people), were fewer.

- **Education:** The “Master’s” degree group, with 39% (93 people), had the highest frequency; followed by “Ph.D.” with 34% (82 people) and “Bachelor’s” with 27% (65 people).
- **Work Experience:** The “11–15 years” group, with 47% (113 people), had the highest frequency; followed by “5–10 years” with 23% (55 people), “above 15 years” with 19% (46 people), and “under 5 years” with 11% (26 people).

**b) Qualitative Question Analysis**

To answer the qualitative question, the **thematic analysis method** with a flexible approach (Braun & Clarke, 2012) was used:

**Question:**

What are the dimensions, components, and indicators of the governance system of holdings based on risk appetite?

To answer the above question, after reviewing the theoretical foundations and prior research, interviews were conducted with 20 experts based on the interview protocol provided in the appendices. Then, using thematic analysis with a flexible approach (Braun & Clarke, 2012), the themes of the governance system of holdings based on risk appetite were identified, developed, named, and interpreted.

Finally, based on the extracted sub-themes (semantic units) from the interview transcripts, the **dimensions, components, and indicators** of the governance system of holdings based on risk appetite are presented in the table below:

**Table 4 – Dimensions, Components, and Indicators of the Governance System of Holdings Based on Risk Appetite**

Construct	Dimension	Component	Indicator	Source	Interviewee Code
Governance system of holdings based on risk appetite	Organizational structure	Task division	Number of defined roles	Pazhouhi et al. (2022)	I1, I3, I7, I15
			Existence of job descriptions and clarity of duties for each position	Seraj & Bagheri (2023)	I2, I9, I12, I14
			Alignment of duties with organizational goals	Oliva et al. (2025)	I5, I6, I8, I16
			Degree of impact of task division on organizational performance	Gorovoy & Grigoryev (2024)	—
		Board of directors	Number of board members	Nikoukhah et al. (2024)	I6, I8, I14, I15
			Diversity of board members' expertise	Bauer et al. (2023)	I4, I8, I10, I16
			Level of members' participation in meetings	—	I1, I4, I10, I18
			Tenure of board members	Li et al. (2021)	I2, I7, I11, I19
		Internal relations	Existence of effective communication channels	Erin & Aribaba (2021)	—
			Speed of information exchange between departments	Pazhouhi et al. (2022)	I2, I7, I11, I15
			Number of coordination meetings between departments	Yari et al. (2021)	I3, I5, I12, I16
			Existence of communication guidelines	Gorovoy & Grigoryev (2024)	I1, I6, I11
		Hierarchical structure	Number of managerial levels in the organization	Oliva et al. (2025)	I3, I8, I15
			Clarity of organizational levels	Oterholm (2024)	I2, I5, I13
			Impact of hierarchical structure on decision-making	Nikoukhah et al. (2024)	—
			Level of authority at each managerial level	Erin & Aribaba (2021)	I10, I14, I16

### c) Quantitative Question Analysis

#### Question:

How are the dimensions and components of the governance system of holdings based on risk appetite prioritized?

For prioritizing the components, **factor loadings** were used, and for prioritizing the dimensions, the **Average Variance Extracted (AVE)** index was applied. The results are shown in the table below:

**Table 5 – Prioritization of Dimensions and Components of the Governance System of Holdings Based on Risk Appetite**

Dimension	AVE	Priority	Component	Factor Loading	Priority
Organizational Structure	0.567	3	Task division	0.751	3
			Board of directors	0.755	2
			Internal relations	0.749	4
			Hierarchical structure	0.757	1
Decision-Making Processes	0.599	1	Transparency in processes	0.768	4
			Stakeholder participation	0.776	2
			Use of data	0.779	1
			Compliance with laws	0.774	3
Risk Management	0.540	5	Risk identification	0.739	1
			Risk assessment	0.735	3
			Risk management culture	0.736	2
			Monitoring and reporting	0.732	4
Information Transparency	0.552	4	Disclosure of financial info	0.743	2
			Disclosure of non-financial info	0.741	3
			Access to information	0.746	1
Social Responsibility	0.581	2	Social impacts	0.764	2
			Participation in sustainable development	0.766	1
			Business ethics	0.759	3

#### Interpretation of Results:

- The **Decision-Making Processes** dimension had the highest AVE (0.599) and thus ranked first among all dimensions.
- The **Social Responsibility** dimension ranked second (AVE = 0.581).
- The **Organizational Structure** dimension ranked third (AVE = 0.567).
- The **Information Transparency** dimension ranked fourth (AVE = 0.552).
- The **Risk Management** dimension had the lowest rank (AVE = 0.540).

At the component level:

- In **Organizational Structure**, *Hierarchical Structure* ranked first (0.757).
- In **Decision-Making Processes**, *Use of Data* ranked first (0.779).
- In **Risk Management**, *Risk Identification* ranked first (0.739).

- In **Information Transparency**, *Access to Information* ranked first (0.746).
- In **Social Responsibility**, *Participation in Sustainable Development* ranked first (0.766).

#### 4. Discussion and Conclusion

The findings of the present study showed that the governance system of holdings based on risk appetite has five main dimensions, including organizational structure, decision-making processes, risk management, information transparency, and social responsibility. The results of prioritizing these dimensions also showed that decision-making processes are in the highest priority, followed by, respectively, social responsibility, organizational structure, information transparency, and risk management. These results indicate that, in the governance system of holdings, attention to risk appetite as a strategic principle requires the creation of

mechanisms that—through efficient organizational structures, risk-based decision-making, effective risk management, transparency in providing information, and also the observance of social responsibilities—guarantee the organization’s sustainable and effective performance. The governance system based on risk appetite, as one of the key concepts in financial and strategic management of holdings, refers to a set of mechanisms, processes, and decisions whose goal is to achieve a balance between growth opportunities and acceptance of related risks. According to theories of risk management and corporate governance, risk appetite determines the level of risk acceptance in organizational decisions and is guided through decision-making processes, organizational structures, and transparent information systems. These theories emphasize that an efficient governance system must be able to establish a balance between strategic objectives and constraints related to risk, which is clearly observed in the dimensions of the present study’s findings.

The results of the study show that decision-making processes have the highest priority among the dimensions of the governance system based on risk appetite. This result is consistent with the theoretical foundations related to strategic decision-making, because decisions determine the key orientations of the organization. The related theories, such as the rational decision-making theory and Simon’s decision-making cycle model, show that decisions based on transparent data and risk analysis can lead to reduced hazards and increased organizational effectiveness. Also, foreign research background—for example, a study in multinational companies—has shown that organizations whose decision-making processes are based on risk appetite have better financial and strategic performance (Oliva et al., 2025).

Social responsibility, as the second priority of the findings, emphasizes the importance of holdings’ interaction with society and the surrounding environment. According to theoretical foundations, social responsibility is not only an ethical obligation, but also a key strategy in managing non-financial risk. Stakeholder theory shows that observing social responsibilities can increase stakeholders’ trust and lead to reduced organizational risks (Gorovoy & Grigoryev, 2024). In the domestic background, studies in large Iranian companies have shown that social responsibility leads to improved organizational brand

and reduced environmental and legal risks. Organizational structure, as the third priority in the findings, indicates the importance of designing structures that can optimize processes related to risk appetite (Pazhouhi et al., 2022). According to organizational management theories such as contingency theory, organizational structure must be adapted to the environment and conditions of the organization. Foreign research background, such as studies conducted in European holdings, has shown that flexible organizational structures can facilitate risk acceptance while maintaining necessary controls (Bauer et al., 2023).

The dimensions of information transparency and risk management are also in the fourth and fifth priorities, respectively. Information transparency, as one of the fundamental principles of corporate governance, enables better decision-making and reduces uncertainty. According to related theories, such as agency theory, increasing information transparency leads to reduced conflicts of interest between managers and stakeholders. Risk management, as a tool for identifying, assessing, and controlling risks, also plays a vital role in the governance system of holdings. Previous studies have shown that combining risk management and information transparency can lead to improved organizational performance and reduced losses from financial crises (Li et al., 2021).

The findings of the study have important implications for holding managers and policymakers. Attention to decision-making processes, as the first priority, indicates the need to develop decision-making systems based on data and risk analysis. Social responsibility should also be considered a strategic asset and be incorporated into the organization’s macro-policies. Moreover, designing flexible organizational structures, enhancing information transparency, and strengthening risk management are among the actions that can guarantee sustainable and effective performance of holdings.

The findings of the study showed that the governance system of holdings based on risk appetite includes five key dimensions: organizational structure, decision-making processes, risk management, information transparency, and social responsibility. These dimensions, as fundamental components, shape the necessary mechanisms for effective risk management and strategic decision-making in

holdings. In addition, prioritizing the dimensions of the governance system showed that decision-making processes have the highest importance, because they play a decisive role in risk management and strategic steering of holdings. Social responsibility also ranked second, indicating the importance of social communication and the ethical commitment of organizations in today's competitive environment. Organizational structure, information transparency, and risk management were, respectively, in the subsequent ranks; this classification indicates the complementary and synergistic role of these dimensions in strengthening a comprehensive governance system in holdings.

In the governance system of holdings based on risk appetite, organizational structure—as one of the key dimensions—is responsible for regulating relationships among various parts of the organization and creating coordination to achieve strategic goals. An appropriate organizational structure helps facilitate the flow of information, reduce conflicts of interest, and improve decision-making processes. This dimension is particularly more important in holdings that face complexities among subsidiaries and different environments. In management theories, organizational structure is recognized as a fundamental factor for establishing control and supervision in organizations.

Decision-making processes, as the dimension with the highest priority, indicate the importance of informed and data-based decision-making in the governance system of holdings. These processes include risk analysis, use of predictive models, and evaluation of the results of previous decisions. Decision-making theories, such as bounded rationality, emphasize that managers must make optimal decisions under uncertainty and using appropriate tools. This is especially crucial in holdings that often face large-scale investments and diverse risks.

Risk management, as one of the key dimensions of the governance system, provides the necessary tools to identify, assess, and reduce risks related to the activities of holdings. In agency theory, risk management is proposed as a means to reduce managers' opportunistic behaviors. On the other hand, transaction cost theory also emphasizes the importance of reducing costs arising from environmental risks. This dimension helps holdings, while maintaining financial stability, to identify and exploit growth opportunities.

Information transparency, as another dimension of the governance system, emphasizes the disclosure of accurate and timely information. This transparency not only strengthens stakeholders' trust but also enables effective oversight of organizational performance. Based on stakeholder theory, information transparency is one of the important tools for safeguarding stakeholders' rights and creating healthy interactions in the organization. Disclosure of accurate information reduces costs arising from information asymmetry and leads to improved financial performance of holdings.

Social responsibility, as a dimension with high priority, indicates holdings' commitment to society and the environment. This dimension not only helps increase the organization's credibility among stakeholders, but also lays the groundwork for sustainable development and reduction of social and environmental risks. Stakeholder theory emphasizes that organizations must attend to the interests of all stakeholders and fulfill their social responsibility toward society. This approach helps holdings, while maintaining competitive advantage, to strengthen their social relations.

Finally, the interaction among these key dimensions provides a comprehensive framework for the governance system of holdings that can lead to improved organizational performance and reduced risks. This framework not only enables managers to make better decisions but also assures stakeholders that the organization acts responsibly and transparently. The findings of this study can be used as a conceptual model for designing a governance system in other holdings and similar organizations.

In the end, it can be said that the findings of this study are consistent with the results of Seraj and Bagheri (2023); Nikoukhah et al. (2024); and Azad and Pourzamani (2022). For example, the study by Seraj and Bagheri showed that strong corporate governance can help moderate risk and return, which is aligned with the prioritization of governance dimensions in this study. Likewise, the findings of Nikoukhah et al. about the effect of organizational and managerial conditions on risk appetite confirm the importance of organizational structure and risk management as key dimensions of the governance system. In addition, Azad and Pourzamani emphasized that information transparency and monitoring variables play an important role in increasing organizational efficiency, which matches this study's findings about

the importance of information transparency. This consistency indicates the scientific robustness of the hypothesis and the possibility of generalizing the results to other holdings. The findings of the present study, with an emphasis on social responsibility, are also in line with the views presented in domestic and foreign literature that stress the role of ethics and organizational responsibility in enhancing performance and reducing risk.

Based on the study's findings and the identified dimensions, practical recommendations are presented separately for each dimension:

**Dimension: Decision-Making Processes — Components: transparency in processes, stakeholder participation**

- Hold monthly meetings with the presence of all stakeholders to review and clarify key decisions.

**Dimension: Information Transparency — Components: disclosure of financial and non-financial information**

- Design and launch a platform for regular disclosure of financial and non-financial information.

**Dimension: Risk Management — Components: risk identification and risk assessment**

- Design and implement risk-management software for identifying and assessing risks.

**Dimension: Decision-Making Processes — Component: use of data**

- Hold training workshops in the field of data analysis: monthly workshops focused on analytical software.

**Dimension: Information Transparency — Component: access to information**

- Design and implement a database for storing and easy access to financial information.

**Dimension: Organizational Structure — Components: internal relations and hierarchical structure**

- Create and publish a standard document for evaluating the performance of financial experts.

**Dimension: Information Transparency — Components: disclosure of financial information and disclosure of non-financial information**

- Hold quarterly conferences to present financial reports and answer investors' questions.

**Dimension: Decision-Making Processes — Component: transparency in processes**

- Develop and publish transparent periodic reports on the holding's financial and strategic performance.

**Dimension: Risk Management — Components: risk identification and risk-management culture**

- Create a program for identifying and managing risks arising from market fluctuations.

**Dimension: Social Responsibility — Component: social impacts**

- Develop and publish annual reports on the holding's social and environmental impacts.

## References

- Ebrahimi Sarou Aliya, M. H.; Tamalaki, H. (2020). *Examination of Default Risk Spillover Between Holding Companies and Their Subsidiaries (Case Study: Iran Khodro Investment Development Co.)*. Financial Management Outlook, 10(30), 99–120.
- Azad, A. A., & Pourzamani, Z. (2022). *Analysis of Company Efficiency from the Perspective of Risk and Governance System: Artificial Intelligence Approach*. Accounting and Auditing Management Knowledge, 11(44), 371–374.
- Pazhouhi, S., Nazemi, A., Namazi, N. R. (2022). *The Impact of Risk on Bank and Insurance Company Stock Prices Considering the Role of Corporate Governance Mechanisms*. Judgment and Decision-Making in Accounting, 1(2), 27–57.
- Seraj, S., & Bagheri, M. (2023). *The Role of Corporate Governance in Moderating Risk and Return*. Journal of Modern Research Approaches in Management and Accounting, 7(26), 1647–1667.
- Shariatmadari, M.; Nahavandi, N. (2020). *Identification and Evaluation of Risks in Petrochemical Construction Projects in Iran; Case Study: Bakhtar Petrochemical Holding*. Structural and Construction Engineering, 7(2), 101–123.

- Nikoukhah, M.; Beshkoush, M.; Kazemi, H. (2024). *Design and Evaluation of the Structural Model of Factors Affecting Risk Appetite in Listed Banks (Case Study: Human Resources of Listed Banks in Tehran)*. *Accounting and Auditing Studies*, 13(50), 69–92.
- Bauer, M. D., Bernanke, B. S., & Milstein, E. (2023). Risk appetite and the risk-taking channel of monetary policy. *Journal of Economic Perspectives*, 37(1), 77–100.
- Braun, V., & Clarke, V. (2012). Thematic analysis. *APA Handbook of Research Methods in Psychology*, 2, 57–71.
- Erin, O., & Aribaba, F. (2021). Risk governance and firm value: exploring the hierarchical regression method. *Afro-Asian Journal of Finance and Accounting*, 11(1), 104–130.
- Goodboy, A. K., & Kline, R. B. (2017). Statistical and practical concerns with published communication research featuring structural equation modeling. *Communication Research Reports*, 34(1), 68–77.
- Gorovoy, A., & Grigoryev, I. (2024). Differentiated Risk Appetite of an Innovative Company. In *Business Development via AI and Digitalization*, 2, 399–408. Cham: Springer Nature Switzerland.
- Kline, R. B. (2023). *Principles and Practice of Structural Equation Modeling*. Guilford Publications.
- Li, Z., Crook, J., Andreeva, G., & Tang, Y. (2021). Predicting the risk of financial distress using corporate governance measures. *Pacific-Basin Finance Journal*, 68, 101334.
- Oliva, F. L., Bution, J. L., Motta, F. G., Fenner, G., Randolph-Seng, B., Papa, M., & Naqshbandi, M. M. (2025). Appetite for risk: theoretical framework and practical application in a technology-based environment. *Intellectual Capital*, 26(1), 71–103.
- Oterholm, T. R. (2024). *Risk Appetite on a Strategic and Operational Level*. Master's thesis, NTNU.
- World Bank Group (2022). *World Development Indicators (WDI)*.