

Article history: Received 27 March 2025 Revised 03 May 2025 Accepted 13 May 2025 Published online 27 May 2025

Journal of Resource Management and Decision Engineering

Volume 4, Issue 2, pp 1-9



Designing and Explaining a Model for Reducing Financial Risks for Investors in Knowledge-Based Industries in Iran

Mehdi Babadi Shoorab¹, Zahra Moradi^{2*}, Zohreh Hajiha³

Department of Industrial Management, ST.C., Islamic Azad University, Tehran, Iran
 Department of Accounting, Dam.C., Islamic Azad University, Damavand, Iran
 Department of Accounting, ST.C., Islamic Azad University, Tehran, Iran

* Corresponding author email address: za5moradi@iau.ac.ir

Article Info

Article type:

Original Research

How to cite this article:

Babadi Shoorab, M., Moradi, Z., & Hajiha, Z. (2025). Designing and Explaining a Model for Reducing Financial Risks for Investors in Knowledge-Based Industries in Iran. *Journal of Resource Management and Decision Engineering*, 4(2), 1-9. https://doi.org/10.61838/kman.jrmde.4.2.2



© 2025 the authors. Published by KMAN Publication Inc. (KMANPUB). This is an open access article under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

ABSTRACT

The management of industries often seeks to reduce risk by providing information through various channels such as regulatory institutions and voluntary disclosures. Risk-taking plays a significant role in maintaining the competitive advantage of companies and guides them toward greater economic growth. In competitive environments, companies pursue different strategies to increase their market share and create barriers to entry for others. The selection of each strategy entails acceptance of varying levels of risk and has different impacts on firm-specific risk. The study sample consists of 18 experts, including specialists, managers, and knowledgeable stakeholders, who are considered the statistical population. The criteria for expert selection include comprehensive knowledge of processes within knowledge-based industries in the country and familiarity with financial risk reduction concepts. Participants were selected through purposive sampling and in accordance with the saturation principle. Using grounded theory methodology, the study identified indicators related to financial risk reduction and proposed a conceptual model. The necessity of each extracted component for reducing financial risk in knowledge-based industries and the presentation of a proposed model were examined. The research was analyzed using three stages of coding: open, axial, and selective. The results show that, based on conceptual and secondary codes, the following components were extracted: Causal Factors (e.g., establishing appropriate structures, team-building to promote knowledge-based companies); Contextual Factors (e.g., empowering financial funds, investment diversification, risk reduction strategies); Intervening Factors (e.g., enhancing management and leadership, empowering knowledge-based companies, research and development); Outcomes (e.g., improving quality of life, increasing owners' trust, profitability). The identified components enable the creation of a real-time, risk-reducing work environment.

Keywords: financial risk reduction, knowledge-based companies, profitability, investment diversification.



1. Introduction

Inancial literacy plays a significant role in understanding investor behavior in both advanced and emerging markets. Undoubtedly, one of the fundamental factors in achieving this is the creation of economic value added through innovation and the commercialization of technology, which is realized in the form of the establishment of knowledge-based companies (Shahrastani & Boostan Fath Abadi, 2024). Companies require financial resources for survival and continuity, and external financing is one of the main methods to obtain such resources (Shakerzavardehi et al., 2021). Today, company managers incorporate risk management into their strategies and programs to reduce risk, achieve corporate objectives, and increase confidence in the decision-making processes of investors and creditors (Bronzini et al., 2017).

Risk tolerance is regarded as both a subjective and operational basis in investment, and due to its association with individual traits, it may result in considerable variation in returns under similar conditions. What matters is that risk has a specific price, and therefore, its transfer or elimination entails a cost. As asset-related risk increases, investors demand higher returns, thus necessitating a balance between risk and return. Among the most critical risks in financial and investment decisions, as perceived by managers, investors, and creditors, are stock liquidity risk and market risk (Darban Fooladi & Tabasi Lotf Abadi, 2024).

Investors, given these considerations, may base their decisions on financial literacy and emotional responses, taking into account investment risk, to apply appropriate recommendations and strategies at the level of individual investors. The relationship between financial information and risk is one of the most fundamental issues in the field of finance. Higher-quality information is always associated with lower uncertainty and risk, and people are willing to pay more for higher certainty and lower risk. Business entities that disclose high-quality information reduce investors' uncertainty regarding their stocks, thereby increasing trading willingness, reducing risk, and improving stock returns. Consequently, the cost of capital for the firm also decreases (Knudsen et al., 2023).

According to the Organization for Economic Cooperation and Development, knowledge-based companies play a significant role in achieving the United Nations Sustainable Development Goals through employment generation, sustainable industrialization, innovation cultivation, and income gap reduction. In this context, their financial performance, sustainability, and the reduction of financial risks are of vital importance for realizing such aspirations (Bartolacci et al., 2020).

Findings from various scientific and technical studies indicate that the lack of financial resources and inefficient allocation are among the primary and most significant challenges facing the establishment, growth, development of knowledge-based companies throughout their lifecycle, especially during the early growth stages (Bozkaya & Van Pottelsberghe De La Potterie, 2008). In Iran, despite various initiatives—particularly after the enactment of the Law on Supporting Knowledge-Based Companies—evidence suggests that these companies continue to face serious challenges in securing financing at different stages of their lifecycle. These challenges include the insufficiency of financial resources in existing funds, weak governmental financial support policies, and the effects of economic and political uncertainties (such as sanctions, inflation, exchange rate volatility, and high bank interest rates) (Nazemi Manbari & Asgharzadeh, 2022; Osouliyan et al., 2022).

Knowledge-based industries are the driving engines of a knowledge economy and play a key role in the production and dissemination of knowledge and, most importantly, in its commercialization. Thus, improving and developing the performance of these companies directly contributes to national production, wealth generation, and the realization of scientific and economic goals. These industries are mainly characterized by three core features: operating in high-tech and high value-added domains, significant expenditure on research and development, and possessing technical expertise (Sajoodi et al., 2020). Furthermore, most knowledge-based companies possess intangible assets such as human capital and technical knowledge and, compared to traditional large industries, rely significantly less on fixed capital. Although knowledge-based products generate high value-added, the inherently research-intensive technology-driven nature of such companies typically results in long payback periods and high levels of risk.

Consequently, financing the costly research activities of these industries remains a major obstacle to their growth. The managers of these companies are often young university graduates who struggle to provide sufficient collateral to banks, thereby limiting their access to bank loans. Even when such financing is secured, they often lack the resilience to endure significant economic fluctuations and may cease operations just as rapidly as they begin. In contrast, large companies, especially joint-stock firms, face fewer obstacles



in financing their activities. They can easily raise capital through stock issuance and enjoy greater access to bank credit. However, small and medium-sized enterprises (SMEs) face constraints in securing required capital. Many entrepreneurs abandon their business ideas due to limited access to financial resources and fail to bring their innovations to market (Adil et al., 2022).

One of the most significant risks currently facing the market is the rash decision-making regarding sudden changes in market regulations, which can significantly influence investor sentiment. This issue is exacerbated by the mass entry of non-expert individuals into the market. The influx of liquidity from inexperienced and financially illiterate investors can cause emotional market behavior, leading to bubbles or crashes at critical trading points (Nazemi Manbari & Asgharzadeh, 2022).

Venture capital is typically used to finance high-risk, innovative ideas or products that have the potential for above-average returns. This type of investment is primarily applied to firms with high innovation or advanced technology capabilities. Due to the inherent uncertainty of outcomes, such capital is often referred to as risk capital. In Iran, venture capital has mostly been state-led and has not been addressed in a structured and strategic manner. This weakness can be attributed to several factors, including the small share of research in the annual budget, the lack of a risk-taking investment culture, unrealistic investor expectations, the unappealing nature of long-term investment, insufficient capital in venture funds, and the prevalence of imitation in domestic projects (Sajoodi et al., 2020).

In recent years, the growth in the number of knowledgebased companies in Iran has coincided with adverse economic conditions, international sanctions, and the absence of appropriate facilitating regulations, intensifying financial challenges for these firms. Financial risk reduction is recognized as a core strategy across domains, aiming to mitigate loss severity through preventive mechanisms. While general methods such as risk analysis, financial education, and expert consultation are known, limited research specifically addresses financial risk reduction for investors in knowledge-based companies. Bagheri et al. (2024) examined the impact of financial and operational risk on audit quality in Tehran Stock Exchange-listed firms and found a significant relationship between financial risk and audit quality (Bagheri & Lotfallian, 2024). Eskandari et al. (2025) investigated stock price crash risk and reported that market-based financial distress does not increase crash risk,

although accounting-based distress measures like Altman's Z-score do (Eskandari & Kordestani, 2024). In contrast, Wang et al. (2023) argued that fintech-driven financial innovation could mitigate this asymmetry and reduce crash risk (Wang et al., 2023). Pan et al. (2022) proposed a dynamic network-based risk management model for petrochemical supply chains (Pan et al., 2022), while Abduljabbar and Brisam (2022) identified major operational, political, and financial risks in Iraq's refining sector (Abduljabbar & Breesam, 2022). Despite the broader relevance of financial risk, the literature remains sparse on its specific implications for knowledge-based firms, underscoring the need for tailored, multidimensional models in this sector.

The rapid pace of technological change exposes knowledge-based industries to significant risks. Thus, in order to achieve efficiency and effectiveness in the technology sector, these industries must develop the necessary capabilities and awareness regarding changes in products, materials, processes, and business-related technologies (Asgarnejad Noori & Emkani, 2017).

Based on this context, the current research aims to identify the components of financial risk reduction for investors in the knowledge-based industries of Iran using a qualitative research approach. Accordingly, the central research question is as follows:

What are the components of financial risk reduction for investors in Iran's knowledge-based industries, and what model can be proposed based on these components?

2. Methods and Materials

The primary objective of this phase of the study is to investigate and explore concepts and categories related to reducing financial risk for investors. Accordingly, in this stage, semi-structured interviews were employed to identify the components of financial risk reduction. Additionally, secondary probing questions were posed alongside each main question to better understand the participants' experiences during the interviews. In the qualitative section, data collection was carried out using two tools: note-taking and semi-structured interviews, to identify the dimensions and components of financial risk reduction. The required qualitative data were collected and analyzed using grounded theory as a research technique, through which concepts, categories, and main and sub-factors were identified and analyzed.



These identified concepts, factors, and categories formed the basis for developing the instrument (questionnaire) to determine influential factors and understand the model's dimensions and components to explain the reduction of financial risk for investors in knowledge-based companies. The statistical population of this study consists of managers of knowledge-based companies who possess executive experience at decision-making levels and are referred to as informed experts. This group was selected to conduct the qualitative part of the study. The interview process began with 6 participants and continued until data saturation was reached, resulting in the participation of 18 experts in total. The method of qualitative data analysis employed in this section is grounded theory. The data analysis process in this design was conducted in three stages: open coding, axial coding, and selective coding.

3. Findings and Results

In the qualitative section, content analysis was used to analyze the data. First, key points from each semi-structured interview were marked through listening to the recorded interviews and reviewing field notes taken during the interviews. Then, key and essential points were extracted from each interview. These key points were subsequently categorized using professional terminology and labeled appropriately. The labeled terms from each interviewee were organized into tables and then grouped into dimensions and components based on their mutual relationships and relevance.

Analysis and Coding: In this stage, sampling should be extensive enough to allow the researcher to discover concepts in an open setting. Essentially, the researcher should code every interesting event. A single interview (text) may yield many codes; however, as the data are systematically reviewed, new codes are identified and final codes are determined.

Discovery of Categories: At this stage, the concepts themselves are categorized based on their relation to similar topics, a process known as categorization. The labels assigned to the categories are more abstract than the concepts that form them. Categories possess high conceptual strength because they can aggregate related concepts. The selected titles were primarily chosen by the researcher, aiming for maximum relevance and coherence with the underlying data they represent. Another important source of labels is the terms and phrases used by the study participants (interviewees), which can be valuable to the researcher.

Describing Categories: Based on their characteristics, in the next step, the categories are described to make them clearer and better defined.

 Table 1

 Initial Extracted Concepts of Financial Risk Reduction and Presentation of an Appropriate Model in Knowledge-Based Companies,

 Secondary Coding, and Formation of Conceptual Codes and Categories

Selective Category	Core Category	Subcategories
Causal Factors	Establishing Appropriate Structure	Strengthening and developing industries to empower companies; the willingness of knowledge-based companies to utilize financial consulting institutions; enhancing public capital inflow into knowledge-based companies; developing infrastructure for knowledge-based products and financing based on the economic and cultural context; monitoring imports; strengthening integrated, transparent, and up-to-date information systems and addressing the absence of financial supply networks; providing infrastructure development services; enhancing domestic markets; targeting government support to knowledge-based companies; developing networks associated with knowledge-based companies; innovation management and commercialization services; innovation management projects, technical and business development, and firm management; harmonizing related organizations such as the tax authority and social security; reforming laws and regulations relevant to knowledge-based companies; ensuring sufficient understanding of various financing methods; strengthening management and expert structures; reforming innovation structures within knowledge-based companies
	Team Building for Enhancing Knowledge- Based Companies	Utilizing all necessary professional expertise within the team; high level of personal skills among team members; cooperation in identifying potential project risks; ability of members to fulfill responsibilities; strong knowledge in relevant new product domains; appropriate reward systems; formation of task-specific teams; formation of risk teams for new product development; participatory culture and expanding cooperation with large companies; intellectual maturity required for shared ownership and responsibilities among members; promoting a participatory culture; leveraging financial and managerial capacities of large firms
Contextual Factors	Empowerment of Financial Funds	Strengthening corporate financial resources based on the lifecycle; provision of guaranteed loans; loans for primary infrastructure development; micro-loans; public financial support and subsidized loan programs; venture capital funds; non-repayable financial assistance for startup and small business operations; government contracts and training



	Investment Diversification	Stock diversification; diversification of securities; use of financial promissory notes; diversification of real estate holdings; reinforcing supervision of knowledge-based product imports; allocating capital across different assets; diversifying investment in both startups and large firms
	Risk Reduction Strategies	Discouraging risky behavior and incentivizing protective behavior; increasing or decreasing time and effort invested in target groups; training colleagues and consulting on risk reduction; organizing educational and advisory programs; improving connectivity with existing services and programs; raising public awareness of available resources; policy changes; skills training
Intervening Factors	Strengthening Management and Leadership	Enhancing capacity and leveraging managerial experience; liquidity management; increasing shareholder wealth and value in the long run; selecting and appointing competent managers; testing products before final production as a risk management skill; hiring academically educated managers with industry experience; periodic training for financial staff; addressing managers' knowledge needs in companies; entrepreneurial mindset, financial literacy, legal and market knowledge
	Empowering Knowledge-Based Companies	Promoting business culture; willingness of knowledge-based companies to offer equity for public participation; strengthening intellectual property rights processes; developing training programs tailored to knowledge-based firms; simplifying policies and regulatory supervision to provide targeted support; executing training tailored to knowledge-based company needs; utilizing expert knowledge within the companies; collaboration between knowledge-based and large firms; strengthening firms' capabilities to attract suitable investors
	Research and Development	Updating technologies; introducing innovations and improving products/services; product/service analysis; resource sharing; financial training (to reduce financial risks and strategies); access to updated information and valuable experiences; financial performance analysis; shaping appropriate industry trends
Outcomes	Improving Quality of Life	Enhancing company income; increasing owners' income levels; informed decision-making; reducing tensions and improving relationships within knowledge-based companies
	Increasing Owners' Trust	Leveraging institutional advantages; customer focus enhancement; promoting proper investment culture; increasing financial literacy among investors; utilizing tax incentives; encouraging indirect investment through financial institutions; increasing stock market share offerings
	Profitability	Enhancing company assets; increasing shareholders' equity; boosting product sales; achieving financial sustainability; coping with intensified market competition; optimizing company performance during crises such as market fluctuations, inflation, etc.

After identifying the categories, the next phase involves structuring the main theoretical categories, presented in Table 2.

 Table 2

 Formation of General Categories from the Components of Financial Risk Reduction

Selective Category	Core Category
Causal Factors	Establishing Appropriate Structure
Team Building for Enhancing Knowledge-Based Companies	
Contextual Factors	Empowerment of Financial Funds
Investment Diversification	
Risk Reduction Strategies	
Intervening Factors	Strengthening Management and Leadership
Empowering Knowledge-Based Companies	
Research and Development	
Outcomes	Improving Quality of Life
Increasing Owners' Trust	
Profitability	

Step Two: Axial Coding

Axial coding constitutes the second phase of analysis in grounded theory development. The aim of this stage is to establish relationships between the categories generated during open coding. This process forms the basis of the paradigm model and assists the theorist in organizing the theoretical process effectively. The core of the relational process in axial coding lies in elaborating and extending one of the categories.

Step Three: Theorizing (Selective Coding)

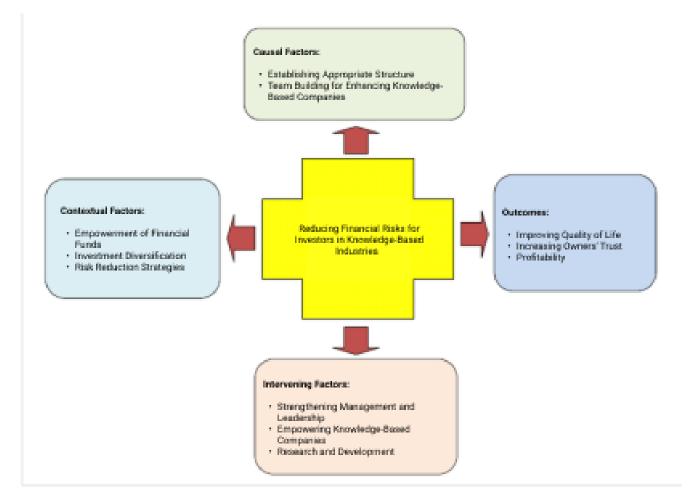
As stated, the goal of grounded theory is not merely to describe phenomena but to generate theory. To convert analyses into theory, categories must be systematically interrelated. Selective coding (based on the outcomes of the previous two coding stages) is the primary phase of theory generation. In this step, the core category is systematically related to other categories and these relationships are presented as a narrative. Categories that require refinement or further development are revised accordingly. At this stage, based on the researcher's understanding of the studied



phenomenon, either the paradigm model is presented narratively or its structure is adjusted and a visual representation of the final theory is depicted, as illustrated in the figure below.

Figure 1

Model of Financial Risk Reduction Indicators in Knowledge-Based Companies.



4. Discussion and Conclusion

The results of the interviews, presented in the form of categories, highlight the importance, necessity, and imperative of reducing financial risk for investors in knowledge-based companies, as detailed below:

A review of the literature concerning financial risk reduction as a dependent variable demonstrates that the importance of this issue has been articulated across all countries, especially with regard to how financial institutions are supervised in markets with advanced capital systems such as the United States, the United Kingdom, Germany, Japan, Singapore, India, and South Africa. These analyses reveal that following financial crises, most countries realized that traditional regulatory approaches—

centered on rules and regulations—lacked the required efficiency and effectiveness, and in fact, were often primary contributors to the crises. Consequently, regulatory approaches evolved from rule-based oversight to principle-based, and more recently, to risk-based supervision. Case studies from the aforementioned capital markets indicate that risk-based supervision plays a significant role in reducing risks, enhancing regulatory effectiveness, and minimizing inspection costs (e.g., fewer inspection days, fewer inspectors, etc.).

In a risk-based approach, financial institutions are categorized according to influential parameters such as asset size, customer base, market share, employee count, and number of branches, alongside risk parameters including credit risk, operational risk, financial risk, legal risk, market



risk, money laundering risk, and so forth. These institutions are classified into three to five tiers: very high risk, high risk, moderate risk, low risk, and very low risk. The frequency and intensity of on-site and off-site supervision of these institutions are determined based on their risk category, such that institutions with higher risk receive more intensive and frequent inspections throughout the year.

As shown, one of the key findings in the proposed model of this research—based on grounded theory—is the identification of financial risk reduction components in knowledge-based companies. These components, derived from conceptual and secondary codes, include:

- 1. Causal factors (establishing appropriate structures, team building to enhance knowledge-based firms);
- Contextual factors (empowering financial funds, investment diversification, risk reduction strategies);
- Intervening factors (strengthening leadership and management, empowering knowledge-based firms, research and development);
- 4. Outcomes (improving quality of life, increasing owner trust, and profitability).

The identified components enable the development and expansion of activities in a competitive and growing environment, paving the way for new investments. Such investments inherently require financing and cash flows. Companies achieve financing through various means, one of which is debt financing (Shakerzavardehi et al., 2021). Utilizing debt financing as a strategic tool has varying impacts on firm value. While debt offers tax advantages that can increase accounting profit and consequently earnings per share (EPS), it also introduces interest costs and the risk of default at maturity, potentially raising financial risk, reducing market share price, and thereby decreasing stock returns (Knudsen et al., 2023; Motaghi et al., 2023).

Financial risk itself is not inherently negative. A sound understanding of it leads to better and more informed decision-making in business or investment, aiding in value assessment. Proper evaluation and forecasting of financial risk contribute to estimating the value of an investment. However, failure to control financial risk can have irreversible consequences that are difficult to recover from, potentially affecting entire sectors and markets (Bozkaya & Van Pottelsberghe De La Potterie, 2008). Financial ratios are crucial tools for predicting financial risk, business discontinuity, and corporate financial crises. These ratios clearly reveal key realities about a company's operational results and financial status and provide relevant insights

(Namazi et al., 2015). Specific ratios are analyzed based on their purpose and applications.

Studies (Rao et al., 2021; Rostami Nourzabad et al., 2022; Sajoodi et al., 2020) confirm a significant relationship between financial risks and financial ratios. Empirical evidence affirms the link between financial news and positive informational shocks with financial risk, which is exacerbated by excessive optimism and emotional biases among retail investors.

An innovation-oriented perspective and the development of technology-based financial innovations can prevent management from concealing bad news, thereby reducing information asymmetry and mitigating risk (Wang et al., 2023). They are also partially consistent with the prior findings (Bagheri & Lotfallian, 2024; Eskandari & Kordestani, 2024), which support the effectiveness of financial risk reduction strategies.

Recommendations for Identifying Financial Risk Reduction Components in Knowledge-Based Companies:

- Employ qualified professionals in fields such as finance, accounting, and marketing.
- Promote effective communication among team members and ensure familiarity with their roles and responsibilities.
- Raise awareness among managers and employees
 of knowledge-based companies about essential
 knowledge areas, while also fostering a culture and
 spirit of technological and innovative
 entrepreneurship.
- Collaborate with large firms to gain experience in various stages from production to sales.
- Diversify financial resources through mechanisms such as crowdfunding, angel investors, and more.
- Introduce necessary legislation for new investments and revise the rigid and formal frameworks of trade law, intellectual property law, and the legal infrastructure for intellectual property rights.
- Encourage public participation and cultural promotion to reduce public distrust and disinterest in investment.
- Provide both financial and non-financial incentives and develop suitable policies to eliminate existing legal and structural barriers.

Authors' Contributions



Authors contributed equally to this article.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

Acknowledgments

We would like to express our gratitude to all individuals helped us to do the project.

Declaration of Interest

The authors report no conflict of interest.

Funding

According to the authors, this article has no financial support.

Ethics Considerations

In this research, ethical standards including obtaining informed consent, ensuring privacy and confidentiality were considered.

References

- Abduljabbar, N., & Breesam, H. (2022). Risk assessment process for the Iraqi petroleum sector. *Journal of the Mechanical Behavior of Materials*, 31, 748-754. https://doi.org/10.1515/jmbm-2022-0018
- Adil, M., Singh, Y., & Ansari, M. S. (2022). How financial literacy moderate the association between behaviour biases and investment decision? *Asian Journal of Accounting Research*, 7(1), 17-30. https://doi.org/10.1108/AJAR-09-2020-0086
- Asgarnejad Noori, B., & Emkani, P. (2017). The Impact of Effective Risk Management on the Financial Performance of Companies Listed on the Tehran Stock Exchange: The Mediating Role of Intellectual Capital and Financial Leverage. *Asset Management and Financing*, 5(2), 112-193. https://ensani.ir/fa/article/377467/
- Bagheri, M., & Lotfallian, M. (2024). Examining the Impact of Financial and Operational Risks on Audit Quality in Companies Listed on the Tehran Stock Exchange. 7th International Conference on Innovative Ideas in Management, Economics, Accounting, and Banking,
- Bartolacci, F., Caputo, A., & Soverchia, M. (2020). Sustainability and Financial Performance of Small and Medium Sized Enterprises: A Bibliometric and Systematic Literature Review. *Business Strategy and the Environment*, 29(3), 1297-1309. https://doi.org/10.1002/bse.2434

- Bozkaya, A., & Van Pottelsberghe De La Potterie, B. (2008). Who Funds Technology-Based Small Firms? Evidence from Belgium. *Economics of Innovation and New Technology*, 17(1-2), 97-122. https://doi.org/10.1080/10438590701279466
- Bronzini, R., Caramellino, G., & Magri, S. (2017). Venture capitalists at work: What are the effects on the firms they finance? https://doi.org/10.2139/ssrn.3048277
- Darban Fooladi, J., & Tabasi Lotf Abadi, V. (2024). Evaluating Investors' Financial Risk Tolerance in the Capital Market. New Explorations in Computational Sciences and Behavioral Management.
 - https://doi.org/10.22034/necsbm.2024.462684.1060
- Eskandari, R., & Kordestani, G. (2024). Agency Costs and the Relationship of Financial Distress Risk with Stock Price Decline Risk. *Financial Management Strategy*, 12(2). https://jfm.alzahra.ac.ir/article_7751.html
- Knudsen, E. S., Hage, F. P., & Vethe, M. B. (2023). The more, the merrier: Performance effects of cash over the business cycle. *Scandinavian Journal of Management*, 39(1). https://doi.org/10.1016/j.scaman.2022.101255
- Motaghi, S., Mobaser, A., & Saber, N. (2023). Technical Analysis and Financial Risk Reduction in the Stock Market: A Case Study of Karaj Brokerage Firms. 6th International Conference on New Developments in Management, Economics, and Accounting, Tehran.
- Nazemi Manbari, S., & Asgharzadeh, G. (2022). Investigating the effect of past behavior and financial literacy on investors' investment decisions in the framework of the theory of planned behavior in Tehran Stock Exchange. *Studies of Economy, Financial Management and Accounting*, 1(8), 87-98.
- Osouliyan, M., Mohammad Fadaei Nejad, I., & Gheitasi, S. (2022).

 Managerial Predictions, Company-Specific Risks, and the Informational Environment (Evidence from Companies Listed on the Tehran Stock Exchange). *Journal of Asset Management and Financing*, 10(1), 25-46. https://amf.ui.ac.ir/article_26649.html
- Pan, C., Huang, X., & Sun, W. (2022). Research on Risk Management of Petrochemical Supply Chain Based on Network Dynamic Evolution Model. *Proceedings of 2021 Chinese Intelligent Automation Conference*. https://doi.org/10.1007/978-981-16-6372-7_26
- Rao, P., Kumar, S., Chavand, M., & Weng Marc Lim, W. (2021).

 A Systematic Literature Review on SME Financing: Trends and Future Directions. *Journal of Small Business Management*, 1-31. https://doi.org/10.1080/00472778.2021.1955123
- Rostami Nourzabad, M., Badami, M. H., & Eshtehri, M. (2022).

 Dimensions of Risk Management Development in the Business Model and Culture of Financial Industry Organizations in Iran. *Journal of Asset Management and Financing*.

 https://www.noormags.ir/view/fa/articlepage/2059473/
- Sajoodi, S., Mohammadzadeh, P., & Fateh, A. (2020). Examining the Effect of Financing from Venture Capital Funds on the Profitability of Knowledge-Based Companies.
- https://jstp.nrisp.ac.ir/article_13804.html
 Shahrastani, S., & Boostan Fath Abadi, M. (2024). Examining the
 Impact of Financial Literacy, Investment Risk, and
 Willingness to Invest in the Tehran Stock Exchange. 3rd
 International Conference on Political Science, Management,
- Economics, and Accounting, Hamadan.

 Shakerzavardehi, F., Ebrahimi, S. K., & Jalali, F. (2021). The Effect of External Financing Activities on Earnings Smoothing Considering the Moderating Role of Organizational Risk Management. 2nd International



Conference on Challenges and Innovative Solutions in Industrial Engineering, Management, and Accounting, Wang, X., Cao, Y., Feng, Z., Lu, M., & Shan, Y. (2023). Local FinTech development and stock price crash risk. *Finance Research Letters*, 53, 103644. https://doi.org/10.1016/j.frl.2023.103644