

Comprehensive Studies on Supply Chain Contract Selection and Identification of Its Factors Using Meta-Synthesis Method

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Abstract. This study examines the factors influencing the selection of supply chain contracts under uncertain conditions. As organizations increasingly face more complex supply chains affected by unstable market conditions and varying demands from stakeholders, the ability to make informed and reliable decisions becomes of paramount importance. This study combines the existing literature from the years 1395 to 1402 in the Iranian calendar (2016–2024 in the Gregorian calendar) and investigates the criteria and sub-criteria for selecting supply chain contracts, highlighting their applications in various industries, including oil and gas.

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1. Introduction

Supply Chain Management (SCM) is a set of approaches that efficiently integrates suppliers, manufacturers, warehouses, product production, and distribution to ensure that products are delivered in the right quantity, at the right location, and at the right time to meet customer demands while minimizing costs within the system [1]. While there are many elements involved in supply chain management activities, supplier selection holds a significant position as it encompasses a series of activities such as identifying, analyzing, and selecting suppliers to become a part of the supply chain. Since supplier selection is based on multiple criteria, it is not an easy task. It involves extensive comparison of suppliers using a series of common criteria. Two key issues in selecting the best supplier or group of suppliers are: what criteria to use and what method to apply for supplier comparison [2].

The supply chain plays a crucial role in every economy and company. The experience of leading countries and industries has shown that increasing efficiency and productivity in the supply chain is a key strategy for improving the business environment, reducing costs, and enhancing overall efficiency. Given that supply chain costs sometimes account for up to 30% of the final product price, effective supply chain management can positively

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impact operations by reducing inventory, increasing productivity, enhancing agility, improving time management, ensuring precise flow tracking, and improving consumer services [3].

To improve supply chain performance, companies outsource some of their tasks and services to other firms [4]. The growing awareness of the importance of supply chains in recent years has led to more innovations in the logistics sector, both at the national level and among leading global companies [5].

For the concept of outsourcing, evaluating and selecting an appropriate supplier contract model is a critical step in establishing sustainable partnerships in the supply chain [6]. Defining precise criteria and standards for selecting the best outsourcing company and supply chain activities is essential.

Supply chain capabilities have the potential to act as flexible features that either prevent disruptions or help the supply chain resume its normal activities immediately after disruptions [7]. The concept of resilient supply chains has become a globally accepted and recognized agenda due to the common vulnerabilities and complexities of global supply chains. Supply chain capabilities should be structured in a way that not only reduces risks but also ensures the reasonable, reliable, efficient, environmentally friendly, proactively managed, and socially acceptable supply of sufficient petroleum products [8].

The oil and gas industry (O&G) is one of the most critical economic sectors contributing to a country's revenue [9]. The revenue from this sector can further facilitate infrastructure development [10]. Given the costs associated with the extraction and maintenance of O&G, prices also rise in relation to these costs [11]. The supply chain refers to a series of activities related to transferring raw materials from suppliers to final consumers, where cost reduction and improved customer satisfaction are also key concerns. Many companies have attempted to maximize their profits through appropriate contract agreements [12]. The successful implementation of this approach depends on several factors. Therefore, in selecting an appropriate contract, both fixed and variable factors must be considered, such as information, human resources (HR), time required for equipment procurement, time, quality, and more [13,14]. Identifying the right contractor among numerous providers offering different services is challenging. Considering various factors before selecting a contract is essential [15].

This study particularly focuses on the key issue of supplier selection, emphasizing the importance of choosing appropriate methodologies suited to the unique challenges of supply chain management. These methodologies can enhance operational performance and strategic coordination.

Moreover, the study encourages researchers to explore innovative approaches that leverage modern technologies to address the complexities and uncertainties typically associated with supply chain contract selection. It also raises important considerations regarding the environmental impact and sustainable practices in decision-making, aligning with broader corporate social responsibility (CSR) goals and sustainable development objectives.

This meta-synthesis serves as a fundamental resource for both academics and supply chain management professionals, offering insights into effective decision-making strategies under uncertainty to tackle contemporary challenges. Future research will focus on applying advanced analytics and adaptive strategies in contract selection, which may lead to innovative solutions that enhance supply chain resilience and performance.

2. Literature Review

The literature on Supply Chain Management (SCM) has increasingly focused on the application of Multi-Criteria Decision-Making (MCDM) methods, particularly in the context of contract selection under conditions of uncertainty. Various studies have utilized

diverse MCDM techniques to improve decision-making processes in SCM, providing valuable insights into their effectiveness and applicability across different sectors.

Several researchers have systematically examined the application of MCDM methods in different areas of supply chain management. For example, a literature review covering a 13-year period (2005 to 2017) identified 140 published articles that categorized the use of MCDM methods at different decision-making levels and industrial applications [16]. This comprehensive review highlights the importance of selecting appropriate MCDM techniques to address specific challenges in supply chain activities.

One of the prominent areas in the literature is the supplier selection process, where MCDM methods play a crucial role. These methods not only help reduce uncertainty in the selection process but also enhance the overall efficiency and effectiveness of supply chain operations [17,18].

Contract selection in supply chains under uncertainty conditions has been examined through various frameworks that incorporate MCDM methods. For instance, studies have demonstrated that using the Evaluation Based on Area Ranking (EAMR) method alongside SWARA for systematically ranking contracts in the healthcare sector proves the applicability of these methods in critical and sensitive environments [18]. Such research confirms the growing need for robust decision-making frameworks to manage the inherent uncertainties in supply chain contracts.

Supplier selection criteria in the early 1980s were primarily cost-oriented, focusing on the economic aspects of supplier selection [19]. Over time, additional criteria such as cost, quality, delivery, flexibility, technological capability, innovation, and financial factors have become widely used [20-28].

Supplier selection studies exist across nearly all industries, including chemical and pharmaceutical industries [29-31], cosmetic and personal care industry [32], paint industry [33,34], and chemical manufacturing [35,36]. Some studies suggest that supplier selection research can be applied across various industries [22,37,38].

Overall, contract selection in SCM is one of the most common research topics in the SCM domain [39,40] due to its direct impact on company performance [41]. Existing studies have conducted research on this subject across various economic sectors [42-44].

Table 1. Supply chain management contract selection factors

Variable	Description	Reference
Flexibility	The ability to adapt to changing conditions.	[45,46]
Demand Fluctuations	Managing varying demand rather than a fixed demand.	[47,48]
Uncertainty	Changes in all factors related to the contract.	[49,50]
Excess Inventory	The impact of surplus stock on cost and efficiency.	[45,51]
Information Distortion	The bullwhip effect and miscommunication in the supply chain.	[52,53]
Responsiveness	The ability to react efficiently to changes	[54,55]
Cost	Direct and indirect costs associated with the contract.	[56,57]
Quality	Ensuring product/service quality meets standards.	[56,58]
Organization	The company's internal structure and capabilities.	[59,60]

Contract Process	Steps and strategies for contract execution.	[61,62]
Project Characteristics	The unique aspects of each project.	[63,64]
Contract Type	Fixed, flexible, revenue-sharing, etc.	[65,66]
Organizational Structure	How the company is structured and managed.	[60,67]
Company Status	Financial stability, market position, and reputation.	[68,69]
Green Tariffs & Standards	Sustainability and environmental regulations.	[32]

Despite significant advancements in this field, gaps still exist in the literature. Therefore, future studies should explore innovative technological approaches that enhance decision-making in supply chain management.

Additionally, the application of fuzzy logic in MCDM methods presents opportunities for further research, particularly in addressing the complexities and uncertainties commonly found in supply chain environments [70].

3. Methodology

3.1 Using the meta synthesis method to find factors

In many topics, there are numerous qualitative studies that examine a common phenomenon. The abundance of qualitative studies on a single phenomenon makes it possible to synthesize these studies and create a new interpretation of a human or social phenomenon. The meta-synthesis method is an emerging approach in qualitative studies that is increasingly being used in social science research. This method is used to systematically interpret the results of qualitative studies to provide a new explanation of the shared phenomenon under study. The increased use of this method underscores the importance for researchers to become familiar with the role of meta-synthesis, the steps involved, how to validate it, and the common challenges in applying it. This paper, using a variety of methodological literature on meta-synthesis, identifies the similarities and differences between this method and other similar approaches. It proposes the stages of the research process, methods to enhance the credibility of this type of research, and finally, common mistakes made when using this method [71].

3.1.1 step One: Research Questions

In this step researcher should define clear and focused research questions that will guide the synthesis process. These questions should address the specific aspects of the phenomenon under study. Therefore, first, the research questions are stated as in Table 2 along with the parameters.

Table 2. Research parameters and questions

Parameter	Questions
What?	This refers to the research question or objective of the study. What exactly is being investigated or synthesized? In meta-synthesis, this would be the phenomenon or concept from previous qualitative studies that you aim to reinterpret or understand in a new way.
Population under Study	This refers to the specific group or set of studies that your research focuses on. In the case of meta-synthesis, the population typically consists of qualitative research articles, papers, or case studies

	related to the phenomenon being studied. Clearly defining the population ensures the synthesis is based on appropriate sources.
Time Limitations	This is about the time frame within which the studies you include in your synthesis were conducted or published. The limitation helps to clarify the scope of the review. For example, you may choose to review studies published in the last 10 years, depending on your research goals
Methodology	This refers to the methodological approach used in the research. In a meta-synthesis, this would involve the steps you follow for selecting, analyzing, and synthesizing the data from previous studies. The methodology includes the process of reviewing the literature, extracting themes, and drawing conclusions based on the findings.

3.1.2 Step Two: Systematic Literature Review

In this step researcher should conduct a comprehensive and systematic review of the literature, ensuring that all relevant qualitative studies on the phenomenon are included. This step involves identifying key themes and concepts from the existing studies. According to Table 3, keyword searches were conducted in both Persian and English.

Table 3. Keyword search

English	Persian
Contract Selection	انتخاب قرارداد
Supply Chain Management	مدیریت زنجیره تامین
Supply Chain Contract	قرارداد زنجیره تامین
Supply Chain Management Contract Selection	انتخاب قرارداد مدیریت زنجیره تامین
Contract Selection with Multi-Criteria Decision Making Method	انتخاب قرارداد با روش تصمیم‌گیری چند معیاره
Uncertainty in Supply Chain Management Contract Selection	عدم قطعیت در انتخاب قرارداد مدیریت زنجیره تامین
-	ترکیب موارد بالا

3.1.3 Step Three: Search and Select Relevant Articles

In this step researcher should search for and select the most relevant articles or studies based on predefined criteria, such as the quality, relevance, and rigor of the studies. The selection should be purposeful to ensure that the studies chosen provide meaningful data for the synthesis. The scientific sites and databases used in this study were from two groups: Persian and English, as shown in Table 4 and Table 5.

Table 4. Persian databases used

Database	Website Address
Jihad Daneshgahi	https://www.sid.ir/
Mag Iran	https://www.magiran.com/
Civilica	https://civilica.com/
Noor Specialized Magazines Database	https://www.noormags.ir/

Table 5. English databases used

Database	Website Address
Springer	https://www.springer.com/

Emerald	https://www.emerald.com/insight/
scholar.google	https://scholar.google.com/
Science direct	https://www.sciencedirect.com/
Wiley	https://onlinelibrary.wiley.com/
Taylor & Francis	https://taylorandfrancis.com/

We also used the following search string on certain websites:

“ Contract Selection AND Supply Chain Management AND Supply Chain Contract AND Uncertainty AND MCDM “

The time frame for the article search was as follows:

- From 1395 to 1403 in the Persian calendar
- From 2016 to 2024 in the Gregorian calendar

In addition, to ensure precision in the content, the following inclusion criteria were considered for selecting articles:

- Only journals were considered. Conference papers, book chapters, patents, discussions, etc., were not reviewed.
- Only articles in Persian or English were included.

3.1.4 Step Four: Extract Results

In this step researcher should extract key findings, concepts, and themes from the selected studies. This process involves organizing the results systematically, which will then be analyzed and synthesized to form a new understanding or interpretation of the phenomenon. Since the aim of meta-synthesis is to find the most appropriate answers to the research questions by examining the literature review. To achieve this goal, we used the strategy presented in the figure below. The results of the research are influenced by the database and keywords used in the study.

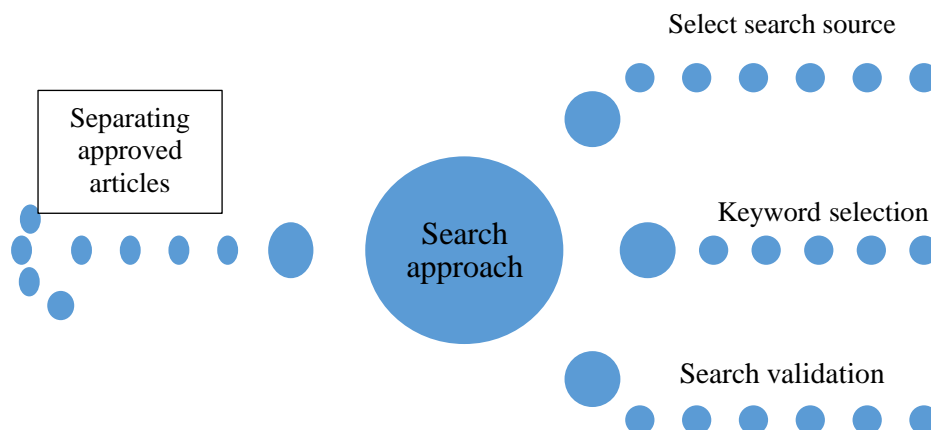


Figure 1 Meta-synthesis search approach.

The desired keywords are extracted from the research questions.

Table 6. English databases used

Database		Number of searches
Jihad Daneshgahi	Searched	26
	Selected	24

Mag Iran	Searched	11
	Selected	11
Civilica	Searched	9
	Selected	4
Noor Specialized Magazines Database	Searched	-
	Selected	-
Springer	Searched	105
	Selected	24
Emerald	Searched	384
	Selected	29
scholar.google	Searched	200
	Selected	46
Science direct	Searched	559
	Selected	48
Wiley	Searched	123
	Selected	10
Taylor & Francis	Searched	167
	Selected	19

The next step is to search for relevant studies in the existing literature that might answer the research question. It is essential to ensure that the text search aligns with what has been previously mentioned and adheres to the inclusion and exclusion criteria for selecting articles. This is a critical step to ensure that your literature review is focused and aligned with your research goals.

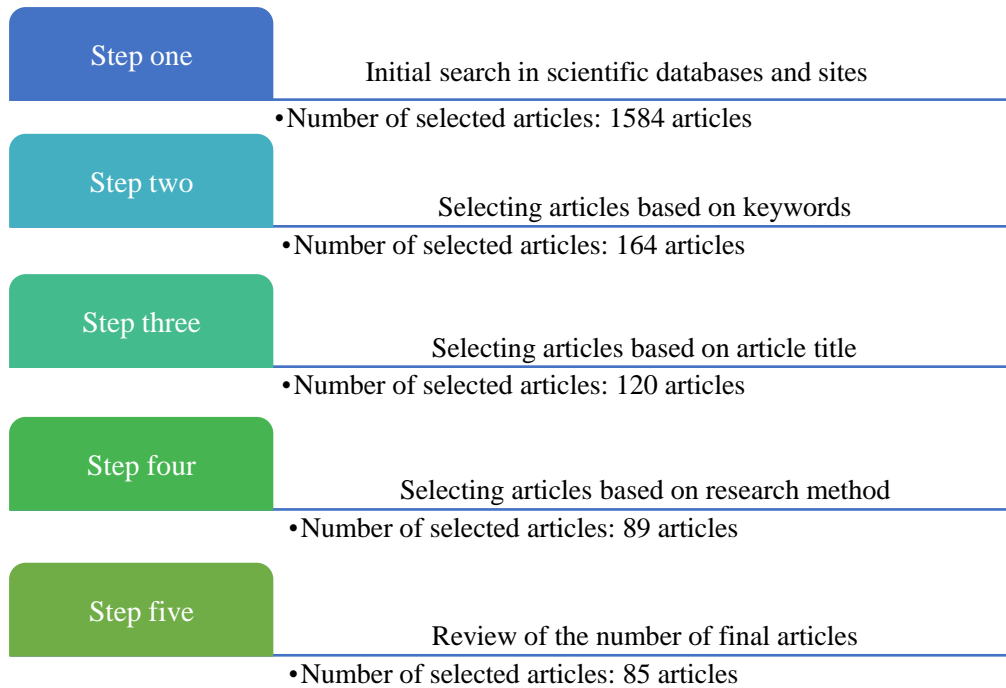


Figure 2 Steps for selecting searched articles

The basis for data extraction can include answering questions such as:

1. Does this article address contract selection in the supply chain?
2. Are the objectives of the article clearly stated?
3. Is the research method of the article clearly defined?

4. Result

Based on these criteria, the data were extracted using specially designed forms, and duplicate articles were excluded. During both the primary and secondary analyses, articles were refined by reviewing the title, abstract, conclusion, and relevant sections of the text.

Table 7. Codes and Sources of Studies

Criteria	Sub-Criteria	Source (Persian / English) research	
Economic and Financial Factors	Costs	Persian	[72-79]
		English	[34,80-102]
	Supplier Financial Stability	English	[6,100,103]
	Production Capacity	English	[80,92,96,97,102,105]
	Inventory Management	Persian	[74,106,107]
		English	[83,98,108]
Quality and Innovation	Productivity and Efficiency	English	[81,98,102]
	Quality	Persian	[74,76,79,107,109,110]
		English	[6,34,80,88-90,98,99,101,105,108,111-118]
	Research and Development (R&D)	Persian	[76,106,107]
		English	[6,80,88,89,101,105,108,116]
	Technology and Innovation	Persian	[79,106,107,119]
		English	[88,89,105,116]
	Quality Certificates	Persian	[106,107,119]
		English	[88,89,102,118,120]
	Robustness	English	[100,121,122]
Supplier Performance and Social Responsibility	Supplier Reputation	Persian	[107,109]
		English	[99,102,108,123]
	Social Responsibility	Persian	[72,78,107]
		English	[86,112,124,125]
	Commitment to Continuous Improvement	English	[87,102,103]
	Environmental Sustainability	Persian	[72,79,106,119,126,127]
		English	[86-88,90,101-

			103,105,112,118,120,121,125,128]
	Safety Management	English	[6,102,103]
Management and Logistics	Delivery Time	Persian	[78,106,109,119]
		English	[81,83-86,88,89,99,108,114,129-131]
	Flexibility	Persian	[78,79,109,110,127]
		English	[6,83,88,89,98,99,104,105,108,117,125,132-134]
	Logistics and Transportation	Persian	[78,107,119]
		English	[83,86,88,114]
	Reverse Logistics	Persian	[78,107,119]
		English	[81]
	Risk and Uncertainty Management	Persian	[74,76]
		English	[88,102,118,135]
Communication and Collaboration	Level of relationships and cooperation	Persian	[76,78,107,136]
		English	[81,102,108,114,118]
	Customer satisfaction	Persian	[76,78,119]
		English	[81,101,102,116]
	Advertising and its effectiveness	Persian	[76,78,107,137]
	Geographical location	English	[34,88,138]
Environmental and Social	Green Product Design and Packaging	English	[90,103,111,120,128]
	Green Supply Chain Management	English	[6,84,103]
	Environmental Certification Compliance	English	[6,88,90]

5. Conclusion

Optimizing contract selection in supply chains within environments characterized by uncertainty is of great importance for organizations aiming to maintain a competitive advantage and improve operational efficiency. As organizations increasingly face more complex supply chains, influenced by volatile market conditions and diverse stakeholder demands, the ability to make informed and reliable decisions has become especially critical. This meta-analysis emphasizes the importance of applying Multi-Criteria

Decision-Making (MCDM) methods to manage the complexities involved in contract selection processes. Given the changing market conditions and unpredictable customer demands, the use of MCDM techniques is proposed as a robust strategy for evaluating various contract options based on a set of defined criteria and sub-criteria, extracted from expert perspectives and literature reviews [16,139].

This research emphasizes the necessity of identifying key criteria and their hierarchical relationships to support effective decision-making. In this context, the study proposes a systematic framework for supplier evaluation that includes both qualitative and quantitative factors [18,139]. The use of the meta-synthesis method for refining the criteria ensures that the model is based on expert opinions, thus enhancing its applicability and relevance across various industries, including oil and gas.

Furthermore, the integration of sustainable supply chain management considerations within the MCDM framework highlights the importance of balancing economic objectives with social and environmental responsibilities [18]. This discussion also reveals the challenges associated with contract selection in today's dynamic environments. This study suggests that decision-makers must be skilled in managing uncertainty and risk, especially when traditional decision-making approaches are insufficient. In such cases, adaptive strategies, such as forming rapid response teams, can provide the agility needed to address unforeseen challenges and make informed decisions [70, 140].

This paper, by synthesizing existing literature from 2016 to 2024, explores the criteria and sub-criteria for supply chain contract selection and highlights their applications across various industries, including oil and gas. The importance of selecting the appropriate contract for effective supply chain management operations is emphasized. Key aspects examined in this paper include:

- **Supply Chain Management (SCM):** This concept involves coordinating and integrating suppliers, manufacturers, warehouses, and distribution to ensure that products are delivered in the correct quantity, at the right place, and at the right time to meet customer needs and minimize costs within the system.
- **Supplier Selection:** This decision in SCM is critical, and since supplier selection involves various criteria, choosing the best supplier is not easy. The supplier selection process includes comparing different suppliers using multiple criteria.
- **Contract Selection:** Another significant aspect of SCM is how different types of contracts impact supply chain performance, especially under uncertainty, and the role they play in ensuring sustainable operations.

By employing advanced analytics and data-driven methods, organizations can enhance their ability to evaluate alternative contract options and implement strategic actions aligned with their overall objectives. Ultimately, the findings of this research emphasize the importance of a structured and methodical approach in contract selection and highlight the role of MCDM techniques in facilitating informed decision-making. Future studies should focus more on integrating emerging technologies and data analysis in the contract selection process, which may lead to innovative solutions to challenges arising from uncertainty in supply chains. By doing so, organizations can better prepare for the complexities of modern supply chains and ultimately improve their performance and resilience [16 , 70].

In conclusion, this study highlights the importance of developing robust methods for selecting supply chain contracts in environments with high uncertainty and volatility. The findings indicate that the selection of appropriate criteria and methods for evaluating suppliers can significantly impact the overall performance of supply chains. Given the continuous developments in industries such as oil and gas, aligning these criteria with the specific needs of each industry is crucial. By emphasizing the synthesis of past and current literature, this study provides a comprehensive perspective on how to optimize contract selection in various sectors. Future research could further explore the integration of new technologies and data analytics into these decision-making processes to offer more

accurate and optimized supply chain management strategies.

References

- [1] D. Simchi and P. K. Levi, *Managing the Supply Chain: The Definitive Guide for the Business*. McGraw-Hill, (2004).
- [2] M. Alkahtani and H. Kaid, Supplier selection in supply chain management: A review study, *Int. J. Bus. Perform. Supply Chain Model.* **10**(2) (2018)107–130.
- [3] S. Abbasi, A. Saboury, and M. S. Jabalameli, "Reliable supply chain network design for 3PL providers using consolidation hubs under disruption risks considering product perishability: An application to a pharmaceutical distribution network, *Comput. Ind. Eng.* **152** (2021), Art. no. 107019.
- [4] H. Beiki, S. M. Seyedhosseini, V. R. Ghezavati, and S. M. Seyedaliakbar, Multi-objective optimization of multi-vehicle relief logistics considering satisfaction levels under uncertainty, *Int. J. Eng.*, **33**(5) (2020) 814–824.
- [5] J. Langley and M. Long, Third-party logistics study: The state of logistics outsourcing-results and findings of the 16th annual study, *Mar.* **8**(2012).
- [6] C. N. Wang, N. A. T. Nguyen, T. T. Dang, and C. M. Lu, A compromised decision-making approach to third-party logistics selection in sustainable supply chain using fuzzy AHP and fuzzy VIKOR method, *Mathematics*, **9** (8) 886(2021).
- [7] T. J. Pettit, J. Fiksel, and K. L. Croxton, Ensuring supply chain resilience: Development of a conceptual framework, *J. Bus. Logist.*, **31**(1) 1-21(2010).
- [8] B. K. Sovacool, I. Mukherjee, I. M. Drupady, and A. L. D'Agostino, Evaluating energy security performance from 1990 to 2010 for eighteen countries, *Energy*, **36**(10) 5846-5853(2011).
- [9] M. A. L. I. Youssef, Effects of world oil price movement on macroeconomic performance in Saudi Arabia, 2019. [Online]. Available: <http://psasir.upm.edu.my/id/eprint/83078/>.
- [10] M. Bradshaw, T. van de Graaf, and R. Connolly, Preparing for the new oil order? Saudi Arabia and Russia, *Energy Strategy Rev.*, **26**(100374) (2019).
- [11] J. D. Hamilton, What is an oil shock? *J. Econ.*, **113** 363–398 (2003).
- [12] A. K. Yazdi, P. F. Wanke, T. Hanne, and E. Bottani, A decision-support approach under uncertainty for evaluating reverse logistics capabilities of healthcare providers in Iran, *J. Enterp. Inf. Manag.*, **33**(2020) 991–1022.
- [13] T. F. d. Poberschnigg, M. L. Pimenta, and P. Hilletoft, How can cross-functional integration support the development of resilience capabilities? The case of collaboration in the automotive industry, *Supply Chain Manag.: Int. J.*, **25** (2020)789–801.
- [14] A. K. Yazdi, P. F. Wanke, T. Hanne, F. Abdi, and A. H. Sarfaraz, Supplier selection in the oil & gas industry: A comprehensive approach for multi-criteria decision analysis, *Socioecon. Plann. Sci.*, **79**(101142)(2021).
- [15] G. Governatori, F. Idelberger, Z. Milosevic, R. Riveret, G. Sartor, and X. Xu, On legal contracts, imperative and declarative smart contracts, blockchain systems, *Artif. Intell. Law*, **26**(2018) 377–409.
- [16] S. A. Khan, A. Chaabane, and F. T. Dweiri, Multi-criteria decision-making methods application in supply chain management: A systematic literature, *Multi-Criteria Methods Techn. Appl. Supply Chain Manag.*, **1**(2018) 10-5772.
- [17] A. Štilić, A. Puška, D. Božanić, and D. Tešić, Multi-criteria decision-making in public procurement: An empirical study of contractor selection for landslide rehabilitation, *Inf.*, **14**(7) 357 (2023).
- [18] I. Meidute-Kavaliauskiene and S. Ghorbani, Supply chain contract selection in the healthcare industry: A hybrid MCDM method in uncertainty environment, *Indep. J. Manag. Prod.*, **12**(4)1160-1187(2021).
- [19] H. S. Kılıç and A. S. Yalçın, Green supplier selection via an integrated multi-attribute decision-making approach, *Sakarya Univ. Sci. Inst. J.*, **23**(6)1066-1079 (2019).
- [20] C. A. Weber, J. R. Current, and W. C. Benton, Vendor selection criteria and methods, *Eur. J. Oper. Res.*, **50**(1) 2–18 (1991).
- [21] Y. Yang and L. Wu, Grey entropy method for green supplier selection, in *Proc. Int. Conf. Wireless Commun., Netw. Mobile Comput.*, Shanghai, (2007) 4682-4685.
- [22] C. Y. Chiou, C. W. Hsu, and W. Y. Hwang, Comparative investigation on green supplier selection of the American, Japanese and Taiwanese electronics industry in China, in *Proc. Int. Conf. Ind. Eng. Eng. Manag.*, IEEE, **8**(11)(2008)1909-1914.
- [23] A. H. I. Lee, H. Y. Kang, C. F. Hsu, and H. C. Hung, A green supplier selection model for high-tech industry, *Expert Syst.*, **36**(4) (2009)7917-7927.
- [24] W. Ho, X. Xu, and P. K. Dey, Multi-criteria decision-making approaches for supplier evaluation and selection: A literature review, *Eur. J. Oper. Res.*, **202**(1) (2010)16–24.
- [25] G. Büyüközkan and G. Çifçi, A novel hybrid MCDM approach based on fuzzy DEMATEL, fuzzy ANP and fuzzy TOPSIS to evaluate green suppliers, *Expert Syst. Appl.*, **39**(3) (2012)3000–3011.
- [26] S. H. Hashemi, A. Karimi, and M. Tavana, An integrated green supplier selection approach with analytic network process and improved grey relational analysis, *Int. J. Prod. Econ.*, **159**(2015)178–191.
- [27] J. Watrobski and W. Salabun, Green supplier selection framework based on multi-criteria decision-analysis approach, in *Sustainable Design and Manufacturing*, Springer, (2016)361–371.
- [28] P. Kumar, R. K. Singh, and A. Vaish, Suppliers' green performance evaluation using fuzzy extended ELECTRE approach, *Clean Technol. Environ.*, **19**(3) (2017)809–821.
- [29] G. Mehralian, A. R. Gatari, M. Morakabati, and H. Vatanpour, Developing a suitable model for supplier selection based on supply chain risks: An empirical study from Iranian pharmaceutical companies, *J. Pharm.*

- Res., **11**(1) (2011) 209–219.
- [30] N. Pourghahreman and A. N. Qhatari, Supplier selection in an agent-based pharmaceutical supply chain: An application of TOPSIS and PROMETHEE, *Uncertain Supply Chain Manag.*, **3**(2015) 231–240.
 - [31] I. Badi and M. Ballem, Supplier selection using the rough BWM-MAIRCA model: A case study in pharmaceutical supplying in Libya, *Decis. Making: Appl. Manag. Eng.*, **1**(2) (2018)16–33.
 - [32] P. Toktaş-Palut, An integrated contract for coordinating a three-stage green forward and reverse supply chain under fairness concerns, *J. Clean. Prod.*, **279**(2021)123735.
 - [33] M. Azadi, M. Jafarian, R. F. Saen, and S. M. Mirhedayatian, A new fuzzy DEA model for evaluation of efficiency and effectiveness of suppliers in sustainable supply chain management context, *Comput. Oper. Res.*, **54**(2015)274–285.
 - [34] A. Alizadeh and S. Yousefi, An integrated Taguchi loss function–fuzzy cognitive map–MCGP with utility function approach for supplier selection problem, *Neural Comput. Appl.*, **31**(11) (2019)7595–7614.
 - [35] C. O. Swift, Preferences for single sourcing and supplier selection criteria, *J. Bus. Res.*, **32**(2) (1995) 105–111.
 - [36] P. Pitchipoo, P. Venkumar, and S. Rajakarunakaran, A distinct decision model for the evaluation and selection of a supplier for a chemical processing industry, *Int. J. Prod. Res.*, **50**(16) (2012)4635–4648.
 - [37] S. Theiben and S. Spinler, Strategic analysis of manufacturer-supplier partnerships: An ANP model for collaborative CO2 reduction management, *Eur. J. Oper. Res.*, **233**(2) (2014)383–397.
 - [38] M. Chand, N. Bhatia, and R. K. Singh, ANP-MOORA-based approach for the analysis of selected issues of green supply chain management, *An Int. J.*, **25**(2) (2016)642–659.
 - [39] S. Elabed, A. Shamayleh, and A. Daghfous, Sustainability-oriented innovation in the health care supply chain, *Comput. Ind. Eng.*, **160**(2021)107564.
 - [40] K. Behnke and M. Janssen, Boundary conditions for traceability in food supply chains using blockchain technology, *Int. J. Inf. Manag.*, **52**(2020)101969.
 - [41] T. Bocek and B. Stiller, Smart contracts—Blockchains in the wings, in *Digital Marketplaces Unleashed*, Springer, (2018)169–184.
 - [42] V. Shermin, Disrupting governance with blockchains and smart contracts, *Strategic Change*, **26**(2017)499–509.
 - [43] K.-J. Hu and F. Y. Vincent, An integrated approach for the electronic contract manufacturer selection problem, *Omega*, **62**(2016) 68–81.
 - [44] J. Walter, Safety management at the frontier: Cooperation with contractors in oil and gas companies, *Safety Science*, **91**(2017)394–404.
 - [45] J. Li, X. Luo, Q. Wang, and W. Zhou, Supply chain coordination through capacity reservation contract and quantity flexibility contract, *Omega*, **99**(2021)102195.
 - [46] M. H. Farahani, M. Dawande, H. Gurnani, and G. Janakiraman, Better to bend than to break: Sharing supply risk using the supply-flexibility contract, *Manufacturing & Service Operations Management*, **23**(2021)1257–1274.
 - [47] L. A. Kantari, I. N. Pujawan, N. I. Arvitrida, and P. Hilletoft, Mixing contract-based and on-demand sourcing of transportation services for improved supply chain performance under supply uncertainties, *International Journal of Systems Science: Operations and Logistics*, (2021) 1–17.
 - [48] T. Avinadav, T. Cheronog, I. Meilijson, and Y. Perlman, A consignment contract with revenue sharing between an app developer and a distribution platform, *International Journal of Production Economics*, **243**(2022) 108322.
 - [49] A. Yucekaya, Electricity trading for coal-fired power plants in Turkish power market considering uncertainty in spot, derivatives and bilateral contract market, *Renewable and Sustainable Energy Reviews*, **159**(2022)112189.
 - [50] M. Farsi and J. A. Erkoyuncu, An agent-based approach to quantify the uncertainty in product-service system contract decisions: A case study in the machine tool industry, *International Journal of Production Economics*, **233**(2021)108014.
 - [51] A. Chakraborty, N. K. Verma, and A. K. Chatterjee, A single supplier multi buyer supply chain coordination under vendor-managed inventory: Ensuring buyers' interests in a decentralized setting, *IIM Kozhikode Society & Management Review*, (2022)22779752211072936.
 - [52] A. Clark and G. Reggiani, Contracts for acquiring information, *arXiv*, arXiv:2103.03911 (2021).
 - [53] Z. Zhang, X. Zhao, Y. Qin, H. Si, and L. Zhou, Interval type-2 fuzzy TOPSIS approach with utility theory for subway station operational risk evaluation, *Journal of Ambient Intelligence and Humanized Computing*, (2021).
 - [54] A. Ebekozién, C. Aigbavboa, A. N. C. Nwaole, E. O. Dako, and A. I. Awo-Osagie, Quantity surveyor's ethical responsiveness on construction projects: Issues and solutions, *International Journal of Building Pathology and Adaptation*, (2021).
 - [55] R. Aid, D. Possamaï, and N. Touzi, Optimal electricity demand response contracting with responsiveness incentives, *Mathematics of Operations Research*, (2022).
 - [56] F. D. Akin, G. Polat, H. Turkoglu, and A. Damci, A crashing-based time-cost trade-off model considering quality cost and contract clauses, *International Journal of Construction Management*, (2021)1-10.
 - [57] B. Samanta and B. C. Giri, A two-echelon supply chain model with price and warranty dependent demand and pro-rata warranty policy under cost sharing contract, *Decision Making Applications in Management and Engineering*, **4**(2021)47–75.
 - [58] J. H. Lee, E. Mistur, L. Liu, and B. Ashuri, Determining contract requirements for quality assurance program in innovative project delivery, in *Proc. Construction Research Congress 2022*, Arlington, VA, USA, 9–12 March (2022)179–188.

- [59] O. Bugrov and O. Bugrova, Formalization of selection of contract-organizational project delivery strategy, IOPscience, 2018. Available: <https://iopscience.iop.org/article/10.1088/1755-1315/304/3/032001/meta>. Accessed: July 10(2022).
- [60] A. Cheaitou, R. Larbi, and B. Al Housani, Decision making framework for tender evaluation and contractor selection in public organizations with risk considerations, *Socio-Economic Planning Sciences*, **68**(2019)100620 .
- [61] J. Ni, J. Zhao, and L. K. Chu, Supply contracting and process innovation in a dynamic supply chain with information asymmetry, *European Journal of Operational Research*, **288**(2021)552–562.
- [62] H. Sarvari, D. W. M. Chan, B. Ashrafi, T. O. Olawumi, and N. Banaitiene, Prioritization of contracting methods for water and wastewater projects using the fuzzy analytic hierarchy process method, *Energies*, **14**(7815)(2021).
- [63] S. V. Novikov and O. N. Dmitriev, Vision of genesis of presentation of hi-tech project during competitive selection, *Russian Engineering Research*, **38**(2018)320–322.
- [64] J. Ding, W. Zhai, Z. Wang, K. Zhang, and J. Cai, "Modelling and design analysis of contract payment methods in civil engineering projects," in *Proc. IOP Conf. Ser.: Earth Environ. Sci.* **304**(2019)32001.
- [65] A. Camci, Ö. Çimen, and S. Gül, Selection of contract type in construction projects using spherical AHP method, in *Proc. Int. Online Conf. Intell. Decision Sci.*, Istanbul, Turkey, **7-8**(2020) 531–547.
- [66] Y.-W. Zhou, X. Lin, Y. Zhong, and W. Xie, Contract selection for a multi-service sharing platform with self-scheduling capacity, *Omega*, **86**(2019)198–217.
- [67] X. Zhao, B. Gu, F. Gao, and S. Chen, Matching model of energy supply and demand of the integrated energy system in coastal areas, *Journal of Coastal Research*, **103**(2020)983–989.
- [68] N. Carbonara and R. Pellegrino, Public-private partnerships for energy efficiency projects: A win-win model to choose the energy performance contracting structure, *Journal of Cleaner Production*, **170**(2018) 1064–1075.
- [69] A. Ruml and M. Qaim, Effects of marketing contracts and resource-providing contracts in the African small farm sector: Insights from oil palm production in Ghana, *World Development*, **136**(2020) 105110.
- [70] G. M. Magableh, M. Z. Mistarihi, T. Rababah, A. Almajwal, and N. Al-Rayyan, A developed model and fuzzy multi-criteria decision-making method to evaluate supply chain nervousness strategies, *Mathematics*, **12**(10) (2024) 1604.
- [71] A. Jafari and M. Amiri, Meta-synthesis: A method for synthesizing qualitative studies, *Journal of Humanities Methodology*, **25**(99) (2020)73–78.
- [72] M. Shafiei and H. Saleh, Supplier selection using goal programming and modified Bandrez algorithm, *Operations Research in Its Applications*, **20**(2) (2023)97-117. [In Persian]
- [73] Z. Davoodi Biragh and M. Seif Barghi, A review of contract research in supply chains considering number of levels and types of contracts, *Supply Chain Management*, **23**(73) (2022)13-24. [In Persian]
- [74] I. Heydarzadeh Ermaghan, I. Mahdavi, and N. Mahdavi Amiri, Applying type-2 fuzzy sets and clustering algorithm in supplier selection: A case study, *International Journal of Industrial Engineering and Production Management*, University of Science and Technology, **3**(27)(2016). [In Persian]
- [75] I. Nasohi, A. Shahandeh Nokabadi, and G. Maslahi, Designing wholesale and profit sharing contracts in a two-level supply chain, *Industrial Engineering and Management*, **33**(1) (2017)13-22. [In Persian]
- [76] H. Shateri, M. Amouzad, H. Hanan, and N. Mokhtarzadeh, Comparison of buyback, discount, and flexible contracts in multilevel supply chains with stochastic demand and game theory approach, *Industrial Management Perspectives*, **34**(2)(2020)131-151. [In Persian]
- [77] J. Behnamian and M. Bashar, Designing a collaborative fuzzy multi-level supply chain considering discounts and marketing costs: A game theory approach, *Industrial Management Studies*, **18**(56) (2020)51-86. [In Persian]
- [78] S. Najiazarpour and E. Timouri, Contractor evaluation and selection in civil projects using supply chain management and PROMETHEE method, *Industrial Engineering and Management (Sharif Journal of Engineering Sciences)*, **34**(1) (2018)29-37. [In Persian]
- [79] Z. Moqaddas, M. Vaezi Ghasemi, and B. Rahmani Parchikalaei, Best supplier selection with flexible inputs and outputs in supply chain management using data envelopment analysis, *New Research in Mathematics (Basic Sciences, Islamic Azad University)*, **3**(11) (2017)31-39. [In Persian]
- [80] A. Hatami-Marbini, S. Hekmat, and P. J. Agrell, A strategy-based framework for supplier selection: A grey PCA-DEA approach, *Operational Research*, **22**(1) (2022)263–297.
- [81] H. Hadian, S. Chahardoli, A. M. Golmohammadi, and A. Mostafaeipour, A practical framework for supplier selection decisions with an application to the automotive sector, *International Journal of Production Research*, **58**(10) (2020)2997–3014.
- [82] B. Güneri and M. Deveci, Evaluation of supplier selection in the defense industry using Q-rung orthopair fuzzy set-based EDAS approach, *Expert Systems with Applications*, **222** (2023)119846.
- [83] S. Yin, B. Li, H. Dong, and Z. Xing, A new dynamic multicriteria decision-making approach for green supplier selection in construction projects under time sequence, *Mathematical Problems in Engineering*, **2017** (2017)7954784.
- [84] T. Gegovska, R. Koker, and T. Cakar, Green supplier selection using fuzzy multiple-criteria decision-making methods and artificial neural networks, *Computational Intelligence and Neuroscience*, **2020** (2020)8811834.
- [85] R. M. Zulqarnain, I. Siddique, S. Ahmad, A. Iampan, G. Jovanov, Đ. Vranješ, and J. Vasiljević, Pythagorean fuzzy soft Einstein ordered weighted average operator in sustainable supplier selection problem, *Mathematical Problems in Engineering*, **2021** (2021)2559979.
- [86] K. H. Chang, A novel contractor selection technique using the extended PROMETHEE II method, *Mathematical Problems in Engineering*, **2021** (2021)3664709.

- [87] K. Govindan, A. Kaul, A. Darbari, J. D. Jha, and P. C. Jha, Analysis of supplier evaluation and selection strategies for sustainable collaboration: A combined approach of best–worst method and TOMADA de Decisao Interactiva Multicriterio, *Business Strategy and the Environment*.**32(7)** (2023)4426–4447.
- [88] M. Ortiz-Barrios, J. Cabarcas-Reyes, A. Ishizaka, M. Barbati, N. Jaramillo-Rueda, and G. de Jesús Carrascal-Zambrano, A hybrid fuzzy multi-criteria decision making model for selecting a sustainable supplier of forklift filters: A case study from the mining industry, *Annals of Operations Research*.**307** (2021)443–481.
- [89] M. A. Ortiz-Barrios, B. Kucukaltan, D. Carvajal-Tinoco, D. Neira-Rodado, and G. Jiménez, Strategic hybrid approach for selecting suppliers of high-density polyethylene, *Journal of Multi-Criteria Decision Analysis*.**24(5–6)** (2017)296–316.
- [90] F. S. Garzon, M. Enjolras, M. Camargo, and L. Morel, A green procurement methodology based on Kraljic matrix for suppliers evaluation and selection: A case study from the chemical sector, *Supply Chain Forum: An International Journal*.**20(3)** (2019)185–201.
- [91] E. Pourjavad and A. Shahin, Green supplier development programmes selection: A hybrid fuzzy multi-criteria decision-making approach, *International Journal of Sustainable Engineering*.**13(6)** (2020)463–472.
- [92] O. Anuchitchanchai, K. Suthiwartnarueput, and P. Pornchaiwisukul, Multi-dependent criteria supplier selection with uncertain performance evaluation, *Journal of International Logistics and Trade*.**16(2)** (2018)32–45.
- [93] M. T. Ahmad and S. Mondal, Dynamic supplier selection through optimal ranking under two-echelon system, Benchmarking: An International Journal.**26(8)** (2019)2574–2607.
- [94] J. Girubha, S. Vinodh, and V. Kek, Application of interpretative structural modelling integrated multi-criteria decision making methods for sustainable supplier selection, *Journal of Modelling in Management*.**11(2)** (2016)358–388.
- [95] K. Govindan, R. Khodaverdi, and A. Vafadarnikjoo, A grey DEMATEL approach to develop third-party logistics provider selection criteria, *Industrial Management & Data Systems*.**116(4)** (2016)690–722.
- [96] X. Wang and J. Cai, A group decision-making model based on distance-based VIKOR with incomplete heterogeneous information and its application to emergency supplier selection, *Kybernetes*.**46(3)** (2017)501–529.
- [97] C. Yu, Z. Zou, Y. Shao, and F. Zhang, An integrated supplier selection approach incorporating decision maker's risk attitude using ANN, AHP and TOPSIS methods, *Kybernetes*.**49(9)** (2020)2263–2284.
- [98] A. Rezaei, M. Rahiminezhad Galankashi, S. Mansoorzadeh, and F. Mokhtab Rafiei, Supplier selection and order allocation with lean manufacturing criteria: An integrated MCDM and bi-objective modelling approach, *Engineering Management Journal*.**32(4)** (2020)253–271.
- [99] S. Karami, S. M. Mousavi, and J. Antucheviciene, Enhancing contractor selection process by a new interval-valued fuzzy decision-making model based on SWARA and CoCoSo methods, *Axioms*.**12(8)** (2023)729.
- [100] S. Varchandi, A. Memari, and M. R. A. Jokar, An integrated best-worst method and fuzzy TOPSIS for resilient-sustainable supplier selection, *Decision Analytics Journal*.**2024** (2024)100488.
- [101] B. Aslani, M. Rabiee, and M. Tavana, An integrated information fusion and grey multi-criteria decision-making framework for sustainable supplier selection, *Int. J. Syst. Sci.: Oper. Logist*.**8(4)** (2021)348–370.
- [102] M. Yazdani, D. Pamucar, P. Chatterjee, and A. E. Torkayesh, A multi-tier sustainable food supplier selection model under uncertainty, *Operations Management Research*.**15(1)** (2022)116–145.
- [103] A. Awasthi, K. Govindan, and S. Gold, Multi-tier sustainable global supplier selection using a fuzzy AHP-VIKOR based approach, *Int. J. Prod. Econ*.**195** (2018)106–117.
- [104] T. K. Wang, Q. Zhang, H. Y. Chong, and X. Wang, Integrated supplier selection framework in a resilient construction supply chain: An approach via analytic hierarchy process (AHP) and grey relational analysis (GRA), *Sustainability*.**9(2)** (2017)289.
- [105] S. Najiazarpour and H. Pouresfandyani, Assessment and selection of contractors in specific contracting projects with supply chain approach, using GRAY and AHP methods as decision support, *Modern Applied Science*.**13(4)** (2019)1–51.
- [106] M. Jafari Eskandari and N. Shakiba, Supply chain management, National Conference on New and Innovative Ideas in Management, Accounting, Legal Studies, and Social Sciences [In Persian].
- [107] F. Jamalou, B. Khani, and R. Shahin, Green supplier selection in the green supply chain based on fuzzy set theory and grey relational analysis, International Conference on Novel Ideas in Management, Economics, and Accounting [In Persian].
- [108] A. Ulutaş, Supplier selection by using a fuzzy integrated model for a textile company, *Engineering Economics*.**30(5)** (2019)579–590.
- [109] S. F. Miralami, Supply chain integration, Supply Chain Management and Logistics Conference [In Persian].
- [110] R. Samizadeh and P. Afshari, A bi-objective supplier selection model in the supply chain and its solution through metaheuristic algorithms, *Journal Title*.**28(3)** (2017)391–404 [In Persian].
- [111] N. Jain and A. R. Singh, Sustainable supplier selection criteria classification for Indian iron and steel industry: A fuzzy modified Kano model approach, *Int. J. Sustain. Eng*.**13(1)** (2020)17–32.
- [112] N. Jain, A. R. Singh, and R. K. Upadhyay, Sustainable supplier selection under attractive criteria through FIS and integrated fuzzy MCDM techniques, *Int. J. Sustain. Eng*.**13(6)** (2020)441–462.
- [113] E. KhanMohammadi, H. Talaie, H. Safari, and R. Salehzadeh, Supplier evaluation and selection for sustainable supply chain management under uncertainty conditions, *Int. J. Sustain. Eng*.**11(6)** (2018)382–396.
- [114] G. Petrović, J. Mihajlović, Ž. Čojbašić, M. Madić, and D. Marinković, Comparison of three fuzzy MCDM methods for solving the supplier selection problem, *Facta Univ., Ser. Mech. Eng*.**17(3)** (2019)455–469.
- [115] L. Abdullah, Z. Ong, and S. N. Rahim, An intuitionistic fuzzy decision-making for developing cause and effect criteria of subcontractors selection, *Int. J. Comput. Intell. Syst*.**14(1)** (2021)991–1002.

- [116] T. L. Nguyen, P. H. Nguyen, H. A. Pham, T. G. Nguyen, D. T. Nguyen, T. H. Tran, et al., A novel integrating data envelopment analysis and spherical fuzzy MCDM approach for sustainable supplier selection in steel industry, *Mathematics*.**10(11)** (2022)1897.
- [117] A. Karbassi Yazdi, Y. Tan, C. Spulbar, R. Birau, and J. Alfaro, An approach for supply chain management contract selection in the oil and gas industry: Combination of uncertainty and multi-criteria decision-making methods, *Mathematics*.**10(18)** (2022)3230.
- [118] H. K. Sarvestani, A. Zadeh, M. Seyfi, and M. Rasti-Barzoki, Integrated order acceptance and supply chain scheduling problem with supplier selection and due date assignment, *Appl. Soft Comput.***75** (2019)72–83.
- [119] M. Fathollah and M. Najafi, Development of financial management models for supply chains and chain financing, *Res. Ind. Eng. Prod. Syst.***4(9)** (2016)257–269 [In Persian].
- [120] J. Rezaei, T. Nispeling, J. Sarkis, and L. Tavasszy, A supplier selection life cycle approach integrating traditional and environmental criteria using the best worst method, *J. Clean. Prod.***135** (2016)577–588.
- [121] R. K. Mavi, M. Goh, and N. K. Mavi, Supplier selection with Shannon entropy and fuzzy TOPSIS in the context of supply chain risk management, *Procedia Soc. Behav. Sci.***235** (2016)216–225.
- [122] M. M. Hasan, D. Jiang, A. S. Ullah, and M. Noor-E-Alam, Resilient supplier selection in logistics 4.0 with heterogeneous information, *Expert Syst. Appl.***139** (2020)112799.
- [123] H. Taherdoost and A. Brard, Analyzing the process of supplier selection criteria and methods, *Procedia Manuf.***32** (2019)1024–1034.
- [124] N. Goker, A novel integrated intuitionistic fuzzy decision aid for agile outsourcing provider selection: A COVID-19 pandemic-based scenario analysis, *Soft Comput.***25(21)** (2021)13723–13740.
- [125] G. Polat, E. Eray, and B. N. Bingol, An integrated fuzzy MCGDM approach for supplier selection problem, *J. Civ. Eng. Manag.***23(7)** (2017)926–942.
- [126] R. Ismailpour, A. Azar, and M. Malekzadeh, A hybrid model for selecting green business partners and green supply chain management, *Second Int. Conf. Ind. Manag., Babolsar*, 2017 [In Persian].
- [127] S. Hajiyekhhali, M. Parchami Jalal, and M. K. Asadi, Supplier selection in green supply chains for oil and gas industry projects using a combination of fuzzy multicriteria decision-making methods, *Environ. Risk Manag.***4(3)** (2017)231–246 [In Persian].
- [128] D. Kannan, Role of multiple stakeholders and the critical success factor theory for the sustainable supplier selection process, *Int. J. Prod. Econ.***195** (2018)391–418.
- [129] I. M. dos Santos, L. R. Peixoto Roselli, A. L. G. da Silva, and L. H. Alencar, A supplier selection model for a wholesaler and retailer company based on FITradeoff multicriteria method, *Math. Probl. Eng.***2020(1)** (2020)8796282.
- [130] C. N. Kristy and T. Y. Zagloel, An integrated analytical hierarchy process and Monte Carlo method approach for supplier selection in construction's supply chain, *Proc. 3rd Asia Pac. Conf. Res. Ind. Syst. Eng.* (2020)300–304.
- [131] D. A. Wood, Supplier selection for development of petroleum industry facilities, applying multi-criteria decision making techniques including fuzzy and intuitionistic fuzzy TOPSIS with flexible entropy weighting, *J. Nat. Gas Sci. Eng.***28** (2016)594–612.
- [132] A. Fallahpour, S. Nayeri, M. Sheikhalishahi, K. Y. Wong, G. Tian, and A. M. Fathollahi-Fard, A hyper-hybrid fuzzy decision-making framework for the sustainable-resilient supplier selection problem: A case study of Malaysian palm oil industry, *Environ. Sci. Pollut. Res.***2021** (2021)1–21.
- [133] S. A. Hoseini, S. H. Zolfani, and P. Skackauskas, A combined interval type-2 fuzzy MCDM framework for the resilient supplier selection problem, *Mathematics*.**2022** (2022).
- [134] R. R. Menon and V. Ravi, Using AHP-TOPSIS methodologies in the selection of sustainable suppliers in an electronics supply chain, *Clean. Mater.***5** (2022)100130.
- [135] A. Fallahpour, K. Y. Wong, S. Rajoo, and A. M. Mardani, An integrated fuzzy carbon management-based model for suppliers' performance evaluation and selection in green supply chain management, *Int. J. Fuzzy Syst.***22** (2020)712–723.
- [136] M. Rafieizadeh and M. Zanjirani, Supplier efficiency evaluation using grey data envelopment analysis with decision-maker preferences, *Strateg. Manag. Ind. Syst.***17(59)** (2022)60–75 [In Persian].
- [137] S. H. Zegardi and S. A. Shahidi, Analysis of the meat supply chain considering carbon emission costs under revenue sharing and cost contracts, *Ind. Manag.***14(4)** (2022)618–637 [In Persian].
- [138] A. Arshadi Khamseh, A time-dependent sustainable-flexible supplier selection considering uncertainty and TODIM method in Iranian dairy industries, *Glob. J. Flex. Syst. Manag.***22** (2021)113–126.
- [139] S. M. Ahmed and C. L. Karmaker, Supply chain contract selection using Delphi-based AHP: A case study in the Bangladeshi super shop, *J. Supply Chain Manag. Syst.***8(3)** (2019)37.
- [140] L. Lapide, Optimizing decision-making under uncertainty, *J. Bus. Forecast.***41(1)** (2022).