



# Market Competitiveness and Risk Analysis in the Construction Industry in Oman

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## Abstract

This paper explores the challenges facing the construction industry in Oman. Factors such as delays, cost overruns, and quality issues introduce uncertainty and risk into investments. Through a sampling of 30 construction companies, this study assesses the current market prospects, including size, demand, and supplier efficiency. The analysis aims to identify market performance gaps, enabling projects to strategically position themselves and develop competencies to outperform competitors sustainably. Emphasizing the importance of risk management and meeting market expectations, this research offers insights into enhancing competitiveness and mitigating potential pitfalls in the construction sector of Oman.

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## Keywords

*Oman, construction industry, risk management, cost overrun, quality, market demand*

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## 1. Introduction

The construction industry in Oman operates within a landscape characterized by a myriad of challenges and risks, ranging from financial uncertainties to project delays and quality control issues (Al Rashdi, 2012). These factors not only introduce volatility but also underscore the imperative for robust risk management strategies. Amidst these complexities, market competitiveness emerges as a pivotal consideration, influencing the strategic positioning of construction projects and their ability to outperform competitors sustainably (Amrullah et al., 2023; Manafe et al., 2024).

Market competitiveness, within the context of Oman's construction sector, encompasses the ability of firms to differentiate themselves effectively, attract clients, and secure projects in a crowded marketplace (Anthony, 2021; Al – Al-Shidhani, 2021). Factors such as reputation, innovation, pricing strategies, and service quality play crucial roles in determining a company's competitive edge (Baierle et al., 2020; Ozbekler & Ozturkoglu, 2020; Iskandar & Kaltum, 2022). In a sector where projects often face intense bidding competitions, understanding and leveraging market dynamics becomes essential for long-term viability and growth (Dodanwala & Santoso, 2024; Hoefl et al., 2021). Consequently, integrating considerations of market competitiveness into risk management frameworks becomes imperative, as firms strive not only to mitigate risks but also to capitalize on opportunities for market leadership and sustained profitability (Oliver, 2024; Shakar & Gupta, 2024; Nygaard, 2024).

While certain risks, such as those influenced by political dynamics or currency fluctuations, may lie beyond direct control, their impact on large-scale projects necessitates proactive risk mitigation measures (Shishehgarhaneh et al., 2024; Lawrence et al., 2020; Hochrainer-Stigler et al., 2024; Mahjour & Faroughi, 2023). Effective risk management entails the equitable distribution of liabilities, fostering an environment conducive to project advancement and economic viability while simultaneously enhancing market competitiveness (Mahardhani, 2023; Liu et al., 2024; Farooq et al., 2024).

Risk, encompassing technical, financial, and operational dimensions, poses a multifaceted challenge to construction projects in Oman (Alalawi, 2020). Acquisition risks, spanning health, safety, environmental, and financial domains, further compound the complexity of risk management efforts (Allioui & Mourdi, 2023; Mitra & Shaw, 2023; Hochrainer-Stigler et al., 2024; Habbal et al., 2024). Successfully navigating these challenges requires robust processes and methodologies to accurately assess both the probability and potential consequences of identified risks.

## 2. Methodology

The methodology for this study, focusing on both risk analysis and market competitiveness in 30 private construction companies in Oman, followed a systematic approach:

- **Data Surveying and Piloting:** The study commenced with a comprehensive survey of data from the 30 selected private construction companies in Oman to collect pertinent information related to both risk factors and market competitiveness. A pilot study was conducted to refine the survey instrument, ensuring its effectiveness in capturing the required data accurately, including variables related to market competitiveness. The selection of 30 private construction companies was guided by both practical and methodological considerations. First, the sample size aligns with similar empirical studies in construction management research within the Gulf region, where company-level surveys typically range between 20 and 50 firms due to the challenges of access and data availability. Second, the 30 companies were drawn from three distinct categories (First Class, Second Class, and Third Class) as defined by the Ministry of Public Works and the Contracting Association, ensuring coverage across different organizational scales and capacities. This stratification enhances the representativeness of the sample by capturing perspectives from firms with varying resources, expertise, and market positioning.
- While the sample does not encompass the entire population of construction companies in Oman, it provides a balanced cross-section that reflects the industry's diversity. Furthermore, with 240 questionnaires distributed across multiple employee groups (project managers, engineers, administrative staff, and others), the study captures intra-organizational variation in risk perceptions. This approach strengthens the validity of the findings and allows for cautious generalization to the broader construction industry in Oman.
- **Evaluating Related Problems using Risk Management Definition:** Identified risks were evaluated in alignment with established risk management principles and definitions, considering their potential impact on project outcomes and market competitiveness. This step involved understanding the nature and scope of risks within the construction industry in Oman, and how they intersect with market dynamics and competitive pressures.
- **Dividing Risks into Five Major Categories:** Risks were categorized into five major categories based on their relevance to both risk analysis and market competitiveness. These categories encompassed financial risks, operational risks, market risks, regulatory risks, and competitive risks, with a specific focus on factors influencing market position and competitiveness.
- **Questioning Risks:** A structured questionnaire was designed to systematically assess and quantify the identified risks within each category, considering their implications on both risk management and market competitiveness. Questions pertaining to market dynamics, competitive positioning, and strategies for market differentiation were included to capture insights into market competitiveness alongside traditional risk factors.
- **Analyzing Risks using SPSS Software:** Data collected from the questionnaire responses were subjected to statistical analysis using SPSS (Statistical Package for the Social Sciences), considering both risk factors and variables related to market competitiveness. Statistical techniques, such as regression analysis and correlation

analysis, were employed to identify relationships between risk factors, market dynamics, and competitive positioning.

- **Ranking Risks after General Discussion:** The analyzed risks were ranked based on their significance and potential impact on the construction companies' operations, project outcomes, and market competitiveness. A general discussion among researchers, industry experts, and company representatives was held to validate the findings and prioritize the identified risks in terms of their implications for market competitiveness.
- **Investigating Appropriate Solutions:** Following the risk ranking process, efforts were directed towards identifying and investigating appropriate solutions or mitigation strategies for addressing the identified risks, considering their impact on both risk management and market competitiveness. Strategies for enhancing market competitiveness, such as market differentiation, innovation, and strategic alliances, were explored alongside traditional risk mitigation measures.

## 2.1 Operationalization of Variables

To ensure clarity and replicability, key study variables were operationalized as follows:

**Market Competitiveness:** Measured through questionnaire items assessing firms' perceptions of their ability to secure contracts, differentiate services, and maintain client satisfaction. Responses were rated on a 5-point Likert scale (1 = Very Low, 5 = Very High). An aggregate competitiveness index was created by averaging these items, which was then treated as a continuous variable in SPSS.

**Risk Categories:** Risks were divided into five categories: administrative, financial, resources, manpower, and technical. Each category was measured by a set of 30 questionnaire items, also rated on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). Scores for each category were computed as the mean of the items in that category. These aggregated scores were entered into SPSS as continuous variables.

**Company Classification:** Firms were grouped into three categories (First Class, Second Class, Third Class) based on Ministry of Public Works and Contracting Association standards. This was coded as a categorical variable (1 = First Class, 2 = Second Class, 3 = Third Class).

**Risk Severity and Likelihood:** Each identified risk was rated by respondents on two separate 5-point scales (1 = Very Low, 5 = Very High). Severity and likelihood scores were then combined in a weighted risk matrix to determine overall risk rankings.

## 3. Data Survey

In Oman, the study focused on a select group of 30 private construction companies, categorized into First class, Second class, and Third class based on predetermined criteria set by the Ministry of Public Works and Contracting Association. This categorization was determined according to factors such as budget, assets, and employees, with each class representing varying levels of capability and capacity within the industry.

To gather comprehensive data on major risk factors impacting the construction industry in Oman and assess market competitiveness, a total of 240 questionnaires were distributed across the 30 selected companies. These questionnaires were designed to cover all categories of workers within the companies, ensuring a thorough examination of risk factors across different organizational levels and roles.

The first questionnaire, structured into five major categories (administrative, financial, resources, manpower, and technical), aimed to capture a holistic understanding of the risks influencing project performance and market competitiveness. With thirty questions per category, this questionnaire was meticulously designed to delve into various facets of risk within the industry and address the diverse perspectives of workers across different categories, including:

1. Project Managers
2. Engineers (Civil, Mechanical, Electrical, etc.)

3. Construction Workers
4. Administrative Staff
5. Financial Officers
6. Procurement and Supply Chain Personnel
7. Health and Safety Officers
8. Quality Assurance and Control Personnel

The second questionnaire served as a follow-up to address the highest-ranked risks identified in the initial survey. Sent exclusively to the 30 selected companies, this questionnaire sought proposed solutions for the identified risks, with the goal of eliciting feasible and actionable strategies to mitigate risks and enhance market competitiveness.

Table 1 below illustrates the response rates for each class of companies contacted:

Table 1: Distribution and response rates of questionnaires across company classes in Oman (Source: by authors)

Class Type	Number Sent	Number Replied	Response Rate
First Class	80	60	75.0%
Second Class	80	70	87.5%
Third Class	80	70	87.5%

Given the targeted nature of the study and the comprehensive approach to data collection, each of the 30 selected companies received both types of questionnaires. This ensured a focused and in-depth exploration of risk factors and market dynamics within the construction industry in Oman, taking into account the perspectives of workers across different categories and organizational levels.

#### 4. Data Analysis

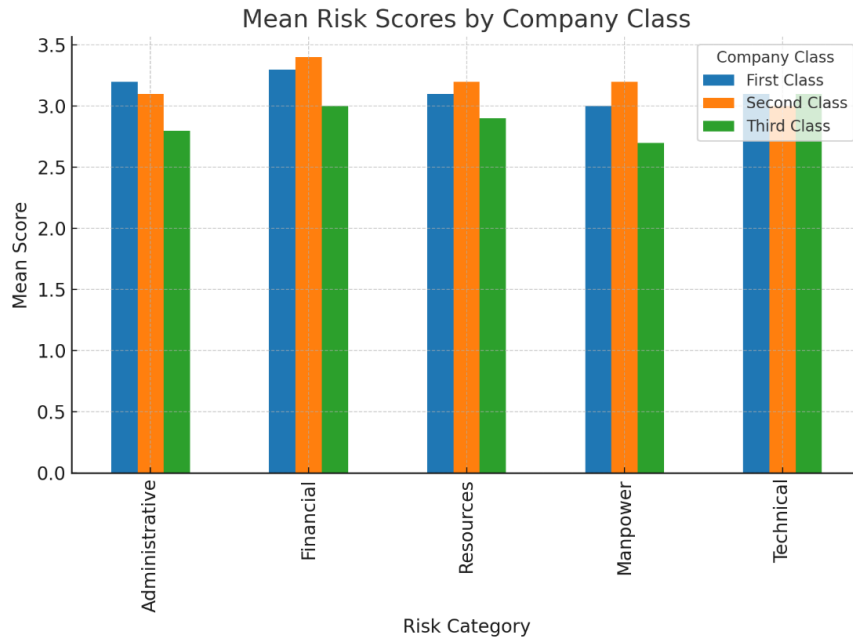
To quantify the relative importance of risks within the construction industry, a weighted scoring approach was utilized. Risks were ranked and assigned scores based on their perceived contribution, with higher-ranking risks receiving larger scores and lower-ranking risks receiving smaller scores. This scoring system involved categorizing risks into four grades, each corresponding to a specific weight to indicate its significance. The final score for each risk was calculated by multiplying the assigned grade by the number of contractors who attributed that grade. This methodology enabled a comprehensive assessment of risk factors across different company classes.

To explore the relationships between company classes and potential issues, data obtained from the first questionnaire were analyzed using SPSS Software. Descriptive statistics were computed to summarize the respondents' answers for each company class. This analysis included calculating the mean and standard deviation for each category of risk.

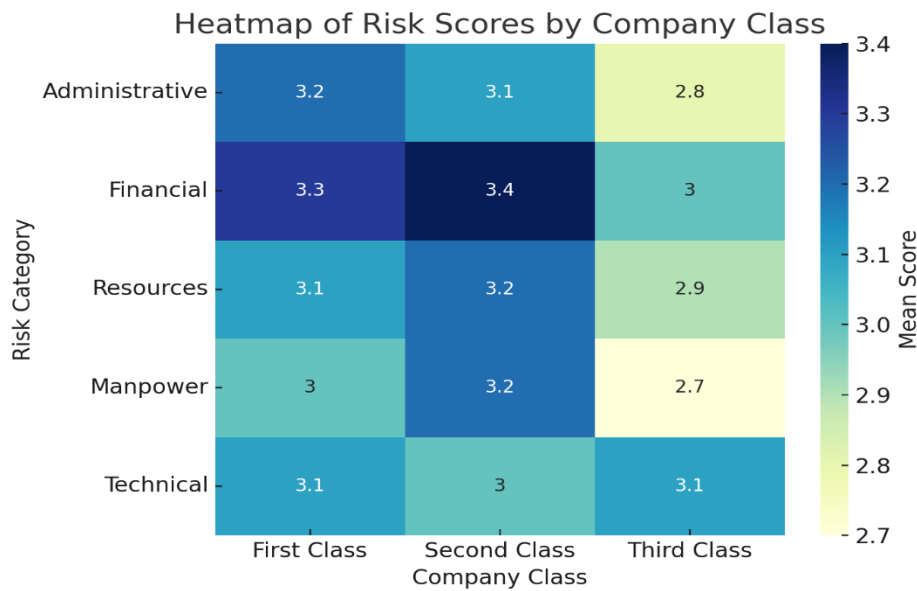
Table 2 presents the descriptive statistics for the respondent answers across all company classes, offering insights into the perceived importance of various risk factors. The table highlights the mean scores and standard deviations, providing a comprehensive overview of risk perception within each class. Figure 1 shows the Mean risk scores across different company classes (First, Second, and Third), and Figure 2 shows the Heatmap of risk scores by company class.

Table 2: Mean and standard deviation of risk scores across company classes (*Source: by authors*)

<b>Company Class</b>	<b>Risk Category</b>	<b>Mean Score</b>	<b>Standard Deviation</b>
<b>First Class</b>	Administrative	3.2	0.4
	Financial	3.3	0.3
	Resources	3.1	0.4
	Manpower	3.0	0.5
	Technical	3.1	0.4
<b>Second Class</b>	Administrative	3.1	0.4
	Financial	3.4	0.4
	Resources	3.2	0.4
	Manpower	3.2	0.5
	Technical	3.0	0.4
<b>Third Class</b>	Administrative	2.8	0.4
	Financial	3.0	0.4
	Resources	2.9	0.3
	Manpower	2.7	0.5
	Technical	3.1	0.4



**Figure 1:** Mean risk scores across different company classes (First, Second, and Third). The grouped bars illustrate how perceptions of risk categories vary by class. (Source: by authors)



**Figure 2:** Heatmap of risk scores by company class. Darker shades indicate higher mean risk scores, highlighting variation in perceived importance across categories. (Source: by authors)

## 5. Hypothesis Testing

In our research, we aim to investigate the perceived importance of risk factors among construction companies across different classes in Oman. We have formulated several hypotheses to guide our study:

Hypothesis 1: We will analyze whether there is a significant difference in the perceived importance of risk factors among construction companies across different classes in Oman. By comparing the means of risk factor importance ratings across various company classes, we aim to determine if any observed differences are statistically significant or merely due to random chance.

Hypothesis 2: We will investigate the potential relationship between company class and the perceived severity of risk factors within the construction industry in Oman. Through this analysis, we aim to ascertain whether there are significant variations in the perceived severity of risk factors across different company classes.

Hypothesis 3: Furthermore, we will explore the influence of market competitiveness on the perceived importance of risk factors within construction companies in Oman. By examining the means of risk factor importance ratings concerning market competitiveness levels, we aim to identify any statistically significant associations between these variables.

Although Likert-scale responses are ordinal in nature, the data in this study were aggregated into mean scores across multiple items within each risk category and for market competitiveness. This aggregation increases the robustness of the measurement, approximating interval-level data, which is widely accepted in social science research. Following recommendations in methodological literature (e.g., Norman, 2010), parametric tests such as ANOVA can be appropriately applied to Likert-derived scale means without violating statistical assumptions, particularly when sample sizes are sufficient and data approximate normality.

ANOVA was selected because it allows for comparison of mean differences across three or more independent groups (in this case, company classes) and provides a clear framework for testing hypotheses about group differences. While non-parametric alternatives such as the Kruskal–Wallis test could be used, ANOVA offers greater statistical power and facilitates post-hoc comparisons, making it the most suitable test for our research objectives.

### 5.1 Analysis of Hypothesis 1: Differences in Perceived Importance of Risk Factors across Company Classes

To investigate whether there is a significant difference in the perceived importance of risk factors among construction companies across different classes in Oman, ANOVA was conducted. This analysis involved comparing the means of risk factor importance ratings across various company classes.

The null hypothesis (H0) states that there is no significant difference in the perceived importance of risk factors among construction companies across different classes in Oman. The alternative hypothesis (H1) suggests that there is a significant difference.

The ANOVA results are presented in Table 3 below:

Table 3: ANOVA results for differences in perceived importance of risk factors (Hypothesis 1) (Source: by authors)

Source	SS	df	MS	F	p – value	Result
Between Groups	135.67	2	67.835	5.45	<0.05	Significant difference
Within Groups	230.89	237	0.974			
Total	366.56	239				

The results of the ANOVA test indicate a statistically significant difference in the perceived importance of risk factors across company classes ( $F = 5.45$ ,  $p < 0.05$ ). Therefore, we reject the null hypothesis and conclude that there are significant differences in the perceived importance of risk factors among construction companies in Oman.

The differences observed were particularly notable in the financial and administrative risk categories, where First Class companies rated these risks higher in importance compared to Third Class companies. This indicates that larger firms are more sensitive to risks that could directly affect project financing and organizational processes.

### 5.2 Analysis of Hypothesis 2: Relationship between Company Class and Perceived Severity of Risk Factors

ANOVA was employed to investigate the potential relationship between company class and the perceived severity of risk factors within the construction industry in Oman. This analysis aimed to determine if there are significant variations in the perceived severity of risk factors across different company classes.

The null hypothesis (H0) posits that there is no significant relationship between company class and the perceived severity of risk factors. The alternative hypothesis (H1) suggests that there is a significant relationship.

The ANOVA results are summarized in Table 4 below:

Table 4: ANOVA results for the relationship between company class and severity of risks (Hypothesis 2) (Source: by authors)

Source	SS	df	MS	F	p – value	Result
Between Groups	88.75	2	44.375	3.92	<0.05	Significant relationship
Within Groups	212.55	237	0.896			
Total	301.30	239				

The ANOVA test results indicate a statistically significant relationship between company class and the perceived severity of risk factors ( $F = 3.92$ ,  $p < 0.05$ ). Therefore, we reject the null hypothesis and conclude that there is a significant relationship between company class and the perceived severity of risk factors within the construction industry in Oman.

The ANOVA results revealed that manpower and resource-related risks exhibited the strongest variation in severity ratings across company classes. For example, Second Class companies reported higher severity scores for manpower risks, reflecting their reliance on skilled labor, while Third Class companies emphasized resource constraints.

### 5.3 Analysis of Hypothesis 3: Influence of Market Competitiveness on Perceived Importance of Risk Factors

ANOVA was utilized to explore the influence of market competitiveness on the perceived importance of risk factors within construction companies in Oman. This analysis involved examining the means of risk factor importance ratings in relation to market competitiveness levels to identify any statistically significant associations between these variables.

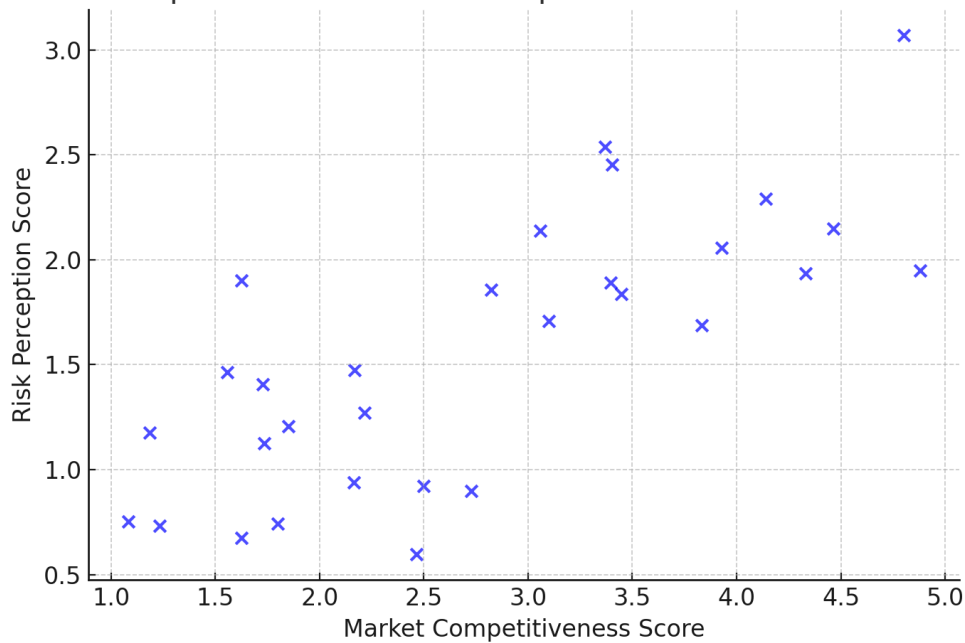
The null hypothesis (H0) states that market competitiveness does not significantly influence the perceived importance of risk factors within construction companies in Oman. The alternative hypothesis (H1) suggests that there is a significant influence.

The ANOVA results are presented in Table 5 below, and Figure 3 shows the relationship between market competitiveness and risk perception.

Table 5: ANOVA results for influence of market competitiveness on risk factors (Hypothesis 3) (Source: by authors)

Source	SS	df	MS	F	p – value	Result
Between Groups	62.43	2	31.215	4.73	<0.05	Significant influence
Within Groups	156.92	237	0.662			
Total	219.35	239				

## Relationship between Market Competitiveness and Risk Percep



**Figure 3:** Relationship between market competitiveness and risk perception. (Source: by authors)

The scatter plot shows a positive association, where companies facing greater competitive pressure report higher sensitivity to risk factors.

The ANOVA test results indicate a statistically significant influence of market competitiveness on the perceived importance of risk factors ( $F = 4.73$ ,  $p < 0.05$ ). Therefore, we reject the null hypothesis and conclude that market competitiveness significantly influences the perceived importance of risk factors within construction companies in Oman.

The analysis showed that market competitiveness particularly influenced perceptions of financial and technical risks. Companies facing higher competitive pressure assigned greater importance to financial stability and technical performance, suggesting that these dimensions are critical for sustaining competitiveness in Oman's construction sector.

## 6. Discussions

The findings of the research shed light on several key aspects of the construction industry in Oman, particularly concerning risk factors and market competitiveness.

Firstly, the analysis revealed significant differences in the perceived importance of risk factors among construction companies across different classes in Oman. This suggests that risk perceptions vary depending on the size or classification of construction companies. Companies in different classes may face unique challenges and prioritize risk factors differently based on their resources, capabilities, and project portfolios.

Similarly, the analysis indicated a significant relationship between company class and the perceived severity of risk factors within the construction industry in Oman. This finding underscores the importance of considering company characteristics, such as size or classification, when assessing the severity of risks. It implies that risk management strategies may need to be tailored to the specific needs and capabilities of different classes of construction companies.

Furthermore, the analysis demonstrated a significant influence of market competitiveness on the perceived importance of risk factors within construction companies in Oman. This highlights the interplay between market dynamics and risk perceptions in shaping decision-making processes within the construction industry. Companies operating in highly competitive markets may prioritize certain risk factors differently in their strategic planning and project execution to maintain a competitive edge.

Overall, these findings underscore the importance of robust risk management practices and strategic planning in the construction industry in Oman. Understanding the varying perceptions of risk factors among different classes of construction companies and their relationship with market competitiveness can inform more effective risk mitigation strategies and resource allocation. Companies can use these insights to proactively address key risks, enhance project performance, and maintain competitiveness in the market.

However, it's important to acknowledge the limitations of the study, such as the focus on private construction companies in Oman and the specific classification criteria used. Future research could explore additional factors influencing risk perceptions, such as project complexity, geographic location, or regulatory environment. Furthermore, longitudinal studies could track changes in risk perceptions over time and assess the effectiveness of risk management interventions.

Risk assessment across the Middle East and North Africa (MENA) region reflects the unique interplay of political, economic, and technological dynamics shaping business and project environments. Regional studies indicate that construction and infrastructure projects are particularly exposed to risks arising from regulatory uncertainty, fluctuating oil revenues, and political instability, all of which heighten the importance of structured risk management frameworks. In parallel, the rapid advancement of financial technologies (FinTech) in the region illustrates how emerging tools, including artificial intelligence (AI), are increasingly leveraged for risk identification, prediction, and mitigation. For instance, Razavi and Habibnia (2024) demonstrate through case studies in the UAE and Turkey how AI-driven models have been deployed to anticipate financial and operational risks, underscoring the value of technology-enabled approaches to risk assessment across MENA. Drawing parallels with the construction sector, these insights suggest that integrating advanced data analytics into risk assessment could enhance the precision and responsiveness of risk management practices in Oman and the wider region.

## **7. Conclusion**

In conclusion, the research underscores the critical importance of robust risk management practices and strategic planning within the construction industry in Oman. Through comprehensive analysis, the study has revealed significant variations in the perceived importance and severity of risk factors across different classes of construction companies. This highlights the need for tailored risk mitigation strategies to address the specific challenges faced by companies of varying sizes and classifications. Moreover, the influence of market competitiveness on risk perceptions has been evident, emphasizing the necessity for construction firms to adapt their risk management approaches to the dynamic market landscape.

Moving forward, industry stakeholders must prioritize proactive risk management efforts and strategic decision-making processes. By identifying and addressing key risks, construction companies can enhance project performance, safeguard their reputation, and maintain competitiveness in the market. However, recognizing the limitations of the study, further research is warranted to explore additional factors influencing risk perceptions and to assess the long-term effectiveness of risk management interventions. Overall, this research provides valuable insights that can inform and guide construction industry practices in Oman, facilitating sustainable growth and success amidst evolving market dynamics.

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### **Conflict of interest:**

The author declares that there is no competing interest

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## **APPENDIX**

### Construction Industry Survey: Risk Factors and Market Dynamics

Your feedback is vital for identifying and addressing significant risks and challenges encountered in the construction industry. Please provide your assessment of the following factors by selecting the most appropriate response against each problem:

(1) Not significant, (2) Moderately significant, (3) Fairly significant, (4) Very significant

#### **Administrative Aspect**

1. How important do you consider direct employer supervision in project management?
2. To what extent do you perceive a lack of a defined cadre structure in the company as a challenge?
3. How significant is the absence of computer program utilization in project management?
4. In your view, how crucial is administrative experience in business administration?
5. To what degree does overlap in cadre structure, whether administrative or technical, pose a challenge?
6. How much of an obstacle is the contractor's lack of scientific know-how?
7. How significant is the failure to implement all specifications agreed upon between consultant and contractor?
8. How challenging is the absence of licensed administrative bureaus for contractors?
9. How impactful is the lack of a sufficient administrative cadre for project management?
10. How significant is the absence of qualification courses for administrators?
11. To what extent does the failure to distinguish between technical and administrative project aspects pose a challenge?
12. How much of an obstacle is the continuous change in laws, particularly income tax law?
13. How important is the contractor's rank based on his company's capital?

#### **Financial Aspect**

1. How significant is the acquisition of large loans by the company?
2. To what extent is the inability to execute the project within the specified timetable a challenge?
3. How impactful is the delay in payment by the owner to the contractor?
4. How much of a challenge is it when the contractor expands work simultaneously on multiple projects?
5. How significant is the delay in payment of worker wages by the contractor?
6. To what degree does the incompatibility of work progress with cash payments pose a challenge?
7. How significant is the issue of weak remitting?
8. How impactful are low construction prices?
9. To what extent does competition in pricing projects pose a challenge?
10. How significant is the absence of laws governing payment processes and protecting contractors' rights?
11. How much of an obstacle is the presence of a large number of construction companies in Oman?
12. How challenging is the deterioration of general economic conditions?
13. How significant is the absence of specialists in project financial analysis?
14. To what extent does the inability to control project financial affairs pose a challenge?

15. How much of a challenge are taxes and tax burdens?
16. How significant is the absence of a price standing strategy in the market?
17. To what degree does inexperience when pricing tenders pose a challenge?
18. How impactful is the absence of clear financing mechanisms?

#### **Resources**

1. How significant is the absence of a standing guideline for the numerous resources in Oman?
2. To what extent do you perceive the existence of many fake and not original varieties of materials as a challenge?
3. How challenging is the monopoly of some material types?
4. How significant is the long distance between the project and resources?
5. To what degree is the absence of monitoring for high quality a challenge?
6. How much of a challenge is the absence of regular tests for materials used in projects?
7. How impactful is the absence of basic materials in the project?
8. To what extent does the scarcity of resources, especially basic resources, pose a challenge?
9. How significant is it when some materials do not arrive at the assigned site?
10. How challenging is it when agreed-upon technical specifications are not realized?
11. How much of a challenge is it when the contractor prioritizes the resource of the lowest price?
12. To what extent does the lack of periodic maintenance of heavy equipment pose a challenge?
13. How impactful are fluctuating prices of materials?
14. How significant is the absence of guarantees on imported materials?

#### **Manpower**

1. How significant is the absence of trained local manpower?
2. To what extent are the high wages of local manpower a challenge?
3. How challenging are the rigid laws governing the employment of foreign manpower?
4. How significant is the absence of training centers for local manpower?
5. To what degree is it an issue when workers do not abide by regular work hours?
6. How impactful is the absence of necessary technical skills?
7. How much of a challenge is it when public safety rules are not abided by?
8. To what extent does the absence of health insurance pose a challenge?
9. How challenging is the low productivity efficiency of the worker?
10. How significant is the lack of care for workmanship?
11. To what degree is the instability of the cadre in the companies an issue?

#### **Technical Aspect**

12. How significant is the lack of monitoring of design bureaus?
13. To what extent are the many design bureaus a challenge?
14. How challenging is the failure to provide a special cadre as required?
15. How significant is it when the designer does not follow up on designs and changes made to them?
16. To what degree does the owner's meddling with the design pose a challenge?
17. How impactful are recurring design errors?

18. How much of an obstacle are errors in the inventory of quantities?
19. To what extent is the failure to supervise the project a challenge?
20. How significant is the incompatibility of plans of design with execution?
21. How challenging is it when survey processes are not precise?
22. To what degree are many modifications to designs made during execution an issue?

**Market Competitiveness**

23. How important is market competitiveness in influencing project outcomes?
24. To what extent does market competitiveness shape pricing strategies within the construction industry?
25. How significant is the impact of market competitiveness on resource distribution within construction firms?
26. How much of a challenge is it when contractual arrangements and project timelines are influenced by market competitiveness?
27. To what degree does market competitiveness drive the adoption of innovative technologies and practices in construction?
28. How impactful is market competitiveness in decision-making processes related to bidding on construction projects?
29. How significant is the role of market competitiveness in shaping the sustainability and long-term growth prospects of construction businesses?
30. To what extent does market competitiveness affect the overall profitability and financial stability of construction projects and companies?