https://doi.org/10.52131/jom.2024.0603.0130

*i*RASD Journal of Management

Volume 6, Number 3, 2024, Pages 152 - 163

Journal Homepage:
https://journals.internationalrasd.org/index.php/jom

The Impact of Economic Fluctuations on Project Management Practices in Large-Scale Construction Projects

Wasif Ali Khan[1]

[1] Scholar, Department of Peace Studies and International Development, University of Bradford, UK.
Email: ranawasifalikhan@gmail.com

ARTICLE INFO

Article History:

Received:	July	02, 2024
Revised:	September	12, 2024
Accepted:	September	16, 2024
Available Online:	September	19, 2024

Keywords:
Economic Fluctuations
Project Management
Construction Industry
Pakistan

Funding:
This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

ABSTRACT

This study investigates the influence of economic changes on management practices in Pakistan, focusing on key areas, including budgeting, cost management, monitoring, project planning, resource allocation, procurement, and risk management. Surveys were conducted to obtain data from 150 project managers in various sectors in Karachi. The results suggest that economic changes substantially impact management's decision-making process in Pakistan's firms. Managers respond to economic instability by implementing adaptive actions such as modifying budgets, strengthening cost controls, improving monitoring systems, revising project plans, reallocating resources, refining procurement methods, and strengthening risk management frameworks. These insights suggest that organizational resilience can be improved by implementing better planning, enhancing risk management practices, optimizing budgeting and cost management, strengthening monitoring and control mechanisms, refining resource allocation and procurement strategies, and fostering organizational agility.

Corresponding Author's Email: ranawasifalikhan@gmail.com

Citation: Khan, W. A. (2024). The Impact of Economic Fluctuations on Project Management Practices in Large-Scale Construction Projects. *IRASD Journal of Management*, *6*(3), 152–163. https://doi.org/10.52131/jom.2024.0603.0130

1. Introduction

In Pakistan, management in various sectors is dependent on economic change. Like any other country in the world, Pakistan has a pluralistic economy; therefore, it experiences cyclical economic conditions that are affected by international and domestic factors (Yousri, Sayed, Farag, & Abdelalim, 2023). These changes impact key management functions, budgeting, cost management, monitoring and controlling, planning, scope, resource, procurement, and risk management functions. In Pakistan, business organizations are perceived always to remain alert to manage their resources and control and reduce expenses when the economy turns bad (Mumtaz, Pirzada, & Vighio, 2023). To achieve these objectives, monitoring and control practices are improved to improve operational efficiency while cutting risks. To overcome this, it is relevant to address challenges connected with economic realities and market changes, which is why it is necessary to apply project planning and scope management (Mahmood et al., 2023). Best procurement practices are applied and pursued to enhance the supply chain responsiveness and cost regulation. Strategic approaches are crucial for handling and covering deficiency and loss risks for financial and operational activities (Akram, Zubair, Asghar, Nishtar, & Lodhi, 2023). This puts Pakistani organizations in a position to take advantage of growth opportunities, improve on this vulnerability, and practice more suitable changes for this kind of economic volatility and dynamics (Mahmood et al., 2023).

Pakistan's general business environment reveals challenges and potential for several industries in the economy. Economic cycles are a driving force behind the management

techniques within an organization; these cycles are informed by global trends, local policies, and geopolitics (Xia & Xiang, 2023). These variations either prove to be a challenge or create some form of organizational strain related to budgeting, cost, control and monitoring processes, project scheduling, scope, resource, procurement, and risk management. The challenge is to develop robust contingency plans that could minimize everything associated with risks and variability in resource utilization, as well as sustain business continuity during recession periods but, at the same time, leverage the effects of business cycles to the organization's advantage (Chathuranga et al., 2023). Considering the outlined unpredictable economic conditions in the Pakistani context, it is crucial to provide a literature discussion of how economic fluctuations influence management practices to enhance the relative ability of organizations to operate adaptively and sustainably for long-term development and competitive advantage (Khaddour & Deng, 2023).

Despite the significantly fewer studies that specifically discuss Pakistan's environment, some work has already been done to explore the effect of economic fluctuation on management practices across the globe (Khahro, Shaikh, Zainun, Sultan, & Khahro, 2023). Unfortunately, no prior research available in the context of Pakistan works in a specific and comprehensive manner that focuses on different consequences of economic fluctuations on management aspects (Akram et al., 2023). These aspects include control strategies, cost controls, accounting control policies, budgeting and estimation, planning, scope management, resource management, procurement, and risk management (Mahmood et al., 2023). There is a lack of research that specifically investigates these effects. This void makes it difficult to understand how Pakistani businesses adapt their management practices in response to fluctuations in the economy (Ayat, Rehman, Qureshi, & Kang, 2023). Conducting additional studies is necessary to understand better the specific challenges and opportunities that Pakistani businesses confront during the economic transition. For research, the objective should be to collect empirical information that indicates the influence of these variances on management decisions and operational strategies in Pakistan's economic landscape, which is always shifting (Melka, 2023). Therefore, this study seeks to address the disparity by analyzing the specific effects of economic volatility on management practices in Pakistan, with the ultimate goal of offering practical insights that improve organizational resilience and performance in changeable economic circumstances.

The remaining paper explains the literature review and empirical analysis for developing the hypotheses, followed by methodological aspects, and then discusses the results and findings of the study. Lastly, the paper gives conclusive remarks, recommendations, and directions for future research.

2. Literature Review

2.1. Economic Fluctuation and Budgeting and Cost Management

Budgeting and cost management aid firms to overcome the nature of economic instability within their environment. Conservative budgeting is a measure that most companies often implement during recessions to reduce the amounts spent on non-essential activities that may in one way or the other be deemed unprofitable at that given time as this is likely to enhance the cash flows and the provision of stability of the business (Chathuranga et al., 2023). This is very reasonable given that when revenues are down or even constrained by the general economy, people tend to limit their spending on unnecessary things and focus on the necessary investment. Existential financial risks mean that in conditions of economic growth, companies can use higher revenues to justify higher spending on innovation, expansion, and market penetration, as observed by (Njaga, Nyagilo, & Matanda, 2023). Managing budget fluctuations works with future contingency strategies, where budget setting and plans to manage the organization adapt to operate in different economic statuses by using techniques like scenario analysis, sensitivity analysis, and risk appraisal. Businesses may enhance resource purchases and be viable across such cycles by controlling cash flows flexibly and proactively (Zain, 2023).

2.2. Economic Fluctuation and Resource Allocation and Procurement

Economic cycles, resource allocation, and procurement-strategies correlation stress the importance of staff adaption for operational stability and effectiveness. It could be argued

that in recessions, the issues of operational necessities and expenditure management are the most relevant to companies. (Zhong, Tang, Chen, & Igor, 2023). This often entails altering supplier relations, including contract renegotiation, expanding procurement sources, and encouraging greater supply chain visibility to minimize such risks and ensure supply chain sustainability in the face of economic fluctuations. Depending on the levels of economic activity, an organization may seek specialization in procurement, establish relations with suppliers, and adopt advanced technologies in procurement (Almeile, Chipulu, Ojiako, Vahidi, & Marshall, 2024). Policies that allow for technical trade-offs that accomplish both short-term cost control and long-term resource preservation foster tactical flexibility in procurement processes. Concerning the second research question, Control theories assert that firms can optimize development and functionality in various states of the economy by synchronizing procurement strategies and patterns with organizational objectives and economic trends (Yousri et al., 2023).

2.3. Economic Fluctuation and Monitoring and Controlling Practices

Dealing with and controlling processes are necessary to maintain organizational performance and sustain governance at a financially shaky time. In a period of economic upheaval, the management emphasizes the increase in productivity to minimize losses and risks and optimize costs (Ahmed, Azhar, & Mohammad; Dler M Ahmed, Z Azhar, & Aram J Mohammad, 2024; Khaddour & Deng, 2023). This anticipative strategy uses the real-time generation of metrics and an organizational performance output that aids in ascertaining less efficient operations, integrating the improvement of those operations, and redistributing resources for various economic conditions. In the thriving economic period, adequate monitoring is pertinent, and for appropriate monitoring, there is a need for insight, strategic fit, performance management, and control of resources for growth objectives as identified (Dler Mousa Ahmed, Zubir Azhar, & Aram Jawhar Mohammad, 2024; Xia & Xiang, 2023). The operational adaptability supported by adaptive monitoring of the organizational functions anchored by sound governance structures and logical risk management models facilitates effectiveness. Organizations can maintain operational efficiency or effectiveness or endanger prevention or exploitation and capture new value in local markets by developing or integrating a new monitoring and control system, improving competitive advantage, and benefiting stakeholders at risk (Zain, 2023).

2.4. Economic Fluctuation and Risk Management

Risk management is crucial to organizational resilience and sustainability during economic downturns. Businesses increase risk management during economic downturns to protect assets and liquidity by detecting and managing financial, operational, and market risks. Diversification, financial hedging, and scenario planning to mitigate downturn implications are common during this time (Khaddour & Deng, 2023). During economic expansions, companies adjust risk tactics, risk tolerance, and resource allocation to growth efforts while managing market volatility. Risk management involves frameworks related to risk assessment, compliance with regulations, and stakeholder involvement to improve decision-making and create value around economic cycles (Xia & Xiang, 2023). Adaptive risk management assists firms in overcoming complicated challenges, improving outcomes, and achieving growth opportunities in transformative economic landscapes; at the same time, it helps boost resilience and enhance performance (Njaga et al., 2023).

2.5. Economic Fluctuation and Project Planning and Scope Management

Economic fluctuations substantially affect organizational project planning and scope management. By focusing on risk management and cost reduction, businesses prefer projects that fulfill their immediate financial objectives during downturns (Mahmood et al., 2023). Management must properly understand scope definition and prioritization to overcome budget constraints and resource scarcity. Organizations are most likely to allocate resources during economic upswings through expansion in project portfolios to achieve growth opportunities (Zhong et al., 2023). Several important strategies are for managing risks and determining project scope during evolving economic conditions. These strategies include incorporating agile methodologies, analysis of the basis of scenarios, and flexible planning. Businesses are most likely to achieve success and resilience in their projects regarding economic landscapes

by integrating their project management practices with economic realities (Almeile et al., 2024).

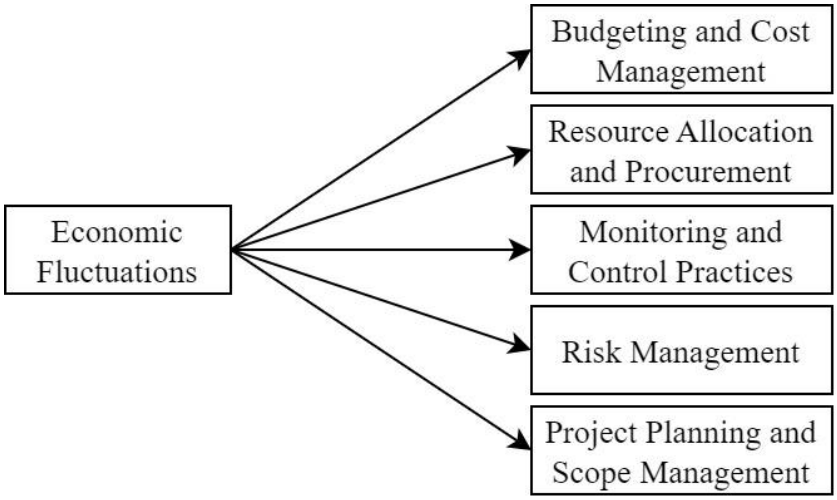

Figure 1: Research Framework

3. Methodology

3.1. Sample and population

This study's sample population comprises project managers in Karachi's construction projects for the last three years. All participants are experts who understand project planning, resource allocation, and implementation, and they perform well in the construction field.

Table 1
Respondents' Profile (n = 188)

		N	%
Gender	Male	123	65.4
	Female	65	34.6
Age	25 to 34	47	25.0
	35 to 44	46	24.5
	45 to 54	54	28.7
	55+	41	21.8
Job Description	Senior Project Manager	29	15.4
	Project Manager	27	14.4
	Project Engineer	36	19.1
	Technical Project Manager	33	17.6
	Site Engineer	19	10.1
	Others	44	23.4
Years of Experience	Less than 5	46	24.5
	5 to 10	51	27.1
	10 to 15	41	21.8
	More than 15	50	26.6
Type of Project	Residential *(e.g., apartments and housing schemes, etc.)*	29	15.4
	Commercial *(e.g., office buildings and shopping malls, etc.)*	22	11.7
	Industrial *(e.g., factories and warehouses, etc.)*	26	13.8
	Infrastructure *(e.g., roads and highways, etc.)*	12	6.4
	Healthcare *(e.g., hospitals and medical centers)*	21	11.2
	Education *(e.g., schools, colleges, universities, etc.)*	27	14.4
	Government *(e.g., Military buildings and secretariats, etc.)*	25	13.3
	Hospitality and Tourism *(e.g., Hotels and resorts)*	26	13.8

The respondents' profile shows a majority of males (65.4%) and a significant proportion of females (34.6%). The age distribution is diverse, with the highest percentage in the 45-54 age group (28.7%). The respondents come from various job descriptions, with Project Engineers (19.1%) and Technical Project Managers (17.6%) being the most represented. Senior Project Managers and Project Managers account for 15.4% and 14.4%, respectively. The respondents have diverse years of experience, with the highest percentage having more than 15 years of experience (26.6%). The respondents work on various projects, with Education (14.4%) and Hospitality and Tourism (13.8%) being the most common. Residential, Industrial, and Government projects also have significant representations, while Infrastructure projects have the lowest percentage (6.4%).

3.2. Measures

According to Zain (2023), Budgeting and cost management involve planning, estimating, and controlling financial resources to achieve organizational goals efficiently. The six metrics are taken from the research done in 2023 by (Zain, 2023) . The study used a 5-point Likert scale to measure respondents' responses. For example, a sample item, *"Uncertainty can lead to budget failures."*

As defined by Njaga et al. (2023), Monitoring and control practices involve overseeing and managing activities to ensure alignment with organizational goals and objectives. The nine items come from a study done in 2023 by (Njaga et al., 2023). A 5-point Likert scale is used as the measurement tool. For instance, a sample item, "*Our organization conducts regular internal audits of construction projects."*

According to Chepng'eno and Kimutai (2021), project planning and scope management encompass defining project goals, objectives, tasks, and deliverables and ensuring that the project scope is effectively controlled throughout its life cycle. The six metrics are derived from a study carried out in 2021 by (Chepng'eno & Kimutai, 2021). Respondents are asked to rate their opinions of Project Planning and Scope Management on a 5-point Likert scale. For example, a sample item, *"Budgetary estimates for construction projects have assisted in minimizing costs."*

According to a definition by Chepng'eno and Kimutai (2021) regarding resource Allocation and Procurement, some important areas that require consideration to achieve project objectives include strategic distribution and acquisition of materials, labor, and equipment. The questionnaire of this study applied a 5-point Likert scale for the assessment. The sample item includes, "Projects sufficiently allocate resources through evaluating bill of quantities to ensure quality construction."

Furthermore, Khaddour and Deng (2023) explain that risk management includes identifying, assessing, prioritizing, and managing risks to reduce their negative effects on a project or organization. This research provides seven items based on research (Khaddour & Deng, 2023). This study also selected a 5-point Likert scale as the assessment tool. For instance, a sample item is *"Allocation of contingency funds and ensuring that contractor has sufficient knowledge and resources to manage project risks effectively."*

According to Zainal, Bani-Mustafa, Alameen, Toglaw, and Al Mazari (2022), economic fluctuations indicate periodic changes in economic activity, including GDP Growth fluctuations, inflation rates, employment levels, and business cycles; these all affect the overall economic conditions and business operations. This study provides four important metrics (Zainal et al., 2022). It also has selected the 5-Point Likert scale as the assessment tool. The sample item includes *"Concerns about significant fluctuations in financial income due to economic changes."*

3.3. Data analysis

PLS-SEM is considered an effective application in construction project management, and it facilitates the analysis of complicated relationships between variables. It is applied to assess multiple effects of factors such as project planning, risk management, and team communication on project outcomes, and it includes quality, cost, and schedule. PLS-SEM also examines the relationships between practices of numerous construction management

projects, for instance, budgeting, scheduling, and resource allocation, and their effects on project performance. Moreover, it also assists in identifying important drivers that help achieve success in construction projects. Furthermore, it allows managers to emphasize the most critical factors to improve project outcomes. With the application of PLS-SEM, construction project managers are most likely to make decisions based on data, optimize resource allocation, and improve overall project performance.

4. Results and Discussions

4.1. Measurement model

The measurement model in PLS-SEM describes the relationships between latent variables and their observed indicators, and it ensures accurate measurement and validity for subsequent structural model estimates. It evaluates indicators' reliability and validity, provides a foundation to examine the structural relationships between the constructs, and enables reliable conclusions from the data. Table 2 estimates the measurement model; it includes construct and convergent validity by applying the PLS algorithm technique.

The above table showed that indicators have reliability higher than the preferred recommended threshold of 0.70 with their probability level below 5% and VIF below 5 (Hair, Hult, Ringle, & Sarstedt, 2022) for establishing construct validity. Moreover, the latent constructs have an alpha coefficient higher than 0.70 and composite reliability (CR) above 0.80 for adequate internal consistency of the latent constructs (Hair, Risher, Sarstedt, & Ringle, 2019). Lastly, the constructs have an AVE coefficient higher than 0.50 (Hair, Ringle, & Sarstedt, 2011); therefore, constructs have achieved adequate convergence between indicators.

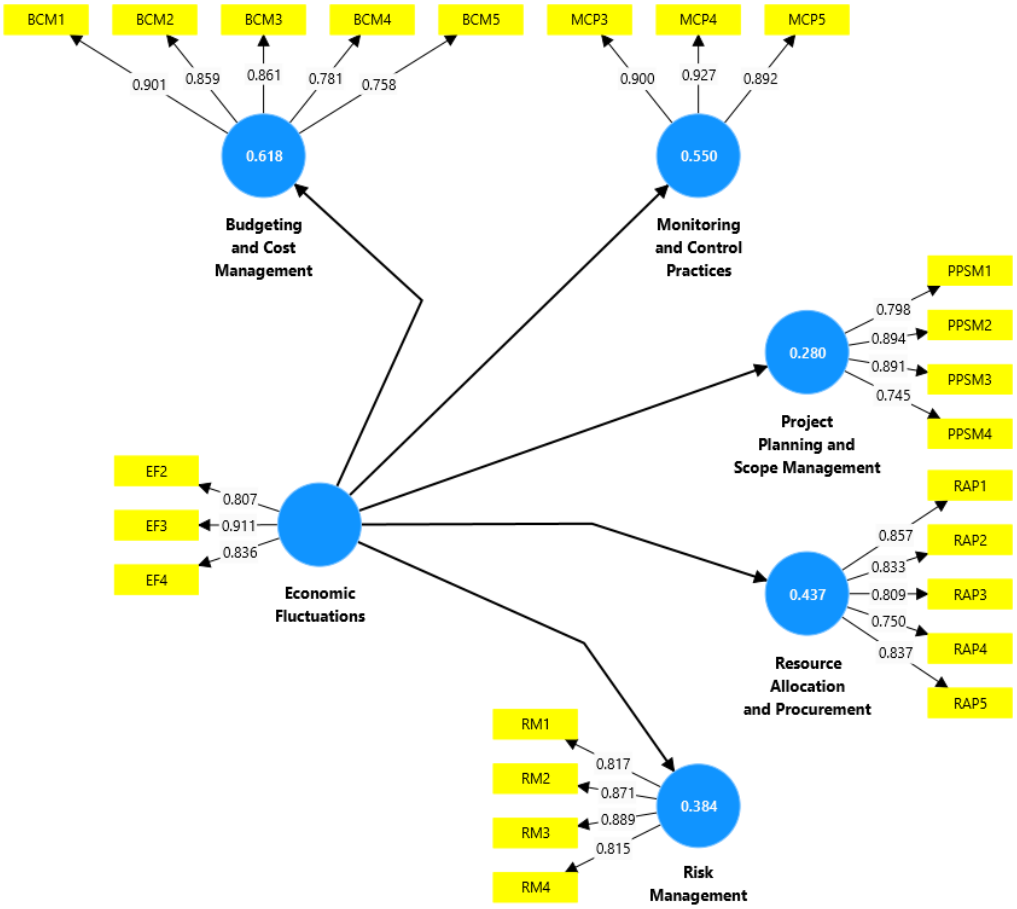

Figure 2: PLS Algorithm

4.2. Discriminant validity

Discriminant validity in PLS-SEM refers to the extent to which a latent variable is distinct and unrelated to other latent variables, indicating that each construct is unique and not redundant. It assesses whether the indicators of a latent variable are more closely related to their construct than to other constructs, ensuring that each construct is empirically distinct

and not conflated with others. Discriminant validity is essential to establish the uniqueness of each construct and prevent redundant or overlapping measurements. Table 3 provides the statistical assessment of the discriminant validity using the HTMT ratio.

Table 2

Measurement Model using PLS Algorithm

Constructs and Indicators	Loadings	Prob.	VIF
Budgeting and Cost Management (Alpha = 0.890; CR = 0.919; AVE = 0.659)			
Uncertainty can lead to budget failures.	0.901	0.000	4.150
Managers frequently face uncertainty regarding future outcomes.	0.859	0.000	3.081
Contingent factors influence the strategic management techniques utilized by organizations.	0.861	0.000	3.119
Alignment between budgeted data and strategic goals is essential for an effective budget.	0.781	0.000	2.280
Inaccurate or unreasonable assumptions can result in budget failures.	0.758	0.000	2.467
Economic Fluctuations (Alpha = 0.814; CR = 0.888; AVE = 0.727)			
Concerns about encountering a low cost–return ratio amid economic fluctuations.	0.807	0.000	1.791
Concerns about facing reduced cash flow during economic fluctuations.	0.911	0.000	2.140
Concerns about navigating an uncertain financial future amidst economic fluctuations.	0.836	0.000	1.677
Monitoring and Control Practices (Alpha = 0.892; CR = 0.933; AVE = 0.822)			
Internal audits encourage accountability and prevent fraud in our construction projects.	0.900	0.000	2.688
Our organization has a policy framework that governs internal controls for construction projects.	0.927	0.000	3.360
Our organization regularly assesses risks in construction projects.	0.892	0.000	2.362
Project Planning and Scope Management (Alpha = 0.859; CR = 0.901; AVE = 0.696)			
Budgetary estimates for construction projects have assisted in minimizing costs.	0.798	0.000	1.891
Time scheduling is provided for each construction project to avoid wasting time and resources during the construction process.	0.894	0.000	2.163
Planning process management effectively manages costs by preventing resource wastage in construction projects.	0.891	0.000	2.525
Planning has assisted in minimizing corruption and mismanagement in construction projects.	0.745	0.000	1.818
Resource Allocation and Procurement (Alpha = 0.877; CR = 0.910; AVE = 0.669)			
Projects had sufficient resources allocated through evaluating bills of quantities to ensure quality construction.	0.857	0.000	2.382
Human resources were effectively utilized during construction to ensure quality outcomes.	0.833	0.000	2.285
Financial resources were allocated to ensure proper transparency and resource allocation in construction projects.	0.809	0.000	2.209
Resource allocation has contributed to the long-term benefits of construction projects.	0.750	0.000	1.684
Physical resources were allocated to bring in all necessary machinery and materials, ensuring quality work without resource wastage.	0.837	0.000	2.016
Risk Management (Alpha = 0.870; CR = 0.911; AVE = 0.720)			
Allocate contingency funds and ensure the contractor has sufficient knowledge and resources to manage project risks effectively.	0.817	0.000	2.182
Devote adequate resources to planning, research, and active risk management to promptly address any risks that arise.	0.871	0.000	2.507
Involve consultants and experts to transfer and mitigate risks during the project risk management process (PRRP).	0.889	0.000	2.541
Prepare comprehensive bidding requirements and make timely decisions to manage project risks effectively.	0.815	0.000	1.952

The above table shows that all the latent constructs have an HTMT ratio below the recommended threshold of 0.90 (Henseler, Hubona, & Ray, 2016; Henseler, Ringle, & Sarstedt, 2015), manifesting that constructs are different. Hence, discriminant validity has been established using the HTMT ratio.

Table 3
HTMT Ratio

	BCM	EF	MCP	PPSM	RAP	RM
Budgeting and Cost Management						
Economic Fluctuations	0.900					
Monitoring and Control Practices	0.812	0.862				
Project Planning and Scope Management	0.686	0.549	0.702			
Resource Allocation and Procurement	0.683	0.728	0.779	0.730		
Risk Management	0.623	0.695	0.633	0.525	0.849	

4.3. Predictive power and relevance

R-squared values indicate the predictive power of various project management practices. budgeting and cost management shows moderate predictability (R^2 = 0.618), followed by monitoring and control practices (R^2 = 0.550). Resource allocation and procurement (R^2 = 0.437) and risk management (R^2 = 0.384) also have moderate predictability in the model, while project planning and scope management have relatively weak predictability (R^2 = 0.280) in the structural model (Hair et al., 2011).

Q-Square values also indicate the relevance of these practices, with budgeting and cost management having strong relevance in the structural model (Q^2 = 0.613). Monitoring and control practices (Q^2 = 0.540) and resource allocation and procurement Q^2 = (0.423), followed by risk management (Q^2 = 0.372), have strong relevance. However, project planning and scope management (Q^2 = 0.260) have moderate relevance in the structural model (Hair, Ringle, & Sarstedt, 2013).

4.4. Structural model

In PLS-SEM, the structural model refers to the analysis component that examines the relationships between latent constructs. It focuses on understanding the causal or predictive relationships between the constructs (Chin, 1998; Henseler et al., 2009). The structural model builds upon the measurement model, which establishes the relationships between the observed indicators and the latent constructs. Once the measurement model is validated, researchers can analyze the structural relationships between the latent constructs (Henseler et al., 2009; Sarstedt et al., 2014). It includes repeatedly sampling with replacement from the original data to develop many subsamples (e.g., 5000), estimate the structural model for each subsample, and calculate the path coefficients and their standard errors. This process facilitates estimating the standard errors, testing hypotheses, creating confidence intervals, and validating structural models. By applying bootstrapping in PLS-SEM, a researcher is most likely to test hypotheses regarding relationships between constructs, estimate the precision of the path coefficients, validate the structural model, account for sampling variability and measurement error, and provide a robust and reliable method for hypothesis testing and model validation. Table 4 demonstrates the results of hypothesis testing using PLS path modeling analysis.

Table 4
Hypothesis Testing using PLS Path Modeling Analysis

Path Relationships	Beta	t-Stats	Prob.
Economic Fluctuation → Budgeting and Cost Management	0.786	25.798	0.000
Economic fluctuation → Monitoring and Control Practices	0.742	20.200	0.000
Economic fluctuation → Project Planning and Scope Management	0.529	10.614	0.000
Economic fluctuation → Resource Allocation and Procurement	0.661	17.521	0.000
Economic fluctuation → Risk Management	0.619	12.931	0.000

The path analysis indicates a significant positive correlation (β = 0.786, $p < 0.001$) between economic fluctuation and budgeting and cost management. Previous research corroborates similar findings and suggests that economic swings stimulate adaptations in budget allocation and expense management strategies. This research has exhibited that in times of economic uncertainty, firms are most likely to emphasize reducing expenses and increasing productivity to sustain profitability and financial security (Amini, Rezvani, Tabassi, & Malek Sadati, 2023). Organizations must apply adaptive budgeting solutions to handle

economic turbulence and maintain sustained financial health and operational resilience (Njaga et al., 2023).

The research also indicates a significant positive correlation between Economic Fluctuation and Monitoring and Control Practices (β = 0.742, p < 0.001). Research supports these conclusions by emphasizing that economic volatility compels firms to implement proactive monitoring and control techniques. Research suggests that in times of economic decline, businesses prioritize improving operational efficiencies and implementing risk mitigation methods to maintain their performance and profitability (Khahro et al., 2023). Efficient monitoring procedures allow firms to quickly discover inefficiencies and optimize resource allocation in response to changing economic conditions, improving overall operational resilience (Zain, 2023).

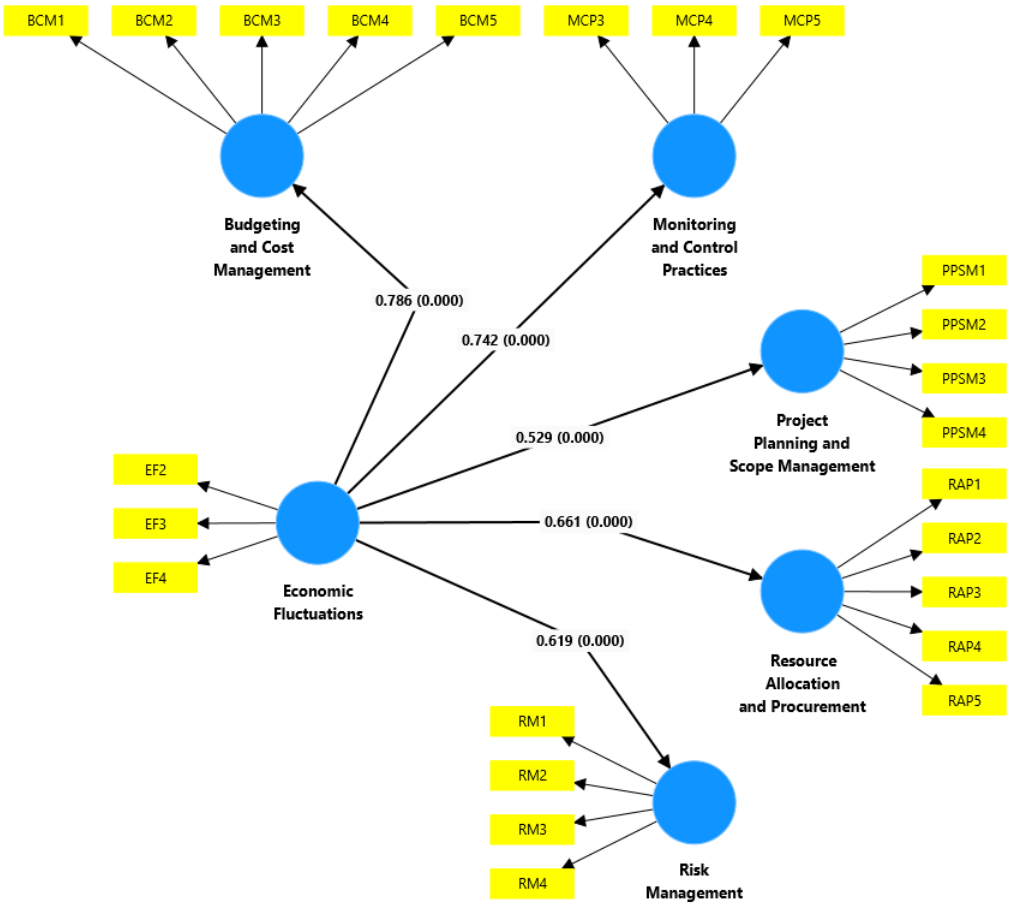

Figure 3: PLS Bootstrapping

These results possess a significant positive correlation (β = 0.529, p < 0.001) between economic fluctuation and project planning and scope management. Prior research corroborates these findings by demonstrating that economic variations necessitate firms to adjust their project planning and scope management practices. Studies indicate that in times of economic decline, businesses prioritize optimizing project efficiency and aligning project scopes with available resources and market demands to guarantee project success and financial sustainability (Akram et al., 2023; Melka, 2023). Agile project management approaches are being more widely used to improve responsiveness and adaptability in project planning, reducing risks related to economic fluctuation (Xia & Xiang, 2023).

The analysis demonstrates a significant positive correlation (β = 0.661, p < 0.001) between economic fluctuation and resource allocation and procurement. The conclusions are supported by empirical evidence, indicating that economic changes impact procurement and resource allocation decisions. Research indicates that in times of economic decline, companies focus on streamlining procurement procedures and securing advantageous agreements with suppliers to sustain profitability and ensure uninterrupted operations (Zhong et al., 2023). Adaptive procurement techniques empower firms to manage supply chain disruptions and market uncertainties effectively, strengthening resilience and gaining a competitive edge in volatile economic conditions (Xia & Xiang, 2023).

The findings of this study reveal a significant positive correlation ($\beta = 0.619$, $p < 0.001$) between Economic Fluctuation and Risk Management. Research substantiates these conclusions by demonstrating that economic volatility forces firms to implement adaptive risk management measures. Research indicates that companies improve their risk assessment frameworks in times of economic decline and use proactive actions to mitigate risks, aiming to protect themselves from economic uncertainty and maintain uninterrupted commercial operations (Khaddour & Deng, 2023). Organizations must implement effective risk management techniques to traverse complexities and achieve optimal outcomes in dynamic economic situations. This will enhance their resilience and ensure sustained long-term performance excellence (Amini et al., 2023).

5. Conclusion and Recommendations

5.1. Recommendations

The study's results indicate that organizations should improve adaptive planning by implementing a comprehensive scenario analysis. Economic risks are mitigated by hedging and diversification strategies to enhance risk management. Efficiency is guaranteed during periods of economic recession by optimizing budgeting and cost management. Real-time analytics-based monitoring improves operational control. Strategic resource allocation prioritizes critical initiatives and strategic sourcing to mitigate supply chain risks. Fostering organizational agility encourages the ability to respond to opportunities. Resilience is fostered by investing in talent for the execution of adaptive strategies. Proactive modifications are made by monitoring market trends and regulatory changes. Collectively, these strategies enhance organizational resilience, allowing businesses to navigate economic fluctuations while effectively maintaining long-term development and competitiveness.

5.2. Limitations and future research

Although this study provides valuable insights into the relationship between economic fluctuations and management practices in Karachi, several limitations require consideration. The results only covered the geographical area of Karachi, were not generalized, and touched other regions with different economic dynamics. This study cannot capture longitudinal effects or changes over time due to using cross-sectional data. Moreover, the utilization of survey-based perceptions possesses measurement errors and biases. Future research that assesses the impact of external factors, including technological advancements and regulatory changes, conducting comparative analyses across regions or industries, incorporating qualitative methods for deeper insights, and exploring longitudinal studies for tracking management practices across economic cycles needs to be investigated. By addressing these avenues, organizations will most likely develop sophisticated strategies to navigate economic uncertainties and improve their comprehension effectively.

5.3. Conclusion

Consequently, this study identified the important relationships between economic volatility and different management methods in the specific setting of Karachi. The results focus on the significant influence of economic instability on budget, cost management, monitoring and control techniques, project planning, scope management, resource allocation, procurement, and risk management. All these areas exhibit a strong and positive relationship with economic changes, as exhibited by significant beta coefficients and high statistical significance. Thus, this study recognizes the constraints of its limited geographical scope and cross-sectional design, indicates potential areas for further investigation to examine longitudinal patterns, conduct comparison analyses across other locations, and evaluate the impact of external influences. These insights provide helpful advice for enterprises in Karachi and other areas, intending to improve resilience, maximize performance, and effectively manage economic risks.

Authors Contribution
Wasif Ali Khan: Is the sole author of this study.

Conflict of Interests/Disclosures
The authors declared no potential conflicts of interest regarding the article's research, authorship and/or publication.

References

Ahmed, D. M., Azhar, Z., & Mohammad, A. J. The Corporate Governance and International Standards for Accounting Role in Reducing Information Asymmetry.

Ahmed, D. M., Azhar, Z., & Mohammad, A. J. (2024). Integrative Impact of Corporate Governance and International Standards for Accounting (Ias, Ifrs) in Reducing Information Asymmetry. *Polytechnic Journal of Humanities and Social Sciences, 5*(1), 567-582.

Ahmed, D. M., Azhar, Z., & Mohammad, A. J. (2024). The Role of Corporate Governance on Reducing Information Asymmetry: Mediating Role of International Standards for Accounting (Ias, Ifrs). *Kurdish Studies, 12*(1).

Akram, N., Zubair, S. S., Asghar, F., Nishtar, Z., & Lodhi, K. (2023). Public-Private Partnerships (Ppps) in Construction Projects: A Study on the Utilization, Effectiveness, and Challenges in Pakistan. *Bulletin of Business and Economics (BBE), 12*(3), 402-409.

Almeile, A. M., Chipulu, M., Ojiako, U., Vahidi, R., & Marshall, A. (2024). The Impact of Economic and Political Imperatives on the Successful Use of Public-Private Partnership (Ppp) in Projects. *Production Planning & Control, 35*(6), 559-579.

Amini, S., Rezvani, A., Tabassi, M., & Malek Sadati, S. S. (2023). Causes of Cost Overruns in Building Construction Projects in Asian Countries; Iran as a Case Study. *Engineering, Construction and Architectural Management, 30*(7), 2739-2766.

Ayat, M., Rehman, H., Qureshi, S. M., & Kang, C. W. (2023). Assessing the Causes of Project Overruns in Tunnel Construction Projects in Pakistan. *International Journal of Construction Management, 23*(11), 1856-1866.

Chathuranga, S., Jayasinghe, S., Antucheviciene, J., Wickramarachchi, R., Udayanga, N., & Weerakkody, W. S. (2023). Practices Driving the Adoption of Agile Project Management Methodologies in the Design Stage of Building Construction Projects. *Buildings, 13*(4), 1079.

Chepng'eno, J., & Kimutai, G. (2021). Planning and Resource Allocation as Project Integrated Management Skills on Sustainability of Road Projects. *International Academic Journal of Information Sciences and Project Management, 3*(6), 443-446.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A Primer on Partial Least Squares Structural Equation Modeling (Pls-Sem)* (3rd ed.). Thousand Oaks,USA: SAGE Publications.

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). Pls-Sem: Indeed a Silver Bullet. *Journal of Marketing theory and Practice, 19*(2), 139–152.

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial Least Squares Structural Equation Modeling: Rigorous Applications, Better Results and Higher Acceptance. *Long range planning, 46*(1-2), 1-12.

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to Use and How to Report the Results of Pls-Sem. *European Business Review, 31*(1), 2-24.

Henseler, J., Hubona, G., & Ray, P. A. (2016). Using Pls Path Modeling in New Technology Research: Updated Guidelines. *Industrial management & data systems, 116*(1), 2-20.

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A New Criterion for Assessing Discriminant Validity in Variance-Based Structural Equation Modeling. *Journal of the academy of marketing science, 43*(1), 115-135.

Khaddour, L. A., & Deng, W. (2023). Multi-Criteria Sustainability Risk Management for Post-War Residential Re-Construction: The Case of Damascus. *Journal of Housing and the Built Environment, 38*(3), 1939-1982.

Khahro, S. H., Shaikh, H. H., Zainun, N. Y., Sultan, B., & Khahro, Q. H. (2023). Delay in Decision-Making Affecting Construction Projects: A Sustainable Decision-Making Model for Mega Projects. *Sustainability, 15*(7), 5872.

Mahmood, S., Sun, H., Abdein, M. A., Qadri, S. U., Iqbal, A., Abdelkader, M. F., . . . Hewedy, O. (2023). Exploring the China-Pakistan Economic Corridor Project Performance During Covid-19 Pandemic. *Heliyon, 9*(12).

Melka, T. (2023). *Assessment of the Causes and Impacts of Claim in Building Construction Project Management of Local Contractors: The Case of Commercial Bank of Ethiopia in Addis Ababa City.* (Degree of Masters of Arts (MA) in Project Management Master's Thesis), St. Mary's University, Ethiopia. Retrieved from http://repository.smuc.edu.et/bitstream/123456789/7832/1/TENSAYE%20MELKA%2c%20approved%20thesis.pdf

Mumtaz, F., Pirzada, N., & Vighio, A. A. (2023). Risk Assessment of High and Low Budget Construction Projects. *International Research Journal of Modernization in Engineering Technology and Science, 5*(7), 3413-3420.

Njaga, C. M., Nyagilo, V., & Matanda, J. (2023). Financial Management Practices on Financial Performance of State Corporations under State Department for Tourism in Kenya. *International Academic Journal of Economics and Finance, 3 (9), 154, 169*, 2.

Xia, X., & Xiang, P. (2023). Dynamic Network Analysis of Stakeholder-Associated Social Risks of Megaprojects: A Case Study in China. *Engineering, Construction and Architectural Management, 30*(10), 4541-4568.

Yousri, E., Sayed, A. E. B., Farag, M. A., & Abdelalim, A. M. (2023). Risk Identification of Building Construction Projects in Egypt. *Buildings, 13*(4), 1084.

Zain, M. M. (2023). Strategic Cost Planning through the Elaboration of Contingency Theory. *Financial & Business Studies Journal/Mağallaẗ Al-Dirāsāt Al-Māliyyaẗ wa Al-Tiğāriyyaẗ, 33*(2).

Zainal, M., Bani-Mustafa, A., Alameen, M., Toglaw, S., & Al Mazari, A. (2022). Economic Anxiety and the Performance of Smes During Covid-19: A Cross-National Study in Kuwait. Sustainability, 2022, 14: 1112. In: s Note: MDPI stays neutral with regard to jurisdictional claims in published ….

Zhong, Q., Tang, H., Chen, C., & Igor, M. (2023). A Comprehensive Appraisal of the Factors Impacting Construction Project Delivery Method Selection: A Systematic Analysis. *Journal of Asian Architecture and Building Engineering, 22*(2), 802-820.