1. Introduction

This study examines the role of managerial stability in enhancing firm value and managing free cash flow (FCF) risk, prioritizing sustainable value creation over short-term profitability (Jensen, 1986). Managerial stability, defined as consistent leadership, reduces financial risks and enhances firm value. The study investigates managerial stability's effect on FCF risk and firm value in Iranian and Iraqi stock markets, comparing differences. The context is relevant due to agency problems in Iran and Iraq, where managerial stability mitigates earnings manipulation and improves investment efficiency (Fama & Jensen, 1983). Managerial stability, defined as senior management continuity, supports sustainable performance and value creation (Hill & Phan, 1991). Stable management fosters long-term strategies, effectively managing FCF and mitigating risks like over-investment (Jensen, 1986). Agency theory highlights that stable management reduces agency costs by aligning managerial and shareholder interests. Studies show mixed results on managerial stability's impact on financial performance, suggesting moderation by economic and industry factors, necessitating further research in diverse contexts.

2. Hypotheses

The research hypotheses are as follows:

H1: Managerial stability reduces free cash flow risk in Iranian and Iraqi listed companies.

H2: Managerial stability enhances firm value in Iranian and Iraqi listed companies.

H3: The effect of managerial stability on free cash flow risk and firm value differs between Iranian and Iraqi markets.

3. Methods

This study uses a hybrid methodology combining advanced AI techniques and spatial econometric models. The sample includes 140 Iranian companies (2016–2023) and 29 Iraqi companies from the Tehran and Iraqi Stock Exchanges. AI techniques, including reinforcement learning, model non-linear relationships between managerial stability and financial variables to identify patterns. Spatial logit and error models analyze spatial dependencies. Econometric outputs enhance AI model

accuracy by incorporating spatial data. This hybrid approach ensures robust analysis.

4. Results

Findings reveal market differences: Iraqi companies, though smaller, exhibit higher return on assets, managerial stability, and financial leverage than Iranian firms. Reinforcement learning performed better in Iran ($R^2 = 0.96$, precision 95%) than Iraq ($R^2 = 0.91$), due to market complexity. Managerial stability significantly enhances firm value, with a stronger effect in Iraq than Iran. It also reduces FCF risk more prominently in Iraq. Firm size and return on assets increase FCF risk, while financial leverage decreases it in both markets.

5. Conclusion

Managerial stability significantly reduces FCF risk and enhances firm value, with greater impact in Iraq's volatile market. In Iraq, economic volatility enhances the value of stable management. In Iran, structured markets moderate this effect. The hybrid methodology proves effective for financial analysis. Recommendations include strengthening supervision and reward systems in Iran and improving governance and transparency in Iraq. Managerial stability, supported by regulatory and governance improvements, fosters sustainable growth. Future research could explore additional market factors moderating managerial stability's effects or the role of AI in optimizing managerial decisions.

Keywords: Managerial stability, free cash flow risk, firm value, artificial intelligence techniques.