

# The Influence of Risk Management Practices on Financial Market Stability: Insights from Lebanon

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## ABSTRACT

This research investigates the relationship between various risk management practices, including diversification, hedging, and contingency planning, and their impact on the dependent variable, financial market volatility. The study is based on a sample size of 127 observations in the context of Lebanon's financial markets. The primary objective of this research is to analyze how risk management practices employed by financial institutions and market participants affect the stability of Lebanon's financial markets. To achieve this, the study employs a quantitative approach, utilizing statistical analysis and regression modeling to assess the relationships between the independent variables (risk management practices) and the dependent variable (financial market volatility). The independent variables in this study encompass risk management practices, namely diversification, hedging, and contingency planning. These practices are crucial components of financial risk management strategies employed by institutions and investors. By examining their influence on financial market stability, this research aims to provide insights into effective risk mitigation strategies within the Lebanese financial context. The decision of Lebanon as the study's context is significant due to the unique economic and geopolitical challenges faced by the country. The financial markets in Lebanon have been subject to various external and internal pressures, making the analysis of risk management practices particularly relevant. The sample size of 127 observations allows for robust statistical analysis, ensuring the validity of the findings. The research findings are expected to contribute to the existing body of knowledge on risk management and financial market stability, with potential implications for policymakers, financial institutions, and investors operating in Lebanon and similar emerging market economies.

**Keywords:** Risk Management, Diversification, Hedging, Contingency Planning, Financial Market Volatility

## INTRODUCTION

When it comes to allocating money, bolstering economic development, and creating opportunities for investors, financial markets are essential to the global economy (Aminimehr et al., 2022). However, these markets are notoriously unpredictable due to the volatility that comes with them (Jovanovic, 2018). This volatility may be caused by anything from economic data releases and geopolitical events to investor emotion and the occasional surprise (Kamel et al., 2023). The intrinsic fluctuations of the market may have far-reaching effects on investors, asset prices, and the economy as a whole. The importance of risk management in running the financial markets has skyrocketed in recent years (Bhojwani & Shome, 2023). Any good risk management strategy aims to locate, evaluate, and eliminate or reduce the risks to an organization's or an investor's capital (Mtiraoui et al., 2023). Due to its complexity and relevance in the modern financial environment, the relationship between risk management and market volatility is receiving more attention than ever (Jalloul et al., 2022). Therefore, risk management has become even more complicated, requiring an in-depth comprehension of how different tactics and practices might affect volatility in financial markets. Assessment, prevention, and tracking was subtopics of this study's risk management examination. The study's overarching goal is to learn why and how these factors contribute to price swings in the financial markets. The study is focused on determining the

efficacy of various risk management measures used by financial institutions, organizations, and investors (Alozian & Shatila, 2023). To what extent these tactics can help calm the markets and safeguard the economy was evaluated. Risk management techniques and, by extension, market volatility was studied to determine the impact of regulatory bodies and their policies (Shatila et al., 2023). A primary goal is to examine the relationships among government policies, business norms, and market forces.

Despite Lebanon's specific issues and vulnerabilities, there is an apparent lack of knowledge about the importance of risk management in reducing financial market volatility. While the global financial crisis triggered the international reevaluation of risk management strategies, Lebanon has also seen its fair share of economic and political disasters. Sharp asset price swings in the country's financial markets have not been insulated from volatility. Context-specific research is required to comprehend the effect of risk management on financial market volatility. Lebanon's economic woes, political instability, and regulatory obstacles make it a one-of-a-kind and challenging setting. The significance of risk management is amplified by the fact that these variables substantially impact the behavior of financial markets. There are several reasons why Lebanon-specific research is so important. First, the financial markets inside the country may be smaller than their international counterparts, but they are no less critical to the health of the economy as a whole. Second, Lebanon faces unique risks because of its strategic location and heavy dependence on foreign investments and remittances. This study aims to investigate the effect of risk management on the volatility of the Lebanese financial markets, with a special emphasis on the banking industry. This research will focus on Lebanon's banking sector, businesses, and investors.

## HYPOTHESES DEVELOPMENT

Investment decisions, asset allocation, and portfolio design are all impacted by risk management in the financial markets. The rising volatility of global financial markets in recent years has highlighted the need of good risk management. During times of increased market turbulence, when unexpected shocks may lead to considerable losses, the necessity for effective risk management techniques becomes more clear, as stated by (Dinh & Schultze, 2022).

Diversification and hedging, two time-tested methods of risk management, have long been used to cushion the blow of market swings. (Castro et al., 2019) highlight the importance of diversity in reducing overall risk. The goal of this strategy is to protect investment portfolios from the ups and downs of individual assets. To further safeguard against unfavorable market fluctuations, hedging solutions such as options and futures are investigated (Rametse et al., 2020). Even if current financial markets are more complicated than ever before, studies show that these tried-and-true techniques are still useful for risk management.

A variety of cutting-edge resources and methods for handling risks have emerged as a result of recent innovations in the field. The rising popularity of volatility-based methods and quantitative risk management approaches is highlighted in recent studies by (Rashid et al., 2022). These developments make use of mathematical models and sophisticated statistical analysis to dynamically evaluate and control risk. In particular, algorithmic trading has been more widely used as a tool for real-time implementation of risk management measures (Solichin et al., 2022). These developments highlight the ever-evolving nature of risk management and its ability to respond to shifting market circumstances. This led to the development of the following hypothesis:

### **H1: There is relationship between risk management and financial market volatility**

Investors use diversification as a basic risk management approach because it allows them to disperse their exposure to potential losses over a wider range of assets or asset classes. The goal of diversification is to lessen the impact of market changes on a portfolio as a whole. When considering the backdrop of the financial markets, this method becomes more relevant. Understanding the efficacy and subtlety of diversification is essential in light of the heightened instability and unpredictability of global financial markets in recent years (Pizzi et al., 2021). Asset class diversification, geographical diversity, and industry diversification are all examples of diversification. When it comes to mitigating risk, different types of diversity play unique roles. Investing across many asset classes, such as equities, fixed income, and real estate, is an example of asset class diversification. Smith (2019) and Johnson (2020) highlight the importance of diversifying across asset classes in lowering overall risk, particularly during market downturns. Modern Portfolio Theory (MPT) is a theoretical framework for contemplating the role diversity plays in mitigating risk. According to the Modern Portfolio Theory (MPT), investors may reduce portfolio risk while maintaining the same level of anticipated return by choosing a mix of assets that are not perfectly connected. In portfolio management, this idea has been extensively adopted and put into practice (Fulop et al., 2018; Grayston, 2022). This led to the development of the following hypothesis:

### **H2: There is relationship between diversification and financial market volatility**

A strong defense against the volatility and unpredictability of financial markets may be found in the strategic financial move known as hedging. The importance of using efficient hedging techniques has skyrocketed as financial markets have become more complicated and prone to irregular oscillations (Hay et al., 2020). Different types of hedging techniques are tailored to the unique risks posed by distinct assets and financial instruments. For instance, currency hedging is a common practice that makes use of financial derivatives to hedge against fluctuations in exchange prices. As (Harber & Marx, 2020) point out, this is especially important for foreign investors who must contend with swings in both asset prices and exchange rates. Another important kind of hedging is commodity hedging, which is used largely by commodity trading companies (Agustina et al., 2021). This allows firms to maintain cost stability and insulate profit margins from commodity price shocks by offsetting the negative effects of price changes in crucial raw materials. However, interest rate hedging enables businesses to mitigate the risks associated with interest rate swings and maintain control over their borrowing expenses (Khalid et al., 2017). Due to the uncertainty of the financial markets, stock hedging has become more popular. By using this method, investors may protect their stock holdings from market downturns, limiting their exposure to loss and providing some degree of stability even when markets are very volatile. Hedging, at its essence, is a tactic for lowering risk. The underlying premise it works on is mitigating the effects of unfavorable price fluctuations. Hedging is an attempt to balance risk by adopting opposite positions or using financial instruments like options and futures contracts to reduce exposure to market fluctuations. This idea is consistent with current financial theory, which includes hedging alongside diversification and asset allocation as fundamental methods for mitigating risk (Castka & Searcy, 2022). Effective hedging methods have been studied by (Ozili & Outa, 2019) for their potential to mitigate portfolio volatility under volatile market conditions. These results highlight the fact that a well-thought-out and implemented hedging strategy may help reduce portfolio volatility and improve risk-adjusted returns (Ushakov et al, 2023). This led to the development of the following hypothesis:

**H3: There is relationship between hedging and financial market volatility**

Organizations and investors use the strategic process of contingency planning to anticipate and deal with uncertain situations, such as fluctuations in the financial markets. One of the main goals of contingency planning is to lessen the likelihood of unfavorable events occurring and to provide a prompt and effective reaction to limit any resulting losses. Effective contingency planning has gained in importance as financial markets have become more volatile and prone to unexpected volatility (Meiryani et al., 2019). For instance, businesses need business continuity planning to make sure they can keep running even if something unexpected happens, like the stock market fluctuating wildly (Shatila & Jalloul, 2022). Planned responses to unforeseen occurrences that might have an effect on financial stability are developed as part of a crisis management strategy (Oradi et al., 2020). Setting stop-loss orders or diversifying investment portfolios are two examples of the kinds of contingency planning that might help investors weather market volatility (Fung et al., 2022). This led to the development of the following hypothesis:

**H4: There is relationship between contingency planning and financial market volatility**

## RESEARCH METHODOLOGY

In the data collection phase of our study, questionnaires were distributed to a targeted sample of 140 financial professionals and stakeholders within Lebanon's financial sector. These questionnaires were designed to gather qualitative insights into the specific risk management strategies, challenges, and experiences of financial institutions in the region.

It is noteworthy that out of the 140 questionnaires distributed, 127 completed responses were received. Therefore, the response rate for the questionnaires in our study stands at approximately 90.9%. While the response rate is quite favorable, it is essential to acknowledge the non-response of a small portion of the sample. Non-response can occur for various reasons, including time constraints, lack of interest, or other logistical challenges faced by respondents.

To mitigate potential non-response bias, the study employed diligent follow-up methods, including reminder emails and phone calls, to encourage participation. Additionally, statistical techniques such as imputation and sensitivity analysis was considered during the data analysis phase to account for any potential bias resulting from non-response.

The high response rate indicates a strong level of engagement and interest among the surveyed financial professionals and stakeholders in Lebanon's financial sector. It provides a robust foundation for the qualitative analysis of the questionnaire data and ensures that the insights gleaned from the responses are representative of the views and experiences of a significant portion of the target population.

## Demographic Statistics

**Table 1.** Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	85	66.9	66.9	66.9
	Male	42	33.1	33.1	100.0
	Total	127	100.0	100.0	

The table presents the gender distribution of a sample population, with a total of 127 respondents. Out of the total sample, 66.9% (85 respondents) were female, while 33.1% (42 respondents) were male.

**Table 2.** Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25	24	18.9	18.9	18.9
	26-30	42	33.1	33.1	51.0
	31-35	18	14.2	14.2	66.1
	35 and above	43	33.9	33.9	100.0
	Total	127	100.0	100.0	

**Table 2** presents the age distribution of the sample population, with a total of 127 respondents. The data is divided into four age categories: 18-25, 26-30, 31-35, and 35 and above. The majority of the respondents (33.9%) aged 35 and above, followed by 33.1% of respondents who were in the age range of 26-30. 18.9% of respondents were between the ages of 18-25, while 14.2% were between the ages of 31-35.

**Table 3.** Education Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bachelors	31	24.4	24.4	24.4
	Masters	90	70.9	70.9	95.3
	Others	6	4.7	4.7	100.0
	Total	127	100.0	100.0	

**Table 3** presents the education level distribution of the sample population, with a total of 127 respondents. The data is divided into three categories: Bachelors, Masters, and Others.

The majority of the respondents (70.9%) held a Masters degree, while 24.4% held a Bachelors degree. Only 4.7% of respondents fell into the Others category, which may include individuals with vocational or technical training, or those who did not report their educational attainment.

**Table 4.** Income Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	\$1500 and above	60	47.2	47.2	47.2
	Between \$1000 and \$1500	24	18.9	18.9	66.1
	Between \$500 and \$1000	31	24.4	24.4	90.6
	Less than \$500	12	9.4	9.4	100.0
	Total	127	100.0	100.0	

**Table 4** presents the income level distribution of the sample population, with a total of 127 respondents. The data is divided into four income categories: Less than \$500, Between \$500 and \$1000, Between \$1000 and \$1500, and \$1500 and above.

The majority of the respondents (47.2%) reported an income level of \$1500 and above. 24.4% of respondents reported an income level between \$500 and \$1000, while 18.9% reported an income level between \$1000 and \$1500. Only 9.4% of respondents reported an income level of less than \$500.

## Reliability

**Table 5.** Reliability Statistics

	Cronbach Alpha
Risk Management	.856
Diversification	.769
Hedging	.756
Contingency Planning	.836
Financial Volatility	.795

**Risk Management:** The reliability coefficient for the risk management construct is .856. This high value of Cronbach's Alpha indicates a strong internal consistency within the items measuring risk management, suggesting that they consistently reflect the same underlying concept. It implies that the items included in the risk management scale are well correlated, providing reliable and stable results.

**Diversification:** The diversification construct has a Cronbach's Alpha of .769. This is considered a respectable level of reliability, indicating a good level of internal consistency among the items measuring diversification. The items in this scale appear to be adequately aligned, capturing the essence of the diversification construct effectively.

**Hedging:** For the hedging construct, the Cronbach's Alpha is .756. This suggests a good internal consistency, though it is slightly lower than the diversification construct. The items measuring hedging are reasonably well correlated, indicating that they are collectively reliable in measuring this financial strategy.

**Contingency Planning:** The reliability coefficient for contingency planning is .836, which is a high value. This demonstrates a strong internal consistency within the scale, implying that the items are well correlated and reliably measure the construct of contingency planning.

**Financial Volatility:** The Cronbach's Alpha for financial volatility is .795. This value suggests a good level of internal consistency among the items measuring financial volatility, indicating that they are reliable in capturing this particular aspect of financial management.

## Pearson Correlations

**Table 6.** Pearson Correlations

		Risk Management	Diversification	Hedging	Contingency Planning	Financial Voatility
Risk Management	Pearson Correlation	1	.300**	.142	.696**	.337
	Sig. (2-tailed)		.001	.111	.000	.019
	N	127	127	127	127	127
Diversification	Pearson Correlation	.300**	1	.534**	.350**	.664**
	Sig. (2-tailed)	.001		.000	.000	.000
	N	127	127	127	127	127
Hedging	Pearson Correlation	.142	.534**	1	.190*	.550**
	Sig. (2-tailed)	.111	.000		.033	.000
	N	127	127	127	127	127
Contingency Planning	Pearson Correlation	.696**	.350**	.190*	1	.149
	Sig. (2-tailed)	.000	.000	.033		.095
	N	127	127	127	127	127
Financial Volatility	Pearson Correlation	.337	.664**	.550**	.149	1
	Sig. (2-tailed)	.019	.000	.000	.095	
	N	127	127	127	127	127

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

**Table 6** provides a comprehensive view of the Pearson correlation coefficients between various financial and organizational constructs, based on responses from 127 participants. The Pearson correlation coefficient is a measure of the linear relationship between two variables, ranging from -1 to 1. A value closer to 1 or -1 indicates a stronger linear relationship, whereas a value closer to 0 indicates a weaker linear relationship.

The correlations between risk management and other constructs are diverse. A significant positive correlation exists between risk management and diversification ( $r = .300, p = .001$ ), and a strong significant positive correlation with contingency planning ( $r = .696, p = .000$ ). However, the relationship between risk management and financial volatility is weaker, though still significant ( $r = .337, p = .019$ ). No significant correlation is found between risk management and hedging ( $r = .142, p = .111$ ).

Diversification shows a significant positive correlation with all the other constructs. It is strongly positively correlated with financial volatility ( $r = .664, p = .000$ ) and hedging ( $r = .534, p = .000$ ), and it also has a significant positive correlation with contingency planning ( $r = .350, p = .000$ ) and risk management ( $r = .300, p = .001$ ).

Hedging is significantly positively correlated with diversification ( $r = .534, p = .000$ ) and financial volatility ( $r = .550, p = .000$ ), indicating that organizations that employ hedging strategies also tend to focus on diversification and are better equipped to handle financial volatility. There is a weaker, though still significant, positive correlation with contingency planning ( $r = .190, p = .033$ ). However, no significant correlation is found between hedging and risk management ( $r = .142, p = .111$ ).

Contingency planning has a strong positive correlation with risk management ( $r = .696, p = .000$ ) and significant positive correlations with diversification ( $r = .350, p = .000$ ) and hedging ( $r = .190, p = .033$ ). However, the relationship between contingency planning and financial volatility is not significant ( $r = .149, p = .095$ ).

Financial volatility shows significant positive correlations with diversification ( $r = .664, p = .000$ ), hedging ( $r = .550, p = .000$ ), and risk management ( $r = .337, p = .019$ ). However, it does not have a significant correlation with contingency planning ( $r = .149, p = .095$ ).

## Regression Analysis

**Table 7.** Regression Analysis

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.722a	.522	.506	.411	

a. Predictors: (Constant), Risk Management, Diversification, Hedging, Contingency Planning and Financial Volatility

  

Coefficients <sup>a</sup>					
Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	.569	.119		4.793	.000
Risk Management	.121	.054	.196	2.237	.027
Diversification	.603	.083	.567	7.277	.000
Hedging	.178	.049	.268	3.616	.000
Contingency Planning	.230	.074	.336	2.404	.017

a. Dependent Variable: Financial Volatility

**Table 7** presents an in-depth regression analysis that elucidates the relationships between financial volatility and a set of independent variables: risk management, diversification, hedging, and contingency planning. This analysis is instrumental in comprehending how these distinct variables contribute to fluctuations in financial stability within an organization, based on data gathered from 127 respondents.

The model summary offers a holistic view of the regression model's efficacy. The R value, standing at .722, indicates a robust positive correlation between the predicted and observed values of financial volatility, suggesting that the model is adept at capturing the underlying trend in the data. The R Square value, calculated at .522, denotes that 52.2% of the variance observed in financial volatility can be accurately explained by the model, incorporating the selected independent variables. This is a substantial proportion, highlighting the relevance of the chosen variables in understanding financial volatility. The Adjusted R Square, slightly lower at .506, provides a more conservative and adjusted estimate, taking into account the number of predictors in the model, which further attests to the model's validity. The standard error of the estimate, determined to be .411, offers insight into the typical deviation of the prediction errors, aiding in assessing the precision of the model's predictions.

Diving deeper into the coefficients, the analysis unveils the unique contribution of each predictor to the model. The constant, standing at .569 with a significant t-value of 4.793 ( $p = .000$ ), provides the baseline level of financial volatility when all other variables are held constant. Risk Management, with an unstandardized coefficient of .121 and a standardized coefficient (Beta) of .196, demonstrates a significant positive impact on financial volatility ( $t = 2.237$ ,  $p = .027$ ). This implies that enhancements in risk management practices are associated with an increase in financial volatility, albeit the relationship is moderately strong.

Diversification emerges as a substantial predictor with an unstandardized coefficient of .603 and a high Beta value of .567, accompanied by a significant t-value of 7.277 ( $p = .000$ ). This underscores the crucial role diversification plays in influencing financial volatility, indicating that more diversified portfolios or strategies tend to be associated with higher financial volatility. Hedging also shows a significant positive relationship with financial volatility, as evidenced by an unstandardized coefficient of .178, a Beta of .268, and a t-value of 3.616 ( $p = .000$ ). This reflects the intricate relationship between hedging practices and financial stability, suggesting that employing hedging strategies may lead to increased financial volatility.

Contingency Planning, with an unstandardized coefficient of .230 and a Beta of .336, reveals a significant and positive influence on financial volatility ( $t = 2.404$ ,  $p = .017$ ). This highlights the importance of having robust contingency plans in place, as they are found to be associated with variations in financial stability.

## DISCUSSION OF FINDINGS

In light of the substantial financial market volatility in Lebanon, driven predominantly by political instability, economic tribulations, and the devaluation of the local currency, there is an imperative need for robust risk management practices among organizations operating in this milieu. The statistical data presented in the previous tables offer insightful revelations about the intricate relationship between risk management and financial market volatility in the Lebanese context.

Firstly, examining the Pearson correlations discloses a moderate positive correlation between risk management and financial volatility (Pearson Correlation = .337,  $p = .019$ ). This underscores that as organizations intensify their risk management efforts, they concurrently experience a surge in financial volatility. It is paramount to approach this correlation with circumspection, as the presence of correlation does not substantiate a causal relationship. There might be underlying factors or third variables influencing this relationship, particularly in a volatile and complex environment like Lebanon.

The regression analysis propounds an additional layer of understanding. Here, risk management is identified as a significant predictor of financial volatility. With an unstandardized coefficient of .121 and a standardized coefficient of .196 ( $t = 2.237$ ,  $p = .027$ ), the data implies that an enhancement in risk management practices is statistically correlated with an increment in financial volatility. At first glance, this might appear paradoxical, as conventional wisdom posits that risk management practices are instituted to mitigate volatility and engender stability. However, the unique financial and economic landscape of Lebanon requires a nuanced interpretation.

Organizations in Lebanon are navigating through tempestuous financial waters, and a robust framework of risk management could impel them to partake more aggressively in financial markets. This active participation, while fraught with higher risks, could also unveil avenues for potential rewards. It is plausible that in such a volatile environment, risk management practices are not serving to dampen volatility; instead, they are empowering organizations to manage and potentially capitalize on it. This proactive and strategic approach to risk and volatility might elucidate the positive correlation observed in the statistics.

When delving into the adjusted descriptive statistics for risk management, organizations depict a relatively high level of confidence in their ability to identify, assess, and mitigate risks (with means ranging from 1.29 to 1.95 on a scale where 1 is "Strongly Agree" and 5 is "Strongly Disagree"). Nevertheless, given the tumultuous financial and economic climate of Lebanon, it is plausible that these risk management practices are predominantly oriented towards crisis management and ensuring organizational survival, as opposed to the reduction of financial volatility per se.

The moderate positive correlation between risk management and financial volatility might also reflect a strategic decision by organizations in Lebanon to take on more risks in search of higher returns, especially in an environment where traditional avenues for growth and stability might be limited. This indicates a maturity in risk-taking behavior, where risks are not avoided but are managed strategically to ensure that the organization can navigate through volatility while capitalizing on potential opportunities.

Moreover, the challenging economic conditions in Lebanon might be compelling organizations to innovate in their approach to risk management. This includes adopting more comprehensive and dynamic risk management practices that go beyond traditional risk aversion and seek to integrate risk management into the strategic decision-making process of the organization.

The relationship between risk management and financial market volatility in Lebanon, as derived from the statistical data, presents a complex and multifaceted picture. While organizations are evidently engaging in risk management practices, these practices seem to be oriented towards navigating and leveraging financial volatility, rather than minimizing it. This highlights the critical importance of context-specific strategies and solutions in risk management, particularly in volatile environments such as Lebanon. The data underscores the need for a sophisticated, strategic, and proactive approach to risk management that aligns with the unique challenges and opportunities presented by the Lebanese financial environment. This led to the validation of the following hypothesis:

**H1: There is relationship between risk management and financial market volatility**

Analyzing the relationship between diversification and financial market volatility requires an examination of how investment portfolios are structured and how they respond to fluctuations in the financial markets. In the context of the statistical data provided in the previous tables, this relationship can be elucidated further.

This positive correlation might initially seem counterintuitive, as diversification is traditionally viewed as a risk management strategy aimed at reducing the exposure to unsystematic risk, and consequently, reducing volatility. However, this relationship can be understood more clearly when considering the specific financial environment and investment landscape.

In volatile markets, such as those often experienced in Lebanon due to economic instability, political unrest, and other macroeconomic factors, diversification becomes a crucial strategy for investors. The Lebanese financial market, characterized by its unpredictability and susceptibility to external shocks, necessitates a diversified investment approach to mitigate potential losses.

The descriptive statistics for diversification further shed light on this relationship. Investors seem to recognize the importance of diversifying their portfolios across different asset classes, as indicated by the relatively low mean score of 1.86. Additionally, there is a general consensus that diversification contributes positively to the stability and performance of investment portfolios, as reflected by the mean score of 1.43.

However, the positive correlation with financial volatility suggests that while diversification is employed as a strategy to manage risk, it does not necessarily insulate investors from experiencing volatility. Instead, diversification allows investors to navigate through volatile markets more effectively, spreading risk across different asset classes and reducing the impact of poor performance in any single investment.

In the Lebanese context, the effectiveness of diversification as a strategy to reduce volatility might also be influenced by the availability and performance of various asset classes, the level of market development, and access to international markets. These factors play a crucial role in determining how diversification impacts the experience of financial volatility.

The relationship between diversification and financial market volatility, based on the statistical data and considering the Lebanese financial context, suggests that while diversification is a prevalent and recognized strategy for managing risk, it does not negate the experience of financial volatility. Instead, it serves as a tool for investors to navigate through volatile markets, spreading risk and potentially enhancing the overall stability and performance of their investment portfolios. The positive correlation between diversification and financial volatility underscores the complexity of this relationship and highlights the need for a nuanced understanding of how diversification strategies operate in volatile financial environments. This led to the validation of the following hypothesis:

**H2: There is relationship between diversification and financial market volatility**

The relationship between hedging strategies and financial market volatility is a complex one, and an examination of this relationship requires a careful analysis of how these strategies are implemented and their effectiveness in mitigating financial risks. Based on the statistical data provided in the previous tables, we can delve deeper into this relationship, especially within the context of financial markets. However, this correlation can be understood more clearly when considering the intricacies of hedging strategies and the nature of financial markets. Hedging involves the use of financial instruments to reduce or eliminate the risk of adverse price movements in an asset. While this can effectively mitigate certain financial risks, it does not eliminate market volatility. In fact, the use of hedging instruments themselves can introduce additional complexities and risks, potentially contributing to an organization's experience of volatility.



In the context of Lebanon, where the financial markets are characterized by high volatility due to economic instability, political unrest, and other factors, hedging becomes a critical tool for organizations. However, the effectiveness of these strategies is contingent upon a deep understanding of the financial instruments used, the market conditions, and the potential risks involved.

The positive correlation between hedging and financial market volatility suggests that while hedging strategies are employed to manage financial risks, they do not insulate organizations from experiencing market volatility. Instead, these strategies require a sophisticated approach and a thorough understanding of the market dynamics to navigate through the volatility effectively. This led to the validation of the following hypothesis:

**H3: There is relationship between hedging and financial market volatility**

The relationship between contingency planning and financial market volatility can be discerned by analyzing the statistical data provided in the previous tables, particularly within the context of financial markets. In the context of Lebanon, which has experienced significant financial instability in recent years, contingency planning becomes especially crucial. The country's financial markets are subject to a variety of risks, including political instability, economic downturns, and currency devaluation. In such an environment, organizations need to have robust contingency plans in place to navigate through periods of financial volatility. However, the weak correlation between contingency planning and financial market volatility suggests that having contingency plans in place does not necessarily translate to experiencing less financial market volatility. This could be due to a variety of factors, including the effectiveness of the contingency plans, the organization's ability to implement them effectively, and the nature of the financial volatility itself. This led to the validation of the following hypothesis:

**H4: There is relationship between contingency planning and financial market volatility**

## CONTRIBUTION OF THE STUDY

The study under discussion has made substantial contributions to the existing body of knowledge in the fields of finance and risk management, with a particular focus on the Lebanese context. This analysis has unfolded across various dimensions, including theoretical frameworks, empirical understanding, and methodological approaches.

The study has made significant strides in linking and applying established financial theories - Portfolio Theory, Options Theory, and Market Efficiency Theory - to the practical and volatile financial landscape of Lebanon. By doing so, it has provided a nuanced understanding of how these theories operate in real-world, high-stress financial environments.

The findings of this study have contributed to a deeper understanding of how diversification impacts financial volatility. In the context of Lebanon, the results indicate that there is a complex relationship between diversification and financial market volatility. The study challenges the traditional view that diversification always leads to risk reduction, showing that in volatile markets, diversification may not always function as a safety net. This contribution is significant as it adds a layer of complexity and realism to the Portfolio Theory, especially in emerging markets or economies experiencing instability.

The study's examination of hedging practices and their relationship to financial volatility provides valuable insights that contribute to the Options Theory. The findings suggest that hedging, while used as a risk management tool, does not necessarily reduce financial volatility in the short term. This underscores the importance of understanding the underlying assets and market conditions when employing options for hedging, aligning with the principles of Options Theory but also adding a practical perspective on its application in volatile markets.

The analysis of risk management practices, contingency planning, and their relationship with financial volatility contributes to the Market Efficiency Theory. The findings imply that even in a volatile market, there are opportunities for organizations to manage risk and navigate uncertainties effectively. This suggests that the market may not be entirely efficient, but through robust risk management and planning, organizations can work towards achieving a level of operational efficiency.

The empirical contributions of this study are notable, particularly in its comprehensive use of statistical analyses - descriptive statistics, regression analysis, Pearson correlations, and reliability analysis - to understand the relationship between risk management practices and financial volatility.

The study provides empirical evidence on how organizations in Lebanon perceive and respond to financial volatility. The descriptive statistics offer a granular view of the practices and beliefs of these organizations, while the regression

analysis and Pearson correlations provide a broader understanding of how different risk management components interact with financial volatility.

By doing so, the study not only adds to the empirical knowledge on this subject but also provides a basis for future research, potentially paving the way for longitudinal studies or comparative analyses across different regions or market conditions.

Methodologically, the study sets a precedent for future research in finance and risk management within volatile markets. The comprehensive approach to data collection and analysis ensures that the findings are robust and reliable, providing a solid foundation for future studies.

The use of various statistical tools and methods offers a multi-faceted view of the subject matter, contributing to the methodological richness of the study. Future researchers can draw upon these methods, potentially adapting and applying them to different contexts or research questions.

Furthermore, the study's focus on the Lebanese context provides a unique methodological contribution. By situating the research within a specific and volatile financial landscape, the study addresses a gap in the existing literature, offering insights and methodologies that are tailored to emerging markets and economies in transition.

On a practical level, the study offers valuable insights for organizations, investors, and policymakers operating within volatile financial markets. The findings underscore the importance of robust risk management practices, strategic diversification, and proactive contingency planning.

Organizations can draw upon these insights to enhance their risk management strategies, ensuring that they are not only mitigating risks but also positioning themselves to navigate and potentially capitalize on financial volatility. Investors can use the findings to make informed decisions, adapting their investment strategies to the complexities of the market.

Policymakers can leverage the study's findings to guide regulatory reforms and initiatives, aiming to enhance transparency, stability, and resilience in the financial markets.

## LIMITATIONS OF THE STUDY

The study, while comprehensive and insightful, presents certain limitations that should be acknowledged to understand the scope and applicability of its findings fully.

The research is deeply rooted in the Lebanese context, examining financial volatility and risk management practices within this specific geographical and economic landscape. While this focus provides detailed insights applicable to Lebanon, it also limits the generalizability of the findings to other regions or countries. Lebanon has a unique set of economic, political, and social conditions that have significantly influenced its financial markets. The extent to which these findings can be applied to countries with different economic structures, regulatory environments, or political climates remains uncertain.

The study adopts a cross-sectional design, capturing data at a single point in time. While this approach is effective for understanding the current state of affairs, it does not account for temporal changes or longitudinal trends. Financial volatility and risk management practices are dynamic and can evolve over time, influenced by external factors such as market conditions, regulatory changes, and global economic trends. The absence of a longitudinal perspective limits the study's ability to capture these changes and provide a more comprehensive understanding of the phenomena under investigation.

The study focuses on specific aspects of risk management—diversification, hedging, contingency planning—and their relationship with financial volatility. While these components are integral to risk management, there are other dimensions and practices in risk management that the study does not explore. For example, the role of corporate governance, internal controls, and risk culture are crucial in managing financial risks but are not addressed in this study. The selection of variables, therefore, presents a limitation in terms of providing a holistic view of risk management practices.

The data used in the study, particularly for the descriptive statistics, are based on self-reported measures from organizations. This approach introduces an element of subjectivity, as responses may be influenced by individual perceptions, biases, or a desire to present the organization in a positive light. The accuracy of these responses is crucial as it directly impacts the validity of the findings. While efforts may have been made to ensure honest and accurate responses, the inherent subjectivity of self-reported data remains a limitation.

The study relies on participants' willingness to respond and provide accurate information. This dependence introduces the potential for response bias, where the sample of participants who choose to respond may not be representative of the broader population. Organizations that are more proactive in risk management or have had significant experiences with financial volatility may be more inclined to participate in the study, potentially skewing the results.

While the study employs a range of statistical tools and methods, there are inherent limitations to these approaches. The validity of the regression analysis, for instance, assumes a linear relationship between the independent and dependent variables. In reality, the relationship between risk management practices and financial volatility may be more complex, potentially influenced by mediating or moderating variables not included in the model.

The findings of the study, particularly the relationships identified through correlation and regression analyses, provide a foundational understanding of how risk management practices relate to financial volatility in Lebanon. However, these findings require further validation through additional studies and empirical investigations. Replicating the study in different contexts, with varied samples, and over different time periods would strengthen the validity of the findings and contribute to a more robust understanding of the phenomena.

The study, by delving into organizational practices and experiences with financial volatility, touches upon sensitive areas that may have ethical implications. Ensuring confidentiality and anonymity was paramount, and any limitations in achieving this could have influenced participants' willingness to provide accurate and honest responses.

In conclusion, while the study provides valuable insights into risk management practices and financial volatility in the Lebanese context, it is imperative to consider these limitations when interpreting the findings and drawing conclusions. The study sets the stage for future research, highlighting the need for longitudinal studies, broader variable inclusion, and further empirical validation to enhance our understanding of risk management in volatile financial markets.

## FURTHER RESEARCH AND PERSPECTIVES

The study presented a comprehensive examination of risk management practices and their relationship with financial volatility, primarily within the Lebanese context. However, as with any research endeavor, it opens avenues for future research that could provide deeper insights, address its limitations, and contribute to the existing body of knowledge. One of the primary limitations of the current study is its geographical focus on Lebanon. Future research could aim to replicate the study in different countries and regions, providing a comparative analysis of how risk management practices and their relationship with financial volatility vary across diverse economic, political, and cultural contexts. Such studies could help in generalizing the findings and understanding the universality or specificity of risk management practices.

The cross-sectional nature of the study captures a snapshot of risk management practices and financial volatility at a single point in time. Future research could adopt a longitudinal design, tracking changes in risk management practices and financial volatility over extended periods. This would provide insights into how these practices evolve, adapt, and respond to changes in the financial markets, as well as how sustained risk management efforts impact financial volatility in the long run.

The study focused on specific components of risk management—diversification, hedging, and contingency planning. Future research could expand on this by exploring other dimensions of risk management, such as risk culture, corporate governance, and internal controls. Additionally, investigating the role of external factors, such as regulatory changes, global economic trends, and market conditions, would provide a more holistic understanding of risk management practices and their effectiveness.

While the current study predominantly employed quantitative methods, future research could benefit from incorporating qualitative or mixed-methods approaches. Conducting interviews, focus groups, or case studies would provide richer, more nuanced insights into organizational risk management practices, their motivations, challenges, and the decision-making processes involved. This would complement the quantitative findings and contribute to a more comprehensive understanding of the phenomena.

The study did not specify the industries or sectors of the participating organizations. Future research could focus on specific industries or sectors, examining how risk management practices and their relationship with financial volatility vary across different fields. Different industries have unique risk profiles and may adopt varied risk management strategies, making this a worthwhile area of exploration.

The relationships identified in the study could be influenced by mediating or moderating variables not included in the initial model. Future research could explore potential mediators and moderators, such as organizational size, financial resources, or management expertise, to understand better how these factors influence the relationship between risk management practices and financial volatility.

While the study focused on financial volatility, future research could examine how risk management practices impact broader organizational performance metrics. Investigating how effective risk management contributes to financial stability, growth, and long-term sustainability would provide valuable insights for practitioners and policymakers.

The current study did not delve into the specific risk management tools and techniques employed by organizations. Future research could focus on examining the effectiveness of various risk management tools, their adoption rates, and their suitability for different types of risks. This would provide practical insights for organizations seeking to enhance their risk management practices.

Investigating the role of training and development in enhancing risk management skills and awareness within organizations presents another potential area for future research. Evaluating the availability, accessibility, and effectiveness of risk management training programs would provide insights into how organizations can better equip their employees to navigate financial volatility.

The field of risk management is continually evolving, with technological advances playing a significant role. Future research could explore how emerging technologies, such as big data analytics, machine learning, and blockchain, are transforming risk management practices and their impact on financial volatility.

Exploring the ethical considerations of risk management practices, as well as their alignment with corporate social responsibility (CSR) principles, presents another avenue for future research. Examining how ethical and responsible risk management contributes to financial stability and organizational reputation would add a valuable dimension to the current understanding.

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