

IMPACT OF DERIVATIVE INSTRUMENTS ON FINANCIAL STATEMENTS: PERSPECTIVE OF INVESTORS AND ANALYSTS

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Abstract

Financial derivatives reduce risks and boost firm value. However, companies should clearly disclose derivatives instruments' purpose as they help investors make sound decisions and analysts analyze a company's financial health. Therefore, the current study examined the impact of derivative instruments on financial statements from the perspective of investors and analysts. The primary data was obtained through a structured questionnaire from 120 respondents (100 investors and 20 financial analysts) from 5 companies in India that use derivative instruments. Respondents were selected as per convenience and SPSS 25 has been utilized for data analysis. The results showed a statistically significant correlation between the consideration of derivative instruments, investment decisions, and financial health analysis from the perspective of both investors and financial analysts. Further, the study found that perceptions and attitudes of investors and analysts regarding the risk associated with companies heavily relying on derivatives significantly affect their investment decisions as well as investment strategies. It has been concluded that effective use of derivatives can be a valuable risk management tool, but transparent disclosure and careful assessment of their influence are essential for informed investment decisions. The study will be helpful for stakeholders and policymakers to be able to make sound investment decisions and effective investment strategies.

Keywords: *Derivative Instruments; Financial Statements; Investors; Analysts; Risk Management; Investment Decisions; Investment Strategies*

1. Introduction

Financial derivatives are based on the value of a different asset, market indicator, or circumstance. A derivative contract's worth is determined not by the value of the contract itself but by the worth of the underlying. Accounting for derivatives has been difficult because of the complication of original and continuing appraisals, despite the fact that derivatives have been in some form for millennia (Stewart, 1989; Hairston & Brooks, 2019).

The notional market size for derivatives had surpassed \$700 trillion by 2001, making them an essential part of the world economy (Bartram, et al., 2009). The 500 largest companies in the world use derivatives to manage 94% of their financial risks and 88% of their foreign exchange risks, according to the "2009 International Swaps Derivatives Association (ISDA) overview report". According to "Bank of International Settlements (BIS) data", as of the end of June 2014, non-financial companies owned notional benefits of \$15.7 trillion and \$9.1 trillion, respectively, in the outstanding interest rate and foreign currency options (Waswa & Wepukhulu, 2018). It is commonly known that corporations frequently utilize derivative securities. Concerns from regulators, creditors, and investors about how corporations employ derivatives have grown in recent years due to the instruments' pervasiveness and high-profile incidents of ex-post 'bad' realizations (Guay, 1999).

The management of different financial risk exposures, such as pricing, foreign currency, credit risks, and interest rates, is frequently done via financial derivatives. Derivatives facilitate more efficient deployment of capital, facilitate the flow of foreign money, and enhance opportunities for diversified portfolios by allowing investors to transfer and disaggregate these risks. Hence, the development and expansion of efficient capital markets are contingent upon the presence and utilization of financial derivatives. Derivatives may, and in some cases have, been utilized by market participants to capitalize on high risks, evade prudential controls, and manipulate accounting standards, just like any other complicated financial product. For instance, by moving some risks off balance sheets, derivative instruments may enable a corporation to take on excessive debt in the absence of effective internal risk management and prudential oversight. Although developing market nations with less established risk management procedures, credit information infrastructure, and prudential regulation are thought to have a greater problem with derivative abuse, this is untrue. The issue is not exclusive to these nations. One of the largest issues for authorities in both developed and developing markets is to devise prudential policies that provide market participants incentives to utilize derivatives responsibly in a world where financial products are continually changing (Ilyina, 2004).

Investors and analysts often overlook the unfavorable correlation between unrecognized losses or gains on cash flow hedging and future profitability. Previous research has hypothesized that the accounting framework for cash flow hedging or inadequate derivatives disclosures are to blame for

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 this mispricing (Campbell, et al., 2021). The aforementioned factor, in conjunction with the considerable instability observed in financial markets, has amplified the necessity for enhanced and pertinent information, as well as improved openness regarding an organization’s financial instrument-related exposures and the strategies employed to mitigate such risks. Financial statement users and investors require such information in order to make well-informed assessments of the risks that entities face as a result of utilizing financial instruments and the corresponding returns they generate. The consolidation of disclosure requirements pertaining to financial instruments in IFRS 7 has been undertaken by the “International Accounting Standards Board (IASB)” as a component of its overarching long-term initiative on financial instruments (Bischof, 2009).

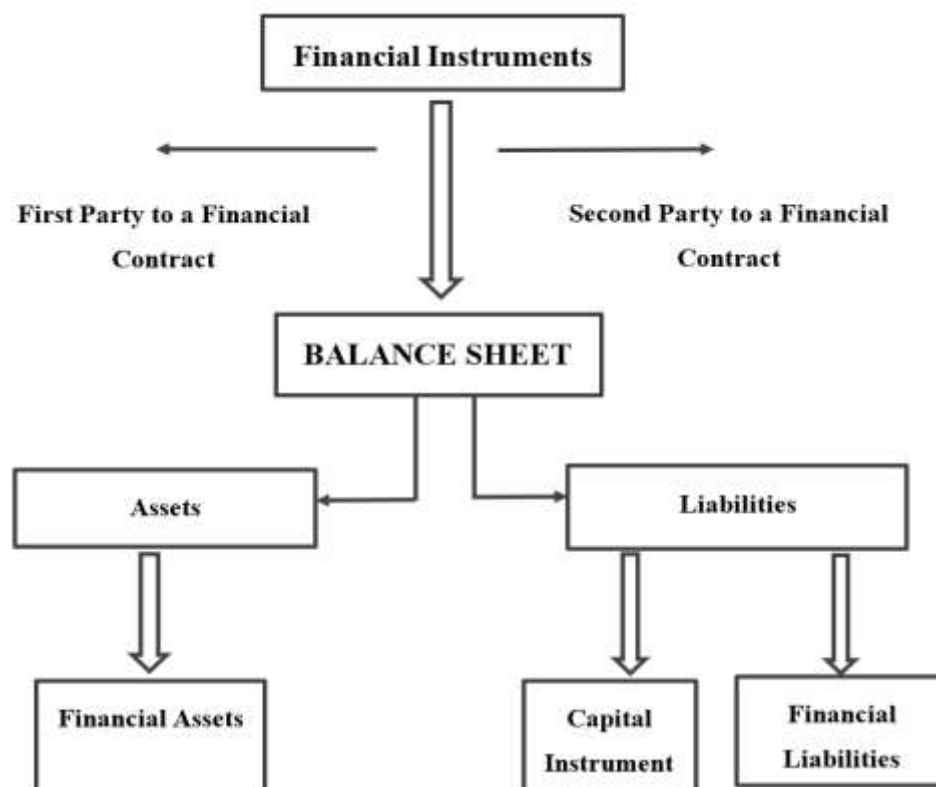


Figure 1: The Balance Sheet Effects of the Occurrence of a Financial Instrument

Source: https://www.researchgate.net/figure/The-balance-sheet-effects-of-the-occurrence-of-a-financial-instrument-Source-Own-study_fig1_351562051

The purpose of the disclosure requirements established by IFRS 7 is to help users assess the relevance of an entity’s financial instruments to its financial performance and position, as well as the nature and extent of the risks to which the entity is exposed. Financial institutions are not the only ones who must comply with IFRS 7. Simple financial instruments like loans, accounts receivable and payable, cash, and investments influence all organizations that use such tools (Amoako, 2010). Several revisions to the current standard have been made since 2008 as users of financial statements prompted the International Accounting Standards Board to issue a discussion paper in September 2008 titled

“Reducing Complexity in Reporting Financial Instruments” in response to their concerns. The International Accounting Standards Board (IASB) has begun working on the project of issuing IFRS 9 to streamline Financial Instruments (FI) accounting in light of such a situation. The three areas of FI that are being updated here are measurement and categorization, impairment, and hedging. The IASB published its final revision of the standard on July 24, 2014. Dispositions under IFRS 9 replace IFRS 7 in their entirety as of 01 January 2018 (Mnif & Znazen, 2020).

The remainder of the document is divided into five sections. The reviews of different authors from past studies are explained in Section 2. The research methods for the study are explained in Section 3. Section 4 describes the results and findings. Section 5 displays the discussion. Conclusions, implications, limitations, and recommendations for Further Studies are included in Section 6. At last, references are represented.

2. Literature Review

Based on the aforementioned introductory material, “The Effect of Derivative Instruments on Financial Statements,” it can be argued that derivative instruments, which present novel possibilities for risk management and investment strategies, have an ever-increasing impact on the financial landscape. Integrating them into financial statements, however, has raised serious concerns about their effects, openness, and the perceptions of investors and analysts.

Following these brief explanations, the literature review is broken down into three parts below:

- i.** Impact of Use of Derivative on Firm Performance
- ii.** Effect of Firm Characteristics and Other Factors on Derivative Usage
- iii.** The Complexity of Derivative Disclosures to Investors and Analysts

In order to better understand and explain the study’s nature and central issue, all three parts of the literature review are grounded on a critical evaluation of relevant literature. Important to note is that it is grounded in a systematic literature review conducted with a globalization viewpoint.

I. Impact of Use of Derivative on Firm Performance

Das and Kumar (2023) investigated how firms’ usage of foreign exchange derivatives affected their value. The study found that companies who employed derivatives for risk management had a market value that was around 5% greater than those who did not. However, on the basis of a sample of non-financial company consumers of derivatives, Alam & Afza (2017) discovered that the use of derivatives couldn’t considerably increase a company’s worth since the expected premium on instruments for hedging was negligible in comparison with cash flows for equity value. Similarly, Yildiz Savas and Kapusuzoglu (2020) encountered that companies using hedging derivatives did not

have a market value advantage over those not using them. Whereas Nguyen, et al. (2018) argued that consumers of derivatives have been entitled to a “discount.” While there has been minimal evidence to suggest that the application of options was detrimental to value, the reduction was most closely tied to the usage of swaps.

Furthermore, Hadian and Adaoglu (2020) highlighted the benefits of employing derivatives to boost company value. On the basis of a sample of businesses from different countries, Wahyudi (2019) looked into how corporate governance, the use of international financial derivatives, and business performance all interact with one another. The results of the study implied that firms can benefit from using derivatives when their corporate governance, both internal and external, seems well-established. Similarly, Ayadi, et al. (2022) discovered little proof that adopting derivatives increases value for businesses in industrialized nations, including the UK, US, France, Canada, Germany, Australia, and Japan. On the contrary, Mefteh-Wali & Rigobert (2018) discovered that increasing a company’s investment in derivatives for finance has the opposite effect of increasing its value, and that happened because investors refrain from giving a premium to the firm for its usage of derivatives. Similarly, using data from a large section of the Australian market, Nguyen and Faff (2010) found that the value of a company usually decreases as it invests in financial derivatives. Finally, Hu (2022) suggested that significant use of derivatives can reduce the firm’s cash flow volatility by lowering the expenses associated with financial distress, the underinvestment issue, tax convexity, and management ownership.

II. Effect of Firm Characteristics and Other Factors on Derivative Usage

Giambona, et al. (2018) discovered that the information Asymmetry between the management and shareholders of a corporation can influence how it handles hedging. In the same manner, Wen, et al. (2021) discovered that firms with profitability, higher leverage, investment growth, and fewer financial limitations were more likely to employ foreign currency derivatives for risk management. Similarly, Singh and Agrawal (2023) argued that tax incentives have been linked to company hedging using financial derivatives since such use can boost both debt capacity and tax advantages. On the other hand, Lau (2016) found that the firm’s leverage ratio has been proven as an affecting element. Leverage ratio affects a firm’s performance, especially when interest rates vary, and can, therefore, impact a firm’s choice to engage in financial derivatives transactions as a hedging tool. At the same time, Bartram (2019) looked at the automotive sector and found that changes in the value of currencies matter much to the extent that derivatives have been utilized. As one of the three primary hazards (shift in commodity prices, the foreign exchange rate, or interest rates) for organizations, the risk exposure from the shift of the foreign exchange rate was strongly linked to production cost, profitability, and sales.

Whereas Choi, et al. (2021) examined whether or not retaining cash may act as a hedge. The study's findings implied a substitution link between hedging derivative use and cash holding since both strategies help businesses reduce their reliance on external capital when properly implemented. It implied that there had been an inverse correlation between retaining cash and making use of derivatives. Similarly, Friberg and Seiler (2017) believed that increased risk increases the likelihood of using derivatives, whereas more ambiguity has been linked to bigger cash holdings. Financial limitations have been identified as a key issue affecting businesses' decisions regarding derivatives investments as a form of hedging. On the other hand, Bezzina and Grima (2012) found the variables that promote or inhibit the correct use of derivatives. The five variables that made up correct derivative usage were modifications, Abuse, Knowledge, Opinion, and Rewards. Considering the dissimilar impact of uncertainty and danger, Tanha, et al. (2018) discovered that manager's use of derivatives was often aimed at lowering the overall risk and unpredictability of cash flows and profitability. Reduced bankruptcy expenses, lower debt, and lower taxation have not been deemed most important (Benson & Oliver, 2004). In addition to this, Al-Slehat, et al. (2018) concluded that the application of financial derivatives has been influenced by a variety of administrative, monetary, accounting, and legal variables.

III. The Complexity of Derivative Disclosures to Investors and Analysts

Derivative contracts were inherently complicated, and disclosures and accounting procedures for derivatives further added to the complexity for investors. The most complicated and convoluted financial instrument may be a derivative (Battiston, et al., 2013). In an empirical study, Bitsios (2023) concluded that the global financial crisis that occurred between 2007 and 2010 was triggered by the misvaluation of derivatives due to the complicated nature of credit derivatives. Experimental data from recent studies by Durney, et al. (2021) revealed that stock market participants avoid companies that use derivatives because they consider their shares to be too volatile. In addition, Chang, et al. (2016) favored that derivatives reporting was very complicated. In the same manner, Ahmed (2021) asserted that in order to use hedging for derivative contracts, businesses must first meet stringent, ill-defined requirements. It caused inconsistent disclosure of derivatives, which made it hard for financial experts to evaluate the dangers faced by a company.

On the other hand, Chang, et al. (2016) revealed that analysts, despite their financial training, frequently miscalculated the impact of corporations' derivatives activities on profitability. The authors found that a set of accounting rules for derivatives has led to more accurate predictions from analysts. While Troyer, et al. (2023) examined the businesses' derivative disclosure methods to investors and stakeholders following the adoption of accounting standards, and it was discovered that there was a lack of clarity and completeness in these disclosures, indicating that further standards

were required. Finally, Hairston and Brooks (2019) reported that the Financial Crisis Advisory Group (FCAG) had found significant holes in the accounting for derivatives. The complicated nature of accounting requirements for financial instruments, the difficulty of implementing fair value reporting in illiquid markets, and the prolonged identification of losses related to financial instruments all contributed to these limitations.

While there is plenty of literature on the accounting and disclosure aspects, few studies examine how investors and analysts interpret and respond to these disclosures. Closing this gap would provide valuable insights into the practical implications of derivative disclosures for financial markets and guide companies in enhancing their reporting practices. The aforementioned three sections aid in diversifying and acquiring various points of view on the subject in order to move toward the objectives based on the identified research gap.

3. Research Methods

As per the objectives and hypothesis shown in Table 1, the study utilized primary data collection methods in conjunction with the convenience sampling method to determine the “impact of derivative instruments on financial statements: the perspective of investors and analysts.” The study has been conducted in India. The primary data was collected via a structured questionnaire study from a total of 120 respondents (investors and financial analysts), including 100 investors and 20 financial analysts from 5 companies (Reliance Industries, Maruti Udyog, Mahindra and Mahindra, Infosys, and Tata Consultancy Services) in India that use derivative instruments. The questionnaire furthermore encompasses significant demographic data, including age, gender, educational Qualification, Income Level and Investment Experience (for investors), and Industry Experience and Specialization (for Financial Analysts). Several indicators were removed from the analysis because they were found to have “Inadequate Reliability, Convergent Validity, Extracted Average Variance, or Discriminant Validity”. Finally, the questionnaire was constructed on the basis of valid variables, including consideration of derivative instruments, investment decisions, financial health analysis, perception of risk, risk assessment factors, perceptions and attitudes of investors toward companies, and influence on investment strategy. The study employed an exploratory research design. Excel and SPSS software have been used to examine the data. The statistical tools correlation and regression have been used to test the hypothesis of the study.

Table 1: Analytical Framework of Objectives

Sr. No.	Objective	Hypothesis	Used Statistical Test	Description

1.	To assess the extent to which investors and financial analysts consider the presence and disclosure of derivative instruments when making investment decisions and analyzing a company's financial health.	H1: There is a significant relationship between the consideration of derivative instruments and investment decisions or financial health analysis by investors and financial analysts.	Correlation	A statistical indicator of how closely two variables are changing at the same pace.
2.	To analyze how investors and analysts perceive the risk associated with companies that heavily rely on derivatives and whether it affects their investment decisions.	H2: Investor and analyst perceptions of the risk associated with companies heavily relying on derivatives significantly affect their investment decisions.	Regression	A compendium of statistical methodologies for ascertaining the degree of association between two variables.
3.	To analyze the perceptions and attitudes of investors and financial analysts towards companies that actively use derivative instruments and how these perceptions influence investment strategies.	H3: Perceptions and attitudes of investors and financial analysts towards companies that actively use derivative instruments significantly influence investment strategies.	Regression	A compendium of statistical methodologies for ascertaining the degree of association between two variables.

4. Result and Findings

Table 2: Demographic Profile of the Investors

Sr. No.	Demographic Characteristics	Category	N	%
1	Gender	Male	54	54%
		Female	46	46%
2	Age Group	Below 25 years	34	34%
		25-34 years	22	22%
		35-44 years	24	24%
		Above 45 years	20	20%

3	Education Qualification	10th	25	25%
		12th	30	30%
		Graduation	21	21%
		Post Graduation	24	24%
4	Income Level	Upto 3 lakhs	24	24%
		3 - 6 lakhs	20	20%
		6 - 10 lakhs	29	29%
		More than 10 lakhs	27	27%
5	Investment Experience	Up to 5 years	30	30%
		5 - 10 years	31	31%
		More than 10 years	39	39%

Table 2 shows “the Demographic Characteristics of the Investors” in terms of their Gender, Age group, Education, Income Level, and Investment Experience of respondents. According to Table 2, out of 100 investor respondents, 54% are male, and 46% are females. The maximum number (34) of respondents are from the age group of Below 25 years, i.e., 34%. The maximum number (30) of respondents have completed 12th, i.e., 30%. The table further shows that the maximum number (29) of respondents earn 6 - 10 lakhs, i.e., 29%, and the maximum number (39) of respondents have Investment Experience of More than 10 years, i.e., 39%.

Table 3: Demographic Profile of the Financial Analysts

Sr. No.	Demographic Characteristics	Category	N	%
1	Gender	Male	9	45%
		Female	11	55%
2	Age Group	Below 25 years	6	30%
		25-34 years	4	20%
		35-44 years	5	25%
		Above 45 years	5	25%
3	Education Qualification	Graduation	8	40%
		Post Graduation	7	35%
		Ph. D.	5	25%

4	Industry Experience	Up to 5 years	5	25%
		5 - 10 years	11	55%
		More than 10 years	4	20%
5	Specialization	Equity Research	2	10%
		Fixed Income	6	30%
		Derivatives	7	35%
		Risk Management	5	25%

Table 3 shows “the Demographic Characteristics of the Financial Analysts” in terms of their Gender, Age group, Education, Industry Experience, and Specialization of respondents. According to Table 3, out of 100 Analysts respondents, 45% are male, and 55% are females. The maximum number (6) of respondents are from the age group of Below 25 years, i.e., 30%. The maximum number (8) of respondents have completed Graduation, i.e., 40%. The table further shows that the maximum number (11) of respondents have Industry Experience of 5 - 10 years, i.e., 55%, and the maximum number (7) of respondents are specialized in Derivatives, i.e., 35%.

H1: There is a significant relationship between the consideration of derivative instruments, investment decisions, and financial health analysis by investors and financial analysts.

➤ **Investors**

Table 4: Descriptive Statistics

Descriptive Statistics			
	Mean	Std. Deviation	N
Consideration of derivative instruments	19.5700	3.50830	100
Investment Decisions	20.1300	3.31405	100
Financial Health Analysis	16.8900	2.68138	100

The descriptive statistics Table 4 offers the mean and SD of the variables, the consideration of derivative instruments, investment decisions, and financial health analysis for investors. The mean score for “consideration of derivative instruments” is approximately 19.5700, and the standard deviation is 3.50830. The mean score for “investment decisions” is approximately 20.1300, and the standard deviation is 3.31405. The mean score regarding “financial health analysis” is approximately 16.8900, and the standard deviation is 2.68138.

Table 5: Correlations

Correlations				
		Consideration of derivative instruments	Investment Decisions	Financial Health Analysis
Consideration of derivative instruments	Pearson Correlation	1	.275**	.209*
	Sig. (2-tailed)		.006	.037
	N	100	100	100
Investment Decisions	Pearson Correlation	.275**	1	.570**
	Sig. (2-tailed)	.006		.000
	N	100	100	100
Financial Health Analysis	Pearson Correlation	.209*	.570**	1
	Sig. (2-tailed)	.037	.000	
	N	100	100	100
**. "Correlation is significant at the 0.01 level (2-tailed)."				
*. "Correlation is significant at the 0.05 level (2-tailed)."				

The correlation table 5 describes the relationship between the consideration of derivative instruments, investment decisions, and financial health analysis for investors. The above table shows that there is a statistically significant correlation between the consideration of derivative instruments, investment decisions, and financial health analysis (i.e., the sig value is below 0.05) (sig value = 0.006, 0.037, and 0.000).

➤ **Financial Analysts**

Table 6: Descriptive Statistics

Descriptive Statistics			
	Mean	Std. Deviation	N
Investment Decisions	15.1500	2.77726	20
Financial Health Analysis	17.0500	4.17354	20
Consideration of derivative instruments	16.2500	2.98901	20

The descriptive statistics Table 6 offers the mean and SD of the variables investment decisions, financial health analysis, and consideration of derivative instruments for Analysts. The mean score for "investment decisions" is approximately 15.1500, and the standard deviation is 2.77726. The mean

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score regarding “financial health analysis” is approximately 17.0500, and the standard deviation is 4.17354. The mean score for “consideration of derivative instruments” is approximately 16.2500, and the standard deviation is 2.77726.

Table 7: Correlations

Correlations				
		Investment Decisions	Financial Health Analysis	Consideration of derivative instruments
Investment Decisions	Pearson Correlation	1	-.555*	-.575**
	Sig. (2-tailed)		.011	.008
	N	20	20	20
Financial Health Analysis	Pearson Correlation	-.555*	1	.552*
	Sig. (2-tailed)	.011		.012
	N	20	20	20
Consideration of derivative instruments	Pearson Correlation	-.575**	.552*	1
	Sig. (2-tailed)	.008	.012	
	N	20	20	20
*. “Correlation is significant at the 0.05 level (2-tailed).”				
**. “Correlation is significant at the 0.01 level (2-tailed).”				

The Correlation Table 7 describes the relationship between investment decisions, financial health analysis, and consideration of derivative instruments for Analysts. The above table shows that there is a statistically significant correlation between investment decisions, financial health analysis, and consideration of derivative instruments (i.e., the sig value is below 0.05) (sig value = 0.011, 0.008, and 0.012).

H2: Investor and analyst perceptions of the risk associated with companies heavily relying on derivatives significantly affect their investment decisions.

➤ **Investors**

Table 8: Regression Analysis

Hypothesis	Regression Weights	Beta Coefficient	R	R2	F	t-value	p-value	Hypotheses Result
H2		0.230	0.303	0.092	4.899	2.314	0.023	Supported

Risk Assessment Factors -> Investment Decisions								
Perception of Risk -> Investment Decisions	0.254					2.562	0.012	Supported

Table 8 shows the regression analysis for the hypothesis analyses if Risk Assessment Factors and the Investor’s perceptions of the risk associated with companies heavily relying on derivatives significantly affect their investment decisions. The “dependent variable”, Investment Decisions, was regressed on the predictive variables of Risk Assessment Factors and the Investor’s perceptions of the risk to test the hypothesis. $F = 4.899$, $p < 0.05$, demonstrating that Risk Assessment Factors and the Investor’s perceptions of the risk associated with companies heavily relying on derivatives significantly influence investment Decisions ($b = 0.230$, & 0.254 , and $p < .005$). Furthermore, the $R^2 = 0.092$ implies that the model explains 9.2 % of the variation in the Investment Decisions of investors, an alternate hypothesis is accepted.

➤ **Financial Analysts**

Table 9: Regression Analysis

Hypothesis	Regression Weights	Beta Coefficient	R	R2	F	t-value	p-value	Hypotheses Result
H2	Risk Assessment Factors -> Investment Decisions	0.503	0.603	0.364	4.868	2.911	0.033	Supported
	Perception of Risk -> Investment Decisions	0.631				2.320	0.010	Supported

Table 9 shows the regression analysis for the hypothesis analyses if Risk Assessment Factors and the analyst’s perceptions of the risk associated with companies heavily relying on derivatives significantly affect their investment decisions. The “dependent variable”, Investment Decisions, was regressed on the predictive variables of Risk Assessment Factors and the analyst’s perceptions of the risk to test the hypothesis. $F = 4.868$, $p < 0.05$, demonstrating that Risk Assessment Factors and the analyst’s perceptions of the risk associated with companies heavily relying on derivatives significantly influence investment Decisions ($b = 0.503$, & 0.631 , and $p < .005$). Furthermore, the $R^2 = 0.364$ implies that the model explains 36.4 % of the variation in the Investment Decisions, an alternate hypothesis is accepted.

H3: Perceptions and attitudes of investors and financial analysts towards companies that actively use derivative instruments significantly influence investment strategies.

➤ **Investors**

Table 10: Regression Analysis

Hypothesis	Regression Weights	Beta Coefficient	R	R2	F	t-value	p-value	Hypotheses Result
H3	Perceptions and attitudes of investors towards companies -> Influence on Investment Strategies	0.328	0.328	0.107	11.774	3.431	0.001	Supported

Table 10 shows the regression analysis for the hypothesis analyses if Perceptions and attitudes of investors toward companies that actively use derivative instruments significantly influence investment strategies. The “dependent variable”, Investment Strategies, was regressed on the predictive variables of Perceptions and attitudes of investors towards companies to test the hypothesis. $F = 11.774$, $p < 0.05$, demonstrating that Perceptions and attitudes of investors toward companies that actively use derivative instruments significantly influence investment strategies ($b = 0.328$, and $p < .005$). Moreover, the $R^2 = 0.107$ implies that the model demonstrates 10.7% of the variation in the Investment Strategies of investors, an alternate hypothesis is accepted.

➤ **Financial Analyst**

Table 11: Regression Analysis

Hypothesis	Regression Weights	Beta Coefficient	R	R2	F	t-value	p-value	Hypotheses Result
H3	Perceptions and attitudes of financial analysts towards companies -> Influence on Investment Strategies	0.615	0.615	0.378	10.774	3.307	0.004	Supported

Table 11 shows the regression analysis for the hypothesis analyses if Perceptions and attitudes of financial analysts toward companies that actively use derivative instruments significantly influence investment strategies. The “dependent variable”, Investment Strategies, was regressed on the predictive variables of Perceptions and attitudes of financial analysts towards companies to test the hypothesis. $F = 10.774$, $p < 0.05$, demonstrating that Perceptions and attitudes of financial analysts toward companies that actively use derivative instruments significantly influence investment strategies ($b = 0.615$, and $p < .005$). Moreover, the $R^2 = 0.378$ implies that the model demonstrates 37.8 % of the variation in the Investment Strategies, an alternate hypothesis is accepted.

5. Discussion

By 2000, more than 60% of businesses in 47 countries were using derivatives of some sort, and by 2013, notional quantities for over-the-counter (OTC) derivatives had exceeded \$650 trillion (Bartram, 2019). Thus the study primarily aimed to assess the extent to which investors and financial analysts consider the presence and disclosure of derivative instruments when making investment decisions and analyzing a company’s financial health. The study's significant findings were identified through a careful process of data acquisition and analysis, employing several tools (MS Excel and SPSS) and techniques including descriptive statistics, regression analysis, and correlation analysis.

The finding of the current study revealed that there is a significant positive relationship between the consideration of derivative instruments, investment decisions, and financial health analysis from the perspective of investors (i.e., sig value = 0.006, 0.037, and 0.000 which is below 0.05 for all three variables), as shown in Table 5, and financial analysts (i.e., sig value = 0.011, 0.008, and 0.012 which is below 0.05 for all three variables), as shown in Table 7 which means consideration of derivative instruments, investment decisions, and financial health are positively correlated. The findings of the current study are similar to the study by Campbell, et al. (2019), who demonstrated that developing market enterprises may protect themselves from the effects of global economic volatility by using derivatives, but one must be mindful to interpret the findings depending on the larger current economic conditions. However, In contrast to the current study, Adam, et al. (2017) reported that utilizing derivatives can reduce a company’s value since they are either inefficient at minimizing risk or they introduce new risks as a result of speculative trading. Similarly, Dos Santos, et al. (2017) discovered no proof that using derivatives has an effect that can be considered statistically significant and reported that derivatives have been utilized by Brazilian corporations to control cash flows rather than to add value. The reason for such variation can be the time gap between the studies, as recent studies have supported the findings of the current study.

Further, the study found that perceptions of Investors and analysts regarding the risk associated with companies heavily relying on derivatives significantly affect their investment decisions, as shown in

Tables 8 ($b = 0.230$, & 0.254 , and $p < .005$) and 9 ($b = 0.503$, & 0.631 , and $p < .005$), respectively.

The past studies showed the findings similar to the current study however, past studies have shown mixed results regarding the perception. For example, Durney, et al. (2021) demonstrated that investors view companies utilizing derivatives as dangerous and avoid trading on their equities. On the contrary, Martin (2019) found that investors prefer companies that employ derivatives to handle firm risks because doing so conveys a message that upper management has been more cautious in their decision-making than those who have not included derivatives in financial statements. However, the current study is based on data from the best companies in India that utilize the derivatives which makes the results of the current study more trustable.

At last, the study found that Perceptions and attitudes of investors and financial analysts toward companies that actively use derivative instruments significantly influence investment strategies, as shown in Tables 10 ($b = 0.328$, and $p < .005$) and 11 ($b = 0.615$, and $p < .005$), respectively. The findings of the current study are similar to past studies as in a recent study, He, et al. (2022) stated that disclosure of the usage of derivative instruments—in the notes, if done properly, can help investors in better decision-making. By demonstrating that the incorrect valuation of derivatives-using enterprises disappeared when SFAS 161 was implemented, Campbell, et al. (2021) suggested that SFAS 161's obligatory derivative disclosures improved investor comprehension of the financial impact of businesses' derivative use. However, the current study is based on the disclosure of derivatives as per the latest standard resulting in better and accurate outcomes.

As per the above discussion, it is clear that the ways in which companies manage and communicate their derivative activities can significantly influence investment decisions and perceptions of financial stability in the eyes of investors and analysts. On comparing the current studies with past studies it has been found that the current study has explored the variables from the perspective of investors and analysts both separately which has not been seen in past studies.

6. Conclusion

The growing economic significance of derivatives, as well as the enhancement in disclosure quality, which has made information more accessible, have both fueled the growth of derivatives research in accounting studies in recent years. However, despite an increase in studies on the usage of derivatives, recent studies have complicated the issue of the value significance of using derivatives rather than resolving it since results have remained inconsistent. Therefore, the current study examines the impact of derivative instruments on financial statements from the perspective of investors and analysts.

Findings showed a statistically significant correlation between the consideration of derivative instruments, investment decisions, and financial health analysis from the perspective of both investors

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and financial analysts. Further, the study found that perceptions and attitudes of investors and analysts regarding the risk associated with companies heavily relying on derivatives significantly affect their investment decisions as well as investment strategies.

Finally, the study concluded that institutional Investors generally favor more disclosure concerning the use of derivatives because it is seen as more relevant and helpful in understanding the risk profiles of corporations and because it represents the enhancement of information openness. With the help of these disclosures, investors and financial analysts become able to make sound investment decisions and effective investment strategies. It has also been recommended that there is a need for simple and universal standards for the disclosure of derivatives, considering the complexity of the present accounting and reporting regulations mandated by authorities.

6.1 Implications, Limitations, and Recommendations for Further Studies

The current study implied that Investors can make more informed decisions when they understand how derivatives affect a company's earnings stability and balance sheet health. Analysts, armed with such knowledge, can provide more accurate assessments of a company's financial health and potential investment risks.

Similar to all research, this study has some limitations, like the current study is limited to the perspective of Investors and Analysts only. Therefore, In the future, researchers should look at a bigger group of people and do real-world studies to find out what makes derivative statements in capital markets valuable and what factors affect them.

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