

Dynamics of company performance in perspective risk and return

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Abstract

This study analyzes the effect of organizational risk and managerial risk-taking on abnormal returns for companies listed on the Indonesia Stock Exchange for 2019–2023. Using 540 observations selected through purposive sampling, companies are categorized into high-performing (HPF) and low-performing (LPF) companies. The analysis used multiple linear regression. The results show that managerial risk-taking has a significant positive effect on abnormal returns in HPF, but a significant negative effect in LPF. Conversely, organizational risk has a significant positive effect on abnormal returns in both groups. These findings indicate that the relationship between risk and return depends on the state of company performance, especially in the context of managerial risk-taking. The results support Prospect Theory, particularly the Reflection Effect, and confirm that company performance is an important factor moderating the direction and magnitude of risk's influence on abnormal returns. These findings are useful for investors and managers in making strategic and investment decisions.

Keywords: Abnormal Return, Business Performance, Prospect Theory, Organizational Risk, Managerial Risk-Taking.

Abstrak

Penelitian ini menganalisis pengaruh risiko organisasi dan pengambilan risiko manajerial terhadap abnormal return pada perusahaan yang terdaftar di Bursa Efek Indonesia pada periode 2019–2023. Dengan menggunakan 540 observasi yang dipilih melalui purposive sampling, perusahaan dikelompokkan menjadi perusahaan berkinerja tinggi (HPF) dan berkinerja rendah (LPF). Analisis dilakukan menggunakan regresi linier berganda. Hasil penelitian menunjukkan bahwa pengambilan risiko manajerial berpengaruh positif signifikan terhadap abnormal return pada HPF, tetapi berpengaruh negatif signifikan pada LPF. Sebaliknya, risiko organisasi berpengaruh positif signifikan terhadap abnormal return pada kedua kelompok perusahaan. Temuan ini mengindikasikan bahwa hubungan risiko dan return dipengaruhi oleh kondisi kinerja perusahaan, terutama dalam konteks pengambilan risiko manajerial. Hasil penelitian mendukung Teori Prospek, khususnya Efek Refleksi, serta menegaskan bahwa kinerja perusahaan merupakan faktor penting yang memoderasi arah dan besarnya pengaruh risiko terhadap abnormal return. Temuan ini bermanfaat bagi investor dan manajer dalam pengambilan keputusan strategis dan investasi.

Kata kunci: Return Taknormal, Kinerja Bisnis, Teori Prospek, Risiko Organisasi, Pengambilan Risiko Manajerial.

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1. Introduction

One of the most fundamental concepts in modern finance is the relationship between risk and return. With the creation of Modern Portfolio Theory by Markowitz (1952), risk has been seen as a crucial factor influencing expected return. It is commonly believed that investors are averse to risk, meaning they demand higher expected returns as compensation for taking on more uncertainty. This principle was additionally codified by the Capital Asset Pricing Model (CAPM), which asserts that expected returns are directly related to systematic risk, as indicated by beta (Sharpe, 1964; Lintner, 1965). In this context, risk is viewed as the key determinant of investment returns, with the assumption that the link between risk and return is consistent, positive, and applicable across various situations. The positive link between risk and return has established itself as a fundamental principle of financial economics. According to conventional finance theory, logical investors assess investment options by weighing anticipated returns against the related risks. Assets with greater uncertainty should accordingly yield higher returns to attract investors. As a result, a favorable relationship between risk and return has traditionally been viewed as a key principle guiding capital markets.

Even though it holds theoretical significance, empirical findings about the risk–return relationship have been quite inconsistent. In recent decades, scholars have recorded many irregularities that question the forecasts of conventional finance theory. A prominent example is the Low Volatility Anomaly, indicating that low-risk stocks frequently outperform high-risk stocks when adjusted for risk. Research conducted by Ang et al. (2006), Baker et al. (2011), Blitz et al. (2013), and Frazzini and Pedersen (2014) indicates that stocks exhibiting lower volatility often yield returns that surpass those forecasted by traditional financial models. The presence of the Low Volatility Anomaly poses a major obstacle to conventional finance theory. If risk is the main factor influencing return, then high-risk assets ought to consistently outperform low-risk assets. Nonetheless, empirical evidence shows that this is not consistently true. Conversely, investors can occasionally obtain greater returns from investments that seem to be less risky. These findings indicate that factors beyond risk also play a role in the formation of returns. These elements could comprise behavioral biases, institutional limitations, market flaws, and variations in investor perceptions.

The unpredictability of the risk–return relationship extends beyond capital markets. Comparable trends have also been recognized in organizational and strategic management settings. Bowman (1980, 1982) presented what is now referred to as Bowman's Paradox, illustrating an inverse correlation between risk and organizational performance. In contrast to traditional beliefs, companies that succeed frequently display reduced risk, while those that underperform are more likely to take on increased risks. Later research by Fiegenbaum and Thomas (1988), Bromiley (1991), and Wiseman and Bromiley (1996) further corroborated this phenomenon.

Because it implies that organizational conditions affect risk-taking behavior, Bowman's Paradox is especially significant. In order to maintain their competitive edge, high-performing companies typically steer clear of needless risks. On the other hand,

businesses that are performing poorly can be more inclined to take on risk in order to improve results. These results suggest that risk-taking behaviour is neither static and uniform, but rather dynamic and context-dependent.

When combined, the data from Bowman's Paradox and the Low Volatility Anomaly provide significant challenges to the conventional understanding of the risk-return relationship. Strategic management studies emphasize the importance of organizational factors and managerial decision-making, whereas financial economics focuses on market-based risk and investor compensation. Although these two viewpoints offer insightful information, they frequently stay apart from one another. Because of this, we still don't fully grasp how internal organizational behavior affects external market outcomes.

The shortcomings of conventional finance theory have prompted the creation of alternative methods that take behavioral and psychological aspects into account. A prominent approach that questions the presumption of perfect rationality is behavioral finance. Behavioral finance acknowledges that economic decisions are frequently influenced by cognitive biases, emotions, and subjective perceptions rather than considering investors and managers as completely rational decision-makers (Kahneman & Tversky, 1979; Thaler, 1999). In this context, Expected Utility Theory (EUT) is a key component of traditional finance's explanation of decision-making in the face of uncertainty. EUT holds that people weigh options according to expected utility and select the one that will maximize their level of satisfaction. This concept is predicated on consistent rationality and stable preferences. These presumptions lead to a positive relationship between risk and return since risk-averse people require greater compensation to accept more uncertainty.

Prospect Theory was created by Kahneman and Tversky (1979) in order to overcome these constraints. Prospect Theory contends that people assess results in relation to a reference point rather than in absolute terms, in contrast to Expected Utility Theory. Therefore, whether or not people believe they are making gains or losses in relation to that reference point has an impact on decisions. The Reflection Effect is one of Prospect Theory's most significant ramifications. This idea holds that people are often risk-seeking when faced with potential losses but risk-averse when faced with potential profits. This phenomenon implies that risk choices change depending on the situational context. Depending on whether they believe they are in a favorable or unfavorable position, the same person may exhibit entirely different attitudes toward risk.

Corporate decision-making is significantly impacted by the Reflection Effect. Firm performance can be used as a benchmark in organizational settings to assess whether managers view their circumstances as a gain or a loss. Businesses that perform above aspiration levels would be said to be in a win domain, whereas those that perform below aspiration levels might be seen to be in a loss domain. As a result, it is anticipated that managerial risk preferences will vary based on organizational performance.

Another important component of Prospect Theory is the concept of a reference point. Rather than evaluating outcomes in absolute terms, individuals assess performance relative to a benchmark or aspiration level. In organizational settings, aspiration levels may be determined by historical performance, industry averages, competitor achievements, or internally established targets. When actual performance exceeds these aspirations, managers tend to perceive themselves as operating within a gain domain. Conversely, when performance falls below aspirations, managers perceive themselves as operating within a loss domain.

This argument is strongly supported by earlier studies. According to Fiegenbaum and Thomas (1988), businesses that fall short of their goals typically take more risks in an attempt to boost productivity. On the other hand, companies that surpass performance standards tend to become more cautious in order to safeguard their current accomplishments. The behavioral predictions of Prospect Theory were further supported by Wiseman and Bromiley's (1996) demonstration that managerial willingness to tolerate risk is influenced by organizational performance.

There are several ways to conceptualize risk in a corporate setting. One viewpoint emphasises risk-taking by managers, which reflects the strategic choices they make. Investment policies, financing options, capital expenditures, acquisitions, diversification plans, and other uncertain acts are examples of such decisions. Thus, the behavioral aspect of risk is represented by managerial risk-taking. Organizational risk, which represents variation in organizational performance and outcomes, is the subject of another viewpoint. Variations in profits, profitability, and operational outcomes are captured by organizational risk. Organizational risk reflects the uncertainties and repercussions of corporate operations, whereas management risk-taking indicates intentional managerial decisions.

How internal organizational risk is converted into external market responses is a significant topic that has not received enough attention. The majority of research on Bowman's Paradox concentrates on organizational goals, including survival, expansion, and profitability. On the other hand, stock market performance is the main focus of research on the Low Volatility Anomaly. Few studies have looked at how managerial risk-taking affects investor responses in various performance scenarios in an effort to integrate these viewpoints. In this context, signaling theory provides a helpful foundation for comprehending this relationship. Corporate actions communicate information to external stakeholders, according to Spence (1973) and Ross (1977). Managers' choices can act as signals that lessen the information asymmetry between companies and investors because they have better knowledge of a company's prospects.

Therefore, depending on organizational conditions, managerial risk-taking may be understood differently. Increased risk-taking may be a sign of confidence, future profitability, growth prospects, and innovation in high-performing companies. Such activities may be seen favorably by investors since they show management's confidence in the company's capacity to produce future profits. Stock prices may rise

as a result, resulting in positive abnormal returns. On the other hand, low-performing companies' risk-taking may be seen differently. Such behavior could be interpreted by investors as a sign of financial hardship, desperation, or concern about the future. Increased risk-taking could be seen as an effort to recover losses rather than an indication of growth prospects. As a result, negative investor reactions could result in reduced abnormal returns.

This theory implies that there is a conditional rather than a universal relationship between risk and reward. Depending on how well a company performs and how investors understand it, the same amount of risk may have various results. Therefore, it is crucial to comprehend these contextual variables in order to explain variations in the risk-return relationship. This study uses abnormal returns as the main metric of return in order to capture investor responses. The discrepancy between actual returns and the expected returns that market models predict is known as abnormal returns. Abnormal returns, in contrast to raw stock returns, show market reactions that are not entirely explained by systematic risk factors. As a result, abnormal returns offer a better metric for analyzing how investors react to organizational circumstances and managerial decisions.

Although numerous studies have examined the relationship between risk and return, an important gap remains. Previous studies have generally focused either on market-based risk anomalies or on organizational risk and performance, with limited attention to how firm performance influences market responses to managerial risk-taking. Furthermore, although Prospect Theory suggests that risk behavior differs under gain and loss conditions, empirical evidence on whether high- and low-performing firms exhibit different abnormal returns in response to risk-taking remains limited. Therefore, the conditional role of firm performance in shaping the risk–return relationship is still insufficiently understood.

This study incorporates managerial risk-taking, organizational risk, and abnormal returns into a unified paradigm, in contrast to other research that focuses on either market-based risk anomalies or organizational risk-performance correlations independently. More significantly, the study presents business performance as a border condition that establishes whether investors see risk-taking favourably or unfavourably. This method offers a more thorough explanation of how internal managerial actions result in external market consequences.

Based on these factors, this study examines how organizational risk and managerial risk-taking affect abnormal returns while taking firm performance into account. In order to investigate whether the relationship between risk and return varies depending on performance conditions, the study specifically makes a distinction between high-performing and low-performing enterprises. By using this method, the study offers a behavioural explanation based on prospect theory and connects internal organisational behaviour with external market responses.

This study adds to the body of literature in a number of ways. By showing that the link between risk and return is dependent on firm performance, it first expands on the

risk-return literature. Second, by using Prospect Theory and the Reflection Effect to explain investor reactions and business risk-taking, it advances behavioral finance. Third, by combining internal and external viewpoints on risk, it closes the gap between capital market research and strategic management research. Lastly, by emphasizing the significance of taking firm performance into account when assessing risk-taking choices and investment possibilities, the findings offer useful implications for investors and corporate managers.

2. Literature Review

Managerial Risk Taking and Organizational Risk

Palmer and Wiseman (1999) define organizational risk as income stream uncertainty, which can be measured by the variance of Return on Assets (ROA) and Return on Equity (ROE). Organizational risk has been widely examined in studies of the Bowman Paradox, particularly in explaining the negative relationship between risk and return (Fiegenbaum and Thomas, 1988; Fiegenbaum, 1990; Bromiley, 1991; Miller and Leiblein, 1996; Wiseman and Bromiley, 1996; Situmeang et al., 2006). Hoskisson et al. (2017) distinguish organizational risk from managerial risk-taking, defining it as the subsequent uncertainty resulting from managerial risk-taking that affects the organization's income stream.

Although organizational risk is considered diversifiable under CAPM, Amit and Wernerfelt (1990) found that managers still pay attention to organization-specific risk. Agency Theory explains this behavior because excessive income-stream fluctuations may lead to financial distress or bankruptcy, which can significantly affect managers' wealth, careers, and employment. Organizational failure may also affect other stakeholders, such as employees and suppliers. Therefore, managers and stakeholders have incentives to prevent excessive organizational risk and maintain the stability of the organization.

Palmer and Wiseman (1999) define managerial risk taking as management's proactive strategic choices involving uncertainty, while Hoskisson et al. (2016) describe it as top managers' strategic choices associated with uncertain outcomes. Both studies position managerial risk taking as an antecedent of organizational risk. Common measures include debt, capital expenditure, R&D spending, diversification, market expansion, mergers and acquisitions, advertising, and product innovation, with debt and capital expenditure offering the advantage of direct measurement from financial statements (Hoskisson et al., 2017).

Theoretical Perspectives on Risk Taking and Firm Performance

Managerial risk-taking can be explained through Prospect Theory, Upper Echelon Theory, Agency Theory, Behavioral Agency Model, and Behavioral Theory of the Firm (Hoskisson et al., 2017). Prospect Theory suggests that high performance encourages risk aversion, whereas poor performance encourages risk seeking. Upper Echelon Theory emphasizes the influence of top managers' characteristics on strategic choices (Hambrick & Mason, 1984). Agency Theory argues that managers tend to be more risk

averse than diversified shareholders, but performance-based compensation and monitoring can encourage greater risk taking (Jensen and Meckling, 1976; Lim and McCann, 2013; Faleye, Hoitash, and Hoitash, 2011; Sanders and Hambrick, 2007). Meanwhile, Behavioral Theory of the Firm suggests that performance below the aspiration level increases risk taking, while organizational slack can influence risk by providing resources for strategic change (Bromiley, 1991; Miller and Leiblein, 1996; Barreto, 2012; Arrfelt, Wiseman and Hult, 2013).

Previous studies on the Bowman Paradox provide important evidence that the relationship between risk and performance depends on the firm's performance context. Fiegenbaum and Thomas (1988) found a positive relationship between risk and performance among high-performing firms but a negative relationship among low-performing firms, supporting the Reflection Effect of Prospect Theory. Similar findings were reported by Fiegenbaum (1990), Patel et al. (2017), and Gupta (2017). Subsequent studies using sequential periods further showed that performance affects subsequent risk negatively, while risk also negatively affects subsequent performance (Bromiley, 1991; Wiseman and Bromiley, 1996; Situmeang et al., 2006; Tsai and Luan, 2016). Palmer and Wiseman (1999) further demonstrated that firm performance affects organizational risk through managerial risk-taking.

Risk, Firm Performance, and Market Response

This performance-dependent pattern is also relevant to stock returns. Wang, Yan, and Yu (2016) found that the relationship between beta and stock returns is positive when investors experience gains but negative when they experience losses, consistent with the Reflection Effect. Extending this perspective from investors to managerial decision making, the present study argues that the effect of managerial risk taking and organizational risk on abnormal returns may likewise depend on whether firms are high or low performing. This provides a basis for examining whether market responses to risk differ between gain and loss domains.

Synthesizing the theoretical mechanisms of the Reflection Effect with signaling dynamics, the market's evaluation of risk depends critically on the firm's performance context. In high-performing firms, managerial risk-taking manifested through strategic capital expenditures and leverage decisions signals managerial confidence and pursuit of positive expected value projects. Investors interpret such resource allocations as value-enhancing expansions, thereby generating positive abnormal returns. Conversely, in low-performing firms, capital expenditures and debt accumulation are frequently perceived as desperate gambles on negative expected value projects to recoup prior losses, worsening financial distress and triggering adverse market reactions. Although empirical evidence regarding capital expenditure, leverage, and stock returns remains context-dependent (Chen & Ma, 2011; Sanders & Hambrick, 2007), firm performance is expected to moderate these relationships, dictating whether managerial risk-taking yields positive or negative abnormal returns.

A parallel logic applies to organizational risk. While traditional pricing models assume unsystematic performance variability is uncompensated due to diversification,

market imperfections force investors to price total and idiosyncratic performance volatility (Chatterjee et al., 1999; Goyal & Santa-Clara, 2003). Under the Reflection Effect, organizational risk reflects operational vitality and capacity for positive earnings surprises in high-performing firms, encouraging positive investor valuations. In contrast, within underperforming firms, performance variability amplifies downside risk and insolvency concerns, leading to negative abnormal returns (Ang et al., 2006). Unlike Palmer and Wiseman (1999), who positioned organizational risk as a mediator, this study examines its direct relationship with abnormal returns, alongside managerial risk-taking, to determine whether market responses to risk differ between high- and low-performance conditions.

Based on the theoretical arguments and empirical evidence discussed above, this study develops a conceptual model to examine the relationship between managerial risk-taking, organizational risk, and abnormal returns under different firm performance conditions. The model distinguishes between high-performing firms, representing the gain domain, and low-performing firms, representing the loss domain. The proposed research model is presented in Figure 1.

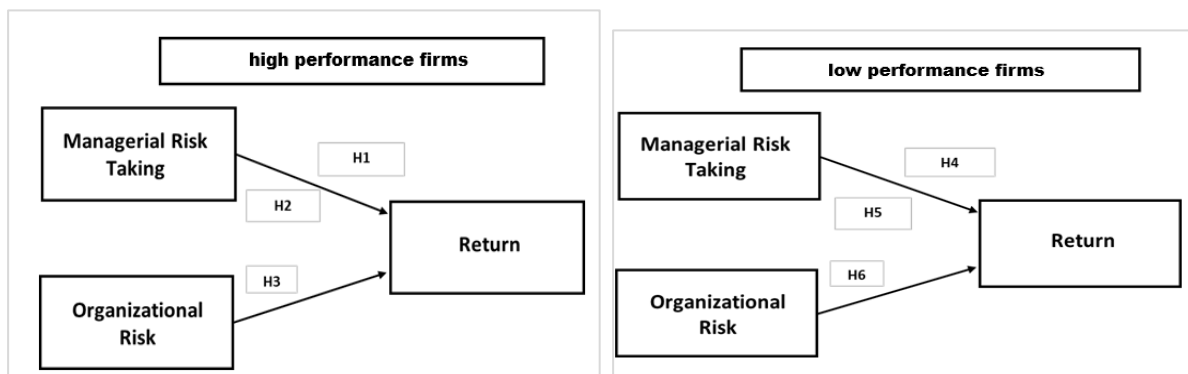


Figure 1. Research Model

The model proposes that the effects of managerial risk-taking and organizational risk on abnormal returns differ according to the firm's performance condition. Specifically, positive effects are expected in high-performing firms, whereas negative effects are expected in low-performing firms. Accordingly, the following hypotheses are proposed:

- H1: Managerial risk-taking, as measured by capital expenditure, has a positive effect on abnormal returns in high-performance firms.
- H2: Managerial risk-taking, as measured by debt level, has a positive effect on abnormal returns in high-performance firms.
- H3: Organizational risk has a positive effect on abnormal returns in high-performance firms.
- H4: Managerial risk-taking, as measured by capital expenditure, has a negative effect on abnormal returns in low-performance firms.
- H5: Managerial risk-taking, as measured by debt level, has a negative effect on abnormal returns in low-performance firms.

H6: Organizational risk has a negative effect on abnormal returns in low-performance firms.

3. Research Method

The population of this study consists of companies listed on the Indonesia Stock Exchange (IDX) during the 2019–2023 period. The sample was selected using a purposive sampling technique based on the following criteria: (1) companies included in the Kompas 100 Index announced in February of each observation year; (2) companies that remained listed on the IDX during the observation period and were not delisted; (3) companies that published complete annual financial statements and stock price data required for the analysis; (4) companies with complete data for measuring abnormal returns, managerial risk-taking, organizational risk, and control variables; (5) firms from the financial sector were excluded because they have distinct financial characteristics, regulatory environments, and risk structures compared with non-financial firms; (6) stocks that were actively traded for at least three years during the observation period; and (7) observations containing extreme outlier values were excluded to improve the reliability of the regression estimates. Based on these criteria, a total of 540 observations were collected and subsequently classified into High-Performance Firms (HPF) and Low-Performance Firms (LPF) based on firm performance.

Abnormal stock returns are the study's dependent variable. The discrepancy between actual and predicted returns, which are used to gauge how the market reacts to information about a company, is known as abnormal returns. This study measures abnormal returns using a method that is frequently employed in financial research: comparing actual returns with market-based projected returns (MacKinlay, 1997). The two risk dimensions that make up the study's independent variables are organizational risk and management risk-taking. Risk-taking by managers is a reflection of their decision-making style and the degree to which they are willing to take risks. Organizational risk, on the other hand, is a measure of how unpredictable a company's success is based on its performance variability. From an internal business standpoint, risk is represented by these two variables. Company performance serves as the study's moderating variable. Within a context of gain and loss, corporate performance is utilized to distinguish between different company conditions. High-performing businesses are thought to be in a win scenario, whereas low-performing businesses are in a loss situation, as Prospect Theory explains. As a result, this variable is utilized to determine if the two scenarios have different risk-return relationships (Fiegenbaum & Thomas, 1988).

Regression analysis with a moderation strategy was the data analysis method employed in this investigation. The regression model is used to investigate the relationship between risk and business performance as well as to test the direct impact of risk on abnormal returns. The purpose of this interaction test is to ascertain if the relationship between risk and return is strengthened or weakened by company performance. It is anticipated that this research approach will produce empirical data

in line with the Prospect Theory paradigm, especially with regard to the Reflection Effect, which asserts that risk behavior varies in win and loss scenarios. It is anticipated that the study's findings would offer a more thorough explanation of how risk and return relate to businesses and capital markets.

4. Results and Discussion

4.1. Results

There were 248 high-performing enterprises and 292 low-performing firms based on the Return on Assets (ROA) compared with the prior year's ROA.

Table 1. Descriptive Statistics for High-Performing Firms

Descriptive Statistics	Abnormal Return	d(CE/S)	d(D/BE)	d(STD ROA)	Momentum	Reversal	Sales Growth	Asset Growth
Mean	3.9%	0.035134	-0.004999	-0.002439	56.0%	30.3%	20.5%	10.5%
Median	-3.5%	0.005227	-0.005445	-0.000579	36.6%	7.6%	14.1%	11.5%
Maximum	405.7%	3.179837	1.176821	0.043196	417.2%	417.2%	289.4%	94.5%
Minimum	-141.7%	-3.447311	-1.445257	-0.072812	-77.2%	-94.3%	-75.1%	-91.3%
Std. Dev.	59.0%	0.580008	0.263709	0.013335	86.6%	93.4%	36.1%	26.1%
Observations	248	248	248	248	248	248	248	248

The descriptive statistics for 248 businesses that were deemed high-performing due to their higher ROA than the prior year are shown in Table 1. These companies saw an average rise in capital expenditures of 0.0351. The standard deviation of ROA, a measure of organizational risk, dropped by 0.0024, while their debt-to-book equity ratio (D/BE) dropped by 0.005. Furthermore, the companies produced an average abnormal return of 3.9%, suggesting that the market responded favorably during the observation period.

The impact of organizational risk and managerial risk-taking on abnormal returns in both high-performing and low-performing businesses was investigated in this study using multiple linear regression. Overall, the findings show that the explanatory power of the regression model is strong. Table 1 summarizes the findings of the goodness-of-fit test for the underperforming businesses.

Table 2. Descriptive Statistics for Low-Performing Firms

Descriptive Statistics	Abnormal Return	d(CE/S)	d(D/BE)	d(STD ROA)	Momentum	Reversal	Sales Growth	Asset Growth
Mean	-9.6%	-0.056802	-0.017991	0.00085	15.3%	21.4%	6.8%	12.2%
Median	-15.5%	-0.004582	-0.001195	-2.80E-05	-1.2%	8.8%	6.3%	11.3%
Maximum	310.9%	3.162092	1.976612	0.079907	540.9%	441.2%	126.8%	94.9%
Minimum	-388.4%	-2.948478	-1.791138	-0.071683	-72.9%	-94.4%	-58.7%	-99.6%
Std. Dev.	58.5%	0.443481	0.361798	0.01523	69.6%	71.9%	21.8%	20.9%
Observations	292	292	292	292	292	292	292	292

The descriptive statistics for 292 companies that were categorized as low-performing due to a lower ROA than the prior year are presented in Table 2. The debt-to-book equity ratio (D/BE) decreased by 0.018 while capital expenditure decreased by 0.0568 on average for these companies. As a gauge of organizational risk, the ROA standard deviation hardly fluctuated. These companies produced an average abnormal

return of -9.6% compared to high-performing companies, indicating that investors reacted negatively to companies with declining performance.

Table 3. Summary of Goodness of Fit Model (Low Performance)

Statistic	Value
R-squared	0.508
Adjusted R-squared	0.497
F-statistic	49.003
Prob (F-statistic)	0.000
Durbin-Watson	1.469

Table 3 indicates that the adjusted R² value of 0.497 demonstrates that the independent variables in the model, debt level, organizational risk, asset growth, sales growth, momentum, and reversal, explain approximately 49.7% of the fluctuations in abnormal returns. Furthermore, the overall importance of the regression model is represented by the F-statistic probability value of 0.000. Consequently, the utilized model can sufficiently explain the relationships among the research variables.

Testing the study hypotheses came next after a goodness-of-fit analysis showed that the regression model was appropriate for additional investigation. The purpose of this test was to ascertain how organizational risk and managerial risk-taking affected abnormal returns in both high- and low-performing businesses. A summary of hypothesis testing based on the regression findings of many models will be provided in Table 4 to make the reading and interpretation of the study results easier.

Table 4. Summary of Hypothesis Testing Results

Hypothesis	Variables	Performance	Direction of Relationship	Significance	Results
H1	Capital Expenditure >> Abnormal Return	High	Positive	Significant	Supported
H2	Debt Level >> Abnormal Return	High	Positive	Significant	Supported
H3	Organizational Risk >> Abnormal Return	High	Positive	Significant	Supported
H4	Capital Expenditure >> Abnormal Return	Low	Negative	Significant	Supported
H5	Debt Level >> Abnormal Return	Low	Negative	Significant	Supported
H6	Organizational Risk > Abnormal Return	Low	Positive	Significant	Not Supported

Table 4 shows that managerial risk-taking, as measured by capital expenditure and debt levels, significantly and favorably affects abnormal returns in high-performing firms. Additionally, at a certain level of significance, organizational risk also has a beneficial impact on abnormal returns. On the other hand, using both capital expenditure and debt levels as proxies, managerial risk-taking demonstrated a negative and significant impact on abnormal returns in underperforming firms. Contrary to the suggested premise, organizational risk had a positive and significant impact on abnormal returns.

4.2. Discussion

The study's findings show that there are notable differences between high-performing and low-performing businesses in the relationship between managerial risk-taking and abnormal returns. Managerial risk-taking has a positive and large impact on abnormal returns in high-performing organizations, as indicated by capital expenditures and debt levels. On the other hand, managerial risk-taking significantly and negatively affects abnormal returns in underperforming businesses. This variation in the relationship's direction implies that the market's reaction to risk varies depending on the company's performance rather than being universal.

Prospect Theory, specifically, the concept of the Reflection Effect offers an explanation for this outcome. Given that high-performing businesses are often deemed profitable, management tends to be cautious regarding risks. Under these conditions, opportunities for investment with favorable anticipated returns usually inform selective risk-taking choices. Heightened risk is associated with greater abnormal returns since investors interpret these decisions as positive indicators of the company's prospects. On the other hand, management frequently takes a risk-taking stance in underperforming businesses that are losing money. To boost business performance, management is prepared to take greater risks in these circumstances, even on initiatives with little chance of success. However, this behavior is not always seen favorably by investors. Increased risk in underperforming businesses is frequently interpreted as a sign of greater uncertainty and possible losses, which causes the market to react negatively by lowering abnormal returns.

These findings are consistent with earlier studies that demonstrate how a company's relative performance affects risk-taking behavior. These results also corroborate Bowman's Paradox, which holds that underperforming businesses typically take greater risks but do not always see better returns. As a result, the internal circumstances of the business have an impact on the nonlinear relationship between risk and return. In the meantime, the study's findings demonstrate that organizational risk positively influences abnormal returns in both high- and low-performing businesses. The suggested hypothesis, which predicted a change in the relationship's direction dependent on business performance, is not entirely supported by this result. The absence of this distinction suggests that investors do not view organizational risk differently in gain or loss scenarios.

The features of each variable can account for the variations in results between organizational risk and management risk-taking. Strategic management decisions directly lead to managerial risk-taking, which is more indicative of decision-making behavior impacted by psychological considerations as outlined in Prospect Theory. On the other hand, organizational risk does not directly reflect managerial goals or strategies; rather, it more closely reflects the performance variability that results from a company's actions. Additionally, the lack of a directional link in organizational risk may be explained by the potential for post-earnings announcement drift. Investors interpret performance variability indirectly based on the firm's performance in these circumstances since the market does not respond to short-term corporate performance

information fully efficiently. Overall, the study's findings show that the kind of risk employed in the research has a big impact on how the link between risk and return develops. While organizational risk did not follow the pattern outlined in Prospect Theory, managerial risk-taking did. This demonstrates that different risks have different effects on stock returns.

The study's conclusions have significant ramifications for the advancement of theory and practice. These findings theoretically support the behavioral finance approach's applicability in describing occurrences that are beyond the scope of traditional finance theory. Practically speaking, these findings imply that before making investment decisions, investors should take into account a company's performance and the kind of risk it faces because different market reactions might result from the same risk depending on the company's setting.

The relationship between risk and return is one of the most fundamental concepts in modern financial theory. Classically, financial theory states that there is a positive relationship between risk and return, where investors who are willing to take on higher risks will be compensated with higher returns (Markowitz, 1952; Sharpe, 1964; Lintner, 1965). This concept is the basis of various financial models, including the Capital Asset Pricing Model (CAPM), which explains that the expected return of an asset is determined by its level of systematic risk (Sharpe, 1964; Fama & French, 2004). Within this framework, risk is viewed as the primary factor determining investment returns, so the relationship between the two is considered stable and universal.

However, various empirical studies have shown that the relationship between risk and return is not always consistent with the predictions of classical theory. Several studies have found anomalies where assets with lower risk levels actually generate higher returns than assets with higher risk (Ang et al., 2006; Baker et al., 2011; Blitz et al., 2013). This phenomenon, known as the Low Volatility Anomaly or Low Risk Anomaly, directly challenges the basic assumptions of traditional financial theory. The existence of this anomaly suggests that factors other than risk influence return formation, making the relationship between risk and return more complex than explained by conventional theory.

The Low Volatility Anomaly's endurance has been explained by a number of theories. From a behavioral standpoint, investors frequently show a preference for high-risk equities that resemble lottery tickets because they have a slim chance of producing extraordinarily high returns. Investors may overvalue riskier equities and undervalue safer ones as a result of this bias, which could lead to lower returns on high-risk securities and better returns on low-risk assets. According to Baker et al. (2011), investors often overestimate the potential for growth of volatile companies, which leads to price deviations from fundamental values.

There have also been institutional explanations put forth. According to Frazzini and Pedersen (2014), many investors are unable to increase their exposure to low-risk assets by borrowing due to leverage limits. Because of this, investors who are looking for bigger returns sometimes overweight high-risk products, which drives up their

prices and lowers their potential returns. These results suggest that risk itself, investor behavior, and market frictions all have an impact on the link between risk and return. As a result, it may be oversimplified to assume a universally positive risk-return relationship, especially in markets where information asymmetry and behavioral biases are prevalent.

Beyond the capital market context, the inconsistent relationship between risk and return has also been found in organizational contexts. Bowman (1980, 1982) found a negative relationship between risk and company performance, which later became known as Bowman's Paradox. This finding indicates that high-performing companies actually have lower levels of risk, while low-performing companies have higher levels of risk (Fiegenbaum & Thomas, 1988; Bromiley, 1991). This phenomenon further strengthens the argument that the relationship between risk and return is not universal, but rather depends on the specific conditions that influence it.

These two phenomena indicate that traditional approaches to explaining the relationship between risk and return have limitations. Therefore, alternative approaches are needed that can more comprehensively explain variations in this relationship. One relevant approach is behavioral finance, which emphasizes that economic decisions are not entirely rational but are instead influenced by psychological factors and cognitive biases (Kahneman & Tversky, 1979; Thaler, 1999).

In classical financial theory, Expected Utility Theory (EUT) is used to explain individual behavior in the face of risk. This theory states that individuals are risk-averse, that is, they tend to avoid risk unless adequate compensation is provided (Von Neumann & Morgenstern, 1953; Rabin, 2000). The implication of this assumption is that the relationship between risk and return is always positive. However, various studies have shown that the rationality assumption in EUT does not always align with actual individual behavior. Phenomena such as the Allais Paradox and the Ellsberg Paradox indicate that individuals are often inconsistent in their decision-making (Allais, 1953; Ellsberg, 1961). Furthermore, in the capital market context, investors often exhibit various behavioral biases such as overconfidence, loss aversion, and representativeness bias (Barberis & Thaler, 2003; Baker et al., 2011). These biases can lead to deviations from the expected risk-return relationship, thus reinforcing the need for alternative approaches to explaining the phenomenon.

In response to these limitations, Kahneman and Tversky (1979) developed Prospect Theory, which explains that individual risk decisions are influenced by their reference point and perceptions of gains and losses. In this theory, individuals tend to be risk-averse in situations of gain and risk-seeking in situations of loss. One important implication of Prospect Theory is the Reflection Effect, which is a change in risk behavior depending on the conditions faced (Tversky & Kahneman, 1992). In the corporate context, profit or loss can be represented by the company's performance level. Companies with high performance can be considered to be in a gain state, while companies with low performance are in a loss state (Fiegenbaum & Thomas, 1988;

Wiseman & Bromiley, 1996). Thus, management's risk-taking behavior is not constant but is influenced by the company's performance.

Loss aversion is a key component of prospect theory. People typically feel losses more strongly than gains of the same size. As a result, decision-makers are frequently more driven to prevent losses than to seek comparable rewards. This asymmetry suggests that risk preferences are influenced by both the likelihood of events and whether they are presented as gains or losses in relation to a reference point.

Previous research has shown that firm performance significantly influences management risk-taking. Low-performing firms tend to increase risk in an effort to improve performance, while high-performing firms tend to reduce risk to maintain their position (Fiegenbaum & Thomas, 1988). This relationship is nonlinear and indicates differences in managerial behavior based on performance (Wiseman & Bromiley, 1996). In this context, risk is understood not only as the variability of company performance (organizational risk), but also as the result of managerial decisions (managerial risk-taking) (Miller & Bromiley, 1990; Hoskisson et al., 2017). This approach provides a more comprehensive understanding of the sources of risk within a company because it considers the behavioral aspects of management as decision-makers.

Most previous research tends to view the relationship between risk and return from a single perspective, either internal or external. Research on the Low Volatility Anomaly focuses on the market perspective, while research on Bowman's Paradox focuses on the company's internal perspective (Baker et al., 2011; Bowman, 1980). However, in reality, there is an interaction between a company's internal conditions and external investor responses.

Within the framework of signaling theory, corporate management decisions can serve as signals to investors regarding the company's condition and prospects (Spence, 1973; Ross, 1977). Increased risk taken by management can be interpreted differently depending on the company's performance. In high-performing companies, increased risk can be viewed as a positive signal, while in low-performing companies, increased risk can be viewed as a negative signal. Thus, the relationship between risk and return is influenced not only by the level of risk itself, but also by the context in which the risk arises.

In this study, returns are measured using abnormal returns, which are the difference between actual and expected returns (Elton & Gruber, 1995). Using abnormal returns allows for more accurate analysis because it controls for systematic risk factors (Fama, 1998; MacKinlay, 1997). Thus, abnormal returns can reflect the market's response to information derived from managerial decisions. Although numerous studies have examined the relationship between risk and return, several research gaps remain. Most studies assume a fixed relationship, without considering specific conditions that could alter its direction. Furthermore, previous research tends to separate internal and external perspectives, thus failing to provide a complete picture of the risk-return

relationship mechanism. The use of Prospect Theory in this context is also limited, particularly in integrating the Reflection Effect concept with company performance.

Based on this gap, this study aims to analyze the relationship between risk and return, considering the role of company performance as a determining factor in the direction of this relationship. Risk is measured using managerial risk-taking and organizational risk, while return is measured using abnormal stock returns. By integrating internal company perspectives and external market responses, this study is expected to provide a more comprehensive understanding of the relationship between risk and return.

Theoretically, this research contributes to the development of financial literature by demonstrating that the relationship between risk and return is contextual and influenced by company performance. Furthermore, this research expands the application of Prospect Theory in an organizational context. Practically, the results of this study can assist investors in making investment decisions and assist company management in formulating more optimal risk-taking strategies.

5. Conclusion

Considering variations in business performance, this study attempts to investigate the impact of organizational risk and managerial risk-taking on abnormal returns. The analysis leads to the conclusion that the link between risk and return varies depending on the type of risk and the performance of the company. The study's findings show that, depending on the success of the business, managerial risk-taking has varying effects on abnormal returns. Managerial risk-taking significantly and favorably affects abnormal returns in high-performing businesses. On the other hand, managerial risk-taking significantly and negatively affects abnormal returns in underperforming businesses. These results imply that the internal conditions of the company have an impact on how the market reacts to risk.

Organizational risk, on the other hand, had a favorable impact on abnormal returns for both high- and low-performing businesses. Since there were no variations in the relationship's direction based on business performance, this result does not entirely support the hypothesis. This suggests that investors do not view organizational risk differently depending on performance. Overall, the study's findings provide credence to the Prospect Theory method of understanding risk-taking behavior in businesses, especially the Reflection Effect idea. It is crucial to differentiate between risks resulting from managerial choices and risks resulting from fluctuations in business performance, as the results also show that not all forms of risk follow the same pattern. Therefore, by highlighting the critical significance of business performance conditions and the types of risk included in the analysis, this study helps to expand knowledge of the relationship between risk and return.

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