



South Korean Capital Market Reacts to Park Ji Min's Solo Debut



Wahyu Farah Fathin Ahsta [✉]Entar Sutisman ²Kartim Kartim ³

[✉] Universitas Yapis Papua, Jayapura, 99113, Indonesia
^{2,3} Universitas Yapis Papua, Jayapura, 99113, Indonesia

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*Corresponding author. [Wahyu Farah Fathin Ahsta](mailto:wfarahfathina@gmail.com)
wfarahfathina@gmail.com

KEYWORDS	ABSTRACT
<p>Keywords:</p> <p>Abnormal Return; Stock Price; Beta Risk; Event Study; Solo Debut.</p> <p>Conflict of Interest Statement:</p> <p>The author(s) declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.</p> <p>Copyright © 2024 AAAR. All rights reserved.</p>	<p>Purpose: This study analyzes the South Korean stock market reaction to HYBE stock before and after Park Ji Min's solo debut on March 24, 2023.</p> <p>Research Design and Methodology: The analytical techniques employed are the paired sample t-test for normally distributed data, the Wilcoxon signed-rank test for non-normally distributed data, and the single index model technique for beta risk variables.</p> <p>Findings and Discussion: The results showed significant differences in abnormal returns, stock prices, and beta risk of HYBE shares before and after Park Ji Min's solo debut.</p> <p>Implications: This research makes a unique contribution to the accounting and financial management field by providing insights into international investment and its relation to signaling theory and event study. It can significantly advance our understanding in these areas and pave the way for further research.</p>

Introduction

Companies listed under K-pop music and in the Korean capital market are among the investment alternatives for the public, especially K-pop fans. (Azzahra et al., 2022). HYBE Corporation is one of the companies that mainly focuses on K-pop. The company was officially listed on the Korea Stock Exchange under Big Hit Entertainment on October 15, 2020. It raised 963 billion KRW in its initial stock offering on the Korea Stock Exchange, making it the largest IPO in South Korea in the last three years. Shares opened at 270,000 KRW - double the IPO price of 135,000 KRW - and closed at 258,000 KRW. These figures brought the company's valuation to KRW 8.7 trillion (Cirisano, 2020). HYBE Corporation's share price increased until it peaked on November 18, 2021, at KRW 419,000.





Figure 1. HYBE Corporation Stock Price Chart Since IPO Until the End of 2021

Source: finance.yahoo

HYBE Corporation's shares dropped 27.5% in early trading on June 15, 2022, to 168,000 KRW, following a close of 193,000 KRW the previous day. Within the first hour of trading, the stock fell to 140,000 KRW, resulting in a total market capitalization loss of approximately \$1.7 billion before returning to a price of 145,500 KRW. HYBE shares ended the day down 24.9% to 145,000 KRW. Rachmawati (2022) It suggests that on September 28, 2022, HYBE Corporation experienced a 7.1% decline in its share price for the second consecutive time. At that time, HYBE Corporation shares were traded for 129,000 KRW. The price is lower than the initial public offering (IPO) price of 135,000 KRW. The decline in HYBE Corporation's share price was noted to have begun after the announcement that BTS, one of its boy groups, would go on hiatus and focus on individual activities.



Figure 2. HYBE Corporation Stock Price Chart After BTS Hiatus Announcement

Source: finance.yahoo

One of the BTS members who released solo works during BTS' hiatus period is Park Ji Min, who has had a considerable influence in the entertainment industry. On January 16, 2023, French luxury brand Dior introduced Ji Min as a global ambassador. This caused Dior's share price to skyrocket to an all-time high. The share price rose to 775.50 EUR on the same day. On January 18, 2023, the share price rose to 789.00 EUR, reaching a 31-year high. This shows that each member can individually develop their branding power. (Diderich, 2023).

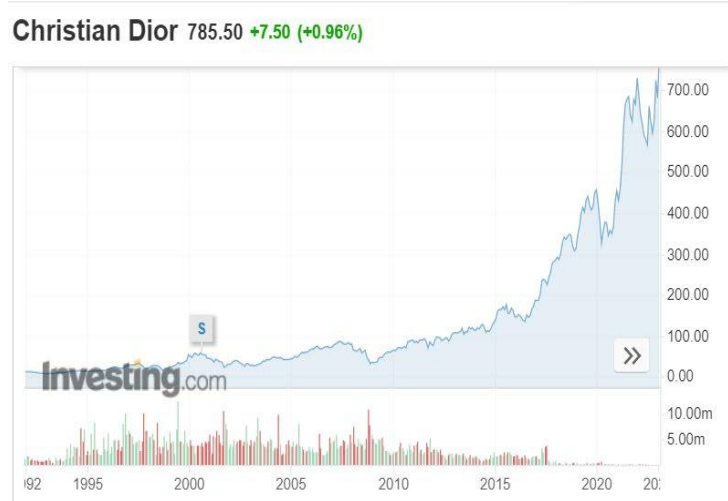


Figure 3. Dior Stock Price Chart After Park Ji Min Became Global Brand Ambassador
 Source: *investing.com*

Issues and news about an idol can affect the stock price of related music companies (Chofifah & Suryani, 2022). The market size of South Korea's entertainment industry continues to expand, and the global popularity of K-pop is increasing (Messerlin & Shin, 2013). Investing in K-Pop-related companies can be a promising opportunity; however, thorough research and analysis of individual companies and market trends are crucial for making informed investment decisions. An abnormal return refers to changes in a company's stock price that cannot be explained by general market factors. This abnormal return can be an unexpected increase in stock price or an unanticipated decrease. At the same time, beta risk plays a vital role in measuring the impact of events on stock prices. Companies with high beta tend to be more susceptible to price fluctuations during certain events, whereas companies with low beta may be less affected.

This study refers to research by Soraya (2023) entitled "An Event Study: Indonesian Capital Market Reaction to The Russia-Ukraine War Announcement." This study examined differences in abnormal return variables and found no significant differences between abnormal returns before and after the announcement of the Russia-Ukraine war. This aligns with the opinion of Bahri and Fatchurrohman (2023). Bahri & Fatchurrohman (2023), in their research, "Capital Market Reaction to the Announcement of the Prohibition of Syrup Drug Distribution," and (Hotimah & Astawinetu, 2020) through the results of the study "Analysis of Differences in Stock Returns and Abnormal Returns Before and After the Protest from Greenpeace About Plastic Waste at PT. Unilever."

The results, which suggest that there is no difference in abnormal return value, contradict the research of Yousaf et al. (2022) on "The reaction of G20+ stock markets to the Russia-Ukraine conflict "black-swan" event: Evidence from event study approach" with the results of abnormal returns before and after the launch of 'special military operations' by Russian military forces showing a strong negative impact of this military action on most stock markets, which means there are differences in these variables. Machfudi & Isywardhana (2023), in their research "Analysis of Capital Market Reaction to the Russian and Ukrainian War Events (Case Study on Shares of Energy Sector Companies Listed on the Indonesia Stock Exchange)" also obtained the results that there were significant differences in abnormal returns before and after the events of the Russian and Ukrainian wars.

In addition to the abnormal return variable, some previous studies used the stock price variable. Research by Lubis et al. (2023) in "Analysis of the Capital Market Reaction to the Announcement of the Stock Split" indicates that stock prices are significantly affected both before and after the announcement. Cung & Rakhmat (2022), in a study entitled "Are There Differences in Stock Prices, Trading Volume, and Abnormal Returns Between Before and After the Merger of PT Indosat?" support the statement that there are significant differences in stock prices before and after an event. Research by Pardiansyah et al. (2023), entitled "Comparative Analysis of Sharia Stock Prices and Returns in the Health Sector Before and During the COVID-19 Pandemic," suggests that stock prices do not exhibit significant differences before and during the COVID-19 pandemic. The last variable is

a beta risk; where in the study "Differential Analysis of the Rate of Return and Beta Risk of Shares Before and During the COVID-19 Case in Consumer Goods Companies on the IDX for the 2018-2021 Period" by Kennedy et al. (2021) obtained the results that there is a significant risk difference between before and during the COVID-19 pandemic in Indonesia.

Based on existing research, this study will also examine the stock market reaction to another event, namely Park Ji Min's solo debut. This study will focus on three variables – abnormal return, stock price, and beta risk – to test whether the solo debut of Park Ji Min, a boy band member with international popularity, will impact the movement of HYBE Corporation shares. The difference between this study and previous studies lies in the combination of variables used, the method of measuring beta risk, and the events studied, focusing on only one company.

Literature Review

Stock

The stock price refers to the value of a share of stock traded on a stock exchange at a specific point in time, determined by the market's supply and demand dynamics. (Azis & Hartono, 2017). It represents the market's consensus on a company's equity value at any given moment. Generally, stock price refers to the closing price during the observation period for each stock included in a sample, and it is closely monitored by investors (Pardiansyah et al., 2023). The movement of stock prices is paramount to investors, as it provides critical insights into the market's perception of a company's performance and prospects. In the capital market, stock prices are categorized into three main types: the highest price (high price), the lowest price (low price), and the closing price (close price). These prices reflect a stock's trading activity range during a trading session and serve as critical indicators for investors and analysts. The highest price represents the maximum price at which a stock was traded during the day, while the lowest price indicates the lowest price reached during the day. The closing price is particularly significant, as it represents the final trading price for a stock at the end of a trading session and is often used as a benchmark for evaluating stock performance. (Ta et al., 2020).

Understanding stock prices is crucial for investors, as they directly influence investment decisions and portfolio management strategies. Various factors, including company performance, macroeconomic indicators, market sentiment, and external events such as geopolitical developments or significant corporate announcements, influence the fluctuations in stock prices. (Baker, 2024). As stock prices are closely tied to the perceived value of a company, they also play a critical role in determining shareholder wealth and market capitalization. (Parveen & Siddiqui, 2017). Recent studies have emphasized the importance of analyzing stock price movements to predict market trends and assess risk. (Zakhidov, 2024). For example, a study by Katembo (2024) Highlighted the impact of market volatility on stock price fluctuations, suggesting that investors should carefully monitor these movements to mitigate potential risks. Haritha & Uchil (2020) Explored the relationship between stock prices and investor behavior, finding that changes in stock prices significantly influence investor sentiment and decision-making processes.

Abnormal Return

Abnormal returns are commonly used to test market efficiency and typically occur around the announcement of a significant event. The magnitude of abnormal returns can vary depending on the relative size of the event and the overall market conditions. (Alves & Silva, 2021). A market is considered efficient when no investors experience abnormal returns, meaning all available information is fully reflected in stock prices. (Andriansyah & Irwandi, 2023). Positive abnormal returns indicate that the actual return exceeds the expected return anticipated by investors, suggesting that the market has reacted favorably to the event (Santoso & Silitonga, 2023). Conversely, negative abnormal returns occur when stock prices decline significantly following an event, resulting in returns that are lower than investors expected.

Positive or negative abnormal returns are crucial in investment decisions, as they can signal the market's reaction to specific events and have significant implications for stock prices and liquidity. For instance, a positive abnormal return may encourage investors to increase their holdings,

anticipating continued positive performance. On the other hand, a negative abnormal return might prompt investors to sell off their shares to avoid further losses, potentially leading to decreased liquidity and downward pressure on the stock price (Linnainmaa & Zhang, 2021). Understanding the dynamics of abnormal returns is essential for investors seeking to navigate market fluctuations effectively. Research has shown that abnormal returns are not only indicators of market reaction but also provide insights into the market's overall efficiency. For example, Dewi et al. (2022) found that abnormal returns are closely tied to market sentiment and can reflect broader economic trends. Similarly, Linnainmaa & Zhang (2021) emphasized the importance of analyzing abnormal returns to assess the potential impact of significant events on stock performance. Shleifer (2000) highlighted that abnormal returns often serve as early indicators of market inefficiencies, allowing investors to adjust their strategies accordingly.

Risk

Risk is a form of uncertainty related to future situations that may arise due to decisions made based on different considerations today. In the context of investment, risk can be understood as a measure of the potential loss that may occur during investment activities. Accurately predicting the level of risk in investments is crucial for minimizing possible losses and optimizing returns by leveraging trends and changes in influential variables (Puspitaningtyas, 2015). Investment risk is inherently tied to the uncertainty surrounding the future performance of assets, making it a fundamental concept in financial analysis. The ability to anticipate and manage risk effectively is crucial for investors seeking to strike a balance between risk and return. By understanding the factors that influence risk, investors can make informed decisions that align with their financial goals and risk tolerance (Sivarajan, 2019). For example, predicting risk in a volatile market allows investors to adjust their portfolios to protect against significant losses while pursuing potential gains.

Several studies have emphasized the importance of risk prediction and management in achieving successful investment outcomes. For instance, Hampton (2009) highlights that accurately assessing risk can lead to better investment strategies, enabling investors to identify and capitalize on market opportunities while avoiding potential pitfalls. Similarly, Maginn et al. (2007) argue that understanding risk is about avoiding losses and optimizing returns by strategically positioning investments in response to market dynamics. The relationship between risk and return is a central tenet of modern portfolio theory, which posits that higher levels of risk are associated with the potential for higher returns (Constantinides & Malliaris, 1995). However, this relationship also underscores the importance of risk management, as investors must carefully weigh the potential rewards against the possibility of significant losses. Thompson & Walker (2021) noted that effective risk management involves diversifying investments, analyzing market trends, and staying informed about macroeconomic factors that could impact asset performance.

Park Ji Min's Solo Debut

In 2023, Ji Min released her first album, "FACE." The album depicts Ji Min facing herself and how she prepared for her new soloist role. (Suteja, 2023). The album ranked number 2 on the Billboard 200 chart, with album sales of 124,000 units, marking the third biggest sales week in 2023 and the biggest for a solo artist this year. "FACE," primarily performed in Korean, consists of six tracks: "Face-off," "Interlude: Drive," "Like Crazy," "Alone," "Set Me Free, Pt. 2," and "Like Crazy (English Version)." The song "Like Crazy" in the album made Ji Min the first South Korean solo artist to top the Billboard Hot 100 chart. "Like Crazy" broke 254,000 combined total downloads of the song and CD single, attracting 10 million views and 64,000 radio broadcasts in its first week. (Trust, 2023).

Park Ji Min's solo debut can serve as a reference or signal to investors when making decisions, especially for HYBE Corporation shares, given the company's work contract with her. This research will examine HYBE Corporation's stock performance before and after Park Ji Min's solo debut, as measured by abnormal returns, stock prices, and beta risk variables. This research will also find out whether there are differences in these variables within a predetermined period.

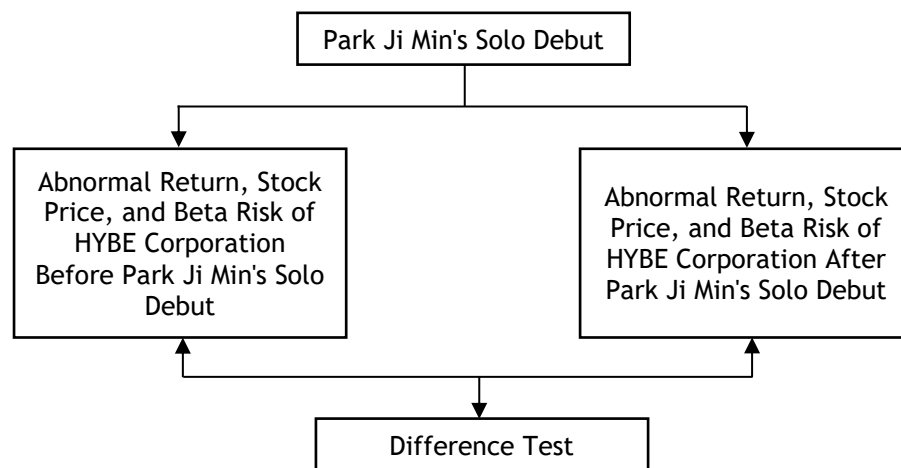


Figure 4. Theoretical framework

Source: data processed, 2023

Changes in Abnormal Return Before and After Park Ji Min's Solo Debut

The critical variable in this hypothesis is the abnormal return, which is the difference between a stock's actual return and its expected return over a specific period. Abnormal return is used to evaluate the impact of events on a stock's market value, such as a product launch, financial announcement, or, in this case, the solo debut of a famous artist. Understanding abnormal returns is crucial in financial analysis, as it provides valuable insights into market reactions to significant events. Measuring abnormal returns for Park Ji Min's solo debut helps gauge how the market, including investors and fans, reacts to this debut. This research is crucial as it can demonstrate how a high-profile solo debut, in collaboration with the entertainment agency, influences the company's stock value. The hypothesis posits that there is a change in abnormal returns before and after Park Ji Min's solo debut. This is based on the idea that the debut is a significant event likely to affect market sentiment and investor expectations, leading to fluctuations in stock prices. Whether the sentiment towards the debut is positive or negative, it is expected to be reflected in the changes in abnormal return.

Several studies support this hypothesis. Cung & Rakhmat (2022) found that significant events in the entertainment industry, including artist debuts, often result in notable changes in the abnormal returns of related companies' stocks. Chofifah & Suryani (2022) also highlighted how celebrity-related events directly impact investor behavior and market performance. Lubis et al. (2023) observed significant abnormal returns surrounding the debut of K-pop artists, indicating strong market reactions. Machfudi & Isyнуwardhana (2023) similarly identified shifts in abnormal returns to solo debuts, underscoring the importance of assessing market responses to major entertainment events.

H₁: There is a Change in Abnormal Return Before and After Park Ji Min's Solo Debut.

Stock Price Before and After Park Ji Min's Solo Debut

The primary variable in this hypothesis is the stock price, which refers to the market value of a share traded on a stock exchange. Stock prices are influenced by a company's performance, economic conditions, and specific events that can impact market perceptions of a company's value. In this context, the stock price is used to assess the impact of Park Ji Min's solo debut on the associated company's value. The stock price is crucial in financial market analysis, as it reflects a company's value and investor perceptions. Analyzing changes in stock prices before and after a significant event, such as Park Ji Min's solo debut, provides valuable insights into market reactions, which are essential for making informed investment decisions. Understanding how such events affect stock prices enables investors and financial managers to navigate market dynamics more effectively.

The hypothesis suggests a significant change in stock price before and after Park Ji Min's solo debut. This is based on the idea that the debut, being a highly anticipated event, can affect market perceptions and, consequently, the stock price of the related company, such as the entertainment agency managing the artist. Positive market reactions may lead to increased stock prices, while adverse reactions could result in a decline. Thus, the hypothesis assumes that stock prices will fluctuate in response to the debut. Empirical evidence from previous studies supports this hypothesis. Lubis et al. (2023) Found that K-pop artist debuts often trigger significant changes in stock prices before and after the event. Cung & Rakhmat (2022) Similarly, it has been observed that significant events in the entertainment industry, including artist debuts, cause substantial fluctuations in stock prices. Wicaksono, (2022) It also reported that significant announcements or events have a substantial impact on stock prices, indicating market sensitivity to such occurrences.

H₂: There is a Change in Stock Price Before and After Park Ji Min's Solo Debut

Beta Risk Changes Before and After Park Ji Min's Solo Debut

The key variable in this hypothesis is beta risk, a measure of a stock's systematic risk relative to the overall market. Beta indicates how sensitive a stock's price is to market fluctuations, with values greater than 1 suggesting higher volatility than the market and values less than 1 indicating lower volatility. In this study, beta risk is analyzed to assess how the risk associated with a company's stock changes before and after Park Ji Min's solo debut. Beta risk plays a crucial role in investment analysis, as it provides insights into the level of risk a stock carries compared to the market. Investors rely on beta to evaluate the potential risks and returns in their portfolios. Understanding how beta risk varies before and after a significant event, such as Park Ji Min's solo debut, can help investors determine if a stock becomes more or less risky due to the event. This is crucial because shifts in beta can affect investment decisions, risk management, and asset allocation.

The hypothesis suggests that beta risk changes before and after Park Ji Min's solo debut. The reasoning is that this debut, as a significant event in the entertainment industry, could influence investor perceptions of the associated company's stock risk. If the debut is viewed as a potential volatility trigger, the stock's beta risk may increase, indicating a higher systematic risk. Conversely, if the debut reduces uncertainty, the beta risk may decrease, reflecting a lower risk. Thus, the hypothesis anticipates a change in beta risk as a response to the debut.

H₃: Beta Risk Changes Before and After Park Ji Min's Solo Debut

Research Design and Methodology

This study employs a quantitative research approach, utilizing secondary data. It also uses the event study research method to examine market reactions to information from specific announcements or posts.

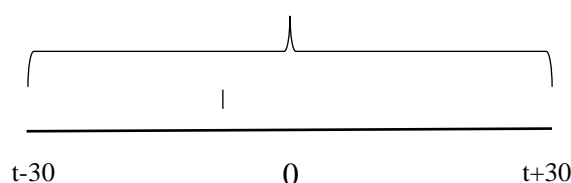


Figure 5. Event Window

Source: data processed, 2023

The research conducted is development research, a form of research that introduces new variables and indicators. In this case, researchers employed a different hypothesis test for the beta risk variable, utilizing the single index model regression technique, and selected a different research object from previous studies, namely Park Ji Min's solo debut. This research is located at the Korea Stock Exchange (KRX) or the South Korean Stock Exchange.

The population used in this study is the entire HYBE Corporation stock listed on the Korea Stock Exchange (KRX) before and after Park Ji Min's solo debut. The sample for this study was obtained

through a time series sampling technique, which allows researchers to collect stock price data within a specified time interval. The total duration consisted of 60 days, comprising 30 days before and 30 days after Park Ji Min's solo debut. This research uses time series sampling techniques. Time series sampling refers to the process of collecting and analyzing data points collected over a specific period. The data collection method applied in this study is documentation by identifying news about Park Ji Min's solo debut sourced from the KoreaTimes, KoreaHerald, Billboard, CNN, IBTimes, CNBC Indonesia, MedCom, IDNTimes, and other news sources, as well as downloading, recording, and identifying HYBE Corporation stock data sourced from the Korea Stock Exchange (KRX), and yahoo finance.

Findings and Discussion

Findings

Descriptive Statistical Analysis Test

Table 1. Descriptive Statistical Analysis Test of HYBE Corporation's Abnormal Return Before and After Park Ji Min's Solo Debut (Descriptive Statistics)

	N	Minimum	Maximum	Mean	Std. Deviation
Abnormal Return Before Park Ji Min's Solo Debut	30	-.05829	.06351	-.0002773	.02940954
Abnormal Return After Park Ji Min's Solo Debut	30	-.05106	.08941	.0122667	.03045873
Valid N (listwise)	30				

Descriptive statistics provide an initial description of the research variables and are used to determine the characteristics of the samples used in the study. Based on Table 1, the abnormal return on HYBE Corporation shares before Ji Min's solo debut has a minimum value of -0.05829, a maximum value of 0.06351, an average (mean) of -0.0002773 and a standard deviation of 0.02940954. At the same time, the abnormal return on HYBE Corporation shares after Ji Min's solo debut has a minimum value of -0.05106, a maximum value of 0.8941, an average (mean) of 0.0122667, and a standard deviation of 0.03045873.

Table 2. Test of Descriptive Statistical Analysis of HYBE Corporation's Stock Price Before and After Park Ji Min's Solo Debut (Descriptive Statistics)

	N	Minimum	Maximum	Mean	Std. Deviation
Abnormal Return Before Park Ji Min's Solo Debut	30	173500	202000	185580.00	6430.123
Abnormal Return After Park Ji Min's Solo Debut	30	182100	294500	237763.33	36824.687
Valid N (listwise)	30				

Table 2 presents the stock price of HYBE Corporation before Ji Min's solo debut, which ranges from a minimum value of 173,500 to a maximum value of 202,000, with an average (mean) of 185,580 and a standard deviation of 6,430.123. At the same time, the HYBE Corporation stock price after Ji Min's solo debut has a minimum value of 182,100, a maximum value of 294,500, an average (mean) of 237,763.33, and a standard deviation of 36,824.687. When viewed from the share price before 202,000 and after 294,500, this indicates a reaction by investors from before to after Ji Min's solo debut, as evidenced by a significant increase in share price.

Table 3. Normality Test of Abnormal Return of HYBE Corporation Before and After the Solo Debut of Park Ji Min

	Statistic	Kolmogorov-Smirnov ^a df	Sig.
Abnormal Return Before Park Ji Min's Solo Debut	.111	30	.200 [*]
Abnormal Return After Park Ji Min's Solo Debut	.125	30	.200 [*]

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Source: SPSS 29 output results (data processed)

The test results table for abnormal return data, covering both periods before and after Park Ji Min's solo debut, indicates that the significance value (Sig.) for each period is 0.200, and the test statistic value for each group is 0.111. is 0.125, and the degree of freedom (df) is 30. These results indicate that statistically, there is insufficient evidence to reject the hypothesis that the two data sets are typically distributed. In other words, this result means that H0 is accepted or can be interpreted as indicating that the data are usually distributed.

Table 4. Normality Test of HYBE Corporation Stock Price Before and After Park Ji Min's Solo Debut (Tests of Normality)

	Kolmogorov-Smirnov ^a		
	Statistic	df	Sig.
Abnormal Return Before Park Ji Min's Solo Debut	.122	30	.200 [*]
Abnormal Return After Park Ji Min's Solo Debut	.166	30	.034

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Source: SPSS 29 output results (data processed)

The table of data normality test results for the stock price variable above shows that the stock price showed a significance level of 0.2 for the stock price before Ji Min's solo debut, which means it is greater than the profitability value of 0.05 and shows a significance level of 0.034 for the stock price after Ji Min's solo debut, which means it is smaller than the profitability value of 0.05. These results suggest that Ho is rejected, implying that the data is not normally distributed. These results indicate that Ho is rejected, or the data cannot be interpreted as normally distributed.

Table 5. Paired Sample T-Test of Abnormal Return of HYBE Corporation Before and After the Solo Debut of Park Ji Min

		Paired Samples Test									
		Paired Differences				t	df	Sig.			
	Mean	Std. Deviat ion	Std. Error Mean	95% Confidence Interval of the Difference				One- Sided p	Two- Sided p		
				Lower	Upper						
Pair 1	Before- After	-.0125 4400	.03551 606	.00648 432	-.025805 91	.000717 91	-1.935	29	.031	.063	

Source: SPSS 29 output results (data processed)

Based on the paired sample t-test, as shown in Table 5, it is known that the mean value or average change in the abnormal return variable in the period before and after Ji Min's solo debut is -0.01254400. The standard deviation value of 0.03551606 indicates the variation in the data, precisely the difference in the relevant period. In contrast, the value of 0.00648432 in the standard error of the mean illustrates how accurately the sample average represents the actual average of the population related to abnormal returns. The 95% Confidence Interval of the Difference value estimates the exact value of the difference between the two periods being compared in the interval -0.02580591 to 0.00071791. The t-statistic value of -1.935 indicates how far the sample mean is from zero, with 29 degrees of freedom (df) indicating the amount of data used to calculate the value. The value of -1.935 suggests that the difference between the two periods is lower than expected on average, which could mean a decrease or lower change in the period after Ji Min's solo debut. On the significance side, the one-sided p-value is 0.031, indicating a statistically significant difference in abnormal returns. In contrast, the two-sided p-value is 0.063, suggesting a tendency for a difference but with a slightly lower significance level.

Referring to Table 6, it is scientifically proven that HYBE Corporation experienced changes in stock prices during the study period. The hostile ranks column indicates two stock price data points after Ji Min's solo debut that are smaller than those in the previous period, with a mean of 3.00 in an amount of 6.00, which illustrates that the difference in stock prices after Ji Min's solo debut is lower than before. On the other hand, in the positive ranks column, it is known that there are 28 stock

price data after the event that is greater than the period before Ji Min's solo debut, with a mean of 16.39 in an amount of 459.00, which indicates that the stock price after Ji Min's solo debut is higher than before. The ties column shows no similarity in stock prices during the specified period.

Table 7 presents the Z value, indicating a statistically significant difference between the two conditions. The number -4.659 in the column means a substantial difference in stock prices between the two periods. The value of Asymp. Sig. (2-tailed) A p-value smaller than 0.001 suggests that the p-value is less than 0.001. This indicates that the observed difference between the two conditions is statistically significant.

Table 6. Wilcoxon Signed Rank Test of HYBE Corporation Stock Price Before and After Park Ji Min's Solo Debut

Ranks		N	Mean Rank	Sum of Ranks
HYBE Corporation Stock Price After Park Ji Min's Solo Debut - HYBE Corp. Stock Price. Before Park Ji Min's Solo Debut	Negative Ranks	2 ^a	3.00	6.00
	Positive Ranks	28 ^b	16.39	459.00
	Ties	0 ^c		
	Total	30		
a. HYBE Corporation Stock Price After Park Ji Min's Solo Debut < Stock Price Before Park Ji Min's Solo Debut				
b. HYBE Corporation Stock Price After Park Ji Min's Solo Debut > Stock Price Before Park Ji Min's Solo Debut				
c. HYBE Corporation Stock Price After Park Ji Min's Solo Debut = Stock Price of HYBE Corp. Before Park Ji Min's Solo Debut				

Source: SPSS 29 output results (data processed)

Table 7. Wilcoxon Signed Rank Test of HYBE Corporation Stock Price Before and After the Solo Debut of Park Ji Min 2 (Test Statistics)

HYBE Corporation Stock Price After Park Ji Min's Solo Debut - HYBE Corporation Stock Price Before Park Ji Min's Solo Debut	
Z	-4.659 ^b
Asymp. Sig. (2-tailed)	<.,001
a. Wilcoxon Signed Ranks Test	
b. Based on hostile ranks.	

Source: SPSS 29 output results (data processed)

Table 8. Regression Technique Test of Single Index Model Risk Beta Shares of HYBE Corporation Before Park Ji Min's Solo Debut (Coefficients^a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.000	.005		.064	.949
	KOSPI	1.820	.531	.544	3.428	.002

a. Dependent Variable: HYBE Corporation Stock Return Before Park Ji Min's Solo Debut

Source: SPSS 29 output results (data processed)

Table 9. Regression Technique Test of Single Index Model Risk Beta Shares of HYBE Corporation After the Solo Debut of Park Ji Min (Coefficients^a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.013	.006		2.378	.024
	KOSPI	.133	.789	.032	.168	.868

a. Dependent Variable: HYBE Corporation Stock Return After Park Ji Min's Solo Debut

Source: SPSS 29 output results (data processed)

The beta coefficient for the Korea Composite Stock Price Index (KOSPI) is 1.820. The positive and statistically significant beta coefficient, with a p-value of 0.002, indicates that HYBE Corporation's stock reacted strongly to overall market movements in the lead-up to Ji Min's solo debut. It can be observed that, before the event, the HYBE stock price trend tended to follow significant changes in the KOSPI index, confirming a close relationship between market trends and the company's stock performance during this period. This means that HYBE Corporation's stock returns tend to be sensitive

to changes in the KOSPI index. The significance value of 0.002 also indicates that KOSPI movements had a substantial influence on HYBE Corporation's stock returns before Park Ji Min's solo debut.

The analysis results show a relatively low beta coefficient for HYBE Corporation shares after Park Ji Min's solo debut, which is 0.133. This value indicates that HYBE Corporation stock returns in the period after Ji Min's solo debut have low sensitivity to changes in the KOSPI index. A beta coefficient close to zero indicates that this stock has low sensitivity to changes in the index or factors measured in this model. The high statistical significance value of 0.868 suggests that the relationship is not statistically significant.

Hypothesis Testing

H₁: there is a significant difference in abnormal returns before and after Park Ji Min's solo debut

H₂: there is a substantial difference in stock prices before and after Park Ji Min's solo debut

H₃: there is a significant difference in beta risk before and after Park Ji Min's solo debut. Additionally, there is a null hypothesis (H₀), which states that there is no significant difference between the variables.

Hypothesis testing will be carried out through the Paired Sample T-Test test, Wilcoxon Signed Rank Test, and Single Index Model Regression Technique. The paired sample t-test will be used if the data is proven to be normally distributed, provided that the significance level is set at a suitable level. A value smaller than 0.05 means the proposed hypothesis is accepted, and the null hypothesis is rejected. The Wilcoxon Signed-Rank Test will be used if the data is proven to be abnormally distributed, provided that the Asymptotic Distribution Is Known. Sig. (2 tailed) more petite than 0.05 means the proposed hypothesis is accepted, and the null hypothesis is rejected. The Single Index Model Regression technique will be applied to the beta risk variable, as indicated by the coefficient-beta value generated in each period. The requirement for the proposed hypothesis to be accepted is if there is a difference in the coefficient. Beta value in each period. If $\beta = 1$, the asset tends to align with the market. If the β is greater than 1, the asset is more volatile than the market, while if the β is smaller than 1, the asset is less volatile than the market. The null hypothesis will be accepted if the resulting coef. Beta values in both periods are equal to one, more than one, or less than one.

Discussion

Abnormal Return and Park Ji Min's Solo Debut

The study's findings reveal insufficient evidence to support the hypothesis (H₁) that there is a significant difference in abnormal returns before and after Park Ji Min's solo debut. Contrary to the expectations grounded in signaling theory, which suggests that substantial events should lead to observable changes in market behavior, the results indicate no significant variation of abnormal returns during the periods surrounding the debut. This suggests that either the market anticipated the debut, resulting in a muted reaction, or the event needed to be more impactful to significantly influence investor behavior. The rejection of H₁ and acceptance of the null hypothesis (H₀) indicates that Park Ji Min's solo debut did not lead to a significant difference in abnormal returns, challenging the assumption that such events should trigger noticeable market responses. This finding aligns with studies by Bahri & Fatchurrohman (2023), Hotimah & Astawinetu (2020), Santoso & Silitonga (2023), and Soraya (2023), which also found that certain events or announcements do not always lead to significant changes in abnormal returns. These studies support the notion that markets may not always react strongly to specific events, particularly when those events are anticipated or perceived as less impactful.

However, the results contrast with the findings of Cung & Rakhmat (2022), Chofifah & Suryani (2022), Lubis et al. (2023), and Machfudi & Isyнуwardhana (2023), who reported significant changes in abnormal returns following major entertainment industry events, such as artist debuts. This discrepancy could be due to differences in the events studied, market conditions, or methodologies. The market's reaction to Park Ji Min's solo debut was muted compared to other events analyzed in

these previous studies. These findings have practical implications for investors and market analysts, underscoring the importance of exercising caution when evaluating the impact of celebrity-driven events on stock prices. The results suggest that not all such events significantly affect market performance, emphasizing the importance of considering a broader range of factors when evaluating potential market impacts. For companies like HYBE Corporation, this outcome indicates that entertainment-related milestones may not always be perceived as critical drivers of stock performance, underscoring the importance of developing diversified strategies to manage investor expectations and ensure stock stability.

Stock Prices and Park Ji Min's Solo Debut

The study examined stock prices and proposed the hypothesis (H2) that "there is a significant difference in stock prices before and after Park Ji Min's solo debut." The findings confirmed this hypothesis, as H0 was rejected and H2 was accepted, indicating a significant difference in stock prices before and after the debut. The low significance value suggests that these results reflect a genuine difference in the population, making it unlikely that the observed changes occurred by chance. These findings align with the fundamental concept that significant events, such as a high-profile artist's solo debut, can impact investor behavior and stock prices. The results support signaling theory, which posits that market participants react to new, impactful information. In this case, Park Ji Min's solo debut was perceived as a significant event, influencing investor sentiment and leading to noticeable changes in stock prices.

This study's results are consistent with previous research by Lubis et al. (2023), Cung & Rakhmat (2022), and Wicaksono (2022), all of which found significant differences in stock prices before and after specific events. These studies highlight the role of substantial events as catalysts for stock price movements, emphasizing the importance of monitoring such occurrences for potential market impacts. However, the findings contrast with those of Pardiansyah et al. (2023), who found no significant difference in stock prices following similar events. This divergence could be due to differences in the events studied, market conditions, or methodologies. These findings suggest that investors and financial analysts should closely monitor significant events, such as solo debuts by prominent artists, as they can have a substantial impact on stock prices. For companies like HYBE Corporation, understanding potential market reactions to such events can inform strategies for managing investor expectations and capitalizing on favorable market conditions. These insights underscore the importance of incorporating event-driven analysis into investment strategies to effectively anticipate and respond to market fluctuations.

Beta Risk and Park Ji Min's Solo Debut

The study examined beta risk, measuring the sensitivity of HYBE Corporation's stock to changes in the KOSPI index before and after Park Ji Min's solo debut. The findings revealed a significant decrease in this sensitivity following the debut. Before its debut, a positive relationship existed between HYBE's stock and the KOSPI index, indicating that HYBE's stock price moved in line with broader market trends. After the debut, however, this relationship weakened considerably, showing little to no correlation between HYBE's stock movements and the KOSPI index. The regression analysis revealed that, prior to its solo debut, HYBE Corporation's stock was highly susceptible to changes in the KOSPI index, closely tracking overall market fluctuations. Following its debut, the stock became less sensitive to these market fluctuations, indicating a shift in its risk profile. These results support the hypothesis (H3) that there is a significant difference in beta risk before and after Park Ji Min's solo debut, leading to the rejection of the null hypothesis (H0).

This shift in beta risk suggests that Park Ji Min's solo debut had a significant impact on HYBE's stock behavior amid market volatility, indicating a change in the company's exposure to market risk. This outcome is consistent with theories suggesting that significant events can alter a stock's sensitivity to broader market movements, reflecting changes in investor perceptions and market conditions. Comparing these findings with previous research, they align with studies showing that significant events can influence a company's beta risk. However, the observed decrease in beta risk after the debut contrasts with cases where similar events increased market sensitivity, emphasizing

the unique market reaction to Park Ji Min's solo debut. These findings suggest that investors and analysts should consider how significant events, such as high-profile debuts, can alter a company's risk profile. HYBE Corporation's reduced sensitivity to the KOSPI index following its debut may indicate lower exposure to broader market volatility, which in turn influences investment strategies and risk management practices. These insights underscore the importance of continuously monitoring beta risk in response to significant corporate events, enabling a better understanding and management of the associated risks.

Conclusion

This study investigated the impact of Park Ji Min's solo debut on HYBE Corporation's stock, focusing on abnormal returns, stock prices, and beta risk. The findings revealed no significant difference in abnormal returns before and after the debut, suggesting that the market did not react as strongly as anticipated. Conversely, the study found a substantial change in stock prices, reflecting a positive market evaluation of Park Ji Min's debut. Additionally, a notable shift in beta risk indicated that HYBE's stock became less sensitive to broader market movements after the debut.

The value of this research lies in its contribution to understanding how major entertainment events, such as a high-profile solo debut, can influence stock performance and risk profiles. This study is original in its focus on Park Ji Min's debut and its detailed examination of beta risk alongside traditional stock performance metrics. The findings have practical and managerial implications, suggesting that companies like HYBE Corporation should be aware of how such events can impact investor perceptions and market dynamics. The results highlight the importance of considering event-driven risk when making investment decisions for investors.

However, this study has limitations. The focus on a single company, HYBE Corporation, limits the generalizability of the findings. Future research should expand the scope to include other major companies in the South Korean entertainment industry, particularly those within the Big Four, to assess the broader impact of solo debuts by internationally famous groups like BTS. Utilizing various analytical tools can provide additional insights into market reactions and stock performance. Future researchers are encouraged to explore these avenues to build on the foundation laid by this study.

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