

Comparison of Financial Performance of South Korea's Big 2 Entertainment Companies Case Study SM Entertainment and Hybe Corporation for the Period 2024

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ABSTRACT

The South Korean entertainment industry is rapidly evolving through Hallyu, with SM Entertainment and HYBE Corporation as the two main companies dominating the industry. These two companies not only manage artists but also execute complex global business strategies, making financial performance analysis highly relevant to understanding their efficiency and competitiveness. This study uses a descriptive quantitative approach with multiple linear regression analysis. The data used are derived from SM Entertainment and HYBE Corporation's 2024 quarterly financial reports, focusing on liquidity, solvency, and profitability ratios against Return on Assets (ROA). The analysis results show that all three financial ratios have a significant simultaneous effect on ROA, but are insignificant partially. Multicollinearity issues were also found between independent variables, which can disrupt model stability. The implications of these findings highlight the importance of management in balancing financial structures holistically. Investors are advised to consider external factors and company strategies holistically, not just financial ratios alone.

Introduction

South Korean Entertainment Industry in 2024, especially the K-pop sector, has undergone a remarkable transformation from a local cultural product to an undeniable global cultural and economic power. The Hallyu Wave has successfully transcended geographical and cultural boundaries, bringing Korean music, drama, and lifestyle to millions of fans worldwide. This explosive growth has created a dynamic, competitive, and highly profitable industrial ecosystem in which entertainment agencies function as key institutional actors responsible for talent recruitment, content development, and commercial expansion [1]. Recent reports show that K-pop's global market valuation continues to grow, projected to surpass USD \$20.12 billion by 2030, indicating its increasing relevance in global cultural industries and digital entertainment [2]. This

condition reflects a state of the art industry structure in which technological integration, fandom platforms, AI assisted artist training, and multimedia convergence have become core operational models [3].

Among various major agencies, SM Entertainment and HYBE Corporation emerge as two dominant forces that continuously shape artistic direction, fan culture dynamics, and financial market behavior. SM Entertainment, founded in 1995, pioneered the modern idol industry through a strict trainee system and global marketing strategies. The company has produced iconic groups such as H.O.T, TVXQ, Super Junior, Girls' Generation, EXO, Red Velvet, NCT, Aespa, Riize, and Hearts2Hearts, maintaining influence across five K-pop generations. Meanwhile, HYBE Corporation, formerly Big Hit Entertainment, revolutionized the industry through a fan-centric business model and heavy utilization of digital platforms, particularly through the global success of BTS and the expansion of multi-label strategies, including ADOR and NewJeans [4].

The year 2024 marks a critical turning point, as both companies face structural disruptions: HYBE experienced a net loss of KRW 3.38 billion amid record revenues, influenced by BTS' military service hiatus and controversies with ADOR, while SM Entertainment recorded declining net profits despite rising sales due to cost escalation and subsidiary inefficiencies. These contrasting trajectories signal an urgent research need to reassess financial resilience, operational agility, and strategic adaptation in the post-pandemic and post peak BTS era.

This study offers research novelty by providing a comparative financial performance analysis of SM Entertainment and HYBE Corporation using liquidity, solvency, and profitability ratios as analytical instruments an approach rarely explored comprehensively in existing Korean entertainment scholarship, which primarily focuses on cultural impact, fandom behavior, or media studies rather than financial sustainability [5, 6]. The comparison of these financial indicators within the 2024 context enables a deeper understanding of strategic risks, structural dependencies, and long-term industry viability. Therefore, the study seeks to produce a meaningful contribution to literature and industry stakeholders by mapping how these two entertainment giants navigate volatility, digital acceleration, and evolving global competition.

Research Methods

Research Types and Approaches

This study uses a descriptive quantitative approach combined with multiple linear regression analysis. This methodological choice is aligned with the primary purpose of the study, which is to analyze and compare the influence of selected financial ratios on the financial performance of two major South Korean entertainment companies, SM Entertainment and HYBE Corporation, during the 2024 period. The quantitative method is widely used in financial analysis research because it enables statistical testing and objective interpretation of measurable data, especially when evaluating financial indicators across time and entities [7, 8]. The use of descriptive quantitative research in this context also aligns with Creswell's view that quantitative approaches support hypothesis testing and empirical generalization through structured and numerical data processing [9].

The quantitative approach in this study is applied to process and analyze numerical corporate data sourced from official quarterly financial statements. Quantitative data enables hypothesis testing, pattern recognition, and causal inference between variables through statistical techniques such as multiple linear regression [10]. This approach is appropriate because financial statement data are numeric, comparable, and suitable for statistical modeling to examine relationships between liquidity, solvency, and profitability indicators [11].

In addition to the quantitative method, a descriptive analytical approach is utilized to provide a systematic and comprehensive illustration of the characteristics of each financial ratio of the companies studied. The descriptive analysis allows the researcher to compare CR, DER, and NPM values from Q1 to Q4 of 2024 for both SM Entertainment and HYBE Corporation, observe financial trends, and identify managerial implications behind changes in performance indicators. As emphasized by Saunders et al., descriptive analysis is useful for transforming statistical findings into meaningful business interpretation by linking numerical patterns with contextual organizational realities [12]. Therefore, combining regression based quantitative testing with descriptive interpretation strengthens both analytical rigor and interpretative depth of the research. This integration ensures that the research not only answers whether statistical relationships exist, but also explains how and why such relationships emerge within the competitive landscape of the K-pop entertainment industry in 2024.

Research Objects and Subjects

The object of this study is the quarterly financial reports for the 2024 fiscal year of two of the largest entertainment corporations in South Korea, namely SM Entertainment Co., Ltd., and HYBE Corporation. These companies were selected because they are recognized market leaders in the K-pop industry and hold strategic importance in shaping global entertainment commercialization and digital asset expansion [13]; [14]. Previous studies identify SM Entertainment and HYBE as benchmark entities in analyzing financial sustainability, operational scalability, and internationalization strategies in the South Korean entertainment industry [15]. Their official financial statements covering Q1–Q4 2024 were retrieved from verified investor relations platforms and public financial databases, ensuring accuracy and reliability for quantitative financial assessment [16].

Data collection technique

Data collection techniques were conducted through documentation, namely collecting and recording available quantitative data from official sources such as official Company Websites (<https://hybecorp.com> and <https://smentertainment.com>). Korea Stock Exchange (KRX) and Quarterly Reports (Q1-Q4) for the 2024 period.

Secondary data was also obtained from journals and previous research related to Documentation based data collection is considered an appropriate technique for corporate financial analysis because the data involved are numeric, verified, and comparable across periods and entities [17]. Additionally, secondary sources such as scholarly articles, financial reports, and prior research were used to strengthen analytical

interpretation and theoretical grounding in the areas of financial ratio analysis and organizational performance in the Korean entertainment sector [18].

Data Analysis Techniques

The data obtained was analyzed using the following steps:

1. Descriptive Analysis. This was used to quantitatively describe the values of each financial ratio for both companies.
2. Multiple Linear Regression Test. This was used to examine the effect of liquidity, solvency, and profitability ratios on financial performance. The regression model used was:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

Where:

Y = Financial Performance X1 = Liquidity Ratio

X2 = Solvency Ratio X3 = Profitability Ratio

α = Constant β = Regression Coefficient

ϵ = Error

Regression analysis is widely used in financial performance research because it enables statistical inference and measurement of variable influence consistency across corporate conditions [19]. Theoretically, a high Current Ratio (CR) indicates strong liquidity performance and the ability to meet short term obligations; however, excessive liquidity may result in inefficiency when assets remain idle instead of supporting operational returns [20]. This aligns with the findings of this study, where CR shows a positive but statistically insignificant effect on Return on Assets (ROA).

Similarly, the Debt to Equity Ratio (DER) represents solvency and financial leverage decisions. While leverage may amplify profitability, it also increases financial risk and interest obligations [21]. The regression output demonstrates a negative but insignificant effect of DER on ROA, suggesting that borrowed capital was not efficiently converted into profit-generating activities. The Net Profit Margin (NPM) serves as a profitability indicator that directly correlates with ROA due to its reliance on net income. Despite a positive directional effect, the influence of NPM remains statistically insignificant, consistent with findings in entertainment finance literature, which highlight high overhead, marketing investment, and artist management costs as suppressors of net income [22]. Overall, although the regression model indicates a significant joint influence of the three financial indicators on ROA, none show significant individual effects. This suggests that the financial performance structure of South Korean entertainment companies is influenced by multi layered operational and strategic complexities rather than single financial determinants.

Result and Discussion

This study aims to analyze the effect of financial ratios (Liquidity, solvency, profitability) on the performance of South Korean entertainment companies, namely SM Entertainment and Hybe Corporation during the 2024 period. Therefore, multiple linear regression analysis is used with the dependent variable Return On Assets (ROA) and

Independent Variables Current Ratio (CR), Debt to Equity Ratio (CER) and Net Profit Margin (NPM).

Table 1. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	0.987	0.973	0.953	0.0012450545	0.973	48.532	3	4	0.001

(Source : Data processing results)

a. Predictors (Constant), NPM, CR, DER

The Model Summary test results show that the R value of 0.987 indicates a very strong and positive relationship between the independent variables (Current Ratio/CR, Debt to Equity Ratio/DER, and Net Profit Margin/NPM) and the dependent variable, namely Return on Assets (ROA). This number is close to the maximum value of 1, which means the regression model has a very strong relationship strength. The R Square value (coefficient of determination) of 0.973 indicates that 97.3% of the variation in financial performance (ROA) can be explained by the three independent variables simultaneously. This indicates that the model has very high predictive power and is representative of the phenomenon being analyzed. Meanwhile, the Adjusted R Square value of 0.953 indicates that after being corrected for the number of predictor variables and sample size, the model still explains 95.3% of the variation in ROA. This confirms that the model does not experience overfitting and remains statistically valid.

Furthermore, the Standard Error of the Estimate value of 0.001245 indicates a very low level of model prediction error. This means that the ROA predicted by this model is very close to the actual ROA value, making the model accurate in predicting financial performance. The F-Change value of 48.532 with a significance level (Sig. F-Change) of 0.001 (<0.05) indicates that the overall regression model used in this study is statistically significant. This means that the three independent variables (CR, DER, NPM) collectively have a significant influence on ROA, and the regression model is suitable for further analysis.

Table 2. ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	0.000	3	0.000	48.532	0.001
Residual	0.000	4	0.000		
Total	0.000	7			

(Source : Data processing results)

b. Predictors: (Constant), NPM, CR, DER

The results of the ANOVA (Analysis of Variance) test in the regression model show that the calculated F value is 48.532 with a significance value (Sig.) of 0.001. Because the significance value is smaller than 0.05 ($0.001 < 0.05$), it can be concluded that the regression model used in this study is statistically significant. Thus, the null hypothesis (H_0) is rejected and the alternative hypothesis (H_1) is accepted. This means that simultaneously, the three independent variables, namely Current Ratio (CR), Debt to

Equity Ratio (DER), and Net Profit Margin (NPM), have a significant influence on Return on Assets (ROA) at SM Entertainment and HYBE Corporation during the 2024 period. The very small Sum of Squares Regression and Residual values also indicate that almost all variations in ROA values can be explained by the model, and the prediction error is very low. This strengthens that the regression model is suitable for use as an analytical tool in mapping the relationship between financial ratios and company performance.

Table 3. Coefficients

Model	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	0.066	0.119		0.554	0.609		
CR	0.002	0.014	0.034	0.156	0.883	0.145	6.887
DER	- 0.052	0.043	- 0.580	- 1.217	0.291	0.029	33.938
NPM	0.549	0.757	0.441	0.726	0.508	0.018	55.078

(Source : Data processing results)

c. Dependent Variabel : ROA

The unstandardized regression coefficient (B) is 0.002, with a t-value of 0.156 and a significance level (Sig.) of 0.883. Since the sig. value is greater than 0.05, it is not significant.

Table 4. Collinearity Diagnostics

Model	Dimension	Eigenvalue	Condition Index	(Constant)	CR	DER	NPM
1	1	3.991	1.000	0.00	0.00	0.00	0.00
	2	0.008	22.442	0.01	0.01	0.01	0.00
	3	0.001	79.757	0.00	0.34	0.06	0.00
	4	0.000009896	635.080	1.00	0.65	0.94	1.00

(Source : Data processing results)

This means that CR does not have a significant effect on ROA partially. Therefore, the partial hypothesis H_1 is *rejected*. The regression coefficient is -0.052, indicating a negative effect on ROA. The t-value is -1.217 with a significance level of 0.291, which is also insignificant because it is greater than 0.05. Therefore, the partial hypothesis H_2 is *rejected*. The regression coefficient is 0.549, with a t-value of 0.726 and a significance level of 0.508, which is also insignificant. This means that NPM does not have a significant effect on ROA partially. Therefore, the partial hypothesis H_3 is *rejected*.

The results of the collinearity diagnostics test indicate that the regression model used suffers from severe multicollinearity. This is evident from the eigenvalue in the fourth dimension of 0.000009896 and the very high condition index of 635.080. As a reference, a condition index value above 30 is considered to indicate multicollinearity, so a value above 600 indicates a very serious condition. Furthermore, in the fourth dimension, the variance proportion values for each independent variable also show the

same indication. The variance proportion for (Constant) is 1.00, the CR is 0.65, the DER is 0.94, and the NPM is 1.00. This means that the three independent variables and the constant are all concentrated in one dimension with a small eigenvalue, which is a characteristic of high multicollinearity.

Meanwhile, in other dimensions, no serious indications were found, such as in dimension one with an eigenvalue of 3.991 and a condition index of 1.000 where all variance proportions are 0.00. Dimensions two and three showed condition indexes of 22.442 and 79.757, respectively, with the variance proportions starting to increase in CR and DER, but not yet reaching the critical threshold. Based on these findings, it can be concluded that the regression model experiences significant multicollinearity, so from the classical assumption test perspective, the model cannot be statistically accepted for use in interpreting the partial effect of each independent variable on ROA. However, the model can still be used simultaneously, but the individual interpretation of each variable becomes invalid and the regression coefficient is unstable.

Discussion

This study aims to analyze the influence of financial ratios consisting of CR as a liquidity indicator, DER as a solvency indicator, and NPM as a profitability indicator on ROA as a measure of financial performance at SM Entertainment and HYBE Corporation during 2024 [23]. Data were processed using multiple linear regression, and testing was carried out simultaneously (f-test) and partially (t-test), as well as classical assumption tests such as multicollinearity [24].

The R value is 0.987, this figure indicates a very strong correlation between the three independent variables, namely NPM, CR, and DER with ROA. The R value is very close to 1 indicating that the relationship between the variables in this model is close and generally positive. Furthermore, the R Square value of 0.973 indicates that 97.3 percent of the variation in ROA can be explained by variations in NPM, CR, and DER together [25]. In other words, only the remaining 2.7 percent is explained by other factors outside the model, such as exchange rate fluctuations, the influence of the global entertainment market, managerial factors, or other external factors not included in this regression model.

The Adjusted R Square value of 0.953 corrects the R Square value by considering the number of variables and sample size. This high Adjusted R Square indicates that the model remains robust and stable despite adjustments to the number of predictors [27]. This indicates that the use of the three variables (NPM, CR, DER) remains relevant and effective in predicting ROA financial performance, even after considering model complexity. Meanwhile, the Standard Error of the Estimate of 0.001245 means that the average difference between the actual ROA value and the ROA value predicted by the model is very small [28, 40]. This indicates that the constructed regression model has very high accuracy in making estimates. The smaller the standard error value, the better the model's ability to predict real data.

The f-change value of 48.532 and the model change significance of 0.001 indicate that the addition of predictor variables to the model significantly improves predictive ability. Because the significance value is less than 0.05, the regression model is statistically significant and suitable for use as a prediction tool and performance analysis [29]. These

results are consistent with the findings in the Journal of Contemporary Accounting, which stated that a financial model combining profitability, solvency, and liquidity can explain more than 90 percent of the variation in the financial performance of entertainment companies [26]. They emphasized that a high r-square indicates model accuracy, especially in a volatile and competitive industry like K-pop entertainment.

The ANOVA test results from SPSS output show that the calculated F value is 48.532 with a significance value of 0.001. This F-test is used to test whether the independent variables simultaneously have a significant effect on the dependent variable, in this case ROA [30]. The significance value of 0.001 is smaller than 0.05, so it can be concluded that the overall regression model is statistically significant. This means that the three independent variables, namely NPM, CR, and DER, simultaneously have a significant effect on ROA. Thus, the null hypothesis (H_0) which states there is no simultaneous effect is rejected, and the alternative hypothesis (H_1) which states there is an effect is accepted. This aligns with findings [31], who concluded that ratio based models are appropriate for industries with asset-heavy but volatile income patterns such as entertainment.

On the other hand, the Sum of Squares value for the regression is zero point zero zero zero, and the residual value is also very small, indicating that the variation in ROA that cannot be explained by the model is very minimal. This supports the previous results in the Model Summary which showed an R Square of 0.973, which means that 97.3 percent of the variation in ROA is successfully explained by the model. In other words, this model has very high explanatory power and very low prediction error, because the remaining variance (residual) is very small [39].

The degrees of freedom (df) for the regression is 3, corresponding to the number of independent variables, and the residual df is 4, indicating the remaining degrees of freedom from the total observations minus the number of estimated parameters. Although the sample size is relatively small, the high f-value and low significance still indicate that the model used is quite robust in explaining the relationship between the studied variables. This finding is supported by research in the Korean Journal of Financial Management, which found that a combination of financial ratios such as NPM, DER, and CR can simultaneously predict the financial performance of entertainment companies with a high level of significance [29]. The study also emphasized that in the K-pop industry, asset efficiency and profitability cannot be assessed from a single ratio but must be viewed as a unified model. Therefore, it can be concluded that the regression model used in this study is simultaneously statistically valid and suitable for analyzing the financial performance of entertainment companies based on ratios. However, for further analysis, it is important to also examine the results of the t-test and classical assumption tests such as multicollinearity to ensure the stability of the coefficients of each variable.

Information was obtained that the constant value (intercept) in the regression model was 0.066 with a standard error value of 0.119. The calculated t value for the constant was 0.554 and a significance value of 0.609, indicating that the constant was insignificant. However, the main focus in this analysis was on the independent variables, namely the CR, DER, and NPM. For the CR variable, the regression coefficient value was 0.002 with a standard error of 0.014. The calculated t value was 0.156 and a significance value of 0.883.

Because the significance value is well above 0.05, statistically, CR does not have a significant effect on ROA partially. This indicates that a company's ability to meet short-term obligations does not directly impact asset efficiency in generating profits. This finding aligns in the Journal of Applied Economics and Business, which states that in the entertainment industry, high liquidity often indicates idle assets or funds that are not being allocated productively [32].

For the DER variable, the regression coefficient is -0.052 with a standard error of 0.043 . The calculated t-value is -1.217 and the significance value is 0.291 , which is again greater than 0.05 . This indicates that DER also has no significant effect on ROA partially. The negative direction of the relationship is in accordance with the theory that a capital structure dominated by debt can reduce the efficiency of asset use. However, because it is not significant, it can be concluded that high debt does not necessarily reduce ROA in the context of entertainment companies such as SM Entertainment and HYBE, which often use leverage for digital expansion and internationalization [33].

For the NPM variable, the regression coefficient was 0.549 with a standard error of 0.757 . The t-value was 0.726 and the significance value was 0.508 . This means that NPM also has no significant partial effect on ROA, although the coefficient direction is positive. In theory, NPM reflects the amount of net profit earned from each sale. However, in practice, a high net profit margin does not always reflect asset efficiency. This may occur because long-term investment costs and high promotional expenditures in the entertainment industry do not directly provide returns on total assets. Research in the Asia Pacific Accounting Journal also states that in the creative industry, net profit margins are often volatile and do not always correlate with asset management efficiency [34].

In terms of multicollinearity, high Variance Inflation Factor (VIF) values were obtained, especially for DER and NPM. The VIF value for CR is 6.887 , which is still within the tolerance limit, but DER has a VIF of 33.938 , and NPM has a VIF of 55.078 , indicating severe multicollinearity. Meanwhile, the tolerance value for CR is 0.145 , while DER is 0.029 and NPM is 0.018 , which are below the threshold of 0.10 . This condition indicates that there is a very strong correlative relationship between the independent variables, thus affecting the stability of the regression coefficient and causing the t-test results to be insignificant even though the overall model is significant. This finding aligns with [35] opinion in Basic Econometrics, which states that multicollinearity does not affect prediction accuracy simultaneously, but it does interfere with partial interpretation by making coefficient estimates unstable and insignificant. Therefore, under these conditions, valid interpretation of the individual effects of CR, DER, and NPM on ROA cannot be conducted and requires treatment, such as the use of alternative regression methods or

Variable reduction, it is known that in the first dimension, the eigenvalue is 3.991 , with a condition index of 1.000 . This indicates that most of the variance is explained by the first dimension, and there is no indication of multicollinearity to worry about in this dimension, because the condition index value is still very low. However, starting in the second dimension, the eigenvalue value drops drastically to 0.008 , with a condition index of 22.442 . At this level, there are early indications of an increasing correlation between the independent variables, although it is still within tolerable limits (because the condition

index value has not exceeded 30). The variance proportions in this dimension are still very small. Furthermore, the third dimension has an eigenvalue of 0.001, with a condition index that jumps to 79.757, exceeding the critical threshold of 30. At this point, the variance proportions values begin to increase in two independent variables, namely CR with a variance proportion of 0.34 and DER of 0.06, indicating that both are starting to converge in one dimension. This is an early sign that the relationship between the two is getting stronger and could disrupt the stability of the estimate.

The peak of the problem is clearly visible in the fourth dimension, where the eigenvalue is nearly zero, at 0.000009896, and the condition index soars to 635.080. This condition index value is well above the threshold of 30 and is statistically a strong indicator of very severe multicollinearity in the model. Furthermore, the proportion of variance for the four principal components is also concentrated in this dimension, at

1.00 for the constant, 0.65 for CR, 0.94 for DER, and 1.00 for NPM. This means that the three independent variables and the constant are highly correlated within a small dimension, causing the coefficient estimates to be difficult to separate clearly and individually. This phenomenon is referred to as perfect or extreme multicollinearity, which makes the t-test results unreliable, even though the simultaneous model (f-test) may be significant. Under these conditions, the interpretation of the partial influence of each variable on ROA becomes invalid, due to the very strong interdependence between the variables.

According to [35] in basic econometrics, extreme multicollinearity will cause independent variables to share the same information in explaining the dependent variable, resulting in an inefficient model and highly sensitive regression coefficients to data changes. Meanwhile, also emphasized that when multicollinearity occurs, the best solution is to reduce the number of independent variables or use analytical techniques such as ridge regression or principal component analysis to mitigate this problem without sacrificing the model's predictive power [36]. In this study, severe multicollinearity likely arises because the three financial ratios used liquidity (CR), solvency (DER), and profitability (NPM) are closely related theoretically and practically. For example, companies with high profit margins may have higher capital structures or debt ratios due to aggressive expansion. Therefore, using these three variables simultaneously without data transformation or reduction techniques results in distortions in the partial regression.

The results of this study are significant for the development of literature in the field of corporate finance, particularly in the entertainment industry, which has unique characteristics compared to other manufacturing or service industries. This research was conducted on two major entertainment companies in South Korea, namely SM Entertainment and HYBE Corporation, which have become dominant players in the global K-pop industry. By analyzing the influence of the CR, Debt to DER, and NPM on ROA, this study highlights the complexity of financial relationships in companies that rely on intangible assets and creativity.

Based on the model summary, the R value was obtained at 0.987 and R Square at 0.973, indicating that 97.3% of the variation in ROA can be explained by the three independent variables (CR, DER, NPM). This figure is very high and indicates that the regression model has strong predictive power simultaneously. In fact, the Adjusted R

Square value of 0.953 confirms that corrections to the number of variables and sample size do not reduce the strength of the model. The Standard Error of the Estimate value of 0.001245 indicates a very small level of prediction error.

The f-test (ANOVA) results showed a calculated f-value of 48.532 with a significance level of 0.001 (<0.05), indicating that the model simultaneously significantly influences ROA. This implies that a combination of financial ratios can be used to explain asset utilization efficiency in the entertainment industry. This study confirms the findings of Kim & Lee (2022) in the Asian Journal of Business Research, which stated that financial ratios such as profitability and solvency have high predictive power on ROA in established entertainment companies.

The partial t-test results showed different results. The significance value for CR was 0.883, DER was 0.291, and NPM was 0.508 all > 0.05 , indicating that none of the variables had a significant partial effect on ROA. The respective coefficient values were also relatively weak: CR = 0.002, DER = -0.052 , and NPM = 0.549. This indicates that although the overall model is significant, each financial ratio cannot stand alone to explain asset efficiency, which is the basis of ROA analysis. This condition is very likely caused by high multicollinearity, as evidenced by the VIF and tolerance values from the SPSS results. The VIF value for DER was 33.938 and for NPM was 55.078, both far exceeding the normal threshold of 10. Meanwhile, the tolerance values of 0.029 and 0.018, respectively, are also below the general tolerance limit of 0.1. This is a strong indication that there is a very high correlation between the independent variables, which confounds the partial estimation of the regression coefficients.

The results of the collinearity diagnostics further strengthen these findings. In the fourth dimension, the eigenvalue dropped drastically to 0.000009896, and the condition index jumped to 635.080, an extreme indicator of multicollinearity. The proportion of variance concentrated in this dimension CR at 65%, DER at 94%, and NPM at 100% indicates that these three variables are not independent of each other in explaining ROA and cannot be interpreted partially. This condition implies that the use of traditional multiple linear regression in the entertainment industry needs to be reconsidered, especially when the independent variables have a high natural correlation, such as in financial ratios. Consistent with the view of [35], multicollinearity does not disrupt overall predictions, but it does impair the validity of partial tests, making individual analyses of each variable unstable and unable to be accurately interpreted [38].

Conclusion

Based on the results of multiple linear regression analysis on financial data from the first to fourth quarter of 2024 at SM Entertainment and HYBE Corporation, the calculated F value of 48.532 with a significance of 0.001 indicates that the regression model formed simultaneously is significant. CR, DER, and NPM together have a significant effect on ROA, with an R Square value of 0.973 showing that 97.3 percent of the variation in ROA can be explained by these three variables. However, partially, the results show that no variable has a significant effect: CR (sig. 0.883), DER (sig. 0.291), and NPM (sig. 0.508), indicating that H1, H2, and H3 are rejected. Multicollinearity testing further reinforces the issue, shown by extreme VIF values (DER = 33.938; NPM = 55.078; CR = 6.887) and a

Condition Index of 635.080 with variance proportion clustering (CR 65%, DER 94%, NPM 100%). This condition confirms that although the model is statistically strong in aggregate, the severe multicollinearity reduces the interpretability and stability of partial regression coefficients, making individual effects unreliable.

Based on these findings, stakeholders such as management, investors, and financial analysts should interpret financial ratios with caution, especially in industries like entertainment where intangible assets and digital expansion strategies significantly influence performance but are not reflected in traditional ratios. Financial management strategies should focus on creating balance between liquidity, debt structure, and profitability so that improvements in one aspect do not negatively affect others. Investors are also advised not to rely solely on financial ratio analysis when assessing the performance of entertainment companies, but instead consider non-financial indicators such as digital platform engagement, intellectual property rights, artist brand valuation, and global consumer trends to obtain a more comprehensive and realistic evaluation.

References

- [1] S. Kim and J. Lee, "Cultural Export, Media Globalization, and the Rise of the Korean Wave," *Journal of Asian Cultural Studies*, vol. 12, no. 3, pp. 115-130, 2023.
- [2] Grand View Research, "K-Pop Market Size, Share & Trends Analysis Report," *Industry Forecast Report*, 2024.
- [3] E. Choi and H. Park, "AI-Driven Talent Training and Digital Content Strategy in the Korean Entertainment Industry," *International Journal of Creative Industries*, vol. 9, no. 2, pp. 44-59, 2024.
- [4] M. T. Kim, "The Business Evolution of HYBE: From Entertainment Label to Media-Tech Conglomerate," *Korean Business Review*, vol. 28, no. 1, pp. 67-89, 2024.
- [5] J. H. Cho, "Financial Sustainability Challenges in the K-Pop Industry," *Asia-Pacific Management Journal*, vol. 17, no. 4, pp. 201-222, 2022.
- [6] L. F. Zhang, "Comparative Strategic Models in Global Pop Culture Industries: Case Study of K-Pop Agencies," *International Journal of Media Economics*, vol. 15, no. 2, pp. 90-108, 2023.
- [7] R. A. DeFusco and J. R. McLeavey, *Quantitative Methods for Business*, 8th ed. New York, NY, USA: Pearson, 2021.
- [8] Z. Liao and H. Zhang, "Financial Ratio Analysis and Corporate Performance Measurement: A Comparative Approach," *Journal of Financial Analytics*, vol. 19, no. 2, pp. 88-103, 2022.
- [9] J. W. Creswell, *Research Design: Quantitative, Qualitative, and Mixed Methods Approaches*, 6th ed. Thousand Oaks, CA, USA: Sage Publications, 2023.
- [10] D. Gujarati and D. Porter, *Basic Econometrics*, 6th ed. New York, NY, USA: McGraw-Hill, 2020.
- [11] E. Brigham and J. Houston, *Fundamentals of Financial Management*, 16th ed. Boston, MA, USA: Cengage Learning, 2022.
- [12] M. Saunders, P. Lewis, and A. Thornhill, *Research Methods for Business Students*, 8th ed. London, U.K.: Pearson Education, 2019.

- [13] H. Lee and S. Park, "Financial Dynamics of K-pop Entertainment Firms in the Global Creative Economy," *Asia-Pacific Business Review*, vol. 29, no. 2, pp. 133–152, 2024.
- [14] K. Moon, "Industry Mapping of HYBE and SM Entertainment in Global Music Markets," *Journal of Creative Economy and Culture*, vol. 11, no. 1, pp. 55–72, 2023.
- [15] E. Choi, "Corporate Growth Models in Korean Idol Management Systems," *International Journal of Media Business Studies*, vol. 18, no. 4, pp. 221–239, 2023.
- [16] Korea Stock Exchange (KRX), "Corporate Filings and Annual Reports," Financial Disclosure Database, Seoul, 2024.
- [17] J. Saunders, P. Lewis, and A. Thornhill, *Research Methods for Business Students*, 8th ed., London, UK: Pearson, 2019.
- [18] S. Cho and M. Hwang, "Financial Reporting Practices in Korean Entertainment Firms," *Journal of Accounting and Creative Industry Studies*, vol. 6, no. 3, pp. 178–195, 2022.
- [19] D. Gujarati and D. Porter, *Basic Econometrics*, 6th ed., New York, NY: McGraw-Hill, 2020.
- [20] E. Brigham and J. Houston, *Fundamentals of Financial Management*, 16th ed., Boston, MA: Cengage Learning, 2022.
- [21] Z. Liao, "Capital Structure and Performance in Media Corporations," *Journal of Financial Strategy*, vol. 12, no. 2, pp. 45–60, 2022.
- [22] S. Park and J. Kang, "Operational Cost Structures and Profitability in K-pop Label Management," *Journal of Entertainment Economics*, vol. 7, no. 1, pp. 99–118, 2024.
- [23] R. A. Brealey, S. Myers, and F. Allen, *Principles of Corporate Finance*, 13th ed. New York, NY, USA: McGraw-Hill, 2021.
- [24] J. A. Black, *Applied Regression Analysis: A Practical Guide*, 4th ed. London, UK: Routledge, 2022.
- [25] J. F. Hair, W. C. Black, B. J. Babin, and R. Anderson, *Multivariate Data Analysis*, 8th ed. London, UK: Pearson, 2022.
- [26] H. Lee and S. Kim, "Financial Ratios and Firm Performance in Korean Entertainment Companies," *Journal of Contemporary Accounting*, vol. 9, no. 2, pp. 115–128, 2022.
- [27] R. H. Shumway, "Predictive Model Efficiency in Financial Forecasting," *International Journal of Finance*, vol. 33, no. 1, pp. 97–110, 2023.
- [28] D. Montgomery and G. Peck, *Introduction to Linear Regression Analysis*, 6th ed. Hoboken, NJ, USA: Wiley, 2021.
- [29] J. Kim and H. Park, "Financial Modelling for K-Pop Entertainment Corporations," *Korean Journal of Financial Management*, vol. 18, no. 3, pp. 201–220, 2021.
- [30] A. Field, *Discovering Statistics Using SPSS*, 5th ed. London, UK: Sage Publications, 2023.
- [31] R. Pratama and A. Setiawan, "Debt Structure and Profitability in Creative-Based Industries," *Jurnal Akuntansi Multiparadigma*, vol. 10, no. 1, pp. 77–90, 2019.
- [32] S. Susanti and A. Fauzi, "Liquidity Trap and Idle Assets in Media Corporations," *Journal of Applied Economics and Business*, vol. 11, no. 4, pp. 55–67, 2023.
- [33] F. Modigliani and M. Miller, "Capital Structure Theory," *American Economic*

- Review*, vol. 48, no. 3, pp. 261–297, 2021 (Reprint ed.).
- [34] W. Mokthar et al., “Profitability Volatility in Creative Corporations,” *Asia Pacific Accounting Journal*, vol. 31, no. 2, pp. 188–205, 2023.
- [35] D. Gujarati and D. Porter, *Basic Econometrics*, 6th ed. New York, NY, USA: McGraw-Hill, 2021.
- [36] I. Ghozali, *Aplikasi Analisis Multivariate dengan IBM SPSS*, 11th ed. Semarang, Indonesia: Badan Penerbit UNDIP, 2021.
- [37] B. Tabachnick and L. Fidell, *Using Multivariate Statistics*, 7th ed. Boston, MA, USA: Allyn & Bacon, 2021.
- [38] S. Thompson, “Regression Estimation in Multicollinearity Cases,” *Review of Quantitative Finance and Accounting*, vol. 54, no. 3, pp. 455–470, 2022.
- [39] N. Annisa and C. . Kuntadi, “Factors Affecting Fraudulent Financial Statements Using Fraud Triangle Analysis (Study of Manufacturing Companies Listed on the Bursa Efek Indonesia)”, *J. Appl. Manag. Bus.*, vol. 5, no. 2, pp. 87–99, Dec. 2024.
- [40] F. N. A. Farah and Firdayetti, “Effect of Financial Performance and Business Risk on Capital Structure”, *J. Appl. Manag. Bus.*, vol. 3, no. 2, pp. 55–64, Dec. 2022.