

## Impact of Corporate Financing Decisions on Firm Value of Listed Hydropower Companies in Nepal

Bhuvaneshwar Bhatta 

MBA Scholar, Apex College, Mid-Baneshwor, Kathmandu, Nepal

### ARTICLE INFO

#### Corresponding Author

Bhuvaneshwar Bhatta

#### Email

bhuvaneshwar.bhatta022@  
apexcollege.edu.np

#### Article History

Received: 10 November 2024

Revised: 26 December 2024

Accepted: 02 February 2025

#### Cite

Bhatta, B. (2025). Impact of corporate financing decisions on firm value of listed hydropower companies in Nepal. *Apex Journal of Business and Management (AJBM)*, 4(1), 77–88. <https://doi.org/10.61274/apxc.2025.v04i01.007>

### ABSTRACT

This study investigates the impact of corporate financing decisions on the market value of listed hydropower companies in Nepal. Specifically, it examines how financial metrics influence firm value, as measured by market capitalization. The analysis is based on 21 listed hydropower companies in Nepal from 2017 to 2023, comprising 147 observations. The study employs descriptive statistics, correlation analysis, and multiple regression analysis to assess the relationship between the dependent variable (firm value) and five independent variables: earnings per share, net worth per share, return on assets, current ratio, and debt-to-equity ratio. The results reveal that net worth per share has a borderline significant impact on firm value, suggesting a modest role of shareholder equity in market performance. More notably, the debt-to-equity ratio significantly influences firm value, indicating that a balanced capital structure enhances market valuation. Companies with optimal leverage levels appear to be better positioned for market growth. The regression model's F-statistic confirms the collective significance of the financing variables in influencing firm value within the hydropower sector. This study provides actionable insights for stakeholders, suggesting that hydropower companies should focus on achieving a balanced capital structure to optimize debt and equity ratios. Strengthening shareholder equity and carefully managing leverage are critical for enhancing market value and ensuring financial stability.

*Keywords:* stock exchange, liquidity management, financial sustainability, shareholder value maximization, regulatory framework

### Introduction

The hydropower industry is critical to Nepal's energy production and economic development, playing a significant role in the nation's electricity supply and promoting sustainable growth (Mishra et al., 2017). Hydropower companies typically require substantial capital for their projects, making

financial decisions a crucial factor influencing their economic performance and long-term viability. Decisions on financing, such as the mix of debt, equity, and retained earnings, directly impact a company's market value and financial stability. The corporate financing decisions made by firms in terms of capital structure, asset management, and

liquidity are central to determining their market performance (Van Horne & Wachowicz, 2009).

The overarching goal of any firm is to maximize its value to benefit shareholders by increasing their wealth. In Nepalese hydropower companies, key financing decisions, including debt levels, asset utilization, and liquidity management, have a considerable impact on firm value. Effective management of these elements is reflected in stock market performance and investor perceptions. This study differs from previous research by examining whether financing decisions in an emerging market align with value-maximizing objectives (AI Mutairi et al., 2011).

Firm value, often gauged through market capitalization, is an essential indicator of a company's ability to generate profits, sustain growth, and create shareholder wealth. Financial decisions, such as capital structure and liquidity management, directly influence this value, with metrics like debt-to-equity ratio, current ratio, and return on assets playing pivotal roles in shaping investor confidence and market valuation (Permata et al., 2020; Myers, 2001). Understanding these dynamics is crucial for stakeholders in the hydropower sector to make informed financial decisions that optimize long-term value (Tan et al., 2012).

### Problem Statement

This study aims to address the gap in existing literature by examining the relationship between corporate financing decisions and firm value for listed hydropower companies in Nepal. While prior research has explored the impact of corporate financing on firm value (Handriani & Robiyanto, 2018), there is limited focus on the specific financial metrics—such as asset turnover, liquidity, debt-to-equity ratio, and return on assets—within the context of Nepalese hydropower companies. These companies face unique challenges in financing large-scale projects due to their capital-intensive nature, requiring an optimal mix of debt, equity, and internal funds (Pike & Neale, 2009). Corporate financing decisions, including capital structure and liquidity management, directly influence profitability and market valuation, yet a clear understanding of how these factors collectively

affect firm value remains under-explored in the hydropower sector.

The rationale behind this study is to provide a more comprehensive understanding of how financing decisions, particularly in emerging markets like Nepal, can influence the financial performance and market value of hydropower firms. By investigating key financial metrics and their relationship with firm value, this research will offer valuable insights for managers, investors, and policymakers aiming to optimize the financial strategies of hydropower companies. Furthermore, this study will contribute to the broader body of knowledge on corporate financing in the hydropower sector of developing countries, facilitating more informed decision-making and improving financial sustainability (Awan et al., 2010; Jensen, 2001).

### Research Objective

The major objective of this study is to analyze the impact of corporate financing decisions on firm value of listed hydropower companies in Nepal.

### Literature Review

The concept of financing decisions and their impact on firm value has been extensively studied, with Donaldson (1961) being the first to introduce the pecking order theory. According to this theory, firms prefer internal funds (retained earnings) over debt and external equity due to the informational asymmetry between the company and external investors. In cases where external funds are needed, companies favor debt over issuing new equity (Skinner & Soltes, 2011). This preference for internal finance is attributed to its lower cost, as it avoids the need for loan repayments or equity issuance, which can strain the firm's financial position (Mai, 2010).

The dividend policy of a company is another critical factor influencing its value. Dividends are perceived as indicators of a company's profitability and ability to generate returns (Robiyanto et al., 2017). Investment decisions also play a significant role in determining the firm's financial performance. Tyastari et al. (2017) argued that the investment decisions that focus on high returns at manageable

risks tend to increase a company's worth, thus enhancing shareholder wealth (Handriani & Irianti, 2015).

The trade-off theory, proposed by Myers (1984), posits that firms seek an optimal capital structure by weighing the tax benefits of debt against bankruptcy costs. Pleshko et al. (2014) examined the role of strategic alignment and marketing decisions in improving market share and profitability, finding that consistent strategies tend to result in higher market shares but do not necessarily improve return on assets (ROA). Hackbarth and Sun (2024) explored the impact of debt on corporate investment and financing dynamics, emphasizing that firms might adjust their leverage based on the nature of their investment opportunities, highlighting the importance of long-term financing for stable growth.

Focusing on the hydropower sector, studies such as Markannen and Braeckman (2019) have examined the financing challenges of sustainable hydropower projects in emerging markets, pointing out that public opposition and long-term capital requirements make financing such projects difficult. Similarly, Nasab (2012) analyzed the financial aspects of small hydropower projects in Malaysia, emphasizing cash flow projections to aid investors in making informed decisions. This highlights the importance of understanding cash flows and financing mechanisms for hydropower projects in developing countries.

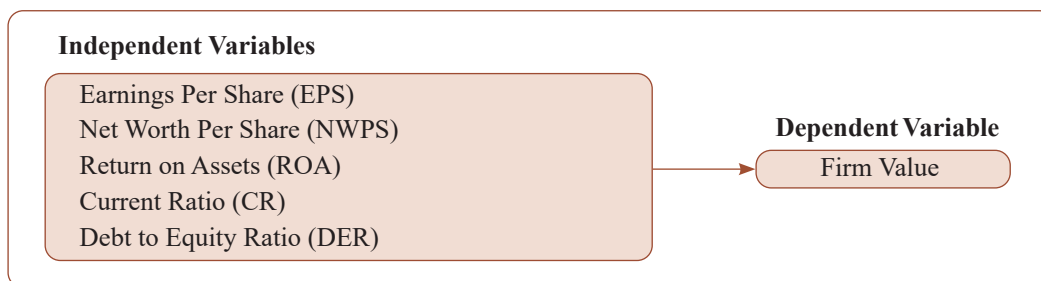
Turning to Nepal, Rajbanshi (2019) studied the capital structure of Nepalese hydropower companies, identifying profitability, liquidity, and tax shields as key determinants influencing debt decisions. Lamichhane and Shrestha (2021) found that the debt-to-capital ratio positively affects financial performance, whereas the debt-to-asset ratio had a negative effect. Subedi (2018) examined investment constraints for hydropower companies in Nepal, concluding that internal cash flows play a critical role in financing new projects, and highlighting the challenges posed by capital market frictions. The study suggested that government intervention is necessary to ensure better access to financing.

While much of the literature has explored corporate financing decisions across various sectors and regions, few studies have specifically addressed the impact of these decisions on the market value of hydropower companies in Nepal. The majority of research focuses on long-term capital structures or the role of debt and equity without considering the unique financing needs of the hydropower sector, which often involves large upfront investments and long gestation periods. Moreover, existing studies, such as those by Aras and Yildirim (2018) and Pleshko et al. (2014), tend to focus on larger companies or established markets, leaving a gap in research on smaller or emerging market companies. Studies like those by Markannen and Braeckman (2019) and Rajbanshi (2019) primarily focus on long-term financing and tax advantages but do not adequately address short-term financing, which is also crucial for hydropower projects. Additionally, factors such as government subsidies, regulatory frameworks, political instability, and environmental concerns, which significantly influence financing decisions in Nepal's hydropower sector, have largely been overlooked. According to (Chiluwal & Mishra, 2018; Chiluwal & Mishra, 2017), internal cash flows and leverage are crucial determinants influencing investment decisions in this sector, highlighting the interdependence between financing constraints and investment capabilities. Maskey and Mishra (2018) further argues to improve productivity through safe working culture at hydropower sites (Lama et al., 2019; Mishra et al., 2019) by using project management practices (Mishra, 2020).

Therefore, this study seeks to bridge these gaps by investigating how corporate financing decisions—specifically, capital structure, liquidity, debt, and equity—affect the market value of hydropower companies in Nepal, taking into account both long-term and short-term financing mechanisms, as well as external factors unique to the sector.

### Conceptual Framework

This section shows how corporate financing decisions impact the market value i.e. either it can positively or negatively impact market valuation of hydropower sectors of Nepal.

**Figure 1***Conceptual Framework*

## Methodology

### Research Philosophy and Design

This study adopts a quantitative research design to investigate how corporate financing decisions impact the firm value of listed hydropower companies in Nepal. A quantitative approach is selected as it allows for empirical analysis using numerical data, thereby facilitating the quantification of relationships between financial variables (EPS, NWPS, ROA, CR, and DER) and firm value. The focus is on identifying the impact of these financial metrics on firm value, offering empirical evidence of their interrelationships.

The research design incorporates both descriptive and correlational research. Descriptive analysis is used to summarize the data and provide an overview of financial performance across the sample, while correlational analysis helps in assessing the nature and strength of the relationships between the independent variables (EPS, NWPS, ROA, CR, and DER) and the dependent variable (firm value).

Given the focus on how corporate financial decisions influence firm value, panel data regression analysis is used. Panel data, which spans both across companies and over time, provides a more comprehensive understanding of the relationships under investigation, offering insights into firm-specific and temporal variations. This methodology is particularly effective for analyzing dynamic relationships and assessing both cross-sectional and time-series effects.

### Sample and Data Description

The study uses panel data from 21 listed hydropower companies in Nepal, with data spanning the period from 2017 to 2023. The sample includes publicly listed companies on the Nepal Stock Exchange (NEPSE), ensuring that the data is relevant and consistent. A total of 147 observations (21 companies  $\times$  7 years) form the dataset. Data is obtained from secondary sources, including financial statements, balance sheets, income statements, and annual reports of the companies, as well as data from the Nepal Stock Exchange and Nepal Rastra Bank.

**Table 1***The Selected Companies for the Study*

SN	Name	Symbol	No. of Observations
1	Arun Valley Hydropower Development Company Limited	AHPC	7
2	Butwal Power Company Limited	BPCL	7
3	Chilime Hydropower Company Limited	CHCL	7
4	National HydroPower Company Limited	NHPC	7
5	Sanima Mai Hydropower Limited	SHPC	7
6	United Modi Hydropower Limited	UMHL	7

SN	Name	Symbol	No. of Observations
7	Ankhukhola Hydropower Company Limited	AKJCL	7
8	Arun Kabeli Power Limited	AKPL	7
9	Api Power Company Limited	API	7
10	Barun Hydropower Company Limited	BARUN	7
11	Himalaya Urja Bikas Company Limited	HURJA	7
12	Mountain Hydro Nepal Limited	MHNL	7
13	Panchthar Power Company Limited	PPCL	7
14	Panchakanya Mai Hydropower Limited	PMHPL	7
15	Chhyangdi Hydropower Company Limited	CHL	7
16	Synergy Power Development Limited	SPDL	7
17	Radhi Bidyut Company Limited	RADHI	7
18	Nepal Hydro Developer Limited	NHDL	7
19	Khani Khola Hydropower Company Limited	KKHC	7
20	Kalika Power Company Limited	KPCL	7
21	Ngadi Group Power Limited	NGPL	7

### Variables and Financial Tools

The study uses the following financial

variables to investigate the relationships between corporate financing decisions and firm value:

**Table 2**

*Relationships between Corporate Financing Decisions and Firm*

Variable	Type	Measurement Formula
Firm Value	Dependent	$FV = \text{Market Capitalization (Stock Price} \times \text{No. of Shares Outstanding)}$
Earnings Per Share	Independent	$EPS = (\text{Net Profit After Tax} - \text{Preferred Dividend}) / \text{No. of Shares Outstanding}$
Net Worth Per Share	Independent	$NWPS = \text{Shareholders' Equity} / \text{No. of Shares Outstanding}$
Return on Assets	Independent	$ROA = \text{Net Income} / \text{Total Assets}$
Current Ratio	Independent	$CR = \text{Current Assets} / \text{Current Liabilities}$
Debt to Equity Ratio	Independent	$DER = \text{Debt} / \text{Equity}$

### Data Collection

Secondary data is collected from annual reports, balance sheets, income statements, and financial statements of the selected hydropower companies. The sources of this data include the Nepal Stock Exchange (NEPSE), Nepal Rastra Bank, and other regulatory bodies.

### Method of Data Analysis

The data is analyzed using descriptive statistics, correlation analysis, and regression analysis:

### *Descriptive Statistics*

Used to summarize and describe the basic characteristics of the data, including the mean, standard deviation, minimum, maximum, and coefficient of variation (CV) for each variable. This gives an overview of the financial performance of the companies.

### *Correlation Analysis*

Used to examine the strength and direction of relationships between the independent variables

and the dependent variable (firm value). Correlation coefficients will indicate whether the financial metrics are positively or negatively associated with firm value.

### Regression Analysis

Panel data regression models (fixed-effects or random-effects) are applied to estimate the relationships between corporate financing decisions (EPS, NWPS, ROA, CR, and DER) and firm value. The t-statistic assesses the statistical significance of each variable, while the F-test evaluates the overall model fit.

### Specification of the Model

The study uses a panel data regression model to estimate the relationships between the independent variables (corporate financing decisions) and the dependent variable (firm value). This approach is chosen to capture both cross-sectional variation (differences between companies) and temporal variation (changes within companies over time).

The regression model is specified as

$$\begin{aligned} FV &= \beta_0 + \beta_1 \text{EPS} + \beta_2 \text{NWPS} + \beta_3 \text{ROA} + \beta_4 \text{CR} \\ &\quad + \beta_5 \text{DER} + \epsilon \\ &= \beta_0 + \beta_1 \text{EPS} + \beta_2 \text{NWPS} + \beta_3 \text{ROA} + \beta_4 \text{CR} + \\ &\quad \beta_5 \text{DER} + \epsilon \end{aligned}$$

Where,

FV = Firm Value (Dependent Variable)

EPS = Earnings Per Share

NWPS = Net Worth Per Share

ROA = Return on Assets

CR = Current Ratio

DER = Debt to Equity Ratio

$\beta_0$  = Constant term (intercept)

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$  = Coefficients of the independent variables

$\epsilon$  = Error term

### Model Assumption

The model assumes that the relationship between corporate financing decisions and firm value is linear, and that the independent variables (EPS, NWPS, ROA, CR, and DER) are related to firm value through their respective coefficients. This model will allow the identification of how each financial metric influences the market value of hydropower companies over the period from 2017 to 2023

### Hypotheses

The following hypotheses are formulated to examine the relationships between corporate financing decisions and the firm value of listed hydropower companies in Nepal:

**H1:** There is a significant relationship between earnings per share (EPS) and firm value of listed hydropower companies in Nepal.

**H2:** There is a significant relationship between debt-to-equity ratio (DER) and firm value of listed hydropower companies in Nepal.

**H3:** There is a significant relationship between net worth per share (NWPS) and firm value of listed hydropower companies in Nepal.

**H4:** There is a significant relationship between return on assets (ROA) and firm value of listed hydropower companies in Nepal.

**H5:** There is a significant relationship between current ratio (CR) and firm value of listed hydropower companies in Nepal.

### Summary of Analysis

The findings are organized under different sub-headings based on the tests performed. These tests provide the key results needed for this study's conclusions. The tests include the stationary test, model test, cross-sectional dependence test, regression analysis, and hypothesis test.

**Table 3***Stationary Test*

Variable	Levin, Lin & Chutt*	Prob
Firm Value	-3.54	0.00001
EPS	-8.5	0.00001
NPS	-27.88	0.00001
ROA	-38.13	0.00001
CR	-8.45	0.00001
DER	-10.13	0.00001

Table 3 shows the Levin, Lin & Chu (LLC) test results confirm the stationarity of various financial variables used in this study, all at the level form. Firm Value has an LLC test statistic of -3.54 with a p-value of 0.00001, indicating stationarity at the level. This suggests that fluctuations in firm value are temporary and revert to a long-term mean. The stationarity of firm value is critical as it ensures reliability in assessing the market performance of companies, enabling stakeholders to make sound investment and strategic decisions based on historical trends.

EPS shows a test statistic of -8.5 and a p-value of 0.00001, indicating that it is also stationary at the level. This result implies that variations in EPS are not persistent and revert to a stable mean, which is important for understanding a firm's profitability trends over time. For investors, the stability of EPS serves as a consistent measure of earnings performance, supporting informed investment decisions.

NWPS records an LLC test statistic of -27.88 with a p-value of 0.00001, confirming its stationarity at the level. This result highlights that any shocks to profitability are temporary, maintaining a steady trend over time. Such stability is essential for firm in evaluating long-term profitability and making strategic adjustments.

ROA has a test statistic of -38.13 and a p-value of 0.00001, demonstrating its stationary at the level. This suggests that changes in ROA are short-lived and revert to a consistent mean. The stability of ROA is significant for firms and stakeholders as it provides a reliable measure of efficiency in utilizing assets, allowing for better financial planning and performance analysis.

CR also shows stationarity, with an LLC test statistic of -8.45 and a p-value of 0.00001. This indicates that the variable remains stable over time, making it a dependable measure of liquidity. The stationarity of CR is crucial for assessing a firm's ability to meet short-term obligations, ensuring operational and financial stability.

DER is stationary at the level as well, with a test statistic of -10.13 and a p-value of 0.00001. This finding implies that changes in a firm's leverage levels are not persistent and revert to a mean over time. The stability of DER provides stakeholders with confidence in assessing a firm's financial risk and capital structure management over the long term. All variables in this study are stationary at the level form, indicating that they do not require differencing for further econometric analysis. The stability of these variables ensures the reliability of the data for drawing meaningful conclusions and making informed decisions.

**Table 4***Unitroot Test*

Test Summary	Chi-Sq. Statistic	Chi-Sq.d.f.	Prob.
Cross-sectionrandom	22.119018	5	0.0005

The test summary provides the results of a statistical test, likely the Hausman test, which is used to decide between the random effects model and the fixed effects model in panel data analysis. The Chi-Square Statistic is 22.119018, with 5 degrees of freedom, and the corresponding p-value is 0.0005. Since the p-value is significantly lower than the threshold of 0.05, the null hypothesis is rejected. This indicates that the random effects model is not suitable for the data, and the fixed effects model is a better choice for analyzing the relationships among the variables.

**Table 5**

*Summary Test*

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	9.435045	0.146510	64.39854	0.0000
EPS	0.002625	0.004386	0.598448	0.5507
NWPS	0.002764	0.001399	1.975112	0.0505
ROA	-0.094474	0.289701	-0.326110	0.7449
CR	0.002490	0.009786	0.254465	0.7996
DER	-0.194576	0.060052	-3.240123	0.0015

R-square	0.827123
Adjusted R-square	0.791404
F-statistic	23.15672
Prob (F-statistic)	0.000001
Durbin-Watson Stat	1.415157

Table 5 displays the regression analysis of firm value. The regression analysis examines the relationship between the dependent variable and independent variables such as EPS, NWPS, ROA, CR, and DER. The intercept (C) has a coefficient of 9.435, which is highly significant (p-value=0.0000), indicating the baseline value of the dependent variable when all independent variables are zero. Among the predictors, DER (Debt-to-Equity Ratio) shows a significant negative relationship with the dependent variable, with a coefficient of -0.1946 and a p-value of 0.0015, suggesting that higher debt levels reduce the firm value. NWPS (Net worth per Share) has a positive coefficient of 0.0028 and a p-value of 0.0505, indicating a weak but borderline significant influence. In contrast,

### Regression Analysis

Regression analysis is used to understand and explain the relationship between a dependent variable and one or more independent variables. Simple linear regression, like correlation, measures the strength of the linear relationship between two variables. However, the key difference is that correlation treats both variables equally, without distinguishing between independent and dependent variables, whereas linear regression identifies one variable as dependent and the other as independent.

EPS, ROA, and CR have p-values well above 0.05, indicating no statistically significant relationship with the dependent variable in this model.

The overall model explains 82.7% of the variation in the dependent variable, as indicated by the R-squared value of 0.8271, while the adjusted R-squared of 0.7914 confirms the model remains robust after accounting for the number of predictors. The F-statistic of 23.157 with a p-value of 0.000001 confirms that the model is statistically significant as a whole. The Durbin-Watson statistic of 1.415 suggests mild positive autocorrelation in the residuals. In overall, the model provides strong explanatory power, with DER emerging as a key determinant of the dependent variable, while the other variables show limited or no significant impact.

### Durbin-Watson Test

The Durbin-Watson statistic value of 1.415157 is used to detect autocorrelation in the residuals (errors) of a regression model. Autocorrelation



refers to the correlation of a variable with itself over time, and in the context of regression analysis, it means that the residuals from one observation are correlated with those from another. A Durbin-Watson statistic close to 2 suggests that there is no autocorrelation (i.e., the residuals are independent). A value below 2 indicates positive autocorrelation, where residuals tend to follow a pattern. A value above 2 suggests negative autocorrelation, where residuals tend to move in the opposite direction.

In this case, a value of 1.415157 (lies between  $DL=1.441$  and  $DU=1.647$ ) suggests positive autocorrelation, meaning the residuals from one observation are likely to be similar to those from the next. While not extremely high, this suggests some level of correlation in the residuals, which might imply that the model could benefit from further refinement or adjustments, such as including lagged variables or reconsidering the model's specification.

#### ***Debt-to-Equity Ratio (DER)***

The analysis reveals that the Debt-to-Equity Ratio has a significant negative relationship with firm value, as evidenced by a coefficient of  $-0.194576$  and a p-value of  $0.0015$ . This suggests that higher levels of debt relative to equity (higher leverage) reduce the firm value of hydropower companies in Nepal. This finding highlights the importance of maintaining a balanced capital structure, as excessive reliance on debt can increase financial risk and erode shareholder value.

#### ***Net Worth Per Share (NWPS)***

A positive but marginally significant relationship was found between Net Worth Per Share and firm value, with a coefficient of  $0.002764$  and a p-value of  $0.0505$ . This indicates that an increase in net worth per share contributes positively to firm value, suggesting that a stronger equity position enhances the financial stability and market value of hydropower companies. Although the relationship is marginally significant, it implies that improving equity can be a strategic move to increase the firm's market value.

#### ***Earnings Per Share (EPS)***

The relationship between Earnings Per Share and firm value was found to be statistically insignificant, with a p-value of  $0.5507$ . This suggests that, within the context of the hydropower sector in Nepal, EPS does not serve as a strong predictor of firm value. This finding indicates that other financial metrics, such as capital structure and equity, may have a more substantial impact on firm value in this sector than operational profitability measures like EPS.

#### ***Return on Assets (ROA)***

Return on Assets showed a negative but statistically insignificant relationship with firm value, with a t-statistic of  $-0.326110$  and a p-value of  $0.7449$ . This suggests that ROA does not have a significant impact on firm value for hydropower companies in Nepal. Despite the negative sign, the lack of statistical significance indicates that asset utilization and profitability, as reflected in ROA, are not critical factors in determining the market value of these companies.

#### ***Current Ratio (CR)***

The Current Ratio, which measures the liquidity of a company, also showed no significant impact on firm value, with a p-value of  $0.7996$ . This suggests that liquidity is not a crucial factor in determining the market value of listed hydropower companies in Nepal. While liquidity is important for short-term financial health, it does not appear to influence long-term firm value in this context.

#### ***Model Fit and Significance***

The overall regression model demonstrated a strong fit, with an R-squared value of  $0.827123$ , indicating that approximately  $82.7\%$  of the variation in firm value can be explained by the independent variables included in the model. The Adjusted R-squared value of  $0.791404$  further confirms the robustness of the model by accounting for the number of predictors. The F-statistic of  $23.15672$ , with a p-value of  $0.000001$ , indicates that the model is statistically significant and that the combination of variables considered collectively influences firm value.

### **Autocorrelation Concerns**

The Durbin-Watson statistic of 1.41515 suggests the presence of autocorrelation in the residuals, indicating that the errors in the model may be correlated. This suggests the need for caution in interpreting the results, as it may point to the presence of omitted variables or misspecification in the model. Further refinement is needed to address potential autocorrelation and improve the robustness of the findings.

The findings of this study suggest that corporate financing decisions, particularly the Debt-to-Equity Ratio and Net Worth Per Share, play a significant role in determining the firm value of hydropower companies in Nepal. The significant negative relationship between DER and firm value emphasizes the importance of avoiding excessive leverage, as higher debt levels increase financial risk and negatively impact market value. On the other hand, the positive but marginally significant relationship between NWPS and firm value highlights the importance of maintaining a strong equity base, which enhances the financial position and market perception of hydropower companies.

However, the results also indicate that certain financial metrics, such as EPS, ROA, and CR, do not have a significant impact on firm value in this sector. This could suggest that investors and managers in the hydropower sector may place more importance on capital structure decisions and equity strength rather than short-term profitability or liquidity ratios.

The overall strength of the regression model, as indicated by the R-squared and F-statistic, demonstrates that the selected variables are valuable predictors of firm value in the context of listed hydropower companies in Nepal. However, the presence of autocorrelation in the residuals suggests that further research and model refinement are necessary to ensure the accuracy and reliability of the results.

### **Conclusion**

This study investigates the impact of corporate financing decisions on the firm value of listed hydropower companies in Nepal. The results show that factors like Debt-to-Equity Ratio and

Net Worth Per Share significantly influence firm value, while Earnings Per Share and Return on Assets show limited effects. Specifically, a high Debt-to-Equity Ratio negatively impacts firm value, whereas a stronger equity position, reflected in Net Worth Per Share, positively affects market value. The findings underscore the importance of capital structure management in driving the financial performance of hydropower companies.

The study contributes to a better understanding of financial dynamics in the hydropower sector and offers insights for managers, investors, and policymakers. The model used explains a significant portion of the variations in firm value, providing a foundation for future research in this area.

### **Recommendations**

1. Based on the findings, the following recommendations are made:
2. Hydropower companies should maintain an optimal Debt-to-Equity Ratio, focusing on a balanced financial structure to ensure long-term stability and reduce financial risk.
3. Companies should prioritize strategies that enhance equity value, such as reinvesting profits, issuing new equity shares, or reducing liabilities.
4. Since EPS and ROA have limited impact on firm value, companies should focus on strategic financial planning to improve overall financial stability.
5. Policymakers should incentivize investment in the hydropower sector through favorable financing options and policies that promote sustainable growth.
6. Regulatory frameworks should encourage a healthy balance between equity and debt financing, with incentives for equity investment and measures to limit excessive borrowing.
7. Investors should evaluate a company's financial structure and overall capital management as part of their investment decisions to identify firms with robust financial positions.

## References

- Al Mutairi, M. E., Hasan, H., & Risik, E. A. (2011). The impact of corporate financing decision on corporate performance in the absence of taxes: Panel data from Kuwait stock market. *World Finance Conference*, 12(2), 120–145.
- Aras, G., & Mutlu Yildirim, F. (2018). The impact of corporate finance decisions on market value in emerging markets. *International Journal of Productivity and Performance Management*, 67(9), 1959–1976.
- Awan, H. M., Bhatti, M. I., Ali, R., & Qureshi, A. (2010). How growth opportunities are related to corporate leverage decisions? *Investment Management and Financial Innovations*, 7(1), 90–97.
- Chiluwal, K., & Mishra, A. K. (2017). Construction practice of small hydropower projects in Nepal. *International Journal of Creative Research Thoughts*, 5(4), 1417–1433.
- Chiluwal, K., & Mishra, A. K. (2018). Impact of performance on profitability of small hydropower projects in Nepal. *International Journal of Current Research*, 10(1), 63918–63925.
- Donaldson, G. (1961). *Corporate debt capacity: A study of corporate debt policy and the determination of corporate debt capacity*. Beard Books.
- Hackbarth, D., & Sun, D. (2024). Corporate investment and financing dynamics. *The Review of Corporate Finance Studies*, 13(3), 625–667.
- Handriani, E., & Irianti, T. E. (2015). Investment opportunity set (IOS) berbasis pertumbuhan perusahaan dan kaitannya dengan upaya peningkatan nilai perusahaan. *Jurnal Ekonomi dan Bisnis*, 18(1), 83–99.
- Handriani, E., & Robiyanto, R. (2018). Corporate finance and firm value in the Indonesian manufacturing companies. *International Research Journal of Business Studies*, 11(2), 113–127.
- Jensen, Michael C (2001). Value maximization, stakeholder theory, and the corporate objective function. *Journal of Applied Corporate Finance*, 14(3), 8–21
- Lama, C., Sah, D. P., & Mishra, A. K. (2019). Occupational hazards identification and their risk assessment during the construction of the head race tunnel in the middle Bhotekoshi hydroelectric project. *International Journal of Research-Granthaalayah*, 7(3), 227–248.
- Lamichhane, P., & Shrestha, P. M. (2021). Nexus between capital structure and financial performance of Nepalese hydropower companies. *Journal of Management*, 24(1), 117–127.
- Mai, M. U. (2010). *Impact of dividend policy on company value In Manajerial opportunistic behavioral conduct and corporate governance structure empirical study on manufacturing companies go public in Indonesian capital market* [Doctoral dissertation, Dissertation], Universitas Diponegoro, Semarang, Indonesia.
- Markkanen, S., & Plummer Braeckman, J. (2019). *Financing sustainable hydropower projects in emerging markets: an introduction to concepts and terminology*. The University of Manchester.
- Maskey, A., & Mishra, A. K. (2018). Labor productivity assessment of armed police force Nepal building construction projects. *International Journal of Current Research*, 10(11), 75315–75324.
- Mishra, A. K., Lama, C., & Sah, D. P. (2019). Effectiveness assessment of preventive and control measures of safety implementation. *Journal of Advanced Research in Civil and Environmental Engineering*, 6(2), 1–20.
- Mishra, K. (2020). *Project management: Theory and practice from different countries*. (pp. 345). DK International Research Foundation.
- Mishra, S., Degtereva, E. A., & Paneru, K. (2017). Role of foreign direct investment by multinational companies in economic growth of Nepal. *Journal of Economics*, 5(1), 91–101.

- Myers, S. C. (2001). Capital structure. *Journal of Economic perspectives*, 15(2), 81–102.
- Myers, S. C. (1984). Finance theory and financial strategy. *Interfaces*, 14(1), 126-137.
- Nasab, A. P. Z. (2012). Financial analysis of small-hydro power project in Malaysia from the investor perspective. In *International Conference on Environment, Energy and Biotechnology, IPCBEE* (Vol. 33).
- Pleshko, L., A. Heiens, R., & Peev, P. (2014). The impact of strategic consistency on market share and ROA. *International Journal of Bank Marketing*, 32(3), 176–193.
- Permata, I. S., & Alkaf, F. T. (2020). Analysis of market capitalization and fundamental factors on firm value. *Journal of Accounting and Finance Management*, 1(2), 59–67.
- Pike, R., & Neale, B. (2009). Corporate finance and investment: decisions and strategies (6th ed.). *Pearson Education*.
- Rajbanshi, P. L. (2019). Determinant of capital structure of Nepalese hydropower companies. *Journal of Finance*, 25(1), 149–158.
- Robiyanto, R. (2017). The volatility-variability hypotheses testing and hedging effectiveness of precious metals for the Indonesian and Malaysian capital market. *International Journal of Business*, 19(2), 167–192.
- Skinner, D. J., & Soltes, E. (2011). What do dividends tell us about earnings quality? *Review of Accounting Studies*, 16, 1-28.
- Subedi, K. D. (2018). funding gap in hydropower projects of Nepal: Does internal finance matter?. *Saptagandaki Journal*, 9(2), 34–52.
- Tan, H. B., Cheah, E. T., Johnson, J. E., Sung, M. C., & Chuah, C. H. (2012). Stock market capitalization and financial integration in the Asia Pacific region. *Applied Economics*, 44(15), 1951–1961.
- Tyastari, T. T. D., Rosidi, R., & Saraswati, E. (2017). Dividend policy and corporate value. *Journal of Finance & Banking*, 21(3), 196–239.
- Van Horne J. C., & Wachowicz, J. M. (2009). *Fundamentals of financial management* (13<sup>th</sup> ed.). *Pearson Education Limited*.

