

Article

# The relationship between gearing ratio and return on equity (ROE) ratio to earnings per share (EPS)

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**Abstract:** The study examines the relationship between EPS and the gearing ratios and return on equity (ROE) ratio of 9 public listed firms on the Malaysian Stock Exchange from 2014 to 2022 financial years. The firms are selected at random. From this study it was established that there is a negative relation between EPS and gearing and a positive relation between EPS and ROE. Companies that want to attract more investors need to keep their gearing ratio low and increase the return on equity ratio high. To obtain the benefits of gearing or external funding, there need to be a balance between equity and debts. There is no one optimal balance between debt and equity. This balance is difference for each company and the sector they operate in. It is important for managers of companies to find the optimal balance between debt and equity, unique to their company.

**Keywords:** gearing; earning per share (EPS); return on equity (ROE); ratios performance; price earnings ratio

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## 1. Introduction

Effective financing is essential for the smooth operation of any business, regardless of its size or industry. It can be secured either directly from shareholders or through borrowing from creditors and banks. Well-planned financial management ensures that service firms can focus on their core activities while maintaining sufficient cash flow to meet their working capital needs. The primary sources of funds for any business are debt instruments and equity issuance, and firms often leverage a mix of both to support their operations and investments. Managers need to skillfully balance debt and equity to maximize the benefits of this financial strategy (Siyabolola et al., 2015).

The gearing ratio, which measures the proportion of total long-term debt to equity, indicates a firm's reliance on debt relative to its equity. A higher ratio suggests that the firm is heavily financed through debt. In this context, the gearing ratio reflects the degree to which a firm's activities are supported by external versus internal funds. According to Modigliani and Miller (1958), in the absence of tax benefits associated with debt, the capital structure of a company has no impact on its performance. Their theory posits that if there are no tax advantages from interest payments, the choice between external and internal financing becomes irrelevant. However, the tax shield benefit remains a crucial factor that makes external debt financing attractive to financial managers.

EPS and ROE have significant influence on the share price. Thus this explains why management of most companies are focusing on improving their EPS and at the

same time they need to check on any other variables that affect the EPS of their company (Hasan et al., 2014).

## **2. Literature review**

### **2.1. Earnings per share (EPS)**

Earnings per share (EPS) financial ratio is very important and vital for investors because this ratio relates directly to profitability of a company. The EPS figure is used by investors and analysts to assess company performance, to predict future earnings, and to estimate the value of the company's shares (CFI Team, 2024). The higher the EPS, the more profits a company is perceived to be making. And this makes the company's stocks more attractive to investors. Shares with high EPS are priced at high value (more expensive) compared to shares with low EPS. Furthermore, EPS serves as a useful comparative tool, enabling investors to measure the profitability of different companies and this helps in making better decisions regarding portfolio diversification.

According to Syamsuddin (2007), earnings per share (EPS) is defined as a ratio that indicates the profit earned by investors or shareholders for each share, calculated by dividing net income after tax by the total number of outstanding ordinary shares. EPS serves as a key indicator of the company's value and reflects its success in generating the desired returns for its shareholders. Haryamani (2007) suggests that, for a comprehensive assessment of a company's financial health, EPS should be analyzed alongside other financial ratios. This approach provides a more complete understanding of the company's profitability, efficiency, and solvency.

Haryamani (2007) emphasizes that to gain a more comprehensive understanding of a company's financial health, it is crucial to analyze earnings per share (EPS) alongside other financial ratios. This combined analysis provides deeper insights into the firm's profitability, efficiency, and solvency.

In cases where non-recurring events impact the financial statements, it becomes necessary to normalize the EPS. Non-recurring items, such as profits or losses from asset sales, restructuring expenses, or legal settlements, can significantly skew a company's reported earnings. Normalizing EPS involves excluding these one-time events to present a clearer picture of the company's core earnings capacity. For instance, if a company's reported EPS appears high due to substantial gains from the sale of fixed assets, failing to adjust for this could mislead investors into believing that the company's profitability is consistently strong, which may result in flawed investment decisions.

### **2.2. Shareholder's equity**

The stockholders' equity section in a company's financial position statement offers valuable insights for analysing financial health. In the event of liquidation, equity holders are last in line to receive payments, only after all loan, bond, or debt holders have been compensated. This implies that bondholders are prioritized over equity holders in terms of payment. Shareholders' equity represents the residual value after subtracting a company's total liabilities from its assets. For companies with

issued shares, shareholders, business owners, and investors collectively own the equity portion.

The shareholders' equity section comprises several key components, each carrying distinct value and significance:

- 1) **Share capital:** This refers to the funds a company raises by issuing shares. During the initial public offering, a specific number of shares are sold at a predetermined price, generating direct capital for the company. Subsequent to this, shares can be freely traded in the market, but only the funds from the initial offering go directly to the company.
- 2) **Retained earnings:** Retained earnings represent the amount of money left within the company after distributing dividends to shareholders. Shareholders with dividend-paying shares are entitled to a portion of the company's profits. The retained earnings reflect the funds available to the company after making these distributions.
- 3) **Net income:** Net income is calculated by deducting all expenses and other deductions from the company's total revenue. Profit, in this context, refers to the amount remaining after covering operational costs. The accrual concept is applied when calculating net income, which includes non-cash items.
- 4) **Dividends:** Dividends refer to the cash payments made to shareholders. Investors who own shares in a company hold a stake in the business and are entitled to a portion of its profits. The dividend amount corresponds to the portion of profits allocated per share, as typically outlined in the stock agreement (Fuscaldo, 2024).

While debt holders may have limited interest in the specific details of equity beyond its overall value for assessing solvency, shareholders are more concerned with both liabilities and equity. This is because stockholders' equity can only be distributed after all obligations to bondholders have been fulfilled (Vipond, 2024).

### **2.3. Price/earnings (P/E) ratio**

The price/earnings (P/E) ratio compares a company's market value per share with its earnings per share (EPS), offering a comprehensive view of the company's valuation. A lower P/E ratio suggests that a stock may be undervalued, potentially presenting an attractive investment opportunity (Field et al., 2012; Myers, 1977).

This ratio is often calculated not just for individual companies but also for entire stock indices. For instance, Petronas Malaysia had a P/E ratio of 18.8 in 2019, 17.1 in 2020, and 19.2 in 2023. Since stock prices are constantly fluctuating, the P/E ratios of both individual stocks and stock indices are dynamic, changing as companies release their earnings reports, typically on a quarterly basis.

The formula for calculating the P/E ratio is relatively simple: it involves dividing the market price of a share by its earnings, where earnings refer to profit after tax and preference dividend deductions. While the P/E ratio is generally calculated using the current share price, an average price over a specified period can also be used (Berger, 2023).

Regarding the earnings component of the calculation, there are three distinct approaches to the P/E ratio, each reflecting different aspects of a stock's performance and value.

## **2.4. Three different types of P/E ratios**

Price divided by earnings, part of the P/E ratio is simple and consistent. But the earnings component alone can be calculated in three different ways. Each of those three approaches tells us different things about a share (or index).

## **2.5. Trailing twelve-month (TTM) earnings**

A common method for calculating the P/E ratio is to utilize a company's earnings from the previous 12 months, known as the trailing P/E ratio or trailing twelve-month (TTM) earnings. The advantage of this approach lies in its reliance on actual reported financial data, making it a widely accepted metric for assessing company performance. This method is frequently employed in company evaluations, and many financial platforms, including Google Finance and Yahoo Finance, use the trailing P/E ratio in their analyses (The Wall Street Journal, 2024).

## **2.6. Forward earnings**

To address the limitations associated with using historical data, the forward earnings method can be applied. This approach involves calculating the P/E ratio based on projected future earnings, rather than past performance. The forward P/E ratio utilizes estimates of a company's expected earnings, providing the advantage of incorporating the most current expectations regarding the company's performance over the upcoming year—in other words, it is based on forward-looking information.

## **2.7. The Shiller P/E ratio**

Another commonly used method for calculating the P/E ratio is to take the average earnings over a longer period. A well-known example of this is the Shiller P/E ratio, also referred to as the CAPE (Cyclically Adjusted Price Earnings) ratio. The Shiller P/E is determined by dividing the current price by the average inflation-adjusted earnings over the past ten years. This approach is widely used to assess the valuation of the S&P 500 index.

It is important to note that a negative P/E ratio indicates that a company is experiencing negative earnings or losses. Even well-established firms, such as major airline companies, may occasionally report negative earnings, particularly during challenging periods like the COVID-19 pandemic. However, this does not necessarily imply that these companies are poor investment options.

## **2.8. Debt/equity (D/E) ratio**

The Debt-to-Equity (D/E) ratio is a critical metric that provides insights into a company's leverage and financial risk, complementing the analysis of earnings per share (EPS). A high D/E ratio suggests that the company has taken on substantial debt, which could jeopardize its financial stability even if it reports a high EPS (Obembe and Soetan, 2015).

## **2.9. External funding**

All business ventures need fundings to ensure that the outcome of projects undertaken will be successful. Having adequate cash or fundings is the most important

for growth, innovation, sustainability and long-term success. Having said that, money isn't easy to come by, especially in large amounts. Most banks and financial institutions are willing to loan huge amounts of money to companies with good prospects (Harrison, 2018).

The primary advantage of using external sources of finance is that it allows a business to access a wide range of financial solutions without depleting its existing savings or diverting funds from critical areas. Managers gain access to various financial instruments, enabling them to raise and borrow capital as needed. Additionally, borrowing can facilitate the rapid creation of new wealth by investing larger sums than an investor could afford using only personal funds. Another benefit is the potential for tax savings, as interest and other borrowing costs may be tax-deductible, which can reduce taxable income. In some cases, prepaying interest (up to 12 months) could allow companies to bring forward a tax deduction, particularly if current income levels are higher than anticipated in the following year and if interest rates are expected to rise (BT Professional, 2024).

Moreover, external financing is highly flexible, with many funds having no specific usage restrictions. This allows businesses to accelerate growth, acquire equipment, purchase property, support cash flow, launch advertising campaigns, purchase supplies, and even provide emergency relief (Kokot-Stępień, 2022).

However, the drawbacks of external financing include interest charges, lender service fees, and legal costs, which can make it more expensive than using internal capital. Companies with lower credit ratings may still secure loans, but often at a higher cost, which can reduce reported profits over the loan term. Weaker credit ratings result in more expensive loan agreements, making it essential for businesses to review their credit reports before applying for external funding. Lenders typically conduct background checks, evaluating the borrower's financial history, including any unresolved debt or missed payments (Harrison, 2018).

Another downside of external financing through banks or financial institutions is that it may require the company to relinquish partial ownership. In return for funding, external investors may gain voting rights, which can potentially compromise the company's original vision and mission (Root III, 2019).

Highly geared companies face additional risks that should be considered, including increased financial pressure, potential loss of control, and heightened vulnerability to economic downturns (BT Professional, 2024):

- 1) Gearing brings in gain, but it also brings in losses. If profits made on investments are less than the gearing costs, the borrower may be unable to service the loan. Disposing some fixed assets will be required to avoid default (Trade off theory).
- 2) The investment may not perform as expected resulting in a capital loss (capital risk) if forced to sell.
- 3) As with any loan, the investor/borrower needs to be sure they can afford to service it. If relying on investment income to service the loan, this source may not always be sufficient (income risk). Even if the investor/borrower is relying on regular income from other existing investments, it's important to make sure their cash flow is sufficient to meet both the loan repayments and interest expenses, and to build up some extra funds for unexpected events.

Changes in tax laws (Legislative risk) and the regulatory framework may eliminate some of the Tax benefit of gearing is when a company takes loans, interest payments made by the company are tax deductible, and this reduces the company tax bill (Wall Street Prep, 2024a). This is part of theory off theory. On the other hand, there are benefits that can be gained from borrowings provided the borrowings are managed efficiently. Some of the ways to manage and monitor gearing are as follows (Melville, 2019):

- 1) Borrow less so that the fixed obligation is less, to ensure regular interest payments can be easily met in case things don't go as planned.
- 2) Borrowings are done only for high quality investments. This may reduce the risk of negative returns.
- 3) When taking loans, consider long term investments. Long term investments may give more time to over come any downturns in the market and take advantage of the upturns.
- 4) Diversify or spread the investments in several different sectors. By doing this risk can be spread across a range of asset classes and / or securities. The negative effect of poor performance of one asset class has a limited effect on total returns.
- 5) Repay loans on time to avoid the level of gearing increasing (and to avoid a margin call, in respect of a margin loan).
- 6) Look for ways to reinvest the income earned from these investments to increase over all income of the company.
- 7) Regularly review the loan position.

“The optimal gearing ratio can differ significantly depending on the company and the industry in which it operates. It also hinges on how effectively a company manages its debt and its overall performance. When evaluating the gearing ratio, it is crucial to consider factors such as earnings growth, market share, and cash flow. Notably, well-established firms may have the flexibility to pay off debt by issuing equity if necessary. In essence, maintaining debt on the balance sheet can reduce the need for equity financing, which is a strategic decision. By relying more on debt and less on equity, companies can minimize share dilution, potentially boosting their stock price and improving earnings per share” (Boyte-White, 2024).

### **Trade off theory**

The trade off theory stated that to be able to maximize the value of the firm, company must be able to determine the optimal level of debt and equity (Wall Street Prep, 2024b). As mentioned above, there are benefits from getting or increasing loans or debentures, but debts have to be managed efficiently to enjoy these benefits. By doing so, the weighted average cost of capital (WACC) can be minimized. A low WACC increases the value of the company.

### **2.10. Relationship between EPS, ROE and gearing**

The gearing ratio is a key metric used to assess a company's financial leverage, indicating the extent to which it relies on borrowed funds versus equity capital. Financial leverage reflects the proportion of debt in a company's capital structure compared to its equity. It is important to note that whether a gearing ratio is considered

good or bad is relative and depends on comparisons with other companies within the same industry (CFI Team, n.d.).

Below are some general benchmarks for interpreting gearing ratios:

- High gearing ratio: Above 50%.
- Low gearing ratio: Below 25%.
- Optimal gearing ratio: Between 25% and 50%.

Companies with high gearing ratios often rely on loans to cover operational expenses, which can increase the risk of bankruptcy, especially during economic downturns or when interest rates rise. This elevated leverage can result in financial strain (Nugraha and Bayunitri, 2020).

Numerous scholars have explored the implications of gearing based on financial reports from various countries. For instance, Jensen and Meckling (1976) emphasized the need for a trade-off between the agency costs of debt and equity, advocating for a balanced approach to utilizing both forms of financing. Similarly, Brander and Lewis (1986) highlighted that borrowers are often protected by limited liability, while Jensen (1986) noted that debt financing can have a constraining effect on managerial decisions. Collectively, these studies indicate that leverage can positively impact firm performance by adding value.

Conversely, other research presents a more critical view of debt financing. Myers (1977) argued that excessive debt can have detrimental effects, while Titman (1984) found that debt financing often triggers negative reactions among shareholders. Ghosh (2008) further supported this perspective, providing evidence of a negative relationship between debt financing and firm performance. These contrasting findings suggest that the impact of leverage on a firm's success is complex and context dependent.

## **2.11. Return on equity (ROE)**

The return on equity (ROE) ratio assesses a company's effectiveness in generating profits from the funds invested by its shareholders, complementing the profitability insights provided by earnings per share (EPS). According to the Corporate Finance Institute (2020), ROE is calculated by dividing a company's annual net income by its total shareholders' equity, expressed as a percentage present in **Figure 1**. Additionally, it can also be derived by dividing the firm's dividend growth rate by its earnings retention rate.

ROE is a valuable metric for evaluating how efficiently both existing and new equity investments are being utilized within the company:

- High return on equity (ROE): A higher ROE indicates that the company is effectively using equity capital to generate significant net profits.
- Low return on equity (ROE): Conversely, a lower ROE suggests that the company is less efficient in generating profits from the equity contributed by its shareholders.

This metric provides insights into the company's profitability relative to the equity invested, helping stakeholders gauge the efficiency of management in utilizing shareholder funds.

**DuPont formula**

$$\text{ROE} = \frac{\text{Net Income}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Total Assets}} \times \frac{\text{Total Assets}}{\text{Shareholder Equity}}$$

net profit margin    asset turnover    financial leverage

**Figure 1.** Break down the ROE ratio further.

“The return on equity (ROE) metric serves as a simplified formula for assessing investment returns from a shareholder’s perspective, as illustrated in **Figure 2**. According to Wall Street Prep (2024a), a steadily increasing ROE over time is generally considered a positive indicator that management is effectively creating value for shareholders.”

A recent study conducted by Ferniawan (2024) revealed that Earnings Per Share (EPS) significantly influences stock prices in construction and building sub-sector companies listed on the Indonesia Stock Exchange. The study also found that Return on Equity (ROE) has a notable impact on stock prices within this sector. Moreover, the research concluded that when EPS and ROE are analyzed together, they have a substantial combined effect on the stock prices of these companies (Ferniawan et al., 2024).

**Return on equity (ROE) formula**

$$\text{ROE} = \left( \frac{\text{Net income (annual)}}{\text{Shareholders' equity}} \right) \times 100$$

**Figure 2.** Return on equity formula.

- 1) A company can improve or increase the net profit margin by making more money for every unit of sales.
- 2) A company can improve their asset turnover by generating more sales and keeping the total assets at a constant level or lower. Increase the efficient use of the assets.
- 3) A company can improve its ROE by borrowing money (external financing) and earning more on that money than it costs or interest to be paid.

According to Lewis (2024), improving Return on Equity (ROE) requires enhancing one of the three key ratios. Total Asset Turnover (TATO) is categorized as an activity or efficiency ratio, which evaluates a company’s effectiveness in utilizing its assets. The higher the TATO, the more efficiently the company is using its assets to generate net sales (Afriati, 2016).

Asset turnover measures how effectively all the assets owned by a company are utilized to support its sales (Sitanggang, 2013). This ratio is calculated by comparing the volume of sales to the total assets employed by the company. Essentially, it reflects



the capacity of a company's assets to generate revenue. Additionally, this ratio serves as an indicator of the firm's success in leveraging its assets to achieve net profits (Harahap, S. 2013). Company can improve the asset turnover by increasing revenue, liquidate excess assets and have a better inventory management (Finance Management, n.d.).

### **3. Research methodology**

The study employs an ex-post facto research design, as it utilizes historical accounting data to examine the relationship between the independent variables and the dependent variable. The research relies on secondary data sourced from published annual financial reports of nine companies listed on the Malaysian Stock Exchange, covering the period from 2014 to 2022.

Hypothesis development:

The relation between gearing and return on equity to Earnings Per Share.

H<sub>0</sub>—there is no correlation between gearing and return on equity to EPS.

H<sub>1</sub>—there is positive correlation between debt/equity and EPS.

H<sub>2</sub>—there is positive correlation between return on equity and EPS

### **4. Data processing and analysis methods**

The study calculates the Gearing Ratio and Return on Equity (ROE) ratio, utilizing correlation coefficients to assess the strength and direction of the linear relationships between these variables. Data from **Tables 1–9** is used for the analysis. The correlation coefficient is a statistical measure that evaluates the linear association between two variables, with possible values ranging from  $-1$  to  $1$ . A coefficient of  $-1$  indicates a perfect negative or inverse correlation, where an increase in one variable corresponds to a decrease in the other, and vice versa. Conversely, a coefficient of  $1$  signifies a perfect positive correlation, indicating a direct relationship, while a coefficient of  $0$  suggests no linear relationship.

Correlation coefficients are widely used in both science and finance to determine the degree of association between variables, factors, or data sets. This measure indicates how one variable moves relative to another. For instance, given that high oil prices benefit crude producers, a strong positive correlation can be observed between oil prices and the forward returns on oil stocks.

It is important to distinguish between the values of  $R$  and  $R^2$  when analysing correlation. The Pearson correlation coefficient ( $R$ ) measures the strength and direction of a linear relationship between variables, whereas the coefficient of determination ( $R^2$ ) assesses the proportion of variability in the dependent variable that is explained by the regression model.

The correlation coefficient, denoted as  $r$ , quantifies the degree of linear association between two variables, with values ranging between  $-1$  and  $1$ . The  $R$ -squared value ( $R^2$ ), which is the square of  $r$ , indicates the explanatory power of the regression model. For example, an  $R^2$  of 40% suggests that 40% of the variability in the dependent variable can be explained by the model.

Together, correlation and regression analysis can help businesses make more informed decisions, improve management, and optimize operations. The 9 companies listed in the Malaysian Stock exchange and chosen randomly are as follows:

Tables showing EPS, Debt/Equity and Return on Equity of 9 Companies.

**Table 1. Nestle.**

Year	2022	2021	2020	2019	2018	2017	2016	2015	2014
EPS	265	243	235.7	286.96	280.97	274.01	272	252	235
Debt/Equity	1.0677	0.8130	0.8748	0.6119	2.7235	2.5965	0.4180	0.3600	0.2832
Return on Equity	0.9904	0.9779	0.9921	1.0120	1.0244	0.9791	0.8834	0.9126	0.6585

**Table 2. Proton.**

Year	2022	2021	2020	2019	2018	2017	2016	2015	2014
EPS	9.71	-15.33	28.66	18.57	25.78	-23.62	-51.31	15.53	23.63
Debt/Equity	0.997	0.984	0.689	0.633	0.255	0.229	0.554	0.559	0.664
Return on Equity	0.030	-0.038	0.063	0.037	0.104	-0.075	-0.117	0.032	0.054

**Table 3. Perodua.**

Year	2022	2021	2020	2019	2018	2017	2016	2015	2014
EPS	71.7	43.8	40.7	57.2	42.7	-35.5	16.9	21.5	28.7
Debt/Equity	0.00314	0.012	0.004	0.021	0.092	0.002	0.002	0.002	0.003
Return on Equity	0.136	0.089	0.087	0.128	0.106	0.096	0.041	0.054	0.074

**Table 4. Sunway.**

Year	2022	2021	2020	2019	2018	2017	2016	2015	2014
EPS	10.66	44.91	7.2	14.55	13.05	13.04	12.85	17.9	18.24
Debt/Equity	0.52	0.45	0.52	0.61	0.52	0.39	0.4	0.45	0.29
Return on Equity	0.0563	0.2801	0.0427	0.089	0.0806	0.084	0.0893	0.1234	0.1378

**Table 5. United plantation.**

Year	2022	2021	2020	2019	2018	2017	2016	2015	2014
EPS	145	125	96	68	89.5	189	159	141	134
Debt/Equity	$8.5370 \times 10^{-5}$	$3.7244 \times 10^{-7}$	$3.8008 \times 10^{-5}$	$3.9154 \times 10^{-5}$	$3.8625 \times 10^{-5}$	$3.9510 \times 10^{-5}$	$4.2230 \times 10^{-5}$	0	$3.7612 \times 10^{-4}$
Return on Equity	20.86	19.44	15.28	11.12	14.45	15.61	13.98	13.04	13.12

**Table 6. Kawan.**

Year	2022	2021	2020	2019	2018	2017	2016	2015	2014
EPS	10.7	8.84	7.79	3.39	6.34	8.1	13.25	16.38	11.51
Debt/Equity	1.61	0.57	1.66	2.88	4.04	5.38	6.94	11.7	3.78
Return on Equity	0.097	0.086	0.080	0.037	0.071	0.094	0.113	0.148	0.136

**Table 7. DRB-HICOM.**

Year	2022	2021	2020	2019	2018	2017	2016	2015	2014
EPS	9.71	-15.33	28.66	18.57	25.78	-23.62	-51.35	15.53	23.91
Debt/Equity	0.82	0.88	0.75	0.65	0.56	0.61	0.81	0.74	0.84
Return on Equity	0.042	-0.032	0.055	0.048	0.040	-0.022	-0.097	0.054	0.094

**Table 8. Matrix.**

Year	2022	2021	2020	2019	2018	2017	2016	2015	2014
EPS	24.6	31.4	29.5	29	32	28.7	37	40	36
Debt/Equity	0.38	0.45	0.161	0.152	0.157	0.202	0.154	0.044	0.022
Return on Equity	0.105	0.140	0.148	0.165	0.177	0.181	0.295	0.275	0.286

**Table 9. Ajinomoto.**

Year	2022	2021	2020	2019	2018	2017	2016	2015	2014
EPS	27.95	76.49	98.44	93.06	92.54	308.33	67.1	48.9	46.1
Debt/Equity	0.211	0.222	0.027	0.025	0.027	0.026	0.041	0.042	0.040
Return on Equity	0.336	0.091	0.128	0.122	0.129	0.395	0.133	0.106	0.107

**Table 10.** Results showing the correlation, covariant and regression of the 9 companies. Correlation.

	EPS	GEARING	ROE
EPS	1		
GEARING	-0.84074034	1	
ROE	0.871535116	0.047252085	1

**Table 11.** Covariant.

	EPS	GEARING	ROE
EPS	7407.637326		
GEARING	-12.10622151	2.799069921	
ROE	20.59665811	0.021707003	0.07395257

**Table 12.** Coefficient.

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	16.18586376	5.957471266	2.716901691	0.008074205	4.330118106	28.0416094
Gearing	-6.458057131	2.729463052	-2.366054058	0.020398103	-11.88986171	-1.026252552
ROE	275.0417457	16.63075937	16.53813513	$1.5515 \times 10^{-27}$	241.9454798	308.1380116

**Table 13.** Summary output.

<b>Regression Statistics</b>	
Multiple <i>R</i>	0.880509855
<i>R</i> Square	0.775297604
Adjusted <i>R</i> Square	0.769680044
Standard Error	41.55638488
Observations	83

**Table 14.** Anova.

	<b>df</b>	<b>SS</b>	<b>MS</b>	<b><i>F</i></b>	<b>Significance <i>F</i></b>
Regression	2	476679.2481	238339.6241	138.0132332	$1.1596 \times 10^{-26}$
Residual	80	138154.65	1726.933125		
Total	82	614833.8981			

## 5. Discussion

From the above results we can derive the following points:

- 1) The analysis (**Tables 10–14**) reveals a negative correlation between Earnings Per Share (EPS) and the Gearing Ratio, and a positive correlation between EPS and Return on Equity (ROE). This finding aligns with the study conducted by Enekwe et al. (2014), which identified a negative relationship between the gearing ratio and firm performance, as measured by return on assets. Companies with high levels of debt tend to distribute lower dividends to shareholders, likely due to cash flow constraints faced by highly leveraged firms. This explains the observed negative correlation between gearing and EPS.
- 2) Conversely, companies with a high ROE are generally those with substantial profit after tax, which translates into stronger cash flows. Such firms are more capable of distributing dividends to their shareholders, thereby resulting in a positive correlation between ROE and EPS. The correlation coefficient of 0.871 indicates a strong positive relationship between ROE and EPS.
- 3) The *R*-squared value of 0.77 suggests that the regression model explains 77% of the variability in the target variable. In social science research, an *R*-squared value between 0.5 and 0.99 is typically considered acceptable, especially when most explanatory variables are statistically significant. According to Henseler (2009), *R*-squared values of 0.75, 0.50, and 0.25 are classified as substantial, moderate, and weak, respectively.
- 4) Additionally, the *p*-values for both the Gearing Ratio and Return on Sales (ROS) are less than 0.05, indicating statistical significance. As a result, the null hypothesis is rejected in favor of the alternative hypothesis.

The reported empirical findings led the authors to suggest the following recommendations for managers, shareholders and policymakers:

- 1) Shareholders who prioritize receiving annual cash dividends should consider investing in companies with low gearing and strong profitability. Firms with high gearing have fixed obligations, such as interest payments on loans, which can deplete available cash, leaving insufficient funds for shareholder dividends (CFI

Team, 2024). In this study, the gearing formula focused solely on long-term debts (non-current liabilities). Future research could incorporate total liabilities, including both current and non-current liabilities, to determine whether the findings would differ.

- 2) Company managers should carefully monitor their firm's borrowing levels, as company cash should not be solely allocated to cover interest payments. It is also essential to allocate cash for dividends to enhance the reported EPS, thereby attracting potential investors.
- 3) Maintaining a low gearing ratio not only improves the company's EPS but also enhances its Return on Equity (ROE). A strong ROE reflects positively on managerial performance and efficiency, thereby strengthening investor confidence.
- 4) However, a low gearing ratio does not automatically indicate a healthy capital structure. Capital-intensive firms or those operating in highly cyclical industries may find it challenging to finance their operations solely through shareholder equity. At some point, external financing becomes necessary to sustain operations and cover internal costs (CFI Team, 2024). Managers must strike a balance between the appropriate levels of equity and debt to benefit from external financing. Typically, an optimal gearing ratio for well-established companies falls within the 25% to 50% range (Boyte-White, 2024).

## **6. Limitations and future studies**

This study analyses nine randomly selected public listed companies, without focusing on any specific sector. For future research, the same financial ratios could be used to examine companies within specific industries. For instance, analyzing nine companies in the banking sector and nine in the motor industry could help determine whether the effects of gearing and EPS differ across sectors. This study's gearing ratio calculation was based solely on long-term liabilities; however, future research could include current liabilities to assess their impact on EPS.

In future studies, the sample size can be increased from 9 companies to 15 or more companies, to obtain better results.

The Return on Equity (ROE) ratios in this study were calculated using net profits after tax (PAT). In subsequent research, ROE could be measured using profits before tax (PBT) to explore whether taxes significantly affect a company's financial ratios. According to Modigliani and Miller (1958), incorporating taxes into financing decisions may have a favourable impact on firm performance.

## **7. Contribution**

This study offers valuable insights for companies in developing countries regarding the importance of understanding and monitoring the relationship between Earnings Per Share (EPS), gearing, and Return on Equity (ROE). Given the current economic climate, where most firms carry loans and long-term liabilities on their balance sheets, it is crucial to understand how these factors impact overall company performance. A higher EPS is particularly beneficial for attracting and retaining shareholders. Companies can enhance their EPS by leveraging sound financial

knowledge and strategic management of their financing options. The outcome of this study is useful to managers, as it stresses the importance of having a healthy balance between debt and equity. It is also useful to shareholders of the company, as it shows that a company with debts is not necessarily a bad sign. If the company can have a healthy balance between external financing and internal financing, the company will benefit from a low weighted average cost of capital, thus increasing the company's overall value. Even creditors and bankers can benefit from this study by understanding the concept of optimal balance of debt and equity. It is safe to extend their credits to companies that have an optimal balance between debt and equity.

## 8. Conclusion

Financial leverage, also known as gearing, plays a significant role in creating opportunities for both investors and businesses. However, it also introduces substantial risk, particularly for investors, as leverage can magnify losses during economic downturns. For businesses, increased leverage means taking on additional debt, which can be challenging to repay if the company experiences slow growth and poor cash flow in subsequent years.

There are various strategies that both individuals and companies can employ to strengthen their equity base, and financial leverage is one such approach. For businesses, leveraging involves borrowing funds to drive growth, while for investors, it enables access to financial instruments with lower initial capital requirements. However, given the inherent risks of leverage, it is crucial to weigh its advantages against potential drawbacks to determine whether leveraging aligns with a company's financial goals and circumstances.

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