

THE RELATIONSHIP BETWEEN COMPANIES' EARNINGS PER SHARE (EPS) AND GEARING

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Abstract: *The objective of the study is to calculate and measure gearing ratios and EPS (Earning Per Share) of public listed companies and to examine the relationship between the debts and EPS. The study was empirical in nature. The study was conducted over a period of 5 years for the financial years 2016 to 2020 and is based on secondary sources of data. Gearing ratios were calculated from the information given in the financial position of the companies and the EPS is based on the value given in the balance sheet of the respective companies. Excel was used to determine the correlation between EPS and the debt ratio. It was concluded that there is moderate correlation between gearing (debt) and EPS. The correlation coefficient is greater than zero, therefore, it can be concluded that it is a positive relationship.*

Keywords: *Ratio, EPS, Gearing*

Introduction

Any company that is incorporated in Malaysia must submit their Annual Statutory Financial Statements and Key Financial Indicators (KFI) to SSM (Suruhanjaya Syarikat Malaysia or Companies Commission of Malaysia). The filing must be completed using the SSM Malaysian Business Reporting System (MBRS).

Many publicly traded corporations have their own in-house personnel prepare their annual reports, or they outsource this to large accounting firms, professional writing firms, and graphic artists to create impressive brochures to accompany these reports.

Company annual reports provide information on the health of a company to shareholders, stakeholders, the media and other stakeholders. Understanding the purpose of the annual

report can help ensure that the report contains pertinent information about the company. Annual reports became legally required after the Stock Marketing Crash of 1929. Public listed companies must send an annual report to the Securities and Exchange Commission (SEC) and it can be available for public viewing (Contributor, 2020).

Annual reports can generally be found in the company's website which contains information for investors and the general public. The annual reports consist mainly of financial statements, the financial position of the company and the statement of cash flows.

There are many benefits of doing a proper financial analysis. One of the benefits of financial statement analysis is that it can help the business to thrive. Through financial statement analysis we can determine and identify financial strengths, weaknesses and relationships that exist in your company.

This paper covers the analysis of gearing (debt to equity ratio) and EPS. A Debt-to-Equity Ratio determines how much total liabilities there are in relation to equity in the business in a balance sheet.

The gearing ratio can indicate, if there too much debt in the company or if the company has more equity that what it owes. This ratio analysis is done over a number of years to identify trends and likely changes that can affect the company.

Problem Statement

Nearly all companies in Malaysia rely on loans or external funding to continue in operations. Relying heavily on external funding will increase the gearing ratio. High gearing increases the financial risk of the company. Many are not aware the effect loans have on companies' EPS. If high gearing leads to EPS of the company being worst off, this will affect the shareholders' perspective of the company in a negative way.

Objectives

1. To determine relationship between two variables, gearing and EPS.
2. To predict respond of the variables to each other.

Literature Review

Gearing

Gearing ratio is a financial ratio that emphasizes the relationship between fixed interest capital (debt) and ordinary share capital (equity) with the aim of highlighting the financial risks borne by the company. There have been some conflicts on whether the short-term loan should be included in the computation of the gearing ratio. Some authors such as Siyanbola and Olaoye (2013) insisted that gearing ratio should only focus on long-term loans and instruments with fixed coupon rates like preference stocks, whilst others would argue that all loans and overdrafts should be considered because the interest rate of return would still be impacted regardless of the loan duration (Kasasbeh, 2021). Although the gearing ratio is defined and measured differently by different authors, its ultimate concept is to express the proportion of borrowed fund to the owner's equity, which can be illustrated by the mathematical formula below:

$$\text{Gearing ratio} = \frac{\text{Total debt}}{\text{Total equity}} \quad \text{Gearing ratio} = \frac{\text{Long term liabilities}}{\text{Capital employed}} \times 100\%$$

According to Muthee et al., (2016) from the University of Nairobi, a firm with a ratio of more than 50% would be categorized as high-g geared as the company is mainly financed by borrowings and thus is controlled by outsiders. A high gearing ratio would result in high-interest expenses, thus leading to a larger cash outflow (Melville, 2019).

Gearing ratio is crucial in assisting companies to determine the optimal capital structure which comprises of debt and equity. Debt financing allows companies to have higher profitability and return on equity capital as long as the investment's rate of return is higher than the debt's return (Hasan et al., 2021). However, companies might use their shareholders' investment to settle the interest and principal of debts, and this is when the gearing ratio comes in to help companies re-evaluate their financing strategy as well as determining the suitable balance (Abor, 2007). Interest payments lower the company's distributable earnings during the early financing phase when the level of debt is minimal. Net interest payments (interest on debt minus tax savings on profits due to interest expenses) will enable the corporation to trade equity in due to tax avoidance. In another sense, the profits available to shareholders will be the excess return on investments over the set interest on the debt minus the tax savings. Because of its duty to make timely interest payments and debt repayments, fluctuations in operating profitability can increase a company's financial risk.

When deciding on capital structure, one needs to consider the influence of leverage ratios on earnings per share. The amount of debt a company has will significantly impact the earnings available to stock investors. Before earnings can be transferred to shareholders, a company with a high debt ratio must produce enough profit to pay interest on its debt. As a result, the more the debt, the greater the financial risk. As the level of debt rises, so does the projected return to stockholders thus raising financial risk and the possibility of insolvency. When debt is a larger part of total capital, expectations will be higher to compensate for the expected increased financial and insolvency risk. Debt in the capital structure puts equity shareholders at risk. An increase in debt improves earnings per share if the company makes profits that must surpass the interest payable on the debt (The Economic Times, 2018).

Using a company's gearing ratio to gauge its financial structure does have its limitations. Gearing ratios could reflect a risky financial structure, but not necessarily a poor financial state. Whilst the figure gives some insight into the company's financials, it should always be compared against historical company ratios and competitors' ratios.

Generally, higher levels of gearing cause higher levels of financial risk. If the level of gearing increases, the expected return of equity shareholders will also increase, along with the increase in financial risk and personal and bankruptcy risk due to higher levels of the debt component in total capital and therefore the expectation will be more to compensate for taking higher levels of financial and bankruptcy risk.

Earnings Per Share (EPS)

Earnings per share is a financial ratio that attributes a company's earning to every outstanding ordinary share. Paragraph 14 of International Accounting Standard 33 (IAS 33) has specifically mentioned that the company's earnings should be adjusted by tax expenses and all dividends incurred for preference shares (IFRS, 2021). Thus, its mathematical illustration is as follows:

$$\text{EPS} = \frac{\text{earning after taxes - dividends on preference shares}}{\text{weighted average number of ordinary shares}}$$

(Prewysz-Kwinto and Voss, 2017)

EPS measures a company's profitability as the figure itself represents how much profit shareholders can earn by buying one share of common stock (Lev, 1989). EPS is mainly about book value, as the actual market price for shares is not considered, and only the weighted average amount of shares is used since the actual outstanding amount might fluctuate (Mirzaldi et al., 2021). An alternative for EPS is diluted EPS, where all convertible instruments including warrants and stock options are taken into consideration for their potential-dilutive effects (Robbette et al., 2017). As regulated by IAS 33, it is compulsory for entities to disclose EPS data in financial statements if the entities are publicly trading their equity instruments (IFRS, 2021).

EPS is proven to have a positive correlation with the market price of the company shares. Higher EPS will result in higher stock prices – as the profit portion per share increases, the ordinary share becomes more attractive to shareholders, whilst the increasing demand towards the company shares will eventually stimulate its market price (Chang et al., 2008). Such viewpoints are supported by multiple researchers; for instance, both Baruch Lev (1989) and Almunani (2014) once mentioned that EPS was a direct indication of shareholders' potential wealth. EPS also signals the future growth of a company; thus, it is frequently used for long-term investment decisions (Darto, 2019). Besides, EPS is applied in the calculation of P/E ratio to inspect the market price general investors would pay for the company's stock for its current earnings (Demsetz, 1995).

EPS is regarded as the most popular and extensively utilized financial performance metric. Many believe that earnings are the most significant success metric they reported to outsiders. EPS is also the cornerstone that supports strategic decision-making processes like share values, management performance incentive programs, as well as mergers and acquisition. EPS is much more straightforward to compute and easier to understand. When there is growth in EPS, management is generally praised.

However, when using EPS to make investing or trading choices, we also need to look at its disadvantages. For instance, a firm can manipulate EPS by repurchasing shares, lowering the number of shares outstanding, and inflating EPS at the same earnings level. Results per share will be affected by changes in accounting standards for reporting earnings. EPS is a principal element of the Price-Earnings (PE) ratio because the PE ratio can assist investors in determining the value of their stock holdings. This can be reflected as, PE ratio = Market price of each equity share / Earning per share

EPS & Gearing

Siyanbola and Olaoye have written in their research that financial leverage represents the debts that are occupied in the capital structure of an organization and the purpose of financing it with debts is to improve the efficiency, effectiveness of business operation, however high leverage will also cause the organization to have an obligation to pay the fixed interest that comes after the debt borrowed. The formula to calculate the effect of debt towards EPS is stated below:

$$DFL = \frac{\% \Delta \text{ in EPS}}{\% \Delta \text{ in EBIT}}$$

(Siyanbola and Olaoye, 2013)

Many researches have conducted research to find out the relationship between financial leverage and the profitability of the company and amongst these researchers are Kumar and Aleemi (2020), where they investigated how financial leverage affects EPS. For their research purpose, seven listed companies from the Bombay Stock Exchange were chosen and annual reports from a period of seven years were used to analyse this relationship. Based on their research, they concluded that there is both a positive and negative relationship between financial leverage and EPS. The explanation behind the positive relationship is, that when there is high financial leverage then the return on investments will be higher compared to fixed interest charged therefore making the leverage favourable against EPS. However, financial leverage can be unfavourable against EPS as well, and this is when the firm doesn't produce enough sales which is expected by the borrower. This leads to the earnings being lower than the cost of fixed interest being charged which causes the EPS to be low.

Research Hypotheses

H₀: $\rho_{xy} \approx 0$

Null hypothesis, there is no relation between x and y.

H₁: $\rho_{xy} \neq 0$

The alternative hypothesis (H₁) states, there is a relation between x and y.

Methodology

Data Collection

Nine Malaysian companies listed in the Malaysian Stock exchange were selected at random and extracted the gearing and EPS figures extracted from these companies from 2016 to 2020. Gearing is calculated by taking the long term liability divided by equity (Siyanbola et al., 2013). The data for long term liability and equity was obtained from published financial statements of the nine companies selected. The companies' names have been replaced by naming them as Company 1, Company 2 and so forth.

Results and Discussion

Company 1

Year	2016	2017	2018	2019	2020
Gearing%	28.50	27.40	27.07	25.25	18.54
EPS sen	24.4	4.0	3.9	4.7	71.2

Company 2

Year	2016	2017	2018	2019	2020
Gearing%	20.85	39.57	57.82	57.32	74.54
EPS sen	50.91	20.48	-0.35	24.68	-40.05

Company 3

Year	2016	2017	2018	2019	2020
Gearing%	16.83	22.64	24.51	24.59	10.97
EPS sen	95.1	115.0	85.5	83.5	27.8

Company 4

Year	2016	2017	2018	2019	2020
Gearing%	6.97	4.11	2.04	2.89	2.1
EPS sen	14.69	12.46	3.23	4.51	0.54

Company 5

Year	2016	2017	2018	2019	2020
Gearing%	11	12	14	10	9
EPS sen	17.6	20.7	16.3	-57.2	10.5

Company 6

Year	2016	2017	2018	2019	2020
Gearing%	43.05	50.26	60.92	63.30	81.25
EPS sen	276	232	336	430	430

Company 7

Year	2016	2017	2018	2019	2020
Gearing%	7.04	5.76	5.79	5.15	4.33
EPS sen	13.25	8.10	6.34.	3.39	7.79

Company 8

Year	2016	2017	2018	2019	2020
Gearing %	2.10	1.17	1.13	1.36	1.47
EPS sen	26.8	28.6	22.8	19.3	17.7

Company 9

Year	2016	2017	2018	2019	2020
Gearing %	0.11	0.068	0.0512	0.014	0.0044
EPS sen	16.9	-35.4	42.7	59.3	42.7

SUMMARY OUTPUT						
<i>Regression Statistics</i>						
Multiple R	0.535495971					
R Square	0.286755935					
Adjusted R Square	0.271580529					
Standard Error	18.43436328					
Observations	49					
<i>ANOVA</i>						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	1	6421.380275	6421.380275	18.896097	7.34637E-05	
Residual	47	15971.81023	339.8257496			
Total	48	22393.19051				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	11.36405559	3.194928016	3.55690505	0.0008692	4.936689466	17.7914217
EPS (x)	0.13948071	0.032086925	4.346964095	7.346E-05	0.074930143	0.20403128

Discussion and Conclusion

The above analysis confirms that there is a correlation between EPS and Gearing. Both significant F and the P-values are lower than 0.05, therefore as such we reject $H_0: \rho_{xy} \approx 0$, and accept $H_1: \rho_{xy} \approx 0$.

The correlation coefficient (γ) expresses the strength of association between 2 variables. If the correlation coefficient is greater than zero, it indicates a positive relationship. The value of EPS increases when gearing increases.

In this study, the correlation coefficient (γ) is 0.5355, so there is a moderate positive correlation between EPS and gearing. This finding corroborates what was reported by Rajan and Zingales (1995). The findings of this research is important from a theoretical and practical view point. To obtain the right mix of long term debts, equity and EPS, is importance to improve the leverage decision and the value of the company.

From this study, if the EPS increases by 1 sen, the gearing will increase by 13.9%. Coefficient of determination (γ^2) is to estimate the percentage of the independent variable that explains what happens to the dependent variable.

In the analysis above, the γ^2 is 0.287. 28.7% of the variation in gearing is explained by a one unit change in EPS. We can conclude therefore that although gearing of a company affects the EPS, it is not the only factor. There are other likely factors such as liquidity, profitability and the health of the economy, that affect a company's EPS. It would be recommended to do further research on these variables' and determine their effect on EPS.

According to new research, companies that borrow will have the obligations to pay fixed interest on these borrowing. As long as profits made by this companies exceeds the interest obligation, the relationship between gearing and EPS will be positive ("Profitability and Financial Leverage: A Study Based on Stitched and Unstitched Textile Sector of Pakistan," 2019).

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