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FINANCIAL PERFORMANCE EVALUATION THROUGH RATIO ANALYSIS: A STUDY ON RURAL POWER COMPANY LTD.

Muhammad Salah Uddin [(a)] *Md. Faisal-E-Alam* [(b)] *Sheikh Abdul Kader* [(c)1] *Md. Ali Imran* [(d)] *Tahrima Haque Beg* [(e)]

[(a)] *PhD Student, Department of Economics, Faculty of Economics and Administrative Sciences, Sakarya University, Turkey; E-mail: salahuddindu2004@gmail.com*
[(b)] *Assistant Professor, Department of Management Studies, Faculty of Business Studies, Begum Rokeya University, Bangladesh; E-mail: faisal14.ru@gmail.com*
[(c)] *Assistant Professor, Department of Economics, Faculty of Social Sciences, Jagannath University, Bangladesh, PhD Scholar, Sakarya University, Turkey; E-mail: kafiaub@gmail.com*
[(d)] *Assistant Professor, Department of Business Studies, Faculty of Business & Entrepreneurship, Daffodil International University, Bangladesh; E-mail: imran@daffodil.ac*
[(e)] *Assistant Professor, Department of Management & Finance, Sher-e-Bangla Agricultural University, Bangladesh; E-mail: sau.finance1@gmail.com*

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ABSTRACT

Financial statements are a set of reports that detail an organization's cash flows, financial position, and financial results. Financial statement analysis provides a piece of information on the financial status and the present situation of the company as well as able to forecast their future plan. This study makes an effort to evaluate Rural Power Company Ltd.'s financial performance from 2018 to 2020. The present study is mainly based on secondary data collected from the sample unit and results are interpreted in tabular form and bar chart using MS Excel. The results show how effectively the company is managed in terms of production, administration, and sales. It means the economic condition of firm is good. On the other hand, the Current Ratio, Liquid ratio, Debt Equity Ratio, Gross Profit Ratio, Net Profit Ratio, and EPS Ratio are acceptable. But the Return on Equity (ROE) Ratio is not satisfactory, which needs further improvement. An economist can assess the degree of economic power concentration and potential dangers in the financial policies adopted by examining the financial accounts of various firms. The analysis also serves as the foundation for a number of governmental acts concerning licensing, restrictions, price fixing, profit caps, dividend freezes, tax subsidies, and other concessions to the business sector.

INTRODUCTION

Financial performance is frequently used to compare similar businesses within the same industry or to compare whole industries or sectors. It is also a broad indicator of a company's overall financial health during a specific period. Financial Statement Analysis is critically evaluating the financial data presented in the financial statements to comprehend and make judgments on the business's activities. Identifying a company's financial strengths and weaknesses helps predict the firm's future prospects (Oshoke & Sumaina, 2015). Financial analysis is strategically related to the items of the balance sheet, income statement, and other operational data and is also known as the analysis and interpretation of financial reports (Rahman & Saif, 2021). Financial statement analysis gives critical information about managerial effectiveness and business efficiency. This allows the analysts to make decisions about the firm's operation and future investments in it.

The steady flow of power is essential to the functioning of modern industry (Anwar & Daryanto, 2020). In a nutshell, a corporation develops if its' per-person electrical energy consumption is high enough. For becoming a developed nation, more attention is paid to setting up a power company to meet the demand for electricity (Rai & Prakash, 2019). Rural Power Company Ltd. (RPCL) was established in 1994 and incorporated as a public limited company with the aim of fostering a private culture in the Private Power Generation sector as part of the nation's power sector reform. From July 2007, the power plant supplied 210 MW of electricity to the national grid. Due to the 100% locally mobilized equity investment, Rural Electricity Company Limited has expanded the scope of power generation in Bangladesh's private sector.

[1]*Corresponding author: ORCID ID: 0000-0003-3959-7169*

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This is unquestionably a national private company, which will undoubtedly increase investor confidence in the private power generation industry.

This study intends to analyze financial performance regarding prospects of the RPCL. Only the financial performance of Bangladeshi banking companies has been investigated (Hossain & Saif, 2019). The current study area is valid and significant after recognizing this gap in the literature. This study aims to provide a response to the question: What factors affect the financial performance of sustainable power providers in emerging markets like Bangladesh? Few studies have examined financial ratio analysis to assess the success of businesses. Hence, the research aim is determined in the context of measuring financial performance using ratio analysis. The findings will give a scenario of existing profitability and operational effectiveness. This study will also uncover the relative weight given to various elements of the Rural Power Company Ltd.'s financial position. The financial performance is evaluated for facilitating financial data simplification, financial strength analysis, decision-making, forecasting, and planning.

The following is how the study is organized: The background, problem statement and significance of the study are explained in the introduction section. The review of earlier research is followed in the literature review section. The next section, materials and methods, describes the research methodology and sample strategy used in this work. The results section summarizes the findings of the analysis and interpretation. Finally, the conclusion addresses summary, constraints and offers suggestions for further research.

LITERATURE REVIEW

Many studies have attempted to find the proper financial factors for measuring performance, ensuring that a company's activity is consistent with the interests of its managers and stakeholders and serves as a foundation for economic decision-making.

Ratio analysis has been widely investigated as a measure of corporate success. A financial ratio is a technique companies use to examine financial statements to provide and explain an idea of the good and bad status of a company's financial situation over a specific period of time (Sari, 2019). It has recently been suggested to use financial ratio analysis to assess the financial performance of the American power and energy sector. The empirical findings are also applied to a global comparison of other significant industrial nations. After performing just marginally better than American standards, the Japanese electric power corporation possessed sufficient administrative and financial competence (Sueyoshi, 2005). Ratio analysis is used to evaluate a company's past performance, current state, and prospects for the future (Hasanaj & Kuqi, 2019). Despite the fact that there are many standards and different financial ratios available, the study's objectives and the organization's activities determine which ratios should be employed. Financial ratios give useful insights and help managers make better decisions if appropriately interpreted (Kader et al., 2021b; Kabir et al., 2021; Nayeen et al., 2020; Nahar et al., 2021; Rahman et al., 2021a; Rahman et al., 2021b; Shahriar 2021a; Shahriar 2021b; Zayed et al., 2021a; Zayed et al., 2021b; Ahmed et al., 2022; Al-Quraan et al., 2022).

Paun (2017) looked at the financial performance of companies in the power sector and found that the majority of them lacked a stable financial position. The findings, however, show that the additional variables to ROE and ROA included in the analysis are significant in assessing the financial success of sustainable electricity producers (Schabek, 2020). Another study discovered that government-owned power generation companies' financial performance is more efficient than private-sector power generation companies (Rai & Prakash, 2019). There needs to be more research on performance evaluation for individual organization across the whole power sector (Dong et al., 2021). Financial ratios are used in multi-decision analysis to assess the financial performance of power-producing businesses (Lkuçar & Ifci, 2016; ; Faisal-E-Alam et al., 2022; Khan et al., 2022; Mia et al., 2022; Rubi et al., 2022; Zayed et al., 2022a; Zayed et al., 2022b). When evaluating a company's financial success, one can look at either the absolute performance in terms of the scope of operations (balance sheet and income statement) or the relative performance in terms of financial ratios (Katchova & Enlow, 2013; Vibhute et al., 2021; Ali et al., 2020a; Ali et al., 2020b; Chowdhury et al., 2020; F. Chowdhury et al., 2021; Chowdhury et al., 2021; Iqbal et al., 2021; Kader et al., 2019; Kader et al., 2021a).

The findings of ratio analysis can also serve as a valuable control and monitoring function each year. The company's performance can be assessed by examining financial ratios relating to liquidity (Rashid, 2018). Greater levels of such ratios indicate a healthy liquidity position through the maintenance of high current assets or low current liabilities. When liquidity is assessed using the current ratio, a problem arises because it only evaluates the assets' number, not their quality. The current and liquid or quick ratios should be examined to determine the company's liquidity situation over the short and long terms. The debt-to-equity ratio (DER) evaluates capital dependency; the higher this ratio, the more unprofitable the company is since it is taking on more risk of eventual collapse (Nurhikmawaty et al., 2020). The gross profit margin is always greater than the net profit margin, which indicates the company's profitability (Mahdi & Khaddafi, 2020). In every sector, ROE is a critical ratio, it also includes the net profit margin for some companies, and it is more significant than ROA because it measures the company's performance (Panigrahi, 2021). Increase in EPS ratio is a crucial indicator of performance since it demonstrates how much money the organization is producing for its shareholders after accounting for the effects of issuing new shares and changes in profit (Kumar et al., 2018). Financial ratios substantially impact financial performance (Al Dalayeen, 2017). As a result, in the current study, the term "financial performance" simply refers to the analysis of financial statements, and financial ratios are the instruments used to evaluate the financial performance of the organizations.

MATERIALS AND METHODS

The Rural Power Company Ltd (RPCL) is selected as a sample unit on the basis of purposive sampling to make it representative of the other power companies. The reason for choosing RPCL is based on the consideration that it will represent the picture of a zone being homogeneous regarding location and other external perspectives. The present study is mainly based on panel data (from 2018 to 2020) collected from the sample unit. Annual Reports of RPCL (various issues), financial statements, income statements and balance sheets from the sample firm have been considered secondary data sources. Panel data capture greater variability than time series or even cross-sectional data (Gocer & Alatas, 2016). In this regard, similar results have been found in contemporary study settings (Gill & Kaur, 2015; Uribe & Guillen, 2020). A powerful technique for financial analysis is ratio analysis. Financial ratio or ratio is the mathematically defined relationship between two accounting data. An analyst can more accurately assess the firm's financial status and performance with the aid of a ratio. In addition to current and future creditors, a company's owners and management are also concerned with the health of the company's finances. A company's financial statement can be evaluated by its profitability and financial ratios. Although there are many factors for evaluating financial performance, we consider seven in this study. The ratios are (1) Current; (2) Liquid; (3) Debt Equity; (4) Gross Profit Margin; (5) Net Profit Margin; (6) Return on Equity (ROE); and (7) Earnings per Share (EPS). Some scholars adopt these ratios in evaluating financial performance, as depicted in the following table 1.

Table 1. Evaluation criterion of financial performance used by researchers

Measures of Evaluation	Academics
1. Current Ratio	Edirisinghe et al. (2008), Lim et al. (2014), Huang et al. (2015)
2. Liquid Ratio	Edirisinghe et al. (2008), Lim et al. (2014), Huang et al. (2015)
3. Debt Equity Ratio	Edirisinghe et al. (2008), Lim et al. (2014)
4. Gross Profit Ratio	Mahdi & Khaddafi (2020)
5. Net Profit Ratio	Edirisinghe et al. (2008), Lim et al. (2014)
6. Return on Equity (ROE) Ratio	Mirghafuri et al. (2013), Edirisinghe et al. (2008), Lim et al. (2014)
7. Earnings Per Share (EPS) Ratio	Khajavi et al. (2005), Edirisinghe et al. (2008), Lim et al. (2014)

RESULTS

Current Ratio

The Current ratio is the ratio of total current assets divided by total liabilities. Current ratio is the measurement of the firm's short term solvency. A ratio of greater than one means that the firm has more current assets than liability. Current ratio gives a general picture of adequacy of working capital and of the company's ability to meet its day to day obligations. Obligations which are matured within a year can be included in current liabilities. Current ratio of Rural Power Company Ltd. (RPCL) is calculated using the following formula and shown in table 2.

$$\text{Current Ratio} = \frac{Total\ current\ Asset}{Total\ cureent\ liabilities}$$

Table 2. The current ratio of RPCL during the Study period

Year	2018 (in crore)	2019 (in crore)	2020 (in crore)
Total Current Assets	137.80	216.60	229.90
Total Current Liabilities	83.76	124.52	139.62
Current Ratio (%)	1.65:1	1.74:1	1.65:1

Source: Calculated from annual reports of RPCL from 2018 to 2020

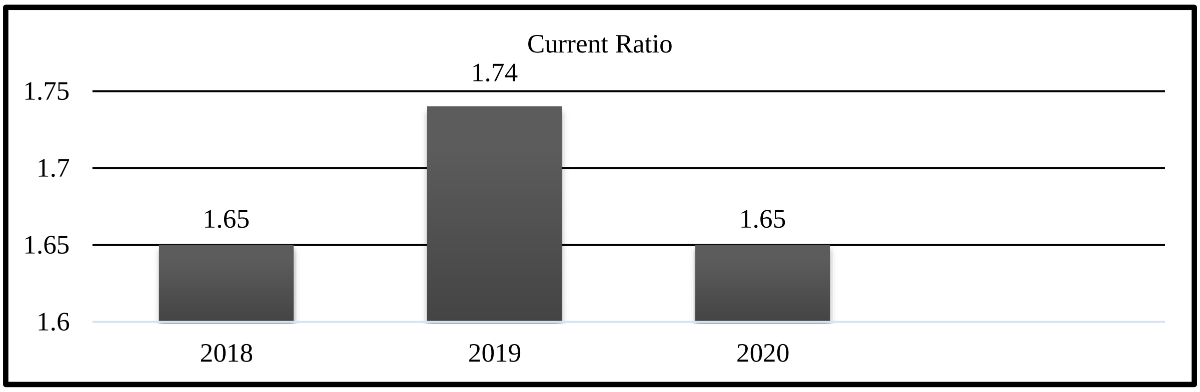

Figure 1. Bar chart of current ratio from 2018 to 2020

Source: Processed data from table 2

The present ratio indicates an upward trend in 2019 compared to the prior year and a decreasing trend in 2020 compared to the prior year (see figure 1). The usual proportion is 2:1. The corporation has taka of current liabilities for every taka. The ratios of 1.65:1 in 2018, 1.74:1 in 2019, and 1.65:1 in 2020 which is merit consideration for future development.

Liquid Ratio

A company's liquidity ratio is used to determine whether it has enough cash equivalents to cover its present liabilities or obligations. The liquid ratio for RPCL is calculated using the given formula and shown in table 3.

$$\text{Liquid Ratio} = \frac{Total\ current\ Asset - Inventories}{Total\ cureent\ liabilities}$$

Table 3. The liquid ratio of RPCL during the Study period

Year	2018 (in crore)	2019 (in crore)	2020 (in crore)
Total Current Assets- Inventories	132.94	212.9	175.34
Total Current Liabilities	83.76	124.52	139.62
Liquid Ratio (%)	1.59:1	1.71:1	1.26:1

Source: Calculated from annual reports of RPCL from 2018 to 2020.

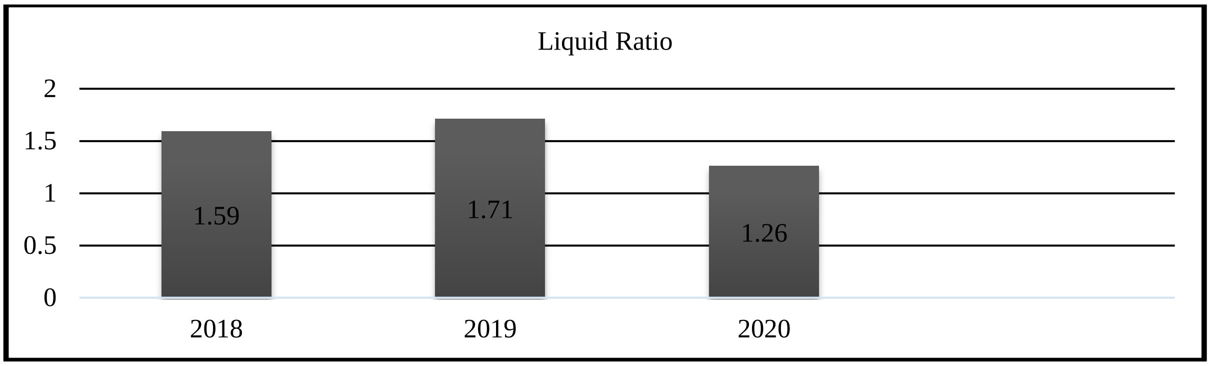

Figure 2. Bar chat of liquid ratio from 2018 to 2020
Source: Processed data from table 3

The liquid ratio increased in 2019 compared to the prior year and decreased in 2020 compared to the prior year, both of which show that the corporation is able to pay off its' immediate current liabilities. The company has a standard ratio of 1:1. The ratios of 1.59:1 in 2018, 1.71:1 in 2019, and 1.26:1 in 2020 which deserves for upcoming development (see figure 2).

Debt Equity Ratio

Debt Equity Ratio is found dividing long term debt by total equity. It is a relative measure of position of debtors compared to equity holders. A high ratio indicates the higher position of debt within the firm's financing than the equity capital. The following formula is used to calculate the debt-to-equity ratio of RPCL and table 4 shows the results.

$$\text{Debt Equity Ratio} = \frac{Long\ term\ Debt}{Total\ Equity}$$

Table 4. The debt equity ratio of RPCL during the Study period

Year	2018 (in crore)	2019 (in crore)	2020 (in crore)
Long Term Debt	322.11	160.72	274.11
Total Equity	1105.57	1317.30	1543.83
Debt Equity Ratio (%)	0.29:1	0.12:1	0.18:1

Source: Calculated from annual reports of RPCL from 2018 to 2020

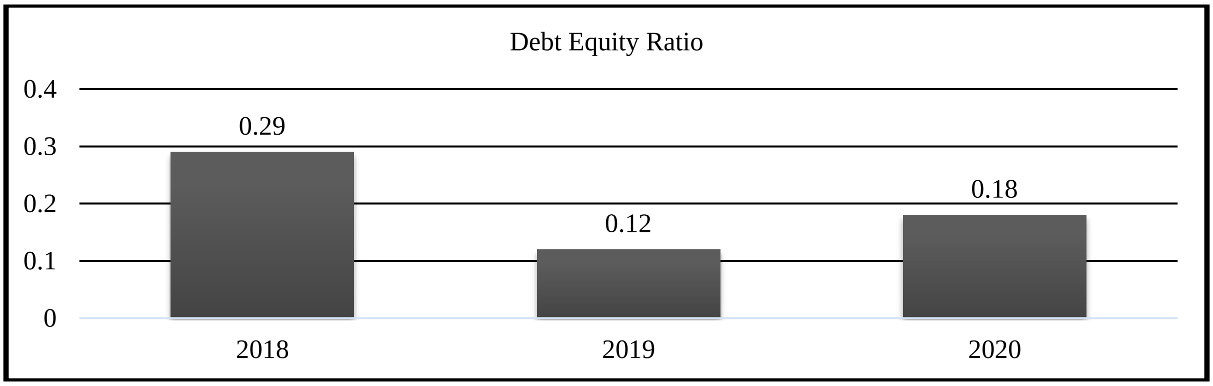

Figure 3. Bar chat of debt equity ratio from 2018 to 2020
Source: Processed data from table 4

The ratio shows the relationship between external and internal equities. The standard ratio is 1:3 and the calculated ratio is 0.29:1 in 2018, is 0.12:1 in 2019 and is 0.18 in 2020 which is either less or lower than of standard (see figure 3).

Gross Profit Ratio

The difference between sales and the manufacturing cost of the items sold is the gross profit. Additionally, sales are contrasted with gross profit. The efficiency with which management generates each unit of goods is indicated by the gross profit margin ratio. This ratio shows the typical difference between sales revenue and cost of goods sold. A high gross profit ratio indicates effective product management and suggests that the company can produce at comparatively reduced costs. Low gross profit margins are a result of lower selling prices, which results in greater cost of products sold. The gross profit ratio of RPCL is calculated using the formula below, and the results are shown in table 5.

$$\text{Gross Profit Ratio} = \frac{Gross\ profit \times 100}{Net\ sales}$$

Table 5. The gross profit ratio of RPCL during the Study period

Year	2018 (in crore)	2019 (in crore)	2020 (in crore)
Gross profit	16445.45	13520.00	16532.11
Net Sales	333.24	311.29	350.28
Gross Profit Ratio (%)	49.35	43.43	47.20

Source: Calculated from annual reports of RPCL from 2018 to 2020

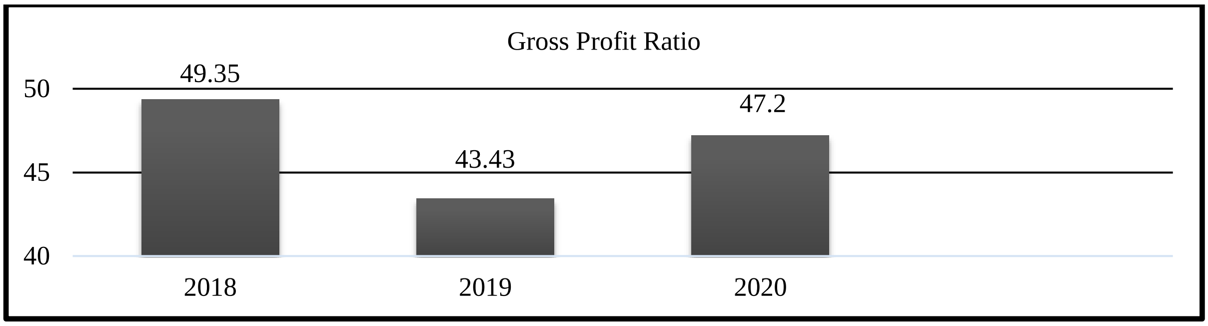

Figure 4. Bar chat of gross profit ratio from 2018 to 2020
Source: Processed data from table 5

The ratio shows how much sales are required to cover the operating cost. The standard ratio is 80% to 90% and the ratio worked out above is 49.35% in 2018, is 43.43 in 2019 and is 47.20 in 2020 which indicates lower than standard ratio. Though sales have been dropped by 5.92% in 2020 compared to last year due to increase in cost of power generation, repair and maintenance expenses mainly, gross margin has been increased by 3.77% in 2020 (see figure 4).

Net Profit Ratio

Net margin is another name for this ratio. This gauges the association between a company’s net profit and sales. The company’s ability to withstand challenging economic conditions is shown by its’ net income profit ratio. A business with a high net margin ratio would make sure that the owners received a sufficient return and could survive in tough economic times when selling prices were dropping, production costs were rising, and consumer demand was reducing. A corporation with a low net profit margin ratio would find it extremely challenging to survive these benefits. According to the definition of net profit margin ratio used, it is determined by formula given below and presented in table 6.

$$\text{Net Profit Ratio} = \frac{Net\ Income\ (profit) \times 100}{Net\ Sales}$$

Table 6. The net profit Ratio of RPCL during the Study period

Year	2018 (in crore)	2019 (in crore)	2020 (in crore)
Profit (loss) (Tax free)	12459.97	11756.11	16352.77
Net Sales	333.24	311.29	350.28
Net Profit Ratio (%)	47.39	37.77	46.68

Source: Calculated from annual reports of RPCL from 2018 to 2020

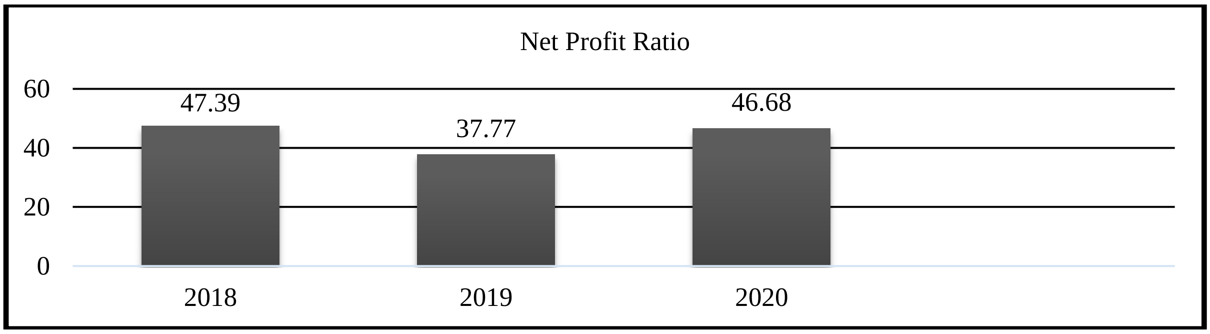

Figure 5. Bar chat of net profit ratio from 2018 to 2020
Source: Processed data from table 6

In 2018, RPCL's net profit was 47.39%; in 2019, it dropped to 37.77%; and once again in 2020, it increased to 46.68% (see figure 5). As a result, the Net Profit Ratio is acceptable. It shows how effectively the business manages the power's production, administration, and sale.

Return on Equity (ROE) Ratio

The ratio of a firm's net income to its shareholders' equity is known as return on equity (ROE). A company's profitability and the effectiveness of its revenue generation are measured by its return on equity (ROE). The higher the ROE, the better a corporation can turn equity financing into profits. ROEs of 15% to 20% are typically seen as favorable. Along with other financial parameters, ROE is used while valuing stocks. The following formula is used to calculate ROE which displays in table 7.

$$\text{Return on Equity Ratio} = \frac{Net\ Income\ (Tax\ Exempted) \times 100}{Total\ Equity}$$

Table 7. The return on equity ratio of RPCL during the Study period

Year	2018 (in crore)	2019 (in crore)	2020 (in crore)
Net Income (Tax Exempted)	12459.97	11756.15	163.52
Total Equity	1105.57	1317.30	1737.88
Return on Equity Ratio (%)	11.27	8.92	9.41

Source: Calculated from annual reports of RPCL from 2018 to 2020

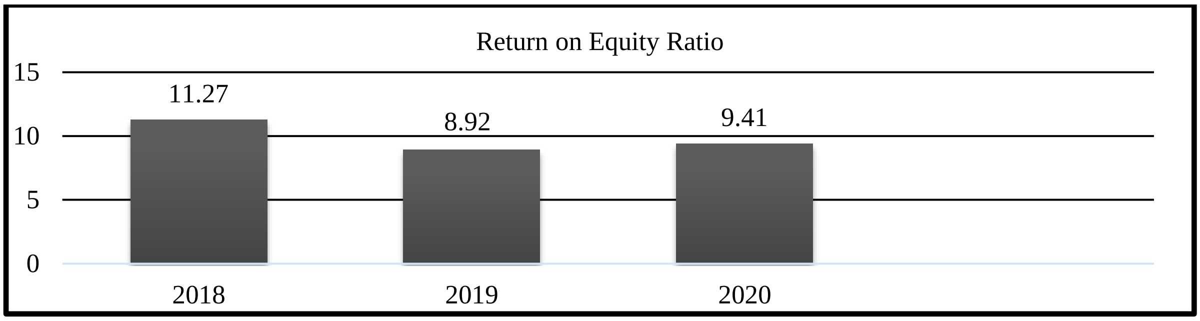

Figure 6. Bar chat of return on equity ratio from 2018 to 2020

Source: Processed data from table 7

Figure 6 depicts that the company's net profit on equity share capital was 11.27% in 2018, 8.92% in 2019 and 9.41 in 2020, indicating that profitability decreased in 2019 and increased in 2020. In short, the company is receiving a satisfactory return on its' investment.

Earnings per Share (EPS) Ratio

EPS is a measure that is used to estimate a company's present and long-term financial performance. EPS is the sum of the net income divided by the number of outstanding common shares of a corporation. After expenditures and expenses are taken into account, a company's net income is the amount made available to all shareholders. EPS is commonly referred to as a company's bottom line value. The formula below is used to calculate the EPS ratio which exhibits in table 8.

$$\text{Earnings per Share Ratio} = \frac{Net\ Income\ (Tax\ Exempted)}{Total\ Number\ of\ Share}$$

Table 8. The EPS Ratio of RPCL during the study period

Year	2018 (in crore)	2019 (in crore)	2020 (in crore)
Net Income (Tax Exempted)	124.60	117.56	163.52
Total Number of Share	0.924	0.975	1.06
EPS Ratio	134.85	121.14	153.18

Source: Calculated from annual reports of RPCL from 2018 to 2020

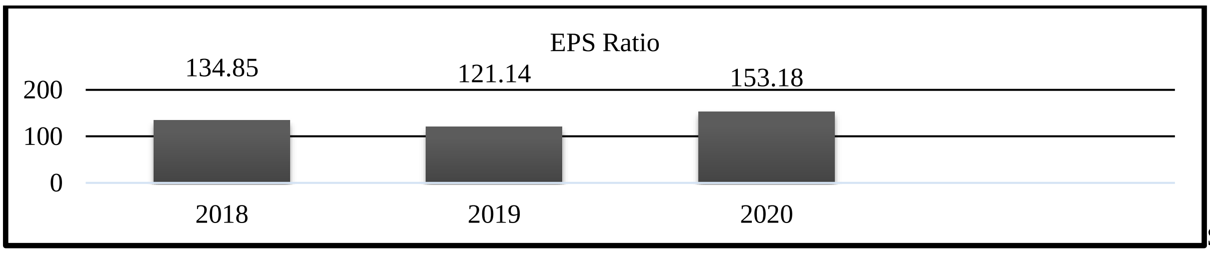

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Figure 7. Bar chat of EPS ratio from 2018 to 2020

Source: Processed data from table 8

The Company earned a profit of Tk 134.85 in the year of 2018, Tk 121.14 in the year of 2019, and Tk 153.18 in the year of 2020 on each share of face value Tk 500 (see figure 7). As a result, the Rural Power Co. Ltd. has an advantageous position and good economic condition.

DISCUSSIONS

Analyzing and interpreting financial statements is a routine practice to assess the company's performance. It is suggested that the company's performance should be evaluated continuously. Because performance reviews lead to corrective action. This study indicated that the future of RPCL is promising and becoming more competitive in unexpected conditions. However, it must reduce operating expenses in order to increase net profit. The corporation should eventually strengthen its' liquidity position to run the company successfully. The empirical findings from the panel data estimations demonstrated that the gross profit ratio and net profit margin ratio, as well as the ROE ratio and EPS ratio, are discovered to have a favorable and significant impact. Investments in RPCL can be expected to yield a good return and increase wealth. However, this study takes some precautions for interpreting and comprehending the results due to some inherent limitations possessed by ratio analysis. In addition, financial ratio analysis can not only determine the company's success because the management team contributes to the achievement of goal in the long run.

CONCLUSIONS

Since RPCL's earnings have been rising, this will draw many investors' attention. The organization should now focus on corporate growth while simultaneously making contributions to meet social demands for the benefit of society. The company should investigate the viability of borrowing money from other sources so that it may continue to increase its' production capacity while taking demand into account. To better manage credit and increase profit, the company should enhance its' credit policy. The company's liquidity situation is quite strong. As a result, it should reduce investment in current assets. They must thus alter their credit policy to cut back on debtors. Additionally, they want to consider these short-term investments in other things like corporate expansion. The analysis of the RPCL's financial performance during the study period shows that it was satisfactory. The company should provide a new direction for the business so that it can grow and become more profitable. However, the business needs to examine socioeconomic, management, and operational factors as well as have up-to-date knowledge about policymakers' judgments. Moreover, the analysis and findings from this study are based on secondary data sources for a short time. Additionally, the current study is limited to a few financial performance factors and does not consider outside variables like gross domestic product, inflation, stock market capitalization, etc. Accordingly, with the addition of external components to the evaluation of financial performance, there is room for additional research, preferably a comparison among different companies on the topic.

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REFERENCES

Al Dalayeen, B. (2017). Financial Performance Appraisal of Selected Companies in Jordan. *Open Journal of Business and Management*, *5*(01), 131-140. https://doi.org/10.4236/ojbm.2017.51012

Anwar, R., & Daryanto, W. M. (2020). FINANCIAL PERFORMANCE ANALYSIS AND MEASURENMENT OF STATE OWNED POWER GENERATION COMPANIES BEFORE AND AFTER ASSET REVALUATION IN 2015. *International Journal of Business, Economics and Law*, *21*(1), 18-31.

Ali, M. C., Islam, K. M. A., Chung, S. J., Zayed, N. M., & Afrin, M. (2020). A Study of Green Human Resources Management (GHRM) and Green Creativity for Human Resources Professionals. *International Journal of Business and Management Future*, *4*(2), 57-67. https://doi.org/10.46281/ijbmf.v4i2.857

Ali, M. C., Islam, K. A., Chung, S. J., Zayed, N. M., & Islam, M. R. (2021). The correlation between job-hopping attitude and turnover behavior: A job satisfaction perspective in Bangladesh. *International Journal of Business and Management Future*, *5*(1), 14-26.

Ahmed, S. F., Zayed, N. M., Islam, K. M. A., & Nitsenko, V. (2022). Investigating the impact of re consumption on co2 emissions: evidence from the saarc countries. Natsional'nyi Hirnychyi Universytet. Naukovyi Visnyk, (3), 107-111. https://doi.org/10.33271/nvngu/2022-3/107

Al-Quraan, T. M., Vovk, O., Halko, S., Kvitka, S., Suprun, O., Miroshnyk, O., ... & Islam, K. A. (2022). Energy-Saving Load Control of Induction Electric Motors for Drives of Working Machines to Reduce Thermal Wear. *Inventions*, *7*(4), 92. https://doi.org/10.3390/inventions7040092

Chowdhury, S., Islam, K. M. A., Rahman, M. M., Raisa, T. S., & Zayed, N. M. (2020). One Day International (ODI) Cricket

Match Prediction in Logistic Analysis: India VS. Pakistan. *Journal of Human Movement and Sports Sciences*, *8*(6), 543-548. https://doi.org/10.13189/saj.2020.080629

Chowdhury, F. N., Mustafa, J., Islam, K. M. A., Hasan, K. B. M. R., Zayed, N. M., & Raisa, T. S. (2021). Social Business in an Emerging Economy: An Empirical Study in Bangladesh. *The Journal of Asian Finance, Economics and Business*, *8*(3), 931–941. https://doi.org/10.13106/JAFEB.2021.VOL8.NO3.0931

Chowdhury, S., Meero, A., Rahman, A.A.A., Islam, K. M. A., & Zayed, N. M., Hasan, K.B.M. R. (2021). AN EMPIRICAL STUDY ON THE FACTORS AFFECTING ORGANIC FOOD PURCHASING BEHAVIOR IN BANGLADESH: ANALYZING A FEW FACTORS. *Academy of Strategic Management Journal*, *20*(4), 1-12. *Retrieved from* https://www.abacademies.org/articles/an-empirical-study-on-the-factors-affecting-organic-food-purchasing-behavior-in-bangladesh-analyzing-a-few-factors-11136.html

Dong, J., Liu, D., Liu, Y., Huo, H., Dou, X., & Bao, A. (2021). Trading performance evaluation for traditional power generation group based on an integrated matter-element extension cloud model. *Energy Reports*, *7*, 3074-3089. https://doi.org/10.1016/j.egyr.2021.05.041

Edirisinghe, N. C. P., & Zhang, X. (2008). Portfolio selection under DEA-based relative financial strength indicators: case of US industries. *Journal of the operational research society*, *59*(6), 842-856. https://doi.org/10.1057/palgrave.jors.2602442

Faisal-E-Alam, M., Meero, A., Rahman, A. A. A., Zayed, N. M., Islam, K. M. A., & Imran, M. A. (2022). Social Media and Tourists' Decision in Bangladesh: An Empirical Study on Travelling Cox's Bazar. *Journal of Environmental Management and Tourism*, *13*(4), 925-934. Retrieved from https://journals.aserspublishing.eu/jemt/article/view/7050organic-food-purchasing-behavior-in-bangladesh-analyzing-a-few-factors-1939-6104-20-4-815.pdf

Gill, S., & Kaur, P. (2015). Family involvement in business and financial performance: a panel data analysis. *Vikalpa*, *40*(4), 395-420. https://doi.org/10.1177/0256090915605756

Gocer, I., Akin, T., & Alatas, S. (2016). The effects of saving-investment gap on economic growth in developing countries: A clustering and panel data analysis. *Theoretical & Applied Economics*, *23*(2), 157-172.

Hasanaj, P., & Kuqi, B. (2019). Analysis of financial statements. *Humanities and Social Science Research*, *2*(2), 17-27. https://doi.org/10.30560/hssr.v2n2p17

Hossain, M. S., & Saif, A. N. M. (2019). Impact of firm size on financial performance of banking companies in Bangladesh. *Journal of Banking & Financial Services*, *11*(2), 143-160.

Huang, C., Dai, C., & Guo, M. (2015). A hybrid approach using two-level DEA for financial failure prediction and integrated SE-DEA and GCA for indicators selection. *Applied Mathematics and Computation*, *251*, 431-441. https://doi.org/10.1016/j.amc.2014.11.077

İlkuçar, M., & Çifci, A. (2016). Performance evaluation of electricity generation companies traded on BIST according to the financial parameters through the application of TOPSIS method. *International Journal of Social Sciences and Education Research*, *2*(3), 815-824. https://doi.org/10.24289/ijsser.279025

Iqbal, M. M., Islam, K. M. A., Zayed, N. M., Beg, T. H., & Shahi, S. K. (2021). IMPACT OF ARTIFICIAL INTELLIGENCE AND DIGITAL ECONOMY ON INDUSTRIAL REVOLUTION 4: EVIDENCE FROM BANGLADESH. *American Finance & Banking Review*, *6*(1), 42-55. https://doi.org/10.46281/amfbr.v6i1.1489

Katchova, A. L., & Enlow, S. J. (2013). Financial performance of publicly-traded agribusinesses. *Agricultural Finance Review*, 73 (1), 58-73. https://doi.org/10.1108/00021461311321311

Khajavi, S., Salimifard, A., & Rabia, M. (2005). Application of data envelopment analysis (DEA) in determining the portfolio of the most listed companies in Tehran Stock Exchange. *Social and Human Sciences of Shiraz University*, *22*(2), 75-89.

Kumar, S., & Venoor, M. A. (2018). Analysis of Impact of Earning Per Share, Dividend Per Share and Price Earnings Ratio On Stock Performance. *International Journal of Research in Economics and Social Sciences (Ijress)*, *8*(3), 187-214.

Kader, S. A., Zayed, N. M., Khan, S., Islam, K. M. A., & Siddiki, M. N. A. (2019). An Analysis of Socio-Economic Condition of Female Readymade Garments'(RMG) Workers in Dhaka City. *The Millennium University Journal*, *4*(1), 12-20. Retrieved from http://www.themillenniumuniversity.edu.bd/journal/index.php/TMUJ/article/view/26

Kader, S. A., Rahman, A. A. A., Meero, A., Islam, K. M. A., Zayed, N. M., Hasan, K. B. M. R. (2021a). COVID-19: AFTER EFFECTS OF CORONAVIRUS AND ITS IMPACT ON GLOBAL ECONOMY. *Academy of Strategic Management Journal*, *20*(1). 1-9 *Retrieved from https://www.abacademies.org/articles/covid19-after-effects-of-coronavirus-and-its-impact-on-global-economy-11472.html*

Kader, S. A., Kulsum, U., Islam, K. M. A., Siddiki, M. N. A., Zayed, N. M., & Raisa, T. S. (2021b). Present Situation of the Field Workers in the Development Sector: A Social, Financial and Employment Aspect in Bangladesh. *Journal of Southwest Jiaotong University*, *56*(2). https://doi.org/10.35741/issn.0258-2724.56.2.29

Kabir, M. R., Khan, S., Chowdhury, S., Jahan, S., Islam, K. A., & Zayed, N. M. (2021). Corruption Possibilities in the Climate Financing Sector and Role of the Civil Societies in Bangladesh. *Journal of Southwest Jiaotong University*, *56*(2). https://doi.org/10.35741/issn.0258-2724.56.2.6

Khan, S., Zayed, N. M., Darwish, S., Nitsenko, V., Islam, K. A., Hassan, M. A., & Dubrova, O. (2022). Pre and Present COVID-19 Situation: A Framework of Educational Transformation in South Asia Region. *Emerging Science Journal*, *7*, 81-94.

Lim, S., Oh, K. W., & Zhu, J. (2014). Use of DEA cross-efficiency evaluation in portfolio selection: An application to

Korean stock market. *European journal of operational research*, *236*(1), 361-368. https://doi.org/10.1016/j.ejor.2013.12.002

Mahdi, M., & Khaddafi, M. (2020). The Influence of Gross Profit Margin, Operating Profit Margin and Net Profit Margin on the Stock Price of Consumer Good Industry in the Indonesia Stock Exchange on 2012-2014. *International Journal of Business, Economics, and Social Development*, *1*(3), 153-163. https://doi.org/10.46336/ijbesd.v1i3.53

Mirghafoori, S. H., Shafiee Roodposhti, M., & Naddafi, G. (2013). Financial performance evaluating with grey theory and data envelopment analysis technique two step approach (Case study: Province telecommunication companies). *Management Research in Iran*, *16*(4), 189-205.

Mia, M. M., Zayed, N. M., Islam, K. M. A., Nitsenko, V., Matusevych, T., & Mordous, I. (2022). The Strategy of Factors Influencing Learning Satisfaction Explored by First and Second-Order Structural Equation Modeling (SEM). Inventions, 7(3), 59. https://doi.org/10.3390/inventions7030059

Nayeen, C. J., Islam, K. M. A., Chowdhury, F. N., & Zayed, N. M. (2020). Testing Communicative Language Teaching (CLT) through English for Today (EFT) in Bangladesh: Challenges Faced by Tertiary Students Initially. *American International Journal of Education and Linguistics Research*, *3*(2), 19-27.

Nahar, S., Meero, A., Rahman, A. A. A., Hasan, K. B. M. R., Islam, K. M. A., Zayed, N. M., Faisal-E-Alam, M. (2021). ANALYSIS ON THE MARKETING STRATEGY AND COMPETITIVE ADVANTAGE OF BANKING INDUSTRY IN BANGLADESH: AN ENTREPRENEURIAL CASE STUDY OF HSBC BANK. *Academy of Entrepreneurship Journal*, *27*(4). 1-7. *Retrieved from https://www.abacademies.org/articles/Analysis-on-the-marketing-strategy-and-competitive-advantage-of-banking-industry-1528-2686-27-4-552.pdf*

Nurhikmawaty, D., Isnurhadi, I., Widiyanti, M., & Yuliani, Y. (2020). The Effect of Debt to Equity Ratio and Return on Equity on Stock Return with Dividend Policy as Intervening Variables in Subsectors Property and Real Estate on Bei. *Edunomic: Jurnal Ilmiah Pendidikan Ekonomi Fakultas Keguruan Dan Ilmu Pendidikan*, *8*(2), 72-85. http://dx.doi.org/10.33603/ejpe.v8i2.3531.

Oshoke, A. S., & Sumaina, J. (2015). Performance evaluation through ratio analysis. *Journal of Accounting and Financial Management*, *1*(8), 1-10.

Panigrahi, C. M. A. (2021). Financial analysis by return on equity (ROE) and return on asset (ROA)-A comparative study of HUL and ITC. *Panigrahi AK, Vachhani K, Financial analysis by return on equity (ROE) and return on asset (ROA)-A comparative study of HUL and ITC. J Manag Res Anal*, *8*(3), 131-138. https://doi.org/10.18231/j.jmra.2021.027

Paun, D. (2017). Sustainability and financial performance of companies in the energy sector in Romania. *Sustainability*, *9*(10), 1-11. https://doi.org/10.3390/su9101722

Rahman, S. M., & Saif, A. N. M. (2021). Performance evaluation of some listed companies: insights from Dhaka Stock Exchange in Bangladesh. *Global Business and Economics Review*, *24*(3), 261-278.

Rahman, A. A. A., Meero, A., Zayed, N. M., Islam, K. M. A., Rabban, M. R., Bunagan, V. D. R. (2021a). IMPACT OF LEVERAGE RATIOS ON INDICATORS OF FINANCIAL PERFORMANCE: EVIDENCE FROM BAHRAIN. *Academy of Strategic Management Journal*, *20*(3). *Retrieved from https://www.abacademies.org/articles/impact-of-leverage-ratios-on-indicators-of-financial-performance--evidence-from-bahrain-11166.html*

Rubi, M. A., Chowdhury, S., Rahman, A. A. A., Meero, A., Zayed, N. M., & Islam, K. M. A. (2022). Fitting Multi-Layer Feed Forward Neural Network and Autoregressive Integrated Moving Average for Dhaka Stock Exchange Price Predicting. Emerging Science Journal, 6(5), 1046-1061. https://doi.org/10.28991/ESJ-2022-06-05-09

Rahman, A. A. A., Darwish, S., Meero, A., Zayed, N. M., Islam, K. M. A., Raisa, T. S. (2021b). EMERGING STRATEGIES AND ECONOMIC IMPACT OF COVID-19: A CASE STUDY OF GULF COOPERATION COUNCIL COUNTRIES (GCC). *Academy of Strategic Management Journal*, *20*(1). 1-10 *Retrieved from https://www.abacademies.org/articles/emerging-strategies-and-economic-impact-of-covid19-a-case-study-of-gulf-cooperation-council-countries-gcc-11270.html*

Rai, A., & Prakash, A. R. (2019). A Comparative analysis between the power generating companies using thermal and other renewable sources of energy. *Sustainability and Business Management* (pp. 27-56). Delhi: Excel India Publishers.

Rai, A., & Prakash, A. R. (2019). A comparative study on financial performance of power generating companies in India. *Journal of Commerce and Accounting Research*, *8*(4), 12-27.

Rashid, C. A. (2018). Efficiency of financial ratios analysis for evaluating companies' liquidity. *International Journal of Social Sciences & Educational Studies*, *4*(4), 110-132.

Sari, D. W. (2019). Ratio analysis of financial performance of companiesl Q45 index listed. *Humanities & Social Sciences Reviews*, *7*(3), 419-423. https://doi.org/10.18510/hssr.2019.7361

Shahriar, M. S., Islam, K. M. A., Zayed, N. M., Hasan, K. B. M. R., & Raisa, T. S. (2021a). The Impact of COVID-19 on Bangladesh's Economy: A Focus on Graduate Employability. *The Journal of Asian Finance, Economics and Business*, *8*(3), 1395–1403. https://doi.org/10.13106/JAFEB.2021.VOL8.NO3.1395

Shahriar, M.S., Hasan, K.B.M.R., Hossain, T., Beg, T.H., Islam, K.M.A., & Zayed, N.M. (2021b). Financial decision making and forecasting techniques on project evaluation: a planning, development and entrepreneurial perspective. *Academy of Entrepreneurship Journal*, *27*(4), 1-7. *Retrieved from https://www.abacademies.org/articles/Financial-decision-making-and-forecasting-techniques-on-project-evaluation-a-planning-development-1528-2686-27-4-553.pdf*

Schabek, T. (2020). The financial performance of sustainable power producers in emerging markets. *Renewable Energy*, *160*, 1408-1419. https://doi.org/10.1016/j.renene.2020.06.067

Sueyoshi, T. (2005). Financial ratio analysis of the electric power industry. *Asia-Pacific Journal of Operational Research*, *22*(03), 349-376. https://doi.org/10.1142/S0217595905000509

Uribe, J. M., & Guillen, M. (2020). *Quantile regression for cross-sectional and time series data: Applications in energy markets using R*. Cham, Switzerland: Springer International Publishing.

Vibhute, N. S., Haralayya, B., & Jeelan, B. V. (2021). Performance Evaluation of Selected Banks using Ratio Analysis. *J Adv Res Eco Busi Mgmt*, *4*(2), 36-44.

Zayed, N. M .Z., Meero, A., Rahman, A. A. A., Islam, K. M. A., Shahiduzzaman Khan Shahi, Shama Tasnim. (2021a). Demand and Supply-Side Analysis of Dhaka Based Online Business during the COVID-19 Pandemic: Evidence from Bangladesh. *Journal of Southwest Jiaotong University*, *56*(3). https://doi.org/10.35741/issn.0258-2724.56.3.47

Zayed, N. M., Islam, K. M. A., Shahi, S. K., Rahman, M. S., & Raisa, T. S. (2021b). AN ANALYSIS ON THE EFFECTS OF CORONAVIRUS (COVID-19) ON THE FINANCIAL MANAGEMENT OF MULTINATIONAL CORPORATIONS. *Australian Finance & Banking Review*, *5*(1), 43-53. https://doi.org/10.46281/afbr.v5i1.1015

Zayed, N. M., Edeh, F. O., Darwish, S., Islam, K. M., Kryshtal, H., Nitsenko, V., & Stanislavyk, O. (2022). Human Resource Skill Adjustment in Service Sector: Predicting Dynamic Capability in Post COVID-19 Work Environment. *Journal of Risk and Financial Management*, *15*(9), 402. https://doi.org/10.3390/jrfm15090402

Zayed, N. M., Edeh, F. O., Islam, K. M. A., Nitsenko, V., Dubovyk, T., & Doroshuk, H. (2022). An Investigation into the Effect of Knowledge Management on Employee Retention in the Telecom Sector. *Administrative Sciences*, *12*(4), 138. https://doi.org/10.3390/admsci12040138

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