

## Effects of the Pandemic on the Financial Performance of Listed Readymade Garment Firms in Bangladesh

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### Abstract

This study examined how the COVID-19 pandemic impacted the financial performance of listed firms in the readymade garment (RMG) industry in Bangladesh. Out of 56 RMG companies listed in the Bangladesh Stock Exchange, 33 firms whose complete financial data from 2016-2021 was publicly available were selected as the sample. Through the use of descriptive, correlation, and regression analysis, the study explored the sector's financial well-being both before and during the pandemic, including the relationship between the pandemic and financial metrics, the extent of its impact, and other factors that influenced financial performance. The findings revealed a significant negative impact on RMG profitability indicators such as Return on Assets ( $-.032, p < .01$ ) and Return on Equity ( $-.067, p < .05$ ). Factors such as firm size, debt ratio, growth rate, and accounts receivable turnover were also identified as significant influencers of financial performance during the pandemic period. These findings underscored the pandemic-related challenges that RMG companies in Bangladesh faced, and emphasize the importance of proactive strategies for risk mitigation. They also highlight practical implications for strategic financial management and resilience-building measures within the sector.

**Keywords:** COVID-19, Bangladesh, ready-made garments industry, financial performance

### Introduction

The coronavirus SARS-CoV-2 was first identified as the causative agent for a series of atypical respiratory diseases in the city of Wuhan, Hubei Province, China in December 2019 (Pollard et al., 2020). On March 11, 2020, this novel Corona virus disease (COVID-19) was described as a pandemic by the World Health Organization (WHO) (Mishra et al., 2020). This forced many countries to implement a comprehensive closure of economic activities, which caused challenges that differed from previous economic crises. As the virus spread rapidly, the severity of its impact and inability to limit its spread were the main factors that caused a global economic crisis (Garad et al., 2021).

The pandemic led to a severe global recession with differential impacts within and across countries (Barrett et al., 2021). Emerging markets and developing economies suffered more than advanced economies. Hevia and Neumeyer (2020) examined the economic impact of the COVID-19 pandemic on emerging economies, where it resulted in sharp declines in employment across many countries. Frequent lockdowns restricted the mobility of labor, which adversely affected income levels as well as production capacity utilization, thereby reducing output capacity (Shah & Garg, 2023). Belhadi et al. (2021) indicated that government measures to contain the outbreak resulted in stricter border restrictions and complete nationwide lockdowns, thereby causing a negative short-term impact on consumer spending, investments, and disruptions to international trade and global supply chains. Rababah et al. (2020) pointed out further that supply chain based businesses and manufacturing firms faced issues such as decreases in demand, reductions in cash flows, lower sales revenues, limited availability of workforces, and marketing issues. Their futures depended mainly upon their ability to counter such challenges, although even after doing so, their financial futures might still hang in the balance.

The primary aim of this research was to examine the extent of the COVID-19 pandemic's impact on the financial health of the RMG sector in Bangladesh and the nature of its effects. The textile sector has a greater facet for growth and foreign exchange earnings than other sectors in Bangladesh. It makes a significant contribution to the national economy by creating plentiful employment

opportunities and reducing poverty through socioeconomic development (Fatema et al., 2018). Among developing economies such as Cambodia, Sri-Lanka, China, etc., Bangladesh has achieved a strong position as a global RMG supplier mainly due to having some of the cheapest labor costs among apparel manufacturing countries (Asgari & Hoque, 2013).

However, there has been a lack of studies exploring the determinants of financial performance in Bangladesh's textile sector (Mitra & Adhikary, 2017). The present study was conducted because of a need to fill this gap and learn more about the factors that affect the financial performance of RMG firms in terms of their overall financial health, profitability, and management. Given the unprecedented crisis of the COVID-19 pandemic and subsequent economic repercussions, the financial health and resilience of these firms needs to be examined. Understanding how the pandemic has affected their financial performance is crucial for devising strategies to mitigate future risks and uncertainties. Additionally, analyzing financial performance will help in identifying challenges, vulnerabilities and opportunities for future growth and sustainability.

This study may also provide a clearer understanding of the pandemic's financial impact on the sector, which can guide the formulation of contingency plans to boost the industry's recovery and build resilience against future crises. The importance of identifying financial challenges is necessary to formulate effective strategies for recovery, risk management, resilience building, and strategic planning for the future.

## **Literature Review and Hypothesis Development**

### ***Financial Performance***

The financial performance of companies is a topic that has attracted substantial attention and interest from financial experts, researchers, the general public, and corporate managers (Omondi & Muturi, 2013). Heikal et al. (2014) explained that investors are interested in companies with high returns on assets (ROA), as they can produce high levels of corporate profits. Omondi and Muturi (2013) reported that ROA is the accounting measure widely used in market analytics for measuring financial performance. Ahsan (2012) elaborated on the importance of return on equity (ROE), as it is a closely watched financial ratio among equity investors. The higher the ROE value, the higher the profits that the company can generate for shareholders; this makes investors more interested in purchasing their shares in order to receive attractive dividends (Mahzura, 2018).

### ***Impact of COVID-19 on Financial Performance***

The degree of COVID-19 consequences differed from one economy to another and from one firm to another (Atayah et al., 2022). A study by Rababah et al. (2020) revealed that the pandemic caused disruptions in global commerce, resulting in losses for many industrial sectors. Measures such as lockdowns, social distancing, and travel restrictions led to decreased demand, production halts, and a decline in economic activity. The study highlighted the adverse effects of COVID-19 on the financial performance of Chinese companies using financial indicators such as ROA and ROE with size, leverage ratio, growth rate, and total revenues as control variables. It revealed a decrease in overall profitability and investment, with significant impacts observed across industries. Another study by Achim et al. (2022) examined the financial performance of 218 Romanian companies from 2019 to 2020, focusing particularly on how the COVID-19 pandemic impacted their finances. They found that companies with higher levels of debt struggled more during the pandemic, experiencing lower profitability and returns on equity. Due to the pandemic, these companies faced financial constraints, limiting their ability to invest and adapt to changing market conditions. Additionally, higher debt levels increased financial risk, making these companies more vulnerable to economic downturns. Similarly, other studies also found that COVID-19 had a negative impact on the financial performance of Indonesian firms (Daryanto & Rizki, 2021; Demirhan & Sakin, 2021).

However, financial performance varied among firms, industries, and countries. During COVID-19, the consumer goods and pharmaceutical sectors saw an increase in profitability while other sectors such as property, real estate, building construction, and services experienced decreases in profitability

ratios (Devi et al., 2020; Droj et al., 2021). Atayah et al. (2022) noted that despite the challenges, the logistics industry experienced increased demand during the pandemic due to its essential nature, with many governments exempting logistics services from lockdown measures. This study showed that collaboration between governments and logistics companies helped maintain supply chains and facilitated the movement of essential goods. Nevertheless, in some countries, the COVID-19 had a negative impact on the financial performance of logistic firms (Atayah et al., 2022). According to Nguyen (2022) before the pandemic, the logistics industry was experiencing growth, driven in part by a rapid rise in e-commerce. However, the outbreak disrupted global manufacturing and supply chains, leading to a decline in financial performance for logistics enterprises. Chakraborty and Biswas (2020) indicated that the supply chain shock due to the pandemic caused a bullwhip effect in the fashion and RMG industries. As a result of the lockdown, firms belonging to the Bangladesh Garment Manufacturers and Exporters Association closed their factories in line with the government's lockdown instructions (Kabir et al., 2021). This disrupted Bangladesh's export of garments (Emran & Schmitz, 2023).

Based on the literature review, a hypothesis related to the impact of various factors on the financial performance of the RMG industry in Bangladesh during the COVID-19 pandemic may be formulated as follows:

*Hypothesis (H<sub>1</sub>): The COVID-19 pandemic had a significant negative relationship on the profitability of listed RMG firms in Bangladesh.*

### ***Control Variables***

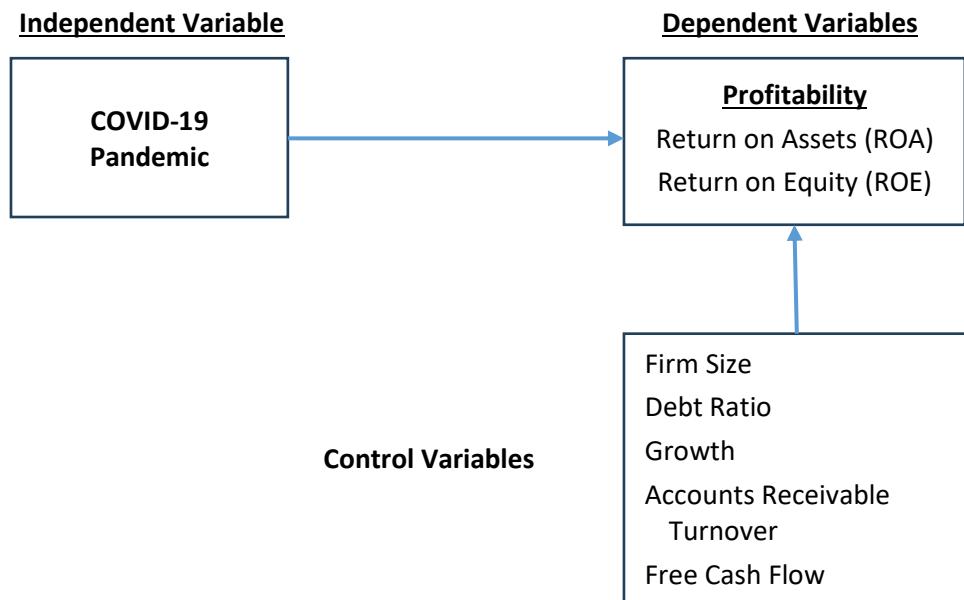
Doğan (2013) discovered a positive correlation between *Firm Size* and profitability among companies listed on the Istanbul stock exchange from 2008 to 2011. More specifically, larger firms, as indicated by total assets, total sales, and the number of employees, consistently demonstrated higher levels of profitability. This relationship suggested that larger firms may benefit from economies of scale, leading to more efficient operations and increased profitability. In addition, corporate debt policy is one of the most important determinants of how firms may be able to withstand economic and financial crises. Çitak and Ersoy (2012) revealed a significant negative relationship between firm profitability and a company's *Debt Ratio*. Its findings implied that firms might adjust their debt policies based on their profitability and dividend payout practices to navigate economic challenges effectively.

*Growth* is especially significant because a company can maintain its performance without running into financial problems (Rahim, 2017). Furthermore, the *Accounts Receivable Turnover Ratio* evaluates how long it takes to collect an organization's receivables (Binsaddig et al., 2023). A study by Amanda (2019) emphasized that a proficient receivables turnover rate reflects a company's adeptness in managing its operational activities, and effective management of this rate translates to enhanced profitability levels. Abughniem et al. (2020) found that *Free Cash Flow* had a negative and statistically significant effect on company performance. This indicated that a higher level of free cash flow was associated with poorer performance in terms of both profitability and market evaluation.

### ***Conceptual Framework***

This study explored possible effects of the COVID-19 pandemic (the independent variable) on the profitability of listed RMG firms in Bangladesh, as shown below in Figure 1.

**Figure 1** Effects of COVID-19 on Profitability



Source. Adopted and modified from Linh & Mohanlingam (2018)

This examination focused on Return on Assets (ROA) and Return on Equity (ROE) as its dependent variables, serving as indicators of financial performance. Furthermore, the framework control variables included Size, Debt Ratio, Growth, Accounts Receivable Turnover (ART), and Free Cash Flow (FCF). These control factors were considered for their potential influence on the association between COVID-19 and financial performance measures.

### **Data and Methodology**

#### **Data and Sampling**

The study's population encompassed a total of 56 listed textile companies whose shares are traded on the Bangladesh Stock Exchange Market. From this pool, data were successfully collected from 33 companies spanning the years 2016 to 2021, which amounted to 198 observations. Before the regression analysis was conducted, descriptive statistics were used to check for errors or missing data that might affect the analysis. Firms with problematic or missing data were either removed from the sample before data analysis commenced, and explanatory notes were added to describe the reason for inclusion of unusually low or high values.

#### **Research Models and Variable Definitions**

The variable measurements and definitions used in this study are shown below in Table 1.

**Table 1 Variable Measurements and Definition**

Variable	Abbreviation	Definition	Measurement
<b>Independent Variable</b>			
COVID-19	COVID-19	Indicator variable	Indicator variable that is equal to 1 from January 1, 2020, to December 31, 2021 (within-COVID), and 0 from January 1, 2016, to December 31, 2019 (pre-COVID).
<b>Dependent Variables</b>			
Return on Assets	ROA	A measurement of profitability shows how efficient management was in using assets to generate earning	Net Income/Total Assets
Return on Equity	ROE	Shows how much net income a company earned for each TAKA invested by the owners.	Net Income/Shareholders' Equity
<b>Control Variables</b>			
Size	SIZE	Size of firm in terms of sales revenue	Natural log of Sales
Debt Ratio	DEBT	Shows the proportion of assets financed by debts	Total Liabilities/Total Assets
Growth	GROWTH	Operating income growth ratio is the amount of profit realized from business operation.	Growth Rate of Net Income
Accounts Receivable Turnover	ART	Measures a company's effectiveness in collecting its receivables; it shows how well a company manages credit extended to customers, how quickly those accounts were collected/paid.	Net Credit Sales/Accounts Receivables
Free Cash Flow	FCF	Remaining cash available for distribution among all the shareholders of a corporate entity.	Cash Generated from Operating Activities—Capital Expenditures

Source: Adapted and modified from Linh & Mohanlingam (2018)

The following research models were adopted to investigate the effects of COVID-19 on the financial performance of the RMG industry in Bangladesh:

$$ROA_{it} = \beta_0 + \beta_1 COVID-19 + \beta_2 SIZE_{it} + \beta_3 DEBT_{it} + \beta_4 GROWTH_{it} + \beta_5 ART_{it} + \beta_6 FCF_{it} + \beta_7 FirmFixedEffect + e_{it}$$

$$ROE_{it} = \beta_0 + \beta_1 COVID-19 + \beta_2 SIZE_{it} + \beta_3 DEBT_{it} + \beta_4 GROWTH_{it} + \beta_5 ART_{it} + \beta_6 FCF_{it} + \beta_7 FirmFixedEffect + e_{it}$$

In the above models, COVID-19 is a variable that is equal to 1 during the period from January 1, 2020, to December 31, 2021 (within-COVID), and 0 from January 1, 2016, to December 31, 2019 (pre-COVID). ROA and ROE represent the financial performance of the company. SIZE, DEBT, GROWTH, ART (Accounts Receivable Turnover), FCF (Free Cash Flow) are the control variables. "i" represents the number of companies and t represents time period ranging from 2016 to 2020. *FirmFixedEffect* represents firm specified dummy that tells the unique effect firm specifies and time invariant unobservable are having on the regression.

## Results

### Descriptive Analysis

Table 2 reports descriptive statistics for financial performance variables from 33 listed textile companies on the Bangladesh Stock Exchange, covering 198 observations from 2016 to 2021. The mean value for ROE was 4.39% with a standard deviation of 18.93%, which reflects a significant amount of volatility in results. COVID-19 severely reduced the profitability of some firms, as shown by a minimum ROE of -121%. The ROA had a mean of 1.64% and a standard deviation of 6.468%, with a minimum of -31% and a maximum of 28%, reflecting the effects of COVID-19.

**Table 2 Descriptive Statistics**

Feature	N	Minimum	Maximum	Mean	Std. Deviation
ROA	198	-31%	28%	1.64%	6.468%
ROE	198	-121%	147%	4.39%	18.93%
COVID-19	198	0%	100%	33%	47.3%
Size	197	6.61	10.12	9.18	0.52
Debt Ratio	198	2%	396%	52.88%	47.16%
Growth	198	-2,543%	1,383%	-15.76%	278.68%
ART	198	0	153.640	8.36	22.14
FCF	198	-3,014,592,929	1,727,659,337	-92,393,507	481,542,205

*Note.* ART – Accounts Receivable Turnover; FCF – Free Cash Flow

The mean value of operating income growth was -15.76%, showing an overall reduction in net income. A minimum value of -2,543% was recorded, with a maximum of 1,383%. The reason for these extreme figures-2,543% was because one company (Alltext Industries Ltd, 2020–2021, p. 22) in the sample reported a massive decrease in net income during 2021. In addition, the high maximum figure of 1,383% was because another company (Saiham Textile Mills Limited, 2018–2019, p. 46) reported a huge jump in net income from ₩109,175,887 in 2018 to ₩1,707,217,088 in 2019.

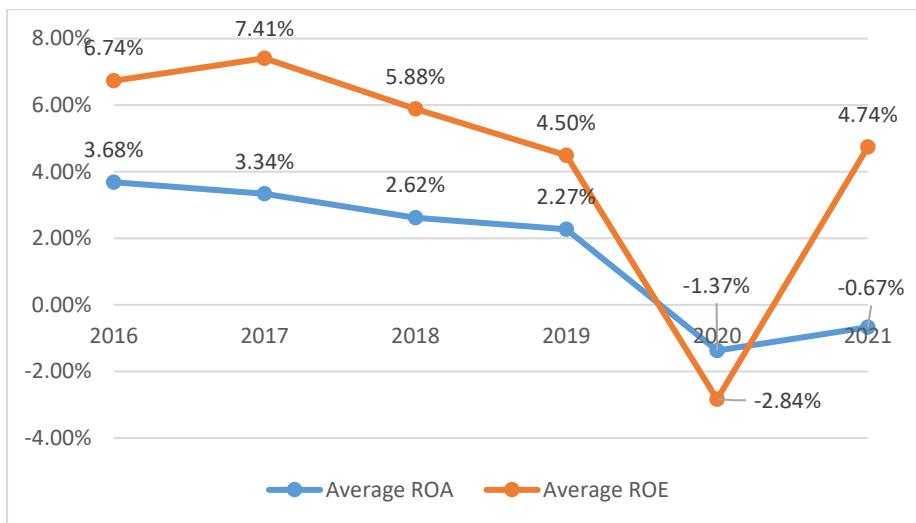
The Debt Ratio measures the extent of company's leverage (Hayes, 2024). In Table 2, the mean value of 52.88% shows that on average, total liabilities were about 52.88% of total assets. The maximum Debt Ratio of 396% was because one company (Dulamia Cotton Spinning Mills Limited, 2017–2021) had significantly more liabilities than assets for the years from 2017 to 2021. Moreover, the minimum of debt ratio of 2% reflected that one company (Generation Next Fashion Limited, 2016–2017) minimal debts the years 2016 and 2017.

Accounts Receivable Turnover (ART) measures how effective a company is in collecting its debts. The ARTs in Table 2 revealed that on average, the firms collected accounts receivable from sales about 8.36 times in a year. The minimum ART was 0 because one company (Desh Garments Limited, 2016–2017) reported no accounts receivable for the years of 2016 and 2017. The maximum of ART was reported as 153.64 times a year by one company (Alhaj Textile Mills Limited, (2016–2017, 2017–2018, p. 36), which had high turnover for the three consecutive years during 2016, 2017, and 2018.

Free cash flows (FCF) measures the remaining cash a company has generated after paying for capital expenditures and dividends. The mean value of FCF showed that the free cash flows had a balance of ₩92,393,507.61, indicating that companies did not have excess cash after spending on capital expenditures and dividends during the observed period.

The average ROA and ROE ratios of the 33 RMG firms are shown in Figure 2, and a substantial decrease in profitability may be seen during 2020 and 2021 when COVID-19 occurred. On average, ROA ratios dropped from 3.68% in 2016 to -1.37% in 2020. ROE ratios increased to 7.41% in 2017, but then steeply dropped to -2.84% in 2020.

**Figure 2 Financial Performance (Profitability) of Listed Firms in RMG Industry in Bangladesh from 2016–2021**



### Correlation Analysis

Pearson's correlation was applied to understand the relationships among COVID-19 (the independent variable), the dependent variables ROA and ROE, and the control variables Size, Debt, Growth, ART, and FCF (as presented in Table 3). The Pearson's correlation analysis revealed several significant relationships among the variables studied. A notable positive correlation of .508 was found between return on assets (ROA) and return on equity (ROE), indicating a strong relationship between profitability measures. COVID-19 was negatively correlated with ROA (-.293) at a significant level, indicating an adverse impact on asset utilization during the crisis period.

**Table 3 Pearson's Correlation Coefficients**

Factor	ROA	ROE	COVID-19	Size	Debt Ratio	Growth	ART	FCF
ROA	1.00							
ROE	.508**	1.00						
COVID-19	-.293**	-.129	1.00					
Size	.397**	.245**	-.047	1.00				
Debt Ratio	-.463**	.044	.112	-.419**	1.00			
Growth	-.419**	.203**	-.087	.170*	-.032	1.00		
ART	-.154*	.019	-.062	-.319**	.328**	.012	1.00	
FCF	.025	-.008	.010	-.221**	-.013	-.004	.055	1.00

Code. \*\* Correlation is significant at the .01 level (2-tailed); \* Correlation is significant at the .05 level (2-tailed).

No significant correlation was found between COVID-19 and the control variable Size. This implied that COVID-19 had an impact on firms regardless of their size. Table 3 also shows that Size had a significant positive association with ROA and ROE, which indicates that larger companies could earn higher income from their assets and equity. A negative significant correlation was found between Debt Ratio and Size, indicating that small companies had higher debt ratios to sustain their operations than larger firms. Free Cash Flow had a significant negative relationship with Size (-.221), which indicated that larger companies had lower free cash flows after covering their dividend payments and capital expenditures.

As shown in Table 3, the relationship between COVID-19 and the debt ratio was not significant; however, there was a significant negative correlation (-.463) between the Debt Ratio and ROA. This shows that the higher the debt ratio, the lower were the earnings generated on assets. On the other hand, positive and significant correlations were found between Growth and ROE (.203), ROA (.419)

and Size (.17). This meant that larger companies were more likely to experience positive outcomes on investments in assets, and in terms of the equity contributed by shareholders.

The accounts receivable turnover (ART) indicates negative significant correlations with ROA and SIZE (-.154, and -.319, respectively). This means that lower accounts receivable turnover brought a higher return on assets, and larger-sized company had a harder time collecting their accounts receivable. A moderate positive significant correlation to debt ratio (.328) indicates that companies with high account receivable turnovers also had high debt ratios.

### **Regression Analysis**

To examine the effects of COVID-19 on the financial performance of the listed RMG firms, regression analysis was utilized, and the results are displayed in Table 4. The effects of COVID-19 on financial performance are reported for Regression Model 1 (ROA) and Regression Model 2 (ROE).

**Table 4 Regression Model 1 (ROA)**

Feature	Coefficient	t	Significance
(Constant)	-.547***	-3.438	< .001
COVID-19	-.032***	-4.888	< .001
Size	.061***	3.887	< .001
Debt Ratio	-.019	-1.007	.316
Growth	.008***	6.359	< .001
Art	-.001**	-2.189	.030
Fcf	5.483E-12	0.728	.468
Firm Effect	Yes	Yes	
R Square	.660		
Adjusted R Square	.578		

*Note.* \*\*\*  $p < .01$ , \*\*  $p < .05$ , and \*  $p < .10$

In the ROA regression model, the Adjusted R-Square value of .578 indicated that 57.8% of the variability in ROA in Model 1 was explained by the COVID-19 independent variable. The coefficient for COVID-19 was -.032 with  $p$ -value of  $< .001$ , indicating a statistically significant negative relationship between COVID-19 and ROA. This suggests that the COVID-19 pandemic had harmful effects on ROA and reduced overall profitability. Additionally, a positive relationship was seen between the control variable SIZE and ROA. The coefficient for Size was .061 with  $p$ -value  $< .001$ , meaning that larger companies tended to have higher earnings on assets. The Debt Ratio (coefficient of -0.019, and a  $p$ -value of .316), showed no significant effect on ROA. On the other hand, the Growth coefficient value of .008 with  $p$ -value of  $< .001$  indicated a positive and significant relationship between Growth and ROA, which implied that when companies experienced higher growth, this contributed to higher return on assets. The coefficient for ART was -.001 with a  $p$ -value of .030, illustrating a significant negative relationship between ART and ROA. This suggested that companies with lower accounts receivable turnover tended to have higher return on assets.

In Table 5, regression results for return on equity (ROE), or Model 2, are shown. In the ROE regression model, the Adjusted R-Square value of .229 indicated that 22.9% of the variability in ROE in Model 2 was explained by the COVID-19 independent variable. The coefficient for COVID-19 was -0.067 with a  $p$ -value of 0.012, indicating a statistically significant negative relationship between COVID-19 and ROE. The COVID-19 pandemic had a detrimental effect on ROE and reduced overall profitability. The coefficient for Size was .177 with a  $p$ -value of .005, indicating a significant positive relationship between Size and ROE. This suggested that the larger-sized companies in the sample tended to have higher returns on equity. There was also a significant positive relationship between Debt Ratio and ROE, with a coefficient value of .336 and a  $p$ -value of  $< .001$ . This suggested that firms

with higher total debt over assets tended to have higher returns on equity. The coefficients for Growth, ART and FCF were not statistically significant to ROE, as their *p*-values were all more than .10.

**Table 5** Regression Model 2 (ROE)

	<b>Coefficient</b>	<b>t</b>	<b>Significance</b>
(Constant)	-1.861***	-2.927	.004
Covid-19	-.067**	-2.532	.012
Size	.177***	2.835	.005
Debt Ratio	.336***	4.367	< .001
Growth	.008	1.633	.104
Art	6.327E-5	0.058	.954
Fcf	1.973E-11	0.656	.513
Firm Effect	Yes	Yes	
R Square	.379		
Adjusted R Square	.229		

*Note.* \*\*\* *p* < .01, \*\* *p* < .05, and \* *p* < .10

All things considered, the regression analysis suggested that the presence of COVID-19, Size, Growth and ART significantly influenced Return on Assets (ROA). It also suggested that the presence of COVID-19, Size, and Debt Ratio significantly influenced Return on Equity (ROE), while other variables such as Growth, ART, and FCF did not have significant effects on ROE.

## Discussion

This study delved into the financial performance of listed RMG companies in Bangladesh amidst the COVID-19 pandemic. The findings underscored the significant negative impact of COVID-19 on firm profitability. These results were aligned with similar conclusions of other researchers (Daryanto & Rizki, 2021; Demirhan & Sakin, 2021; Rababah et al., 2020). However, a few studies showed opposite results. For example, Devi et al. (2020) discovered that the consumer goods sector experienced an increase in financial performance during COVID-19. Febriantika et al. (2021) found that profitability improved during COVID-19 when examining 108 listed manufacturing companies in Indonesia. The consistency and contrast in findings across studies enhances the understanding of the pandemic's impact on financial performance in different sectors and regions. Other factors like sustainable business models and long term corporate social responsibility strategies might enhance firms' ability to go through such crises (Mattera et al., 2022).

Moreover, firm Size, Debt Ratio, Growth rate, and accounts receivable turnover emerge as pivotal factors influencing financial performance, indicating the complex interplay of many variables during crisis periods. These findings provide significant implications for managers and administrators in Bangladesh's RMG sector, particularly in light of the COVID-19 pandemic. In response to the unprecedented challenges posed by the pandemic, RMG companies must prioritize cost optimization strategies and implement measures such as linear programming to enhance resource utilization and profitability. Additionally, developing comprehensive strategies for asset utilization and debt management is crucial to navigating the adverse effects of COVID-19. Proactive debt management, including refinancing existing debts and diversifying revenue streams beyond traditional textile products, could contribute to sustainable financial health and resilience in the face of economic uncertainties. Policymakers, academics, stakeholders, and investors are encouraged to support initiatives that promote diversification, innovation, and effective debt management within the RMG sector to ensure long-term success and resilience.

## Conclusion

### Summary of the Study

This research study investigated the financial performance of the ready-made garment industry in Bangladesh amidst the COVID-19 pandemic, utilizing data from 33 RMG firms listed on the Bangladesh Stock Exchange from 2016 to 2021. The analysis revealed a significant downturn in financial health during the pandemic, with companies experiencing reduced ROA and ROE. Interestingly, larger companies appeared to fare better financially, possibly due to their greater resources or other advantages. Overall, the findings underscored the need for RMG companies to adapt their strategies in response to the pandemic's financial challenges in order to remain resilient.

### Limitations of the Study

While this research offers valuable insights into the financial performance of the RMG industry in Bangladesh during the COVID-19 pandemic, it has several limitations. The data was limited to 33 listed RMG firms, which may not fully represent the entire sector of 56 companies. The study mainly focuses on ROE and ROA, neglecting other important financial aspects like liquidity and cost efficiency. The timeframe from 2016 to 2021 may not have fully captured the pandemic's prolonged impact, and potential confounding variables were not accounted for. Despite these constraints, the findings provide useful insights for stakeholders and policymakers and lay the groundwork for future research.

### Directions for Future Research

Future research in the RMG industry in Bangladesh should address several key limitations identified in this study. Expanding the sample size to include a more diverse range of companies within the RMG sector would mitigate potential biases and provide a broader perspective on financial performance. Additionally, incorporating a wider range of financial indicators beyond ROA and ROE, such as working capital management, could offer a more comprehensive assessment. Longitudinal analyses extending beyond the study period would capture the evolving impact of the pandemic on financial performance over time. Moreover, future studies could explore a broader range of variables, including government policies, market conditions, and consumer behavior, to better understand the complex interplay between external influences and financial outcomes.

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