

## Corporate Liquidity and Profitability Management: A Study on Textile Industry in Bangladesh

Kaniz Fatema<sup>1</sup> A.K.M. Golam Rabbani Mondal<sup>2</sup> and Md Amzad Hossain<sup>3</sup>

### Abstract

**Purpose:** This study aims to identify, whether corporate liquidity has an impact on profitability management concerning the textile sector in Bangladesh.

**Design:** This is a causal study where the dependent variable is profitability, measured by Return on Assets (ROA) and Return on Equity (ROE). For the independent variables, the study adopts the traditional liquidity variables, namely Current Ratio (CR), Liquid Ratio (LR), and Total Cash Ratio (TCR). This study is based on secondary data collected from the annual reports of selected textile companies. Here, multiple regression analysis and descriptive statistics techniques have been used to actualize the research objectives.

**Findings:** The study shows that there is statistically insignificant impact of liquidity on profitability management. It is unlikely that liquidity has influences on profitability management among the textile companies in Bangladesh.

**Originality/Value:** This study has empirically validated the impacts of corporate liquidity on profitability management. Therefore, the research can be helpful for cash management and increasing profitability concerning the textile sector.

**Key Words:** Liquidity, Profitability, Current Ratio, Liquid Ratio Total Cash Ratio, Return on Asset, Return on Equity.

### Introduction

The concepts of profitability and liquidity can be deemed to be the topmost concern for management of every organization which should be considered while the management performs its most significant duties. In general, liquidity talks about the capability of a firm to meet its transient commitments (Investopedia, 2020). In the same way, the liquidity of an asset implies exactly how rapidly it tends to be converted into cash (Hasbrouck and Schwartz, 1988). Therefore, while referring to a company's liquidity, it means the capability to meet its current liabilities. Liquidity is generally estimated by various financial ratios (Investopedia, 2020). Hence, a study of liquidity is extremely fundamental for both inward and outward experts on account of its adjacent association with routine tasks of any organization (Bhunia and Khan, 2011). Furthermore, a feeble liquidity situation represents a risk to the affluence in addition to the profitability of a firm and therefore, makes it risky and weak (Elangkumaran and Karthika, 2013). On the contrary, profitability is considered as a proportion of the sum by which an association's income outperforms its pertinent costs (Niresh, 2012). In any case, the managers interestingly are keen on estimating the working enactment as far as profitability. In this way, a low overall revenue would advance inefficient administration and the financial backers would be speculative to put resources into the organization (Neely, 2002). Subsequently, potential financial benefactors are interested in profits and appreciation in the market price of the stock and focus closer on the benefit ratios.

Brigham and Houston (2019) expressed that, business decision-makers need to make decisions on corporate liquidity and profitability management, which tend to be contradictory in terms of objectives. For instance, the organization through ensuring a tolerant credit strategy might be in a situation to build its deals, yet its liquidity may watch out in negative ways. Furthermore, to the risk-return theory, there is an immediate connection between risk and return. Subsequently, companies with excess liquidity may have commonly safe and thereafter low benefit. Alternately, an organization that has low liquidity may confront high danger results to better yield (Olufemi and Olubanjo, 2009). Subsequently, the firm is needed to keep a congruity between liquidity and productivity in its regular business activities. As a concern of the aforementioned discussion, through this study, it is examined that if

<sup>1</sup> Assistant Professor, Department of Humanities, Rajshahi University of Engineering and Technology, Rajshahi, email: kahnezfatema8220@yahoo.com

<sup>2</sup> Professor, Department of Marketing, University of Rajshahi, Rajshahi-6205, email: rabbani\_mondal@yahoo.co.uk

<sup>3</sup> Professor, Department of Finance, University of Rajshahi, Rajshahi-6205.

there is any connection between the corporate liquidity and profitability management concerning the textile sector in Bangladesh. This study also attempts to determine whether liquidity predicts profitability. The paper further makes an effort to generate evidence on whether the firm's profitability measured by ROE and ROA has an impact on liquidity variables at a significant level. Precisely, the study tested the association empirically concerning Current Ratio, Liquid Ratio, and Total Cash Ratio with Return on Equity (ROE) and Return on Assets again. This study, therefore, is an attempt to examine the causal relationship between the corporate liquidity factors and the profitability measurements in the textile industry of Bangladesh.

Henceforward, the objective of the study stands as-

1. To find out any relationship between liquidity, addressed by CR, LR, and TCR, with profitability, addressed by ROA.
2. To identify any association between liquidity, addressed by CR, LR, and TCR, with profitability, addressed by ROE.

### **Theoretical Framework**

The concepts of liquidity and profitability have been widely examined and investigated in business research. Though the instantaneous existence of a business is contingent on its liquidity, its long-term survival and development depend on profitability (Chamberlain and Gordon, 1989). Hence, the concept of liquidity confirms short-term survival, whereas profitability confirms long-term survival. Therefore, these issues have attracted researchers to investigate for long-term and short-term survival of business entities. (Priya & Nimalathan, 2013).

Corporate liquidity and profitability are the two essential inspirations driving working capital management (WCM) and relate to the planning of assets and liabilities improvements over the long run (Pass and Pike, 1984). So, the earlier literature focuses on corporate liquidity and profitability management; and the trade-off hypothesis sets that these two financial terms present conflicting qualities to an organization. Thus, a quest for one will mean a compromise of the other (Das et al. 2015). Nevertheless, the opposing side of thinking holds that managers can seek after both corporate liquidity and corporate profitability for the management goals as these two targets have a close relationship.

However, these two viewpoints were agreed by Dash and Ravipati, (2009) in their work. In their investigation, they showed that there were two particular schools on this issue. First and foremost, working capital isn't a factor in improvement corporate profitability and there might be a negative connection between them. Besides, interest in working capital assumes a fundamental part to improve corporate profitability; if there is a base degree of speculation of working capital and yield, deals can't be kept up. Several studies have advocated the corporate liquidity and profitability trade-off theory. These incorporate Shin and Soenen (1998); Deloof (2003); Eljelly (2004); Narware (2004); Terueland Solano (2005); Lazaridis and Tryfonidis (2006); Rahmen and Nasr (2007); Nobanee and Hajjar (2009); Dashand Ravipati (2009); Olufemi and Olubanjo (2009); Mathuva (2010); Manohar and Ashokkumar, (2010); Vieira (2010); Bhunia and Brahma (2011); Niresh (2012); Quayyum, (2012); Saluja and Kumar (2012); Egbide et al., (2013); Chukwunweike(2014); Rahman et al., (2015); Das et al., (2015); Ahmad, (2016); Uddin et al., (2016); Al-quadi and Khanji (2018).

In these studies, a fundamentally negative association between corporate liquidity and profitability management was the outcome. Specifically, Shin and Soenen (1998) thought about a model of 58,985 recorded associations in America for a period of twenty years and tracked down a robust adverse association between the net trade cycle and cash conversion cycle as an extent of corporate liquidity and profitability. Based on these discoveries, they presumed that managers can build the incentive for their investors by lessening the cash conversion period to a sensible least. Along these lines, Deloof (2003) also showed up at a comparative goal at the point when he examined this association on an example of 1009 huge Belgian non-monetary firms. Teruel and Solano (2005) examined the consequence of working capital management on profitability utilizing an example of 8872 small and medium-sized Spanish firms and tracked down that a more limited cash conversion cycle can increase the business's profitability. A close report was done in Athens by Lazaridis and Tryfonidis (2006), examining an example of 131 recorded organizations for the period 2001 to 2004. They tracked down a robust adverse association between corporate

profitability and cash conversion cycle and prompted that administrators should manage the cash conversion cycle effectively and have every part of it to upgrade corporate profitability.

Further, ongoing investigations have additionally affirmed the presence of the trade-off between corporate liquidity and profitability management. As Manohar and Ashokkumar (2010) did a contextual investigation concerning the Cement Industry in Tamilnadu and observed a major negative connection between the company's profitability and its liquidity level. Likewise, Vieira (2010) discovered the connection between liquidity and profitability of airline companies from 2005 to 2008. This examination has confirmed the relationship between these two indicators over the short and medium terms and showed how this relationship was influenced by the monetary emergencies of 2008. Thus, through utilizing the financial information published by the organizations, the relationship was concentrated on the assistance of statistical procedures and a two-dimensional investigation was utilized. To sum up, the investigation noticed a huge positive connection between liquidity and profitability in the short run and for the medium run, it was affirmed that the relationship was positive.

Bhunia and Brahma (2011) have additionally considered the significance of corporate liquidity to corporate profitability and tracked down a critical negative association between the corporate profitability assessed by Return on Capital Employed and each of the independent liquidity factors, current ratio (CR), liquidity ratio (LR), ALR, DER, AOI, AOD and AOC except Current Ratio which exhibited a beneficial outcome on corporate profitability. Clarification to a portion of these outcomes could be gathered from asserting that shortening the cash Conversion Cycle delivers corporate liquidity and effects straightforwardly on the organization's financial situation just as the organization's profits or productivity.

Quayyum (2012) led an examination and the purpose of this paper was to sort out the measurably significant connection between the profitability and working capital management and hence assisted with clarifying the need of firms in optimizing their degree of working capital management, efficiency, and along these, management could make gainful moves to maximize their profitability. For that study corporations enlisted with Dhaka Stock Exchange had been selected and the analysis covered a period from 2005 to 2009. Here, selected industries were the cement industry, food industry, pharmaceuticals industry, and engineering industry. The consequences of this investigation plainly showed that except for the food industry, any remaining chosen enterprises have a significant level of association between the Profitability Indices and different Working Capital Components. Furthermore, this paper also showed that the degree of the relationship varies from industry to industry. Saluja and Kumar (2012), in their research paper, have assessed the liquidity and profitability trade-off in Bharti Airtel Ltd., which is India's most exceptional telecom specialist organization. This study required the most recent five years' information of Bharti Airtel Ltd. Furthermore, in this manner, it assessed the connection between profitability and liquidity. In this investigation, the authors utilized the Spears man's Rank Difference technique for analysis and inferred that there is a negative connection between profitability and liquidity. Also, they have recommended that it is fundamental for each firm to keep up the balance between profitability and liquidity. Niresh (2012) has additionally directed an investigation, which started to discover the circumstances and logical results connection between liquidity and profitability. The study covered around 31 recorded manufacturing companies in Sri Lanka over a time of recent years from 2007 to 2011. Correlation analysis and descriptive statistics were utilized in their investigation and the relationship esteems were discovered to be negative between return on capital employed and all the liquidity factors as estimated by current ratio, quick ratio, and liquid ratio. Consequently, the discoveries of this examination proposed that there is no acute connection between liquidity and profitability among the recorded assembling firms in Sri Lanka.

Egbide et al. (2013) conducted a study and attempted to research the connection between liquidity and profitability. In this study, the investigation depended on an example of 30 assembling organizations recorded in the Nigeria Stock Exchange for the time frame 2006 to 2010 and the study received a quantitative technique taking into account the nature of the factors utilized for investigations. Here, both descriptive statistics and a multiple regression technique were used for information investigations. The consequences of this investigation recommend that the current ratio and liquid ratio are emphatically connected by profitability through the cash conversion cycle which is

unfavorably connected to the profitability of assembling organizations. These cases were, nevertheless, genuinely immaterial, showing a low degree of effect of liquidity on the profitability of assembling organizations in Nigeria.

Chukwunweike (2014) in his investigation tried to find out the correlation between liquidity and profitability of "Industrial/Domestic products" industries that are quoted in the Nigerian Stock Exchange (NSE) on a sample population of two selected companies. At this point, the Current ratio, Acid-test ratio, and Return on capital employed were considered as a liquidity measure. On the other hand, profitability was measured by Return on Assets. This study adopted the quantitative research design and simple correlation analysis was used to test the hypothesis at a 10% level of significance. The general discoveries of this examination showed that there is a critical positive relationship between current ratio and profitability, while, there is no definite significant correlation between the Acid-test ratio and Return on capital employed with profitability. Thus, experts have suggested that corporate substances ought not to seek extreme liquidity approaches to the detriment of their profitability, which implies, they should find some kind of balance between two performance indicators: Liquidity and Profitability.

Rahman et al. (2015), have additionally led an examination to analyze the connection between working capital management and profitability of 10 sample organizations listed in Chittagong Stock Exchange (CSE) of Bangladesh. The consequence of their examination uncovered that organization's operating profit was emphatically related to efficient management of working capital. Thus, the outcome might be useful to the recorded organizations for formulating the working capital policies to control efficient working capital management. Moreover, Das et al. (2015) in their study attempted to encapsulate the liquidity management situation of private commercial banks in Bangladesh alongside profitability analysis. Also, their examination reasoned that appropriate liquidity management can increase the profitability of the Banks if different components move decidedly. This exploration was led by considering the banking state of Bangladesh and demonstrated that overabundance liquidity diminishes profitability. Their investigation likewise demonstrated how legitimate liquidity management assists with expanding the banks' profitability in Bangladesh.

Uddin et al. (2016) in their investigation have discovered the relationship between liquidity risk and bank performance. The investigation was dependent on secondary data, gathered from the yearly reports of the banks and applied the multiple regression analysis technique to actualize the research objectives. Here, the dependent variable is bank performance (BP) which is the mix of two factors, specifically return on assets (ROA) and return on equity (ROE). Then again, independent variables are current ratio (CR), loan to deposit ratio (LDR), and liquid assets to total assets ratio (LATAR). The consequences of this study show that there is no significant relationship between current ratio and bank performance; then again, the effect of loan to deposit ratio and liquid assets to total asset ratio has statistically significant relations with bank performance. In conclusion, the investigation distinguishes a negative connection between bank performance and loan to deposit ratio, and bank performance, and liquid asset to total asset ratio also exhibits similar relationship.

Ahmad (2016), in his exploration paper, attempted to know the relationship between two ratios of financial statements, to be specific profitability and liquidity. The study focused on the banking sector and relations were estimated by current ratio, quick ratio, and net-working capital. The bank under the examination was Standard Chartered Bank Pakistan and quantitative research design was utilized as a tool for this investigation. Besides, for discovering the relations and their strength the correlation and regression analyses were likewise utilized in this study. Lastly, the discoveries of this study reasoned that there is a weak positive correlation between liquidity and profitability. Accordingly, the organizations need to focus on liquidity management which has a positive connection with the organization's profitability.

Al-quadi and Khanji (2018) led an investigation to analyze the association between liquidity and profitability, through a larger number of indicators. Thus, this investigation looked to see if liquidity through quick ratio significantly affects the Jordanian trade services organizations' profitability through Return on Asset (ROA). In this examination, liquidity indicators included current ratio and quick ratio which estimated the organization's capacity to meet its momentary commitments, while profitability was estimated by ROA. Now, the study utilized the information collected from 2008-2015 financial reports of 11 Jordanian trade organizations, listed at Amman Stock

Exchange (ASE) and various tests were applied to analyze the relationship between liquidity and profitability. Also, as an outcome, the study uncovered that there is a significant effect of the independent variable quick ratio on dependent variable Return on Asset (ROA) that implies profitability through Return on Assets (ROA) is altogether affected by liquidity through current and quick ratio. Contrary to the above-mentioned literature, some researchers have also found positive and mixed (both positive and negative) associations between the concepts of corporate liquidity and corporate profitability. Narware (2004), in his investigation of working capital management and profitability of the NFL, a fertilizer organization, discovered both positive and negative associations. As communicated by Shin and Soenen (1998), an organization can have bigger deals with a liberal credit strategy, which expands the money cycle. For the present circumstance, the extended cash conversion cycle may achieve greater profitability. Additionally, Deloof (2003) states that a more extended cash conversion cycle may raise corporate profitability since it prompts greater sales.

Accordingly, it has become important to study the relationship between corporate liquidity and profitability in the textile sector. Henceforth, it is an inevitability to realize the impact of corporate liquidity on profitability management goals of the textile industry in Bangladesh. As a consequence, over ascertaining the degree of impact concerning the liquidity on profitability variables through regression analysis, it will be probable to find out whether the liquidity factors influence the profitability or not, and researchers will be able to offer appropriate policy recommendations for the decision-makers of the concerned textile companies in Bangladesh.

### **Corporate Liquidity**

Liquidity might be characterized as the capability of a firm to meet its monetary commitments as they fall due. The balance sheet (characterized as “a structured statement of assets and liabilities”), generally estimating assets, claims against those assets and portrays the liquidity of the firm (Khan and Peter, 1992). Diverse liquidity measures like current ratio, acid-test ratio, and quick ratio, operating cash flow ratio or total cash ratio and working capital ratio are regularly used in various research papers on corporate profitability and liquidity management to measure the operating efficiency of the organization. Among these variables following are used as liquidity variables for this study:

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

The current ratio shows the degree of current assets for current liabilities. The current ratio is applied as an indicator of an organization's liquidity position. All in all, a lot of current assets against a limited amount of current liabilities give some confirmation that the obligations coming due will be paid (Investopedia, 2020). The current ratio is communicated with the accompanying equation:

$$\text{Current Ratio} = (\text{Current Assets}) / (\text{Current Liabilities})$$

### **Liquid Ratio (LR)**

The Liquid ratio measures the ability of a company to use its near cash or quick assets to extinguish or retire its liabilities immediately (Investopedia, 2020). Quick assets include those current assets that presumably can be quickly converted to cash, close to their book values. The formula for liquid ratio can be written as:

$$\text{Liquid ratio} = \frac{\text{Cash and Cash equivalents} + \text{Marketable Securities} + \text{Accounts Receivable}}{\text{Current Liabilities}}$$

### **Operating Cash Flow Ratio (OCFR) or Total Cash Ratio (TCR)**

A significant measure of the general financial strength of an organization is the degree of money it produces through ordinary business activities. As an organization works, cash comes into the business as income and goes out as costs (Investopedia, 2020). These movements, known as cash flows, are at the core, all things considered, and decide the capacity of the organization to create profits and proceed with its operations. The equation for the operating cash flow ratio can be written as:

$$\text{Operating Cash Flow Ratio} = \frac{\text{Cash Flow from Operations}}{\text{Current Liabilities}}$$

### **Corporate Profitability**

Profitability is the capability to make a profit from all the business movements of an organization, a company, firm, or an enterprise. It estimates the management's efficiency in the utilization of organizational resources in enhancing the business (Investopedia, 2021). Profit is a definitive 'output' of an organization and it will have no future if it neglects to make adequate profit. Distinctive profitability estimates like return on capital employed (ROCE), earnings before interest and taxes (EBIT), earning before tax (EBT), gross profit margin, net profit margin, return on assets (ROA), return on equity (ROE), return on investment (ROI), return on net assets (RONA) are regularly utilized in various research papers dependent on corporate profitability and liquidity management for rational about the operating efficiency of the organization. Among these profitability measures, the following two measures were applied, because these two adequately relate a profit figure (from the Profit and Loss Account) to an assets figure (from the Balance Sheet).

### **Return on Equity (ROE)**

Generally, common or ordinary shareholders are entitled to the residue profits. The rate of profit isn't fixed for them; the income might be appropriated to shareholders or held in the business. Eventually, the net profit after tax addresses their return. So, a return on shareholder's equity is determined to see the profitability of proprietors' investment. The shareholders' equity or net worth will incorporate paid-up share capital, share premium and reserves, and surplus less accumulated losses. Net worth can likewise be found by deducting total liabilities from total assets. ROE is net profit after taxes divided by shareholders' equity which is given by net worth. The formula can be written as:

$$ROE = (\text{Profit after tax}) / (\text{Net Worth (equity)})$$

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

Return on Assets communicates the net revenue earned by an organization as a level of the total assets accessible for utilization by that organization. ROA recommends that organizations with a higher amount of assets ought to have the option to earn higher levels of income (Investopedia, 2020). Generally, ROA estimates the management's ability to earn a profit from the company's resources (assets). ROA is computed by dividing net income by the company's total asset. It can be written as:

$$ROA = (\text{Net Income}) / (\text{Total Asset})$$

### **Hypotheses of the Study**

The following hypotheses have been formulated based on the aforesaid literature review to actualize the research objectives of the study:

**H<sub>1</sub>:** *There is a significant relationship between liquidity and Return on Assests (ROA).*

As research evidence shows results by taking the Current ratio as an instrument to find the relation between profitability and liquidity, it becomes clear that there is a disagreeable relation between liquidity and its profitability (Abuzar and Eljelly 2004, Al Nimer, Warrad et al 2015, Alavinasab and Davoudi, 2013, Gracia-Teruel and Martinaze Solano, 2007). The correlation and regression study of Eljelly (2004) founded that the Current ratio is more vital to measure profitability. The use of forecasting of liquidity and short-term financing during a crisis affects profitability positively (Lambery and Valming, 2009). Hence, particular studies support a negative correlation between the current ratio and profitability.

Moreover, the significant impact of only liquid ratio on ROA was pictured by Saleem and Rehman (2011). The main results were explained through a significant effect on the financial positions with divergent sums along with the liquidity ratios in the first place (Saleem and Rehman, 2011).

Therefore, it can be stated that the increase in the number of day's accounts receivables, accounts payable, and inventories, and cash conversion cycle leads to a decrease in the profitability (Alavinasab and Davoudi, 2013).

Accordingly, the sub-hypotheses stand as the following-

**H<sub>1a</sub>:** There is an impact of Current Ratio on Return on Assets.

**H<sub>1b</sub>:** There is a substantial impact of Liquidity Ratio on Return on Assets.

**H<sub>1c</sub>:** There is an effect of total Cash Ratio on Return on Assets.

**H<sub>2</sub>:** *There is a significant relationship between liquidity and Return on Equity (ROE).*

Although results revealing that ROE is not significantly affected by three ratios current ratio, quick ratio, and liquid ratio were tested (Heikal, Khaddafi et al., 2014). Another study by Saleem and Rehman, (2011) revealed that there is an insignificant impact of only liquid ratio on ROE.

For these authors, liquidity and financial position reflected in return on equity (Heikal, Khaddafi et al., 2014; Saleem and Rehman, 2011), which also gives indications over the effect of financial leverage, represents the economic and financial health of companies (Vieira 2010). Besides, it was said that shareholders invest capital to acquire a high ROE and can calculate using several ratios including CR, QR, TCR etc., illustrates usually negative relations with the dependent variable ROE when the balance is not retained among the variables (Pimentel et al., 2005, Alavinasab and Davoudi, 2013). To sum up, the sub hypotheses are presented below-

**H<sub>2a</sub>:** There is an impact of Current Ratio on Return on Equity.

**H<sub>2b</sub>:** There is an effect of Liquid Ratio on Return on Equity.

**H<sub>2c</sub>:** There is an influence of Total Cash Ratio on Return on Equity.

### **Methodology**

For conducting this study both descriptive and analytical techniques were followed. The study utilized secondary data for the investigation. For this, the data have been collected from the annual financial statements of the tested twenty textile companies for the time frames 2014-2018, making an aggregate of 100 observations (Five years' observations for twenty companies).

### **Sampling and Research Design**

In this study, a sample of twenty (20) textile companies out of 56 companies of the textile sector listed in the Dhaka Stock Exchange (DSE) on a random basis was taken.

The study applied both descriptive statistics and multiple regression techniques for the data analysis. The selection of variables utilized in this research work was influenced by past investigations. Here the dependent variable is profitability which is estimated by Return on Equity and Return on Assets, additionally proposed by Niresh, (2012) and Bolek, (2013). As the independent variables, this paper embraces the customary liquidity variables specifically Current Ratio, Liquid Ratio, and Operating Cash Flow Ratio or Total Cash Ratio.

### **Model Specification**

This study carried out multiple regression analysis technique to identify the relationship between liquidity and profitability variables. Where liquidity variables are independent and profitability variables are dependent. To enable assessment of the relationship between corporate liquidity and profitability factors, this paper noticed the accompanying definitional model:

$$P = f(L)$$

Which shows profitability is the function of liquidity. More specifically:

$$ROA = f(CR, LR, TCR) \dots \dots \dots i$$

$$\text{And } ROE = f(CR, LR, TCR) \dots \dots \dots ii$$

Where; P= Profitability measurement represents ROE & ROA on the other hand L= Liquidity measurement represents CR, LR, and TCR of any organization.

The above equations when expressed in explicit econometric form give:

$$ROA_{t_i} = \beta_1 CR_{t_i} + \beta_2 LR_{t_i} + \beta_3 TCR_{t_i} + u_{t_i} \dots \dots \dots iii$$

$$ROE_{t_i} = \beta_1 CR_{t_i} + \beta_2 LR_{t_i} + \beta_3 TCR_{t_i} + u_{t_i} \dots \dots \dots iv$$

Where;  $ROA_{t_i}$ =Return on Asset and  $ROE_{t_i}$ = Return on Equity of organization i at time t; i=1, 2.....20 organizations.

$\beta$  = Constant;  $CR_{t_i}$ = Current Ratio,  $LR_{t_i}$ = Liquid Ratio,  $TCR_{t_i}$ = Total Cash Ratio, t: Time =1, 2... 5 years and  $u_{t_i}$ = Error term.

## Data Analysis and Discussion of Results

### Descriptive analysis

A sample of twenty manufacturing companies for the period 2014-2018 in the textile sector listed on the Dhaka Stock Exchange was selected and used to define the liquidity and profitability performances and to perceive the impact of liquidity on profitability management of these selected textile companies. The combined descriptive statistics for all the companies have been shown in **Table-1**.

**Table1: Descriptive statistics**

Particulars	Mean (AM) $\mu$	Standard Deviation $\sigma$	Maximum	Minimum
Total Cash Ratio (TCR)	26%	30%	96%	-1%
Liquid Ratio (LR)	1.52	2.26	11.50	0.02
Current Ratio (CR)	2.64	2.76	12.54	0.15
Return on Assets (ROA)	5%	4%	9%	-10%
Return on Equity (ROE)	11%	14%	27%	-1%

Source: Figures are calculated using the data provided in the annual reports of the selected twenty textile companies.

The table represents that the average current ratio of the selected companies is 2.64, and indicates companies have availability of current assets that is just about more than double of their current liabilities. Although it may be considered satisfactory, a liquid ratio score of 1.52 dictates companies' current assets comprises a significant portion of inventory and prepaid expenses that cannot be considered as most liquid assets creating a liquidity crisis in the company. Also, standard deviations for liquid ratio 2.26 and current ratio 2.76 indicate deviations in the liquidity management among these selected twenty textile companies. Again significant deviation in different variables indicates some form of inconsistency among companies operating within the industry. So overall, the liquidity ratio for our concerned industry is not satisfactory.

On average, all the companies have a Return on Asset of 5%, which is quite low. General rule is that the higher the return on assets the better it is because the company is earning more money on its assets. A low return on assets compared with the industry average indicates inefficient use of the company's assets. In the case of Return on Equity, higher values are generally favorable, meaning that the company is efficient in generating income by using shareholder wealth. Here, the average Return on Equity is 11% among these selected twenty textile companies.

At this point, one thing ought to be mentioned that, the deviations in ROE is 14% and in ROA, it is 4% among the chosen twenty companies in the industry, which is additionally critical, implying that every one of the companies in the industry can't get profit. In any case, depending exclusively on ROE for investment choices isn't protected. It very well may be falsely affected by the management. Again, it has been observed that the highest Current Ratio and Liquid Ratio for the selected twenty companies are 12.54 and 11.50, while the lowest of these ratios are 0.15 and 0.02 respectively. These ratios will be satisfactory when matching with the standard for CR (2:1) and LR (1:1). The thing is that CR and LR should not be more or less; rather it should be matched with the standard to avoid both liquidity crises and excess liquidity. In the case of OCF ratio or TCR, there also occurred a high standard deviation of 30% among these listed textile companies. Here, the high standard deviation of TCR represents the inconsistency among these selected companies to repay their current liabilities from the operating cash flows. Furthermore, the



highest ROA and ROE among these selected textile companies are 9% and 27% respectively. These two ratios generally represent how effectively any company manages its profitability within the industry.

**Table 2: Regression statistics**

	<b>ROA</b>	<b>ROE</b>
Current Ratio	.463	.098
Liquidity Ratio	-.257	-.301
Total Cash Ratio	.014	.008
F Value	2.84*	.171
R Square	.086	.006
N	20	20

\* $p < .05$

### Results of Hypothesis Testing

#### **Hypothesis 1<sub>a</sub>**

This hypothesis was formulated to estimate the impact of the current ratio on return on asset. When examined with other variables in a regression model, it reveals that the current ratio does not affect the return on assets ( $p > .05$ ). The result signifies that the changes in current ratio do not contribute to the change in return on assets.

#### **Hypothesis 1<sub>b</sub>**

To evaluate the impact of liquid ratio on return on asset the next hypothesis was formulated. The result signifies that changes in total cash barely contribute to the changes in return on assets since the result is statistically insignificant ( $p > .05$ ). So the hypothesis is rejected and concludes that liquid ratio has no significant effect on return on asset.

#### **Hypothesis 1<sub>c</sub>**

This hypothesis was framed to assess the impact of the total cash ratio on return on asset. The result exhibits a trivial beta coefficient. From the result, it is signified that the changes in total cash rarely contribute to the change in return on assets. As the result is not statistically significant ( $p > .05$ ), the formulated hypothesis is rejected and so it can be concluded that the total cash ratio has no significant effect on return on investment.

#### **Hypothesis 2<sub>a</sub>**

This hypothesis estimates the effect of the current ratio on return on investment. It is exposed in a regression model when examined with other variables of this research that the current ratio does not affect return on investment ( $p > .05$ ). The result signifies that with the changes of current ratio, no contribution is to make in return on investment.

#### **Hypothesis 2<sub>b</sub>**

Through this hypothesis, the impact of liquid ratio on return on investment is estimated. The results unveil a significantly negative beta value. It reveals that liquid ratio does not affect return on investment ( $p > .05$ ). Therefore, the hypothesis is rejected and concludes that liquid ratio has no significant effect on return on investment.

#### **Hypothesis 2<sub>c</sub>**

This hypothesis was formulated to estimate the impact of total cash ratio on return on investment. The result signifies that the changes in total cash barely contribute to the change in return on assets. As the result is not statistically significant ( $p > .05$ ), the hypothesis is not accepted and concludes that total cash has no significant effect on return on investment.

### **Conclusion**

The paper was aimed at finding out the impact of corporate liquidity on profitability management concerning the textile industry in Bangladesh. Particularly, to estimate the relationship, through the help of literature, an empirical investigation was done using regression analysis principally. The result reveals liquidity variables as Current Ratio (CR), Liquid Ratio (LR), and Total Cash Ratio (TCR) and profitability variables by Return on Equity (ROE) and Return on Assets (ROA). As corporate liquidity and profitability both contradict each other, a proper trade-off

between these two is necessary to ensure proper liquidity condition which at the same time will ensure profitability in the organization as several studies affirm the presence of the trade-off between corporate liquidity and profitability management. Considering the fact found in different works of literature, it might be concluded that there could be a relationship among the variables. But unfortunately, in this scenario, concerning the sample (20) of selected manufacturing companies of the textile sector in Bangladesh, each of the hypotheses was rejected and it was concluded that there is no significant relationship among the variables. The findings of this study are also similar to that of Narware (2004), in his study of working capital management and profitability of NFL, a fertilizer company, found to have both positive and negative associations. Furthermore, this study is also similar to that of Manohar and Ashokkumar (2010), who did a contextual analysis of the Cement Industry in Tamilnadu and discovered significant negative relation between the company's profitability and liquidity levels. Be that as it may, the cardinality of liquidity management in any organization can't be over-stressed. This is because either inadequate liquidity or an abundance of liquidity may be hurtful to the smooth operation of the organization. Consequently, it has become important to think about the proper corporate liquidity and profitability management of the country's manufacturing as well as the textile industry. So, it is worth mentioning here that the significance of the relationship among liquidity variables and profitability variables has a low degree of associations, that is, there is an insignificant impact of liquidity on profitability management among the selected manufacturing companies of the textile industry in Bangladesh. Therefore, the candid recommendation of this paper is that the general condition of liquidity ought to be improved to well affect the profitability of the organizations and a more realistic credit strategy ought to be set up, which would prompt the minimization of cash flows and can improve the profitability. Likewise, it is proposed that further research be conducted on this research topic with various areas and expanding the years of example.

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