



ASSESSING THE IMPACT OF LIQUIDITY MANAGEMENT CRITERIA ON SUPPLY CHAIN FINANCING: EVIDENCE FROM INDIAN FIRMS

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Abstract

The study was devised to assess the possible liquidity management criteria of India's non-financial firms and thereof establishing the relation with Supply Chain financing (SCF). The findings indicated that the liquidity management criterion such as leverage, asset composition, liquidity, size, and sales growth of the firms was statistically significant. Moreover, asset composition, liquidity, and sales growth had a positive relation with SCF. Whereas leverage and size of the firm were negatively related. The study provides a new dimension in understanding the liquidity management criterion and its impact on SCF in the Indian context for non-financial firms.

Keywords: India, Non-Financial Sector, Panel data, Liquidity management, Supply Chain Financing

JEL Classification: C33, G3, G310, G320

INTRODUCTION

The liquidity decision of the firm is of the important dimensions for the sustainability and long-term success of the company. Long-term capital management has an intention to enhance the firm value (Samiloglu & Demirgunes, 2008), and short-term investment decision influences the profitability of the firm. Both are equally important for the survival of the firm. Smith (1987) and Lamberson (1995) stated that it has been difficult to harder to manage the optimal amount of working capital and discover the fundamental drivers of its management. The continuity of the firm and its performance depends upon how efficiently it, manages its daily operations and maintains a better balance between liquidity and profitability requirements (Aktas et al., 2015). Liquidity management is also popularly known as working capital management (WCM) of the firm. Nearly all the research on WCM has been done for developed economies, whereas for developing economies like India, there has been limited research conducted (Saravanan et al., 2017). Also, research carried out in the WCM context was more in terms to understand the association of WCM with the profitability and value of the firm.

The factors affecting WCM are also known as the liquidity factors responsible for appropriate WCM. Proper Supply Chain financing (SCF) can be measured in terms of the sales growth of the firms (Beaver, 1966). Nimalathan (2010) stated that the current assets investment decisions are considered crucial factors of WCM. The dataset was taken from 2003-2007 of the listed firms in the manufacturing sector of Sri Lanka. It was discovered that the firm's cash conversion cycle was negatively related to its return on assets. Moreover, inventory conversion and receivable conversion have a positive association with the return on assets of manufacturing firms. Therefore, managing the current assets of the firms becomes important for the managers to ensure a smooth flow of operation and maintain the profitability of the firm. Wasiuzzaman (2018) indicated that the determinants of liquidity by considering 986 Malaysian small firms. A quantile ordinary least square regression method was used to understand the liquidity decision of the firms. The study concluded that the significant factors

affecting the liquidity decision of the firms were size, asset tangibility, age, profitability, firm status, and growth at different quantile levels.

The present study first attempted to identify factors responsible for the appropriate liquidity management of the firms in the non-financial sector of India. And later, the association of these factors with the SCF of the firms was analyzed. The efficient utilization will lead to better management of funds and later the profitability of the firms. Per the best understanding of the author, in the Indian context, the study will have a unique contribution. Although such type of studies has been conducted for developed and some developing economies. The determinants of liquidity management were considered for the study both from micro as well as macroeconomic points of view.

The flow of the research is presented in the study as follows- the review of literature for identifying the determinants of liquidity management is present in the second segment, followed by the estimation of the empirical model in the third segment. The influence of determinants of liquidity management on SCF is presented in the fourth segment. The last segment concluded the study with the future scope of research.

LITERATURE REVIEW

Prior research works have indicated that the focus of WCM is to enhance profitability and maintain a proper balance with the liquidity of the firm, which results in increases in the shareholders' value (Aktas et al., 2015). There has been past research work on WCM, where several types of ratios were applied to explain the WCM of the firms (Paul & Mitra, 2018; Nazir & Afza, 2009; Chiou et al., 2006). The compelling cause for the collapse of the small and medium-scale firm was irregular WCM which has been reported for developed economies such as the USA and UK (Peel and Wilson, 1996).

Beaver (1966) has discussed in his research the strength of financial ratios, which enable us to understand the financial health of a firm and the reasons for the failure of a business. The working capital management decision can be measured by using the networking capital turnover ratio (Wasiuzzaman, 2018). For the smooth conduct of daily business operations, an adequate extent of working capital should be held back by the companies. For this purpose, an adequate level of current assets should be maintained in the firm to meet its current obligations. Moreover, the effective utilization of the working capital must be measured for the firms. This was done by measuring the proportion of working capital required to generate sales for the firm. The effective utilization of working capital is expressed as the working capital turnover ratio. A better turnover ratio suggests that the firm is maximizing the use of its liquid assets and liabilities to boost the sales and growth of the company.

Profitability

Kamal and Mohd Zulkifli (2004) in their study have used the measure of profitability to understand the efficient utilization of the assets of the firm to generate profit as Return on Assets. Jose et al. (1996) assessed the interrelationship between profitability and liquidity in the American context of companies. The study inferred that an inverse association was reported between liquidity and profitability. Higher profitability was seen in the case of aggressive WCM. Wang (2002) conducted a study with 379 Taiwanese firms and 1555 Japanese firms to understand the relationship between liquidity with profitability. In the study, the cash conversion cycle was used to represent liquidity and profitability. The measure for profitability was expressed in terms of return on assets and return on equity. An inverse relationship was found between both. The study concluded that companies increased their performance by minimizing the cash conversion cycle. Furthermore, numerous studies from various countries negative

influence were found with respect to the association of liquidity and profitability (Gill et al., 2010; Falope and Ajilore, 2009; Lazaridis and Tryfonidis, 2006; Deloof, 2003 and Shin and Soenen, 1998). Tahir & Anuar (2016) highlighted in their study the WCM influence on profitability by considering a set of 127 companies in the textile industry in Pakistan for the span of 2001-2012. The variables used in the study were economic growth rate, current asset turnover, net working capital, average collection days, current liabilities to total assets, the extent of debt in firms, and current assets to operating income had a negative association with the company's profitability. The variables such as sales growth, size of the firm, account payable, inventory conversion days, cash conversion cycle, and current assets to total assets had a considerable positive relation with the company's profitability.

WCM, on the other hand, is not solely dependent on the company's profitability. The DuPont Model decomposes profitability measures, the return on equity, and the return on assets as a combination of several factors such as assets turnover, profit margin, and leverage of the firm (Paul, 2021).

Leverage

Fund management has become the most fundamental element for the endurance of the firm. The financing of the working capital has a huge influence on the overall WCM and the firms' performance. The earlier research works have demonstrated that the sort of financing utilized for working capital by the organizations impacted its management and performance (Baños-Caballero et al., 2010; Bei and Wijewardana, 2012; Nazir and Afza, 2009). Bhama, Jian & Yadav (2019) were in congruence with the pecking order theory that companies with less debt were inclined toward raising more debt. They conducted the study with Indian and Chinese firms. The study indicated that the firms in China with a surfeit scenario pay off the debts as their capital structure has more short-term debts. Whereas in India, the surfeit firms do not pay off the extreme debts in their capital structure. Thus, financing is always a crucial decision criterion for companies. The optimal capital structure has a considerable effect on the value of the firm as well as on the existence of the firm.

Nazir & Afza (2009) indicated in their study the association of profitability with working capital financing (WCF) policy. They concluded that firms using conservative policies for financing the working capital requirement can create value for the firm, whereas firms adopting aggressive policies get more value in the stock market. Altaf & Ahmad (2019) indicated in their research that financing the working capital needs influences the firm's performance. They used the dataset of ten years of 437 companies in the non-financial sector from 2007-2016. According to the findings, the relation between WCF and the performance of the companies was negative. If the companies are financially strapped, they can use short-term lending to meet their working capital needs. Current liabilities are one of the significant elements of WCM, so working capital financing becomes relevant in determining the WCM.

Asset Composition

The non-financial sector relates to manufacturing firms which are capital-intensive. Caballero et al., (2010) stated that the companies outlay in non-current assets with more growth possibility, and the funding of the working capital was dependent more on current liabilities compared to non-current. Kwenda (2014) stated in his study that the proportion of investment in fixed assets had a considerable effect on working capital investment. WCM focuses on maintaining an appropriate level of current assets in the firm for the smooth working of the business. The composition of the assets in the firm will help to understand the proper mix of non-current and current assets. The extent of non-current assets in the firm represents the productive assets used for the proper functioning of the firm.

Firms' Size

The size and liquidity of the firm have an inverse relationship (Hill et al., 2010; Moss & Stein, 1993; Kwenda, 2014 Nazir & Afza, 2009). The larger firms used to have a more diverse business with a better customer base and required less liquidity suggested by Moss and Stein (1993). A better customer base represents higher sales turnover, both cash sales, and credit sales. Therefore, large firms can manage with lesser liquidity, whereas smaller firms required more liquidity (Nazir & Afza, 2009). The working capital investment is inversely proportional to the size of the firm. (Kwenda, 2014).

Liquidity

The firms required less liquidity and investment in the working capital if it reports higher sales volume. (Banos-Caballero et al., 2010 and Chiou et al., 2006). One of the measures of liquidity of the firms is the current ratio and it influences the profitability of the firm (Paul & Mitra, 2018). A sufficient level of current assets maintained in the firm will ensure a smooth flow of production, and efficient utilization of the non-current assets, and the firm can honor its short-term obligations at the right time. Therefore, liquidity becomes one of the important criteria for liquidity management. Looking at the other side, if the firm has inadequate current assets, then it will be difficult for the firm to accept new projects and grow. The creditworthiness of the firms gets affected if the firm does not meet its obligations.

Firms' Growth

The firm's growth can be indicated through the growth in sales of the firm. Kwenda, (2014) indicated in his study that sales growth had an insignificant impact on the investment of working capital requirements. On one hand, Chiou et al. (2006) advocated higher sales growth requires less focus on liquidity and working capital requirement, whereas Moussawi et al. (2006) proclaims the expansion in the sales turnover requires more current assets in terms of inventory level. Therefore, the firm should keep the optimum amount of current assets for its survival and growth.

Economic Growth

The liquidity decision is the short-term capital investment decision and is dependent on the proper functioning of the firm. But at the same time, the working capital requirement is affected by certain macroeconomic variables such as the economic growth rate. The economic condition of the country impacts the firm's financing requirements. Working capital investment had a negative relation with economic growth (Kwenda, 2014). At the time of the economic downturn, the working capital requirement becomes more for the smooth flow of the business and sustainable survival (Chiou et al., 2006).

Therefore, a gap has been identified after an in-depth literature review in explaining the association of determinants of liquidity management with the Supply Chain financing of the firms. There was evidence from the prior studies about the relationship of WCM with the profitability and performance of the firms but the association of determinants of liquidity management with SCF of the firms was not found in the Indian context. So, the present study attempts to bridge the gap by establishing the association of determinants of liquidity management with the SCF of the firms and thereof understanding the implication of the same.

DATA AND METHODOLOGY

To understand the influence of the determinants of liquidity management on Supply Chain financing, data from the firms was obtained from the electronic database CMIE Prowess. The

financial information of non-financial firms of India listed in the BSE Stock Exchange for a span of five years (2016-2020) has been collected for the study. A systemic method was adopted to reach the final sample of 1818 firms for five years, where the firms with missing data, non-availability of compatible financial information, and full information were dropped from the sample. The macroeconomic variable, Gross domestic product (GDP) information was extracted from the Reserve Bank of India website for a period of five years (2016-2020).

After conducting an in-depth literature review, the determinants and the variable used for Model estimation were identified. Table no-1 enlists the determinants and the variables.

Table No 1: Determinants and Variables used in Model Estimation

Determinants	Variables	Literature Support
Supply Chain Financing	Net Working capital turnover ratio	Wasiuzzaman, 2018, Beaver, 1966
Profitability	Return on Assets	Gill et al., 2010; Falope and Ajilore, 2009; Lazaridis and Tryfonidis, 2006; Kamal and MohdZulkifli, 2004; Deloof, 2003 and Wang, 2002
Leverage	Long-term liabilities to total assets ratio	Altat & Ahmad 2019 and Nazir and Afza, 2009
Asset composition	Non-current assets to total assets ratio	Kwenda, 2014 and Banos-Caballero et al., 2010
Liquidity	Current ratio	Paul and Mitra, 2018
Firms' Size	Log of total assets	Kwenda, 2014 and Nazir and Afza, 2009
Firms' Growth	Sales growth rate	Kwenda, 2014 and Chiou et al., 2006
Economic Growth	GDP growth rate	Kwenda, 2014 and Chiou et al., 2006

The measurement of the variables used for model estimation was summarized in table no-2.

Table No 2: Measurement of Variables

Variables	Acronym	Measurement
Net Working capital turnover ratio	SCF	(Current Assets – Current Liabilities)/Sales
Return on Assets	Roa	Earnings after tax/Total Assets
Long-term liabilities to total assets ratio	Lev	Loan term Borrowings/Total Assets
Non-current assets to total assets ratio	atcomp	Fixed Assets/Total Assets
Log of total assets	Size	Ln (Total Assets)
Current ratio	Cr	Current Assets/ Current Liabilities
Sales growth rate	salesgr	(Sales _t / Sales _(t-1))-1
GDP growth rate	Gdpgr	(GDP _t / GDP _(t-1))-1

Model Estimation

To understand the influence of the determinants of liquidity management on Supply Chain financing, the SCF variable was regressed with the determinants of liquidity management with the effect on time and across firms. As stated by Greene (2008) that panel data regression considers the heterogeneity across the groups. So, the model was developed by applying a panel data regression to understand the influence across time as well as across firms. Paul & Mitra (2018) studied the association of WCM with the profitability of the firms of the steel industry in India by applying a panel data regression model. The findings revealed that WCM determinants had a considerable influence on the profitability of the firms.

Therefore, the model estimated for the study to establish the association between liquidity management criterion on SCF was as follows:

$$SCF_{it} = \alpha + \beta_1 roa_{it} + \beta_2 lev_{it} + \beta_3 atcomp_{it} + \beta_4 size_{it} + \beta_5 cr_{it} + \beta_5 salesgr_{it} + \beta_5 gdpgr_{it} + \varepsilon_{it} \quad (1)$$

Where wt_tn_{it} (dependent variable) stands for the SCF of the firm ‘i’ at the time ‘t.’ Similarly, the independent variables with the control variables were also considered for the firm ‘i’ at the time ‘t’ for the model estimation.

Empirical Results

The detailed statistics of the dependent and independent with the control variables used in the model estimation are summarized in Table no-3. The maximum value for SCF was 196.667 and the minimum was -1930.96, with the mean value of -0.4310 and Std. Dev. value of 23.93. The roa of the firms has a Max value of 70.338 and a Min value of -4.7096. The Std. Dev. of roa was 0.7518 and a mean value of 0.0290. The average of lev of the firms over the year was reported as 0.1711 and for atcomp, it was 0.3608. The liquidity represented by cr has a deviation of 3.2394 over the years for the firms. The average salesgr and gdpgr over the years were 7.6812 and 0.1029, respectively.

Table No 3: Results of Descriptive Statistics

Variables	Mean	Std. Dev.	Min	Max
SCF	-0.4310	23.9273	-1930.96	196.667
Roa	0.0290	0.7518	-4.7096	70.338
Lev	0.1711	0.3964	-0.7100	14.002
Atcomp	0.3608	0.1802	0.00009	0.9926
Size	7.7509	1.9406	1.1314	16.086
Cr	1.7522	3.2394	0.0078	162
Salesgr	7.6812	1.9609	-1.6094	15.633
Gdpgr	0.1029	0.0159	0.0721	0.1176

Notes:Std.Dev.-Standard Deviation, Min- Minimum Value, Max- Maximum Value

Authors’ calculations

Table No 4: Panel Data Regression Model

Dependent	Fixed Effect			Random Effect		
	SCF			SCF		
	Coefficient (B)	Std. Error	p-value	Coefficient(B)	Std. Error	p-value
Roa	-0.3275	0.3542	0.355	0.0710	0.3285	0.829
Lev	-3.0278	1.6503	0.067	-1.4110	0.6713	0.036*
Atcomp	32.4957	3.9118	0.000*	5.8218	1.4938	0.000*
Size	-12.3216	1.2357	0.000*	-6.7075	0.3608	0.000*
Cr	0.3407	0.0983	0.001*	0.4030	0.7900	0.000*
Salesgr	20.1349	0.7785	0.000*	6.8919	0.3585	0.000*
Gdpgr	5.5226	15.1560	0.715	11.8145	15.1933	0.437
Constant	-71.9554	9.0510	0.000*	-5.1643	2.0179	0.010*
R ²	0.0171			0.0414		
Test	F			Wald chi Sq.		0.000*

Notes: *Significant at 5% level Authors’ calculations

Analysis of the results of Panel Data Regression

The results of fixed effect regression and random effect regression were presented in table no-4. The p-value of the f statistics is 0.000, which is less than 5 percent significance level. So, the fixed effect model is applicable. The fixed effect empirical model is as follows:

$$SCF_{it} = -71.995 - 0.3275(roa_{it}) - 3.0278(lev_{it}) + 32.495(atcomp_{it}) - 12.321(size_{it}) + 0.3407(cr_{it}) + 20.134(salesgr_{it}) + 5.5226(gdpgr_{it}) + \epsilon_{it} \quad (2)$$

The total variation of 1.710 percent of SCF was described by the seven independent variables as the R-squared value was reported as 0.0171. While analyzing the p-value of the independent variables, it was found that atcomp, size, cr, and salesgr were found statistically significant. Moreover, atcomp, cr, and salesgr had a positive relation with SCF. So, it is concluded that the SCF is dependent on the composition of assets, growth in the sales turnover of the firms, and current ratio. It was also found that roa, lev, and gdpgr were not significant.

The Wald chi-square test was conducted, and it was found that the p-value was less than 0.05. Therefore, it is inferred that the random effect model was also relevant. The random effect is analyzed through the following empirical model:

$$SCF_{it} = -5.164 + 0.071(roa_{it}) - 1.411(lev_{it}) + 5.821(atcomp_{it}) - 6.707(size_{it}) + 0.403(cr_{it}) + 6.891(salesgr_{it}) + 11.814(gdpgr_{it}) + \epsilon_{it} \quad (3)$$

The total variation of 4.14 percent of SCF was described by the seven independent variables as the R-squared value was reported as 0.041. While analyzing the p-value of the variables, it was found that lev, atcomp, size, cr, and salesgr were found statistically significant. Moreover, atcomp, cr, and salesgr had a positive relation with SCF. The level of debt represented as lev was negatively associated with WCM (Kwenda, 2014 and Nazir and Afza, 2009). The result also indicates that the leverage of the firms has an inverse relation with the Supply Chain financing. It was also found that roa and gdpgr were not significant.

Table No: 5- Results of Hausman test

Model specification	Test- Chi-sq.	p-value
Fixed effect or Random effect	441.74	0.000*

Notes: *Significant at 5% level.

Authors' calculations

In order, to examine, which model between the fixed effect and random effect was more relevant, the Hausman test is performed, and the findings were shown in table no-5. Since the p-value of the chi.sq. is 0.000 which is less than 5 percent significance, so the null hypothesis is not accepted. Thus, the fixed-effect model is considered more relevant. From the fixed effect model, it was evident that atcomp, size, cr, and salesgr were found statistically significant. The atcomp has a positive association with SCF (Kwenda, 2014 and Banos-Caballero et al., 2010). So, organizations having a better level of productive assets results in proper utilization of the working capital for generating sales turnover for the organization. The liquidity represented by the current ratio and firms' growth represented by sales growth also had a positive association with the SCF (Chiou et al., 2006 and Banos-Caballero et al., 2010). As it is evident from the findings of the study, more is the current ratio better will be the Supply Chain financing rate. Moreover, as the sales of the firm increase, it requires more current assets in terms of inventory level, cash, and other current assets for the smooth flow of the business operations. The model also indicated that the size varies negatively with the SCF of the firm (Kwenda, 2014; Hill et al., 2010; Nazir and Afza, 2009 and Moss and Stein, 1993). The firm size is an indication of the level of the total assets of the business. So, as the size increases without the growth in the sales turnover, the Supply Chain financing will be relatively less. The model stated that leverage, profitability, and economic growth do not have a significant association with SCF. The SCF is not dependent on the leverage of the firms. The profitability of the firm is the combination of several factors (Paul, 2021). So, SCF may not have any direct association with the profitability of the firms. Mostly liquidity management is a function of the microeconomic i.e., firm-specific variables, so the influence of the economic condition of the country may not have any considerable influence on the SCF of the firm.

Test for Robustness

To assess the robustness, the unit root test was conducted by applying the Levin–Lin–Chu test. For each panel, the test entails fitting an Augmented Dickey-Fuller regression. Based on the AIC, the number of lags was chosen with not more than ten lags. Moreover, the test uses the Bartlett kernel with ten lags by default to predict the long-run variance of the data series. The bias-adjusted t statistic for Levin–Lin–Chu test for all the variables was significant at a 5 percent level. As a result, the null hypothesis is not acknowledged, and the data series is stationary. The unit root test results were presented in table no-6

Table No 6: Results of Unit-root test

Variables	Adjusted t statistics	p-value	Lags
SCF	-2.2e+02	0.000*	1
Roa	-52.855	0.000*	1
Lev	-8e+13	0.000*	2
Atcomp	-20.0201	0.000*	1
Size	-20.0042	0.000*	1
Cr	-30.1634	0.000*	1
Salesgr	-4.4e+13	0.000*	2
Gdpgr	-160.00	0.000*	1

Notes: *Significant at 5% level.

Authors' calculations

Subsequently, the Pearson Correlation test and variance of factors (VIFs) were conducted to check the multicollinearity problem. Pearson Correlation coefficients were calculated to understand the association among the variables used in the Model. The results were captured in table no-7. The variable SCF had a significant relation between lev, size, cr, and salesgr. Wherein with lev and size, it had negative relation and with cr and salesgr had a positive relation. The variable roa has a positive and statistically significant association with lev.

Similarly, the variable lev had a statistically significant relationship with atcomp, size, cr, and salesgr. The atcomp and cr had a positive relation with lev but the size and salesgr had a negative relationship with lev. The variable atcomp has a positive relation with size but negative in cr. The variable size had a significant relationship with cr (negative), salesgr (positive), and gdpgr (negative). The variable cr had a statistically negative relationship with salesgr and gdpgr. All the correlation coefficients of the variables were within the limit of 0.8 except salesgr and size. So further, VIFs was calculated for all independent and control variables, and it was found that the VIFs values for the variables were below 10. Therefore, it can be concluded that there was no serious multicollinearity problem.

Table No7: Results of Correlations Analysis and VIFs

	SCF	roa	Lev	Atcomp	Size	cr	salesgr	gdpgr	VIFs
SCF	1.000								-
roa	0.0132	1.000							1.01
lev	-0.0360*	0.0917*	1.000						1.07
atcomp	-0.0133	0.0089	0.1334*	1.000					1.09
size	-0.0216*	-0.0166	-0.1356*	0.0752*	1.000				7.41
cr	0.0296*	0.0072	0.0811*	-0.1368*	-0.1066*	1.000			1.05
salesgr	0.0528*	0.0066	-0.1736*	-0.0048	0.9256*	-0.1371*	1.000		7.50
gdpgr	0.0150	0.0080	0.0051	-0.0015	-0.0223*	-0.0345*	-0.0053	1.000	1.00

Notes: *Significant at 5 percent, VIFs- Variance of Factors

Authors' calculation

To check the heteroskedasticity of the error terms in fixed effect regression, a Modified Wald test for GroupWise heteroscedasticity was conducted. And it was found that the p-value was 0.000 at a 5 percent significance level. Therefore, the statistical evidence implies that heteroskedasticity is present.

CONCLUSION

The study was directed to examine the determinants of liquidity management for the non-financial sector firms in India. A dataset of 1818 firms for a time of five years from 2016-2020 was considered. The variables used to establish the association between SCF defined by SCF with its determinants as a set of independent variables as profitability (roa), Leverage (lev), asset composition (atcomp), and liquidity (cr), and control variables as firms' size (size), growth of the firm (salesgr) and economic growth (gdpgr).

The empirical model was developed by applying the fixed effect regression and random effect-regression. It was found that the fixed effect empirical model was more appropriate. The result of the study indicated that the SCF of the firms was dependent on the microeconomic variables used in the study which were firm specific. The composition of the assets had a considerable positive association with SCF. Moreover, the liquidity and the sales growth also had a significant positive influence (Banos-Caballero et al., 2010 and Chiou et al., 2006). The firm size had an inverse relation with SCF. When the size of the firm is large, the Supply Chain financing increases and vice versa (Hill et al., 2010; Moss & Stein, 1993; and Nazir & Afza, 2009). The economic condition as a macroeconomic variable does not have any connection with the SCF of the firm. Therefore, it is concluded that for better liquidity management, the significant determinants were assets composition, leverage, liquidity, firm size, and growth of the non-financial firms. Whereas leverage, profitability, and economic growth did not find any considerable effect on the SCF of the firms.

As per the knowledge of the author, this study is one of the novel attempts to understand the determinants of liquidity management in the Indian context for non-financial firms. Prior research works have been undertaken to explore the association between a firm's performance and the factors affecting the working capital in the Indian context. Therefore, the study will provide a new dimension in understanding the requirements for better liquidity management and its effect on SCF of the firms in the Indian context for non-financial firms.

The study had certain limitations to the number of variables used to understand liquidity management. So, it is recommended, that the future scope of the study may include additional variables for better understanding liquidity management. The period was limited to five years only as per the data availability. Endogeneity issues require further discussion and thoughts, but in the study, it was addressed as liquidity management is a part of the short-term decision of the firm.

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