



## Working Capital Financing and Entrepreneurship Development: Evidence from the Indian Stock Market

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**Key words:** Working capital finance, entrepreneurship, business development, stock exchange, India

**Abstract:** The main objective of this study is to ascertain the impact of working capital management on selected company's performance in National Stock Exchange in India. In this study, employed various variables for analysis of working capital management to explores select company's performance. To assess the impact of working capital financing on entrepreneurship business development in India by employing retrospective research based on the financial statements for the periods of 4 years ranging from 2014-2017. To examine the company's authentication through the statistical analysis of descriptive and multiple regression analysis were employed. The present study ascertained that there is a significant positive coefficient amongst working capital financing with the support of variables namely: inventory management, receivable management, payable management and cash management and entrepreneurship development in India. The results of the statistical analysis exhibited  $R^2 = 0.661$ , adjusted  $R^2 = 0.633$ ,  $F = 23.411$ . Consequently, this study concluded that appropriate working capital financing facilitate entrepreneurship development in India. Furthermore, this study suggested to business entrepreneurs and stakeholders need to administer appropriate working capital components for successful business development.

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### INTRODUCTION

The finance plays substantial role in development of entrepreneurship, capital is the basic inevitability to establish and maintain the entrepreneurship. It is the proportion of micro, small, medium and large-scale entrepreneurship of India's liquidity and ability but it is associated with additional characteristics of capacity to encounter its momentary commitments in development of

organisation. The business environment influenced with entrepreneurial activities and proliferated significantly to the development of profit-oriented sector. Subsequently, conditions constitute with business are the foundation for the survival in long period, growth and stability in competitiveness of entrepreneurship progress. Moreover, capital restructuring can attain middle point to improve from ailing organisation to liquidating organisation it requires tremendous efforts for capital management.

Business organisation cannot survive with scare of working capital finance and it require substantial investment in this type of assets requires comprehensive decision on the part of management of the company. Working capital for every business organisation is the paramount of capital to maintain its day-to-day business operations, therefore, the management of working capital is commonly measured as a tool to sustaining capability of the business confidential to their regular operations. Working capital is frequently measured by financiers to assess the financial short-term reimbursement ability in financial crucial position<sup>[1,2]</sup>.

Frequently, demanding financial circumstances to pose warning to the survival of the business enterprise. However, the availability of funds can strengthen the organisation to attain the rapid growth market incompetitive business. In the direction of maintain business activities regularly needed mobilize the financial resources are challenging task for the organisations, although, recently, there has some improvement in new sources of financing available for business organisations such as small-scale equity investments and mature market investment.

Investment in working capital is more significant component of corporate finance because it can influence in generate sustain profitability and liquidity of business organisation. Working capital manage with current assets and current liabilities, beyond that there is numerous reasons consisted. The proportion of the current assets account of any manufacturing company dominate over half of its total assets. Generally, an organisation working capital is ascertained through the subtracting of the organisation's current resources from its quantity of current liabilities. Excess of current assets can easily result in an organisation register inadequate return on assets. Whereas, organisation constitute with short of current assets also generate result as shortage and difficulties in maintaining proper business operations<sup>[3]</sup>.

On the other hand, India is the second largest population country in the entire world, thus, employment creation and enhance the income opportunity are approximately huge challenges nowadays. Therefore, there is not any hesitation associated with the other factors that are abstracting the national development. Entrepreneurs development can resolve such problems through establishment and innovative management of utilizing appropriate financial resources. Although, earlier business environment had been proved that prosperity and success are depend on capital management and many entrepreneurs imagine when they start their own business organisation. However, any business to succeed takes more than a vision of time. Capital plays significant role to establish, operate, expansion and success of business organisation. This can be classified as working capital and fixed capital and other terms referred to as short-term or long-term sources of finance. Entrepreneurs have many options to select and funding to

their business organisation and they must aware of the implication of selecting alternative sources of finance.

Mostly, entrepreneurs are not able to consider different financial strategies and those are suitable of the relevant sources of finance to the opportunities of business organisation. One more function require for the entrepreneurs to estimate market demand as well it is not limited to the process of in view of awareness regarding suitable products and services to the target market besides that searching suitable means of finance for execute business plans of action. The basic major problem of the entrepreneurs at the initial stage may not have required finance background, they essential to consult finance expert opinion and it is not seemed like priority. However, entrepreneur's intention to be launch out their products and services at the target market which has the products of their creative progression.

Empirical evidence obtain from over the entire world research demonstrate that the perpetuity of Micro, Small and Medium Enterprises (MSME) has taken the attention over the world in several areas such as employment creation, poverty alleviation, wealth maximisation among others. The successful business organisation ability is momentarily anchored on the continuously solvency of that organisation<sup>[4]</sup>. According to Gill *et al.*<sup>[5]</sup>, referred working capital is very important for business organisation because it can create wealth for shareholders. In addition, incompetent management of working capital may provide results either over-investment or under-investment in working capital, consequently which will diminish the profitability position of the organisation. Under-investment in working capital can shepherd organisation to financial disasters and subsequently lead the organisation at risk of liquidation. Rao<sup>[6]</sup> opined that in the organisation employees uses a time forecast on every day business require capital decisions through current assets that are regularly converted into other benefits types referred as short-term investments. Instance, a firm must disclose current liabilities under the short-term liabilities on rational basis.

### **Literature review**

**Review of literature and conceptual framework:** Business organisation requires funds to maintain day-to-day business operations is referred as working capital. Operations are unlimited of business organisation including such as purchase of raw material, carriage cost of material, payment of wages and salaries, rent rates taxes and insurance, overhead expenses and providing credit service to customers<sup>[7]</sup>. In the words of Pandey<sup>[8]</sup> stated that a firms financing decision is different from its financial structure as well suggested there are various sources of funds such as short-term and long-term represents the organisations financial structure whereas combination of long-term debt and equity capital proportion represents the financing decision. Besides that, Pandey<sup>[8]</sup> stated that when the organisation can hold the

unique debt-equity ratio is consider maximizing its returns and minimizing organization risk level, therefore, decision would be necessary applicable with the working capital composition. On the other hand, Forghani *et al.*<sup>[9]</sup> described that evaluating the effect of working capital management on company's recommended that "selecting the best practice for working capital management, evaluating working capital optimally in companies and managing appropriate current assets and liabilities can improve company's performance". Also, they emphasized that the practice proper strategies to manage current assets and current liabilities, depend on suitable policies and methods to control account receivables and debt collection accordingly, decrease the timeperiod of debt collection and increase company's cash position then to improve working capital of the company's. In the opinion of Ademola<sup>[2]</sup>, the working capital management is pivotal to the any organisation for growth and existence among the competitive organisations and therefore, working capital require to meet their objective and managers need to focus over how effectively manage working capital financing for the day-to-day in succession of the business.

Accordingly, Singh and Asress<sup>[10]</sup> described that organisation need to be well-designed and effective management of working capital consequently, it can contribute significant profitability and liquidity position for the organization. In the opinion of Valipour *et al.*<sup>[11]</sup>, through the well-organised working capital management, organisation can minimize their dependence on outside sources of finance and they can utilize maximum internal generated funds for future investments. In implication managing the working capital is very difficult task to the organisation in the case of monetary<sup>[12]</sup>. The threat is engaged in working capital management are associated with the organize the short-term assets that result over the short-term liabilities because interconnection that existing among them. It is not possible to reach sustainable stage of capital. It is a likelihood to turn out to be bankrupt and might obligatory in liquidation of the organisation<sup>[13]</sup>. On the other hand, in the area of financial management very sensitive topic is working capital management because its productiveness is very important, specifically, those companies relative with manufacturing because of a foremost proportion of asset is controlled of current assets<sup>[3]</sup>.

In the case of increasing financial markets the organisations are characteristically occupying low level with inadequate contract to longer period capital markets. Generally, some organisations are probable to depend on proprietor financing, long term debt financing and short-term debt financing to their required savings cash, receivable and inventories<sup>[14]</sup>. Working capital costs would increase during the financial emergency and

remain elevated<sup>[15]</sup> and also, they stated that there are three types of problems driverelated to suppliers working capital costs such as deficiency of admissioonto loan for working capital, there is a possibility to higher interest rate for small organisation and repayment of loan terms are prolonged. However, organisations to enhance profitability and to maintain adequate liquidity position, consequently, corporate financing decision must consider along with their working capital composition<sup>[16]</sup>. On the other hand, according to Merchant<sup>[7]</sup>, divided working capital as two areas such as regular working capital that supplies fixed funds for overall business objectives and another type is short-term working capital used to supplies to meet the day-to-day business operations. According to Casson<sup>[17]</sup> opined that fundamental awareness about internal finance implies that potential entrepreneurs face liquidity constraints and they are controlled through restriction on the access to liquidity and the possession of and access to own capital can suggest strongly entrepreneurship development.

#### **Empirical framework working capital finance:**

Financial advisors and preeminent researcher theoretically recommended that perfect working capital management is essential to become the successful business organisation during eachfinancial period. Most of the organisations invested massive amount of cash invested in working capital finance. Therefore, this scenario can determine tends to development of organisation. According to, Mohamad and Saad described that current ratio reported negatively significant to financial performance of 172 listed Malaysian organisation. Their study found that importance and appropriate management of working capital and thus, significant results recorded on firm's market value and profitability. They also extended their suggestion that working capital management remains part of the company's financial strategic and operational planning and procedures to better development of the organisations.

In the opinion of Kasiran *et al.*<sup>[18]</sup> emphasised that the selected Small and Medium Enterprise (SME) companies are less efficient in managing their working capital and they found that positive relationship between the microenterprises and micro finances to achieve sustainability of the company and maintaining the organisation with an increase performance. They also suggested that SME companies require strong financial support from all financing agencies, otherwise organisations loss of opportunity to expand the organisation because they will be disappointed with short term liquidity crisis and consequences as decline the enterprise rating. Moreover, Moreia<sup>[19]</sup> stated that the MSME growth should depend on the financial

accessibility. In addition, that MSME growth in developing countries is dependents on identify and accessibility of finance and along with that need to recognize most significant obstacles that barriers their growth and performance.

Lazaridis and Tryfonidis<sup>[20]</sup> examined the relationship between corporate profitability and working capital management of listed companies on the Athens Stock Exchange. They investigated total sample of 131 firms over the time period 2001-2004. They used cash conversion cycle to estimate the working capital management as well as gross operating income is used to estimate firm's profitability. They employed regression analysis revealed that a negative relationship between cash conversion cycle and firm's profitability, this study confirms the opinion that a decrease in the cash conversion cycle would produce more profit. In addition, research conducted by Gill *et al.*<sup>[5]</sup> with the intention to extend the research work of Lazaridis and Tryfonidis<sup>[20]</sup>. But during their research, take over 88 American listed firms on the New York stock exchange during the years 2005-2007. Concluded with the research that discover the relationship between working capital management and profitability. They were employed Pearson's correlation they found a negative correlation between the gross operating profit and accounts receivables. This research suggested that if the average collection period increases it must have negative impact on the profitability. Through regression analysis they found that a positive and significant result between the cash conversion cycle and profitability. Therefore, they revealed that higher the cash conversion cycle and higher the profitability of the firm. They determined and suggested that if the firm's appropriate management of working capital can increase the profitability.

Moreover, it was also found through empirical investigation that external causes for financing dilemma because of cost of capital is very high and lack of financial consultant support. Even though profitable business organisation can have working capital problems because this can increase the long long-lasting payments from their clients. Based on the consequence's appropriate management of the working capital is very difficult task in the area of monetary organisation<sup>[12]</sup>.

**Objectives of the study:** The prime objective of the study is to evaluate the strength of working capital management as an instrument aimed at entrepreneurship business development in India. In order to achieve this prime objective, the study constitute specific objectives are to:

- Evaluate the impact of inventory management over entrepreneurship business development in India
- Examine the scope of receivable management can improve entrepreneurship business development in India

- Evaluate the effect of payable management over entrepreneurship business development in India
- Investigate the scope of cash management can enhance entrepreneurship business development in India
- Evaluate the combined influence of the working capital elements on entrepreneurship business development in India

**Test of hypothesis:** The present study framed the hypothesis to examine the impact of working capital financing on entrepreneurship development in India over the study period.

- $H_0$ : there is no significant impact of working capital management on entrepreneurship development in India
- $H_1$ : there is significant impact of working capital management on entrepreneurship development in India

## MATERIALS AND METHODS

**Research design:** The present study employed retrospective research design using the secondary data analysis of financial information extracted from the financial statement for the years 2014-2018 of top 10 companies under consumer goods listed in the National Stock Exchange (NSE) of India. The present study employing descriptive and inferential statistical analysis. To examine the selected company's data employed through the statistical tool of multiple regression analysis. This type of test can useful in establish the linear relation between two or more variables. In addition, the descriptive statistics can examine the means and standard deviations of regression variables. Moreover, the utilization of inferential statistics is to generate inferences or conclusions about a population based on research design. Therefore, the prime objective of the study is to ascertain the intensity of the working capital management as tools in ensuring the entrepreneurship development in India.

**Population of the study:** The population of the study comprises NSE 100 and selected top 10 listed companies in National Stock Exchange as of 31 March, 2019. Selected companies equities are listed under 10 industry sector including electric equipment, cement and construction material, automobiles, consumer food, household and personal product, pharmaceuticals and drugs, construction-real estate, telecommunication service provider, IT-software and textile. This study intended to measure the performance of large market capitalisation companies and constitute characteristics of entrepreneurship business. The present study concern from the entire population but focused on top 10 listed

companies as per market capitalisation and which are represent the population of the study to entrepreneurship development in India.

**Data collection method:** The present study collected required data through the manually from the selected firm's annual reports. This study extracted results through the Excel and SPSS where the study collected numerical values directly from the annual reports in order to obtain the variables of the study. Certainly, this study manually preparing the calculation instead of extracting ratios from the annual reports in order to get the calculations comprehensible for all the selected firms. This study demonstrates the validity and generates more accurate results over the study period from 2014-2017.

**Research models:** In order to prove the study hypothesis asserted above and this study designed the following research model to examined of the functional relationship of variables as given below:

**Functions:**

$$Y = f(X)$$

Y = y<sub>1</sub>+y<sub>2</sub> = Dependent variables  
 X = x<sub>1</sub>+x<sub>2</sub>+ = Independent variables  
 x<sub>3</sub>+x<sub>4</sub>+x<sub>5</sub>

**Dependent variables:**

$$Y = \text{Entrepreneurship Development in India (ENTDI)}$$

Where:

Y = Entrepreneurship Development in India (ENTDI)  
 y<sub>1</sub> = Log of Changes in Total Assets(CHTA)  
 y<sub>2</sub> = Log of Changes in Sales Volume (CHSV). Thus,  
 Y = y<sub>1</sub>+y<sub>2</sub> are dependent variables.

**Independent variables:**

X = f (x<sub>1</sub>, x<sub>2</sub>, x<sub>3</sub>, x<sub>4</sub>, μ) are independent variables  
 X = Working Capital Management (WCM)

Where:

X = x<sub>1</sub>+x<sub>2</sub>+ = Independent variables  
 x<sub>3</sub>+x<sub>4</sub>+μ  
 f = Functional dependency of the relationship  
 x<sub>1</sub> = Inventory Management (INVM)  
 x<sub>2</sub> = Receivable Management (RECM)  
 x<sub>3</sub> = Payable Management (PAYM)  
 x<sub>4</sub> = Cash Management (CAHM)  
 μ = Random variable (error term), refers to other possible factors of concern and not included in the model

**Functional relationships:**

$$\text{ENTD} = (\text{INVM}, \text{RECM}, \text{PAYM}, \text{CAHM}), \dots, \text{F1}$$

**Model arrangement:**

$$\text{ENTD} = \alpha_0 + \beta_0(\text{INVM}) + \beta_1(\text{RECM}) + \beta_2(\text{PAYM}) + \beta_3(\text{CAHM}) + \mu, \dots, \text{F2}$$

This study examined the variable at 95% confidence level and 5% level of significance, the impact of independent variable on the dependent variable is estimated.

**Evaluation of variables:** The relationship and coefficient of the estimated and controllable variables (i.e., β<sub>0</sub>-β<sub>3</sub>) of firm's performance of Working capital management and development in India was estimated and using Ordinary Least Squares (OLS) technique. In this study, make use of large number of variables to ascertain the entrepreneurship development estimation in India implemented aside from substitute for the above variables were computed using the below formulae. Therefore, these evaluation model have been used by previous researcher namely: Padachi<sup>[21]</sup>, Raheman and Nasr<sup>[1]</sup>, Falope and Ajilore<sup>[22]</sup>, Ogundajo<sup>[23]</sup> and Ademola<sup>[2]</sup> to measure the impact of working capital management besides, these are the main variables that influence working capital management (Table 1).

Table 1: Summary of variables/evaluation and test of hypothesis

Variables type	Evaluation models	Equations
Average Collection Period (ACP)	Account receivable/Sales×365 days	1
Inventory Turnover in Days (ITD)	Inventory/(Cost of goods sold)×365 days	2
Average Payment Period (APP)	(Accounts payable)/Purchases×365 days	3
Cash Conversion Cycle (CCC)	ACP+ITD-APP	4
Current Ratio (CR)	(Current asset)/(Current liabilities)	5
Debt Ratio (DR)	(Total debt)/(Total assets)	6
Asset Turnover Ratio (ATR)	Sales/(Total assets)	7
Size	Natural numeral of total assets	8
Age	The number of years, since, the commencement of the firm to the observation date	9
Asset tangibility	(Net fixed assets)/(Total assets)	10
Development	Changes in the natural numeral of total assets	11

Researcher's research in 2019

**RESULTS AND DISCUSSION**

Table 2 represents the descriptive statistical analysis of selected companies relevant with extrinsic and independent variables such as CHTA, CHSV, INVM, RECM, PAYM, CAHM. The relevant data were attained for the period from 2014-2017. The analysis of maximum and minimum values expresses the suggestions of significant variations in the ratios over the study period. The analysis of the skewness of log of total assets (CHTA), log of sales value (CHSV), Inventory Management (INVM), Receivable Management (RECM), Payable Management (PAYM) and Cash Management (CAHM) shows positive indications (Appendix 1 and 2).

Therefore, this represents that the right tail of skewness is particularly extreme and they particularly said that positively skewed. As well as inferences were drawn through the statistical analysis revealed that there is none of the variables were negatively skewed. Meanwhile, in the view of kurtosis, all the respective variables of frequency distribution indicating greater kurtosis tails than the normal distribution but except Receivable Management (RECM) reported negative kurtosis. Moreover, in relation to kurtosis, all the respective variables are consisting a heavy tail, i.e., more than normal distribution. Furthermore, statistical analysis stated that thresholds exactly of skewness and kurtosis according to Jargue-Berra indicating that there is no significance of the values because the results of the study revealed that all the variable values is >3 thresholds. The inferences were drawn from the Jargue-Berra test and it is a formal test that validates the values of skewness and kurtosis and it also referred as a normality test. However,

it is found through the descriptive statistical analysis that results of skewness and kurtosis does not lies between 0 and 3 thresholds except Receivable Management (RECM) and Payable Management (PAYM) of skewness. Therefore, it suggested according to normality test that there are certainly not significance values for the skewness and kurtosis. As far as normality test results confirmed that the series normally not distributed (Table 2).

**Testing of hypothesis results and discussions:** This study examines and drawn significant impact of working capital management on entrepreneurship development in India during the study period. The standardized coefficients of all the variables were reported positive and inferences were drawn from the statistical analysis of hypothesis testing reported significant. Moreover, which suggest that entrepreneurship business development is significantly impacted by the all the extrinsic variables of the present study. Table 3 additionally revealed that inventory management reported that it has reached tolerance limit, however, this is non-significant impact of entrepreneurship business development with a coefficient ( $\beta_1$ ) of 0.000, receivable management accurately reported a positive but this is non-significant impact on entrepreneurship business development with a coefficient ( $\beta_2$ ) of 0.048, payable management reported unstandardized coefficient is exactly positive but this is non-significant impact on entrepreneurship business development with a coefficient ( $\beta_3$ ) of 0.109 and besides, cash management also reported that positive but this is similarly non-significance impact on entrepreneurship business development with a coefficient ( $\beta_4$ ) of 0.086.

In addition, the second portion of the statistical analysis of Table 3 represented output of multiple

Table 2: Descriptive analysis

Descriptions	CHTA	CHSV	INVM	RECM	PAYM	CAHM	ENTD
<b>N</b>							
Valid	40	40	40	40	40	40	40
Missing	0	0	0	0	0	0	0
Mean	22.5320	42.3852	528.0119	50.3040	455.9788	122.3370	64.9173
SE of mean	8.55074	24.43403	246.71475	7.88498	96.32123	268.63711	25.86087
Median	14.0659	11.5390	72.6828	20.1970	288.7636	-74.8361	27.5853
Mode	-8.45 <sup>a</sup>	-5.00	1.02 <sup>a</sup>	0.23 <sup>a</sup>	7.28 <sup>a</sup>	-2642.02 <sup>a</sup>	-71.79 <sup>a</sup>
SD	54.07960	154.53435	1560.36110	49.86896	609.18897	1699.01026	163.55853
Variance	2924.603	23880.864	2434726.754	2486.914	371111.205	2886635.878	26751.392
Skewness	5.525	5.652	5.095	0.706	2.653	3.758	4.631
SE of skewness	0.374	0.374	0.374	0.374	0.374	0.374	0.374
Kurtosis	32.984	34.000	28.350	-1.119	7.643	19.372	24.404
SE of kurtosis	0.733	0.733	0.733	0.733	0.733	0.733	0.733
Range	349.94	1038.73	9406.02	148.72	2915.62	11614.57	1035.37
Minimum	-8.45	-78.55	1.02	0.23	7.28	-2642.02	-71.79
Maximum	341.49	960.18	9407.05	148.95	2922.90	8972.55	963.58
Sum	901.28	1695.41	21120.47	2012.16	18239.15	4893.48	2596.69
<b>Percentiles</b>							
25	3.6105	1.5716	51.5132	12.8453	129.4785	-339.8252	9.6600
50	14.0659	11.5390	72.6828	20.1970	288.7636	-74.8361	27.5853
75	22.7763	26.5111	214.4836	103.5069	435.4501	148.8572	46.0815

<sup>a</sup>Multiple modes exist. The smallest value is shown; SPSS

Table 3: Hypothesis testing results of descriptive statistics

Variables	Mean	SD	N
ENTD	64.9173	163.55853	40
INVM	528.0119	1560.36110	40
RECM	50.3040	49.86896	40
PAYM	455.9788	609.18897	40
CAHM	122.3370	1699.01026	40

Table 4: Hypothesis testing results of correlations of variables

Tests	Correlations				
	ENTD	INVM	RECM	PAYM	CAHM
<b>Pearson correlation</b>					
ENTD	1.000	0.806	-0.106	0.043	0.722
INVM	0.806	1.000	-0.211	-0.068	0.937
RECM	-0.106	-0.211	1.000	0.304	-0.273
PAYM	0.043	-0.068	0.304	1.000	-0.412
CAHM	0.722	0.937	-0.273	-0.412	1.000
<b>Sig. (1-tailed)</b>					
ENTD	-	0.000	0.258	0.397	0.000
INVM	0.000	-	0.096	0.338	0.000
RECM	0.258	0.096	-	0.028	0.044
PAYM	0.397	0.338	0.028	-	0.004
CAHM	0.000	0.000	0.044	0.004	-

SPSS dependent variable: ENTD

Table 5: Hypothesis testing results of ANOVA

Models (1)	Sum of squares	df	Mean square	F	Sig.
Regression	689751.680	3	229917.227	23.411	0.000 <sup>b</sup>
Residual	353552.610	36	9820.906		
Total	1043304.290	39			

SPSS; <sup>a</sup>Dependent variable: ENTD; <sup>b</sup>Predictors: (Constant), CAHM, RECM, PAYM

regression which disclose that  $R = 0.813$ ,  $R^2 = 0.661$ , adjusted  $R^2 = 0.633$  and F-statistic = 23.411. Moreover,  $R^2$  shows that there is a positive relationship prevailing among the variables. The adjusted  $R^2$  of 0.661 indicates that about 66.1% of the variation in business development and inferences were obtained based on the independent variables of the present study. This signifies that 66.1% of changes in the development of selected companies and impact assigned to the inventory management, receivable management, payable management and cash management of population of the present study and distinguished from the remaining 33.9% of other company's business development is measured by other external variables but not included in the model of the present study. This study found that adjusted  $R^2$  is very close proximity to the  $R^2$ , so, recommended that there is a smaller amount of disadvantages for irrelevant variables in the model. In the opinion of the F-statistical value reported positive value of 23.411, it indicates that there is a significant positive relationship among entrepreneur business development with the variables of inventory management, receivable management, payable management and cash management.

The multiple regression analysis reported Durbin-Watson statistical value of 1.928 and which lies between the threshold of 1.90 and 2. According to

Durbin-Watson statistical analysis stated that the value should lie between 0 and 4. The value tends to 0 is indicating positive autocorrelation, the value of 2 means there is no autocorrelation in the sample of data and the value of 4 indicating there is a negative autocorrelation among the variables. Furthermore, Durbin-Watson value is more than  $R^2$  in the regression analysis, the attained results can be regarded as legitimate and referred as high degree of the model specification. This analysis indicated that the Durbin-Watson value of 1.928 is  $>1$  and  $R^2$  value of 0.661, consequently, the results is considered as not legitimate and similarly less degree of the model specification.

The statistical analysis revealed of the F-statistical value indicate that the overall goodness of fit of the model is satisfactory, this model has substantial goodness of fit for estimating entrepreneurship business development in India. Hence, it is concluded that reject the null hypothesis and select the alternative hypothesis and similarly, inferences were drawn from the analysis that working capital management employs a significant impact on entrepreneurship business development during the study period in India. The results of the hypothesis presented through the separate table of coefficients and correlations of the variables (Table 4-7).

Table 6: Hypothesis testing results of coefficients of variables

Models (1)	Unstandardized coefficients		Standardized coefficients (β)	t-values	Sig.
	B	SE			
Constant	2.177	25.228		0.086	0.932
RECM	0.048	0.339	0.015	0.142	0.888
PAYM	0.109	0.029	0.407	3.727	0.001
CAHM	0.086	0.010	0.894	8.270	0.000

R = 0.813; R<sup>2</sup> = 0.661; Adjusted R<sup>2</sup> = 0.633; SE of the estimate = 99.10048; R<sup>2</sup> Change = 0.661; F-statistic value = 23.411; Durbin-Watson = 1.928; Observations = 40; SPSS dependent variable: ENTND

Table 7: Hypothesis testing results of excluded variables

Model (1)	β	t-value	Sig.	Partial correlation	Collinearity statistics/tolerance
INVM	0.0 <sup>b</sup>	0.0	0.0	0.0	0.000

<sup>a</sup>Dependent variable: ENTND; <sup>b</sup>Predictors in the model: (Constant), CAHM, RECM, PAYM, (Tolerance = 0.000 limit reached)

**Impact of working capital management on entrepreneurship development in India**

**Functional relationships:**  $ENTD = \alpha_0 + \beta_0(INVM) + \beta_1(RECM) + \beta_2(PAYM) + \beta_3(CAHM) + \mu$ .

**Theoretical expectations:**  $\alpha_0 \geq 0; \beta_{0-3} \geq 0$ .

**Evaluated model:**  $ENTD = 2.177 + 0.000 INVM + 0.048 RECM + 0.109 PAYM + 0.086 CAHM$ .

**CONCLUSION**

The organisations must require short term investments to enhance the performance of the organisations in terms of productivity, profitability. Also, the working capital financing is important to overwhelm the financial problems relevant with the day-to-day business operations of the firms. In this study, assessed the impact of working capital financing to entrepreneurship development. Consequently, through this research found that the firms can encounter their short-term period responsibilities and results generated to firms to rise productivity and profitability over the preceding years of performs of the situation or else competitor. Furthermore, it is assessed that liquidity position identified by firms working capital management and performance relationship, also demonstrate the firm's current position in the prevailing market value. According to Pedro and Pedro stated that profitability and value of the firms impacted significantly through the appropriate management of working capital financing and investment in current assets such as inventory and trade credit is appropriate investment, then investing heavily it might remain harmful to a firms profitability, therefore, it is essential for each organisations to take optimal decision and estimate regard to how much

need to invest in debtors and inventory account and how much credit to accept from suppliers of the firms.

Furthermore, Shin and Soenen<sup>[24]</sup> described that “effective working capital management is a fundamental component of the firm’s overall corporate strategy to create shareholders value”. Firm’s analysis and understanding the financing options at various stages of the venture’s lifecycle is necessary to obtain sustainable development. The present study tried to establish the entrepreneurship development in India as a result of the indication by the level of log of changes in total assets; log of changes in sales volume, log of changes in net operating profit. Subsequently, this study discovers Working Capital Management (WCM) significantly influence the entrepreneurship business development through appropriate management of the individual components of the working capital management namely: inventory management, receivable management, payable management and cash management. The present study determines that the collective results of the descriptive variables on Entrepreneurship Development in India ( $ENTD = \alpha_0 + \beta_0(INVM) + \beta_1(RECM) + \beta_2(PAYM) + \beta_3(CAHM) + \mu$ ) is statistically significant relation to the management of working capital components for estimation of entrepreneurship development. The results found from the statistical analysis that the calculated  $F = 23.411$  and critical value with  $df_1 = 3$  and  $df_2 = 36$  at 0.05 level of significance is 2.87. Hence, concluded that there is significant impact of working capital management on entrepreneurship business development in India. This tendency ensure that entrepreneurs stimulate for generate much employment, productivity growth and produce innovative manufactured goods to achieve the customer’s expectations.



APPENDIX

Appendix 1: List of selected companies

Selected companies	No. of observations
ABB India Ltd.	6
ACC Ltd.	6
Ashok Leyland Ltd.	6
Britannia Industries Ltd	6
Colgate-Palmolive (India) Ltd.	6
Aurobindo Pharma Ltd.	6
DLF Ltd.	6
Bharti Airtel Ltd.	6
HCL technologies Ltd.	6
Page industries Ltd.	6
Total	600

Appendix 2: Parameters of selected companies name

Companies name	Years	CHTA	CHSV	INVM	RECM	PAYM	CAHM	ENTD
ABB India Ltd.	2014	-7.1610	-5.0000	68.57380	101.5182	53.7594	116.3326	-12.1610
	2015	-8.4530	-12.0000	68.50140	103.4995	53.5813	118.4195	-20.4530
	2016	-4.7010	-5.0000	65.88820	104.6187	51.5957	118.9111	-9.7010
	2017	8.6980	1.0000	76.79170	110.8021	54.0833	133.5105	9.6980
ACC Ltd.	2014	4.7976	4.8497	104.57370	12.7676	138.4453	-21.1040	9.6473
	2015	0.9330	0.4969	66.14590	14.9885	173.3091	-92.1746	1.4299
	2016	4.9970	-7.3023	65.95590	17.7984	288.5804	-204.8260	-2.3053
	2017	10.7835	17.1051	79.08820	18.3895	333.1865	-235.7087	27.8886
Ashok Leyland Ltd.	2014	-3.3572	-25.3108	3049.61149	4.2591	112.5778	2941.2927	-28.6680
	2015	3.9310	26.8634	667.18990	1.1734	103.0499	565.3134	30.7944
	2016	-4.0396	31.9430	828.42540	0.2291	7.2801	821.3744	27.9034
	2017	8.0306	6.3226	1770.34360	7.0008	10.9539	1766.3904	14.3532
Britannia Industries Ltd.	2014	9.5904	12.3212	34.50880	6.2903	386.9362	-346.1371	21.9116
	2015	33.4817	13.7711	27.42980	3.6103	299.6699	-268.6298	47.2528
	2016	24.5845	10.7568	28.55020	4.9000	288.9468	-255.4966	35.3413
	2017	20.5029	9.2664	43.26720	7.5299	344.0989	-293.3018	29.7693
Colgate Palmolive India Ltd.	2014	13.9257	12.9471	57.66830	13.4193	151.5791	-80.4915	26.8728
	2015	14.3172	10.6397	51.48870	14.9362	126.5155	-60.0906	24.9569
	2016	14.2060	4.6518	58.50020	13.0783	134.3464	-62.7679	18.8578
	2017	18.8807	8.5539	58.57430	20.5189	148.2739	-69.1807	27.4346
Aurobindo Pharma Ltd.	2014	30.4828	38.0561	190.34350	118.4715	133.0050	175.8100	68.5389
	2015	36.0877	50.4023	384.59110	105.7356	128.3030	362.0237	86.4900
	2016	21.5639	15.8938	191.10920	118.7538	143.3763	166.4867	37.4577
	2017	3.5037	7.3926	222.27500	66.3791	134.6813	153.9728	10.8963
DLF Ltd.	2014	1.6744	15.7659	40.53670	148.9457	877.0009	-687.5185	17.4403
	2015	-4.2327	6.1686	54.21990	142.5535	777.1746	-580.4012	1.9359
	2016	71.5457	160.8899	128.33380	117.6913	856.3300	-610.3049	232.4356
	2017	4.2122	-15.6320	132.21630	148.6684	2922.9024	-2642.0180	-11.4198
Bharti Airtel Ltd.	2014	3.4037	960.1774	9407.04540	15.5678	450.0589	8972.5543	963.5811
	2015	341.4913	19.5334	451.44730	19.8752	370.6720	100.6505	361.0247
	2016	28.0921	-0.3562	51.58660	19.1477	391.6238	-320.8895	27.7359
	2017	18.3395	3.2864	245.43100	18.7687	349.9341	-85.7344	21.6259
HCL Technologies Ltd.	2014	36.6880	120.5612	1.02490	68.5938	349.2917	-279.6730	157.2492
	2015	14.2132	25.4541	4.85530	71.1641	470.1773	-394.1579	39.6673
	2016	6.7642	-78.5545	9.32960	103.5094	1018.5712	-905.7322	-71.7903
	2017	21.6971	148.7712	4.68560	79.5472	1434.3958	-1350.1630	170.4683
Page Industries Ltd.	2014	41.9407	35.0470	162.84950	22.2145	1371.7852	-1186.7210	76.9877
	2015	22.9800	29.9336	174.27440	20.6639	2276.8522	-2081.9140	52.9136
	2016	14.7206	15.3409	1823.11240	21.0956	340.4295	1503.7785	30.0615
	2017	22.1652	20.4023	170.13020	3.4855	181.8183	-8.2026	42.5675

Researcher compiled data

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