

# Cash and Credit Management Practices of Naga Limited, Dindigul

Dr.R.Amudha,C.R. Sathiya Narayanan

**Abstract**— To incorporate and progress any business, finance is the *sine qua non*. Management of funds has become a vibrant element in business. Though strategic planning and raising of funds are essential, controlling and administering of funds receives equal significance as it deals with daily operation of the business. The administering of funds is often referred as working capital management, or fund management, which ensures the sufficient ability in terms of money to endure the day to day operations.

Cash investment levels (Capex) and changes in trade receivables result in the rise of alternative costs affecting net working capital level. The rise and fall of working capital level require the balancing of future free cash flows which influences firms' value changes. Thus, management of cash and receivables influence the firm's value. The study focuses on the cash and credit management of the Naga Ltd. – Retail division (as a credit giver).

The object of the study is to analyze the management of cash and credit and its effect on the firm's value of Naga Ltd. The secondary data for the study were taken from the records of the company for the period of five years from March 2011 to March 2015. The values are extrapolated and correlations are computed with the help of the SPSS Package to study the co-relationship between net working capital (NWC), future free cash flow (FFCF) and firm's value. It is inferred that firm's value has a stronger positive correlation with FFCF than NWC. The firm must take FFCF into account while planning the NWC to increase the firm's value. By extrapolating NWC, a decreasing trend is anticipated in the near future of the company. It is suggested that the company should revamp its financial strategy to avoid the expected situation and to maintain a favourable working capital position. This will assist the company to enhance its firm's value in future.

**Index Terms**— Cash and credit management practices, Firm value growth, Future free cash flow growth, Net working capital growth.

## I. INTRODUCTION

To incorporate and progress any business, finance is the *sine qua non*. Management of funds has become a vibrant element in business. Though planning and raising of funds is important (which is long-term in nature), controlling and administering of funds is much more important than them for a business (which is short-term in nature). The administering of funds is often referred as working capital management (*fund management*), which ensures the sufficient ability in terms of money to continue the operations. Profitability can be achieved by managing financial and non-financial resources especially by managing working capital. The cash

and near cash items should be taken care of while managing the working capital requirements of a firm. The credit worthiness of a firm is assessed by the external users in terms of solvency and liquidity. Lack of proper cash and credit management practices may result in liquidation. This necessitates the prompt management of cash and accounts receivable/payable function which may lead to satisfactory working capital position. Thus, illiquidity can be avoided by efficient management of cash and credit policies.

## II. REVIEW OF LITERATURE

Trade credit management should be regarded as a relational activity and not merely a narrow technical function [1]. There is a need to introduce cash management controls and credit management policy [2]. The most important qualitative guidelines used to assess credit-worthiness consisted of a credit applicant's character, capacity, and capital [3]. In determining the grant of business credit, there are some basic financial elements, such as credit volume, cash discount, and collection strategy, to connect with suitable credit policy [4]. As a best practice, technology should be utilized to convert the volumes of transactional data into meaningful business intelligence [5]. Cash management influences firm's value, because its cash investment levels entail the rise of alternative costs, which are affected by net working capital levels. Both the rise and fall of net working capital levels require the balancing of future free cash flows, and in turn, result in firm's valuation changes [6]. Managers fear the negative part of the risk and hold cash to hedge against it. Cash balances are held to use chances that are created by the positive part of the risk equation. Cash balances are the result of the operating needs of the firm [7]. There is a difference between financial costs of groups with managed or non-managed cash flows [8]. Credit policy, employee development and intelligence collection systems are the most important predictors for the efficiency and effectiveness of credit control management [9]. Credit management must move up from being an add-on service at the end of a company's sale cycle to being part of an organization's business processes, integrated into the sales and marketing function [10]. Credit management which has been traditionally viewed as a separate collection oriented element is now being brought into the full business model. That model is a cycle, which starts with contract origination, production and distribution and only finally involves credit management [11]. The informal systems of cash management mainly practiced were found to be susceptible to cash fraud and other business growth difficulties [12].

Dr.R.Amudha, Faculty, School of Management, SASTRA University, Thanjavur, Tamilnadu, India

C.R. Sathiya Narayanan Student, School of Management, SASTRA University, Thanjavur, Tamilnadu, India .



III OBJECTIVES AND SCOPE OF THE STUDY

Cash investment levels (Capex) and changes in trade receivables result in the rise of alternative costs affecting net working capital level. The rise and fall of working capital level require the balancing of future free cash flows which influences firms' value changes. Thus, management of cash and receivables influence the firm's value. The study focuses on the cash and credit management of the Naga Ltd. – Retail division, Dindigul (as a credit giver) and its effect on firm value. The objectives of the study is to know the impact of cash and credit policy on the value of the firm and to predict cash and credit position and to suggest suitable measures to maintain good optimum cash balances in the future. The secondary data for the study were taken from the records of the company for the period of five years from March 2011 to March 2015. The values are extrapolated and correlations are computed with the help of the SPSS Package to study the co-relationship between net working capital (NWC), future free cash flow (FFCF) and firm's value.

IV ANALYSIS AND DISCUSSION

4.1 Cash Management Practices of Naga Ltd. (Retail Division)

All the conceptual cash optimization models focus on profit maximization as its objective. But this framework focuses on wealth maximization i.e. Effect of cash balance (NWC) on the firm's value.

$$NWC = CA - CL = AAR + ZAP + G - AAP$$

Where,

NWC=Net working capital, CA= Current assets, CL= Current liabilities, AAR= Average level of accounts receivables, ZAP= Inventory, G= Cash and cash equivalents, AAP= Average level of accounts payable

$$\Delta V_p = \sum_{t=1}^n \frac{\Delta FFCF_t}{(1+k)^t}$$

Where,  $\Delta V_p$  = Firm value growth,  $\Delta FFCF_t$  = Future free cash flow growth in period t, k = Discount rate

$$\Delta FFCF_t = (CR_t - FC_{WD} - VC_t - Dep) \times (1 - T) + Dep - \Delta NWC_t$$

Where,  $CR_t$  = Cash revenues on sales,  $FC_{WD}$  = Fixed costs,  $VC_t$  = Variable cost in time t, Dep = Depreciation, T = Effective tax rate,  $\Delta NWC_t$  = Net working capital growth, Capex = Operational investment growth.

Table No. 1  
Calculation of Net working capital growth

PARTICULARS	(Rs. in Lakhs)				
	2011	2012	2013	2014	2015
Total current assets	5364.09	4549.62	9483.86	10079.73	8622.09
Total current liabilities	5192.8	4318.13	9397.49	9939.69	8407.43
Net working capital	171.29	231.49	86.37	140.04	214.66
Net working capital growth		35.14	-62.689	62.139	53.284
		50756	53303	63182	77578

Source: Secondary data

Net working capital growth is calculated by,

$$\Delta NWC_t = \frac{\text{Current NWC} - \text{Previous NWC}}{\text{Previous NWC}} \times 100$$

Table No. 2

Calculation of Future free cash flow growth in period t

PARTICULARS	(Rs. in Lakhs)			
	2012	2013	2014	2015
Cash revenues on sales	29882.47	36863.88	42329.85	46353.2
Fixed costs	2655.9	3092.64	4115.67	4014.61
Variable cost in time	22722.51	26721.74	31095.52	35140.98
Depreciation	925.56	1378.1	1644.42	1746.33
Effective tax rate	0.18	0.18	0.18	0.18
Net working capital growth	35.145	-62.6895	62.1396	53.2847
	0756	3303	3182	7578
Operational Investment growth	381.83	122.49	751.2	387.63
Future free cash flow growth	3442.95	5968.84	5319.95	5775.46
	4924	7533	7168	4824

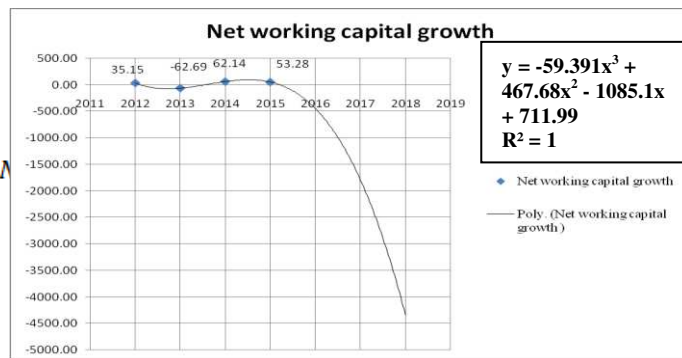
Table No. 3

Calculation of Firm value growth

PARTICULARS	(Rs. in Lakhs)			
	2012	2013	2014	2015
Discount Rate @ 10%	0.68301	0.75131	0.82644	0.90909
	3455	4801	6281	0909
Firm value growth	2351.5	4484.48	4396.65	5250.42
	8454	3496	8817	2567

Source: Secondary data

Figure No. 1  
Chart showing net working capital growth



Source: Secondary data

The above chart projects the growth of net working capital for the forthcoming three years from 2016-2018 based on the trend during the past five years under study. The growth in NWC shows a decreasing trend because of the excess of the current liabilities over the current assets.

NWC growth declines in the year 2013 due to the augmentation of short-term borrowings from 2030.35 in 2012 to 6751.32 in 2013, short-term provisions from 102.51 in 2012 to 103.67 in 2013, other current liabilities from 1700.05 in 2012 to 2064 in 2013, inventories from 2379.69 in 2012 to 6869.71 in 2013, trade receivables from 1622.65 in 2012 to 1837.1 in 2013, cash from 156.33 in 2012 to 455.01 in 2013 and decline of trade payables from 485.22 in 2012 to 478.5 in 2013, short term loans and advances from 312.28 in 2012 to

286.79 in 2013 and other current assets from 78.67 in 2012 to 35.25 in 2013.

NWC growth inclines in the year 2014 due to the augmentation of trade payables from 478.5 in 2013 to 1223.38 in 2014, other current liabilities from 2064 in 2013 to 2279.95 in 2014, trade receivables from 1837.1 in 2013 to 3023.91 in 2014, cash from 455.01 in 2013 to 473.63 in 2014 and decline of short term borrowings from 6751.3 in 2013 to 6334 in 2014, short term provisions from 103.67 in 2013 to 201.36 in 2014, inventories from 6869.71 in 2013 to 6293.3 in 2014 and short term loans and advances from 286.79 in 2013 to 231.77 in 2014.

NWC growth declines in the year 2015 due to the augmentation of trade payables from 1223.38 in 2014 to 1382.63 in 2015, other current liabilities from 2279.95 in 2014 to 2621.68 in 2015, short term provisions from 102.36 in 2014 to 140.83 in 2015, cash from 473.63 in 2014 to 700.71 in 2015, short term loans and advances from 231.77 in 2014 to 826.45 in 2015, other current assets from 57.11 in 2014 to 163.57 in 2015 and decline of short term borrowings from 6334 in 2014 to 4262.29 in 2015, inventories from 6293.31 in 2014 to 4581.89 in 2015 and trade receivables from 3023.91 in 2014 to 2349.47 in 2015.

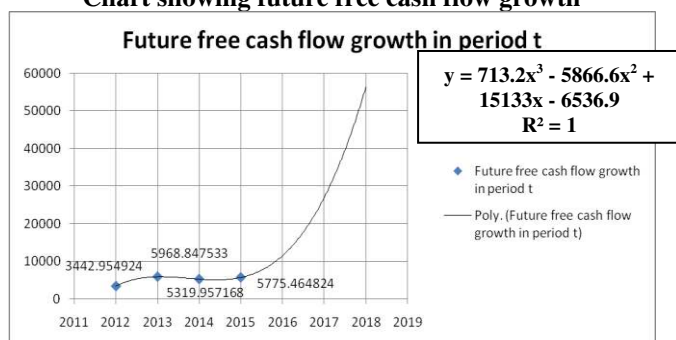
**Table No. 4**  
**Prediction of NWC growth from 2016 to 2018**

$y = -59.391x^3 + 467.68x^2 - 1085.1x + 711.99$	
Period	Values
2016	-445.385
2017	-1790.586
2018	-4338.503

Source: Secondary data

The above table shows the projected calculation of NWC growth from 2016 to 2018. The values are projected using the polynomial equation,  $y = -59.391x^3 + 467.68x^2 - 1085.1x + 711.99$ . The values of "x" are assumed as 1 for 2012, 2 for 2013, 3 for 2014, 4 for 2015, 5 for 2016, 6 for 2017 and 7 for 2018. The projected values of NWC growth further declines in the following years as -445.385 in 2016, -1790.586 in 2017 and -4338.503 in 2018.

**Figure No. 2**  
**Chart showing future free cash flow growth**



Source: Secondary data

The above chart projects the growth of future free cash flow for the forthcoming three years from 2016-2018 based on the trend during the past five years under study. The growth in future free cash flow shows a growing trend because cash revenue on sales, fixed costs, variable costs and depreciation surpass net working capital growth and operational investment growth.

FFCF growth inclines from 3442.95 to 5968.85 between 2012- 2013, due to the augmentation of cash revenues on sales from 29882.47 to 36863.88 between 2012- 2013, fixed costs from 2655.9 to 3092.64 between 2012- 2013, variable cost from 22722.51 to 26721.74 between 2012- 2013, depreciation from 925.56 to 1378.1 between 2012- 2013 and decline of net working capital growth from 35.15 to -62.69 between 2012- 2013 and operational investment growth from 381.83 to 122.49 between 2012- 2013.

FFCF growth declines from 5968.85 to 5319.96 between 2013- 2014, due to the augmentation of cash revenue of sales from 36863.88 to 42329.85 between 2013- 2014, fixed cost from 3092.64 to 4115.67 between 2013-2014, variable cost from 26721.74 to 31095.52 between 2013- 2014, depreciation from 1378.1 to 1644.42 between 2013- 2014, operational investment growth from 122.49 to 751.2 between 2013- 2014 and net working capital growth from -62.69 to 62.14 between 2013- 2014.

FFCF growth inclines from 5319.96 to 5775.46 between 2014- 2015, due to the augmentation of cash revenue of sales from 42329.85 to 46353.2 between 2014- 2015, variable cost from 31095.52 to 35140.98 between 2014- 2015, depreciation from 1644.42 to 1746.33 between 2014- 2015 and decline of fixed costs from 4115.67 to 4014.61 between 2014- 2015, net working capital growth from 62.14 to 53.28 between 2014- 2015 and operational investment growth from 751.2 to 387.63 between 2014- 2015.

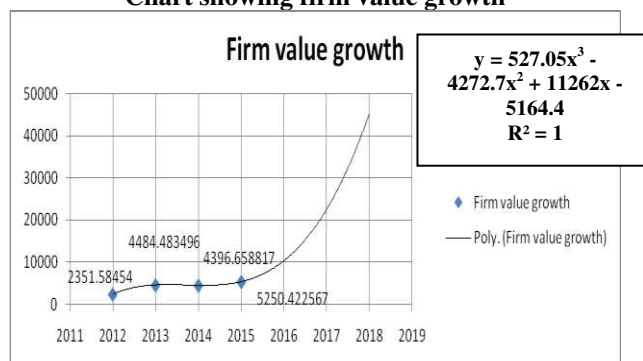
**Table No. 5**  
**Prediction of future free cash flow growth from 2016 to 2018**

$y = 713.2x^3 - 5866.6x^2 + 15133x - 6536.9$	
Period	Value
2016	11613.1
2017	27114.7
2018	56558.3

Source: Secondary data

The above table shows the projected calculation of FFCF growth from 2016 to 2018. The values are projected using the polynomial equation,  $y = 713.2x^3 - 5866.6x^2 + 15133x - 6536.9$ . The values of "x" are assumed as 1 for 2012, 2 for 2013, 3 for 2014, 4 for 2015, 5 for 2016, 6 for 2017 and 7 for 2018. The projected values of FFCF growth incline in the following years as 11613.1 in 2016, 27114.7 in 2017 and 56558.3 in 2018.

**Figure No. 3**  
**Chart showing firm value growth**



Source: Secondary data

The above chart projects the growth of firm value for the forthcoming three years from 2016-2018 based on the trend during the past five years under study. The growth in firm



value shows a growing trend because of the growth of FFCF. Firm value growth inclines from 2351.58 to 4484.48 between 2012- 2013 due to the augmentation of FFCF growth from 3442.95 to 5968.85 between 2012- 2013. Firm value growth declines from 4484.48 to 4396.66 between 2013- 2014 due to the decline of FFCF growth from 5968.85 to 5319.96 between 2013- 2014. Firm value inclines from 4396.66 to 5250.42 between 2014- 2015 due to the augmentation of FFCF growth from 5319.96 to 5775.46 between 2014- 2015.

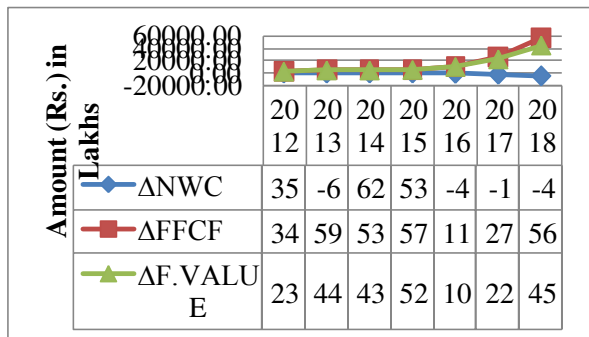
**Table No. 6**  
Prediction of firm value growth from 2016 to 2018

$y = 527.05x^3 - 4272.7x^2 + 11262x - 5164.4$	
Period	Value
2016	10209.35
2017	22433.2
2018	45085.45

Source: Secondary data

The above table shows the projected calculation of firm value growth from 2016 to 2018. The values are projected using the polynomial equation,  $y = 527.05x^3 - 4272.7x^2 + 11262x - 5164.4$ . The values of "x" are assumed as 1 for 2012, 2 for 2013, 3 for 2014, 4 for 2015, 5 for 2016, 6 for 2017 and 7 for 2018. The projected values of firm value growth incline in the following years as 10209.35 in 2016, 22433.2 in 2017 and 45085.45 in 2018.

**Figure No. 4**  
Chart showing actual and extrapolated values of NWC growth, FFCF growth and firm value growth



Source: Secondary data

**Table No. 7**  
Correlation (Pearson) between ΔNWC, ΔFFCF and Firm Value Growth

Particulars	ΔNWC	ΔFFCF	ΔF. VALUE
ΔNWC	1	-0.328	-0.036
ΔFFCF	-0.328	1	<b>0.947</b>
ΔF. VALUE	-0.036	<b>0.947</b>	1

Source: Secondary data

ΔNWC and ΔFFCF have weaker negative correlation (-0.328)

ΔNWC and ΔF. VALUE have weaker negative correlation (-0.036)

ΔFFCF and ΔF. VALUE have stronger positive correlation (0.947)

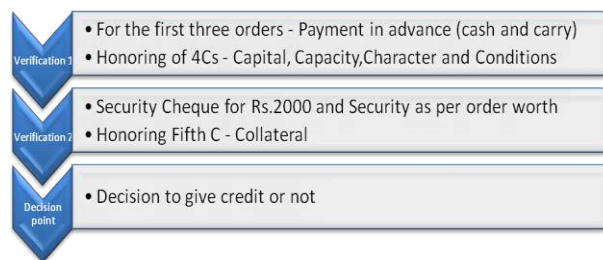
It is understood that, if the ΔFFCF increases, then the ΔF. VALUE increases and vice versa.

4.2 CREDIT MANAGEMENT PRACTICES OF NAGA LTD. (RETAIL DIVISION)

In practice, there are four types of sales happening in the Naga Retail division. They are (i) General trade, (ii) Modern trade, (iii) Direct sales, (iv) Whole-sale trade.

4.2.1 GENERAL TRADE - General trade is done with distributors/ stockists. There are two verification processes which have to be passed by every customer for getting credit allowance. The first verification is done for the first three orders the retailer has to pay in advance (Cash and carry) and no credit will be given to. By honoring this criterion, he is said to be passed off four Cs, namely, Capital - financial strength of the firm, Capacity - ability to pay, Character - willingness to pay and Conditions - general economic conditions. The second verification is done to get eligible for the credit allowance every customer (i.e. Stockists/distributors) have to pay a security cheque for Rs. 2000/- which covers up to five tons of order size. Suppose if they order bulk quantities (more than five tons of order size), if needed, according to the purchase order worth, security will be asked. By honoring this, he will get passed the fifth C, i.e. Collateral - Security. Credit decision is taken after the completion of the security requirements decision to give credit or not will be taken.

**Figure No. 5**  
General Trade Cycle



Source: Author

The company allows seven days as credit period invariably to all customers and no trade discount is encouraged.

**Figure No. 6**

Total Credit Days



Source: Author

**Figure No. 7**

Termination of Credit



Source: Author

The collection effort of the company is very lenient and if the debtor (retailer) doesn't pay the credit amount a period of seven days will be given as first chance and if he again defaults last chance of seven days of period will be given. The debtor should pay within these chances.

**Figure No. 8**  
**Types of collection effort**

**Effort 1** Sending remainders for payments

- Messages will be sent to the debtors/ distributors as gentle reminders before the expiry of credit period ( seven days) to avoid defaults.

**Effort 2** Personal request through telephone

- Debtors/ distributors will be intimated over phone if he defaults credit period and further chances will be provided to honor the payments.

**Effort 3** Taking legal action

- If default becomes permanent, criminal charge will be made on them with proper documents as evidences.

**Source: Author**

Apart from these efforts personal visits will be made to the customers place. Team Leader (TL), Sales Head (SH, who leads four TLs), Product Line Manager (PLM) and Finance Head (FH) will visit all the distributors/stockists every month in different frequencies according to their positions. TL and SH will visit all the distributors in a month. PLM will visit for eight days in a month and FH will visit for one day in a month. If the distributor dies, then his account will be taken as bad debts. Bad debts will be written off @ 2% every year.

**4.2.2 MODERN TRADE**

Modern trade refers to the trade with institutional customers (mostly FMCGs) like Britannia, ITC, who purchase for producing cookies and other food products. An agreement will be made between the institutional customer and Naga Company, which lays down the terms of trade (contains the necessary trade credit details). Credit period allowed is 30 days invariably to all institutional customers. No collection mechanism till now. If needed legal proceedings might be taken in case of defaults.

**4.2.3 DIRECT SALES**

Direct sales refer to the sale of products directly by the retailers without any intermediary (distributor). For this cash and carry model is practiced. No credit is allowed in these sales.

**4.2.4 WHOLESALE TRADE**

For the wholesale trade, credit policies are same as general trade credit policies.

**5 SUGGESTIONS AND CONCLUSION**

By increasing the cash revenues on sales and reducing the net working capital growth, future free cash flows can be increased which in turn will increase the firm value growth. But to attain the optimum balance, the company is suggested to match its current assets to current liabilities. It is suggested that the company should revamp its financial strategy to avoid the expected situation and to maintain a favourable working capital position. This will assist the company to enhance its firm's value in future. The credit mechanism for modern trade has to be formed to systematize the modern trade credit Trade discounts are suggested for the speedy recovery of trade receivables. The company is suggested to differentiate the credit policies and mechanisms for retailers, distributors and wholesalers, because of their differences in lot order size and order worth. The company is suggested to use average collection period as a tool to measure receivables management's efficiency. An optimum collection period means prompt collection and better management of receivables and a longer collection period may negatively affect the short term debt-paying ability of the business in the eyes of analysts. If the average collection period is less than

the credit period allowed by the company, then their recovery mechanism is considerably good. The company is suggested to differentiate the credit duration for different customers in terms of their order, size, order worth and credit worthiness.

The firm value growth can be increased by inclining the future free cash flow growth. Future free cash flow comprises cash revenues on sales, fixed costs, variable costs, depreciation, cash balances, net working capital and operational investments. Negative working capital occurs due to the excess of current liabilities over current assets. The firm must avoid negative net working capital balances to avoid an unfavourable situation. By reducing the unfavourable net working capital, the future free cash flow can be increased. By framing an effective credit management policy, trade receivables can be cashed rapidly, which can be used for further operations. Thus, both cash and credit management practices affect the firm value through future free cash flow. This study can be applied to other FMCG industries and also by the entrepreneurs entering into micro and small enterprises.

**REFERENCES**

1. Boden, R., & Yassia Paul, S. (2014). Creditable behaviour? The intra-firm management of trade credit. *Qualitative Research in Accounting and Management*, 11(3), 275-260.
2. Duncan, N. M., Njeru, D. A., Member, D. F., & Tirimba, O. I. (2015). Effect of Cash Management on Financial Performance of Deposit Taking SACCOs in Mount Kenya Region. *International Journal of Scientific and Research Publications*, 5(2), 1-7.
3. Shao, L. P., Shao, A. T., & Hasan, I. (1997). International credit management policies of U.S. subsidiaries. *Managerial Finance*, 23(4), 19-33.
4. Honghai, W. (2011). Rating of Credit Risk Utilizing Improved GRA with Compound Weight. *IEEE*, 3196-3200.
5. Lynam, G. (2011). Seven Best Practices for Effective Deductions Management. *Business Credit*, 113(1), 26-27.
6. Michalski, G. (2009). Balances Of Cash And The Firm Value. *Ekonomické Rozhlady/Economic Review*, 38(1), 40-48.
7. Grzegorz Michalski, (2009). Target Liquid Balances and Value of the Firm, *Zagreb International Review of Economics & Business*, 12(1), 1-18.
8. Paryabi, A., & Fazlzadeh, A. (2012). Any Relations between Management of Cash Flows & Costs of Benefiting from Debits by Separation of Type of Industry among Accepted Companies at Tehran Stock Exchange Organization. *International Journal of Business and Management*, 7(5), 222-230.
9. Khin, E. W., Loong, C. K., & Singh, G. (2015). Credit Control Management And Business Performance : The Malaysian Family Sme Perspective. *The South East Asian Journal of Management*, 9(1), 21-33.
10. Bjornstad, P. W., & Larsen, B. E. (2000). Credit management in the 21st century. *Credit Control*, 21(5), 15-18.
11. Stanley, J. (2003). The changing face of credit management. *Business Credit*, 105(1), 18-19.
12. Mbroh, J. K. (2012). Cash Management Practices of Small Business Owners in the Cape Coast Metropolitan Area of Ghana. *Asian Economic and Financial Review*, 2(1), 40.

**First Author** Working as a Senior Assistant Professor in School of Management, SASTRA University, Thanjavur, Tamilnadu, India with 27 years of academic experience. Fellow member in Institute of Cost and Management Accountants of India. Specialized in finance and accounting. Published 35 papers in an indexed international journals  
**Second Author** He is a student pursuing MBA with finance specialization.