RESEARCH ARTICLE

WORKING CAPITAL MANAGEMENT OF MICRO ENTERPRISES: A CASE STUDY OF KARBI ANGLONG DISTRICT

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ABSTRACT

The basic assumption of the paper is that, a well designed and concise Working Capital Management ensure enterprises to move forward to attain their goal. However, many Micro enterprises in rural areas do not care about their working capital position and they only run business without the concept of working capital management. Base on this issue, this paper tries to analyse the management of working capital of micro enterprises of Karbi Anglong district of Assam. For the study, twenty one (21) micro enterprises, registered under District Industry & Commercial Centre (DI&CC) during the year 2009-14 have been selected. The paper which is based on both primary and secondary data is empirical in nature. Primary data has been collected through structured schedule. Karl Pearson Correlation Coefficient and Variance Ratio Test (F Test) have been used to analyse the data. Other descriptive statistic like percentage was also used to interpret data. The findings reveal that there is significant relationship between Inventory Days and Account Receivables Days with Cash conversion cycle (CCC) in case of micro enterprises owned by general category, where as it is opposite to the enterprises owned by SC/ST in the study area. It is also revealed that there is significant different in Cash Conversion Cycle (CCC) between Micro enterprises owned by SC/ST and General.

INTRODUCTION

Finance is considered to be the life-blood of business**.** Effective financial management is vital for the business to move forward and its continuity. The financial management decision basically concerned with three major areas- capital structure, capital budgeting and working capital management. Among these major areas, the working capital management is an area of great important to invite other areas to proceed forward. Cash management is one of the most important constituents of working capital. Regardless of the size and the revenue earned, cash is essential for an enterprise to move forward. In other words, without strong cash flow to pay for inventory, raw materials, operating enterprise, and overheads, even businesses with strong sales and profits too, have the probability to run into trouble. Many business leaders discovered that cash is required to keep their businesses running[1]. Enterprises won't be able to pay their expenses without cash. Thus, this necessitates an enterprise to borrow cash, which may sometime leads into the worst scenario and even closing up shop. Cash is one of the most important current assets of the business.

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It is needed at all times to keep the wheels of business moving. However, cash itself does not produce goods or services. It is used as a medium for acquiring other assets. The assets acquired, again need to process, and bring them into salable position. The goods manufactured or services produced are now sold to acquire cash. This whole process of conversion of cash into its form again is known as cash conversion cycle. The Cash Conversion Cycle (CCC) is an indicator that expresses the length of time, in days, that it takes for a firm to convert resource inputs into cash flows[2]. In fact, it is an attempt to measure the number of days it takes to sell an entire inventory, the number of days needed to collect account receivable and the number of days firms take to settle their own bills. In other words, the firm's cash conversion cycle represents how quickly a firm turns its product, from paying for inventory to collecting cash from the customer in payment for finished goods. The longer the cycle, the greater the need for interim financing to pay for the firm's material needs. Its calculation measures how fast an enterprise can convert cash in hand into inventory and accounts payable and account receivable through sales and then back into cash. In fact, it is a metric that expresses the length of time in days, that it takes for an enterprise to convert resources into cash flow.

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[1] William K. Thorpe, '*The Importance of Managing Your Cash Conversion Cycle*' CFO Edge, LLC.

[2] Retrieved from http://www.investopedia.com/terms/c/cashconversioncycle.asp accessed on 7-9-2016.

It attempts to measure the amount of time each net input fund is tied up in the production and sales process before it is converted into cash through sales to customers. In other words, it is a key measurement of enterprise liquidity. Its length of conversion can be measured from its three constituents- Inventories days, Accounts receivables days and Accounts payable days.

Inventories Days (ID) means the number of days goods remain in inventory before being sold. It can be measured as – Average Inventory × 365 ÷ cost of sales.

Accounts Receivable Days (ARD) is a collection period. It means the number of days that a customers' invoice is outstanding before it is collected. It can be measured as under - Average accounts Receivables × 365 ÷ sales

Accounts Payable Days (APD) implies the number of days that an enterprise would take to pay the due amount to its supplier. It can be measured as – Average Accounts payable × 365 ÷ costs of sales.

In the present study, Inventory Days, Account Receivable Days, and Account Payable Days have been calculated based on the above formulae and computed the Cash Conversion Cycle (CCC) from them. Two samples categorised as per caste vise have been examined to find out whether the two samples have any significant different between them.

Statement of Problem

Smooth functioning and consistency of running any enterprise is completely based on availability of working capital and its proper utilization. In order to have sound management of working capital, maintaining cash flow is highly required. To reach this state of affairs deep inside into the minds of owner of micro enterprises, there is a need to conduct and investigate the period of Cash Conversion Cycle of Micro enterprises. It is also same in case of micro enterprises of Karbi Anglong district of Assam. It is evident from the report published by development agencies. The participation of the marginalized section of the society like SC/ST in business activities are very less with compare to other community of the society. No doubt, many studies were conducted and resulted from the study of working capital management practices of various big companies of developed region, but for the least developed area like Karbi Anglong, the study is still untouched and un-explored. As a result, the importance of working capital management is not known to owners of micro enterprises. This may perhaps be the cause of non consistency in running their business activities in the study area. However, the area with its rich natural resources can be converted into commercially feasible and economically developed region if the knowledge of working capital management could reach deep inside into the minds of owners of micro enterprises.

Review of Literature

Lyroudi and McCarty (1993), examined the relationship of cash conversion cycle with current and the quick ratios and with its component variables and resulted that the cash conversion cycle was negatively related to the current ratio, although not statistically significant, to the inventory conversion period, and to the payable differed period, but positively related to the quick ratio and to the receivable conversion period. Yiadom and Agyel (2007), studied how Small Scale Industries (SSIs) of Ghana managed the various components of working capital and found that Notebook was the popular means of keeping record on inventory and cash. Ploughing back of profit was the main reason for not having bank account. SSEs considered inflation/frequent price increases to be more problematic than even high debtor turnover period and low stock turnover. Agha (2014), examine whether there was any significant relationship between profitability and Working capital management (DTO, CTO, ITO, CR). The result revealed that there was a positive relationship between debtor's turnover (DTO) and return on assets (ROA), between inventory turnover (ITO) and ROA and between creditors turnover (CTO) and ROA, but there was no significant relationship between current ratio and ROA. Recharge and Grifin (2014), demonstrated how cash conversion cycle can be effectively used to forecast the dollar amount of operating cash flow in future period and drawn the conclusion that, the time denominated construct of the cash conversion cycle can be algebraically manipulated to compute an inferred dollar amount of operating cash flow in future period.

Bei and Wijewardana (2012), studied 'Working capital policy practice

Evidence from Sri Lankan Companies' and the result depicted that the different working capital policy (WCP) firms were not a homogeneous group with regards to working capital and return on assets. Considerable variability was identified in the take up of three working capital policy by a large random sample of listed in the CSE of Sri Lanka. Evidence from the correlation and regression confirmed the identification of various performance, profitability, liquidity, and efficiency with regards to different types of working capital policy. Asghar Ali and Syed Atif Ali (2012) studied the working capital management and its impact on profitability and affirmed with evident that efficient management of working capital can lead a firm towards profitability. The firms should therefore, improve their receivables and other current assets component for sufficient working capital. Sen and Eda (2009), determined the relationship between efficiency level of firms, traded in Istambul Stock Exchange (ISE) in working capital management and their return on total assets.

The result depicted that there was a significant negative relationship between cash conversion cycle, net working capital level, current ratio, accounts receivable period, inventory period and return on total assets[3]. Niresh (2012), investigated the relationship between working capital management and financial performance of listed manufacturing firms in Sri Lanka. And the result concluded that there was no significant relationship between the cash conversion cycle and the performance measures[4]. Ben K. Agyei Mensah (2012), drawn the conclusion that SMEs in Ashanti Region of Ghana were not good at managing their working capital. The study revealed that SMEs relied on manual methods of inventory and majority did not know anything about economic order quantity model (EOQ). The SMEs lack resources to manage their

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[3] Retrieved from www.ccsenet.org/journal.html accessed on 27-08-2016
[4] Retrieved from www.iiste.org accessed on 27-08-2016

receivables, no proper debt collection and no credit officer were employed[5]. There was a negative correlation between the Cash conversion cycle and the firm size in terms of total assets (AA Muneeb & R. Kashif, 2012). Pakistan was their study area.[6] 'Dollarizing the Cash Conversion Cycle' by B.G. Richarge & BW Griffin (2014), demonstrated that the time denominated construct of the cash conversion cycle can be algebraically manipulated to compute an inferred dollar amount of operating cash flow. They attempted the study to demonstrate how a popular device called the "cash conversion cycle" can be effectively used to forecast the dollar amount of operating cash flow in future periods. Sunday (2011), who conducted the study on the Effectiveness of Working Capital Management in Small and Medium Scale Enterprises by comparing the standard working capital ratio set by him with some selected firms, came with a conclusion that the selected firms showed a sign of overtrading and illiquidity. In this context, he recommended that SMEs must design a standard credit policy and ensure good financial report and control system to survive within the economy of Nigeria.

Research Objective

- To determine the relationship between Inventory Days and Accounts Receivable Days with Cash Conversion Cycle of Micro enterprises owned by ST/SC and General Category in the study area.
- To examine whether there is any significant different in cash conversion cycle of micro enterprises owned by ST/SC and General Category in the study area.

Hypotheses

H_{o1} = There is no significant relationship between inventory days and Accounts receivable Days with cash conversion cycle of micro enterprises owned by ST/SC and General in the study area.

H_{o2} = There is no significant different between cash conversion cycle of micro enterprises owned by ST/SC and cash conversion cycle of micro enterprises owned by General Category in the study area.

MATERIALS AND METHODS

Under this study, both primary and secondary data have been used. Secondary sources consisted of books, journals, articles and websites which were relevant for the study were used. Structured schedule was administered to collect the primary data from the twenty one micro enterprises, which have completed at least for three years since from their establishment. Those Micro enterprises are owned by ST/SC and General category and registered under District Industry and Commercial Centre (DI&CC) during the period from 2009 to 2014. The study area has been confined to Karbi Anglong district of Assam. The Karl Pearson Correlation Coefficient has been used to determine the relationship between Inventory Days and Account receivable days with Cash conversion cycle. And to determine their significant level of relationship, probability value has been computed and compared with its tabulated value to bring conclusion. And Variance Ratio Test

(F Test) has been used to examine whether there is any significant different between two sample variance of cash conversion period of micro enterprises owned by ST/SC and cash conversion period of micro enterprises owned by General Category. And descriptive statistic like percentage has been used to show the number of male/female proprietors, number of SC/ST owned enterprises and their educational qualification of the study area.

Profile of Karbi Anglong

Karbi Anglong district is one of the Autonomous Hill District of Assam, constituted under the provisions of Sixth Schedule of the Indian Constitution. The district is naturally blended with hills and plains and situated in the central part of Assam. It is bounded by Nagaon, Golaghat districts and the state Nagaland in the East, Nagaon district in the North, Morigaon district and the state Meghalaya in the West and Dima Hasao and the state Meghalaya in its South.

DATA INTERPRETATION AND DISCUSSION

Table A: 1, 2 and 3 represent profile of owners of micro enterprises in percentage. The profile includes number of male/female proprietors, caste and their educational qualification. And the 'Table B' separately represents the percentage of Micro enterprises following double entry system of Book Keeping in the study area.

Table A. 1. Percentage of male/ female proprietors

Gender	Frequency	Percentage
Male	17	81
Female	4	19

Sources: Field survey

Table A: 1 represents the number of micro enterprises owned by male and female gender. From the table, it is apparent that, the participation of female gender with 19 percent on business activities is very less with compare to male gender of 81 percent in the study area.

Table A 2. Caste vises of Micro Enterprises

Caste	Frequency	Percentage
ST/SC	7	33.33
General	14	66.67
Total	21	100

`*Sources: Field survey*

The above table reveals that, people from General category with 66.67 percent have been entered more in the field of business than people from ST/SC category with 33.33 percent, in the study area.

Table A 3. Educational Qualification of owners of micro enterprises in the study area

Educational Qualification	Frequency	Percentage
Up to primary	3	14
Secondary	10	48
Graduation	5	24
Post Graduation	Nil	Nil
Others	3	14
Total	21	100

Sources: Field survey

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5 Retrieved from www. Hrmars.com/journals accessed on 27-08-2016
[6] International Journal of Academic Research in Business and Social Sciences, Vol 2 no. 4.

In case of educational qualification of owners of Micro enterprises, majority (i.e. 48 percent) comes under secondary followed by Graduation with 24 percent then 14 percent each to primary level and others. Thus, it can be clearly concluded that, a well and highly qualified candidates do not involve much in the field of business activities in the study area.

Table B. Maintenance of double entry system of bookkeeping

Particulars	Frequency		Percentage	
	ST/SC	General	ST/SC	General
Followed Double Entry System	1	5	14	35
Not Followed Double System	6	9	86	65
Total	7	14	100	100

Sources: Field survey

Table B illustrates the group of owners of micro enterprises, who followed double entry system of bookkeeping on the basis of their caste. Percentage of the two groups (i, e. SC/ST and General) were computed separately. The results depicted that, 14 percent of micro enterprises owned by ST/SC were followed double entry system of bookkeeping and the rest 86 percent did not follow any specified system of recording financial transaction in the study area. And in case of General category, 35 percent, which is much higher than ST/SC if compared.

Hypotheses Testing and Interpretation

For the first hypothesis, Karl Pearson correlation coefficient has been used to examine the relationship status between cash conversion cycle with Account Receivable Days and Inventory Days. And probability value has been computed to see their significant of relationship. Variance Ratio Test (F Test) has been used for testing the second hypothesis.

H_{o1} = There is no significant relationship between inventory days and Accounts receivable Days with cash conversion cycle of micro enterprises owned by ST/SC and General.
H_{a1} = There is a significant relationship between inventory days and Accounts receivable Days with cash conversion cycle of micro enterprises owned by ST/SC and General.

Level of significance, α = .05 (Therefore, the level of confidence = (100-5=) 95 %

Significant values of t-distribution (two tail areas)

H_{o2} = There is no significant different between cash conversion cycle of ST/SC and cash conversion cycle of General category.
H_{a2} = There is a significant different between cash conversion cycle of ST/SC and cash conversion cycle of General category.
Level of significance, α = .05 (Therefore, the level of confidence = (100-5=) 95 %

Here, two tailed small sample test of Variance (F Test) is applied.

Degree of freedom, $v_1 = n_2 - 1 = 14-1=13$
$V_2 = n_1 - 1 = 7-1 = 6$

Computed test statistics:

$F_c = S^2 \div S^2$

= 1002.9 ÷ 239.5 = 4.18 Tabulated value = 3.53

Result: *Since F_c (= 4.18) > $F_{0.05}$ (for V_1 = 13, V_2 = 6) (i.e. 3.53). Therefore, there exists enough statistical evidence to reject the Null Hypothesis.*

Particulars	Calculated r value		Degree of freedom		α	Calculated statistic		Critical p value t		Result
	ST/SC	Gen	ST/SC	Gen		ST/SC	Gen	ST/SC	Gen	
ID with CCC	-0.207	0.695	5	12	.05	0.47	4.37	2.57	2.18	Since critical 'p' value with 2.57 at .05 percent level of significant is larger than the calculated 't' statistic of 0.47 in case of SC/ST, the null hypothesis is accepted. That is, there is no significant relationship between inventory days and Cash conversion cycle. However, the situation is reverse in case of general category. Here, the null hypothesis is rejected, which means there is a significant relationship between inventory days and cash conversion cycle.
AR with CCC	0.534	0.64	5	12	.05	1.408	2.88	2.57	2.18	Here too, the critical 'p' value with 2.57 at .05 percent level of significant is larger than the calculated 't' statistic of 1.408 in case of SC/ST, therefore, the null hypothesis is accepted. That is, there is not much significant relationship between account receivable days with Cash conversion cycle. But the situation is still reverse in case of general category. Here too, the null hypothesis is rejected, which means there is a significant relationship between Accounts Receivable days and cash conversion cycle.

Note: Variables full form and formulae at appendix 'A'

That is to draw conclusion whether there is any significant different between cash conversion cycle of ST/SC and General category.

Thus, it can be concluded that there is a significant different between the two samples of Cash Conversion Cycle of ST/SC and General.

Conclusion

From the above analysis and interpretation, conclusion can be drawn as the followings-

- Female gender does not give enough encouragement to set up micro business venture in the study area.
- Though Karbi Anglong is the tribal dominant areas, the general category has entered more in the field of business activities.
- Highly qualified individuals are seen very less in the field of business in the study area.
- Owners of micro enterprises in the study area run their firms without proper knowledge of recording financial records.
- The relationship between Inventory Days and Accounts Receivable Days with Cash conversion period on the basis of micro enterprises owned by SC/ST and General category are not uniform.
- The Cash Conversion Period of micro enterprises owned by ST/SC and General category do not have any significant relationship in the study area.

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Appendix 'A': Explanation of various variables

Variable Definition
SC Schedule Caste
ST Schedule Tribe
ID Inventory Days is (Average inventory *365)/cost of sales.
Cost of sales = opening inventory + purchase – ending inventory.
ARD   Accounts Receivable Days is (Account receivable * 365)/ Sales.
APD   Account Payable Days is (Accounts payable * 365)/ cost of sales.
CCC   Cash conversion cycle is (IND+ARD-APD)
r   Karl Pearson Correlation Coefficient

$$'r'\ is = \frac{N\Sigma xy \quad (\Sigma x)(\Sigma y)}{\sqrt{[N\Sigma X^2 \quad (\Sigma X)^2][N\Sigma Y^2 - (\Sigma Y)^2]}}$$

P value Probability value

t statistics

$$t\ statistics\ is = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

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