

Working capital management of SMEs in Mauritius

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Abstract

Small and medium enterprises are important for the development and economic growth of a country. However, because of their specificities relating to their size, very often, they are not properly managed. One weak area is the management of working capital. This paper analyses how SMEs in Mauritius implement working capital management in order to determine whether the different components of working capital are effectively managed. An analysis of the survey carried out for this study shows that while there is awareness and willingness to control these, there is still scope for more stringent and effective working capital management of SMEs.

1. Introduction

Previous researches indicate that “poor” or “careless” financial management is a major cause of failures among small business (Smith 1973). Some of the most important internal problems small businesses need to identify are inadequate capital, cash flows management and inventory control. More than 20% of failures were due to irrecoverable debts or poor receivable management (Padachi, 2006). In other developed countries such as US, Canada, England, Australia, it has long been recognized that efficient management of working capital is crucial for prosperity and survival of small businesses (Deloof, 2003). The current financial crisis and the recession that followed since 2008 have brought more focus to the investment that firms make in short term assets and the resources used with maturities of under one year which represent the main share of items on a firm balance sheet. This showed the importance of short term working capital management in organisations all over the world and stimulated researchers attention. One group of practitioners/researchers believed that efficient management of working capital is essential for organisations during the booming economic periods (Lo, 2005) and can be managed strategically to improve competitive position and profitability. Others emphasized that improving working capital management is reasonably important for companies to withstand the impact of economic turbulence (Reason 2008).

Small and medium Enterprises (SMEs) play an important role in the development process of any country. They are a key source of employment creation and output growth in the developing countries as well as in the developed countries (Norton, E 1991). In Mauritius SMEs play a crucial role in employment creation, poverty reduction, improving income distribution, industrial development, rural development and export growth. In fact with the phasing out of Multi Fiber Agreement (MFA), the sugar protocol and the Cotonou Agreement, two main pillars of Mauritian economy namely the textile industry and sugar industry are collapsing at a rapid

pace, thus it is the SME sector that can help in pushing up the economy. However, despite its great importance the SME sector in Mauritius has not developed as fast as expected. There are several factors accounting for this underdevelopment, one of them is the financing problem. Most SMEs rely significantly on internal funding for running their business and when their internal funds are limited they have to look for external finance where access is limited. As a result the probability for expanding or even surviving becomes limited. A further study by Bolten (1971) revealed that working capital problems can be experienced by any business but it is usually small businesses which have most problems especially during their start up phase.

During recent years in Mauritius, many small and medium organisations have suffered particularly of poor working capital management and a lack of financial management skills. Policies and techniques employed in this area often fall short of best practice and this can put at risk the survival of the businesses. Working capital management is important because of its effects on the firm's profitability and risk and consequently its value (Smith 1980).

In order to stimulate the growth and development of SMEs in Mauritius the government of Mauritius has enacted laws protecting the interest of small and medium organization and has set up the SMIDO (now SMEDA), to consolidate, expand and enhance the competitiveness of SMEs. Thus the government provides SMEs with various incentives and assistance in their development including financial help for purchase of equipment as well as for working capital.

This paper studies how working capital management and its components are managed in Small Medium Enterprises in Mauritius.

- **Calculation of Working Capital**

Different methods are used for calculating working capital. According to Rao, R. (1989) there are three methods to calculate working capital:

- Net Working Capital (CA - CL)
- Percentage of Sales Method (based on past experience (Chakraborty K, 2008)
- Operating cycle (the time period between the acquisition of inventory and collection of cash from receivables (I M Pandey, 1970; Scherr F. 1989)

2.1 Determinants of Working Capital

A large number of factors influence the working capital needs of organisations. These factors affect different enterprises differently. Most common among these factors are:

- Leverage: cost of fund invested in the cash conversion cycle is higher in organizations with a larger leverage because they have to pay a higher risk premium. (Chion et al 2006)
- Growth opportunities: Kieshchich et al (2006) showed that future sales growth has a positive influence on an organisation's cash conversion cycle and that organizations might build up inventories in anticipation of future sales growth.
- Size: smaller organizations face greater financial constraints which force them to use more credit (White, 1992)
- Age: Older organizations get external financing more easily and under better conditions (Niskanen, 2006).
- Tangible fixed assets: Fixed investment competes for funds with the levels of working capital when organizations have financial constraints. (Fazzari and Petersen 1993).
- Capacity to generate internal resources (Cunat, 2007)
- Return: ROA has a negative influence on working capital (Wu, 2001) as organizations with better performance get outside capital easier.

Organisations with higher returns have better working capital management because of their market dominance as they have better bargaining power with suppliers and customers (Shien and Soevien 1998)

2.2 Components of working capital

2.2.1 Cash Management

Cash is described as the “oil to lubricate the ever turning wheels of business without which the process grinds to a stop” (Bolten 1976). Cash is the least profitable item of the current assets. Since organisations are mostly concerned with profitability they try to keep a minimum amount of idle cash balances. The primary reasons why organisations hold cash are as follows (Joy OM 1977):

- **Transaction motive:** to allow the firm to conduct its business normally.
- **Precautionary motive:** It provides a cushion or buffer to withstand some unexpected emergencies.
- **Speculative motive:** To allow the organisation to take advantages of unexpected benefit e.g security price changes or increase in interest rate.

But usually a significant proportion of firm’s cash is absorbed in stocks and debtors. On the other hand the main source of cash receipts is sales but the most readily available source of cash is bank overdrafts and loans. (I.M Pandey 1979).

Therefore cash can be generated by:

- shifting inventories faster
- collecting receivables faster
- extending the payable period or shortening the operating cycle

2.2.2 Management of Accounts Payable

Organisations usually purchase on credit and this is usually referred to as trade credit. The practice of businesses extending trade credit to one another is probably the most important source of short term funding (Ruback 2003). There are various advantages related to trade credit and these are:

- Easy availability: except if the firm is not financially stable.
- Flexibility: credit purchases are directly related to the firm sales.
- Informality: it is not formal like negotiated sources of finance.

Deeloo and Jegers (1999) carried out a study, which was based on 661 Belgian non financial firms from 1989 to 1991. They found that accounts payable are a substitute for short term liabilities given the amount of short term assets. Their analysis also revealed that cash flow is significantly and negatively correlated with accounts payable and hence confirms the role of trade credit in financing of a firm.

Trade credit appears to be an interest free loan from suppliers but it is not cost free. In fact it has an implicit cost. Emery (1987) states that suppliers may pass on their costs to the buyers in the form of higher purchase price. Therefore buying firms should negotiate a good purchase price and decide whether to take advantage of cash discounts offered by the suppliers.

Furthermore the buyer should negotiate satisfactory credit terms with its suppliers in terms of length of the credit period allowed. Hence, having come to an agreement on the credit period, a firm should not try to put off its payment further than the agreed time. Delaying payment to suppliers is not an option if a firm wants to improve its working capital. Rafuse (1996) argues that such a tactic is inefficient both for the individual firm and the economy at large. Organisations that go beyond agreed credit limits may run into trouble, (they can lose out on

cash discounts, incur interest charges and upset their suppliers who may refuse future orders (Philip E. Dunn 2001.).

2.2.3 Management of Accounts Receivable

Organisations can either sell on cash or on credit. Organisations allow for trade credit so as to protect their market share from competitors and attract potential customers. Credit sales can be risky since cash is not obtained immediately from the sales. Receivables are one of the biggest components of current assets, therefore, involve large sums of money and should be very carefully managed.

A good collection policy is important to be able to collect from its overdue debtors (Rao R, 1989). The collection procedures should be regularly revised since there is no perfect method to ensure zero bad debts. If the organisation uses the same collection strategy all the time, the customers may eventually find loopholes in the system. As a result, the organisation will incur losses in terms of bad debts and collection costs. (Smith.M & Begemann 1997).

Peter Atrill (2002) postulates that credit management is a particular problem among small businesses. Although approximately one third of total assets employed within small businesses consist of trade debtors there is often a lack of expertise and insufficient resources allocated within the business to manage trade debts.

2.2.4 Inventory Management

Most organisations in manufacturing sector invest substantial amount of capital in inventories, but though stock is a current asset, it is not as liquid as cash. According to Mayee and Boodman (1967) there are two conflicting objectives in inventory management:

- To maintain a large size of inventory for efficient and smooth production and sales operation.
- To maintain a minimum investment in inventories so as to maximize profitability.

Often organisations take the risk of carrying inventories because they serve definite purposes (Dobler and Burt 1996). According to Silver and Peterson (1985), an investment in inventory enables management to decouple successive operations or anticipate changes in demand. The basic function of inventory is to insulate the production process from changes in the environment (Magee and Boodman 1967).

- **Scope of the Study**

This study focuses only on organizations in the small scale sector in Mauritius (SMEs). Earlier definitions of SMEs in Mauritius qualified them in terms of investment in manufacturing equipment (Industrial Expansion Act – Rs5m amended to Rs10m in 1997). Most recent accepted definition now considers small organizations as those employing less than 10 employees and medium organisations having between 10 and 50 employees.

3.1 Contribution of SMEs in Mauritian Economy

SMEs are important for an economy to prosper since economic success depends to a large extent on the presence of a strong and growing small business sector. They are major job creators and instead of being concentrated in one particular area, SMEs are more dispersed in different geographical areas such that both rural and urban areas benefit from job opportunities.

Mauritius also needs a particular strategy for promoting small and medium enterprises (SMES) not only to solve the problem of unemployment but also to boost their purchasing

power so that the additional demand created could push the country's entire economy to grow at a faster pace. The Mauritian economy is now already outperforming many of its trading partners in the SADC and COMESA basically because of its SMEs sector.

3.2 Statement of the Research Problem and Research Objectives

Small and Medium enterprises are by virtue of their size generally exposed to greater financial risk and given the economic importance of SMEs in many countries, poor working capital management practices may have repercussions well beyond the boundaries of the organisation. Thus effective control of working capital management is critical for the survival and growth of SMEs. As a consequence this research will focus on how far SMEs implement their working capital policies.

Thus the main objectives of the study are to:

- Situate where small and medium firms in Mauritius stand in respect of working capital management by conducting a survey.
- Determine whether the different components of working capital are effectively managed.

3.3 Sample of the Study

The sample was drawn from the directory of SMEDA which is a database for registered SMEs operating in diverse activities and for which data was available for a 7 year period.(1st August 2005-31st July 2012). The rationale for selecting only those SMEs registered with SMEDA is that they are expected to be more organized and have undergone training programme in some functional areas. A sample of 100 SMEs has been taken from a population of 18,128 SMEs registered with the SMEDA.

The number of SMEs in each sector has been used to determine the sample of SMEs in each category based on a proportion basis.

Sector	Number of units	%	Sample taken
Food and Beverages	2,266	15	15
Leather and Garments	2,628	17	17
Wood and furniture	483	3	3
Paper product & printing	131	0.9	1
Chemical, Rubber& plastic	107	0.7	1
Handicrafts, pottery & Ceramic	1,425	9	9
Jewellery and related items	128	0.8	1
Fabricated metal products	556	3.6	4
Trade and commerce	6,212	41	41
Others	1,211	7.9	8
Total	15147	98.9	100

Source: Smeda Directory. Table: 1

- **Analysis and Findings**

Responses received from the survey (42%) were analysed and the major findings were:
Analysis of respondents

- 66% of the respondents were SMEs which have been in existence for more than 5 years.

- 31% were small while 69% were medium organizations (on the basis of number of employees).
- 62% of the managers of the SMEs had either a tertiary or professional qualification (Older SMEs have less qualified managers/directors).
- There is no consensus as to an acceptable definition of working capital, though they consider it as being important and have either a formal or informal policy. A chi-square test revealed that there is an association between years of existence and policy used.
- Management of working capital is delegated to various employees, each in charge of controlling a particular component of working capital - everyone then being accountable to the Finance Manager. In fact the literature reveals that it is better to manage the different components of working capital individually to improve the liquidity and profit of the organisation (Srivastav, 2010).

4.1 Cash Management

“Cash is the lifeblood of a business” (Pandey 1979), hence it is important to manage it properly especially in Small and Medium Enterprises.

4.1.1 Motive of Holding Cash

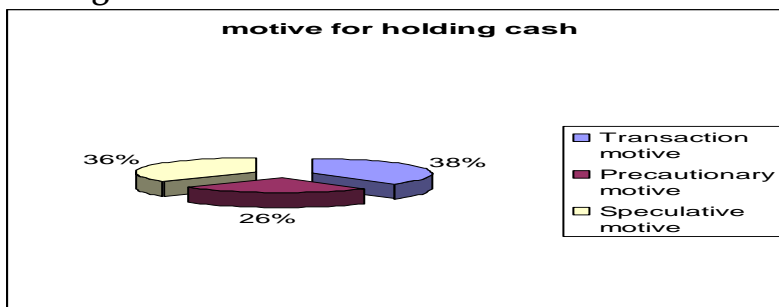


Figure 1

38% of the respondents state that they hold cash for transaction motive i.e. to conduct their ordinary business transactions. 26% of the entrepreneurs state that cash enable them to handle unexpected problems or contingencies due to the uncertain pattern of cash inflows and outflows while 36% of the SMEs expect to benefit from unexpected price changes.

5.4.2 Control of Cash

Proper control mechanisms should be in place to ensure cash is properly managed within the organization.

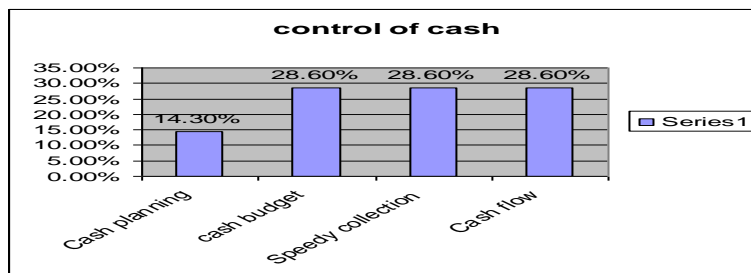


Figure 2

Only 14.3% of the SMEs have cash planning. This allows SMEs to plan their current cash flows and needs thus reduces the possibility of idle cash balances and cash deficits. The other 3 methods are used by an equal number of SMEs. For 28.6% of the SMEs either cash budget enables them to determine their future cash needs, plan for the financing of these needs and

exercise control over cash and liquidity or they make speedy collection of cash or use the cash flow forecast to control their cash balances.

4.1.3 Cash Held by the Organization

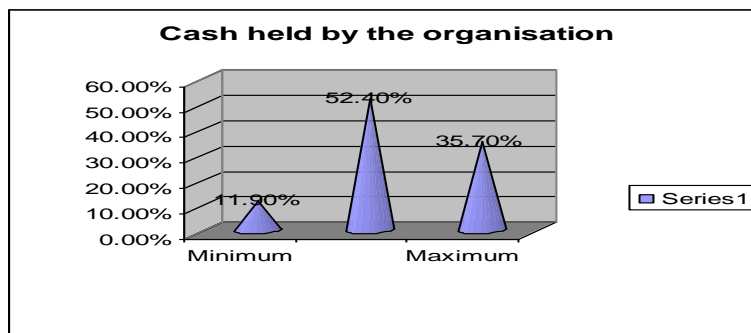


Figure 3

A predetermined appropriate amount of cash is preferred. Too little or too much cash may have additional costs. With too little cash, SMEs may have liquidity problem or will not be able to take advantage of unexpected opportunities, while with excess cash SMEs forego the opportunity to earn interest. 52.4% of SMEs hold a predetermined appropriate amount while 11.9% hold a minimum amount and 35.7% hold maximum cash.

4.1.4 Review of Cash Balance

Amount of cash held by SMEs vary over time. SMEs also review their cash balance on a regular basis. 40.5% of the SMEs review their cash balance on a half yearly basis and 7.1% do so on a weekly basis. Organisations should review their cash balance at least on a monthly basis, in order to have more control on their cash activities.

4.1.5 Analysis of Frequency of Review of Cash Balance and Level of Education

The objective of doing a cross tabulation of the above mentioned variables is to show that managers with a higher level of education tend to review their cash balances more regularly. 62% of managers or directors having studied up to secondary level have never reviewed their cash balance. While 60% with a professional qualification review their cash balance on a weekly basis. This shows that financially literate managers are more concerned about the importance of reviewing their cash balance on a regular basis.

Association between frequency of review of cash balances and level of education

The result for chi-square and Cramer’s V test for the 2 variables are:

Pearson’s X ² Value	Level of significance	P-Value	Cramer's V
62.370	5%	0.000	0.704

Conclusion

Since $p < 0.05$, H_0 is rejected and it is concluded that there is an association between the frequency of reviewing of cash balance and educational level. Since Cramer’s V- value is greater than 0.5, the variables have a strong relationship.

4.1.6 Cash Management Model

None of the SMEs interviewed use a model to manage their cash. This shows that small and medium enterprises lack the necessary skill to understand or to develop a proper model to manage their cash.

4.2 Management of Accounts payable

After analyzing debtor’s management it is of equal importance to analyze creditor’s management since many small businesses purchase on credit. 76% of the respondents do make credit purchases. This may improve the amount of cash available within the business. However, taking too much credit can be unproductive because organisations may have to pay bear additional costs on credit purchases.

Given that the majority of the respondents purchase on credit it is important to find out why SMEs prefer this method.

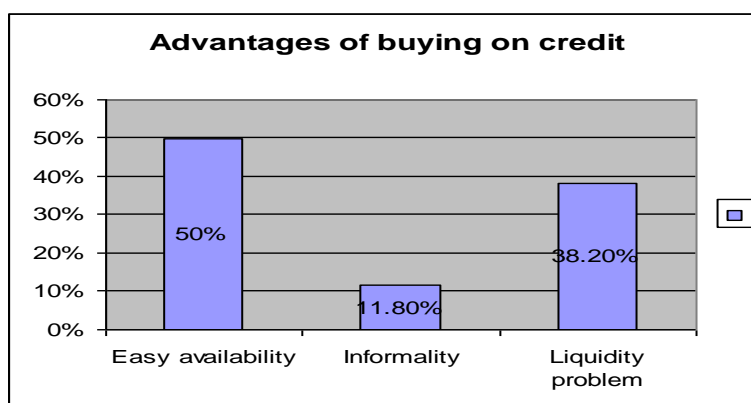


Figure 4

Out of the 76.2% respondents who buy on credit 50% state that credit is easily available while 38.2% tend to have liquidity problems especially for seasonal businesses. 11.8% of the entrepreneurs state that credit is informal.

4.2.1 Creditor’s Payment Period

For 67% of the respondents the period is between 11 and 30 days while 17.6% have a credit period of less than 10 days. It is interesting to compare the SMEs debtor’s collection period with their creditor’s collection period to identify whether SMEs will tend to have liquidity problem.

<u>Comparison between debtor’s collection and creditor’s payment period</u>		
	Debtors collection period	Creditors payment period
Less than 10 days	8	6
Between 11 and 30 days	13	23
Between 31 and 60 days	10	3
Greater than 60 days	7	2

Table 2

SMEs tend to have a much longer debtor’s collection period compare to their creditor’s payment period.

Operating cycle = Raw material stage + Work in progress+ Finished goods inventory+ Debtors collection stage- Creditors' payment period —————→equation 1

Total number of operating cycles (OCs) in a year= 365/X —————equation 2

The amount of working capital will be equal to $\frac{\text{Total operating costs}}{\text{Number Ocs}}$ —————equation 3

From equation 1 the higher the debtor collection period and lower the creditor payment periods the greater will be the operating cycle.

From equation 2 with a longer operating cycle, the number of operating cycles in a year decreases.

From equation3 the smaller the number of operating cycle the greater will be the amount of working capital required. (Assuming other factors remaining constant).

So SMEs will have more financial problems if appropriate mechanism is not adopted to reduce the debtors' collection period.

4.2.2 Methods Used to Settle Amount Due to Creditors

Table 3 shows what strategies are used by entrepreneurs to pay the amount due to creditors. These have been ranked by the respondents.

Strategies used for effecting payment			
	Least commonly used	Commonly used	Most commonly used
Delaying Payment to suppliers	2	3	29
Pay on time to get other credit facilities	16	7	11
Exceed credit Limit	21	7	6

Table3

Delaying payment has the highest frequency and has been ranked first by 29 of the respondents. However such a policy is counter productive for small and medium enterprises. This tends to impact negatively on the image of the organization and there is the risk of refusal of further credit by existing and other potential suppliers. There are costs implications when delaying payment as depicted in figure 5.

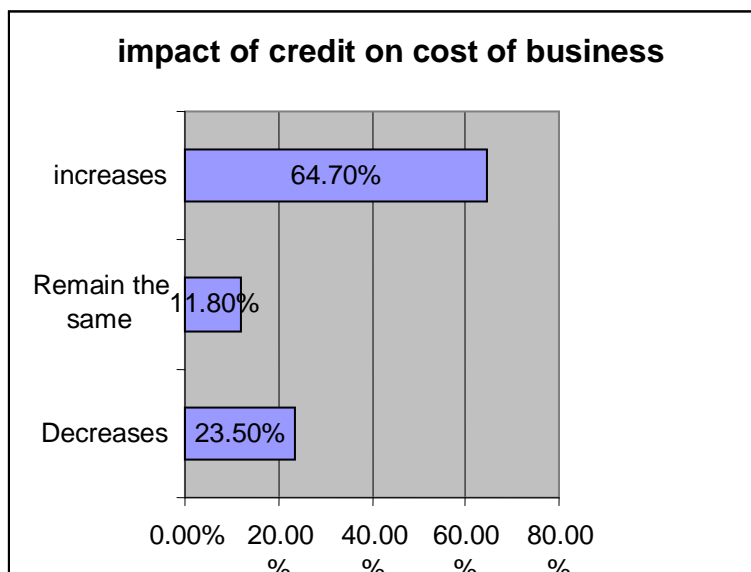


Figure 5

64.7% of the respondents confirmed that delaying payment increases the costs. Therefore such a policy should be discouraged and instead entrepreneurs should pay their debt on the due date to obtain other facilities.

To test whether mean responses for delaying payment as a means for effecting payment varies among the level of education of the respondents.

The normality test between educational level and delaying payment as a means to effect payment shows:

Significant level		Educational level	Delaying payment as a means to effect payment
5%	P-Values	0.030	0.000

Conclusion:At 5% significant level it can be concluded that the 2 variables do not follow Normal distribution. Hence instead of using "ANOVA" the test "kruskal Wallis" will be used to determine whether the mean responses for delaying payment as a means for effect payment varies among educational level.

Since p value =0.319 greater than 5% Ho is accepted

Conclusion: There is no significant difference in the mean responses for delaying payment as a means for effecting payment among different educational level

4.3 Management of Accounts Receivable

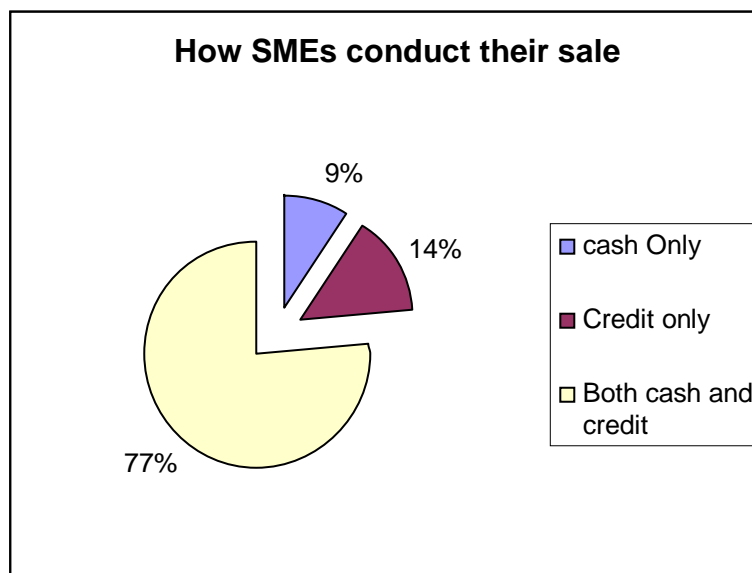


Figure 5

Figure 5 depicts that 77% of the SMEs sell both on a cash and credit basis and 9% sell only on cash. Since most of the respondents (91%) have trade debtors it is important to inquire about the types of credit facilities being offered to encourage debtors settle their credit.

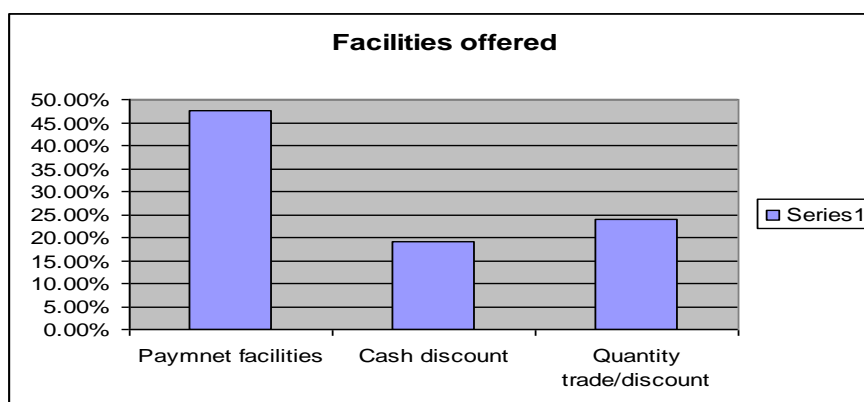


Figure 6

47.6 % of the entrepreneurs offer payment facilities (e.g. payment by cheque, credit card and debit card) while only 19% have recourse to cash discount because this will reduce the profit margin of the organization but may increase liquidity. 23.8% offer quantity or trade discount.

4.3.1 Debtors' Collection Period

21.1% of the respondents have a debtor's collection period of less than 10 days while 18.4% have a period of greater than 60 days. The longer the debtors' collection period the higher is the probability of default by debtors. It is important to find out whether the maturity of a business has any effect on the debtors collection period.

SMEs which have been in existence for less than six years have shorter debtors' collection period (less than 31 days) because they have a more stringent collection policy. Whereas most

firms in existence for greater than six years have a collection period of greater than 31 days which is quite risky.

**To Test the association between debtors' collection period and Maturity of the business
The chi-square test result is shown in table**

Pearson's X ² Value	Level of significance	P-Value	Cramer's V
21.412	5%	0.011	0.433

Conclusion: Since $p < 0.05$, H_0 is rejected and it is concluded that there is an association between debtors' collection period and years of existence and the association between the two variables is positive but weak.

4.3.2 Justifications for the Need to Give Credit

42% of the respondents offer credit in order to increase market share and 33% others do so because of competition. While 16% SMEs give credit so as to increase sales, 69% of them firms found it as "Not important". The reasons are varied for each organization. To increase profitability is another possible justification. This however is found to be a "Not important" by 57% of the respondents. It can also be said that the SMEs are more focused about monitoring and increasing their customer base and their market shares rather than increasing their profitability. This will definitely pay off in the long run, in terms of resulting profitability, assuming the SMEs have a proper credit management mechanism.

4.3.4 Annual Bad Debt

The majority of respondents (37%) have their annual bad debts in the range of Rs 50,000 - Rs 100,000 while only 15.8% of them have an annual bad debts of less than 50,000. A cross tabulation of annual bad debts and size of organisation shows that medium organisations tend to have greater annual bad debt as they normally sell more on credit

44% of SMEs having greater than 20 but less than 50 employees have an annual bad debt of greater than Rs150, 000. While 40% of the respondents having less than 5 employees have less than Rs50,000 as their annual bad debt. This shows that small organizations tend to adopt more efficient credit control mechanisms or simply are more cautious when selling on credit.

A Chi square test is carried out to test the degree of association between annual bad debt and size of the organisation

The chi square test result is shown in table

Pearson's X ² Value	Level of significance	P-Value
14.861	5%	0.095

Table

Conclusion: Since $p > 0.05$ H_1 is rejected and it is concluded that there is no association between size of organisation and annual bad debt.

4.3.5 Presence of a maximum Credit limit

52.4% of the respondents find it useful to fix the credit limit to better control trade debtors while the others consider this approach as not important. Given the majority of the entrepreneurs have a maximum credit limit it is interesting to find out, how often it is reviewed.

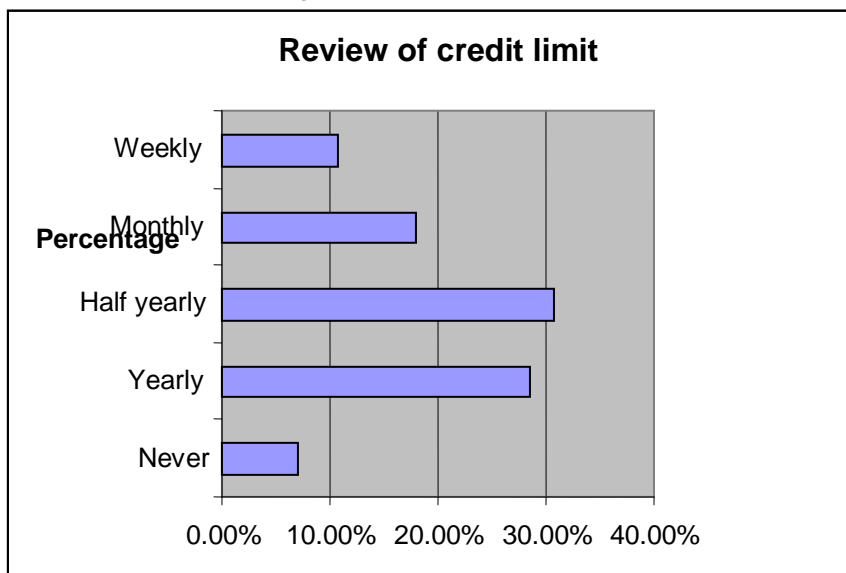


Figure 7

31.3% of the SMEs review their credit limit on a half yearly basis while 27.8% do so, on a yearly basis. This is not appropriate because organisations need to adopt a flexible approach and review their credit limit as and when required or at least on a monthly basis.

4.3.6 Credit Limit Exceeded

It is well known that SMEs have close relationship with their customers. Hence to retain them credit limits are exceeded and credit periods are extended.

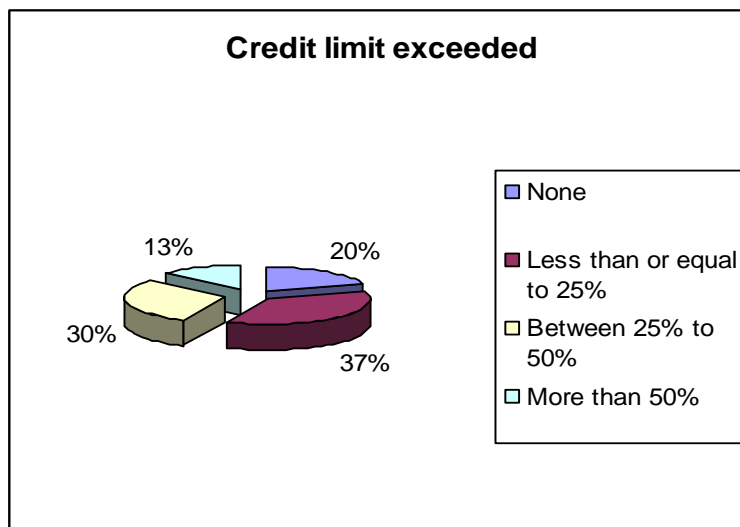


Figure 8

20% of the entrepreneurs state that none of their customers exceeds their credit limit while 80% do allow such practice with varying range depending upon the characteristics of SMEs.

Association between Credit limit exceeded and annual bad debt

Given most of the SMEs allow their customers to exceed their credit limit it is important to test whether there is an association between credit limit exceeded and an increase in Annual bad debt.

The chi-square and Cramer's v test show the following result:

Pearson's X ² Value	Level of significance	P-Value	Cramer's V
58.369	5%	0.000	0.805

Conclusion: Since $P < 0.05$, H_0 is rejected hence there is an association between Credit limit exceeded and annual bad debt and the association between the variables is very strong.

Percentage of credit sales to total sales

For 42.1% of the respondents, 10%-20% of their sales are made on credit. This can be considered as quite significant especially for SMEs and hence highlighting the need of a proper debtor's management system in these organisations.

The mean credit sales figure is 2.053 implying that it falls between 10%-20%. The median credit sales being 2 implies that 50% of the 38 respondents firms have their credit sales value scattered around 10%-20%. The skewness is found to be +0.672 which implies that the credit sales value is positively skewed. Normally if a variable is skewed, it will not follow a normal distribution. The kurtosis is a measure of the peakness of the distribution and in this case it is found to be -0.339 implying it has flat kurtosis.

4.3.8 Credit Policy

32% of the SMEs follow a lenient policy and the same percentage follows a stringent policy. The other 36% prefer a credit policy which is neither too severe nor too liberal in order to maximize benefit from credit sales while at the same time monitoring their exposure to default risk.

4.3.9 Reassessment of Customers' Accounts

From figure, 63% of the respondents reassess their customers account while 37% do not do so as they think it is a time consuming exercise.

The frequency at which reassessment is done is illustrated in figure 9

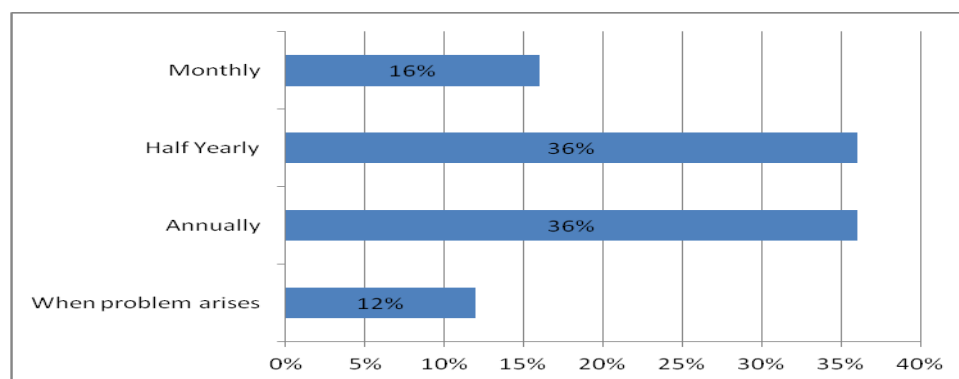


Figure 9

Out of the 63% of the SMEs that reassess customers account, 16% do it on a monthly basis, 36% do so on half yearly and yearly basis while 12% use it only when problem arises. In fact, for an organisation to have a good credit policy, it should reassess its customers' accounts regularly in order to have a constant follow up of its debtors and take corrective actions against irregularities if any.

Cross Tabulation between Maximum Credit Limit and Accounts Reassessment

The objective of doing this test is to show whether SMEs adopting a maximum credit limit also reassess their customers account. 59% of the Entrepreneurs who reassess their customer account tend to also set maximum credit limit for these customers i.e they adopting both approaches. So there are a small proportion of SMEs who are very careful when giving credit to their customers to ensure that payment is made on time.

4.3.10 Collection Tool

The most common collection tool is the telephone; secondly it is through salesperson visits. Telephone is more commonly used as it is cheaper than personal visits. In fact an analysis of the collection tools revealed that SMEs may make use of not only one but several tools.

4.4 Inventory Management

Stock management is important, because organisations should strive to maintain an optimal amount of stock i.e neither too large nor too small. Therefore organisations need to have a proper system of controlling and recording of stock.

4.4.1 Holding of stock

88% of the respondents hold stocks with the expectation of lowering the substantial fixed costs that accrue when ordering and/or producing additional inventories in the event of an unanticipated shortfall. There are also shortage costs that are incurred when organisations cannot satisfy a customer's order. Given that the majority of the SMEs hold stock it is important to find out the period for which stocks are held.

Out of 37 of the entrepreneurs that hold stock, 16.2% do so for less than 20 days while 29.7% hold inventory for greater than 90 days. The greater the stock holding period the greater the amount of working capital required by the firm.

The greater the holding period of inventory the greater will be the operating cycle; hence the total number of operating cycles in a year will decrease and the amount of working capital required will increase.

Association between years of existence and stock holding period

This analysis is done to find out whether years of existence have any effect on the period for which stocks are held in the organization.

The result for the chi-square test for the mentioned variable shows:

Pearson's X² Value	Level of significance	P-Value	Cramer's V
4.443	5%	0.88	-

Conclusion; Since $P > 0.05$, H1 is rejected and there is no association between years of existence and number of days for which stocks are held.

Those who do not hold stock are basically those using perishable materials or where raw materials are readily available.

4.4.2 Proportion of inventory in current asset

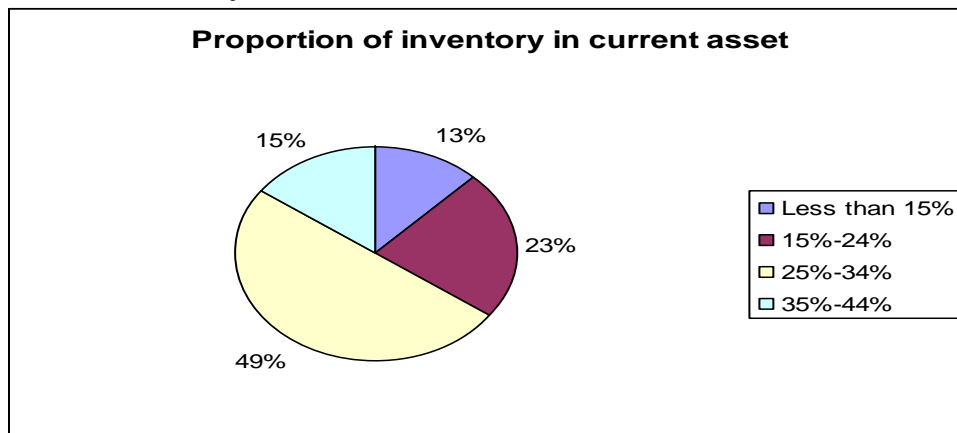


Figure 10

50% of SMEs hold between 25%-34% of inventory as current assets. Therefore inventories represent a major investment on the part of the SMEs surveyed. It is important to note that capital “locked up” in the stocks is idle money which is not earning profits therefore lower level of stock is preferable

4.4.3 People who are Involved in Inventory Management

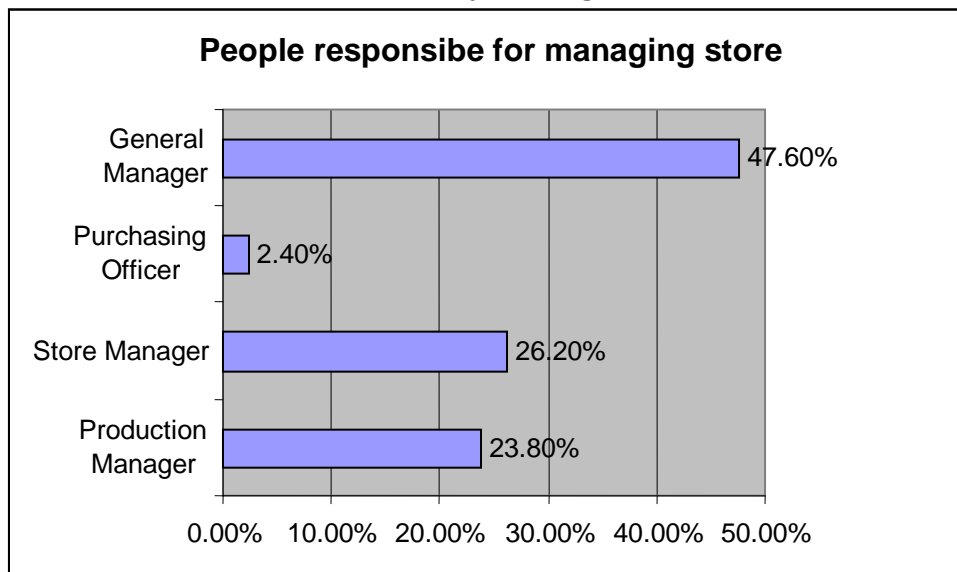


Figure 11

In most of the SMEs surveyed general managers (47.6%) are responsible for managing inventories. Though this responsibility could have been delegated to lower level, among SMEs managers prefer to maintain control – showing the importance given to inventory management.

4.4.4 Measures to assess Inventory Management

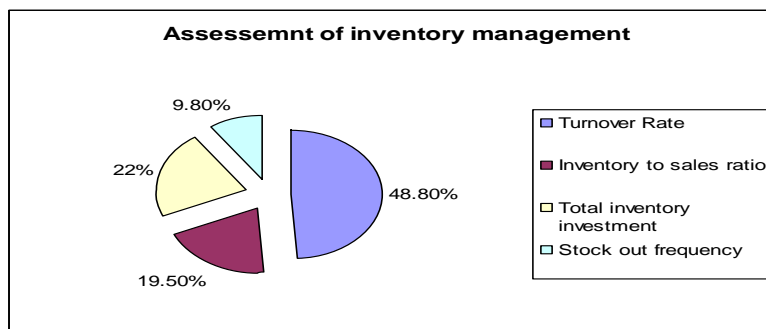


Figure 5.26

48.8% of the respondents prefer to make use of the stock turnover rate to measure the performance of inventory. This method is a simple, easy to use comparable yardstick. However, although inventory turnover is an adequate indicator for comparing performance within the same organisation, it can be misleading when comparing different organizations. Only 9.80% make use of the stock out frequency to measure stock performance.

4.4.5 Buffer/ Safety stock

Most of the SMEs (72.5%) surveyed have a safety stock policy while 27.5% of the SMEs do not hold any safety stock.

Given the majority of SMEs holding safety stock it is interesting to find out why they consider it to be important.

Most of the respondents (21.4%) keep a safety stock primarily to meet unexpected demand. But the safety stock is also used to cover many other situations. 20.7% of the entrepreneurs use the safety stock to safeguard against delay or irregular supply because they import most of their raw materials.

It is also important to find out the number of days for which safety stocks are held since this have an impact on the amount of working capital required by the SMEs.

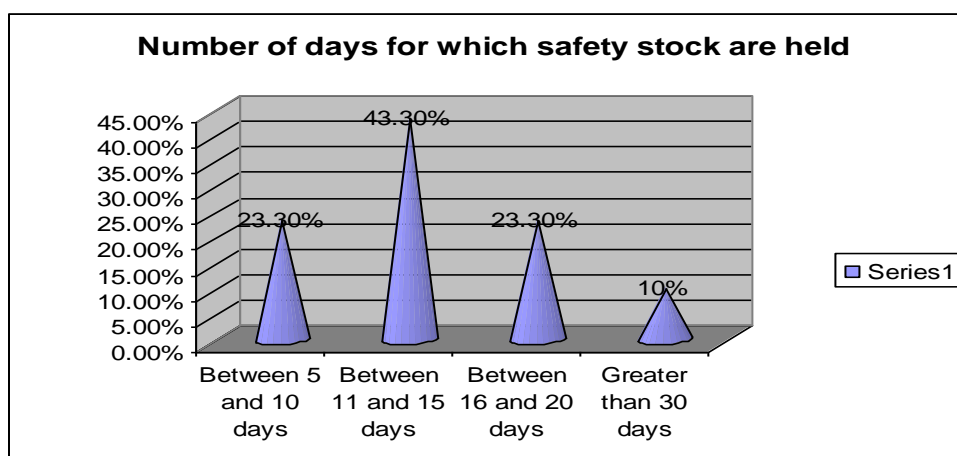


Figure 13

43.3% of the SMEs hold safety stock for 11 to 15 days while 10% have a safety period of greater than 30 days.

Another important issue is to test whether there is any association between the duration for which stock is held and the period for which safety stock is held. If there is any association, then the total holding period will increase thus leading to a greater amount of working capital required by the company. (Assuming other factors in operating cycle are the same).

Association between length of time for which safety stock is held and the length of time for which stock is held

The chi square test result for the 2 variables

Pearson's X ² Value	Level of significance	P-Value	Cramer's V
16.724	5%	0.053	-

Since $P > 0.05$, H₁ is rejected and it is concluded that there is no association between stock holding period and the safety stock holding period.

4.4.6 Methods used for the replenishment of stock

Just in time delivery is most frequently used among the SMEs (34.1%) whereas 24.4% state that they make use of the continuous review system whereby a person within the firm is mostly responsible for reviewing all the stocks at a regular time interval e.g every two weeks and will inform the manager or director if there is a need for ordering stock. Surprisingly Economic order quantity which is considered by most researchers as being very helpful is used by only 17.1% of the respondents.

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