

Financing Working Capital Practices of Small Scale Industries in Chittagong-An Evaluative Study

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ABSTRACT :

Bangladesh despite an important integral part of economy are facing financing working capital problems due to both internal and external factors. The study has found almost same scenario of SSIs in many developing countries like Bangladesh. The study has found that this problem of financing working capital of SSIs remains as a big trap for long. So far knowledge goes, no effective study has been so far made specially over the problem of financing SSIs in Bangladesh. In view of this, the study has been an attempt to evaluate the working capital financing practices of SSIs of Chittagong, Bangladesh. In this regard, the study has conducted interview of 32 samples out of the attempted 97 samples randomly selected. It has used both primary and secondary data. The data thus collected have been analysed by employing percentage, mean, standard deviation, weighted mean score, etc. The study has found inconsistency in financing policies such as approaches, techniques and operating cycle across sample small scale enterprises. Besides, sample small scale enterprises have been found to have used shadow and very common sources of financing which involves high cost and liquidity risk. The study has also identified problems of financing working capital such as loan at exorbitant rate of interest, complicated time consuming procedure and inaccessibility to the institutional loans due to collateral and accounting information and non-preferences of commercial bank. The study has suggested some important prudent measures such as trade off approach, use of adjusted scientific technique for projection of working capital, provisions of providing loans to SSIs as a part of loan portfolio of commercial banks, fiscal benefits etc. for addressing the problems of financing working capital.

Keywords : *Working Capital, Financing, SSIs, Approaches, , and Forecasting.*

INTRODUCTION :

Working capital financing of SSIs remains a big trap of its development in Bangladesh. Finance has been found to be as one of the main barriers to SMEs' growth, and many governments have attempted partial solutions through the creation of specific financing schemes. There are various traditional sources of financing for SMEs ranging

from bank loans, bank overdrafts, own funds/savings, loans from family or friends, and equity funding. Working capital is a significant and important issue during financial decision making because it is a part of the investment in total assets that requires an appropriate financing investment (Bhunia, 2010).

Source of financing working capital depends on what financing working capital policy a firm does follow. Generally, working capital (WC) is financed by a combination of long-term and short-term funds. Long-term sources of funds consist of capital (equity from owners) and long-term debt, which only provide for a relatively small portion of the WC requirement (finance theory dictates that only the permanent portion of WC should be supported by long-term financing (Gitman, 2000)). This portion is the net WC; that is, the excess of the current assets over the current liabilities. On the other hand, the short-term sources of WCF consist of trade credit, short-term loans, bank overdrafts, tax provisions and other current liabilities that can be used to finance temporary WC needs. Sometimes, a WC deficit exists if the current liabilities exceed the current assets. In such a situation, short-term funds are used to also finance part of the non-current assets and the firm is said to be adopting an aggressive WC policy (Bhattacharya, 2001). No doubt, the easy accessibility of finance is an important factor when selecting the source of financing, but its impact on the risks and returns cannot be ignored (Gitman, 2000).

LITERATUREREVIEW :

The few studies that have addressed the financing and capital structure of SMEs are mostly for developed countries (Hughes, 1997; Watson & Wilson, 2002; Zoppa & McMahon, 2002; Hussain & Matlay, 2007); only a few address developing countries (Peterson & Shulman, 1987; Aidis, 2005; Abor, 2005; Bhaird & Lucey, 2011). Various surveys and studies conducted in Bangladesh have identified access to finance as the main problems facing the SMEs. For example, in one recent private enterprise survey, Daniels (2003) identifies that as many as 58% of the surveyed businesses reports the problem of lack of investment funds, whereas 35% mentions the problem of lack of operating funds. Another study conducted in 1996, by the Federation of Bangladesh Chambers of Commerce and Industry (FBCCI) finds out the following constraints to industrial sector growth and investment as perceived by industrial entrepreneurs and businessmen of different classes, such as (1) industrial credit; (2) power supply; and (3) administrative reforms (Mintoo, 2004). However, the Job Opportunities and Business Support (JOBS) program of the Institutional Reform and the Informal Sector (IRIS) finds electricity, credit, and law and order are respectively the three top ranked problems followed by legal barriers, intense competition, and dearth of technical assistance (Meagher, 1998). The Report of the Task Forces on Bangladesh Development Strategies for the 1990s (Policies for Development) identified that SMEs face constraints on both supply and demand sides as well as in respect of policies (Task Force Report, 1991).

Hossain (1998) has also identified some constraints in developing SMEs in Bangladesh. Why commercial banks are so reluctant to extend loans to this sector? That is because of the high risk and supervision cost associated with this type of financing. Hossain (1998), Bhattacharya, et. al. (2000) and Sia (2003) identified that banks are shy to lend to SME activities, as they do not consider them as attractive and profitable undertakings. SMEs are also regarded as high risk borrowers because of their low capitalization, insufficient assets, and high mortality rates (Sia, 2003) and consequently, they are not offered any attractive deals in terms of loans and interest rate. Banks charge high rate of interest from SME loan because of high cost of supervision. For example, in secured credit transactions, interest rates vary from 14% (subsidized in cases defined by Bangladesh Bank policies) to 22% or more (Meagher, 1998). Furthermore, the loan application forms for investment financing from banks are long, tedious, and redundant (Hossain, 1998).

For small enterprises access to bank credit is even very limited. For 'term loan' it is almost impossible; for 'working capital', it is somewhat better. Cookson and Forrest (1999) estimate that 20% - 25% small enterprises have working capital relationships and probably 50% of medium size firms have working capital relationships. On the other hand, 3% - 7% of the small enterprises have term loans compared to 20% for medium size establishment. That is why small enterprises turn most often to moneylenders and other informal sources. Islam, et. al. (2005) have found that bank is the mostly used (identified by 54% of the respondents) source, followed by self-finance (46%) and family and friends (21%). Another such study has revealed that within the non-institutional sources, friends and relatives were the dominant contributors followed by the local lenders. The relatively high incidence of borrowing from friends and relatives may not be surprising given that it might have been easier for the borrowers to approach such lenders and to obtain loan from them on more flexible terms than those received from other lenders (Ahmed, 1984).

On the other hand, one of the major obstacles that have impaired the flow of institutional finance into SMEs is banks' pre-occupation with collateral based lending. Traditionally banks have used fixed asset ownership, particularly land ownership as the basis for judging credit-worthiness of a customer. This puts SMEs at a relative disadvantage, as large entrepreneurs are often able to get around the problem because of their influence and contacts by putting up collateral of dubious valuation. Real estate security, required in nearly every case, is normally taken in the amount of 200% of the loan amount (Meagher, 1998). Bhattacharya, et. al. (2000) also confirmed this high collateral requirement, which many SMEs are not capable to provide. Research into this area for small scale industries is scant, particularly research investigating the financing working capital practices of small scale industries. Therefore, this paper has examined the financing working capital practices of small industries in Bangladesh.

OBJECTIVE OF THE STUDY :

The principal objective of the study is to evaluate the financing working capital practices of SSIs of Chittagong. To accomplish this objective, following specific objectives have been covered :

- a) To examine the financing working capital policies and their practices of sample SSIs;
- b) To examine the sources of financing working capital of sample SSIs;
- c) To identify the problems facing the sample SSIs in financing working capital ; and
- d) To suggest some prudent policy measures for making financing working capital practices of SSIs more pragmatic and effective.

SCOPE OF THE STUDY :

The Study has covered financing working capital practices of following SSIs of Chittagong :

- a) Food and Allied Products;
- b) Textile, Apparel, and Leather.
- c) Wood, Wood Products and Furniture;
- d) Metal Fabrication, Machinery, etc.
- e) No-Metallic Mineral Products;
- f) Chemical, Rubber, Plastics, etc. and
- g) Paper, Printing and Publishing.

The study has also covered financing working capital practices of sample SSIs for five years from 2009 to 2013.

METHODOLOGY OF THE STUDY :

The study has been both empirical and theoretical one. Both primary and secondary data have been used in the study.

POPULATION AND SAMPLING :

The researcher has collected a sources list of SSIs located in Chittagong from Chamber and Commerce Industries and SME Foundation. Accordingly, the researcher has found population size of 128 actively operating. The study has determined sample size of 97 small scale units of seven SSIs by applying scientific techniques. The study small scale units of seven industries proportionately first and then randomly out of randomized block sample second. The researcher despite vigorous efforts has been able to conduct interview of 32 small scale units successfully.

SURVEY INSTRUMENT AND COLLECTION OF PRIMARY DATA:

The study has prepared a structured questionnaire on the basis of three times pilot survey. Researcher has followed direct method of conducting interview for collecting opinions of sample respondents. Finally researcher has been able to conduct interview of 32 sample respondents successfully, indicating success rate of 32.93%.

COLLECTION OF SECONDARY DATA :

The study has collected secondary from the following :

Sources:

- a) Annual Reports of SSIs;
- b) Existing Journals and Magazines;
- c) Websites;
- d) Government Publications; and
- e) BBS.

ANALYSIS OF DATA :

The data thus collected have been tabulated first to make them amenable to the analysis. Then the study has classified the data and analyzed the data by applying financial techniques such as percentage; statistical technique such as mean; and legend for stratifying the responses of the sample respondents.

ORGANIZATION OF THE STUDY :

The study has been organized into three sections. The first section covers statement of the problem, objective, scope, methodology, and limitations of the study. The second section has dealt with the findings over approaches. Sources, and financing working capital practices of SSIs. The final section has covered policy measures and conclusion.

LIMITATIONS OF THE STUDY :

The Study has suffered from data constraints, time constraints , as well as coverage with regard to the area of the study

FINDINGS AND THEIR ANALYSES :

The study has critically examined the approaches, techniques of forecasting working capital, sources of financing working capital, preferences of management with respect to sources, and finally problems associated with the financing working capital of SSIs by employing relevant financial and statistical techniques in the following sub-sections:

EXAMINATION OF WORKING CAPITAL FINANCING POLICIES OF SAMPLE SSIS

The study has examined approaches, operating cycle and techniques of forecasting working capital as follows:

Approaches to Financing Working Capital of SSIs

One of the most important ingredients of the theory of working capital management is determining the financing mix. This theory suggests, how current assets be financed. There are three approaches to financing working capital of a business firm irrespective of sizes, ages, and forms. They are conservative approach, hedging/matching approach, and trade-off approach (Khan and Jain, 1997). The modes and sources of financing working capital differ from firm to firm depending on the financing working capital policy being practiced by small scale industries.

Table 1
Approach to the Financing Working of Small Scale Industries

Approaches		Percentage of Response
i)	Conservative Approach	0.00
ii)	Hedging Approach (Moderate Approach)	84.37
iii)	Trade-off Approach	15.03
iv)	Any other approach (Please mention)	0.00
Total :		100%

Note : Data have been compiled by the researcher.

It has been observed from the perusal of Table-1 that 84.37 of the sample respondents follow hedging approach in financing current assets. This indicates that they use long terms funds for financing fixed portion of current assets and short term funds for financing variable proportion of current liabilities. On the other hand, only 15.03% of the sample respondents use trade-off approach. This indicates that they use long term funds for financing average amount of working capital, and short-term funds financing the excess of working capital over average amount of working capital during a particular period. No sample firm is found to have used conservative approach in financing current assets. It can be said that most of the sample small scale enterprises follow hedging approach which involves high risk and high profit; and least number of sample small scale enterprises follow trade-off approach which offers relatively higher risk adjusted return being efficient approach. This has led the researcher to conclude that approach to financing working capital of most sample small scale enterprises is not efficient. This is again checked by the overall policy being practiced in financing working capital of sample small scale enterprises as follows:

Table 2
Overall Policy of the Sample Small Scale Firms regarding Financing Working Capital

Financing Mix	Percentage of Response
a) All variables need with short term sources and only for the period needed	78.12
b) A portion of the variable need with long-term source; and Inventories only from long-term source	0.00
c) A portion of the permanent need from short term sources	0.00
d) Only half of current Assets financed by long-term source	21.88
e) Any others	0.00
Total :	100%

Note : Data have been compiled by the researcher.

From the perusal of Table-2, it has been found that 78.12% of sample respondents finance variable proportion of current assets with short-term funds and fixed proportion of the same with long-term funds. 21.88% of the sample respondents finance half of current assets with long-term sources and other half of the same with long-term sources of funds. This has matched the findings over financing current assets of sample small scale enterprises to the larger extent.

2.1.2 Forecasting Working Capital Requirements-Techniques, and Operating Cycle

Forecasting working capital requirements is influenced by both intra-firm factors and environmental factors. Besides, the forecasting depends on approaches and policies being followed by small scale industries during operating periods. This sub-section has examined the methodologies followed in forecasting working capital requirements of sample small scale enterprises. These have been discussed in the following paragraphs :

Table 3
Methods for Forecasting Working Capital

Method of Forecasting Working Capital	Percentage of Response
a) Informal / Judgment	100.00
b) Formal / Statistical	0.00

Note: Data have been compiled by the researcher.

It has been found from the analysis of Table-3 that all the sample respondents (100%) project the working capital requirements on the basis of experience of the past. Researcher

has also observed that they are not even aware of statistical techniques to be used in forecasting working capital requirements for the firms. There are statistical techniques for forecasting working capital requirements (Pradhan, 1988). The techniques are :

- A) Judgmental Forecasting: Delphi Technique and Panel of Experts;
- B) Technical Forecasting: Moving average, Exponential smoothing, Trend Adjusted Exponential smoothing, and Trend Projection; and
- C) Fundamental Forecasting: Regression Method, Econometric Model, and Input-Output Analysis.

The use of past experience for forecasting working capital requirement is not scientific in the context of volatile market as well as unfavorable variation in production and sales. So, this has caused unfavorable deviation in actual working capital requirement from forecasted working capital requirements.

All the sample respondents were asked whether they experienced any situation that actual working capital deviated from forecasted working capital. All 100 sample respondents are of the opinion that they have experienced unfavorable deviation in actual working capital from expected/forecasted working capital value due to both controllable and uncontrollable factors as is shown in Table-4 as follows :

Table 4

Reasons for Deviation in Actual Working Capital from Forecasted Working Capital Value

Reasons for Deviation in Working Capital	Percentage of Response
i) Controllable Factors	100
ii) Uncontrollable Factors	100

Note : Data have been compiled by the researcher.

Researcher has identified some reasons/factors for deviation on the basis of opinion of sample respondents. The controllable factors are fluctuation in size of inventory due to straddle price situation, , mounting accounts receivables due to failure to realize in time, decrease in production volume sometime in operating years, etc. The uncontrollable factors are volatility in prices of materials, high inflation rates, higher interest rates, political risk, supply constraints, etc.

Operating (Working Capital) Cycle

Forecasting working capital requires working capital management to consider working capital cycle. The major elements of current assets are inventories, accounts receivables and cash (in hand and at bank) while that of current liabilities are accounts payable and bank overdrafts. According to Atrill (2006), working capital represents a net

investment in short term assets. These assets are continually flowing (circulating) into and out of the business, are essential for day-to-day operations. The various elements of working capital are interrelated, and can be seen as part of a cycle. It can be seen that Cash is used to pay suppliers when raw materials are obtained on credit or raw material are bought with cash, the raw materials are turned into finished goods which are either sold for cash or credit. Credit sales create account receivables which are subsequently collected as cash (Yiadom and Agyei, 2007).

Among the various factors which influence working capital policies of firms include nature of business, market/ demand conditions ((Ben-Horim and Levy,1983), Technology and manufacturing policy (Wood, 1993), credit policy of the firm (Walia,1977), payable management (Gitman, 2005) operating efficiency (Rahman and Ali, 2006; Fairchild, 2005; and Sehgal, et al, 2006) (Hossain and Akon, 1997)), competition (Filbeck and Krueger, 2005), conditions of supply, size, agency problem, growth and profitability, (Kolay, 1991) industry (Hawawini, et al,1986; and Nunn (1981)). Marfo-Yiadom (1996) concluded that nature and size of business, business fluctuation, growth and expansion activities, availability of credit facilities from suppliers, and price level changes influence working capital decisions greatly. Moyer et al (2001) considered sales level, credit policies and the length of the operating cycle. The extant literature reveals the components of working capital as consisting of current assets less current liabilities. The working capital is affected by a number of factors including the nature of the business, credit policy, conditions of supply, price level changes.

Although all sample respondents have responded positive to the change in the components of operating cycle due to change in both controllable and uncontrollable factors, even though only 56.25% of the respondents consider the operating cycle while forecasting working capital value of the firm (see Table-3). Non-consideration of operating cycle in forecasting working capital leads to greater variation in actual working capital from forecasted working capital value. This variation in working capital can therefore be attributed to the factors such as nature of business, market/ demand conditions ((Ben-Horim and Levy,1983), Technology and manufacturing policy (Wood, 1993), credit policy of the firm (Walia,1977), payable management (Gitman, 2005) operating efficiency (Rahman and Ali, 2006; Fairchild, 2005; and Sehgal, et al, 2006) (Hossain and Akon, 1997)), competition (Filbeck and Krueger, 2005), conditions of supply, size, agency problem, growth and profitability,

Table 5
Operating Cycle in Forecasting Working Capital

Operating Cycle	Yes Response: Percentage of Response
a) Does operating cycle vary across year?	100%
b) Is operating cycle incorporated in forecasting working capital?	56.25%

Note : Data have been compiled by the researcher.

Sample respondents (56.25%) who consider operating cycle in forecasting working capital have been found to have taken very basic components of operating cycle. The basic components are credit for suppliers, inventory of raw materials & finished goods, accounts receivables & payables, production, price fluctuation, growth & expansion, etc. The remaining sample respondents (43.75%) who do not consider operating cycle in forecasting working capital value have shown the following reasons against consideration :

Table 6

Reasons against Consideration of Operating Cycle in Forecasting Working Capital

Reasons against consideration of Operating Cycle	Percentage of Response
i) Irregular demand	64.28
ii) Irregular production	50.00
iii) Irregular payment from debtors	91.86
iv) Irregular delivery by Creditors	57.14
v) Fluctuation in the policy of Government	00.00
vi) Any Other	00.00

Notes: a) Data have been compiled by the researcher.

b) Percentage of responses exceeds 100% due to multiple responses of sample Respondents

The reasons shown by 43.75% of total sample respondents appear to be all right in the context of markets and businesses of small scale enterprises. But failure to capture risk arising out of these variables would have made working capital management of small scale enterprises inefficient.

SOURCES OF FINANCING WORKING CAPITAL

The study has examined the financing practices of sample small scale enterprises in this sub-section. First, it has identified sources of financing working capital of sample small scale enterprises; and second, it has examined priority of different sources of financing working capital on five point likert scales.

Identification of Sources of Financing Working Capital of Sample Small Scale Enterprises

The study has identified source of financing working capital of sample small scale enterprises on the basis of opinions extracted from conducting interview of sample respondents through structured interview guide. The responses have been presented in Table-7 as follows:

Table 7
Identification of Sources for Financing Working Capital

Sources for Financing Working Capital		Percentage of Response
a)	Long-Term-External	
i)	Ordinary Share	100
ii)	Preference Share	0.00
iii)	Debenture	0.00
iv)	Loan from financial institutions	100
b)	Long- Terms: Internal	
i)	Retained Earnings	100
ii)	Provisions for various contingencies/Depreciation Reserve	71.87
c)	Temporary Working Capital	
i)	Short Term External	
*	Goods on credit	100
*	Bank Loan	100
*	Discounting of Bills receivables	0.00
*	Bank overdraft	21.87
*	Loan from Sister Concern	25.00
ii)	Short Term: Internal	
*	Gratuity	0.00
*	Dividend Contingencies	0.00
*	Pension Fund	0.00
*	Unclaimed Dividend	0.00
*	Outstanding Liabilities for Expenses	56.25
*	Provisions for Taxation	0.00

Note : a) Data have been compiled by the researcher.

b) Percentage of responses exceeds 100% due to multiple responses of sample respondents.

From the perusal of Table-7 it has been observed that sample enterprises have used both long-term and short-term sources for financing working capital. The sources of financing working capital of sample small scale enterprises are ordinary share, loan from financial institutions, retained earnings, and depreciation reserve of Long-term sources; and trade credit, bank loan, bank overdraft, sister concern loan, and liability for expenses/ salaries of short-term sources. But the frequency of using different sources of financing working capital does vary. It has been found from the examination of Table-7 that all sample

small scale enterprises have used ordinary share, loans from financial institutions, retained earnings, trade credit and bank loans during the study periods. But depreciation reserves, outstanding liabilities for expenses, bank overdraft, sister concern loan, and bank overdraft have been used for financing working capital during study periods by 71.87%, 56.25%, 25%, and 21.87% of the sample respondents respectively. It has also been observed that small scale could not utilize many sources for financing working capital. This situation can be attributed to many reasons such as shallow funding sources, poor credit rating, lack of adequate collateral, poor financing plan, regulatory problem of raising funds by means of issuing bond/debenture / commercial paper, and non-availability of money market products.

The study has also examined the major forms of financing working capital requirements. These responses have been summarized in Table-8 as follows:

Table 8 The Major Forms of Financing Working Capital Requirement	
Forms of Financing Working Capital	Percentage of Response
a) Current Liabilities	100
b) Cash credit	75
c) Deferred credit	56.25
d) WC loan from Banks / Fls	100
e) Equity / Long Term loan	100
f) Any other (Pls. specify)	0.00

Note : a) Data have been compiled by the researcher.

b) Percentage of responses exceeds 100% due to multiple responses of sample respondents

According to the responses of sample respondents, all basic components of operating (working capital) cycle constitute the forms of financing working capital. This implies that sample small scale enterprises are financing current assets by using trade credit, deferred credit, bank loans, equity, etc.

Sources of Financing Working Capital Required by Small Scale Enterprises for Effective Operations

Financing working capital requires effective and optimal working capital financing decision on the basis of minimum cost of alternative to different sources of financing working capital. Alternatives to financing working capital of small scale enterprises are relatively lower as compared to that of medium and large scale enterprises in Bangladesh. Small

scale enterprises face toughest crisis in accommodating funds for financing working capital either from external source or from internal sources because of different inherent difficulties. So, they prioritize available sources of financing working capital on the basis of minimum cost and accessibility. The study in this sub-section has attempted to examine the requirements /preferences of sample respondents on the basis of five point likert scale. The study has measured descriptive measures -mean and standard deviation of opinions of sample respondents on likert scales and shown in Table-9.

Table 9
Mean Responses of Respondents on Sources of Financing Working Capital Required by Small Scale Enterprises for Effective Operations

	Sources of Financing Working Capital	Mean	SD	Decision
1	Equity finance as a source of financing working capital by Small Scale Enterprises for effective operations	4.20	1.15	Highly required
2	Long-term debt as a source of financing working capital for the retained earnings of Small Scale Enterprises	4.50	1.10	Highly required
3	Asset-based financing as a source of funding working capital for effective operations of Small Scale Enterprises	2.75	1.40	Required
4	Accounts payable as a valuable source of financing in working capital to meet short-term obligations of Small Scale Enterprises	4.10	1.10	Highly required
5	Accruals as a discretionary source of financing in working capital for optimal resource utilization of Small Scale Enterprises	3.80	1.05	Highly required
6	Bank loans stands as a source of financing working capital for the liquidity of Small Scale Enterprises	4.20	0.90	Highly required
7	Promoters fund as a source of financing working capital by Small Scale Enterprises for effective operations	3.57	1.25	Highly required
8	Borrowing from friends and family constitute as a vital source of financing in working capital for the profitability of Small Scale Enterprises	4.25	0.90	Highly required
9	Thrift as a source of financing working capital for effective operations of Small Scale Enterprises	4.30	0.65	Highly required

10	Unsecured financing as a source of financing working capital for the solvency of Small Scale Enterprises	2.80	1.45	Required
	Combined Mean	3.85	0.96	Highly required

Sources: Survey Instrument.

Note: Data have been compiled by the researcher.

It has been found from the analysis of Table-9 that sample small scale enterprises in Chittagong highly require financing their working capital through: equity finance (Mean=4.20), long-term debt (Mean =4.50), accounts payable (Mean =4.10), accruals (Mean =3.80), bank loans (Mean =4.20), promoters' fund (Mean =3.57), borrowing from friends and family (Mean =4.25), and thrift (Mean =4.30). However majority of them (SMEs) require financing their working capital through: asset based financing (Mean =2.75), and unsecured financing (Mean =2.80).

The findings of the study have revealed sources of financing working capital as highly required by Small Scale Enterprises for effective operations in Chittagong. The results have showed that the major sources of financing the working capital of small scale enterprises in Chittagong for their effective operations are: equity finance; long term debt; accounts payable; accruals; bank loans ; promoters fund; borrowing from friends and family; and thrift, which are in consonance with the views of Pfohl, Elbert & Hofmann (2003). They have deposed that the major sources of financing the working capital of businesses vis-à-vis Small and Medium Scale Enterprises are: supplier's credit, bank loans, promoter's fund, equity finance, long-term debt, off-balance sheet financing, asset-based financing, accounts payable, accruals and unsecured financing.

Empirically, Fisman (2001) showed that short-term credit; particularly supplier credit is positively correlated with capacity utilization because firms lacking credit face inventory shortages leading to lower capacity utilization. Petersen and Rajan (1997) argue that even in the United States, with extremely well developed financial markets, trade credit is the largest single source of short-term financing. Fisman, particularly claims in developing countries where formal lenders are limited, trade credit plays an even more significant role in funding firm's activities. According to researchers, such as: Van Horne and Wachowicz (2000); Moyer, Mcguigan & Kretlow, (2004), the working capital financing logic is that, temporary current assets are financed with short-term loans and the permanent current assets with long term debt or equity capital. However, the actual investment and financing mix match-up depends on management's approach towards risk and profitability. In the words of Keown, Martin, Petty & Scott (2005) finance sources of working capital management acts as a guiding principle to the manner that working capital should be managed in order for SMEs to attain efficiency in their operations.

Problems Associated with Working Capital Financing

The most important problem of small scale enterprises is access to credit amongst important problems. The study has chalked out some problems peculiar to Small Scale Enterprises with regard to financing working capital on the basis of available existing literatures and talking to the professionals. Accordingly, the study has extracted opinions of sample respondents over problems, and tabulated in Table-10 as follows :

Table 10

Problems peculiar to Small Scale Enterprises with regard to financing Working Capital

Problems Peculiar to Small Scale Enterprises With Regard to Financing Working Capital	Percentage of Response	Degree of Importance on Percentage Weight of Frequency
a) Complicated procedures	65.63	Important
b) Time consuming	78.13	Most Important
c) Difficult terms and conditions	65.63	Important
d) Collateral Problems	100.00	Most Important
e) Exorbitant Rate of Interest	68.75	Important
f) Inadequate supply of working capital	100.00	Most Important
g) Restricted Use	59.38	Important
h) Low money market base	9.38	Least Important

Note : a) Data have been compiled by the researcher.
 b) Percentage of responses exceeds 100% due to multiple responses of sample respondents

Legend :	Degree of Importance	Percentage Frequency
	Most Important	70-100
	Important	50-69
	Least Important	00-49

It has observed and found from examination of financial status of small scale enterprises that Small scale enterprises can't even utilize its installed capacity for lack of sufficient working capital. Sometimes small firms cannot even reach breakeven level due to inadequate amount of working capital despite huge demand for product in the market. It is evident from the analysis of Table-5.4 that the most important problems of financing working capital of small scale enterprises in order of magnitudes are collateral problems

(100%), inadequate supply of working capital(100%), and time consuming (78.13%); important problems of financing working capital are exorbitant rate of interest(68.75%), difficult terms and condition, (65.63), complicated procedure (65.63%), and restricted use; and least important problem is low money market base (9.38%). Respondents of small scale enterprises have made most important problems responsible for not being able to get adequate working capital loan from banks and financial institutions. The problems identified as important are systematic and can be diversified. These findings have reflected real financing working capital problems facing the sample small scale enterprises in Chittagong.

SUMMARY, POLICY IMPLICATIONS, AND CONCLUSION OF THE STUDY :

The study has examined the working capital financing practices of SSIs in Chittagong. Bangladesh by employing scientific techniques. The findings of the study have been summarized as follows :

- a) Findings Relating to Approaches to Financing Working Capital of SSIs:
 - I. Most of the sample small scale enterprises follow hedging approach which involves high risk and high profit; and least number of sample small scale enterprises follow trade-off approach which offers relatively higher risk adjusted return being efficient approach. This has led the researcher to conclude that approach to financing working capital of most sample small scale enterprises is not efficient
 - II. 78.12% of sample respondents finance variable proportion of current assets with short-term funds and fixed proportion of the same with long-term funds. 21.88% of the sample respondents finance half of current assets with long-term sources and other half of the same with long-term sources of funds. This has matched the findings over financing current assets of sample small scale enterprises to the larger extent.
- b) Methodology of Forecasting Working Capital
 - I. The study has found that all the sample respondents (100%) project/forecast the working capital requirements on the basis of experience of the past. Researcher has also observed that they are not even aware of statistical techniques to be used in forecasting working capital requirements for the firms.
 - II. All sample respondents are of the opinion that they have experienced unfavorable deviation in actual working capital from expected/forecasted working capital value due to both controllable and uncontrollable factors.
 - III. The controllable factors are fluctuation in size of inventory due to straddle price situation, , mounting accounts receivables due to failure to realize in time, decrease in production volume sometime in operating years, etc. The uncontrollable factors are volatility in prices of materials, high inflation rates, higher interest rates, political risk, supply constraints, etc.

- IV. Sample respondents (56.25%) who consider operating cycle in forecasting working capital have been found to have taken very basic components of operating cycle. The basic components are credit for suppliers, inventory of raw materials & finished goods, accounts receivables & payables, production, price fluctuation, growth & expansion, etc. The remaining sample respondents (43.75%) who do not consider operating cycle in forecasting working capital value have made some reasons/causes accountable against consideration. The reasons as identified in order of magnitudes are irregular payment from debtors, irregular delivery by suppliers, and irregular production. But failure to capture risk arising out of these variables would have made working capital management of small scale enterprises inefficient.
- C. Sources of Financing Working Capital :
 - I. All sample small scale enterprises have used ordinary share, loans from financial institutions, retained earnings, trade credit and bank loans during the study periods. But depreciation reserves, outstanding liabilities for expenses, bank overdraft, sister concern loan, and bank overdraft have been used for financing working capital during study periods by 71.87%, 56.25%, 25%, and 21.87% of the sample respondents respectively. It has also been observed that small scale could not utilize many sources for financing working capital. This situation can be attributed to many reasons such as shallow funding sources, poor credit rating, lack of adequate collateral, poor financing plan, regulatory problem of raising funds by means of issuing bond/debenture / commercial paper, and non-availability of money market products.
 - II. Sample small scale enterprises in Chittagong highly require financing their working capital through: equity finance (Mean=4.20), long-term debt (Mean =4.50), accounts payable (Mean =4.10), accruals (Mean =3.80), bank loans (Mean =4.20), promoters' fund (Mean =3.57), borrowing from friends and family (Mean =4.25), and thrift (Mean =4.30). However majority of them (SMEs) require financing their working capital through: asset based financing (Mean =2.75), and unsecured financing (Mean =2.80).
 - III. The findings of the study have revealed sources of financing working capital as highly required by Small Scale Enterprises for effective operations in Chittagong. The results have shown that the major sources of financing the working capital of small scale enterprises in Chittagong for their effective operations are: equity finance; long term debt; accounts payable; accruals; bank loans ; promoters fund; borrowing from friends family; and thrift.
- d. Problems Peculiar to Small Scale Enterprises with regard to financing Working Capital
The study has found that the most important problems of financing working capital of small scale enterprises in order of magnitudes are collateral problems (100%), inadequate

supply of working capital(100%), and time consuming (78.13%); important problems of financing working capital are exorbitant rate of interest(68.75%), difficult terms and condition, (65.63), complicated procedure (65.63%), and restricted use; and least important problem is low money market base (9.38%). Respondents of small scale enterprises have made most important problems responsible for not being able to get adequate working capital loan from banks and financial institutions. The problems identified as important are systematic and can be diversified. These findings have reflected real financing working capital problems facing the sample small scale enterprises in Chittagong.

The Study has suggested following policy measures for professionals, financing working capital authority, and policy makers in order to making working capital financing practices of SSIs most pragmatic and productive:

- a) SSIs should follow trade off approach to finance working capital being efficient one.
- b) SSIs should start using effective and adjusted scientific techniques for projecting required working capital. In this regard, they should consider relevant quantitative and qualitative determinants of working capital.
- c) SSIs should keep on monitoring the price volatility of factors of production in order to exploit the benefits of price changes.
- d) SSIs should have an effective plan of utilizing funds with least costs from different sources as much as possible.
- e) Bangladesh Bank being regulator of commercial banks can make a provision to include a particular share of loan portfolio as Loans to SSIs. This would ease problems of obtaining institutional loans for financing working capital of SSIs to a larger extent. Besides, it can offer a loan of window at a bank rate of interest for SSIs through commercial banks in Bangladesh.
- f) The Government should address the problem of financing working capital of SSIs through fiscal benefits and other institutional arrangements like credit programs of NGOs and Specialized banks -Bangladesh Krishi Bank, and Rajshahi Krishi Unnayan Bank, etc.

SSIs can be said to be buffer of Bangladesh economy for its contribution to the employment, value generation for the society, and finally to the eradication of poverty. The policy measures suggested on the basis of findings can be expected to solve the major problem of financing working capital of SSIs and thereby enabling SSIs work as buffer of the economy on a continuous basis.

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