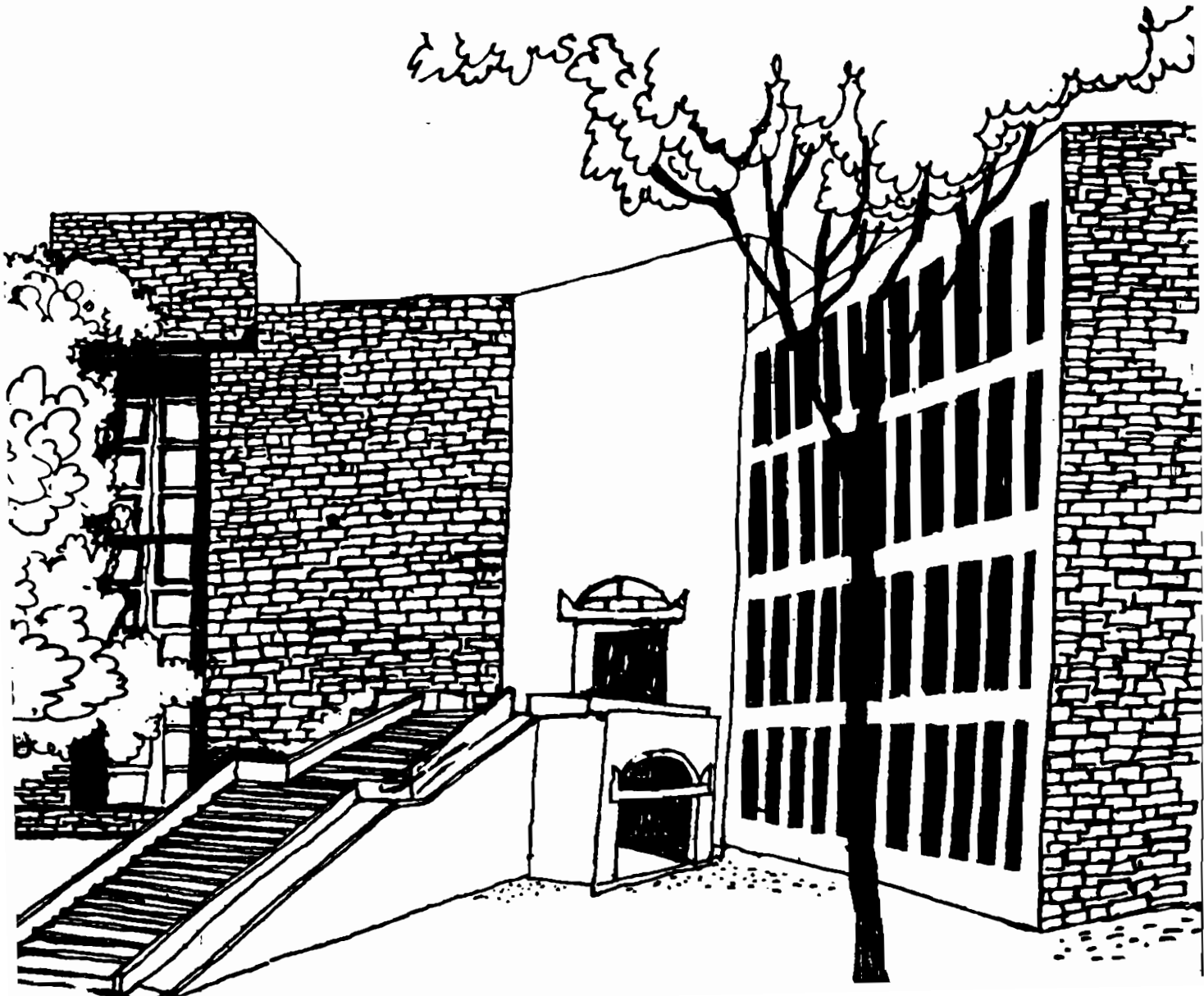




Working Paper



WORKING CAPITAL MANAGEMENT IN SRILANKA

By

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ABSTRACT

The study provides an empirical evidence of working capital management policy and practices of the private sector manufacturing companies in Sri Lanka. The information and data for the study were gathered through questionnaires and interviews with chief financial officers of a sample of manufacturing companies listed on the Colombo Stock Exchange. The main conclusions of the study are summarised below:

- Most companies in Sri Lanka have informal working capital policy. The managing director plays a major role in formulating formal or informal policy. Company size has an influence on the overall working capital policy (formal or informal) and approach (conservative, moderate or aggressive) and review period.
- Finance manager is the responsible for managing working capital components. Stretching of credit payment and ageing schedule are the primary tools of managing disbursement float and controlling debtors respectively. Material requirement planning (MRP) and perpetual inventory control (PIC) system are key techniques of inventory management. Company profitability and working capital policy influence the payable management and working capital finance respectively. Most of the companies take cash discounts, but their annual cost of working capital funds is high that ranges between 15 - 20%.
- Current ratio and cash budget are major techniques of working capital. planning and control. Company profitability has an influence on the methods of working capital planning and control. Companies sometimes consider working capital changes when they evaluate capital budgeting. Most of the companies in this study use bank interest rate as a hurdle rate for evaluating the working capital changes.
- A comparison of the working capital practices of the Sri Lankan companies with the USA companies reveals a lot of similarities. The basic difference is in terms of the use of computerised system and the opportunity to invest surplus cash in the money market instruments.

WORKING CAPITAL MANAGEMENT IN SRI LANKA

INTRODUCTION

In the finance research , working capital management has not been accorded sufficient attention. It is implied by some experts that high business failures have occurred due to poor decision-making in the area working capital management of companies (Smith, 1978). The researchers in the field of finance also thought that the theories of working capital were not amenable to practical application (Cohan and Pringle, 1978). Therefore, much was not written on the subject until sixties (Earnest, 1964). But, since early 1970s, dramatic development took place in the working capital management research (James,1988). Also, its practical use was realised.

Some researcher feel that the management of short-term asset and liabilities is more important than long-term investment and finance in the manufacturing companies (Ned and William, 1995). In fact, current assets form a large proportion of total assets in both developed and developing countries. For example in the USA, current assets are about one-third of the total assets. The practice of working capital management in the developed countries like the USA has reached high level of sophistication. These practices are well documented (Smith and Shirley, 1978). The evidence on the working capital management practices in the developing countries is scanty (Pradhan, 1986; Sishtla, 1992). In this paper, we would document the working capital management policies and practices of manufacturing companies in Sri Lanka.

Manufacturing companies play a major role in the economic development in Sri Lanka. During the last two decades, manufacturing sector has made significant contribution to the national income as well as the export income of the country. In spite of their contribution, manufacturing companies in Sri Lanka are still in the development stage. They need more short- and long-term funds for expansion. Capital markets in Sri Lanka are still in the nascent stage compared to the markets of developed countries. Therefore, the flow of additional capital is slow. Managing the available capital is, thus, a real challenge in Sri Lanka. The optimum utilisation of the existing capital by the Sri Lankan companies is essential for sustaining and expanding their operations.

The purpose of this paper is to present the results of a survey of the working capital management practices and policies of the listed manufacturing companies in Sri Lanka. The study focuses on (a) overall working capital management policy, (b) management of working capital components, and (c) working capital planning and control. A comparison of working capital management practices of companies in Sri Lanka - a developing country is made with companies in the USA - a developed country.

DATA AND METHODOLOGY

The sample of companies has been selected from the Colombo Stock Exchange (CSE). In the year 1995, eighty manufacturing and

processing companies were registered on CSE. Out of these, a sample of fifty companies was randomly selected for the study.

Data were collected for the sample companies through a questionnaire. The questionnaire, used by Smith and Shirley (1978) in their study of the American firms, was modified according to the Sri Lankan business environment for the purpose of this study. The questionnaire included both open-ended and multiple-choice questions. The questionnaires were returned by forty companies. After rejecting four invalid questionnaires, the response rate was 45%. Thus, the results are based on data of thirty-six companies. The response rate for individual questions differs since all questions were not responded by all companies.

Table 1. Distribution of sample companies by size and profitability

	Criteria	No.	Percentage
<u>Size(sales):</u>			
Small	< Rs. 200,000	9	25
Medium	Rs.200,000 and < Rs. 1,000,000	18	50
Large	Rs.1,000,000 and above	9	25
Total sample		36	100
<u>Profitability (ROE):</u>			
Low	< 5%	8	22
Medium	> 5% and <10%	8	22
High	10% and above	20	56
Total sample		36	100

Size and profitability are considered important variables that influence the working capital management practices of companies (Smith and Shirley, 1978). Therefore, the results of the study are also analysed according to company size and profitability. Size is measured in terms of rupee sales and profitability in terms of return on equity (ROE). Half of the respondent companies are medium-sized companies and more than half earn 10% or more ROE (Table 1).

ANALYSIS OF SURVEY RESULTS

Working Capital Management Policy

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In this section, we provide answers to the following questions: (a) Whether the Sri Lankan companies have explicit or implicit policies for working capital? (b) Who is responsible for formulating the policy? (c) Who reviews the working capital policy? (d) What are the methods of estimation of working capital needs? (e) What are the specific working capital policies of particular companies in practice?

Overall policy. Companies in practice may follow explicitly stated formal working policy. Some companies may not feel the need for having a formal policy; they may have informal policy. Most Sri Lankan manufacturing companies follow informal policy for working

capital management. In all, 23 (63.9%) out of 36 responding firms have informal working capital management policy; nine (25%) have formal policy, and remaining four companies (11%) do not have any implicit or explicit working capital policy. Thus, about 90% (32) responding companies follow either a formal or an informal working capital policy.

Table 2. Overall working capital policy

Policy	Total Sample	Company Size			Profitability		
		Large	Medium	Small	High	Medium	Low
Overall Policy:							
Formal Policy	9	6	3	-	7	1	1
Informal Policy	23	3	13	7	11	6	6
No Policy	4	-	2	2	2	1	1
Total responses	36	9	18	9	20	8	8
Significance			0.01239			0.66145	
Approach :							
Conservative	7	1	3	3	3	2	2
Agressive	3	2	1	--	2	1	--
Moderate	16	5	11	--	10	2	4
Changes over time	6	1	1	4	3	2	1
Total responses	32	9	16	7	18	7	7
Significance			0.01291			0.84474	

Is there any association between working capital policy, on the one hand and company size and profitability, on the other? Table 2 shows these relationships. A significantly greater number of the large-sized companies have formal policy for working capital than medium- and small-sized companies. Six out of nine companies following formal policies are large, and three are medium. Seven small-sized companies practise informal policy and two do not have any policy for working capital. Thirteen medium-sized companies follow informal policy. Generally, most large-sized companies practise formal policy and medium- and small-sized companies follow either informal policy or no policy. Thus, the small- or medium-sized companies in Sri Lanka perhaps do not consider it necessary to have formal working capital management policy.

As regards the relation between working capital policy and company profitability, there does not seem to be a strong association. More than half (55%) of the high-profit-earning firms have informal working capital policy, and seven out of nine firms following formal policy also have high profit. Overall, there is no significant relationship between profitability and overall working capital policy.

In theory, companies may also have different attitudinal approaches towards overall working capital management. They may follow conservative, moderate or aggressive working capital management approach. What are the experiences of the Sri Lankan companies? Sixteen (50%) of the 32 companies, responding to this

question, use moderate policy and seven (21.9%) follow conservative policy. Only three companies follow aggressive approach. Six (18.8%) companies do not have any specific approach, and change their policy according to the situation. The conservative or moderate working capital approach followed by most Sri Lankan manufacturing companies implies a low-risk attitude. Another important point is the lack of flexibility of working capital approach in practice. Only six companies in the survey change their approach over time.

Our survey results show a relationship between company size and specific policy behaviour (Table 2). Most small-sized companies practise conservative policy, and half of them change their policy over time. This shows low risk attitude of the small-sized companies. Large-sized companies follow relatively aggressive working capital policy. Most medium-sized manufacturing companies practise moderate working capital policy. This implies that these companies are neither aggressive like large-sized companies, nor conservative like small-sized companies. They attempt to keep working capital risk and liquidity in balance.

There is no significant relationship between working capital policy behaviour and company profitability. It is, however, noticeable that more than half of the high-profit-earning companies practise moderate policy for working capital management in Sri Lanka.

Formulation of policy. In the Sri Lankan manufacturing sector, managing director plays a major role in setting the overall, formal or informal, working capital policy (15 companies). The second most important responsible executive is finance manager or controller (nine companies). Board of directors is also involved in setting the overall working capital policy in a few cases (four companies). In three companies management committees, generally represented by directors, managing director, finance manager or controller and functional managers like sales, production, credit or purchasing, are responsible for formulating working capital policy. In one company there is no specific person to determine the policy; depending on the situation, a responsible person sets the overall working capital policy.

Review of policy. There exists variation with regard to the periodicity of review of the working capital policy. Eleven companies (34.4%) review policy monthly. Quarterly and annual review of policy are practised respectively by six and five companies. Ten companies (31.3%) do not have fixed periodicity for review. They review the working capital policy whenever it is considered necessary.

Do the review practices relate to company size and profitability? More than two-thirds of small-sized companies do not regularly review their working capital policy (except two small-sized companies that subject their policy to quarterly review). This is a consistent behaviour since most small-sized companies also do not have formal working capital policy. The large- and medium-sized companies use monthly review techniques for their working capital policy. Majority of the high-profit-earning firms practise monthly review and low-profit-earning firms do not have a fixed review of the working capital policy. That means that low-profit-earning companies have laxity in the working capital review

perhaps because they have low-risk attitude compared with the large-sized companies. Statistically, there does not exist a strong relationship between the working capital review practices and the company size or profitability.

Estimation of working capital need. How do manufacturing companies in Sri Lanka estimate their working capital needs? More than half (20 companies) of 35 companies that responded to this question, use the current-assets-holding-period for estimating their working capital requirement, while eleven companies (31%) use working-capital-to-sales ratio as the estimation technique. The remaining four companies employ different estimation techniques, such as (a) production capacity and borrowing ability (textile and footwear company); (b) the level of stock and debtors (food and beverage company); (c) combination of above methods (industrial product company); and (d) cash-in hand position (food and beverage company).

The results do not show a significant difference in the working capital estimation techniques according to company size and profitability. However, we do note that most of the large- and medium-sized companies use current-assets-holding-period to estimate working capital needs than the small-sized companies that use ratio of sales. Thirty-one (88.6%) of 35 respondents use both methods to calculate working capital requirement. But there is no statistically significant association between firm size and working capital estimation technique. Further, about two-thirds of the high-profit-earning firms (63%) use current-assets-holding-period as an estimation technique. Similarly, a large number of companies (60.9%) that follow informal policy also use current-assets-holding-period for estimating working capital needs.

Management of Working Capital Components

In this section, we document the Sri Lankan companies' practices vis-à-vis the management of working capital components: cash, receivable, inventory and short-term financing methods like accounts payable and bank finance.

Who are the persons responsible for managing components of working capital? In most Sri Lankan manufacturing companies in this survey, the management of cash, accounts payable and short-term loans is the prime responsibility of the chief financial officer (financial controller or manager) and in some companies, the managing director. The responsibility for managing accounts receivable and inventory is spread amongst various company executives.

Cash Management

Collection and disbursement of cash is the most critical aspect of cash management. The responsibility for cash management falls within the domain of finance manager or controller in most Sri Lankan companies (32 out of 36 respondent companies) in the survey.

A large majority of companies use written or verbal requests for reducing negative float (deposit float). Cash discount comes as the second and regional banking as the third most important technique. Unlike in the Western countries, the lock-box technique

is not important for collection in Sri Lanka. Three companies use "motivation price", combination of cash discounts and requests (written and verbal), and control over future sales for managing and collecting cash quickly from their customers.

For increasing positive float (disbursement float), the stretching of credit is the most frequently used technique in Sri Lanka. Thirty-four companies use this technique and a very large number of them (94.1%) rank it at first or second place. Centralisation of disbursement is the second most important technique. Out of 31 companies using this technique, 28 rank it at first or second place. Nine companies use bank drafts for their payrolls, which is the third important technique for increasing positive float. Three companies follow a combination of all these techniques.

What techniques are used for improving the internal flow of funds within a firm? Companies use several techniques individually or in combination for this purpose. Depository transfer cheque is the most frequently used technique, and all the eighteen companies, using this technique, rank it either at first or second place. Wire transfer is the second important technique; 14 of the 16 respondents (87.5%), rank it at first or second place. Regular mail and professional couriers are used as third and fourth important techniques for transferring funds among various locations of the companies.

Accounts Receivable Management

Why do firms grant credit to their customers? Marketing together with competitive conditions is the most frequently used reason. Twenty-seven out of 34 companies (79.4%) give highest rank to this variable. Industry or trade norms and bad debt losses appear as the second and the third important factors. Client bargaining power, potential implication of the inventory requirement, existing production capacity, and degree of operating leverage are other factors responsible for granting credit.

Most of the manufacturing companies investigate the characteristics (four C's) of customers, viz., character, capacity, capital and condition when granting credit to them. Twenty-seven out of 31 respondent companies (87.1%) consider these characteristics as the most important than the formal credit appraisal. Credit scoring is used by 10 firms and sequential credit analysis by 12 firms. Nine companies also require bank guarantee and customer deposit for credit granting to the customers.

How do companies monitor the payment behaviour of customers that have been granted credit? Ageing schedule is mentioned as the most important measure. Thirty-three companies use this technique and twenty-six of them (78.8%) rank it at the first place. Collection period is the second important monitoring technique and accounts receivable turnover is the third method. Collection experience matrix is theoretically considered as a superior method of monitoring receivable (Lewellen and Johnson, 1972). But this method is accorded low importance by the Sri Lankan companies.

What criteria are used for evaluating the changes in credit terms? Large number of responding companies (31) consider the effect on the firm's sales as the most important criterion. Effect on the level of the firm's profit is the second most important factor,

with 21 out of 29 respondent companies giving it first or second rank. Effect on the level of accounts receivable and on return on investment (ROI) are third and fourth important criteria.

Inventory Control and Management

Finance manager plays major role in inventory management in about one-third of the Sri Lankan manufacturing companies. Management committee comes next for this task. Managing director or other managers such as stores manager, accounts assistant, production manager, general manager and profit centre manager are also responsible for managing inventory in some companies.

Control techniques. What techniques are used by the Sri Lankan firms for controlling inventory? Fifteen out of 35 responding firms follow perpetual inventory control (PIC) system to control inventory. Inventory turnover is the second important technique with 13 firms (37.1%) following this method. ABC analysis is used by six companies (17%).

Our results do not indicate significant relationship between inventory control techniques and the company size, profitability, overall working capital policy and approach (Table 3). The two most popular techniques, ABC analysis and PIC system, are used by firms irrespective of the differences in size, profitability and type of working capital policy. However, it is revealed that out of the six companies using ABC analysis technique, two are large-sized and four medium-sized companies while five are high-profit-earning companies and one low-profit-earning company.

Replenishment of inventory. Several techniques are used by companies for deciding the replenishment and purchase of inventory. But a large number of them (21 out of 36) use material requirement planning (MRP) technique for replenishing inventory. Four companies each follow inventory guidelines and economic order quantity (EOQ) technique. *Ad-hoc* decision for inventory management is employed by three firms (8.3%). Remaining companies (four) use miscellaneous methods such as stock turnover ratio, company sales, combination of MRP and other techniques to decide the appropriate quantity of inventory to replenish. The relationships between the techniques for replenishing inventory and the company size, profitability, overall policy and specific policy of working capital are summarised below (Table 3).

- Large-sized companies follow the MRP, EOQ and other established techniques. They do not go by the industry guidelines or *ad-hoc* decisions. Although medium- and small-sized companies also follow the established techniques, yet some of them do follow industry guidelines and *ad hoc* decisions.
- A number of the high-profit-earning firms follow the MRP technique (12 out of 20 respondents); but some of them also use EOQ technique, industry guidelines and *ad-hoc* decisions. Similar is the situation in the case of the moderate-profit-earning firms also. However, among the low-profit-earning firms, a few follow MRP technique and others follow industry guidelines, *ad-hoc* decisions or other techniques.
- Companies with formal working capital management policy do not seem to follow industry guidelines or *ad-hoc* decisions for

inventory replenishment, whereas companies with informal policy follow all techniques.

Table 3. Techniques for replenishing and controlling inventory

Technique	No. of resp.	Company Size				Profitability				Overall Policy			Specific Policy	
		L	M	S	H	M	L	F	I	N	C	A	M	O
<u>Replenishment :</u>														
Ad-hoc decisions	3	-	2	1	1	1	1	-	3	-	1	-	1	1
Industry guidelines	4	-	4	-	2	-	2	-	3	1	-	-	3	1
EOQ	4	3	-	1	3	1	-	2	2	-	-	-	3	1
MRP	21	5	10	6	12	5	4	6	13	2	5	2	9	3
Other	4	1	2	1	2	1	1	1	2	1	1	1	-	1
Total responses	36	9	18	9	20	8	8	9	23	4	7	3	16	6
Significance					0.19374			0.83355			0.64549			0.61842
<u>Control</u>														
Inventory turnover	13	2	8	3	7	4	2	4	9	-	3	1	6	3
ABC analysis	6	2	4	-	5	-	1	2	3	1	1	-	4	-
PIC system	15	3	6	6	6	4	5	3	9	3	3	2	5	2
Other	1	1	-	-	1	-	-	-	1	-	-	-	-	1
Total responses	35	8	18	9	19	8	8	9	22	4	7	3	15	6
Significance					0.25990			0.50593			0.69002			0.57283

- Companies with an aggressive or a conservative working capital approach mostly use the MRP technique. But companies with moderate approach use all techniques for inventory replenishment and control.
- Overall, a majority of the firms follow the MRP technique for inventory replenishment irrespective of differences in size, profitability or the nature of working capital policy.

What factors do companies consider while purchasing inventory and what is their importance? The availability of components and materials is the most important variable in the inventory purchases of the Sri Lankan companies. Sixteen out of twenty five companies (64%) give first rank to this factor. Shortage-cost is the second important factor, with 19 out of 31 companies (38.5%) rating it at the first or the second place. Price discount and

credit terms of suppliers are ranked as the third and the fourth important factors. Five companies consider other variables as important in the purchase of inventory. These factors include quality and reliability of products (a food and beverage company), annual budget (a ceramic company), continuity of production (a footwear company), economy of purchases (a footwear company), and market demand of products (a food and beverage company).

What are the factors considered by the Sri Lankan companies for replenishment of inventory produced in-house? Production schedule is the most important variable. Twenty out of 33 (60.6%) respondent companies rank it at the first place. Seasonality of demand is the second most important factor. Inflationary effect and shortage-cost are not considered as first-priority factors by any company. One company considers necessity of the item as a deciding factor.

Inventory policy changes. Companies use multiple criteria for evaluating the changes in the inventory policy. Thirty-two firms consider the effect on the firm's profit as the important criterion, although with varying degree of emphasis. Thirty-one firms think the effect on level of investment as important factor. Effect on ROI (28 respondents) and effect of inventory cost (27 respondents) are other important considerations of the inventory policy changes.

Accounts Payable Management

In the majority of the Sri Lankan companies in the survey, accounts payable is controlled and managed by finance manager or controller. Three-fourths of the responding (27 out of 36) firms maintain less accounts payable than accounts receivable. Six firms, however, maintain high percentage of accounts payable and the remaining three companies have accounts payable approximately equal to accounts receivable. Thus, the Sri Lankan manufacturing companies generally operate on a deficit-credit basis, and as a consequence, they would depend on non-spontaneous source for financing their trade deficit.

The overall working capital policy and approach have significant effect on the credit position of the Sri Lankan firms. Most firms with accounts payable less than accounts receivable are medium-sized, high-profit-earning firms, and they follow informal and moderate or conservative working capital approach. This is indicative of the conservative and risk-averse attitude of the Sri Lankan managers in managing working capital finance.

Companies with flexible working capital approach (changing over time) generally maintain accounts payable less than receivable. Overall, company size and profitability have no significant relationship with the credit position of the responding firms.

Cost of accounts payable. Does accounts payable involve a cost? For most of the Sri Lankan firms in the survey, accounts payable is a low or free of cost source of finance. About half of the responding companies (16 out of 33) report that they do not incur any cost; seven companies incur annual cost between 1.0% to 5.9%, and two greater than 15%. There is no relationship between the annual cost of trade and company size, profitability and working capital policy.

Cash discount. The question of practice/policy on availing cash discount affects annual cost of trade supplies. Half of the responding companies (17 out of 33) always take the discount from their suppliers. Nine firms sometimes avail cash discounts and five never make use of this facility. There seems to be no relationship between cash discounts and size, profitability and working capital policies of the companies in Sri Lanka.

Working Capital Funds

Responsibility. In large number of companies (26 out of 34 respondents) finance manager is responsible for working capital funds management. The managing director is responsible for working capital funds management in about one-fourth (8) firms. In one company board of directors is involved in controlling short-term funds.

Purpose. Companies need working capital to meet their regular, seasonal and cyclical needs. More than half of the responding Sri Lankan firms (21 out of 36) use working capital for meeting their regular and constant need. Six companies use working capital funds for financing their cyclical, five for non-spontaneous, and remaining four for seasonal needs.

Table 4. Use of working capital funds

Purpose	Total sample	Company size					Profitability					Overall policy					Specific approach		
		L	M	S	H	M	L	F	I	N	C	A	M	O					
Regular & constant need	21	5	11	5	14	1	6	5	14	1	5	1	12	2					
Cyclical need	6	3	2	1	3	1	2	2	4	0	1	1	3	1					
Seasonal need	4	1	2	1	2	2	-	1	2	2	-	-	1	1					
Nonspontaneous need	5	-	3	2	1	4	-	2	3	1	1	1	-	2					
Total responses	36	9	18	9	20	8	8	9	23	4	7	3	16	6					
Significance					0.69729				0.01253					0.19009				0.44168	

There seems to be some relationship between profitability and primary use of working capital funds (Table 4). Most high-profit-earning firms use working capital funds for regular and constant part of working capital, and most moderate-profit-earning companies to meet non-spontaneous needs. Low-profit-earning companies use short-term working capital funds to finance both regular and cyclical needs of their business. No significant relationship exists between primary use of working capital funds and company size or working capital policy. However, it is observed that a number of companies requiring working capital funds for regular and constant needs are medium-sized, high-

profit-earning companies that also follow informal and moderate working capital policies.

Sources. Banks are the major source of financing working capital needs in Sri Lanka. Bank finances come in the variety of forms. About two-thirds Sri Lankan manufacturing companies in our survey (23 out of 36) finance their working capital needs through bank overdraft. Six companies use letter of credit and four companies other short-term financing methods, such as trust receipt loan (TR loan), working capital loan, bill discounting, import loan or a combination of overdraft and over-night loans.

There does not appear to be a definite relationship between working capital financing methods and company size, profitability or working capital policy. However, a number of companies that use overdraft are medium-sized, high-profit-earning companies with informal and moderate working capital policies.

Collateral. About two-fifths (15) of the responding manufacturing companies in Sri Lanka occasionally require collateral, while 13 companies never need collateral for bank borrowing. This implies that in Sri Lanka banks finance working capital loans depending upon the strength of the balance sheet figures. About one-fourth companies (8 out of 36) always require collateral for bank loan. The requirement of collateral does not have any particular relationship with size, profitability or the working capital policy of companies. However, the results indicate that a number of high-profit-earning, medium-sized, firms that also follow informal and moderate working capital policy occasionally require collateral.

Cost. What is the cost of working capital funds to Sri Lankan manufacturing companies? The working capital funds in Sri Lanka are expensive. Most companies (24 out of 36) in the survey have annual cost ranging from 15% to 19.9%. Less than 10% interest-loan and greater than 20% interest-loan are availed by five companies each. For two companies cost is between 10% to 14.9% and for five companies less than 10%. Although relationship between size, profitability or working capital policy with annual cost of working capital funds is not significant, yet it can be observed from the results that the companies that incur cost between 15% to 19.9% are high-profit-earning, medium-sized companies with informal and moderate working capital policies.

Planning and Controlling of Working Capital

In this section, we analyse the Sri Lankan companies' working capital controlling techniques, cash budgeting methods, working capital management with ROI and implication of working capital for capital budgeting in practice.

Cash Budgeting

The main objective of the Sri Lankan manufacturing companies in preparing cash budget is to plan for shortage and surplus of cash; thirty out of 36 (83.3%) companies prepare cash budgets to forecast final cash surplus or shortage. The remaining six companies have different purposes like alternative sales forecasts, alternative credit terms, or alternative inventory policy.

Seventeen out of 36 (47.42%) companies prepare monthly cash budget and 10 companies daily cash budget. Most of the companies preparing daily cash budget are large-sized, high-profit-earning companies that also follow formal and aggressive working capital policy (Table 5). The situation is quite different in the case of

Table 5. Cash budget

Period	Total sample	Company size					Profitability					Overall policy					Specific policy				
		L	M	S	H	M	L	F	I	N	C	A	M	O							
Daily	10	4	4	2	6	2	2	4	5	1	1	3	3	2							
Weekly	8	1	6	1	4	-	4	1	7	-	2	-	5	1							
Monthly	17	4	8	5	9	6	2	4	10	3	3	-	8	3							
Quarterly	1	-	-	1	1	-	-	-	1	-	1	-	-	-							
Total responses	36	9	18	9	20	8	8	9	23	4	7	3	16	6							
Significance					0.38236			0.26531			0.59580			0.17050							

companies preparing monthly budget. Most of them are small-sized, medium-profit-earning, without a working capital policy and having a moderate approach. One-fourth companies prepare cash budgets on weekly basis. Quarterly cash budgeting is not very popular in Sri Lanka.

Monitoring

Current ratio is the most practised technique for monitoring working capital in Sri Lanka. Twenty-one companies accord first priority to this technique. Working capital turnover is the next important technique; twelve companies rate it as number one technique. Working capital as a percentage of assets is used as the primary monitoring techniques by only three companies. Other techniques used are rollover budgets (cement company), limitation of bank facility (a textile company), seasonality and sales (food product company), or sales (food product company).

Evaluation of Working Capital Changes

How is the effect of changes in working capital components evaluated? The evaluation of the working capital changes in terms of ROI is undertaken by the Sri Lankan companies with different degree of emphasis. Twenty-four out of 35 (68.57%) responding firms sometimes utilise return on investment criterion for evaluating changes in the management of working capital components. Six firms always use ROI, while rest of the companies never consider ROI for evaluating the changes in working capital components.

What hurdle rate is used to compare ROI resulting from the working capital changes. Twenty-seven out of thirty-five (75%) companies always use interest rate as a discount, or hurdle rate. Average cost of capital is used by seven out of 36 (19.4%) firms to evaluate changes in working capital. Cost of equity capital is

used by one firm and one firm does not at all use discount, or hurdle rate for evaluating the working capital changes.

Working Capital and Capital Budgeting

The initial working capital is not always included in the evaluation of capital budgeting decisions by companies in Sri Lanka. Fifteen out of 35 responding firms infrequently consider initial working capital for the evaluation of capital budgeting decisions. Those companies which always consider initial working capital investment are medium-sized, high-profit earning companies with aggressive working capital approach.

Seventeen out of 36 (47.22%) firms always include and 14 out of 36 (38.89%) sometimes include changes in working capital components in capital budgeting projects. There seems to be a direct relationship between profitability and tendency of including changes in working capital components as part of the capital budgeting projects. High-and medium-profit-earning firms are more inclined in considering the working capital changes in the capital budgeting than the low-profit-earning firms.

SUMMARY

The managing director plays a major role in formulating the working capital policy in Sri Lankan companies. Large-sized companies generally have a formal policy while medium- and small-sized companies either have informal or no policy for working capital. On the whole, most companies follow an informal policy. Again company size is an important factor vis-à-vis the working capital attitude, viz., aggressive, moderate and conservative. Large-sized firms are more aggressive, medium-sized firms moderate and small-sized firms conservative in managing their working capital.

The review of working capital varies according to company size. Large- and medium-sized companies review their working capital policy on a monthly basis, while small-sized companies do not have any fixed policy of review; it is mostly situational.

Current-assets-holding-period is the major method for estimating the working capital needs. Estimation methods do not depend on company size, profitability or overall working capital policy.

The finance manager is responsible for cash management. Most companies follow verbal or written requests as a technique of reducing deposit float. Stretching of the credit is an important technique for increasing disbursement float. Half of the survey companies have geographical locations in different provinces. They use depository transfer cheques for moving funds from one location to another.

The finance managers of most companies consider character, capacity, capital, and conditions of customers when they grant credit to them. Ageing schedule is the most important measure to monitor the payment behaviour of customers. More than 90% companies consider marketing and competitive considerations as the evaluating parameters for the credit terms and policy. Effect on the company sales is another important criterion in this regard.

Most of the Sri Lankan manufacturing companies use the material requirement plan (MRP) in deciding on the appropriate amount of

inventory to replenish. A majority of companies consider availability of parts and materials in deciding on the replenishment quantities of inventory. For inventory control, most of the companies use perpetual inventory control (PIC) system. The effect on the firm's profit is analysed in evaluating proposed changes in the inventory policy.

Companies that follow informal working capital policy, have accounts payable less than accounts receivable, while companies without a policy for working capital, have accounts payable greater than accounts receivable. Companies with formal policy maintain a balance between accounts receivable and accounts receivable. In all, aggressive firms have accounts payable greater than accounts receivable; conservative and moderate firms keep their accounts payable less than accounts receivable. Most finance managers always obtain cash discounts from suppliers on time and minimise annual cost of the trade credit.

High-profit-earning firms always use commercial bank loans to finance regular and constant part of the business cycle. Low-profit-earning and medium-sized firms use bank funds to finance cyclical and non-spontaneous needs respectively. Most of the working capital funds are obtained from the commercial banks as bank overdrafts. Annual cost of bank loans is generally between 15% to 20%.

Most companies use current ratio for monitoring the working capital over time. Cash budgets are prepared on monthly basis for planning for shortages and surpluses of cash. Return on investment is sometimes utilised for evaluating changes in the management of working capital components.

A few companies consider the initial working capital in the capital budgeting projects. However, most companies except low-profit-earning firms always consider changes in working capital in capital budgeting decisions. Three-fourths of the survey companies use interest rate as a hurdle rate for evaluating changes in the management of working capital components.

The working capital practices in Sri Lanka are quite similar to the practices in the USA - a developed country (Exhibit 1). However, the use of information technology distinguishes the practices in two countries. In the USA, companies use highly sophisticated information technology to manage the working capital components. For example, the USA companies have computerised systems for inventory control. They also use faster methods of transferring funds. Yet another difference is that the USA companies invest their surplus cash in the money market instruments. Sri Lanka is still in the developing stage; the Sri Lankan companies are not in a position of using advance information technology in managing their working capital. Also, the money market is not sufficiently developed to provide opportunity to companies to deploy their surplus cash profitably.

Exhibit 1. Comparison of the WCM practices in Sri Lanka and the USA

	USA*	SRI LANKA
WCM POLICY		
Overall policy	Informal	Informal
Formulation responsibility	VP (fin.)	Managing director
Review periodicity	Whenever necessary	Monthly
Estimation of wc needs	Percentage of sales	Current-assets holding
Approach	Situational	Moderate
MANAGEMENT OF WC COMPONENTS:		
<i>Cash</i>		
Primary responsibility	Treasurer	Finance manager
Deposit float reduction	Lock boxes	Verbal/written requests
Disbursement float enhancement	Centralised disbursing	Stretching payable
Internal fund movement	Wire transfer	Depository transfer/cheques
<i>Receivable</i>		
Primary responsibility	Treasurer	Finance manager
Granting credit	Four C's of credit	Four C's of credit
Monitoring	Ageing schedule	Ageing schedule
Rationale for credit policy	Marketing and competition	Marketing and competition
Policy evaluation focus	Effect on firm profit	Effect on firm profit
<i>Inventory</i>		
Primary responsibility	Controller	Finance manager
Inventory replenishment	Computerised control	MRP
Material purchase	Availability	Availability
Production Control	Production schedules	Production schedule
Policy changes	Effect on firm profit	Perpetual inventory Effect on firm profit
<i>Payable</i>		
Primary responsibility	Controller	Finance manager
Credit position	AP less than AR	AP less than AR
Annual cost	Negligible	Negligible
Cash discounts	Always take	Always take
<i>WC funds</i>		
Primary responsibility	Treasure	Finance manager
Primary use	Non-spontaneous	Regular & constant part
Types of funds	Line of credit	Overdraft
Collateral	Never require	Occasionally require
Annual cost	8.0 - 10.9%	15.0 - 16.6%
WC PLANNING & CONTROL :		
Controlling technique	Current ratio	Current ratio
Interval of cash budget	Daily	Monthly
Purpose of cash budget	Plan shortage & surplus	Plan shortage & surplus
ROI & W/C changes	Sometimes	Sometimes
Discount rate	Average cost of capital	Interest rate
Initial W/C in capital budgeting	Always	Sometimes
W/C changes in capital budgeting	Sometimes	Always

*Based on Smith and Shirley (1978).

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