

## Working Capital Management of Small Scale Industries in Haryana

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### I Introduction

Working capital is the life-line of every concern. There might not be many business firms in the world where besides investment in fixed assets, fund would not be needed for carrying on day-to-day operations of the business or for working capital. Importance of working capital can further be judged from the fact that many a time the main cause of the failure of a business enterprise has been found to be the shortage of current assets and their mishandling. Whereas fixed investment in fixed assets creates capacity, working capital makes the utilization of that capacity possible. This problem of under-utilization of capacity can be solved-through competent administration of current assets. Sometimes it is said that the fixed capital creates the mill and working capital provides the grist i.e. grinded by the mill, so grist mill is useless.

Working capital is essentially circulating working capital, working capital moves from one process to another from cash to inventories to sales, working capital is used to designate and back to cash. Working capital in a business enterprise may be compared to the blood of the human body: blood gives life and strength to the human body and working capital imparts life and strength – profits and solvency to the business organization. The need for working capital to run the day-to-day business activities need not be over-emphasized. One hardly finds a business enterprise which does not require any amount of working capital. A manufacturing enterprise is sure to collapse without an adequate supply of raw materials to process or without cash to meet the wage bill or without the capacity to wait for the market for its finished goods or without the ability to grant credit to its customers.

### II Objective of the Study

The present study is an attempt to analyze the overall working capital management of small scale industries in Haryana. This study also examines the structure and utilization of working capital in small scale industries in Haryana.

### III Methodology

#### Research Design

Research design of the present study is exploratory as well as descriptive. Since the purpose of the study is to select variable which would likely to be influential in determining the study. So, the research has a 'Casual Design' also. Thus, research design of present study is the combination of all these three designs.

#### Sample Design

The researchers have taken 100 samples of small scale industries which his selected at randomly from five groups of Gurgaon district. The sample design is shown in table 1:

Table 1: Sample Design

Sr. No.	Name of Groups	Number of Industries	% of Customers
1.	Food products	25	20.0
2.	Wooden products	25	20.0
3.	Leather products	25	20.0
4.	Chemical products	25	20.0
5.	Repair & services products	25	20.0
	<b>Total</b>	<b>100</b>	<b>100.00</b>

#### Data Collection Method

To ensure the relevance of the data collected, care is taken to minimize the erosion the cost and human involvement affect the reliability of the data collected. The present study his based mainly on primary data. Primary data are collected by personal interviews, observation and questionnaires which are filled up by different categories of customers. A number of questions pertaining to the problems are framed and these questions are in proper sequence. Most of the questions are of multiple choices and close ended type and filled by using survey method. The period of the study is 2009-10.

### IV Result and Discussion

A part from their low-capital base and the high employment potential, small scale industry ensure decentralized pattern of growth which avoids the evils of concentration and urbanization. In view of these reasons, both central and state governments have taken several measures from time to time to encourage this sector.

## Correlation and Regression Analysis

In order to observe more precisely the behaviour of working capital in relation to sales in the selected groups of industries, Co-efficient of correlation 'r', their 't' values, co-efficient of determination 'r<sup>2</sup>' and linear regression equations have been computed in the table 2.

**Table: 2**

**Showing Co-efficient of Correlation between Working Capital and Sales along with their 't' values, Co-efficient of Determination and Regression Equation**

Group	Linear Regression Equation X on Y	r	r <sup>2</sup>	't' value
Chemical products	X = 6.15+0.20 Y	0.92	0.85	6.7441**
Repair & services	X = 76.99+0.08 Y	0.25	0.06	0.7162
Leather products	X = 17.46+0.11 Y	0.91	0.83	6.1459**
Wooden products	X = 17.13 – 0.17 Y	-0.56	0.31	1.8953
Food products	X = -1.02+ 0.10 Y	0.58	0.34	2.0387
Textile products	X = 9.59+0.08 Y	0.70	0.49	2.7618*
Aggregate	X = 12.30+0.16 Y	0.59	0.35	2.0448

Source: Compiled from annual reports of the respective units.

Note:

\*Significant at 5 percent level

\*\* Significant at 1 percent level

Here X = Inventory

Y = Sales

The table portrays that there is positive correlation between working capital (dependent variable) and sales (independent variable) and significant at 99 percent level of confidence in chemical products, leather products and textile products. There is also positive correlation in working capital and sales in Repair & services and Food products but it is statistically insignificant. Wooden products is the only exception where there is a negative correlation however statistically insignificant. The same fact is witnessed by high value of co-efficient of determination. It shows that the value of r<sup>2</sup> is very high in case of chemical products, leather products and textile products. It means that much of change in working capital is brought about by the change in the volume of sales. However, this value is low in case of Repair & services, wooden products and Food products. This shows that only a small change is brought about in working capital by change in the volume of sales in these groups of industries.

The linear regression equations given in the table can also be used for projecting the requirements of working capital for a given volume of sales in any of the groups under study. The value of parameter 'b' indicates the sensitivity with which working capital in a concern

changes for a unit changes in sales. The value of parameter 'a' points out the capacity of the concern to adjust the size of its working capital according to changes in sales. The value of parameter 'b' is lowest in Textile products. It reflects upon the efficiency of management in controlling the size of working capital for a unit increase in sales. Also the value of 'a' is lowest in textile products than other products. On the whole, this fact indicates that textile products have an efficient control on working capital as compared to any other products.

**Table: 3**

**Showing Co-efficient of Correlation between Current Assets and Sales along with their 't' values, Co-efficient of Determination and Regression Equation**

Group	Linear Regression Equation X on Y	r	r <sup>2</sup>	't' value
Chemical & chemical products	$X = 14.45 + 0.41 Y$	0.93	0.87	7.1211**
Repair & services	$X = 118.90 + 0.15 Y$	0.31	0.10	0.9088
Leather & leather products	$X = 19.74 + 0.32 Y$	0.87	0.76	4.9844**
Wooden products	$X = 35.51 - 0.18 Y$	-0.25	0.06	0.7224
Food products	$X = -6.40 + 0.76 Y$	0.99	0.98	16.0954**
Textile & textile products	$X = 12.36 + 0.34 Y$	0.97	0.94	10.9694**
Aggregate	$X = 3.14 + 0.45 Y$	0.77	0.59	3.4126**

Source: Compiled from annual reports of the respective units.

Note: \*\* Significant at 1 percent level  
Here X = Inventory, Y = Sales

Table 3 portrays co-efficient of correlation 'r' between current assets and sales along with their 't' values (to test the significance of correlation), coefficient of determination (r<sup>2</sup>) and linear regression equation for six groups of industries together with their aggregate position. It appears that there is positive significant correlation (99 percent level of confidence), in current assets and sales in chemical products, leather products, food products and textile products. There is also positive correlation in current assets and sales in Repair & services but it is statistically insignificant. But the Wooden products are sole exception where there is a negative correlation however statistically insignificant. The same fact is witnessed by the value of co-efficient of determination. It seems that this value is relatively high in Chemical products, Leather products, Food products and Textile products. It means that much of change is brought about in current assets by the change in the amount of sales. However, this value is very low in Repair & services and Wooden products which show that only a small change is brought about in current assets by change in the volume of sales in these groups of industries.

The linear regression equations given in the table can also be used for projecting the requirement of current assets for a given volume of sales in any of the groups under study.

The value of parameter 'b' which indicates sensitivity of current assets in relation to sales is lowest in Repair & service products. It shows more effective control over change in working capital with a change in the volume of sales. Also, the value of parameter 'a' is very lowest in case of Repair & services products. Both these values point out towards the fact that adjustment in working capital is possible in this group of industry along with the change in sales.

### Variance Analysis

**Table: 4**

**Two way classification of Variance Analysis: Current Ratio**

Source of Variation Between	Sum of Squares	Degree of Freedom	Mean Sum of Squares	Variance
1	2	3	(2÷3)	
Row (Time-wise)	1.24	9	0.14	$F = \frac{0.14}{0.08} = 1.75$
Columns (Group-wise)	12.33	5	2.47	$F = \frac{2.47}{0.08} = 30.88^*$
Residual	3.80	9×5=45	0.08	
Total	17.37			

Source: Compiled from annual reports of the respective units.

Note: Tabulated 'F' value at 5 percent level is 2.10 for  $V_1 = 9$ ,  $V_2 = 45$

Tabulated 'F' value at 5 percent level is 2.40 for  $V_1 = 5$ ,  $V_2 = 45$

\*Significant at 5 percent level.

Table 4 shows two way classification of variance analysis, viz., rows taming years and columns pertaining groups of industries with regard to current ratio. It appears from the table that the computed value of 'F', i.e., 1.75 pertaining years (rows) is lower than the table value at 95 percent level of confidence. It means that he performance over ten years period does not differ significantly so far as this ratio is concerned. However, the computed value of 'F', i.e., 30.88 pertaining groups of industries (columns) is higher than the table value at 95 percent level of confidence. It shows that the performance of different groups of industries vary so far as this ratio is concerned. In other words, the current ratio of different groups of industries is not alike.

**Table: 5****Two way classification of Variance Analysis: Quick Ratio**

Source of Variation Between	Sum of Squares	Degree of Freedom	Mean Sum of Squares	Variance
1	2	3	(2÷3)	F
Row (Time-wise)	0.26	9	0.03	$F = \frac{0.03}{0.08} = 0.43$
Columns (Group-wise)	6.87	5	1.37	$F = \frac{1.37}{0.08} = 19.57^*$
Residual	3.25	9×5=45	0.07	
Total	10.38			

Source: Compared from annual reports of the respective units.

Note: \*Significant at 5 percent level.

Table 5 shows two-way classification of variance analysis, viz., rows pertaining years and columns pertaining groups of industries with regard to the quick ratio. It appears from table that the calculated value of 'F', i.e., 0.43 pertaining years (rows) is lower than the table value. It shows that the performance over ten year's period does not vary significantly with regard to this ratio. However, the computed value of 'F' being 19.57 pertaining groups of industries (columns) is higher than the table value at 95 percent level of confidence. It shows that the quick ratios vary or different groups of industries under study.

**Table: 6****Two way classification of Variance Analysis: Net Working Capital and Profit**

Source of Variation Between	Sum of Squares	Degree of Freedom	Mean Sum of Squares	Variance
1	2	3	(2÷3)	
Row (Time-wise)	4,679.67	9	519.96	$F = \frac{519.96}{489.08} = 1.06$
Columns (Group-wise)	8,772.31	5	1,754.46	$F = \frac{1,754.46}{489.08} = 3.59^*$
Residual	22,008.39	9×5=45	489.08	
Total	34560.37			

Source: Compiled from annual reports of the respective units.

Note: \*Significant at 5 percent level.

Table 6 portrays two-way classification of variance analysis, viz., rows pertaining years and columns pertaining groups of industries in regard to the ratio of net profit to working capital. It appears from the table that the computed value of 'F' being 1.06 pertaining years (rows) is lower than the table value at 95 percent level of confidence. It means that the performance of all the years is alike so far as this ratio is concerned. In other words, the ratio of net profit to working capital does not vary in different years. But, the calculated value of 'F' being 3.59 pertaining groups of industries (columns) is higher than the

table value at 95 percent level of confidence. It shows that the performance of different groups of industries varies so far as this ratio is concerned.

**Table: 7**

**Two way classification of Variance Analysis: Net Profit and Sales**

Source of Variation	Sum of Squares	Degree of Freedom	Mean Sum of Squares	Variance
1	2	3	(2÷3)	F
Row (Time-wise)	13.31	9	1.48	$F = \frac{1.48}{2.52} = 0.59$
Columns (Group-wise)	63.09	5	12.62	$F = \frac{12.62}{2.52} = 5.01$
Residual	113.36	9×5=45	2.52	
Total	189.76			

Source: Compiled from annual reports of the respective units.

Note: \*Significant at 5 percent level.

Table 7 shows two-way classification of variance analysis, viz., row pertaining years and columns pertaining groups of industries in regard to the ratio of net profit to sales. It appears from the table that the calculated value of 'F' (0.59) pertaining years (rows) is lower than the table value at 95 percent level of confidence. This shows that the performance over ten year's period does not vary significantly with regard to this ratio. However, the computed value of 'F', viz., 5.01 pertaining groups of industries (columns) is higher than the table value at 95 percent level of confidence. It appears that profitability ratio vary for different groups of industries.

## V Conclusion

The progressive growth in current assets at a rate faster than sales shows that the current assets are not utilize properly. The same fact is witnessed by current assets turnover ratio. Similarly, the progressive growth in working capital at a rate faster than sales shows that working capital is not utilized properly. This fact is also confirmed by working capital turnover ratio. Therefore, there is need for proper utilization of current assets and also net working capital. The lack of expertise is an important factor for mis-management of working capital in small scale enterprises. It should be well realized that management of working capital is an important function.

There is no doubt that if there is proper management of working capital in terms of determination of optimum size of working capital, proper and judicious allocation among its various components, proper financing mix of working capital, the twin objectives, viz.,

solvency and profitability can be realized simultaneously. The basic question here is to view the management of working capital in its total preoperative. So we suggested that to adopt a mufti dimensional approach of the defective management of working capital in small scale industries in Haryana.

Working capital management is extremely important in small business since it is relatively more important in small companies than in large companies. A firm may sometimes be able to reduce investment in fixed assets by renting or leasing plant and machinery but it cannot avoid investment in current assets. The management of working capital also helps the management in evaluating various existing or proposed financial constraints and financial offerings.

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