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Chapter - 4

BEHAVIOURAL ANALYSIS OF CHARGEABLE CURRENT ASSETS

The New Bank Lending System focuses great attention on two components of chargeable current assets, namely, the inventory component and the receivable component. For both these components, norms prescribing their upper level provide the basis of bank lending. Also, one of the important goals of the new system has been to ensure that the levels of these two components come down in the industry so that the funds blocked in them are less for maintaining the same level of production and sales. In other words, the new system aimed at improving the turnover ratio of both these components of chargeable current assets in Indian industry. In this chapter therefore, an attempt has been made to analyse the behaviour of "Inventory" and "Receivables". The inventory behaviour has been analysed in Section-I of the chapter, while Section-II is devoted to the analysis of receivables.

Section - 1

Inventory Analysis

Efficient inventory management calls for dependable projections of inventory needs.¹ A number of sophisticated models are

available for the purpose but most of them suffer from several limitations.² Firstly, the restrictive assumptions bring detraction from reality, rendering the analysis futile for practical purposes to some extent atleast. Secondly, such models have optimising devices as their crux which are generalisations, not taking into account the deviations pertaining to reality. Hence, there are no measures for adaptations in such models. Therefore, the postulates emanating from them turn out to be misleading. For policy guidelines and practical utility, such models are either of little help or too expensive from the view point of time and cost to justify their application.³ Hence, an attempt has been made here to analyse inventory levels in a pragmatic frame-work.

Inventory levels may be understood in physical or financial terms. In this analysis, it is only the financial translation of physical levels that has been examined. Further, in this exercise, our assertion is that the level of inventory in an industrial firm is a crucial determinant of its operational efficiency. That part of inventory which is technically governed can not be reduced substantially, while the remaining is controllable and can be managed to achieve Working Capital Management Efficiency (WCME).

An important object of the New Bank Lending System (NBLS) has been to ensure that funds are not blocked in speculative, flabby

and imbalanced inventories and the inventory management efficiency improves in Indian industries.⁴ Secondly, the industries are required to adhere to the 'Norms' or 'Past Level' whichever is lower, with regard to their level of inventories.⁵ Thus, under the NBLS the level of inventories in the large and medium industrial units should decline over a period of time and settle around the norms or below them. It may be recapitulated here that under the New Bank Lending System, no industrial firm can get working capital finance from any bank if it fails to adhere to the norms prescribed for CCA by the RBI. In view of this, and to ascertain the efficiency of NBLS in regard to this most important goal, we have decided to formulate and test the following hypothesis.

Hypothesis

$H_1(a)$ "The level of inventories has significantly come down in the large industrial firms under the New Bank Lending System".

The hypothesis, $H_1(a)$ is to ascertain the efficiency of the NBLS in bringing down the levels of industrial inventories. To test the $H_1(a)$, a multi-technique, multi-stage analysis has been attempted. At the first stage, the behaviour of absolute level of inventory is examined through trend fitting and the

identification of a good fit has been done after analysing the sample data in the three generally accepted forms of a fit. At the second stage, in order to retest the hypothesis H_1 (a), relative inventory analysis has been done, both at the aggregate level and at the sample level.

Stage - I

Statistical Analysis of Inventory Levels

1. Straight line
2. Semi-log
3. Gompertz

Each type of these trend fitting methods has its own merits and demerits. Without being dogmatic or prejudiced about any method it is more scientific to apply each method and compare the results stemming from them for the purpose of selection of a good fit. Each method has a measure of trend fitting which provides specific results. For deciding upon the comparative edge of one method over the others, a better fit measure in the form of goodness of fit is adopted. Goodness of fit is quantitatively ascertained for each type of fit with the help of D statistics. D statistics represents the ratio of sum of squares of deviations of the observed values from the estimated values to the sum total of squares of deviations of the observed values from the mean values.⁶ In this analysis, sample data has been used to ascertain the availability of each measure.

Selection of a Better Fit

Industrial inventory finance requirements should be determined to highlight the actual and potential role of bank lending in the same. In India, we have a developing industrial sector. During the several five year plans, right since the second plan, the rate of industrial growth has been a little higher as compared to other sectors.⁷ According to the mid-term appraisal of the seventh five year plan, the growth rate of industrial output has been to the tune of 13.9 per cent during the preceeding plans.⁸ It is quite obvious that the industrial inventory as well as the financial requirements for the same are increasing. The Normal practice under such situations is to fit a curve that necessarily implies a constant rate of growth for industrial inventory. Such a pursuit may turn out to be futile. An attempt, therefore, is made here to test the degree of goodness of fit. On the basis of the estimation results, the three forms are compared, using the inventory data drawn from the sample units, for the year 1983-84 to 1987-88.

(1) Straight line

It is specified as under:⁹

$$y^*t = a + bt$$

Where -

y^*t = estimated growth rate of inventory with respect to time t .

- a = intercept of the function which indicates the segment of inventory which is irresponsive to time.
- b = the slope of the function with respect to time t. This being the linear function, the growth rate presumes the constant rate.
- t = time horizon in the analysis, i.e., 1983-84-1987-88.
- The said period data relates to the sample industries located in Gujarat.
- The value of these parameters are as under:
- $$y \cdot t = 89,52 + 3.6042 t$$
- (t...1983-84 to 1987-88.)

The estimated parameters of the linear function indicate the intercept and the slope of the straight line fit, respectively. The former parameter indicates the constant component of inventory holdings which is non-responsive to the time variable and may be treated as rock-bottom minimum inventory requirements¹⁰ or the sample units, following the production-function interpretation. The stock parameter indicates that in response to 3.6 units of time horizon variation inventory holdings undergo a unit change. The inventory holdings experience the changes in the form of reordering quantity units.

The linear estimate implies the linear combination of the variables which is a far-fetched assumption. Therefore, it is not applicable for realistic purposes.

With the help of the same tools of analysis, we can make use of this function to estimate the inventory needs for the year of reference. The values of the two parameters (a&b) serve as estimators to derive the value of dependent variable, i.e., inventory corresponding to the value of point of time figure.

(2) Semi-log function

Inventory requirements undergo changes with respect to time. Time horizon as an independent variable is not permitted to have wider oscillations for practical purposes. Therefore, instead of assuming away such a characteristic, it is stressed that a semi log form can take care of the variability and at the same time can facilitate estimation and interpretations.

The semi log form is ⁻¹¹

$$y \cdot t = a + b \log t$$

Where - the notations are used in the same manner as shown earlier.

$y \cdot t$ = estimated growth rate of inventory with respect to time.

a = intercept of the function which indicates the segment of inventory which is irresponsive to time.

b = the slope of the function with respect to time
t.

t = time horizon in the analysis i.e., 1983-84 to 1987-88.

The estimated function is as under:

$$y^*t = 91.84 + 1.03050 t$$

(t...1983-84 to 1987-88)

Taking the form of variable t based on natural log system, yields the measure of contribution of this variable towards deciding the level and the variations in the levels of inventory. Due to log form the effect or erratic variations are ironed out and imparted linearity. The change of 1.03 unit of this variable would evoke a unit change in inventory holdings reflected by reordering quantities. The intercept parameter is 91.84 which is a constant component of inventory requirements in the form of rock-bottom minimum inventory holdings. It is evident that the value of the said parameter is marginally higher than that obtained in the straight line fit. This is due to the change in the treatment of the behavioural pattern of the variable t. In the former fit, though it is subjected to the effects of erratic variations, the same is not needed to, while in the latter type of fit, the said effect is accommodated with the help of the log form of variable t.

But in this estimation the basic lacuna is that it does not touch even the periphery of the problem of revealing the pattern of the rate of growth over time, i.e., it does not enable us to find out whether the growth rate is varying and to what extent during the various subsets of this time horizon. The direction of growth rate is deduced but it may have several deviations in either direction which are of deferring magnitudes, too. This form of estimation does not throw any light on these aspects.

(3) Gompertz Fit

It is defined as:¹²

$$y^*t = ab(t)$$

Where the notations refer to the same variables as denoted earlier. This form allows for varying rates of growth of inventory for the sample units, depending on the values of the parameters, a and b .

If $B < 1$, it implies diminishing rate of growth of inventory and $b > 1$ implies increasing rate of growth of inventory.

The estimate obtained is as under:

$$y^*t = 302.52 (0.2927) 0.9668 t..$$

$$t = \dots(1983-84 \text{ to } 1987-88)$$

The constant component is quite higher than the two in the former types of fit due to the full fledged impact of erratic variations accommodated on the basis of this former fit. The power parameter related with variable t speaks for the growth and the degree of variability of inventory holdings. The constant component being 302.52 indicates that out of each growth rate and variation in inventory holding, reflected in terms of reordering quantities are almost three times of the same. The power parameter 0.97 indicates that the change on the base of 0.2927 would generate a unit change in inventory holdings, the unit of change being in terms of reordering quantities.

It is evident that time variable is in the power place, with the slope parameter being in base and unresponsive to time component parameter being multiplicative to slope parameter. The values of inventory would not only show the growth rate but would reveal the variability of it over a period of time.

The analysis aims at having an estimation tool obtain the dependable measure of inventory requirements. Therefore, it is worthwhile to get the comparative measure for the choice of a particular form. It calls for obtaining the goodness of fit of the function.

Out of the three alternative functional forms, the comparison of goodness of fit is worked out with the help of D statistics.

D has been defined as¹³

$$D = \frac{\sum (y_t - y^*t)^2}{\sum (y_t - \bar{y})^2}$$

Where -

y_t = observed value of inventory level at time t

y^*t = estimated value of inventory for the relevant time horizon.

\bar{y} = mean value of inventory levels.

Hence, D represents the ratio of sum of squares of deviations of the observed values from the estimated values to the total sum of squares of deviations of the observed values from the mean values.¹⁶ Using the same sample data the D values have been obtained as under :

| | <u>Type of fit</u> | <u>D Value</u> |
|----|--------------------|----------------|
| A) | Straight line | 0.068 |
| B) | Semi-log | 0.063 |
| C) | Gompertz | 0.069 |

On the basis of this we can conclude that Gompertz is a better fit. The growth rates of inventory for the time 1983-84 to 1987-88 are obtained with the help of three alternative functional forms which are shown below:

Table - 4.1 Estimated Growth Rates
of Inventory In Percentage

| Year | Straight | Semi log | Gompertz |
|---------|----------|----------|----------|
| | 1 | 2 | 3 |
| 1983-84 | 4.0 | 3.05 | 4.2 |
| 1984-85 | 3.0 | 3.05 | 3.1 |
| 1985-86 | 2.4 | 3.05 | 2.4 |
| 1986-87 | 6.8 | 3.49 | 6.9 |
| 1987-88 | 7.3 | 3.49 | 7.3 |

Note : The data has been calculated from the Annual Reports of Sample Industries.

As compared to the Gompertz and Straight line estimates semi log estimates are symmetric for 3 years. Thus they do not depict the variability in growth rates. Between straight line and Gompertz estimates, on the basis of the D statistic techniques, the latter is the better fit though the growth rate estimated under the two procedures do not differ. Hence, Gompertz estimates appear to be more reliable for ascertaining the industrial inventory growth rates and financial requirements for the same.

The above exercise assures us that the growth rate in the total inventory, in the sample industrial units is relatively systematic.

In order to test the hypothesis H_1 (a), inventory data has been analysed both at the aggregate as well as sample levels. The following table depicts changes in the industrial inventory levels in absolute as well as index form and also in relation to the sales at the aggregate level.

Table - 4.2 Inventory to Sales :
Aggregate Level

| Year | I | I_I | | S | S_I | | I/S | Inv. Turn over |
|---------|----------|--------|--------|----------|--------|--------|------|----------------------|
| | (Rs.Crs) | | | (Rs.Crs) | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1977-78 | 2289.51 | 100.00 | - | 8589.41 | 100.00 | - | 26.6 | 3.8 |
| 1983-84 | 5623.41 | 245.62 | 100.00 | 21708.60 | 252.74 | 100.00 | 25.9 | 3.9 |
| 1984-85 | 6243.13 | 272.69 | 111.02 | 25571.66 | 292.72 | 117.80 | 24.4 | 4.1 |
| 1985-86 | 7426.21 | 324.36 | 132.06 | 29432.64 | 342.67 | 135.58 | 25.2 | 4.0 |
| 1986-87 | 8130.32 | 355.12 | 144.60 | 32190.61 | 374.79 | 148.29 | 25.2 | 4.0 |
| 1987-88 | 8703.22 | 380.14 | 154.77 | 35811.19 | 416.93 | 164.96 | 24.3 | 4.1 |

Source- Financial performance of companies, ICICI portfolio
1987-88. The Industrial Credit & Investment Corporation
of India Ltd. Bombay-June 1989.

Explanations-

1. I = Inventory
2. I_I = Index of Inventory
3. S = Sales
4. S_I = Index of sales

Findings

- (1) The growth rate of inventory for the decade is 28.01 per cent per annum and that for the five years, taking 1983-84 as a base year, it is 10.95 per cent per annum. The growth rate of sales has been 31.69 per cent for the decade and 12.99 per cent for the five years taking 1983-84 as a base year. Thus, the growth rate of sales has exceeded that of total inventory for both the periods covered by the study. This indicates improvement in the efficiency of industrial inventory management.
- (2) To have a better appreciation we have also ascertained the changes in the inventory levels as percentage of sales and turnover. Accordingly, we find that the mean figure of the ratio of total inventory to sales is 25.27 per cent for the entire period. The positive deviation from the mean figure is 1.33 per cent and deviation on the negative side is 0.97 per cent. The deviations on either side of the mean value are marginal. This depicts reasonable consistency in the behaviour of inventory levels. However, as far as the decline in the level of inventories in relation to sales is concerned, it is of the order of only 2.3 per cent points over a period of eleven years. The decline being marginal, therefore, rejects our hypothesis H_1 (a).

- (3) The average inventory turnover at the aggregate level is 3.98 during the entire period. After a year of introduction of the New Bank Lending System, that is, in 1977-78, the inventory turnover was 3.8. After six years, it was just 3.9 and in 1987-99 it was 4.1. Thus, the inventory turnover increased only marginally from 3.8 to 4.1 during a period of 11 years.

Relative Inventory Analysis : Sample Level

To test the hypothesis H_1 (a) at the sample level, data drawn from the sample units have been analysed in the same manner as in the case of aggregate analysis as given below.

Table - 4.3 Inventory to Sales :
Sample Level

| Year | I (Rs.lacs) | I_I (%) | S (Rs. lacs) | S_I (%) | I/S (%) | IT (X) |
|---------|----------------|--------------|-----------------|--------------|------------|-----------|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 1983-84 | 68012.37 | 100.00 | 281653.41 | 100.00 | 24.1 | 4.1 |
| 1984-85 | 71739.25 | 105.48 | 314542.68 | 111.68 | 22.8 | 4.4 |
| 1985-86 | 76588.18 | 112.61 | 340178.80 | 120.78 | 22.5 | 4.4 |
| 1986-87 | 110119.09 | 161.91 | 456149.43 | 161.95 | 24.2 | 4.1 |
| 1987-88 | 119166.45 | 175.21 | 501498.56 | 178.06 | 23.8 | 4.2 |

Source- Annual reports of the sample industrial units for the concerned years.

Explanations-

Abbreviations in this table are as per the explanations given below table no. 4.2

Findings

- (1) In absolute terms, inventories have recorded a rise of Rs. 51154.08 lacs between 1983-84 to 1987-88 giving a growth rate of 15.04 per cent.
- (2) In relative terms, the inventory depicts a mixed pattern. Taking mean of the period being 23.48 per cent, the positive deviation is 0.72 per cent and the deviation on the negative side is 0.98 per cent. Thus, even when there is a clearcut rising trend in inventory in absolute terms, the relative growth pattern depicts a smaller range of deviation from the mean.
- (3) The growth rates of inventory and sales show a similar trend in terms of growth index; the former is marginally lagging behind the latter. This finding sustains our hypothesis H_1 (a), although the decline in the level of inventories relative to sales is only marginal.
- (4) The average inventory turnover for the aggregate sample during the study period has been 4.24. The highest recorded turnover was 4.4 in the year 1985-86 and the lowest was 4.14 in the years 1983-84 and 1986-87. This inventory turnover in sample industries has not improved during the period as it has just changed from 4.1 to 4.2. On this basis, the hypothesis, H_1 (a) can not be accepted.

In view of the acceptance of the H_1 (a) at the aggregate level and its rejection at the sample level, we now propose to test the same hypothesis on the basis of changes in the ratio of inventory to total current assets. A decline in this ratio means improvement in the inventory management efficiency. The following table depicts the relevant analysis both at the aggregate and the sample levels.

Table - 4.4 (A) Ratio of Inventory
to Working Capital : Aggregate Level

| Year | I (Rs.Crs) | I-1 (%) | WC (Rs.Crs) | I-1 (%) | L/WC (%) |
|---------|---------------|------------|----------------|------------|-------------|
| | 1 | 2 | 3 | 4 | 5 |
| 1977-78 | 3389.51 | - | 4648.20 | - | 72.9 |
| 1983-84 | 5623.41 | 4.34 | 11890.43 | 10.50 | 47.3 |
| 1984-85 | 6243.13 | 11.01 | 13394.58 | 12.65 | 46.6 |
| 1985-86 | 7426.21 | 18.95 | 15956.91 | 19.13 | 46.6 |
| 1986-87 | 8130.32 | 9.48 | 18227.11 | 14.23 | 44.6 |
| 1987-88 | 8703.22 | 7.04 | 19436.90 | 6.64 | 44.8 |

Table - 4.4 (B)
Ratio of Inventory
to Working Capital : Sample Industries

| Year | I (Rs.lacs) | WC (Rs.lacs) | I / WC (%) |
|---------|----------------|-----------------|---------------|
| 1983-84 | 68012.37 | 126461.81 | 53.8 |
| 1984-85 | 71739.25 | 136759.41 | 52.5 |
| 1985-86 | 76588.18 | 157614.60 | 48.6 |
| 1986-87 | 110119.09 | 238504.21 | 46.1 |
| 1987-88 | 119166.45 | 257580.30 | 46.3 |

Source - (A) Financial performance of companies, ICICI portfolio 1987-88, The Industrial Credit and Investment Corporation of India Ltd. Bombay -June 1989.

(B) Annual reports of the sample industries.

Explanations-

1. I = Inventory
2. WC = Working capital
3. I-1= Incremental

Findings

- (1) At the aggregate level, inventory constituted about 47 per cent of the total current assets in 1983-84 which came down to 44.8 percent in 1987-88. This shows that the substantial portion of gross working capital is employed and blocked in inventory. However, from the view point of testing the hypothesis, if we examine the change in the inventory ratio a decline is of 2.5 only points.

- (2) In case of sample units, on an average about 50 percent of the total working capital is employed in inventory. In 1983-84 the inventory ratio was about 54 percent which came down to 46 per cent in 1987-88. Even this lowest figure of the sample units is higher by 2.5 points compared to the aggregate level. However, as the inventory ratio has sloped down during the period, the hypotheses H_1 (a) is sustained on the basis of sample data also.
- (3) The analysis reveals an interesting phenomenon in the behaviour of both the total working capital and the inventory. The preceding analysis enabled us to accept the hypothesis H_1 (a) and that the inventory level has declined during the period. To ascertain the factor responsible for the same, we have made incremental growth analysis which shows that working capital increased at a faster rate compared to the inventory. Thus, the decline in the ratio may be attributed to a higher incremental growth in the working capital rather than an increase in the inventory level. The increase in working capital has been due to a greater dependence on market credit. Therefore, the hypothesis that inventory levels have come down significantly appears acceptable but it is not a significant decline. Therefore, its more appropriate to reject the hypothesis.

A new dimension of interest emerges from the above analysis. The question is that if the incremental growth in inventories is not commensurate with the growth in working capital, what has been the use of increased working capital? Working capital is employed in two main categories of chargeable current assets namely, inventories and receivables. Has this increased amount of working capital gone for financing the receivables? It would, therefore, be appropriate to examine this through the analysis of appropriate data.

Section - II

Receivable Analysis

Hypothesis

$H_1(b)$ "The receivables management efficiency in Indian Industries has improved during the post NBLS period".

It is proposed to test this hypothesis at the aggregate level through three indicators. At the outset, the first indicator identified is the Receivable Index - S (R_{I-1}) arrived at by ascertaining the share of receivables in the sales during each year. The second indicator is the Receivables Index - C (R_{I-2}) arrived at by computing the share of receivables in the chargeable current assets (CCA) and the third indicator is the average collection period.

Indicator - I : Receivables Index -S (R_{I-1})

To test the hypothesis H_1 (b) through this indicator, relevant data at the aggregate level has been analysed and presented in the following table:

Table - 4.5 **Receivables Index-S (R_{I-1}) :**
Aggregate Level

| Year | R (Rs.Crs) | S (Rs.Crs) | (R_{I-1}) (%) | (X) |
|---------|---------------|---------------|----------------------|-----|
| | 1 | 2 | 3 | 4 |
| 1977-78 | 1387.56 | 8589.41 | 16.2 | 6.2 |
| 1983-84 | 3674.66 | 21708.60 | 16.9 | 5.9 |
| 1984-85 | 4159.96 | 25571.66 | 16.3 | 6.1 |
| 1985-86 | 4887.02 | 29432.64 | 16.6 | 6.0 |
| 1986-87 | 5661.35 | 32190.61 | 17.6 | 5.7 |
| 1987-88 | 6068.18 | 35811.19 | 16.9 | 5.9 |

Source- Financial performance of companies, ICICI portfolio
1987-88, The Industrial Credit and Investment Corporation
of India Ltd. Bombay -June 1989.

Explanation-

1. R = Receivables
- 2, S = Sales
3. R_{I-1} = Relations of receivables to sales

The table reveals that receivables accounted for 16.2 per cent in sales during the year 1977-78. This figure increased to 16.9 per cent in 1983-84 and after a marginal decline during the intervening period has reached the same level as in 1987-88. Thus, we find that during the eleven year period, instead of achieving a higher receivable turnover ratio, there has been a decline in turnover ratio of receivables forcing us to reject our hypothesis and conclude that our NBLs has failed to achieve this objective.

Indicator - II : Receivables Index - C (R_{I-2})

In order to reassure ourselves about the findings, we have analysed the receivables data in relation to chargeable current assets and expressed the same as R_{I-2} , both in terms of percentage and turnover. The following table shows the (R_{I-2}).

Table -4.6Receivables Index-C (R_{I-2})Aggregate Level

| Year | CCA (Rs.Crs) | R (Rs.Crs) | ACP | R_{I-2} |
|---------|-----------------|---------------|-----|-----------|
| | 1 | 2 | | 4 |
| 1977-78 | 3677.07 | 1387.56 | 58 | 37.7 |
| 1983-84 | 9298.07 | 3674.66 | 62 | 39.5 |
| 1984-85 | 10403.09 | 4159.96 | 60 | 40.0 |
| 1985-86 | 12313.23 | 4887.02 | 61 | 39.7 |
| 1986-87 | 13791.67 | 5661.35 | 64 | 41.0 |
| 1987-88 | 14771.40 | 6068.18 | 62 | 41.1 |

Source- Financial performance of companies, ICICI portfolio
1987-88, The Industrial Credit and Investment Corporation
of India Ltd. Bombay -June 1989.

Explanations

1. CCA = Chargeable current assets
2. R = Receivables
3. ACP = Average collection period in no.of days

It may be observed on the basis of the data given in the above table that the share of receivables in chargeable current assets was 37.7 in 1977-78, which increased to 40.0 in 1983-84 and further increased to 41.1 in 1987-88. On this basis also our hypothesis get rejected and we can reconfirm our findings that the level of receivables has increased and receivables management efficiency accordingly declined during the post NBLP period.

Indicator - III : Average Collection Period (ACP)

To test the hypotheses on the basis of the third indicator, i.e., ACP, the collection period of receivables in each year, has been calculated and presented in the following table.

Table - 4.7 **Average Collection Period (ACP)**

| Year | R (Rs.Crs) | S (Rs.Crs) | ACP (No.of days) |
|---------|---------------|---------------|---------------------|
| | 1 | 2 | 3 |
| 1977-78 | 1387.56 | 8589.41 | 58 |
| 1983-84 | 3674.66 | 21708.60 | 62 |
| 1984-85 | 4159.96 | 25571.66 | 60 |
| 1985-86 | 4887.02 | 29432.64 | 61 |
| 1986-87 | 5661.35 | 32190.61 | 64 |
| 1987-88 | 6068.18 | 35811.19 | 62 |

Source- Financial performance of companies, ICICI portfolio
1987-88, The Industrial Credit and Investment Corporation
of India Ltd. Bombay -June 1989.

Explanations

1. R = Receivable
2. S = Sale
3. ACP= Average collection period.

Note - The ACP is calculated as, $\frac{\text{Receivable}}{\text{Sale}} \times 365$

The average collection period was 58 days in 1977-78 which increased to 62 in 1983-84 and was found to be the same in 1987-88. Thus, the average collection period has increased, instead of declining. On this basis also, we have no choice but to reject our hypothesis and confirm our findings based on R_{I-1} and R_{I-2} .

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