IMPACT OF RECEIVABLES MANAGEMENT ON PROFITABILITY: A STUDY ON SELECTED PRINTING COMPANIES LISTED AT BSE IN INDIA

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Abstract
In this paper an attempt is made to study the impact of receivable management on Profitability. To accomplish this research objective data have been collected from the annual reports of select printing companies for the period from 2009-10 to 2018-19. The ratios which highlight the liquidity viz., Current ratio, Quick ratio, Debtors to current assets ratio, Sales to total assets, LnTA, Return on total assets etc. have been computed. Statistical tools like ANOVA was also used to know the impact on liquidity on profitability. The statistical tools or techniques used in the study are Descriptive statistics, Durbin – Watson correlation and Regression analysis. Profitability was considered as dependent variables. The investigation reveals that the receivables management across selected companies of printing industry is inefficient and showing significant impact on profitability.

Key Words: Printing Industry, Receivable Management, Profitability, and Working capital Management.

1. INTRODUCTION

Indian Printing Industry is constantly evolving and demanding, generating new opportunities. It is the biggest and fastest-growing sector within the country with its allied industries like Printing Machinery Manufacturers, Packaging industries, Paper manufacturing, Ink manufacturing, manufactures of raw material and consumables.

The value of the print industry across the country was estimated to be over 330 billion Indian rupees as of fiscal year 2019. This is expected to go up to almost 410 billion rupees by fiscal year 2024.

The industry has slowly been progressing from the heavy machinery using industry to a more software-centric business. The Indian printers are today equipped with the latest computer-controlled printing machines and flow lines for binding, while state-of-the-art digital technologies are used in pre-press. UV digital printing and inkjet technology are also on rise in India.

The study of the effect of receivables management on corporate profitability has become necessary because of many organizations have fallen victims of premature death. This is as a result of inadequate attention paid receivables. Receivable management is very important for all business be it small or large. The extent to which firms manage their receivables go a long way to the level of their profit. This means the customers who have not yet made payment for goods and services which the firms has provided. Profit may only be called real profit after the receivables are turned into cash.

The management of accounts receivable is largely influenced by the credit policy and collection procedure. Study is deemed necessary because of the frequency of illiquidity problems in corporate in India in recent times owing to improper management of accounts receivables. Hence, the present study “Impact of receivables management on profitability: A study on selected printing companies listed at BSE in India” is aimed to assess the effect of receivables management on profitability for better planning and efficient management of firms in Printing companies listed at BSE.

2. REVIEW OF LITERATURE

Padachi. K (2006) examined the trends in working capital management and its impact on firm’s performance. The results proved that a high investment in inventories and receivables is associated with lower profitability.
Further, he showed that inventory days and cash conversion cycle had a positive relation with profitability. On the other hand, account receivables days and account payables days correlated negatively with profitability.

Deloof, M (2003) found a significant negative relationship between gross operating income and the number of days accounts receivables, inventories and accounts payables of Belgian firms. These results suggested that managers can create value for their shareholders by reducing the number of day’s accounts receivables and inventories to a reasonable minimum. The negative relationship between accounts payable and profitability inconsistent with the view that less profitable firms wait longer to pay their bills.

In ksenija (2013), he investigates how public companies listed at the regulated market in the Republic of Serbia manage their accounts receivable during recession times. A sample of 108 firms is used. The accounts receivables polices are examined in the crisis period of 2008-2011. The short-term affects are tested and the study shows that between accounts receivables and two dependent variables on profitability, return on total asset and operating profit margin, there is a positive but no significant relation. This suggests that the impact of receivables on firm’s profitability is changing times of crisis.

Mathuva (2009) examined the influence of working capital management components on corporate profitability by using a sample of 30 listed firms on the Nairobi Stock Exchange for the period 1993-2008. The findings of the study were that there exists a highly significant negative relationship between the time it takes for firms to collect cash from their customers and a highly significant positive relationship between the period taken to convert inventories into sales.

Huselid (2010) asserts that financial performance has been measured in various ways, items in income and cash flow statement as well statement of financial position can be used for example liquidity measures the ability of the business to meet its financial obligations as they fall due without affecting the company’s normal business operations, it also provide an indication of the business ability to withstand risks by providing information about the operation’s ability to continue operating after a major financial adversity.

Lee (2012) posits that financial performance can be sustained and improved by increasing the market share position, whereby an organization’s objective is to be in the leader in the market which should be characterized by the potential of increasing shareholder value in the process. On the other hand, McTaggart, Kontes and Mankins (2014) reveals that the favorable financial returns in various forms amount into an organizational value which depends on two factors, that is market share positioning and having the competitive advantage over its rivalries to gain higher returns along with economies of scale.

Research Gap: Many studies in the literature are based on developed countries. Therefore, those findings cannot be applied to the Indian context. Since, the nature of economic activities, economic conditions, of developed countries are different from in developing countries. Moreover, no studies have been conducted to analyse the association between liquidity and profitability of printing industry in India.

3. RATIONALE OF THE STUDY

This study tries to fill this gap by doing research on printing companies in India. One of the major causes of liquidation is illiquidity and inability to make adequate profit. The problems to be addressed by this study are to evaluate the relationship between liquidity management and profitability of some listed printing companies at BSE in India. Maintaining a proper liquidity indicates that funds are confined to liquid assets thereby making them unavailable for operational use or for investment purposes for higher returns. Thus, there is an opportunity cost associated with the maintenance of those liquid assets and this might affect the overall profitability of the firm.

4. RESEARCH METHODOLOGY

Research Objectives: The main objective To identify of the impact of receivables management on profitability of selected companies Listed at BSE of Printing industry in India. Sub Objective To identify the significant relationship between receivables management and profitability of selected companies Listed at BSE of Printing industry in India.

Hypotheses Formulation: Based on the conceptualization, two hypotheses which were developed in order to determine the relationship between receivables management and profitability. The following hypotheses are formulated for the study.

H1 - There is a significant relationship between receivables management and profitability.
H2 - There is a significant impact of receivables management on profitability.
Research Design: For the present research work descriptive research design is used to study the cause and effects through possible relationships among variables under study.

Methods of Research: The present research intends to establish relation between impact of receivable management on profitability of selected Printing companies. Further to carry out a systematic study to examine the impact of receivable management on profitability of selected Printing companies with the help of quantitative measures and understanding the same.

Population: All the printing companies registered and traded on Bombay Stock Exchange are sampling elements for this research.

Sampling Decision: The present study is confined only to the 13 selected companies Listed at BSE of Printing industry in India representing the period of 2009-10 to 2018-19, and the value of each item was considered for the purpose of ratio computation and analysis which are related to correlation and regression.

Research Design: The research design followed has been essentially descriptive and explorative one in nature considering objectives identified.

Sampling Technique: The non-probability sampling approach was put to use based on purposive sampling method for drawing of sampling units.

Data Source: The present study is based on secondary data and the data is collected from the official website of Bombay Stock Exchange www.bseindia.com and www.moneycontrol.com.

Period of the Study: The present study is confined only to the 13 selected companies Listed at BSE of Printing industry in India representing the period of 2009-10 to 2018-19.

Sample of the Study: For this research work thirteen Printing companies listed at BSE have been taken as population of the study because BSE is the oldest stock exchange of India where almost companies are listed. Listed companies were taken suitable for the study because they are public entities running under stringent corporate governance regulations, ensuring their financial and accounting disclosures reliability at large. They are: viz., Citizen Infoline Ltd, D B Corp Ltd, H T Media Ltd, Hindustan Media Ventures Ltd, Jagran Prakashan Ltd, Kiran Print-Pack Ltd, Navneet Education Ltd, Repro India Ltd, S Chand & Co. Ltd, Sambhaav Media Ltd, Sandesh Ltd, Sundaram Multi Pap Ltd, Unich Fix-A-Form & Printers Ltd. listed at BSE of Printing industry in India representing the period of 2009-10 to 2018-19.

Data Collection: The data required for the study of the companies were collected from BSE and money control fed into a computer for analysis and storage. The data needed for the study is collected from the annual reports of the company. Secondary data were also collected from Journals, Magazines etc.

Data Analysis Techniques: Data analysis is done by the help of software package SPSS. It is used for processing the data. In addition, descriptive statistics which includes central tendency and dispersion measures are used to describe the dataset. Central tendency include mean, median and mode, while the measures for dispersion include standard deviation, variance. Descriptive statistics is the discipline of quantitatively describing the main features of a collection of information, or the quantitative description itself. The statistical analysis in the study has been performed using the PROWESS IQ database. To measure the receivable management, researcher has used Current ratio, quick ratio, Sales/Total Assets LnTA are used as dependent variables is the profitability ratio for this study.

5. RESULT AND DISCUSSION

A summary of the descriptive statistics for these variables is presented below.

<table>
<thead>
<tr>
<th>TABLE 1: Descriptive Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>LnTA</td>
</tr>
<tr>
<td>ROTA</td>
</tr>
<tr>
<td>CR</td>
</tr>
<tr>
<td>QR</td>
</tr>
<tr>
<td>debtors/current assets</td>
</tr>
<tr>
<td>sales/ta</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
</tr>
</tbody>
</table>

As in the table above the number of observations included in the regression analysis is 130 observations with one dependent variable; Return on Total Assets. and five independent variables; Debtors/CA, CR, QR, Sales/TA and LnTA. The minimum value is the lowest value with relate to the variables and maximum is the highest value of mentioned variables. The mean value is the measurement of central tendency where it represents the average value of the above variables. The descriptive statistics show that over the period under study, the criteria used for measuring profitability including Return on Assets averaged 6.641. Furthermore, the mean value of the Current ratio was 1.8095 and Quick ratio was the 1.1213 value. Mean value of Current ratio did not reach to the standard conventional rule of 2:1 and Mean value of Quick ratio approximately reach to the

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standard conventional rule of 1:1. Further, the average Debtors/Current Assets is 0.41255, which indicates that debtors forms significant part of current assets. This indicates that on the average, printing companies listed at BSE in India may find it difficult to meet their short-term obligations with having inventories but have the adequate capacity to face the short term obligations well without inventories. However, some companies have recorded 10.64 and 6.67 for current ratio and quick ratio in respectively. It means, some companies have good ability to face the short term obligations well while it expresses these companies have not adopted an effective liquidity management and may have excessive funds locked up in debtors or inventory. Some company has recorded debtors/Current Assets as 0.8421, which indicates that heavily majority of current assets are locked up in receivables which increases risk of bad debts. It is an indication of inefficient receivables management.

**TABLE 2 : Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.780a</td>
<td>.608</td>
<td>.592</td>
<td>4.6377</td>
<td>1.396</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), sales/ta, QR, debtors/current assets, LnTA, CR  
b. Dependent Variable: ROTA  
R Square is 0.608  
Adjusted R Square = 0.592  
In this model R Square indicates that 60.8% of ROTA can be explained by the differences in the Independent variable, the remainder 39.2% of the ROTA is attributed to other factors.

**TABLE 3 : ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>4135.563</td>
<td>5</td>
<td>827.113</td>
<td>38.455</td>
<td>.000a</td>
</tr>
<tr>
<td>Residual</td>
<td>2667.031</td>
<td>124</td>
<td>21.508</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6802.594</td>
<td>129</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: ROTA  
b. Predictors: (Constant), sales/ta, QR, debtors/current assets, LnTA, CR

**TABLE 4 : Coefficients**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>-14.083</td>
<td>2.003</td>
<td>-7.032</td>
<td>.000</td>
</tr>
<tr>
<td>LnTA</td>
<td>1.462</td>
<td>.222</td>
<td>.423</td>
<td>6.573</td>
</tr>
<tr>
<td>CR</td>
<td>1.446</td>
<td>.389</td>
<td>.333</td>
<td>3.719</td>
</tr>
<tr>
<td>QR</td>
<td>-540</td>
<td>.627</td>
<td>-.068</td>
<td>-2.861</td>
</tr>
<tr>
<td>debtors/current assets</td>
<td>2.283</td>
<td>2.533</td>
<td>.059</td>
<td>2.902</td>
</tr>
<tr>
<td>sales/ta</td>
<td>15.506</td>
<td>1.721</td>
<td>.562</td>
<td>9.011</td>
</tr>
</tbody>
</table>

a. Dependent Variable: ROTA

Thus, the regression Model obtained could be accepted and it explains Independent variable have significant impact on ROTA. The impact of Debtors/Current Assets, Current ratio, Quick ratio, Sales/TA ratio and LnTA are significant.

**Hypotheses Testing:** Here the Durbin – Watson correlation and regression analysis are used to test the hypothesis.

H1: There is a significant relationship between receivables management and Profitability.

It could be identified Durbin – Watson score. Durbin – Watson score is 1.396 which indicates that there is evidence of positive significant serial auto correlation between receivables and profitability. So this H1 accepted.

H2: There is a significant impact of receivables management on Profitability.

From the above regression analysis, Independent variables significant impact on ROTA.

Ftab = 1.84  
Fcal = 38.455  
Fcal > Ftab, which indicates that H1 is accepted.

I.e. There is a significant impact of Liquidity ratios on Profitability.

Overall, this research could give a recommendation for Printing Companies listed at BSE in India that is, pay more attention on the efficient management of receivables as they have the significant impact on the
profitability of the firms. Further they want to devise new strategies for the proper receivables management as their study result values implies the lack of management in current assets. Particularly they can implement strategies regarding the management of receivables and they could adopt new effective credit policy to make effective Receivables Management system which will lead to enhance the liquidity as well as profitability of firms.

6. LIMITATION OF THE STUDY

This study only considers the ten years of data collection. Future studies could take a long period to identify the real impact and relationship and also this study only covers the 13 listed printing companies and covers more firms in India which are listed at BSE or increase the sample will result the accurate results.

7. CONCLUSION

The study reveals that the Debtors to current assets ratio and Current ratio in Printing companies listed at BSE in India is not satisfactory. Receivables management showing a significant relationship as well as impact on working capital management and profitability. Further management need to devise new strategies for the proper receivables management as the result of the study implies the lack of management in current assets. By implementing strategies regarding the management of receivables and they could adopt new effective credit policy to make effective Receivables Management system which will lead to enhance the liquidity as well as profitability of firms.

REFERENCES