

## **Management of Receivables in India (A study from Food product producing companies)**

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### **Abstract**

Trade credit is different from bank credit. In bank credit motive is to earn profit, but the trade credit is an aid in selling goods and services at a profit. It is confined to receivables arising from transaction between companies. Trade receivables arise from the extension of credit by one business firm to another in order to facilitate the sale of the credit grantor's product. Trade credit is an important source of finance short term capital for businesses after the Bank finance. For the seller, it represents an investment in accounts receivables. Receivables management is the process of controlling and collecting payments from customers. This function helps companies to control credit policies, that can help to improve revenues and leads to financial stability. The most predominant problem Companies face in today's challenging and competitive environment is timely realization of receivables to a successful business and due to cashless transactions with customers, risk is attached to services at a profit and therefore it need a proper management. Objectives of the paper as follows:

1. To study the principles and practices of Receivables management in selected companies
2. To study the relationship between Receivables management and profitability.

The paper will use the regression analysis for the period of 2010-2015, which shows whether the accounts receivables management is important or not for the profitability of the companies. The study will be based on secondary data collection with the help of PROWESS

**Keywords:** *Receivables, Trade credit, Profitability, Credit policies*

### **1. Introduction**

Trade credit is different from bank credit. In bank credit motive is to earn profit, but the trade credit is an aid in selling goods and services at a profit. It is confined to receivables arising from transaction between companies. Trade receivables arise from the extension of credit by one business firm to another in order to facilitate the sale of the credit grantor's product. Trade credit is an important source of finance short term capital for small businesses after the Bank finance. For the seller, it represents an investment in accounts receivables. Receivables management is the process of controlling and collecting payments from customers. This function helps companies to control credit policies, that can help to improve revenues and leads to financial stability. The most predominant problem

businesses face in today's challenging and competitive environment is timely realization of receivables to a successful business and due to cashless transactions with customers, risk is attached to services at a profit and therefore it need a proper management.

The Indian food industry is dignified for huge growth, increasing its contribution to world food trade every year. In India, the food sector has appeared as a high-growth and high-profit sector due to its enormous prospective for value addition, particularly within the food processing industry.

The Indian food retail market is expected to reach Rs.61 lakh crores (US\$ 894.98 billion) by 2020. The Indian food processing industry accounts for 32 per cent of the country's total food market, one of the largest industries in India and is ranked fifth in terms of production, consumption, export and expected growth. It contributes around 14 per cent of manufacturing Gross Domestic Product (GDP), 13 per cent of India's exports and six per cent of total industrial investment. (IBEF, 2016)

The Ministry of Food Processing Industries is concerned with formulation and implementation of the policies & plans for the food processing industries within the overall national priorities and objectives. A strong and dynamic food processing sector plays a vital role in reduction in the wastage of perishable agricultural produce, enhancing shelf life of food products, ensuring value addition to agricultural produce, diversification & commercialization of agriculture, generation of employment, enhancing income of farmers and creating surplus for the export of agro & processed foods. (Ministry of Food Processing Industry, 2016)

Proper and effective receivables management can help food industry to enhance the profitability and better cash collection on time.

## **2. Literature Review**

The three keys for unlocking greater profitability can be executed for better revenue stream. First to design an effective executive portfolio strategy for managing the receivables assets. There should be different strategies for collection of receivables from different segments like government vs. private sector, export vs. domestic and national accounts vs. small accounts. The next strategy includes dispute resolution process under which if the company is able to resolve disputes earliest then it would increase cash flows by releasing payments that have been delayed due to disputes and it reduces the chances of error in disputes. Third key focus would be on accurate order fulfillment and invoicing, if an error is made in taking the order or in fulfilling it or in invoicing it, this will reflect in the entire revenue cycle operation.

There are lot many benefits of effectively managed receivables. Some of the benefits are: Increased cash flows, reduced bad debt loss, higher credit sales, Quality in customer services, lesser administrative cost and these benefits can lead to increase in the overall profitability of the company. Receivables asset reflects the quality of the entire revenue management system of a company. The author designed a simple formula for high quality receivables assets: Excellent receivables results= Higher customer satisfaction + Accurate invoice. To improve the results of receivables management, then company must do two things. First price its invoices accurately as far as possible and second if there are any pricing or invoicing disputes between customers solve it quickly and efficiently. (Salek, Accounts Receivable Management Best Practices, 2005)

During the event of any recessionary period in the country, businesses will try to exploit the available means of increasing working capital and cash flows- whether through stretching trade payables or processing receivables payments. For processing receivables payment businesses will focus on its credit policy. Credit policies have three components:

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Terms of credit policy including due dates, discounts for early payments, procedures for collection and overall credit standards includes type of customers are they willing to pay or not. Many companies enforce systematic collection procedure and establish more aggressive early payment discounts. (Zinger, 2009)

Author studied the relationship between independent variable that is accounts receivables and two dependent variables that are return on assets and operating profit margin to show the effect **apacity**

on profitability with the help of regression analysis by selecting large and medium sized companies listed in Serbia stock exchange. The analysis shows the insignificant but positive relation between the independent and dependent variable. (Denčić-Mihajlov, 2013).

The most important component of working capital management is collection period and payment period of the business. It studied the impact of average collection period and average payment period on the overall profitability of the small and medium sized organizations in Tanzania for the period 2006 to 2011. For the analysis study has used regression analysis by putting gross operating profit as dependent variable and average collection and average payment period as independent variables. There is significant negative relationship between average collection period and profitability and there is positive relationship between average payment period and profitability. (Madishetti & Kibona, 2013)

Receivables forms one third of current assets in India , so the management of receivables is an essential tool for the working capital managers. The study shows the relationship between receivables management on working capital and profitability in cement companies for the period 2001 to 2010 by using a statistical tool called ANOVA. The study concluded that the receivable to current assets ratio across industry worst was not satisfactory and receivable to assets ratio position is better. (Ramana, Ramakrishnaiah, & Chengalrayulu, 2013)

Zainudin (2009) focused on the trade credit management practices of Malaysian SME's in the manufacturing sector and identifies the factors that might influence the trade credit management practices, with the help of a questionnaire and financial data of the selected SME's. Tools used for analysis were Mann- Whitney, Chi – square, Kruskal- walls and spearman's rank correlation test. The study provides many implications which show the SME's lack of awareness and understanding on the importance of the various credit functions.

Peel, Wilson & Howorth (2013) suggested that poor or careless financial management is a major cause of business failure and argued that majority of overdue debtors can be reduced by improved credit management. Study conducted by using a questionnaire provided details of credit management practices, late payments and factors responsible. To improve business performance by using both parametric and non- parametric test like ANOVA, t- test and chi square. Study concluded that business size and life cycle of the firm are the major factors responsible for poor credit management.

Teruel & Solano (2008) studied that whether the accounts receivable decisions follow a model of partial adjustment by using a dynamic panel data of Spanish SME's. Authors concluded that sales growth, size of the firm, capacity to generate internal funds and economic growth are essential in determining trade credit granted by firm.

**3. Objectives of the paper as follows:**

1. To study the principles and practices of Receivables management in selected companies
2. To study the relationship between Receivables management and profitability.

**4. Hypothesis of the study**

Ho: Receivables has no significant effect on profitability

H1: Receivables has significant effect on profitability

## 5. Research methods:

The study has been carried out for a period of five years from 2010-2011 to 2014-2015. For the purpose of the study secondary data has been collected from PROWESS data source. Apart from Prowess, the study used other secondary data collection tools like websites, journals and books. The study focussed initially on top 22 food processing companies according to sales in India in the current year 2015-2016 (<http://www.moneycontrol.com>). But out of them only 16 companies have complete data regarding receivables in Prowess. So, the final analysis is based on 16 selected companies of the sample.

After collecting the necessary data, it has been tabulated and statistical tools like descriptive analysis and regression analysis calculated with the help of data analysis option of Advance excel.

### 5.1 Key research variables:

Receivables turnover is the independent variable and return on assets in the dependent variable.

Receivables turnover= Receivables (Debtors and Bills receivables)/ Sales

Return on assets= Profit/ Total assets

Debt ratio= Debt/ Total assets

Current ratio= Current assets/ Current liabilities

Sales growth= (Current year sales- Last year sales)/ Last year sales

## 6. Analysis

**Table 1 a:Sample of Companies used in analysis**

<b>Top 16 Companies in Food industry</b>
Bambino AgroInds. Ltd.
Britannia Industries Ltd.
Chaman Lal Setia Exports Ltd.
HatsunAgro Products Ltd.
Heritage Foods Ltd.
K R B L Ltd.
Kohinoor Foods Ltd.
Kwality Ltd.
Milkfood Ltd.
Modern Dairies Ltd.
Nestle India Ltd.
Rei Agro Ltd.
Sita Shree Food Products Ltd.
Tasty Bite Eatables Ltd.
Usher Agro Ltd.
Vadilal Industries Ltd.

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**Table 1 b**

<b>Mean</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
<i>Debtors Cycle</i>	32.395	34.17	35.265	33.795	38.3	58.46
<i>Debtors Turnover</i>	27.93915	27.22725	32.7843	29.30885	29.0238	33.4132
<i>Debt/Assets</i>	3.09175	-1.1896	3.3548	3.022	2.4588	2.4506
<i>Change in Sales</i>	1287.165	2017.492	4851.486	5838.234	4853.866	1837.012
<i>Current Ratio</i>	1.6462	1.2818	1.6399	1.15845	1.24	1.158
<i>Creditors Turnover Ratio</i>	24.24625	18.69245	23.0612	25.45624	17.9609	23.0689
<i>Return on Total Assets</i>	5.8985	4.3125	3.662	6.519	6.173	0.277

According to the table 1 b, the highest debtor's cycle is in year 2015 which is 58 days approximately. Debtor cycle shows that in how many numbers of days the company is able to get cash from their receivables.

Debtor's turnover shows that number of times a company is collecting cash from average accounts receivables. According to the data in 2011 shows the minimum debtors turnover as compared to other years.

The debt to assets ratio indicates the proportion of a company's assets that are being financed with debt, rather than equity. In 2010 selected companies used maximum finance through debt and in 2011 it is going negative. Strongest current ratio of the selected companies shows in year 2010.

Creditor's turnover ratio is maximum in 2013 and in the same year maximum return of assets was there.

Regression analysis measures the relationship between two variables one is dependent variable and other one is independent variable. If there is much change in dependent variable due to the change in independent variable, it means there is strong relation between the two variables and vice versa. In regression analysis R square measures that how the data is closely fitted in the regression line or not, which shows the correlation between the variable that is dependent and independent variable. In this study, dependent variable is return on assets and independent variable is receivables turnover. If R square is more than 50 percentages, it shows that the model is satisfactory and fit, if it is less than 50 percentages that the model is weak and not satisfactory.

In all the years from 2010 to 2015, the value of R square ranges from 6% to 35% (Table 2 b), which is less than 50% in all the years; it shows that model fit is not satisfactory in all the years.

F value indicates that the receivables turnover is an important factor for determining return on assets in a company. The minimum F value is 0.917 in the year 2010 and maximum in 2013 that is 7.823

Significance of F is the p value which should be less than 0.05 in all the years of data, so that we can reject our null hypothesis. In table 2 b, in the year 2013 and 2014 the significance value is less than 0.05 which shows that in both the years we can reject the null hypothesis. In the study the null hypothesis used was that receivables have no significant effect on profitability. It mean for 2013 and 2014 receivables have significant effect on profitability that is return on assets. But in rest of the years the significance value is more than 0.05, it means in 2010, 2011, 2012 and 2015 we accept the null hypothesis.

**Table 2 a: Regression results**

Year	a ( Return on assets)	b (Receivables turnover)
2010	4.121	0.063
	(1.358)	(0.957)
2011	2.009	0.082
	(0.603)	(1.168)
2012	2.322	0.046
	(0.824)	(1.001)
2013	2.627	0.104
	(1.386)	(2.797)
2014	2.703	0.107
	(1.289)	(2.586)
2015	-5.273	0.138
	(-0.758)	(1.232)

**Table 2 b: Regression Results**

Year	R square	Adjusted R square	F	Significance F
2010	0.061	-0.006	0.917	0.355
2011	0.089	0.024	1.365	0.262
2012	0.067	0.000	1.003	0.334
2013	0.358	0.313	7.823	0.014
2014	0.323	0.275	6.688	0.022
2015	0.098	0.033	1.519	0.238

**Table 2 c: Regression Results**

Regression Equation	
Year	Equation
2010	ROA= 4.121+ 0.063 RTR
2011	ROA= 2.009+ 0.082 RTR
2012	ROA= 2.322+ 0.046 RTR
2013	ROA= 42.627+0.104 RTR
2014	ROA= 42.703+ 0.107 RTR
2015	ROA= -5.272+ 0.138RTR

**Table 3: Regression Results**  
Company wise analysis

Company	R Square	Sig F
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Bambino AgroInds. Ltd.	0.728	0.031
Britannia Industries Ltd.	0.833	0.011
Chaman Lal Setia Exports Ltd.	0.769	0.022
HatsunAgro Products Ltd.	0.157	0.437
Heritage Foods Ltd.	0.641	0.056
K R B L Ltd.	0.188	0.390
Kohinoor Foods Ltd.	0.547	0.093
Kwality Ltd.	0.245	0.318
Milkfood Ltd.	0.012	0.835
Modern Dairies Ltd.	0.362	0.206
Nestle India Ltd.	0.350	0.216
Rei Agro Ltd.	0.606	0.068
Sita Shree Food Products Ltd.	0.013	0.833
Tasty Bite Eatables Ltd.	0.006	0.883
Usher Agro Ltd.	0.876	0.006
Vadilal Industries Ltd.	0.967	0.000

According to the company wise analysis, half of the companies have R square more than 50 % and the remaining half have R square less than 50 % which shows that in half of the companies' model fit is satisfactory according to regression analysis. The highest R square is in case of Vadilal Industries Ltd. that is 96.7 % and least in Tasty Bite Eatables Ltd. which is only 6%. (Table 3)

## 7. Conclusion:

The findings and analysis shows that in selected food product companies of Food industry there is strong relationship between receivables and profitability only in the year's 2013 and 2014. But in rest of the years there is weak relationship between the two variables of receivables and profitability. According to company wise analysis. Vadilal Industries Ltd., Usher Agro Ltd., Rei Agro Ltd., Kohinoor Foods Ltd., Heritage Foods Ltd., Bambino AgroInds. Ltd., Britannia Industries Ltd. and Chaman Lal Setia Exports Ltd shows the satisfactory model fit in regression analysis. It means there is a relationship between receivables and profitability in these above mentioned companies and in the rest of the companies there is not so strong relationship, which means there would be very less effect on profitability if there is any change in receivables. According to debtors cycle the average debtor's cycle in all the years of selected companies is 38 days approximately and average debtors turnover is 29.94 times.

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