

Influence of Credit Appraisal in Accounts Receivable Management on Financial Performance of Animal Feed Manufacturing Firms in Nakuru County, Kenya

Mary N. Kamau, Barbara Namiinda & Doreen Njeje

Kenya Methodist University

Abstract: *Accounts receivable refers to the unpaid claims a firm has over its customers. They form one of the most important parts of a firm's working capital. Receivables often represent large investment in asset and involve significant volume of transactions and decisions. Thus, the critical part of managing accounts receivables is determining to whom credit should be extended and to whom it should not. This forms the basis of credit appraisal. However, studies have not focused on credit appraisal in accounts receivable management in non-listed firms such as animal feeds manufacturing firms and as such little has been done in this area, thus, requiring in-depth investigation. Therefore the purpose of this study was to investigate the influence of credit appraisal in accounts receivable management in animal feeds manufacturing firms in Nakuru County, Kenya. The study adopted the descriptive survey research design targeting the overall management and staff drawn from 63 animal feed manufacturing firms. Simple random sampling was used to obtain a sample size of 176 respondents. Questionnaires were used for data collection. Data was analyzed using descriptive and inferential statistical methods and the results tabulated and discussed. The findings also revealed that credit appraisal strongly influenced the financial performance of animal feed manufacturing firms in the area. It is also recommended that the firms review their credit payback periods upwards from the current three months period so as to make them more acceptable to the customers and discourage credit defaulting.*

Keywords: *Credit Appraisal, Accounts Receivable Management, Animal Feed Manufacturing Firms*

I. Introduction

According to Robert (2001), accounts receivables are amounts owed to the business enterprise usually by its customers. Accounts receivable measures the unpaid claims a firm has over its customers at a given time, usually in the form of operating line of credit and is mainly due within a relatively short time period. Accounts receivables are one of the most important parts of working capital. Receivables often represent large investment in asset and involve significant volume of transactions and decisions. However, there are considerable differences in the level of receivables in firms around the world. Demirgüç-Kunt and Maksimovic (2007) present evidence that in countries such as France, Germany, and Italy accounts receivables exceeds a quarter of firms' total assets, while Rajan and Zingales (2009) find that 18% of the total assets of US firms consists of receivables. Accounts receivable management is a crucial field of corporate finance because of its effects on a firm's profitability and risk, and consequently on the firm's value. Thus, sound accounts receivable management is a prerequisite for a firm's stability and continuing profitability, while deteriorating credit quality is the most frequent causes of poor financial performance.

Many companies increase sales by being generous with their credit policy, but they may end up extending credit to risky customers who do not pay. If credit policy is too tight, sales will be lost and particularly risky customers might be required to pay cash on delivery. In addition companies should ask potential customers for references from banks and suppliers to determine their payment history. It is important to check these references on potential new customers as well as periodically check the financial health of continuing customers (Pike, Cheng, Cravens, et al., 2005). Accounts receivable should be managed strategically; especially through sound credit appraisal techniques to ensure that only credit worthy clients are allowed to delay their payments. Firms must, therefore, ensure that the management of accounts receivables, and particularly credit customer appraisal is efficient and effective.

Managing accounts receivables involve five steps: determining to whom to extend credit, establishing payment period, monitoring collection, evaluating the liquidity of receivables accelerating and eventually cash receipts from accounts receivable holder. Thus, the critical part of managing accounts receivables is determining to whom credit should be extended and to whom it should not. This forms the basis of credit appraisal. According to DeYoung, Glennon and Nigro (2006) most credit decisions are frequently based on subjective feelings about the risk in relation to expected repayment by the borrower. The first step in limiting credit risk involves screening clients to ensure that they have the willingness and ability to repay the credit sales extended to them. Firms commonly use this approach because it is both simple and inexpensive. While each

company would have its own method of determining risk and quality of its clients, depending on the target group, the 5C's of credit appraisal namely; character, capacity, collateral, capital and condition are important client evaluation concepts and are useful for most occasions (DeYoung et al, 2006).

These 5Cs are: character, capacity, collateral, capital and condition. Character, refers to the trustworthiness and integrity of the business owners .it's an indication of the applicant's willingness to repay and ability to run the enterprise. Capacity assesses whether the cash flow of the business (or household) can service credit repayments. Capital assets and liabilities of the business and/or household ,Collateral; Access to an asset that the applicant is willing to cede in case of nonpayment, or a guarantee by a respected person to repay a credit in default. Conditions, a business plan that considers the level of competition and the market for the product or service, and the legal and economic environment Other measures include but are not limited to credit product design and use of credit committees to assist in credit appraisal. Firms can mitigate a significant portion of default risk by designing Credit products that meet client needs. Credit product features include the, repayment schedule, collateral requirements and any other special terms. Given the vulnerability of the target market, it is common for client to be willing but unable to repay. After carefully determining that this is indeed the case it may be appropriate to reschedule a limited number of credits. Only done under extreme circumstances, this may involve extending the credit sales (Pike, Cheng, Cravens, et al., 2005). Establishing a committee of persons to make decisions regarding Credit is an essential control in reducing credit (and fraud) risk. If an individual has the power to decide who will receive credit, which debt will be written off or rescheduled, and the conditions of the debt, this power can easily be abused and covered up. While credit officers can serve on the credit committee, at least one other individual with greater authority should also be involved. The credit committee has the responsibility not only for approving credit, but also for monitoring their progress and getting involved in delinquency management (Abedi, 2000).

Nakuru County, the former Rift-valley province is well endowed with agriculture and tourism resources which have attracted several manufacturing firms. The role of manufacturing sector in vision 2030 is to create wealth and employment. Some of the manufacturing firms that are found in the county forming the economic basis include: animal feeds manufacturing firms, pyrethrum processing plants, textile industries, agricultural implements, printing, dairy products, engineering works & body builders, saw mills, contractors, bitumen products and quarrying, posho mills, canners and edible oils and soap manufacturers (Nakuru County First County Integrated Development Plan, 2013). Manufacturing activities account for the greatest share of industrial production and forms the core of industry. The manufacturing sector's contribution to GDP grew by an annual average of 5.5 per cent between the period 2003 and 2007 (Economic Survey, 2010). The sector grew at 6.2 per cent in 2007 compared to a growth of 6.3 per cent in 2006. The value of manufacturing output rose by 8.1 per cent from Kshs. 558.3 billion in 2006 to Kshs. 603.7 billion in 2007. In 2007, 1.88 million people were employed in both the formal and informal sectors. Employment within the formal manufacturing sector grew by an annual average of 2.6 per cent between 2003 and 2007. The proportion of employees in formal manufacturing to total employees in the sector averaged 15.7 per cent between 2003 and 2007 (Ministry of Industrialization Strategic Plan, 2012).

Many firms' low performance is as result of poorly performing assets. Manufacturing firms earn revenues from cash and credit sales. They also generate various expenses from costs of production and other general operating expenses. Profitable manufacturing firms earn a positive net income when operating income exceeds total expenses. Cross-sectional regression analysis on accounts receivables management policies, profitability and risk by Deloof (2003), Lazaridis & Tryfonidis (2006) and Javed and Akhtar (2012), all point to a negative relation between accounts receivables and financial performance. Similar studies done locally in Kenya have revealed similar result. Makori and Jagongo (2013) found a significant negative relationship between accounts receivables management and corporate performance of Kenyan firms listed on Nairobi Securities Exchange. Other studies done by Mathuva (2010) and Bett (2009), on NSE listed firms yielded similar results. However, studies have not focused on credit appraisal in accounts receivable management in non-listed firms such as animal feeds manufacturing firms and as such little has been done in this area, thus, requiring in-depth investigation. These firms usually raise their capital from bank loans, owners equity and retained earnings, thus they have limited working capital available. As such, the management of accounts receivable is critical to their operations if they are to be financially sustainable. Therefore the purpose of this study was to investigate the influence of credit appraisal in accounts receivable management in animal feeds manufacturing firms in Nakuru County, Kenya.

II. Research Methodology

This study adopted a descriptive research design to establish the relationship between accounts receivable management and financial performance of animal feed manufacturing firms. Descriptive research involves the description of the status of affairs as it exists.

The total population of registered animal feed manufacturing firms operating within in Nakuru County is 63. The study targeted the overall management and subordinate staff. These were drawn from the finance, credit control and inventory departments of the animal feed manufacturing firms. Therefore, the entire population under consideration in this study was 315. This population was chosen as they were deemed to be in a position to provide reliable information for the study purposes.

The required sample size was obtained using simple random sampling technique which has the advantage of being capable of giving every member in the population under study an equal chance of being sampled. The sample size was computed using the simplified formula proposed by Yamane (1967) for proportions where confidence level is 95% and $P \geq 0.5$ are assumed.

$$n = \frac{N}{1+N(e)^2}$$

Where N is the population and e is the level of precision. A sample size of 176 resulted from the use of the above formula.

This study utilized two types of data: primary data and secondary data. Primary data was obtained by administering questionnaires to the accountants/finance officers in the companies.

Questionnaires solicited information on the practices adopted in these firms in managing the accounts receivables. Further, they sought a subjective assessment on the financial performance for the companies. The questionnaires were also pretested for reliability using the internal consistency method and the used the Cronbach's reliability coefficient to determine the consistency of the questionnaire items. The questionnaire items yielded a Cronbach's reliability coefficient, $r = 0.8312$ which was deemed sufficient for the study purposes.

Data analysis was done with the aid of the computer software Statistical Package for Social Scientists (SPSS) version 22. Descriptive statistical measures such as, frequencies, percentages were used to give glimpse of the general trend of the data. Inferential statistics involving the use of correlation analysis were also used to determine the nature of the relationship between variables at a generally accepted conventional significant level of $P \leq 0.05$ (Gall, Borg & Gall, 2003). In addition, multiple regression analysis was employed to determine other characteristics of the variables such as the overall contribution of the independent variables to the dependent variable and also rank the variables according to the order of their importance

The regression model used in the study was:

$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where;

Y= Financial Performance of animal feed firms

β_0 =constant

$\beta_1 + \beta_3$ = weights crested from the variables (x_1, x_2, x_3) as shown below

X_1 = Credit Control

X_2 = Credit Appraisal

X_3 = Debt Collection

ε is the estimated error of the model that has a mean of zero at constant variance.

III. Results And Discussions

Introduction

The data collected was analyzed using descriptive and inferential statistical methods for each variable and the findings presented in tables, and their implications discussed. One hundred and seventy six questionnaires were administered to the respondents and one hundred and forty two were returned duly filled and useable for the study purposes. This represented an 81% response rate. According to Mugenda and Mugenda (2003), a response rate of over 50% is considered acceptable.

Credit Appraisal in Animal Feed Manufacturing Firms in Nakuru County

The main objective of this study was to investigate the influence of credit appraisal in accounts receivable management in animal feeds manufacturing firms in Nakuru County, Kenya. This objective was determined by posing several statements related to credit appraisal practices in the animal feed manufacturing firms in the area. A 5 point Likert scale was used to rate responses of this variable and it ranged from; 1 = strongly disagree to 5 = strongly agree. A mean score on each item closer to 5 would indicate better the credit appraisal practices in the firms. A score around 2.5 would indicate uncertainty concerning the credit appraisal approaches while scores significantly below 2.5 would suggest poor credit appraisal practices in the firms. The findings are presented in Table 4.3.

Table 2: Credit Appraisal in Animal Feed Manufacturing Firms

Statements	Maximum	Minimum	Mean	Std. Deviation	Totals
Our company has a list of clients who qualify for credit sales	1	5	3.42	0.934	142
Every customer go through a thorough appraisal procedure before they are qualified for credit extension	1	5	3.11	1.273	142
We prefer extending credit to institutional clients	1	5	3.81	1.001	142
We usually seek to extend credit on short payback periods basis not exceeding three months	1	5	3.4	1.001	142
Our company has competent personnel for carrying out client appraisal	2	5	3.72	0.729	142

N=142

The findings in Table 4.3 suggest that most of the firms had made a list of clients who qualified for credit sales (mean = 3.42). They also ensured that all customers seeking credit go through a thorough appraisal procedure before they are qualified for credit extension (mean = 3.11). However, most of them it appears preferred extending credit to institutional clients (mean = 3.81) as the risks were lower compared to individual clients. With a mean of 3.4, it was evident that most of the firms usually sought to extend credit on short payback periods basis not exceeding three months. The findings also indicate that majority (mean = 3.72) of the firms had competent personnel for carrying out client appraisal. The mean score on each item in this objective was also significantly higher than the mid-point 2.5 suggesting that the animal feed manufacturing firms in the area had sound credit appraisal practices.

Regression Analysis

Regression analysis was used to determine the significance of the relationship between the dependent variable and all the independent variable. The results are given in Table 2.

Table 2: Multiple linear regression analysis model summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.458	.2094	.02041	2.658
a. Predictors: (Constant), Credit Appraisal			

Looking at the results in Table 2 show that the model correlation coefficient was $r = 0.458$ was higher than any zero order value in the table. The coefficient of determination $r^2 = 0.2094$, also indicates that the multiple linear regression model could explain for approximately 21% of the variations in the financial performance of animal feed manufacturing firms in Nakuru County resulting from use of credit appraisal in accounts receivable management.

Table 3 Summary of Multiple Regression Analysis

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	15.095	2.366		6.381	.000
Credit Appraisal	.428	.725	.460	3.700	.001
a. Dependent Variable: Financial performance of animal feed manufacturing firms					

Looking at the results in Table 3, it is evident that the Credit Appraisal accounts receivable management was a very important variable that was strongly influencing the financial performance of animal feeds manufacturing firms in Nakuru County ($\beta = 0.460$, $p < 0.05$). This was a significant result. These findings agreed with Dong and Su (2010) who observed a statistically significant positive association between profitability and accounts payables days as a predictor of debt management. However, the findings also disagreed with Mathuva (2009) who found significantly negative relation between accounts collection days and profitability. They also disagree with Neil et al (2010) who found no statistically significant relationship between average payables days and profitability and also between averages inventory days and firm profitability. The variations in the findings were expected as accounts receivable management varies from one context to the next and also the size of the firm. For animal feeds manufacturing firms in a setting, such as, Nakuru County, the effects of accounts receivable management can have a considerable effect on their financial performance and can cause some of them to shut down inadvertently. Delayed or unrecoverable payments for the goods advanced often lead to cashflow problems and especially reduced working capital which causes many of these businesses to seek additional financing in the form of loans. Since, unlike financial institutions the credits advanced by these firms are usually interest free in order to spur sales, the firms usually find themselves experiencing poor earnings and even losses at times. However, it appears from the foregoing findings that most of the firms had discreet credit appraisal practices in their accounts receivable management practices. This had a positive outcome on their financial performance.

IV. Conclusions And Recommendations

Based on the results of the study, it was established that majority of the animal feed manufacturing firms in the area had sound credit appraisal practices and these positively impacted on their financial performance. The firms customarily listed preferred clients for credit sales although they screened all customers seeking credit before they qualified them for credit extension. In line with the study findings above it is recommended that the firms review their credit payback periods upwards from the current three months period so as to make them more acceptable to the customers and discourage credit defaulting.

References

- [1]. Abedi,S.(2000): Highway to Success, Credit Management Journal, [http:// leatherspinters.com](http://leatherspinters.com)
- [2]. Butt, B. Z., Hunjra,I.H.&Rehma.,K.U.(2010). Financial Management Practices and Their Impact on Organizational Performance. World Applied Sciences Journal, 9 (9), 997-1002.
- [3]. Deloof, M. (2003),Does Working Capital Management Affect Profitability of Belgian Firms?, Journal of Business Finance & Accounting, 30(3-4), 573 – 587.
- [4]. Demirgüç-Kunt, A., & Maksimovic, V. (2001),Firms as financial intermediaries: Evidence from trade credit data, World Bank Working Paper 2696
- [5]. DeYoung, Robert, Dennis Glennon, Dennis and Peter Nigro (2006) Borrower-Lender Distance, Credit Scoring, and the Performance of Small Business Loans, FDIC Center for Financial Research Working Paper No. 2006-04
- [6]. Dong, H. P. & Su, J.T. (2010). The Relationship between Working Capital Management and Profitability. International Research Journal of Finance and Economic, 3(5), 62-71
- [7]. Gall, M. D., Borg, W. R., & Gall, J. P.(1996). Educational Research(6th ed.). White Plains, NY: Longman Publishers USA.
- [8]. Javed,B. &Akhtar,S. (2012)Interrelationships between Capital Structure and Financial Performance, Firm Size and Growth: Comparison of industrial sector in KSE: European Journal of Business and Management, 4(15), 148-157.
- [9]. Lazaridis, D.I., &Tryfonidis, D. (2006). “Relationship between Working Capital Management and Profitability of Listed Companies in the Athens Stock Exchange”, Financial Management Analysis,19(1):26-35
- [10]. Makori, D & Jagongo, A (2013) Working Capital Management and Firm Profitability: Empirical Evidence from Manufacturing and Construction Firms Listed on Nairobi Securities Exchange, Kenya. International Journal of Accounting and Taxation, 1(1); 1-14.
- [11]. Mathuva, DM (2009).“The Influence of Working Capital Management Components on Corporate Profitability: A Survey on Kenyan Listed Firms”, Res.J. Bus.Manage.3(1):1-11.
- [12]. Mathuva, D. (2010),The Influence of Working Capital Management Components on Corporate Profitability: A Survey on Kenyan Listed Firms, Research Journal of Business Management, 4, 1-11.
- [13]. Mugenda, O.M & Mugenda (2003) Research methods: quantitative and Qualitative Approaches, Nairobi: Acts press.
- [14]. Neil, M., Gill, A., Nahum, B., (2010). “The Relationship between Working Capital Management and profitability: Evidence from the United States. Bus. Econ. J. 1-9
- [15]. Pike, R., Cheng, N.S., Cravens, K. et al. (2005). Trade Credits Terms Asymmetric information and Price Discrimination Evidence from Three Continents. Journal of Business, Finance and Accounting, 32, pp. 1197-1236.
- [16]. Rajan, R.C and Zingales, L.(1998) Financial Systems, Industrial Structure, and Growth, Oxford Journal of Economics and Social Sciences, Vol. 17. Issue 4, pp. 467-482
- [17]. Robert,N.(2001). Management Accounting. New York: Prentice Hall, Cit.
- [18]. R.O.K (2013), Nakuru County First County Integrated Development Plan. Government printer.
- [19]. R.O.K, (2012), Ministry of industrialization Strategic Plan. Government Printer Nairobi Yamane, T. (1967) Statistics: An Introductory Analysis. (2nd ed.). New York: Harper and Row.
- [20]. Mathuva, D. M. (2010). The Influence of Working Capital Management Components on Corporate Profitability: A Survey on Kenyan Listed Firms. Research Journal of Business Management, 4(1), pp. 1 –11.