International Journal of Business Management and Processes (IJBMP)
Vol 4. Issue No.3. January, 2019. PP 10-17. ISSN 2616-3209

LIQUIDITY MANAGEMENT AS A DETERMINANT OF FINANCIAL DISTRESS IN SAVINGS AND CREDIT COOPERATIVE ORGANIZATIONS IN KENYA

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Abstract

Financial distress is disruptive and costly, and especially relevant due to the impact on workers, shareholders, customers, suppliers, communities and the financial entities. Extreme financial distress often leads to bankruptcy; part of the creative self-destruction phenomena that contribute to the dynamics of innovation and economic renewal. The study aimed at determining the financial distress using financial management in Savings and Credit Cooperative Organizations in Kenya. A Seven-year panel data of thirty SACCOs spanning 2008 to 2014 was fitted on fixed effect model to assess the strength of liquidity management as a determinant of financial distress among deposit taking SACCO's in Kenya. From the findings it was evident that liquidity ratio as a proxy of liquidity management was found to negatively predict financial distress. The study recommends that an efficient liquidity management framework that promotes easier access and cost effective money market system be considered.

Key Words: Financial Distress, Liquidity Management, Savings and Credit Cooperative Organizations

I.INTRODUCTION

In recent past years, there have been many cases of SACCO failures, becoming financially distressed or being labeled totally bankrupt. The phenomenon is increasingly becoming worrisome. Many researchers have tried to predict possible financial distress of many corporate entities, most of which are in the manufacturing industry. Managers of financially distressed firms have incentives to manage earnings and cash flows. They may do so to hide the distress so that they can obtain financing or to reduce the probability of bankruptcy, acquisition or hostile takeover (Rosner, 2003). By managing earnings, firms can avoid violation of debt covenants (Dichev & Skinner, 2002; Jaggi & Lee, 2002). Rogers and Stocken (2005) suggest that managers worry about losing their jobs in difficult times and hence provide highly optimistic forecasts, thereby promising to restore good financial condition. Managers may manage earnings to achieve these optimistic forecasts. Distress also creates problems for firms related to labour, suppliers, customers and creditors. To avoid these problems, managers may manipulate earnings (Koch, 2002).

The potential to expect SACCO's failure is particularly essential from both the private investor's perspective and the social viewpoint, as it is an apparent indication of resource misallocation (Glautier & Underdown, 2001). Even though corporate ethics and governance have created a platform to save you economic distress, the early prediction of distress is important for traders or lending institutions who intend to shield their economic investments (Muller et al., 2009). Latest records indicate that there were numerous corporate failures for the duration of time in the world. Throughout these ultimate years, the annual go with the flow of disasters of businesses did not prevent growing and this trend turns into greater marked during the periods of disaster (Sami, 2013).

Many studies in finance support the need for prediction of the financial soundness and the likely occurrence of financial distress in SACCOs. Glautier and Underdown (2001) factor out

that an early caution sign of possibly failure could permit each management and investors to take preventive measures. The warning signs and Z rating model have the capacity to assist control for predicting company problems early sufficient to avoid economic problems (Ray, 2011). Predicting failure as early as possible with sound accuracy enables firms to take action to reduce the costs of bankruptcy, avoid failure to all stakeholders and contribute towards the business and financial environment stability (Gharaibeh et al., 2013).

The global financial distress is evidenced by some key signals or indicators like high global oil prices, high food prices**,** falling prices, widespread unemployment in virtually all sectors, economic decline in real GDP growth worldwide and general economic pessimism, (Malobe 2009). Recognition of financial distress is important both from the viewpoint of internal management and from the viewpoint of creditor with amounts owing from a company in distress. The remedies available to save a company in distress vary in harshness according to the degree of financial difficulty. If the outlook is sufficiently hopeless, liquidation may be the only feasible alternative.

In Kenya, SACCOs remain the most important players in provision of financial services and have deeper and extensive outreach than any other type of financial institution (ICA, 2002). They provide savings, credit and insurance services to a large portion of the population. Financial sector reforms were adopted in 1989 through the Structural adjustment programs supported by World Bank credit, which included liberalization of interest rate- attained in July 1991, and exchange rate-attained in October 1993. From the year 2010 new developments and intense competition in lending industry in Kenya's economy was witnessed. The introduction of the economic liberalization poses serious challenges to the SACCO's. The emergence of formal and informal segments in the financial sector fragmentation implies that different segments approach problems such as high transactions costs, risk management, mobilization of funds, grants and capitalization (Steel, 1998).

II.RESEARCH OBJECTIVE

To examine whether liquidity management is a predictor of financial distress among deposit taking Savings and Credit Cooperative Organizations in Kenya.

III. RESEARCH HYPOTHESIS

H_0: Liquidity management is not a significant predictor of financial distress among deposit taking Savings and Credit Cooperative Organizations in Kenya.

IV.LITERATURE REVIEW

Working Capital Management Theory

The theory of working capital management is credited to the works of (Smith, 2004).) and is guided by two opposing views; static and dynamic. The static approach relies entirely on liquidity ratios that are derived from the entities balance sheet. Sometimes used current and fast ratios based totally on the knowledge of record, measures liquidity in some sometime within the future in time. The dynamic technique is said to the operations of the enterprise (Brigham & Ehrhardt, 2004). Coins conversion cycle is a dynamic measurement of the time between cash payment for raw materials and then receiving it from debts receivable. The dynamics of an on-going liquidity management is concerned with cash conversion cycle that combines concept which is based on each balance sheet and income statement data to liquidity with period of time. Working capital management on the traditional fashions of the CCC that was initiated by (Brennan, Maksimovic & Zechner, 2003).

It is of great measure to know that how well a corporation is organizing its working capital. Blinder and Maccini (2001) concluded that cash conversion cycle is the most important aspect in working capital management. In fact it tells about the investment and credit decisions in the customer, inventory and suppliers, which show average number of days started from the date when the firm starts payments to its suppliers and the date when it begins to receive payments from its suppliers. Bodie & Merton (2000), analyzed the trends in the WCM and its influence on business performance for small manufacturers of Mauritius. He reported that firms' needs for working capital change over time depending on the rate of creation of money and high internal investment in inventories and receivables led to reduced profitability. There are two concepts of working capital namely quantitative and qualitative**.** According to quantitative concept, the amount of working capital refers to total of current assets. Current assets are considered gross working capital in this concept. The qualitative concept gives an idea regarding source of financing capital. According to qualitative concept the amount of working capital refers to "excess of current assets over current liabilities (Abuzayed, 2012).The excess of current assets over current liabilities is termed as Net working capital. In this concept Net working capital represents the amount of current assets which would remain if all current liabilities were paid. Both the concepts of working capital have their own points of importance (Appuhami, 2008). If the objective is to measure the size and extent to which current assets are being used, Gross concept is useful; whereas in evaluating the liquidity position of an undertaking, Net concept becomes pertinent and preferable (Hutchison, Farris & Anders, 2007).At one given time both the current assets and current liabilities exist in the business.

The current assets and current liabilities are flowing round in a business like an electric current. However, the working capital plays the same role in the business as the role of heart in human body. Working capital funds are generated and these funds are circulated in the business. As and when this circulation stops, the business becomes lifeless. It is because of this reason that the working capital is known as the circulating capital as it circulates in the business just like blood in the human body (Smith & Begemann, 1997). Working capital management is one of critical scopes in financial management because of its influence in liquidation and profitability. There is a possibility of bankruptcy even through profitability in the case of mismanagement of working capital. Working capital deals with current assets and current liabilities which consists a large part of total assets in firms. Extra investment in current assets leads to lower investment. However, firms with low current assets may encounter difficulties in their business process. Efficient working capital management is in a way which trades off between risk of short term debt default and avoiding from overinvestment in current assets (Raheman & Nasr, 2007).

In sum, increasing of receivables and inventories as working capital needs more costly funding and decreases firms return because these assets are low return generating assets. Similarly, decreasing of receivables and inventories as working capital may result in mitigating firm's sale which itself lowers firms value. Both above situation may result in inefficient firm's performance and firm's financial distress (Baños-Caballero et al., 2013). Firms may have optimal working capital leading to their value maximizing (Deloof, 2003). Working capital management efficiency is vital especially for hospitality firms, where a major part of assets is composed of current assets (Horne & Wachowitz, 2000). It directly affects the profitability and liquidity of firms (Raheman & Nasr, 2007). The profitability liquidity tradeoff is important because if working capital management is not given due considerations then the firms are likely to fail and face bankruptcy (Kargar & Bluementhal, 1994). The significance of working capital management efficiency is irrefutable (Filbeck &

Krueger, 2005). Working capital is known as life giving force for any economic unit and its management is considered among the most important function of corporate management. Every organization whether, profit oriented or not, irrespective of size and nature of business, requires necessary amount of working capital. Working capital is the most crucial factor for maintaining liquidity, survival, solvency and profitability of business (Mukhopadhyay, 2004).

The implementation of effective working capital management system is a better way of SACCOs to improve on their earnings. Since the primary objective of the firm is to maximize on profitability and also to increase on shareholders or owners wealth, it is important to have a balance between liquidity and profitability while carrying out daily operations to ensure the smooth running as well as meeting the company's obligation (Waithataka, 2012). Effective working capital management is critical in ensuring suitable growth and development of the SACCOs in Kenya in order to boost the organization's profitability. Working capital management is one of the most important areas while making the liquidity and profitability comparisons among firms (Eljelly, 2004) involving the decision of the amount and composition of current assets and the financing of these assets.

Liquidity Management and Financial Distress

According to Vahid, Mohsen and Mohammadreza (2012) liquidity management plays a significant role in determining success or failure of firm in business performance due to its effect on firm's profitability as well on liquidity. Business success depends heavily on the ability of financial managers to effectively manage the components of working capital (Filbeck& Krueger, 2005). A firm may adopt an aggressive or a conservative working capital management policy to achieve this goal.

Liquid funds play an important role in financial performance of the organization, as the company needs such funds for its day to day running of the organization. Good working capital management reveals higher returns of current assets than the current liabilities to maintain a steady liquidity position of a company (Kotler, 2008). Otherwise; working capital is a requirement of funds to meet the day to day working expenses. So a proper way of liquidity management is highly essential to ensure a dynamic stability of the financial position of an organization. Liquidity is considered as part of a company's operating capital, referring to current asset such as cash in hand cash at bank.

To measure the efficiency of a company's working capital, people often use net working capital which is defined as the difference between current assets and current liabilities. If current assets are higher than current liabilities, an organization has working capital efficiency, explaining the company's ability to continue its operations and to have sufficient funds to satisfy both the needs of the members and upcoming operational expenses. On the other hand, an organization may experience inefficiency on its working capital when current liabilities are more than current asset.

Liquidity problems may affect a bank's earnings and capital and in extreme circumstances may result in the collapse of an otherwise solvent bank. Most microfinance institutions may have to borrow from the market even at an exceptionally high rate during a liquidity crisis. This ultimately causes a decline in the banks' earnings. Moreover, a bank's further borrowing to meet depositors' demand may place the bank's capital at stake. Thus, debt to equity ratio was rise, affecting the bank's effort to maintain an optimal capital structure (Muranaga & Ohsawa, 2002).

According to Chandra (2001), normally high liquidity is considered to be a sign of financial strength, however according to some authors such as Neto (2003), high liquidity can be undesirable. This would be due to the fact that current assets are usually the less profitable than the fixed assets. It means that the money invested in current assets generates less return than fixed assets, representing thus an opportunity cost. Besides that, the amounts employed in current assets generate additional costs for maintenance, thus reducing the profitability of the company.

However, Arnold (2008) points that holding cash also provides some advantages, such as (1) provides the payment for daily expenses, such as salaries, materials and taxes. (2) Due to the fact that future cash flows are uncertain, holding cash gives a safety margin for eventual downturns. And finally (3) the ownership of cash guarantees the undertaken of highly profitable investments that demands immediate payment. Thus, according to Perobeli, Pereira and David (2007), the decision about the liquidity level should be based on optimal levels of liquidity.

A financial system can perform significantly better in open market economy by increasing the availability of funds and allowing risk diversification through efficient channeling of funds (Bekaert et, al. 2000). An efficient financial system can effectively mobilize and allocate resources leading to strong economic growth (Bhetuwal, 2007).Nyamao, Lumumba, Odondo and Otieno (2012) conducted a study to investigate the effects of working capital management practices on the financial performance of small-scale enterprises (SSEs) in Kisii South District, Kenya. The study, which adopted a cross-sectional survey research design, found that working capital management practices were low amongst SSEs as majority of them had not adopted formal working capital management routines. Similarly, their financial performance was on a low average. The study concluded that working capital management practices influence the financial performance of small scale enterprise.

A study by Dong and Su (2010) concluded that a firm's profitability and liquidity are affected by working capital management. The study used pooled data for the period between 2006 and 2008 to assess the companies listed in the Vietnam Stock Exchange. The study focused on cash conversion cycle and related elements to measure working capital management. The study found that the relationships among these variables were strongly negative, suggesting that profit is negatively influenced by an increase in cash conversion cycle. The study also found that profitability increases as the debtor's collection period and inventory conversion period reduce.

V.RESEARCH METHODOLOGY

This study adopted a descriptive survey design to establish whether liquidity management was a significant determinant of financial distress in savings and credit cooperative organizations in Kenya. All the licensed Deposit Taking SACCOs were targeted and those that were in operation between 2008 and 2014 made up the sampling frame of the study. It was important to note that, some of the SACCOs during the selected period were under a restricted licensed due to inability to meet set regulatory requirements, out of which 178 SACCOs were available. Following the recommendations of Naissuma (2000), 30 Deposit taking SACCO's were selected. Secondary data extracted from the individual SACCO financial statements were analyzed using a fixed effect panel model. A two tailed t test was used to test the postulated hypothesis.

VI.RESEARCH FINDINGS AND DISCUSSIONS

Descriptive Analysis of the Variables

The composite nature of the selected determinants of financial distress in SACCOs meant that they were derived through computation of a representative ratio or score from the relevant information presented in their respective financial statements. Liquidity ratio was derived based on the ratio of current assets to current liabilities, capital adequacy as a ratio of core capital to total assets, leverage ratio as the ratio of total liabilities to total equity. The adoption of Zmijeweski as a predictor of distress in SACCOs called for the determination of Net incomes and total liabilities as part of the information to review.

Current Assets and Current Liabilities

Liquidity widely recognized as the degree to which a firm is able to meet its obligation as and when they fall due is broadly measured by the ratio of current/liquid assets to short term/current liabilities. The mean current assets and liabilities of the selected SACCOs between 2008 and 2014 were as summarized in Table 1.

Table 1 Mean current liabilities and Current Assets between 2008 -2014

YEAR	Current Assets (Millions)	Current Liabilities (Millions)
2008	307.7	684.5
2009	175.8	343.4
2010	189.9	365.9
2011	157.9	570.5
2012	208.6	483.8
2013	251.7	558.2
2014	250.8	522.5
Mean	**220.4**	**503.8**

The average liquid assets over the seven years under review stood at 220.4 Million shillings with the liquidity trend declining in between 2008 and 2011 followed by a three-year period of marginal increase. The mean current liabilities were 503.8 Billion shillings ranging from a low of 343.4 million in 2009 and a high of 684.4 million shillings the previous year.

Table 2: Liquidity Ratio and Financial Distress

	Coefficient	Robust Std. Error	t-ratio	p-value	
Constant	0.428699	0.0151528	28.29	<0.0001	***
Liquidity Ratio	−0.0308123	0.00708967	−4.346	<0.0001	***
Mean dependent var	0.401161	S.D. dependent var		0.207826	
Sum squared resid	8.275515	S.E. of regression		0.199465	
R-squared	0.083250	Adjusted R-squared		0.078843	
F(1, 208)	18.88847	P-value(F)		0.000022	
Log-likelihood	41.57258	Akaike criterion		−79.14515	
Schwarz criterion	−72.45094	Hannan-Quinn		−76.43893	
Rho	0.049642	Durbin-Watson		1.827097	

The simple regression model results seen in table 4.8 shows that liquidity ratio significantly explained 7.88% of the variances in the SACCOs distress probabilities. Liquidity ratio has a negative beta coefficient (-0.0308) implying an inverse relationship between liquidity and the probability of distress. This relationship is statistically significant given that the p value (p <

0.0001) is less than the significance level (0.05). When capital adequacy, debt equity ratio and interest spread was incorporated into the model, the relationship remains significant *ceteris paribus* as shown in Table 2

From the findings of the estimation models, and the test of whether the liquidity ratio parameter estimate is significantly different form zero returns a t-statistic value of −4.346 and p-value less than 0.05, led to the rejection of the null hypothesis. Consequently, the study concluded that liquidity was a significant determinant of financial distress of SACCOs in Kenya. The current findings are in concurrence with those found by Casu & Charamonde (2017), Wangombe (2017), Karagu, Kiriri & Achoki (2018) reporting a negative coefficient between liquidity ratio and financial distress in financial institutions. The entitlement to a loan facility upon meeting the required conditions since one is a member is a major challenge to most SACCOs in Kenya, a factor that contributes to the significant relationship between liquidity and distress. Optimal liquidity becomes a strategy that every SACCO must strive to achieve in addition to regulatory requirement set out on liquidity by the industry regulator.

VII.CONCLUSION OF THE STUDY

As it is widely accepted in financial performance measurement, liquidity is measured as the ratio of current assets to current liabilities was used as a proxy indicator of the ability of the firm to deploy their liquid resources in meeting short term obligations. The value of mean current liabilities were on average twice the levels of average current assets over the study period similar to the average sector wide liquidity levels as reported by the regulator. The significance of Liquidity ratio as a determinant of financial distress among SACCOs in Kenya was confirmed. A significant negative coefficient was an indication that increases in liquidity has the ability to reduce the probabilities of SACCOs falling into financial distress.

VIII.RECOMMENDATIONS OF THE STUDY

From the current findings, it is important that liquidity management is recognized as a predictor of financial distress among Deposit corporative societies in Kenya. A negative relationship between liquidity ratio and financial distress call for the establishment of a framework that will promote better liquidity management. This will not only reducing exposure to financial distress but also allow for better returns for the SACCOs as a result of better resource deployment. This calls also for the establishment of an efficient money market for SACCOs.

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How to Cite This Paper:
Jepkorir, S., Muturi, W. M., & Ndegwa, J. (2019b). Liquidity Management as a Determinant of Financial Distress in Savings and Credit Cooperative Organizations in Kenya. *International Journal of Business Management and Processes (IJBMP)*, *4*(3), 10–17.