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THE EFFECTS OF LIQUIDITY RISK MANAGEMENT ON THE FINANCIAL PERFOMANCE OF BAMENDA POLICE CO-OPERATIVE CREDIT UNION (BAPCCUL)

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ABSTRACT

Liquidity risk management is one of the serious concerns and challenges in the modern era Micro Finance Institutions. Micro Finance Institutions having good asset quality, strong earnings and sufficient capital may fail if they are not maintaining adequate liquidity. Consequently, this study seeks to look for the effects of liquidity risk management on the financial performance of the Bamenda Police Cooperative Credit Union (BAPCCUL). The study adopted Ex post facto research design where data was retrieved from the financial statements which were the balance sheet, income statements and notes of BAPCCUL. Ordinary Least Square method of regression was applied to test for the hypothesis which assesses the effects of liquidity risk on financial performance. The results indicated that customer deposits have a positive effect on financial performance of BAPCCUL and so BAPCCUL is encouraged to widen its coverage in the national territory by opening many branches. Also, the amount of cash balances, loans and savings all had positive effects on the financial performance of BAPCCUL according to the outcome of the study. The only variable that portrays a negative effect with net profit was leverage. The period studied in this research ran from 2004 to 2018 and this period was chosen due to availability of data since it was not possible to obtain data for other years. Net profit was considered as a measure of financial performance in the study and the researcher recommends and encouraged that other measures of performance should also be considered when carrying such a study.

Keywords: Liquidity Risk, Financial Performance, Cash balances, Savings, Loans, customer deposits, leverage and net profit.

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1. INTRODUCTION

The need for Micro Finance industry began with one man and one village and it all started in Bangladesh by Muhammed Yunus in 1976 in what was termed the Gramen Bank. The Gramen Bank was the first Micro Finance bank which was established by Muhammad Yunus, a native of Bangladesh. He was motivated by the fact that Bangladeshi business owners were forced to repay much of their profits to loan issuers. In 1976, Yunus extended his first Micro Finance loan from his personal account to a group of women in Bangladesh and the concept grew from there Terzo, (2015).

Since then, the Micro Finance banking industry has been growing rapidly and gaining importance in the global financial sector. As of December 31, 2010, there were 1,395 Micro Finance Institutions globally with an estimated borrower base of 200 million with a total outstanding portfolio of over $44 billion as reported by the MFIs to the Micro Finance Information Exchange (2002). From 2003 to 2008, the global Micro Finance banking industry experienced a growth in borrowers at a Compound Annual Growth Rate (CAGR) of 12 % and a portfolio outstanding CAGR of 34 %. Inter-regionally, South Asia, East Asia and the Pacific region had the highest growth rates in terms of borrowers. Sub-Saharan Africa, Middle East and North Africa have experienced the slowest growth. Latin America continues to lead in terms of portfolio outstanding with $16 billion or 36 % of the total global portfolio, though South Asia has the lead in terms of borrowers with over 50 % of the global borrower base (Rifki, 2010).

However, financial risks mainly with liquidity risk have been cited to be and continue to be an impediment in the performance and growth of this very important sector (Akkizidis and Khandelwal, 2007). Liquidity Risk management in banking and Micro Finance banking sub sector in particular came to limelight especially after the 2007/2008 turbulence that impacted the very existence of this sector as a viable industry. Not only the banks, even the various government bodies have recognised the repercussions or impact of not managing the liquidity risks effectively in banks and accordingly enacted several regulations to control liquidity risks that arise in the banking business and operations. This development led to the introduction of BASEL Norms by Bank of International Settlement (BIS) Committee. The committee has guided all the central banks of the participating countries and the banks governed by them to adapt and align their risk management practices to the norms over a period in time. The Basel norms are focused on the risks in liquidity among other areas which in turn help the banks to quantify the risks and standardise their risk management practices in the said areas (Vaidyula and Kavala, 2013).

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Also, the global financial crisis, experienced between 2007 and 2008 around the world in which banks, stock markets and large financial institutions collapsed made governments in even the wealthiest nations to come up with rescue packages to bail out their financial systems. The Global risk management survey on 71 financial institutions from around the world and across multiple sectors, representing a total of almost US$18 trillion in aggregate assets revealed concerted risk management effort in action. Based on tidal wave of regulatory developments, in the area of capital adequacy, almost all the banks surveyed that are subject to Basel III requirements are on track to meet the minimum capital ratios (Global risk management survey 2017). In particular, the Federal Reserve has introduced the Enhanced Prudential Standards and the Comprehensive Capital Adequacy Review in the US. In Europe, the European Central Bank assumed responsibility for the prudential supervision of the region's banks, and has conducted its comprehensive assessment asset quality review and stress tests. In addition, the Basel Committee for Banking Supervision is introducing higher standards for capital adequacy and liquidity. The Solvency II capital adequacy regime was due to become effective for European insurers at the beginning of 2016, while the International Association of Insurance Supervisors is developing a global insurance capital standard (Hida, 2015).

To this effect, a growing literature suggests that risk management is even more challenging for the Micro Finance banks compared to the conventional counterpart. This is largely attributed to the fact that the Micro Finance banks are faced with additional risks due to the specific features of the financing contracts, liquidity infrastructure, legal requirements, nature of clientele and governance underlying the Micro Finance bank operations (Cihak and Hesse, 2008). Moreover, in view of the increasing pressure of globalisation, effective and efficient risk management in the Micro Finance institutions is particularly important as they endeavour to cope with the challenges of cross border financial flows. Some argued that the Micro Finance banks performance and profitability are significantly affected due to need to allocate more resources to mitigate these risks. In particular, the greater risk mitigation requirements call for adequate capital and reserves, appropriate pricing and control of risks, strong rules and practices for governance, disclosure, accounting, and auditing rules, and suitable infrastructure that could facilitate liquidity management (Sundararajan and Errico, 2002).

Liquidity is a concept that many investors failed to take into account or understand and as a result their financial plans usually fail to come through in such critical times as retirement or college funding for a dependent. However, the fact is that liquidity or a lack thereof causes more financial problems than almost any other aspect of finance. People either lose money, which they needed in the short term because of improper investments or they find they have insufficient funds upon retirement because of years of investing in short term investments for a long-term goal (Central Bank of Barbados, 2008). Businesses use a variety of financial performance

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evaluation measures to analyse the results of their actions. Investors perform a variety of calculations to review the actions of a particular company's financial performance. Both company management and investors spend time focusing on the company's liquidity to ascertain its level of financial performance. Certain financial ratios provide important information regarding a company's liquidity for example bill payment. The primary reason liquidity ratios require attention involve the company's ability to pay its bills. Liquidity ratios compare the current assets of a business to the current liabilities (Akhtar, 2007).

BIS (2008) recommend banks/MFIs to organise the process of liquidity management through identifying, measuring, monitoring, and controlling liquidity risk. Such a process entails at least four elements, the liquidity management policies of the Board of Directors (BOD), the roles of the Asset Liability Committee (ALCO), the effective information system for monitoring and reporting liquidity risk and the roles of internal control systems for liquidity management.

BIS (2008) outlined the process of sound liquidity risk management practices in MFIs as in governance, The Board of Directors determines and articulates the "liquidity risk tolerance" for the MFI both qualitatively and quantitatively including, liquidity ratio limits, cash-flow mismatch limits under normal and stressed conditions, concentration limits on the holdings of liquid assets, as well as concentration limits on funding sources are established costs and are allocated to business lines according to their respective risk taking activities so that business incentives are aligned with the MFI's liquidity risk tolerance. Liquidity cost is calculated based on the cost of maintaining high quality liquid assets and raising longer term funds.

Financial risk concerns risks arising from the business activities of MFIs, while business risk and operational risk relate to MFIs internal affairs. In this respect, liquidity risk is classified under the financial risk category along with credit risk and market risk, Frenkel, Karmann and Schottens (2004). However, the treatment of risks should be arranged under a causal and interactive system because the causes and impacts of one type of risk cannot be isolated from the other types of risks, Waweru and Kalani (2009). In this context, cooperation among MFIs management, stakeholders, regulators, and the public is required to enhance sound liquidity risk management. The latest global financial crisis has placed great emphasis on the importance of a sound liquidity risk management program, to prudently deal with unsecured derivative markets, to avoid excessive and imprudent credits, and to increase market discipline Chakra, (2008). In fact, a majority of the MFIs failures occurred due to an insufficient liquidity management program to solve adverse circumstances, Greenbaum and Thakor, (1995).

As MFIs play an increasingly important role in local financial economies and compete for customers and resources, the rewards of good performance and costs of poor performance are

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rising. Those MFIs that manage risk effectively – creating the systematic approach that applies across product lines and activities and considers the aggregate impact or probability of risks – are less likely to be surprised by unexpected losses(down-side risk) and more likely to build market credibility and capitalise on new opportunities (up-side risk).The core of risk management is making educated decisions about how much risk to tolerate, how to mitigate those that cannot be tolerated, and how to manage the real risks that are part of the business ,Dokulilova, Janda and Zetek (2009).

The global financial crisis 2008-2009 is a good example of the failures in derivative markets, which impacted on the ability of MFIs to provide liquidity to third parties, Siddiqi (2008). Managing liquidity risk, however, is more challenging in the current financial market because significant financial innovations and global market developments have transformed the nature of liquidity risk, BIS (2008).

The important discussion in liquidity risk management is to balance the demand for liquidity on the liability side with the supply of liquidity on the asset side. Liquidity risk problems occur if MFIs fail to balance those two sides and do not have sufficient internal liquidity reserves, and fail to obtain funds from external sources, Waweru and Kalani (2009).

For MFIs that evaluate their performance on both financial and social objectives, those decisions can be more challenging for an institution driven solely by profit. A risk management framework allows senior managers and directors to make conscious decisions about risk, to identify the most cost-effective approaches to manage those risks, and to cultivate an internal culture that rewards good risk management without discouraging risk-taking. Many MFIs have grown rapidly, serving more customers and larger geographic areas, and offering a wider range of financial services and products. Their internal risk management systems are often a step or two behind the scale and scope of their activities. Second, to fuel their lending growth, MFIs increasingly rely on market-driven sources of funds, whether from outside investors or from local deposits and member savings. Preserving access to those funding sources will require maintaining good financial performance and avoiding unexpected losses. Third, the organisational structures and operating environments of MFIs can provide unique challenges. Finally, MFIs are striving developing strategies and policies to measure risks for financial viability through cost-effective and efficient operations, making effective risk management essential to achieving better capital and cash management without undue risk, Siddiqi (2008).

2. STATEMENT OF THE PROBLEM

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There has been a steady growth in Cameroon financial industry in terms of new local and foreign entrant's banks, customer and deposit base, regionalisation and increased scrutiny from the regulators specifically the Bank of Central African States (BEAC) and COBAC regulations. This new shift in this industry can be attributed to the liberalisation of the sector, increased adoption of information technology and improved business environment due to reforms being undertaken in the political, economic, social and cultural fields (IMF country report, 2009).

It is important for MFIs to understand the effect of each of the liquidity components on its profitability and also undertake deliberate measures to optimise its liquidity level. Liquidity risk may arise due to the breakdown or delays in cash flows from the borrowers or early termination of the projects (Diamond and Rajan, 2005).

Thus, a sound management of liquidity is needed if Micro Finance Institutions are to continue to thrive and serve customers (Ismal, 2010), as well as give the average citizen enough confidence, considering the recent trends of collapse of some Micro Finance Institutions across the country due to the socio-political crisis plaguing the Northwest and Southwest regions of the country. For example, several media houses reported the burning down or attacks on some branches of some banks and Micro Finance Institutions in some localities of these two regions. This has result in their inability to sustain their operations. Now a number of studies have been done on Micro Finance Institutions; for example, in areas such as credit management or loans (Owusu, 2008; Arko, 2012), financial performance (Awo and Akotey, 2012), and risk management (Ayam and Ahinful, 2015). Many scholars and researchers such as (Nfor-budi (2015), HelbertKojo Sam (2015) and many other researchers have tried to look for the relationship between liquidity management and financial performance but still there is a gap in the study due to the fact that liquidity behaves with time.

However, in hindsight, no research has tackled liquidity risk management across a variety of financial institutions, such as credit unions; which have distinct characteristics from the mainstream universal/commercial banks in diverse ways. It is hoped that the case study approach will reveal helpful insights in this financial institution, in relation to its liquidity risk management practices. The following research questions have guided this work:

i. What are the effects of customer deposits on financial performance?
ii. Do cash balances have effects on financial performance?
iii. What are the effects of leverage on financial performance?
iv. What are the effects of savings on financial performance?
v. What effects do loans have on financial performance?

3. OBJECTIVES OF THE STUDY

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The main objective of this study is to examine the effects of liquidity risk on financial performance of the Cameroonian Micro Finance sector. In line with the general objective the research project will have the following specific objectives:

i. To examine the effects of deposits on financial performance.
ii. To assess the effects of cash on financial performance.
iii. To investigate the effects of leverage on financial performance.
iv. To verify the effects of savings on financial performance
v. To assess the effects of loans on financial performance

4. RESEARCH HYPOTHESIS

(H_1): Customers deposits do no significantly affects financial performance

(H_2): Cash does not significantly affect financial performance

(H_3): Leverage does not significantly affect financial performance

(H_4): Savings has no effects on financial performance

(H_5): Loans has no significant effects on financial performance

5. SIGNIFICANCE OF THE STUDY

i. The understanding of the liquidity risk practices adopted by the Micro Finance sector in Cameroon as well as how it will influence their performance and will help policy makers such as the government and other stakeholders to design targeted policies and programs that will actively stimulate the growth and sustainability of these institutions in the country, as well as helping those policy makers to support, encourage, and promote the establishment of appropriate policies to guide the firms.
ii. The study findings will benefit management and staff of these institutions who will gain insights into how their institutions can effectively manage their liquidity risk by coming up with appropriate practices.
iii. Regulatory bodies such as CamCCUL, BEAC, COBAC, MINFI and CEMAC can use the study findings to improve on the framework for regulation.
iv. The study findings will benefit management and staff of these institutions who will gain insights into how their institutions can effectively manage their liquidity risk by coming up with appropriate practices.
v. This study will offer an understanding on the performance of adopting appropriate liquidity practices and thus offer competitive advantage to the firms.

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vi. Several practices on risk management and their effects will be discussed for the benefits of the Managers. This is because Micro Finance Institutions need to adapt to the changing needs of the current business set up and requirements of various customers and providers of services. As a result, Micro Finance Institutions in the country and other affiliated institutions will derive great benefits from the study.

vii. The research will contribute to the literature on risk management in the Micro Finance sector especially in developing countries like in Cameroon.

viii. It is hoped that the findings will be valuable to academicians for professional training, learning, teaching, research, policy change, etc. who may find useful research gaps that may stimulate interest in further research in the future.

ix. Recommendations will be made on possible areas of future studies.

6. LITERATURE REVIEW

6.1. Conceptual Literature

6.1.1. Liquidity Risk Management

Liquidity risk is the possibility that over a specific time period, the banks will become unable to settle obligations with immediacy (Drehmann and Nikolaou, 2009). Liquidity risk is the risk that a business will have insufficient funds to meet its financial commitments in a timely manner. The two key elements of liquidity risk are short-term cash flow risk and long-term funding risk. The long-term funding risk includes the risk that loans may not be available when the business requires them or that such funds will not be available for the required term or at acceptable cost.

Liquidity risk is a risk arising from a bank's inability to meet its obligations when they fall due without incurring unacceptable losses. This risk can adversely affect both banks' earnings and capital and therefore, it becomes the priority of a bank's management to ensure the availability of sufficient funds to meet the future demands of providers and borrowers, a reasonable cost. The vulnerability of banks to liquidity risk is determined by the funding risk and the market risk. Liquidity risk needs to be monitored as part of the enterprise-wide risk management process, taking into account the market risk and the credit risk to ensure stability in the balance sheet and the dynamic management of liquidity risk. A bank should only attempt this if it makes good business sense, not use it as a means to keep afloat. Liquidity risk not only affects the performance of banks, but also its reputation (Jenkinson, 2008). A bank may lose the confidence of its depositors, if funds are not timely provided. The bank's reputation may be at stake in this situation.

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The maturity transformation of short term deposits into long term loans makes banks inherently vulnerable to liquidity risk (Basel Committee on Banking Supervision, 2008). The market liquidity risk refers to the inability to sell assets at or near the fair value, and in the case of a relevant sale in a small market; it can emerge as a price slump (Brunnrmeier and Pedersen, 2009).

The behaviour towards liquidity is affected by a firm's characteristics; a bank's liquidity position is affected by its size, status and product type. The size affects the attitude of the bank towards wholesale funding, including the access opportunity (Allen et al., 1989) and the price of the funds obtained (Nyborg et al., 2002). Bank size matters because of the economy of scope and scale; concerning liquidity, a large bank might have better access to the interbank markets because it has a larger network of regular counterparties, on both the assets and the liability side, is able to hold higher liquidity buffers that can be mitigated if an imperfect correlation holds (Kashyap et al., 2002). All businesses need to manage liquidity risk to ensure that they remain solvent.

a. Sources of Liquidity Risk

Liquidity risk can arise from a number of areas within the business, including: unplanned reduction in revenue, seasonal fluctuations, business disruption, sustained reduction in profitability, unplanned capital expenditure, increase in operational costs, inadequate management of working capital, future debt repayments, breach of loan covenants, not matching the maturity profile of debts to the assets which they are funding, inadequate or non-existent financing facilities and inadequate cash flow management (Basel Committee on Banking Supervision, 2008).

b. Need for Adequate Liquidity

Liquidity is dynamic and can change according to both business and market conditions. These conditions can be both expected and unexpected, and will give rise to the need to ensure adequate liquidity to cover all events. In the event that a business faces a cash flow crisis, then the consequences can be wide-ranging (Murdoch, 2000).

The potential issues faced could include (but are not limited to):

i. Impact on supply of goods or services due to inability to meet payment terms
ii. Inability to meet capital expansion plans
iii. Breaching bank loan covenants
iv. Increase in penalties for non-payments and late payments, such as tax obligations etc.

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v. Breaching legal requirements including non-payment of payroll, superannuation and similar obligations
vi. Recall of loan funds due to non-payment of interest and fee commitments
vii. Insolvency / bankruptcy

Diamond and Rajan (2001) stated that a business with adequate liquidity has less risk of being unable to meet their obligations than an illiquid one. Where a business has adequate liquidity, there is also the possibility of improved profitability through reduced interest expense or increased interest income, together with greater financial flexibility to negotiate enhanced terms with suppliers and financiers or participate in new business opportunities.

Cash flow is an integral part of everyday operations. Generally speaking, the root cause of many business failures stems from the inadequate management of available cash, the lack of available cash resources, or lack of access to appropriate financing facilities.

c. Methods of Measuring Liquidity Risk

Due to the numerous sources of liquidity risk, there are several ways of measuring this risk. This guide provides some examples of the simpler measures which can be applied and understood by most businesses.

i. Cash Flow Forecasting

Whether or not a business is experiencing tight liquidity, a regular cash flow forecast is a prudent step for any business to take. Where a business is suffering a cash flow crisis, or in the event that either one of business or market conditions remain volatile, short-term liquidity monitoring should be considered. Where the business has large volumes of daily cash flow transactions (this would depend on the industry, although a rule of thumb would be ten or more daily cash flow transactions), then short-term liquidity may need to be managed daily and monitored often (Ismal, 2010). Where the daily cash flow volumes are less, then weekly cash flow forecasting is best suited, ensuring that the management of short-term liquidity does not put undue pressure on the business resources. Short-term liquidity management will highlight any emerging problems quickly.

Longer term cash flow forecasts can be used to support the strategic objectives of the business and also provide financial details for proposed projects or lenders. In this case, the longer-term cash flow forecast is less about solvency and more focused on longevity of the business. These requirements can be assessed by using a monthly cash flow forecast for the appropriate period

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that needs to be assessed. In most circumstances, a long-term cash flow forecast will be developed for the current financial year to monitor the cash flow of operational activities.

It is important that all business units contribute to the cash flow forecasts to ensure that all sources of liquidity risk are identified. In the event that a cash flow forecast is developed to support a proposed project, then the duration of cash flow forecast should match the term of the project. This is particularly important where a business is altering its strategic direction.

Long-term liquidity can be further assessed by means of sensitivity analysis on the forecast to evaluate the impact of different strategies and levels of business activity in relation to prospective success of internal and external funding (Basel Committee, 2008). When preparing cash flow forecasts, it is essential that realistic assumptions are built into the model.

ii. Financial Ratio Analysis

Financial ratios can be used to identify key areas of liquidity risk. To measure both short-term and long-term liquidity risk, there are three main categories.

d. Indicators of Operating Cash Flows

The ratio of earnings before interest and tax (EBIT), as a multiple of interest expense, is an indicator of the short-term ability to service debt. Ratios may vary from industry to industry and a ratio below industry standards should be critically examined as it may indicate a weakness to an unexpected downturn in income, which could result in insolvency or default on loan covenants. For businesses that have large amounts of non-cash expenses (amortisation, depreciation, deferral items, etc.) it may be more appropriate to look at earnings before interest, tax, depreciation and amortisation. The ratio of debt to gross cash flow (operating profit plus depreciation and deferrals) indicates the financial strength of the business in terms of how many years of cash flow would be required to repay all debt assuming no new debt or equity raisings.

The amount of retained cash which represents cash flows after payment of dividends and owners' withdrawals (net available cash). The amount of available uncommitted funds which are calculated by adjusting retained cash balances for working capital needs and capital expenditures.

e. Ratios of Liquidity

Financial ratios do not necessarily identify the timing of cash flow which is crucial for liquidity management. Furthermore, ratios must be used with care because they may provide only an

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indication of current liquidity based on past performance and are not an indication of the outcome of future operations (Hosna et al., 2009)

Ratios which may be useful in assessing liquidity include:

i. The acid or Quick Ratio, which indicates the extent to which current liabilities can be paid immediately out of liquid assets (cash or cash equivalent), and may indicate the size of the buffer of cash.
ii. The current ratio, which compares the book value of current assets with current liabilities. A ratio of over 1:1 is normally considered to be comfortable. A ratio below 1:1 needs attention as it may indicate a shortage of funds.
iii. The availability of undrawn banking facilities as a percentage of current liabilities, which indicates the existence of a buffer in case of unexpected cash requirements.

When using these ratios, it is important to consider the value used for both stock and debtors. For example, if the business has a large amount of unsalable stock or uncollectable debtors' funds, then the ratios may need to use adjusted figures to reflect this.

f. Financial Strength (Leverage)

The more highly geared (i.e. the greater the ratio of debt to total funds) the business is, the greater its vulnerability to any downturn in cash flows. This would be especially serious, if it coincides with a time for repayment of debt. Highly geared businesses have less capacity to absorb losses or obtain rollover funds.

The appropriate ratio of debt to total funds (debt plus equity) will depend on the type of business and the nature of the operations. As a broad generalisation, a ratio of debt to total funds below 30% may be prudent (although representing an uneconomic level of gearing), while if debt is over 60 % of total funds, this may indicate that the business is becoming highly geared and may be vulnerable in the event of a sudden decline in cash flow from operations. Clearly, cash flow (revenue) quality, consistency and reliability are critical factors in determining an appropriate gearing (Allen and Gale, 2004).

g. Assessment of Funding Facilities

A thorough assessment of available funding may identify risks to the cash position of the business. The key areas to assess would include:

i. The extent the business relies on financing facilities
ii. The extent the business relies on only one lender

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iii. The maturity profile of the facilities, where there is more than one financing facility, ensuring that not all financings mature on the same date
iv. Strength of the relationships with lenders, shareholders and investors
v. The availability of funds in extreme crisis conditions (e.g. Global Financial Crisis)
vi. The status of financing facilities (committed or uncommitted)
vii. Thorough review of loan requirements or covenants to understand the trigger points and subsequent consequences
viii. The ability of the business to raise additional equity

6.1.2. Interest Rate Risk

According to Goodhart (2008), there are two basic facets of liquidity risk: maturity transformation (the maturity of a bank's liabilities and assets) and the inherent liquidity of a bank's assets (the extent to which an asset can be sold without incurring a loss in value under any market conditions). In fact, these two elements of liquidity are intertwined. Financial institutions do not need to worry about the maturity transformation, if they have the assets that can be sold without bearing any loss.

Whereas, institutions having assets that are going to be matured in a shorter period may have less need to keep the liquid assets. Apart from the above-said maturity mismatch, liquidity risk rises due to recessionary economic conditions, causing less resource generation. This leads to an increase the demand of depositors creating liquidity risk. This may cause the failure of a given financial institution or even the banking system due to contagion effect (Diamond and Rajan, 2005).

6.1.3. Credit and Solvency Risks.

Credit risk indicates the failure of a bank to receive interest and/or principal from loans and non-treasury securities. Credit risk also occurs when a bank gives commitments or guarantees on behalf of customers (Sinkey, 2006). Furthermore, credit risk is present in all counterparty exposures like interest rate swaps. On balance sheet strategies for managing credit risk include increasing provisions for all anticipated loans losses. Although, higher provisions reduce the profitability of a bank but higher provisions as percentage of total assets also signals a bank's efforts towards mitigating credit risk. Thus, provisions as percentage of total assets can provide an indication of the extent of credit risk management (Kashyap et al., 2002).

Solvency risk arises out of lack of sufficient funds to pay depositors in the event of a run. Capital to assets ratio indicates the cushion available to a bank against unexpected losses and implicitly protects the interests of insured depositors (Allen and Gale, 2004). Higher capital to assets ratio

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builds confidence of bank depositors but may reduce shareholder value due to reduction in ROE. Thus, maximization of ROE is often linked to a trade-off between ROA and the Equity Multiplier (EM) (reciprocal of capital to asset ratio) which is calculated as total assets/total stakeholder's equity. Banks with higher EM may increase the ROE for shareholders but higher EM indicates low capital to asset ratio and therefore higher solvency risk, which may lead to the bank closing down.

6.1.4. Liquidity Risk Management Process

The liquidity management process first begins with the Board of Directors (BOD) of a firm establishing a liquidity management policy which will serve as a guideline for all the employees in the firm. The Basel Committee, as banking supervisory body, has provided at least three requirements for a BOD to carry out, which are summarised briefly below.

First of all, there is the need for the BOD to understand the liquidity risk profile of their organisation, bearing in mind their internal and external business environment, in order to be able to determine their tolerance limit. Again, there is the need for the BOD to determine and approve the appropriate strategies, policies and liquidity risk management practices which they intend to adopt for their operations. And finally, the BOD also needs to relate the content of this policy to the senior management and then guide them in order to implement it (Basel Committee, 2008). Policies are written statements which show an institution's commitment to pursue certain goals and objectives, by setting standards and courses of action. They are intended to clearly specify the institution's mission, values and principles, as well as defining how daily activities are to be carried out (Kimathi et al., 2015).

With the above requirements having been settled, the policies now must contain the specific goals and strategies of managing the liquidity of the firm (both in the short-term and long term). As a matter of fact, these policies are meant to clearly define the roles and responsibilities of the entities involved the liquidity management process, which include asset and liability management policies as well as the firm's affiliation with other financial institutions and regulators at large. Thus it behoves the BOD to collaborate with the appropriate expertise like the CEO, risk managers and regulators in order to formulate an effective policy which takes into account the business environment of the firm.

6.1.5. Liquidity Risk and Performance of Micro Finance Institutions

Liquidity problems may affect a bank's earnings and capital and in an extreme circumstance may result in the collapse of an otherwise solvent bank (Central Bank of Barbados, 2008). Banks may have to borrow from the market at even an exceptionally high rate during a liquidity crisis. These

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ultimately cause 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 will rise, affecting the bank's effort to maintain an optimal capital structure.

Liquidity risk may cause a fire sale of the assets of the bank which may spill over into an impairment of the bank's capital base (Diamond and Rajan, 2001; Falconer, 2001). If any of the financial institution faces a situation in which it has to sell a large number of its illiquid assets to meet a funding requirements (perhaps to reduce the leverage in conformity with requirement of capital adequacy), the fire sale risk may arise. This scenario may dictate to offer price discount to attract buyers. This situation will have a knock on effect on the balance sheet of other institutions as they will also be obliged to mark their assets to the fire sale price (Goddard et al., 2009).

Diamond and Rajan (2001) state that a bank may refuse the lending, even to a potential entrepreneur, if it feels that the liquidity need of the bank is quite high. This is an opportunity loss for the bank. If a bank is not able to meet the requirements of demand deposits, there can be a bank run (Diamond and Rajan). No bank invests all of its resources in the long term projects. Many of the funding resources are invested in the short run liquid assets. This provides a buffer against the liquidity shocks.

Diamond and Rajan (2005) emphasizes that a mismatch in the depositor's demand and production of resources forces a bank to generate the resources at a higher cost. Liquidity has a greater impact on the tradable securities and portfolios. Broadly, it refers to the loss emerging from liquidating a given position (Zheng and Shen, 2008). It is essential for a bank to be aware of its liquidity position from a marketing perspective. It helps to expand its customer's loan in case of attractive market opportunities (Falconer, 2001). Banks with liquidity problems lose a number of business opportunities. This places a bank at a competitive disadvantage, as a contrast to those of competitors.

6.1.6. Managing Liquidity Risk

Liquidity risk management is an essential component of the overall risk management framework of the financial service industry, concerning all financial institutions (Majid, 2003). Ideally, a well-managed bank should have a well-defined mechanism for the identification, measurement, monitoring and mitigation of liquidity risk. A well-established system helps the banks in timely recognition of the sources of liquidity risk to avoid losses. The balance is growing in markets has made the liquidity risk management more challenging (Guglielmo, 2008) further argues that the banks having enhanced exposure in the capital markets must have a deep understanding of the risk involved. The said banks should develop a mechanism required for proper risk measurement

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and management. A bank should have continuous awareness about the breakdown of its various funding sources in terms of individual strata of clientele' financial markets and instruments (Falconer, 2001).

i) Techniques to Mitigate Liquidity Risk

Traditionally, banks are mandated to maintain a certain level of liquidity in order to serve both regular and irregular demand for liquidity from depositors (Basel Committee, 2008). Regular demands for liquidity are those coming from the daily transaction activities of depositors, whereas the irregular demand (which could be predictable or unpredictable), normally consist of issues such as government withdrawals for fiscal operations and contagious banking crisis, leading to runs (Ismal, 2010).

In the area of satisfying regular demand for liquidity, banks are required to maintain a standby account on the asset side of their balance sheet from which a pool of funds can be drawn from when needed. Commercial banks will obviously need more funds in this pool compared to Savings and Loans Companies and Micro Finance Institutions. Helmen et al. (as cited in Ismal, 2010) describes this standby account to consist of the following:

Currencies (cash in vault) which are the funds held by the banks to meet daily transactions. The surplus is sent to the central bank and central bank certificates; certificates are the liquid deposits kept at the central bank.

Other commercial bank deposits include short-term deposits of banks with other commercial banks. For example, many smaller institutions like the Savings and Loans Companies and Micro Finance Institutions have deposits with the larger commercial banks, both for transaction purposes and as a backup.

Cash items in the process of collection: These consist of cheques deposited with the central bank or other commercial banks, for which credits have not yet been received.

Greenbaum and Thakor (as cited in Ismal, 2010) also propose some techniques to help mitigate the regular demand for liquidity. These include investing more funds in liquid loans and/or keeping more cash in hand. Again, they make mention of the diversification of the sources of funds and finally, the use of the central bank as a lender of last resort where possible.

Now as already mentioned, irregular demand for liquidity is in two folds: predictable and unpredictable. Managing predictable irregular demand for liquidity involves banks using their past experiences or historical data to estimate their short-term liquidity demand, and with the

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assumption that this demand could be seasonal, cyclical or trend. At best, banks could even establish cordial relationships with their clients, and with that, use it to find out their withdrawal schedules or pattern (Ismal, 2010).

Forecasting unpredictable irregular demand for liquidity however, is more difficult to do so, as the name even suggests. Thus for this case, various proactive measures could be undertaken, which include having a contingency funding plan, having a prudential allocation of assets, having a combination of cash flow matching and liquid assets, using deposit insurance.

According to Gatev and Strahan, (2003), the deposits provide a natural hedge to banks against the liquidity risk. Under the stressed market conditions, the banks are perceived as a haven for investors who do not intend to issue funds against their loan commitments. The cash flows in any bank complement each other. The inflows of funds give a natural hedge to banks for outflows due to loan advancements. Therefore, banks use deposits to hedge the liquidity risk. This argument also finds support from the work of Kashyap et al. (2002) who provide a rationale of risk management to define the feature of commercial banks, commonly labelled as "financial intermediary" combining demand deposits with loan commitments.

One possible counter measure to reduce liquidity pressure is the transformation of illiquid assets into cash. In times of immense funding pressure, securitization techniques are usually employed by banking system for liquidation of assets like mortgages (Jenkinson, 2008). A bank should respond to funding shortfall by acting on the assets side of the balance sheet if it is facing restrictions on raising liquidity. It will be forced to squeeze the advancement of loans to its customers to reduce funding requirements. Despite its features to support funding and increase liquidity, Ali (2004) has narrated two main drawbacks of the above stated policy. First, this strategy needs a bit longer period to be matured. Many of the lending decisions are taken in advance and hard to be reversed instantly, thereby not generating liquidity drainage quickly.

Second, reduced lending affects a large part of the economy. In the non-availability of funds to companies and households, it becomes difficult to support long-term investment and consumption in the economy.

6.1.7. Financial Performance

Organisational performance can be measured by financial aims attainment or workers' satisfaction. In the same manner Ho, (2008) pointed out that performance can be evaluated by efficiency and effectiveness of aim attainment. Furthermore, Venkatraman et al. (2008) cited that performance can be assessed by financial performance namely, return on investment, growth of sales, profit, organisation effectiveness, and business performance. Similarly, Delaney et al,

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(2006) asserts that organisation performance can be evaluated by quality service and product, satisfying customers, market performance, service innovations and employees that organisation performance can be appraised by following "dimensions of performance: return on investment, margin on sales, capacity utilization, customer satisfaction and product quality". In the same way, Green et al., (2007) identified that return on investments, sales and market growth and profit are important factors that can be measured by organisation performance. According to these researchers, there are many factors in the study that be measured by performance such as market share, financial performance, efficiency and effectiveness of an organisation performance, and human resource management.

There is general agreement that bank profitability is a function of internal and external factors, Koch (1995) observed that the performance difference between banks indicates the differences in management philosophy as well as the differences in markets served. Profitability if a function of internal factors that are principally influenced by bank's management decisions and policy objectives such as the level of liquidity, provisioning policy, capital adequacy, expense management and bank size, and external factors related to industrial structural factors such as ownership, market concentration and stock market development and other economic factors (Arthanasoglou et al., 2006).

Birlay and Westheed (2001) view financial performance as an approximation for financial success, which is the rate at which the enterprise is satisfied with the profits and growth levels attained. Financial performance looks at the results of a firm's policies and operations in monetary terms, being a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation (Hillman and Keim 2001).

There are a number of financial performance measures, however there is little consensus about which instrument to apply. Richard (2009), views organisational performance as encompassing three specific areas of firm outcomes financial performance (profits, return on assets, return on investment); product market performance (sales, market share); and shareholder return (total shareholder return, economic value added).

Many researchers use market measures like Alexander and Buchholz (1978) and Vance (1975) while others put forth financial measures like Cochran and Wood (1984) and Waddock and Graves (1997). Some adopt both of these (McGuire, Sundgren, Schneeweis, 1988) while others use perceptual measures given inaccessibility of accounting measures of performance (Lyles, 1996; Peng, and Luo, 2000). However, each has different theoretical implications (Hillman and Keim 2001) and each is subject to particular biases (McGuire, Schneeweis and Hill, 1990).

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With a long term stable good performance, earning, efficiency, risk taking and leverage together should be concerned by Micro Finance bank's manager. These factors can be presented with stakeholders' overall interest. However, different stakeholders could be interested with different measurements from traditional, economic and market based point of view applied by academics or practitioners. For example, commonly used traditional ROE measure is one of the internal performance measures for shareholders' value (return of shareholder investment); on the other hand, P/E ratio is the market based measure for analysis financial results of the bank over its share price. Different stakeholders of a bank see its performance from different angles, which depositors are more likely concerned with bank's long term ability to insure their savings, equity holders are more likely looking for bank's profit generation and debt holders will pay more attention to how this bank can repay its obligation (ECB, 2010). The following measures are applicable for financial performance,

6.1.8. Determinants of Financial Performance

The financial performance of firms can be determined by either internal factors or external factors. Internal factors could be bank specific determinants while external factors are Industry specific determinants and macroeconomic determinants. These indicators include: capital adequacy, assets quality, operational efficiency, liquidity and external factors.

i. Internal Factors

a. Liquidity

Liquidity of the firm is a key determinant of the firm's financial performance. Liquidity risk can be measured by two main methods: liquidity gap and liquidity ratios. The liquidity gap is the difference between assets and liabilities at both present and future dates. Liquidity is the amount of capital that is available for investment and spending. Capital includes cash, credit and equity. Most of the capital is credit rather than cash. That's because the large financial institutions that do most investments prefer using borrowed money (Jeanne and Svensson 2007). At any date, a positive gap between assets and liabilities is equivalent to a deficit. Liquidity ratios are various balance sheet ratios which should identify main liquidity trends. These ratios reflect the fact that firm should be sure that appropriate, low cost funding is available in a short time. This might involve holding a portfolio of assets than can be easily sold cash reserves, minimum required reserves or government security

b. Asset Quality

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The firm's asset is another bank specific variable that affects the financial performance of the firm. The bank asset includes among others current asset, credit portfolio, fixed asset, and other investments. Often a growing asset (size) related to the age of the firm. More often than not the loan of the financial institution is a key asset that generates the major share of the banks income (Jeanne and Svensson, 2007). Loan is the major asset of most financial institutions from which they generate income. The quality of loan portfolio determines the financial performance of firm. The loan portfolio quality has a significant impact on the financial performance of the firm. A review or evaluation assessing the credit risk associated with a particular asset. These assets usually require interest payments such as a loans and investment portfolios. How effective management is in controlling and monitoring credit risk can also have an effect on the what kind of credit rating is given (Kashyap, Rajan and Stein, 2002).

c. Operational Efficiency

Operational efficiency is one of the key internal factors that determine the financial performance of the firm. It is represented by different financial ratios like total asset growth, loan growth rate and earnings growth rate. It is one of the complexes subject to capture with financial ratios. Moreover, operational efficiency in managing the operating expenses is another dimension for management quality (Halling and Hayden, 2006). The performance of management is often expressed qualitatively through subjective evaluation of management systems, organisational discipline, control systems, quality of staff, and others. Some financial ratios of the financial statements act as a proxy for operational efficiency. The capability of the management to deploy its resources efficiently, income maximization, reducing operating costs can be measured by financial ratios. One of this ratios used to measure management quality is operating profit to income ratio (Halling and Hayden, 2006).

d. Capital Adequacy

Capital ratio has long been a valuable tool for assessing capital adequacy and should capture the general safety and soundness of financial institutions. In most cases well capitalized banks face lower expected costs of financial distress and such an advantage will then be translated to financial performance of the firm. A firm that exhibits a strong capital base is able to take advantage of profitable investments that can yield high returns in future (Holmstrom and Tirole, 2000).

This ratio is used to protect depositors and promote the stability and efficiency of financial systems around the world. Two types of capital are measured that is tier one capital, which can absorb losses without a bank being required to cease trading, and tier two capital, which can

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absorb losses in the event of a winding-up and so provides a lesser degree of protection to depositors (Kashyap, Rajan and Stein, 2002).

ii. External Factors

The macroeconomic policy stability, Gross Domestic Product, Inflation, Interest Rate and Political instability are also other macroeconomic variables that affect the financial performance financial institutions. For instance, the trend of GDP affects the demand for banks asset (Goddard, Molyneux and Wilson, 2009). During the declining GDP growth, the demand for credit falls which in turn negatively affects the profitability of banks. On the contrary, in a growing economy as expressed by positive GDP growth, the demand for credit is high due to the nature of business cycle. During boom the demand for credit is high compared to the recession (Halling and Hayden, 2006).

6.1.9 Micro Finance Institutions (Credit Unions)

Micro Finance Institutions (MFIs) refer to financial institutions which provide financial services to poor economic agents who are typically excluded from the formal banking system for lack of sufficient collateral (Murdoch 2000). Lack of access to credit can be understood within the context of the absence of collateral that the economically challenged should provide to conventional financial institutions coupled with the various difficulties and high costs involved in dealing with large numbers of small, often illiterate borrowers (Weiss and Montgomery 2005). The poor mostly rely on money from money lenders at high interest rates or friends and family who themselves are cash trapped. MFIs try to overcome these obstacles through initiatives such as group lending and regular savings schemes. Micro Finance is defined as the provision of financial services to low-income economic agents and very poor self-employed and/or unemployed people (Otero, 1999). These financial services according to Ledgerwood (1999) generally include savings and credit but can also include other financial services such as insurance and payment services. Schreiner and Colombet (2001) on the other hand, define Micro Finance as the attempt to improve access to small deposits and small loans for poor households neglected by the formal banking sector. All around the world, poor economic agents are excluded from formal financial and banking systems. As a result of this exclusion, the poor, especially those in the developing world have developed a wide variety of informal, community-based financial arrangements to meet their financial needs. Over the last twenty years, an increasing number of formal sector organisations (nongovernment, government, and private) have been created for the purpose of meeting those same needs. Such informal and formal arrangements offering financial services to poor economic agents come to be commonly referred to as Micro Finance (Brau and Woller, 2004).

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In the context of Africa, the extent of poverty and the existence of a huge informal and private sector, with little or no access to formal sector financial services make micro-financial involvement particularly crucial (Steel et al. 1997). According to Robinson (2001), Micro Finance refers to small scale financial services for both credits and deposits that are provided to people who farm or fish or herd; operate small or microenterprise where goods are produced, recycled, repaired, or traded; provide services; work for wages or commissions; gain income from renting out small amounts of land, vehicles, draft animals, or machinery and tools; and to other individuals and local groups in developing countries in both rural and urban areas. Thus, Micro Finance has often been understood as the means by which poor economic agents convert small sums of money into large lump sums (Rutherford, 1997). Over the last two decades, the growth of the finance sector in the CEMAC region has been marred by the collapse of many operators.

In the 1990s, as the region went through a turbulent economic turmoil, the banking sector was shaken to the roots. Of the 40 banks operating in the region, 9 simply closed down, 16 were declared insolvent and because of their vulnerability while 14 others were placed under constant supervisory observation by the region's central bank. Of the fourteen banks, it was found that only one met the Central bank and other international regulatory standards. After five years of extensive restructuring by the Central Bank, BEAC, 35 banks are currently operating in a region deemed under-served when it comes to conventional financial services. Micro Finance is not a foreign import in most CEMAC countries. Indeed, it is culturally rooted and can be traced back several centuries. Traditional Micro Finance institutions continue to provide access to credit and to some basic micro-insurance for the rural and urban communities. They are mainly informal Self-Help Groups (SHGs) or Rotating Savings and Credit Associations (ROSCAs) commonly known as susus in Ghana, tontines or Njangi in Cameroon. Other providers of Micro Finance services include market roving savings collectors for small traders and co-operatives. These traditional and informal financial institutions have tended to be constrained by geographical and societal boundaries with no aspiration to expand. In response and to restore health in the sector, the COBAC launched a vigorous reform programme. Central to this reform was the development and enforcement of an adequate regulatory framework. By 2006, the number of Micro Finance Institutions had halved. In January 2002, the Ministry of Finance of Cameroon banned 400 hundred companies from providing any form of financial services. Since then, the number of MFIs has been on the increase Source; BEAC (CEMAC Central Bank) Annual Report (2006).

Micro Finance is a source of financial services for entrepreneurs and small businesses lacking access to banking and related services. The two main mechanism for the delivery of financial services to such client are relationship base banking for individual entrepreneur and small businesses and group base model where several entrepreneurs comes together to apply for loans

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and other services as a group. In some regions for example southern Africa, Micro Finance is use to describe the supply of financial services to low income employees, which is closer to the retail finance model prevalent in mainstream banks. For some, micro finance is a movement whose object is a word in which as many poor and near–poor households as possible have permanent access to an appropriate range of high quality financial services, including not just credit but also savings, insurance and fund transfer. Micro Finance is a way to promote economic development, employment and growth through the support of micro- entrepreneurs and small businesses.

There exist three ownership types which include: ownership firm, non-profit organisation and cooperatives. Shareholders firms are firms limited by shares like banks and non-bank financial institutions owned by investors whether they are social or profit seeking investors, individuals or organisations. Cooperatives gather all first categories MFE; they are customer owned organisations like credits unions, saving and credit cooperatives. Non-profit organisations are organisations without any legal owners.

The current COBAC Micro Finance regulatory framework fills a legal vacuum. Member countries such as Cameroon had some embryos of legislation aimed at Micro Finance. Their activities were placed under the tutorship of the Ministries of Agriculture and The Ministries of Finance, because Micro Finance was initially seen as essentially suited for the promotion of rural and agricultural activities (Creusot, 2006).

In addition, there are networks which are not a special category per se, but which may be required to comply with an additional layer of requirements pertaining to the legal status. Overall, COBAC's key instrument and control mechanism at the inception of MFIs seems to be "Accreditation" or licensing. However, the prudential advantages of early licensing system as a control tool are not clear. In the CEMAC region, it is still possible to start Micro Finance activities without any prior authorization from anybody. This is typically the case for churches, a large number of domestic non-governmental organisations some of which have been known to manage portfolio of financial assets that are large enough to contain potential systemic risks.

The master framework that regulates Micro Finance activities in the CEMAC region came into force in 2002 and is known as "Standard n° 01/02/CEMAC/IMAC/COBAC Organisation and supervision of Micro Finance activities in the CEMAC". The COBAC does not prescribe any legal form for MFIs. It focuses on the nature of the activities and divided into three categories:

i. Category one provides savings opportunities exclusively to members and then use these savings to offer credit for member-run projects. These organisations cannot seek

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profit and exist for the sole purpose of the empowerment of their members. They are institutions that collect savings and deposits and lend them on exclusively to their members. This category includes associations, cooperatives and credit unions.

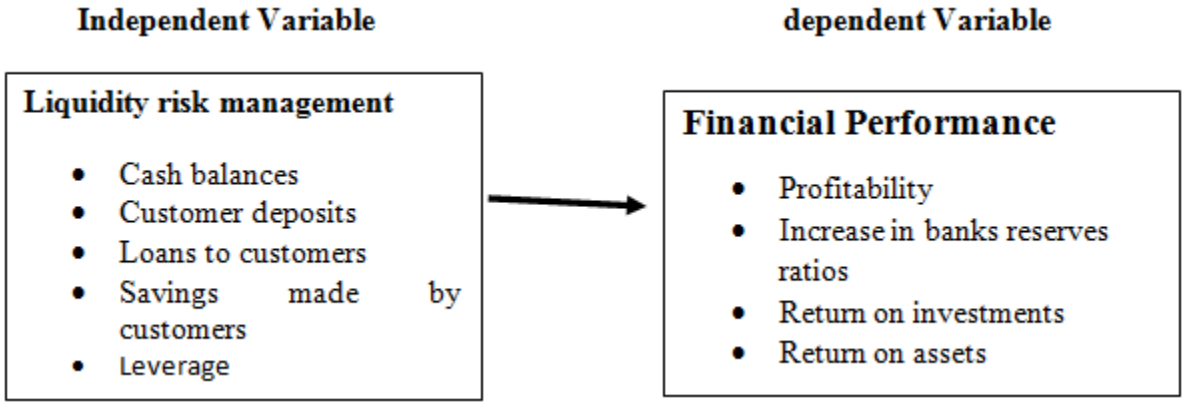
ii. Category two Micro Finance Institutions are profit-seeking institutions which offer savings and credit services to the public. They are institutions that collect savings and deposits and lend them on to third parties. This category groups limited liability companies that function more like mini banks.

iii. The third category is made of lending institutions that do not collect savings and deposits. They include micro credit and project finance institutions, NGOs. They can be easily assimilated to usurers but they do not lend a usury interest rate. It is a legal frame for private lenders to sell their money at a legal interest rate. The third category is not always private limited companies.

6.1.10 Conceptual Framework

According to Creswell (2003), conceptual framework is a basic structure of a research consisting of a certain abstract ideas and concepts that a researcher wants to observe or analyse. This study seeks to establish the effects of liquidity risk management on financial performance of BAPCCUL.

Figure 1: Conceptual Framework



Source: Mathieson and Roldos (2001), Modified by Visemih (2019)

6.2. Theoretical Literature

6.2.1 Liquidity Preference Theory

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Bibow (2005) stated that Keynes described liquidity preference theory saying that people value money for both "the transaction of current business and its use as a store of wealth. Thus, they will sacrifice the ability to earn interest on money that they want to spend in the present, and that they want to have it on hand as a precaution. On the other hand, when interest rates increase, they become willing to hold less money for these purposes in order to secure a profit.

Elgar (1999) One needs money because one has expenditure plans to finance, or is speculating on the future path of the interest rate, or, finally, because one is uncertain about what the future may have in store so it is advisable to hold some fraction of one's resources in the form of pure purchasing power. These motives became known as transactions-, speculative and precautionary motives to demand money. The banks‟ liquidity preference approach suggests that banks pursue active balance sheet policies instead of passively accommodating the demand for credit.

6.2.2 Theory of Corporate Liquidity

Alexiou and Sofoklis (2009) proposed a theory of corporate liquidity demand that is based on the assumption that choices regarding liquidity will depend on firms' access to capital markets and the importance of future investment to the firms. The model predicts that financially constrained firms will save a positive fraction of incremental cash flows, while unconstrained ones will not. The cost incurred in a cash shortage is higher for firms with a larger investment opportunity set due to the expected losses that result from giving up valuable investment opportunities. A liquid company takes advantage of available investments, cash discounts and lower interest charges on borrowings. Hence there is a relationship between cash holdings and investment opportunity and thus financial performance.

The difficulties experienced by some banks and other financial institutions during the financial crisis were due to lapses in basic principles of liquidity management. In response, as the foundation of its liquidity framework, the Basel Committee in 2008 published Principles for Sound Liquidity Risk Management and Supervision ("Sound Principles"). Liquidity is the ability of a bank to fund increases in assets and meet obligations as they come due, without incurring unacceptable losses (Banks, 2005). The liquidity of an asset depends on the underlying stress scenario, the volume to be monetized and the timeframe considered. Therefore, efficient and effective liquidity management is crucial if the survival and prosperity of firms is to be assured.

6.2.3 Commercial Loan Theory of Liquidity (Real Bills Doctrine)

According to this theory, Mishkin, Stern and Feldman, (2006), short-term loans advanced to finance saleable goods on the way from producer to consumer are the most liquid loans the bank can make. These are self-liquidating loans because the goods being financed will soon be sold.

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The loan finances a transaction and the transaction itself provides the borrower with the funds to repay the bank. Adam Smith described these loans as liquid because their purpose and their collateral were liquid. The goods move quickly from the producers through the distributors to the retail outlet and then are purchased by the ultimate cash-paying consumer (Comptroller of the Currency, 2001). A commercial bank needs a higher degree of liquidity in its assets. The liquidity of assets refers to the ease and certainty with which it can be turned into cash. The liabilities of a bank are large in relation to its assets because it holds a small proportion of its assets in cash. But its liabilities are payable on demand at a short notice. Therefore, the bank must hold a sufficiently large proportion of its assets in the form of cash and liquid assets for the purpose of profitability. If the bank keeps liquidity the uppermost, its profit will be below. On the other hands, if it ignores liquidity and aims at earning more, it will be disastrous for it. Thus in managing its investment portfolio a bank must strike a balance between the objectives of liquidity and profitability. The balance must be achieved with a relatively high degree of safety. This is because banks are subject to a number of restrictions that limit the size of earning assets they can acquire (Brunnermeier and Yogo, 2009).

The proponents of this theory argue that the most liquid of assets is money in cash. The next most liquid assets are deposits with the central bank, treasury bills and other short-term bills issues by the central and state governments and large firms, and call loans to other banks, firms, dealers and brokers in government securities.

The less liquid assets are the various types of loans to customers and investments in long term bonds and mortgages. Thus the principle sources of liquidity of a bank are its borrowings from the other banks and the central bank and from the sales of the assets. But the amount of liquidity which the bank can have depends on the availability and cost of borrowings. If it can borrow large amounts at any time without difficulty at a low cost (interest rate), it will hold very little liquid assets. But if it is uncertain to borrow funds or the cost of borrowing is high, the bank will keep more liquid assets in its portfolio (Crowe, 2009). A fully matched position is ideal for a self-liquidating balance sheet but this is not observable in real life, because of the conflicting objectives of a bank and its borrowers, nor is it desirable due to its negative impact on profitability; a reasonable level of mismatch enhances profitability (Crowe, 2009).

The merits are that such short-term self-liquidating productive loans possess three advantages. First, they possess liquidity that is why they liquidate themselves automatically. Second, since they mature in the short run and are for productive purposes, there is no risk of their running to bad debts. Third, being productive such loans earn income for the banks Despite these merits, the real bills doctrine suffers from certain defects. First, if a bank refuses to grant a fresh loan till the old loan is repaid, the disappointed borrower will have to reduce production which will adversely

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affect business activity. If all the banks follow the same rule, this may lead to reduction in the money supply and price in the community.

From the various points of view, the major limitation is that the theory is inconsistent with the demands of economic development especially for developing countries since it excludes long term loans which are the engine of growth. The theory also emphasizes the maturity structure of bank assets and not necessarily the marketability or the shift-ability of the assets.

6.2.4 Liability Preference Theory

This theory was developed in the 1960s. According to this theory, there is no need for banks to grant self- liquidating loans and keep liquid assets because they can borrow reserve money in the money market in case of need. A bank can acquire reserves by creating additional liabilities against it from different sources. These sources include the issuing of time certificates of deposit, borrowing from other commercial banks, borrowing from the central banks, raising of capital funds by issuing shares, and by ploughing back of profits.

Diamond and Rajan (2001) postulated that liability management theory focuses in banks issuing liabilities to meet liquidity needs. Liquidity and liability management are closely related. One aspect of liquidity risk control is the build-up of a prudential level of liquid assets. Asset and liability management is one of the most important risk management measures at a bank. It is one of the essential tools for decision making that sets out to maximize stakeholder value. It is important to track the external factors of the asset and liability management in the market to remain in the long term and to prepare for negative effects. Banking sector analysis could be the instrument to measure the sustainability of the country's financial sector (Goddard et al., 2009).

Asset liability management is the management of the total balance sheet dynamics and it involves quantification of risks and conscious decision making with regard to asset liability structure in order to maximise the interest earnings within the framework of perceived risks. The primary objective of asset liability management is not to eliminate risk, but to manage it in such a way that the volatility of net interest income is minimised in the short run and economic value of the organisation is protected in the long run. The liability management theory function involves controlling the volatility of net income, net interest margin, capital adequacy, liquidity risk and ensuring an acceptable balance between profitability growth and risk (Diamond and Rajan, 2001). The proponents of this theory argue that, through proper asset liability management, liquidity, profitability and solvency of banks can ensure that commercial banks manage and reduce risks such as credit risk, liquidity risk, interest rate risk and currency risk. The liabilities of a bank have different categories of varying cost, depending on the tenor and

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maturity pattern. Similarly, these comprise different categories with varying yields depending on the maturity and risks factors. The main focus of this theory is the matching of liabilities and assets (SBP, 2010).

6.2.5 Shift-ability Theory

Shift-ability theory, developed by Bhattacharyya (2011), states that the This theory also asserts that if the commercial banks maintain a substantial amount of assets that can be shifted on to the other banks for cash without material loss in case of necessity, then there is no need to rely on maturities. According to this view, an asset to be perfectly shifted able must be immediately transferable without capital loss when the need for liquidity arises. Loan for instance becomes secondary back up while secondary back up shifts to become primary back up.

This is particularly applicable to short term market investments, such as treasury bills and bills of exchange which can be immediately sold whenever it is necessary to raise funds by banks. But in a general crisis when all banks are in need of liquidity, the shift-ability theory

This theory posits that a bank's liquidity is maintained if it holds assets that could be shifted or sold to other lenders or investors for cash. This point of view contends that a bank's liquidity could be enhanced if it always has assets to sell and provided the Central Bank and the discount Market stands ready to purchase the asset offered for discount. Thus this theory recognizes and contends that shift-ability, marketability or transferability of a bank's assets is a basis for ensuring liquidity.

This theory further contends that highly marketable security held by a bank is an excellent source of liquidity. Dodds (1982) contends that to ensure convertibility without delay and appreciable loss, such assets must meet three requisites. Liability Management Theory Liquidity management theory according to Dodds (1982) consists of the activities involved in obtaining funds from depositors and other creditors (from the market especially) and determining the appropriate mix of funds for a particularly bank. This point of view contends that liability management must seek to answer the following questions on how do we obtain funds from depositors? How do we obtain funds from other creditors? What is the appropriate mix of the funds for any bank? Management examines the activities involved in supplementing the liquidity needs of the bank through the use of borrowed funds.

The liquidity management theory focuses on the liability side of bank balance sheet. This theory contends that supplementary liquidity could be derived from the liabilities of a bank. According to Nwankwo (1991) the theory argues that since banks can buy all the funds they need, there is no need to store liquidity on the asset side (liquidity asset) of the balance sheet.

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Liquidity theory has been subjected to critical review by various authors. The general consensus is that during the period of distress, a bank may find it difficult to obtain the desired liquidity since the confidence of the market may have seriously affected and credit worthiness would invariably be lacking. However, for a healthy bank, the liabilities (deposits, market funds and other creditors) constitute an important source of liquidity.

This theory has certain elements of truth. Banks now accept sound assets which can be shifted on to other banks. Shares and debentures of large companies are accepted as liquid assets along with treasury bills and bills of exchange. This has encouraged term lending by banks.

This theory has some weaknesses. First, mere shift-ability of assets does not provide liquidity to the banking system. It entirely depends upon the economic circumstances. Second, the shift-ability theory ignores the fact that in times of acute depression, the shares and debentures cannot be shifted on to others by the banks.

6.2.6 Loanable Funds Theory

The hypothesis of the loanable funds theory is that individuals care only about real variables (output gains or losses, purchasing-power gains or losses). The marginal productivity of capital assets (MPk) is given and determined by the technical characteristics of the productive assets. The time preference of individuals is given by the taste of individuals. Entrepreneurs want to maximize their real profit Individuals want to maximize their utility by arbitraging between present consumption and future consumption (and so saving).

In the loanable funds market, the supply of loanable funds comes from the individuals who want to save. They are the lenders. The demand for loanable funds comes from the entrepreneurs who want to buy capital assets (i.e. to invest). They are the borrowers. Negotiations in the loanable market are made in terms of real rate of interest: savers can lend at certain rate, and entrepreneurs have to borrow at another. Thus for the entrepreneurs where marginal gain is greater than rate of borrowing, they will invest more and vice versa. For individuals where marginal gain is greater than cost, they save and vice versa. An increase in investment will increase interest rates automatically.

6.3. Empirical Literature Review

Nfor-budi (2015) carried out a study on the effects of liquidity risk management strategy on financial performance of commercial banks in Cameroon with Afriland First bank as case study for a master's degree from the Pan African Institute for Development West Africa in Buea. This study adopted a correlation research design and data for the study was retrieved from the

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financial statements of Afriland bank during 2003-2013. Multiple regression was applied to test the hypothesis and the results showed that profitability is negatively affected due to increase in cash and leverage. The level of customer deposits was found to positively affect profitability.

Ahmed Arif, Ahmed Nauman (2012), carried out their study on the topic liquidity risk and performance of banking system in Pakistan. They used secondary data from 22 Pakistani banks during 2004-2009 and the multiple regression analysis was applied to access the effects of liquidity risk on banks' profitability. The results show that liquidity risk affect bank profitability with liquidity gap and non-performing loans as the factors exacerbating the liquidity risk as they had negative effects with profitability. The study recommends other researchers to carry out similar studies while using economic factors in place of profitability as a measure of performance.

Emami et al. (2013) studied the effect of liquidity risk on the performance of commercial banks in Iran. This study attempts to examine the effect of liquidity risk on the performance of commercial banks using of panel data related to commercial banks of Iran during the years 2003 to 2010. In the estimated research model, two groups of bank-specific variables and macroeconomic variables are used. In this research, the performance of fifteen Iranian banks is examined during an eight-year period from 2003 to 2010 using of panel data.

The required data is drawn from the studied banks and the data related to macroeconomic variables including the growth of gross domestic product, consumer price index are drawn from central bank's site in order to calculate the inflation ratio. To determine the kind of estimation method in panel data, different tests are used. To select between common effects and the fixed effects, Limner's F-test was used and to select one of the model for the fixed effects against the random effects, Haussmann test was used. The study found that liquidity risk has a significantly negative effect on both criteria of the performance i.e. return on asset and return on equity. It means that liquidity risk will cause to weaken the performance of bank.

Maaka (2013) studied the relationship between liquidity risk and performance of commercial banks in Kenya. The objective of the study was to investigate liquidity risks faced by commercial banks in Kenya and establish the relationship between liquidity risk and the performance of banks in Kenya. The study adopted ex post facto research design where data was retrieved from the balance sheets, income statements and notes of 33 Kenyan banks during 2008-2012. Multiple regressions were applied to assess the impact of liquidity risk on banks‟ profitability. Data was collected from annual reports submitted to the NSE and Capital Markets Authority. The F- test was used to determine the significance of the regression while the coefficient of determination, R^2, was used to determine how much variation in Y is explained by X. The findings of the study

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were that profitability of the commercial bank in Kenya is negatively affected due to increase in the liquidity gap and leverage.

In their study, Tianwei and Paul (2006) investigated on the effect of liquidity on financial performance in agricultural firms, a descriptive study was conducted and 50 firms were studied. The lenders of these firms strived to improve their credit risk management. Internal management was interested in understanding the financial impacts of alternative strategic decisions. And policy makers often assessed the magnitude and distributional effects of alternative policies on the future financial performance of farm business. Data was analysed using a Z-score model, this model was applied to farm accounting data for the detection of farm operating and financial difficulties. The results of this analysis showed that credit risk management significantly led to financial performance of agricultural firms.

Berríos (2013) investigated the relationship between bank credit risk and financial performance and the contribution of risky lending to lower bank profitability and liquidity. The sample data comes from the Mergent Online database, which stores ownership, executive, and financial information about public and private companies. This study focuses on the concept of prudent lending by public state commercial banks, insider ownership, and chief executive officer compensation and tenure, which are governance related bank characteristics. Performance variables in analysis of covariance models include net interest margin, return on assets, return on equity, and cash flow to assets. Preliminary results show a negative relationship between less prudent lending (which may be interpreted as a positive effect of more prudent lending) and net interest margin. However, findings were only statistically significant when the normality assumption was relaxed through the robust regression method. Insider holdings and longer chief executive officer tenure were negatively related to bank performance.

Wanjohi (2013) assessed the current risk management practices of the commercial banks and linked them with the banks' financial performance. Return on Assets (ROA) was averaged for five years (2008-2012) to proxy the banks' financial performance. To assess the financial risk management practices, a self-administered survey questionnaire was used across the banks. The study used multiple regression analysis in the analysis of data and the findings were presented in the form of tables and regression equations. The study found out that majority of the Kenyan banks were practicing good financial risk management and as a result the financial risk management practices mentioned herein have a positive correlation to the financial performance of commercial banks in Kenya. Although there was a general understanding about risk and its management among the banks, the study recommends that banks should devise modern risk measurement techniques such as value at risk, simulation techniques and Risk-Adjusted Return

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on Capital. The study also recommends use of derivatives to mitigate financial risk as well as develop training courses tailored to the needs of banking personnel in risk management.

Ibe (2013) studies the impact of liquidity management on profitability of banks in Nigeria. The work was necessitated by the need to find solution to liquidity management problem in Nigerian banking industry. Three banks were randomly selected to represent the entire banking industry in Nigeria. The period of study was 1995 – 2010. Three banks were selected at random to represent the banks in the banking sector of Nigeria. The hypothesis of the research was examined by the researcher using Regression analysis.

The proxies for liquidity management include cash and short term fund, bank balances and treasury bills and certificates, while profit after tax was the proxy for profitability. Elliot Rothenberg Stock (ERS) stationary test model was used to test the run association of the variables under study while regression analysis was used to test the hypothesis. The result of this study has shown that liquidity management is indeed a crucial problem in the Nigerian banking industry. The study concludes that management of liquidity is a challenge in the Nigerian banking sector.

Konadu (2009) did a study on liquidity and profitability using empirical evidence from listed banks in Ghana. The objective of the study was to determine the liquidity trend of selected banks, to ascertain the profitability trend of the selected banks and to establish and analyse the relationship between the banks' liquidity and profitability levels from 2002 to 2006. The researcher considered only banks listed on the Ghanaian stock exchange. The banks randomly selected were Standard Chartered Bank Ghana Ltd, Cal Bank Ltd and SG-SSB Ltd. In the study, the researcher considered current ratio, quick ratio, cash ratio, net operating cash flow ratio under liquidity ratios. Profitability ratios comprise of net profit margin, return on equity, return on assets and net asset turnover ratios. The researcher employed trend analysis to achieve the set objectives. In this study, the researcher found no positive relationship between liquidity trend and profitability. The research concluded that there is a negative relationship between liquidity and profitability in the Ghana banking sector.

Graham and Bordeleau (2010) did a study on the impact of liquidity on profitability of Banks in Canada. The study was aimed at helping to distinguish empirically, whether banks' holdings of liquid assets have a significant impact on their Profitability. Since liquid assets such as cash and government securities generally have a relatively low return, holding them imposes an opportunity cost on a bank. In the absence of regulation, it is reasonable to expect banks will hold liquid assets to the extent they help to maximise the firm's profitability. Beyond this,

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policymakers have the option to require larger holdings of liquid assets, for instance, if it is seen as a benefit to the stability of the overall financial system.

In the model, profitability is regressed as a non-linear expression of relative liquid asset holdings as well as a set of control variables. The relationship is a function of the liquid assets ratio, a measure of short-term funding reliance and general macroeconomic conditions. While controlling for other factors, the paper found evidence, based on a panel of Canadian and American banks from 1997 to the end of 2009, that profitability is improved for banks that hold some liquid assets, however, there is a point at which holding further liquid assets diminishes a banks‟ profitability, all else equal.

Ismal (2010) conducted a research on the management of liquidity risk in Islamic Banks in Indonesia. Using a triangulation method together with a combination of quantitative and qualitative research approaches, the study sought to analyse liquidity risk management in these banks as well as gain information on the perception of banking depositors and Islamic bankers. Industry performance analysis and econometric time series analysis were conducted to analyse liquidity risk management for Islamic banking. Furthermore, primary data collection was done through questionnaire surveys, targeted at Islamic bankers and depositors. The findings indicated that conventional Islamic banks are exposed to several risks, which affects their operations and performance. Paramount among these risks was liquidity risk, which indicated that the need for a comprehensive liquidity risk management program, especially one based on Sharia guidance and international banking practices.

Asongu (2013) also conducted a research on post-crisis bank liquidity risk management disclosure. The research was aimed at investigating the post-crisis measures banks had taken after the recent global financial crisis, in order to manage their liquidity risk. As already seen, liquidity risk management disclosure became critical for sustaining the confidence of the stakeholders of the economy at that time. Specifically, his study sought to examine the extent to which the Basel II pillar 3 disclosures on liquidity risk management was being applied by 20 of the top 33 world banks. Sampling of the banks was based on the availability information, the ease with which the information provided could be understood as well as ensuring balance geographically. The outcome of the study revealed that only 25% of the sampled banks provided information on liquidity risk management to the public, signalling that majority of the top ranking banks were still not fully complying with the Basel disclosure.

Kimathi et al. (2015), conducted a survey of 96 employees drawn from 6 Micro Finance Institutions in Kenya, in order the access the factors affecting liquidity risk management practices in the MFI's in Kenya. The study concluded that internal controls, institutional policies,

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board oversight and risk monitoring significantly affect the liquidity risk management practices of these MFI's. However, the study also recommended that there was the need for established MFI's to document their local strategies used in managing their liquidity risk, as well as introduce computerized financial management systems in order to make their internal control systems more effective, as these have a positive impact on their liquidity risk management practices.

Kaitibiet al. (2018) studied the link between Efficient Management of Credit Risk and Profitability of Banks in Sierra Leone. The researchers studied one of the commercial banks (Rokel Commercial Bank), for the period 2010 – 2014. Ratios and chats were adopted to examine the association that existed between the outcome and response parameters. The study established that efficient credit management considerably influenced financial returns of commercial banks during the period of the case study.

Marozua (2013) did a study in South Africa to ascertain the link between management of liquidity and financial returns of banks for the period 1994 – 2014. Least squire regression model was employed to empirically determine the link between ROA and liquidity, ROE and liquidity respectively. The research revealed that there is insignificant link between ROA and liquidity.

Kargbo, Hui and Li (2015) studied Commercial Banks' Performance and Credit Risk in Sierra Leone for the period 1997 – 2011. Panel least square regression approach was used to examine the connection between the response and outcome parameters. The conclusion was that loan loss provision, nonperforming loans and the quality of total loans contributed in the poor performance of banks in Sierra Leone. However, bank size and interest rate spread have positive impact on profitability at a very small margin. Das, Chowdhury, Rahma, and Dey (2015) examined the association between Management of liquidity and financial returns of commercial banks in Bangladesh covering the period 2011 – 201. Liquidity and profitability ratios were used to find out the link between management of liquidity risk and profitability of commercial banks. The study presupposes that adequate liquidity management can increase profitability of banks.

Nyabateh (2013) explored the link between management of liquidity and financial returns of financial institutions at the NSE for the period 2010 – 2014. The population of the study was nineteen financial establishments. Regression analysis model was adopted to enhance understanding of the link between the response and predictor variables. The study revealed a weak positive link between financial returns and liquidity of the institutions that were studied.

Shukla and Muchem (2017) studied the nexus between management of Liquidity and financial performance of commercial banks in Rwanda. Fourteen commercial banks were randomly selected for the purpose of the study. Multiple regression technique was adopted to establish the nexus between management of liquidity and financial returns of commercial banks in Rwanda.

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The study concluded that holding more liquid assets as compared to total assets would lead to lower returns to commercial banks in Rwanda and the effect is significant at 5 %.

Graham and Bordeleau (2010) studied the implications of retaining liquid assets on financial returns of big US and Canadian banks for the period 1979 – 2009. The study found improved financial returns for banks that retainedoptimum level of liquid assets.However, retaining liquid assets beyond the optimal levelwould diminish financialreturns, all else equal.

Idowu et al (2017) did a study to ascertain the link between management of liquidity and performance of banks in Nigeria. The study focused on four banks for the period of 2007– 2016 and Pearson's correlation coefficient model was adopted to analyse the association. The study found significant link between liquidity of banks and ROA and ROE.

Mwangi (2014) did a research on the link between management of liquidity risk and financial returns of commercial banks in Kenya for the period 2010- 2013. For the purpose of the study, forty-three listed commercial banks were targeted. Descriptive study design was used by the research to analyse the link between the variables. The study concludes that liquidity risks management is negatively associated with financial performance of commercial banks.

7. METHODOLOGY OF THE STUDY

7.1. Scope of the Study

This study is mainly limited to the Bamenda Police Co-operative Credit Union (BAPCCUL), which is one of the most influential and flourishing Micro Finance Institution in Cameroon. This study is carried out at the Head Office of BAPCCUL located at Commercial Avenue Bamenda. This is because the head office undertakes the activities of all the branches which are spread throughout the country and which will bring valid findings. In this study the researcher was focused on the liquidity risk management strategies and financial performance of BAPCCUL especially as the region is hit by the current socio-political crisis.

7.2 Background of the Study Area

Bamenda, also known as Abakwa or Mankon Town, is a city in Cameroon and the capital of the North West Region of Cameroon. The city has a population of about 2 million people and is located 366 kilometres (227 mi) north-west of the Cameroonian capital, Yaoundé. Bamenda is known for its cool climate and scenic hilly location.

Abakwa, which of date is made of three villages Mankon, Bamendankwe and NkwenBamenda presently contains the highest number of English speaking Cameroonians

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Bamenda is located in Cameroon and it's the headquarters of Mezam Division of the Northwest region of Cameroon. Bamenda is a city with Vincent NjiNdumu as the Government Delegate and AdolpheLeleL'Afrique as the Governor. The population of Bamenda as at the census of 2012 is made up of 348766 people living in the city and about 2000000 people living in its urban area. The elevation of Bamenda is 1614m (5295ft) above sea level.

The origins of the city are related to the establishment of the Tikar people who joined the Kingdom of Bamum in the 1700s. In 1884, the city was colonized by Germany until 1916 when it became a colony administered by Great Britain and France. In 1919, the administration of Northwest Region and thus the city of Bamenda became only British. In 1961, the region joined the Cameroon.

Many of the city's inhabitants are English-speaking, and Cameroonian Pidgin English is the main language spoken in the shops and on the streets of Bamenda.

The city is an amalgamation of seven villages – Mankon, Mendakwe, Nkwen, Chomba, Mbatu, Nsongwa and Bandzah. However, considerable portions of outlying suburban areas, including Bambui, Bambili, Bafut and Akum may be considered as part of the Bamenda greater cosmopolitan area, since urban development initiatives are fast engulfing the said areas (Mark Dike et al, 2019).

The main industries are the processing of agricultural produce such as coffee, elementary food processing, handicraft, cottage industry, education (schools), tourism/hospitality, construction works and transport. The local museum and shops display a wide variety of local baskets, beads, woodcarvings and bronze statues. Many industries and commercial companies are found in the town among which are the brewery company "les Brasseries du Cameroun" and Guinness Cameroun SA, North-west delegation of the then AES/SONEL which is now called Eneo, other companies like FOKOU, QUIFEUROU, SOREPCO, MTN and Orange are also found in the town. However, this study focusses on the Bamenda Police Cooperative Credit Union Limited.

In Bamenda, there are cultural sites such; as the Mankon Fon's Palace with its newly constructed museum, and the Bali Fon's palace with its ancient architectural structures. The mountainous terrain around the city affords scenic views such as that from the mountain Sabga over the Ndop plain. The city of Bamenda has road links to Yaoundé and Douala, as well as an airport, Bamenda Airport, located in Bafut subdivision. North of the city is the Bamenda Ring Road, a 367 kilometres (228 mi) circular route through Cameroon Highlands. Along this road is Mount Oku 3,000 metres (9,800ft), the Kimbi River Game Reserve, the Menchum River waterfalls, a huge Fon's palace at Bafut, and a pyramidal thatched shrine at Akum (also known as Bagangu).

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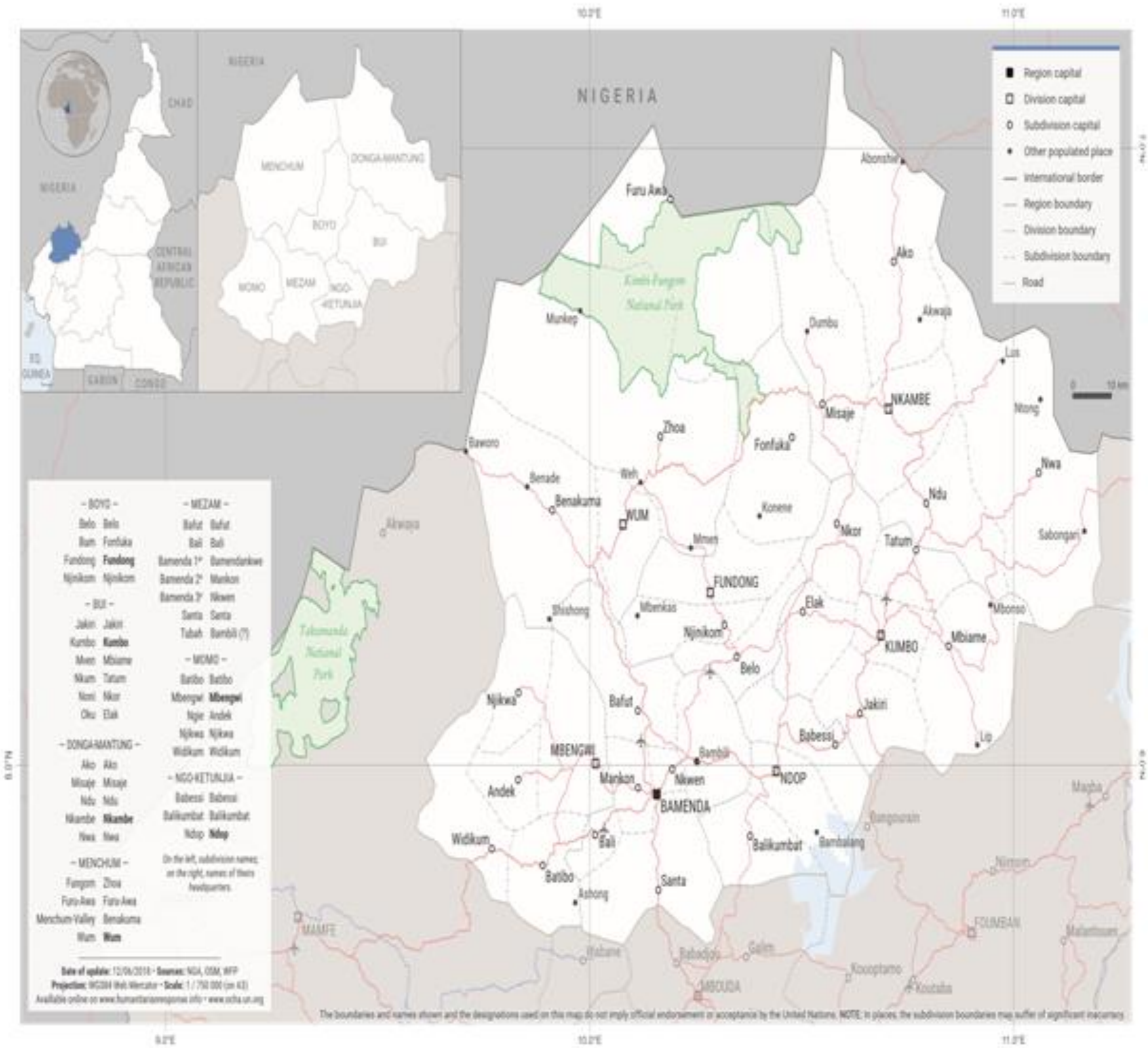
Bamenda has a tropical savanna climate (Köppen: Aw), bordering on a tropical monsoon climate (Köppen: Am), with a long summer wet season and considerably less rainfall in the winter.

Figure 2: Map of Bamenda



Source: Adapted from the UN Office for the Coordination of Humanitarian Affairs (2018)

The Bamenda Police Cooperative Credit Union Limited (BAPCCUL) started with a meeting of members of the west Cameroon pole force held in the Mankon Police recreation Hall on February 5th 1969, Police officers who attended the meeting included among others Messr, M, H Ntune, Ane C,T, Chief YakumNtaw and Pema Rudolf, M,H Ntune who was the chief of the

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police force in west Cameroon came to Bamenda just to create the BAPCCUL as he has already created some in south west province (now region) after he was convinced that a credit union could be if help to the police force, The objectives of the meeting were to promote thrift through systematic savings among members of west Cameroon police officers serving and receiving salary in Bamenda.

Mr. M.H. Ntune presided over the meeting and during the deliberation; members approved the proposal to form a credit union. The necessary arrangements to take up this venture were made and interested persons were requested to submit banker's order to respective banks through which the police officers received their salaries. Arrangements were also made for the payment of the registration fees. The first executive members of the union were elected as follows:

President - Chief J.F Yakum Ntaw

Vice president - Mr. M Langsi

Secretary - J.N.O Nkerbu

Treasurer - Mr. Eyongndip

At the end of April 1969, the first contributions were made in to the BAPCCUL, Savings account in BICIC. These contributions were successfully carried out for April, May, and June, 1969 through bankers' order. When the Cameroon government decided to federate the west Cameroon police force with effect from 1st July 1969, there was a suspicion among the police that they might be a difference or delay in the federal government pay system and consequently, may members of the union applied to withdraw their shares. Among those who did not apply to withdraw their shares were Messrs.Abeuyiy Henry Chi, Aliya Sango and Kimbeng Cletus, with their shares still outstanding and the unions account in the bank was not closed. In August 11969, shares stood at 428,500 CFAF. While membership was 92 but things were bot moving smoothly. Total shares of the union were still standing at 428,500 CFAF deposit with BICIC Bank.

The union first annual general meeting (AGM) were held on Saturday March 24, 1975 at the Mankon Police Recreation Hall chaired by Mr. Ashu Egbe Martin. The treasurer's report for the year ended 31st December 1972 presented by PA Agang, showed that membership of the union had once more risen to 82 and total shares and savings stood at 3,777,800 CFAF Interest from loan was 239,275 CFAF undivided earnings before appropriation of 252,121 CFAF was realized, so far. The total assets of the union were 2,624,500 CFAF. By the time of this annual general meeting in 1973, membership in the union was limited to police officers who received their

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salaries in Bamenda. The union was registered on December 1st 1972 with the registration no WC469.

BAPCCUL so far has 21 branches spread throughout the national territory. Some of the areas include: Yaoundé at Biyem-Assi, one in Bafia, two in Douala (Mbopi and Bonaberi Grand Hangar) and one in Bamenda Ghana Street (which started as a daily collection centre and went operational as a branch on the 16th of August 2008) and head office at old treasury street Commercial Avenue (BAPCCUL Archives, 2017)

See Appendix one for the organisational structure of BAPCCUL

7.3 Research Design

This study has used the Ex post facto research design to address its research questions and to meet its general objectives. The Ex post facto is used to study things which cannot be easily controlled like information derived from prepared financial statements and other publications. The Ex post facto research design is a quasi-experimental study examining how an independent variable, present prior to the study, affects a dependent variable. In this case the independent variables include customer deposits, cash balances, loans, savings and leverage and our dependent variable is the net profit. Here, data is collected from one Micro Finance institution in Cameroon which is the Bamenda Police Co-operative Credit Union LTD (BAPCCUL) "MFI".

7.4. Model Specification

It represents the relationship between liquidity risk management and the performance of Micro Finance institutions in a model form which shows how they relate. The dependent and independent variables were assumed to have a general multiplicative Cobb Douglas functional relationship. The model specification adopted from Ibe (2013) is specified as follows:

$$NP=Log\ (\beta_0 + \beta_1 DEP + \beta_2 Cash + \beta_3 LEV + \beta_4 SAV + \beta_5 LOAN) + \acute{\varepsilon} \quad (1)$$

Where; NP- Net profit which is the dependent variable,

β_0- Constant

DEP- Level of customer deposit

Cash- Cash and balances

LEV –Leverage ratio

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SAV – Savings of members

LOAN – Loans granted/ acquired

β_1, β_2, β_3, β_4 and β_5 are the coefficients of the independent variables

ε –Random error term

7.5. Justification and Measurement of Variables

i. Customer Deposits: They will be collected from the liability side of the statement of financial position without any classification of current or other types of deposit account. It gives the amount of customer deposits at the institution. Customer deposits are used in here because the more customers deposit the more liquid the institutions will be and vice versa.

ii. Cash: Cash balance that will be taken from the assets side of balance sheets. This will include only liquid cash only. It will give the amount of cash which is left idle to meet clients' demands for liquidity and which is creating value. Cash balances are used because cash is the most liquid asset of a business. The more the cash balances, the more liquid the institution and the reverse is true.

iii. Leverage Ratio: this was obtained by dividing Total liabilities by Shareholders' Equity. This variable was added to the regression model to act as a control variable to the firm's characteristics. Leverage represents the ratio of total assets to total liabilities and will have a great effect on profitability. Leverage is a technique involving the use of debt (borrowed funds) rather than fresh equity to purchase assets with the expectation that the after tax profit to equity holders from the transaction will exceed the borrowing cost.

iv. Savings: this is obtained from the members' savings account in the balance sheet. These savings include both the normal member's savings and the daily savings by customers who may not necessarily be members.

v. Loans: The information will be taken from the assets side of the balance sheet of this institution. This is the total amount of loans granted to members throughout the period under study.

7.6 Data Collection

The research make use of mainly the secondary sources of data by taking 15years (2004 -2018) annual reports of BAPCCUL specifically the balance sheet and the profit and loss accounts of

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this institution. Data is secondary due to the variables that are required in the findings which can only be gotten from past published annual financial reports. In addition, data from different documents, manuals, articles, journals, books, previous research and various internet sites will be used for the proper accomplishment of this study. Information from these sources will be limited to the scope of my study and used for more specifically where need be. The data set is shown in Appendix 2.

i. Analytical Technique

Data collected from the past annual reports of BAPCCUL was analysed using the Statistical Package for Social Sciences (SPSS) IBM version 20. The multiple regression analysis in the form of the Ordinary Lease Square will be applied to the data to examine the effects of the various aspects of liquidity risk on the performance of BAPCCUL. The regression model ran from the Annual reports of 2004 to 2018. The statement of financial position as well as the statement of financial performance and their notes will be studied to get the data for the variables mentioned in the model.

ii. Validation of Data

The T-statistics will be used to determine the significance of the regression of the independent variables while the coefficient of determination (R^2), will be used to determine how much variation in net profit is explained by the independent variables. This will be done at 99%, 95% and 90% confidence level. In all, the F-test will be used to determine the joint significance of all the independent variables to determine the dependent variable.

7.7 Reliability Test

The Cronbach's alpha was used to carry out reliability test and the result is shown on the table 1

Table 1: Reliability Statistics

Cronbach's Alpha	**No. of Items**
0.977	**5**

Source: Visemih, (2019)

From the output, the reliability statistic obtained Cronbach's alpha value of 0.977> 0.600, based on the basis of decision making in the reliability test. We can conclude that this research instrument is reliable with a high level of reliability.

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8. PRESENTATION AND DISCUSSION OF FINDINGS

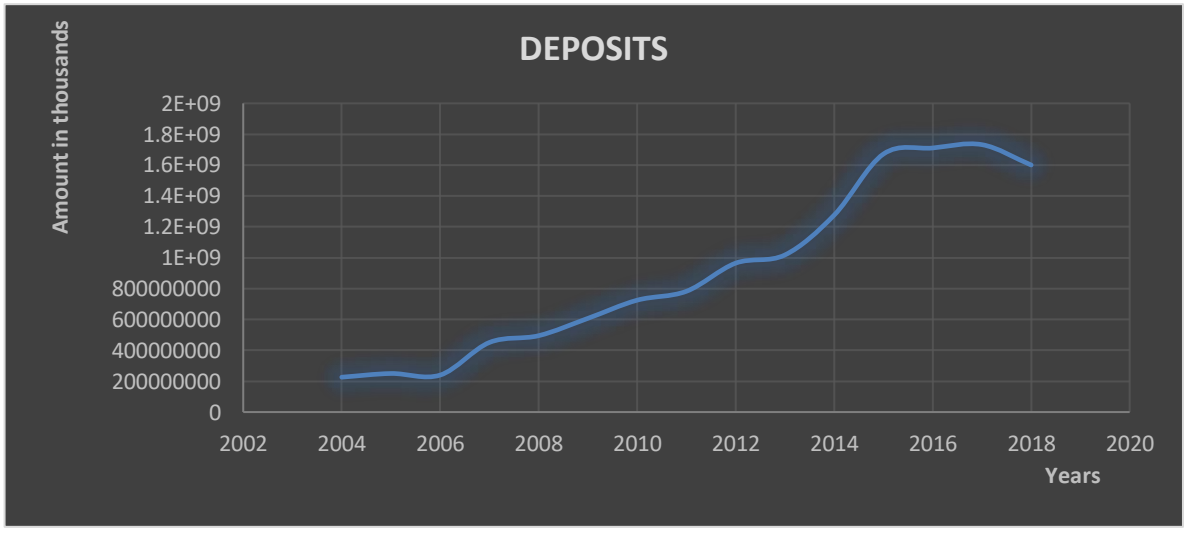
8.1 The Trend of Variables

This shows the behaviour of the variables used in the study throughout the period. It shows how they have been alternating. The variables include cash balances, customer deposits, savings, loans, leverage and net profit.

8.2 Trend of Customer Deposits

This shows how customer deposits have been behaving for the period over study- 2004 to 2018.

Figure 3: Trend of Customer Deposits



Source: Visemih, (2019)

From figure 3, customer deposits increased constantly from 2004 to 2016 and remained relatively stable between 2016 and 2017 and by 2018, it started falling. This may be accounted for by the present socio-political crisis in the regions as the region host many of the branches of this credit union. Also, many civil servants collect their salaries from this credit union and they operate fixed deposits accounts wherein at the end of each month amounts of money are deducted from their accounts and deposited there. Some businessmen around town also deposit their running capital in this credit union due to the fact that it is located inside the town and around the Commercial Avenue which is the business centre of Bamenda. Increase in the interest rates and other charges imposed by BAPCCUL on its customers may discourage members from

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depositing their money with this credit union and the fact that the institution sometimes lack liquidity to satisfy these customers immediately when they come for their cash withdrawals.

8.3 Trend of Cash Balances

It shows the balances which the credit union have been witnessing remaining in their account throughout the period and it's a measure of liquidity and the amount will determine the risk involved when customers come for it.

Figure 4: Trend of Cash Balances

Source: Visemih, (2019)

From figure 4, the trend shows that cash balances were steady between 2004 and 2009 and from 2010; it drastically dropped till 2011 and started increasing sharply right up to 2016 where it started falling to 2018. This can be accounted for by changes in financial transactions effected by members and clients of this credit union. Cash balances may increase due to increase in deposits and savings above withdrawals and the profits obtained from the business and investments of the company. Cash balances will fall if there are rushes by customers to affect withdrawals and it might also be due to investments by the company since the liquidity preference theory says money should be held for unforeseen circumstances, to meet the daily needs and to take chances of investment opportunities. The effects of the socio-political crisis not left out.

8.4 Trend of Loans to Customers

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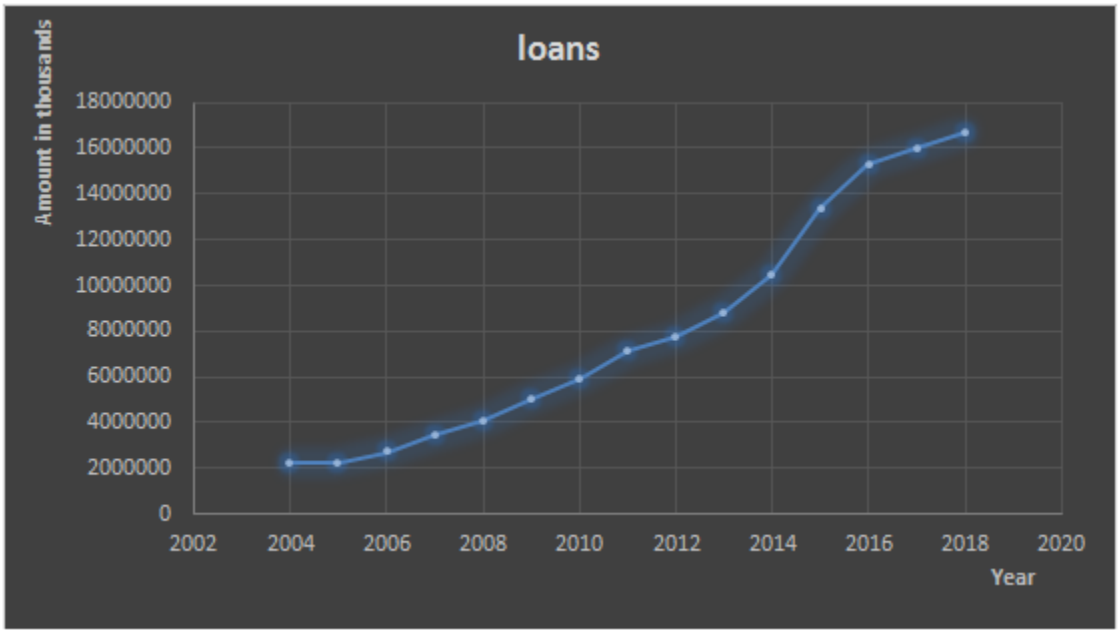
This shows the amount of loans BAPCCUL have been granting to its customers annually over the period of the study. Loan granting is one of the most profitable activity of banks and Micro Finance institutions. The way money is given out as loans will also affect liquidity (the funds available to carter for customers' needs) risk.

Figure 5: Loans Granted to Customers



Source: Visemih, (2019)

From the figure 5, the loan amounts increased slowly up till 2012 where it flattens and by 2013 it fell till 2014 and start rising again and rising very sharply between 2016 and 2018. The most profitable activity of Micro Finance institutions is the granting of loans to members since they are always paid with interest. The in the amount of loans can be as a result of the customers' need for cash either for investment, school fees for children, acquisition of real estate and many other profitable activities. Loans are also obtained for consumption since economic activities have been disturbed especially because of the risen socio-political crisis that has crippled their businesses.

8.5 Trend of Savings Made by Customers

Savings are kept to yield interest at the end of the financial year. The amount saved will also determine the liquid funds that will be available with the financial institution. Savings are used to

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grant loans and in other investments and to satisfy customers' cash needs. Savings are therefore a means of liquidity and the risk is the way they are used and the amount used.

Figure 6: Trend of Savings

Source: Visemih, (2019)

Figure 6 shows a steady increase in savings over the period. Members of BAPCCUL have had enormous confidence in the institution and despite the crisis in the regions, savings still continue to increase. From the table, one can witness that savings increased steadily from 2004 till it reaches 2018.

8.6 Trend of Net Profits

This show how the net profits of BAPCCUL have been changing between 2004 and 2018.

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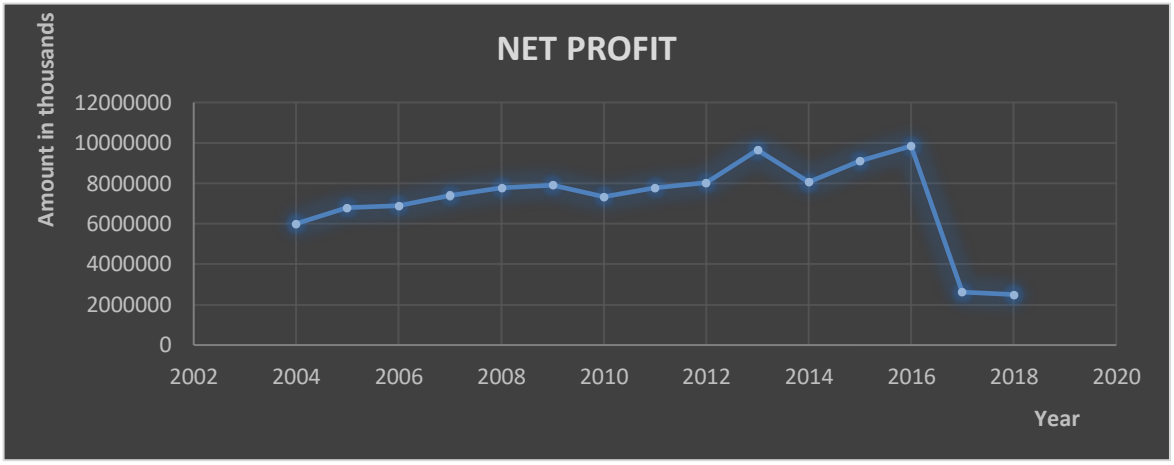
Figure 7: Trend of Net Profits



Source: Visemih, (2019)

Figure 7 shows that net profit has been alternating increasingly from 2004 to 2012 where it rose to 2013 and fell back in between 2013 and 2014. It started rising again from 2014 to 2016 and falls sharply to 2018. These alternations are due to the activities it was performing and the sharp fall in profit between 2017 and 2018 is not unconnected to the political crisis plaguing the region which has caused the credit union to shot down some of its branches located in some interior villages. Profit is the results of the activities of the institution and the way it falls or rises will depend on how the institution carries out its activities.

9. SUMMARY STATISTICS OF VARIABLES

Table 2: Descriptive Statistics of the Variables Used in the Study

Item	Net Profit	Deposit	Cash	Loans	Savings	Leverage
Mean	20.831	20.854	20.548	2.9711	8.5974	1.3636
Median	0.871	20.609	0.560	-3.0424	8.4580	19.3563
Maximum	1.264	22.527	1.151	-2.464	0.7874	16.353
Minimum	20.365	20.020	19.616	-3.1563	17.5866	15.5636
Std. Dev.	0.3137	0.7719	0.489	0 .2198	0.00589	0.4562
Skewness	-0.143	0.3136	-0.608	0.7245	0.31023	-0.2223

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Kurtosis	0.7358	2.8779	0.7591	0.7114	2.9290	2.743
Jarque-Bera	0.5601	2.5576	0.514	0.9417	0.57666	1.0382
N	15	15	15	15	15	15

Source: Visemih, (2019)

From table 2, the mean of net profit is 20.83108 with a minimum and maximum value of 20.36568 and 21.87107 respectively. The standard deviation is 0.313731 indicating a small deviation from the mean.

The observation customer's deposit and cash balance have means of 20.85344 and 20.54854 respectively and the respective standard deviations of 0.771993 and 0.488733 which indicate that the observations tend to cluster around the mean showing small deviations from the mean. On the other hand, the observation loan has a mean of 2.971108 and a standard deviation of 0.219814 which shows a very big deviation of the observation from the mean. The observations savings has mean 18.59743 a standard deviation of 1.005893 also indicating that the observations tend to cluster around the mean, showing small deviations from the mean.

Finally, the observation leverage has a mean of 1.3636 and a standard deviation of 0.4562 which shows a small deviation from the mean.

Looking at the skewness which shows the degree of symmetry of the distributions around the means, we observe that the distributions of deposits, Loans and savings having positive values indicating that most of the observations lie to the right of the mean. The value for deposits shows that it is fairly skewed, loans value shows it is highly skewed as the value is between -1 and 1 and finally the value for savings is 0.310 which is below 0.5 indicating that it is fairly skewed. On the other hand, net profit and cash balances both have negative values, showing that the median is greater than the mean and the observations lie to the left of the mean. They all have values above -0.5 indicating that they are moderately skewed.

To verify for the normality of the observations, the Jarque-Bera statistics is used. Based on the values of the Jarque-Bera statistics, the distributions of profit, deposits, cash and loans are all normality distributed except for savings. The normality of the distributions is confirmed by looking at their Skewness and Kurtosis as they have Skewness less than 1 and Kurtosis less than 3. From the Jacque-Bera normality test result, the p-value of chi2 is 0.4334 which is greater than 10%, thus insignificant, hence we do not reject the null hypothesis of normality and conclude that the data follow a normal distribution.

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Table 3: Heteroskedasticity

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
chi2(1) = 1.22
Prob> chi2 = 0.2687

Source: Visemih, (2019)

The results in table. 3 were further validated by conducting the heteroskedasticity test. Based on the Breusch-Pagan/Cook-Weisberg test for heteroskedasticity, the p-value is 0.2687 which is greater than 10 % level of significance and this can therefore imply that there is no heteroskedasticity in this model.

Table 4: Pair-wise Correlation Analysis

Item	Net profit	Customer deposits	Cash balances	leverage	loan	Savings
Net profit	1					
Deposits	0.037931391	1				
Cash	0.406012583	0.5462137	1			
Leverage	-0.42061968	-0.428483	-0.273147	1		
Loan	0.847160647	0.0322280	0.3185471	0.223525	1	
Savings	0.56772422	0.6473893	0.3583888	0.1272472	0.794652	1

Source: Visemih, (2019)

To verify for the presence of multicollinearity in our model, the pair-wise correlation analysis was carried out on the variables. As pointed out by Gujarati (2004) explanatory variables with correlation coefficients of 0.8 and above can be said to be suffering from multicollinearity. Base on table 4, correlation coefficient between customer deposit and net profit is 0.037931391 showing a very weak positive relation between the two and the coefficient of cash balances and net profit is 0.406012583 indicating a weak positive relationship. Also the correlation coefficient between leverage and net profit is -0.420619688 showing a weak negative relationship. Further the correlation coefficient between loans and net profit is 0.847160647 implying a very strong positive relationship. The correlation coefficient between cash balance and customer deposit is 0.546213729 indicating a positive relationship, the correlation coefficient between leverage and customer's deposits is -0.428483697 indicating a weak negative relationship and the correlation coefficient between loans and customer's deposit is 0.032228095 indicating a very weak positive

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relationship. The correlation coefficient of -0.273147928 between leverage and cash balances indicates a weak negative relationship. The correlation coefficient of 0.318547140 between loans and cash balances indicates a weak positive correlation. Lastly, the correlation coefficient of -0.223527884 indicates a weak negative relationship between loans and leverage. The correlation coefficient between savings and net profit is 0.56772422 which shows a positive relation, coefficient between savings and customer's deposit is 0.6473893 which is positive relationship. The correlation between savings and cash balances has a coefficient of 0.3583888 which shows a weak positive relation, savings and leverage has a 0.1272472 which is a very weak positive relationship while savings and loans have a coefficient of 0.794652 which is a strong positive relation. Given that none of the correlation coefficients of our explanatory variables lie between 0.8 and 1, we therefore say that there is no evidence of multicollinearity in our model.

Table 5: VIF Test for Multicollinearity

Variable	VIF	1/VIF
Cash	1.27	0.787401
Deposits	1.26	0.793650
IAS	1.28	0.78125
Loans	1.08	0.925925
Savings	1.05	0.952380
Leverage	1.03	0.970873
Mean VIF	1.394	

Source: Visemih, (2019)

Table 5, shows the result of VIF which is used to measure the degree of multicollinearity. If the VIF of a coefficient of a variable exceeds 10, then that variable is highly collinear, and multicollinearity becomes a problem (Gujarati, 2004). The VIF result shows that individually, none of the VIF exceeds 10, thus it can be concluded that there is no presence of multicollinearity among the independent variables.

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10. TESTING OF HYPOTHESES

Table 6: The Regression Table

Variable	Coefficients	Std. Error	t	Sig.
Constant	0.218	0.141	1.608	0.039
Log(Cash)	0.239	0.165	1.653	0.029
Log(Deposits)	0.352	0.277	2.773*	0.019
Log(Loans)	0.392	0.271	2.634*	0.032
Log(Savings)	0.284	0.157	3.852**	0.012
Log(Leverage)	-0.235	0.174	1.587	0.038
Adjusted R-squared	0.698			
F-Statistics	5.783			
R	0.836			
Dependent Variable: Net Profit Note: * = significant at 10%, ** = significant at 5%, *** = significant at 1%, Critical values: 2.132 at 10%, 2.776 at 5%, and 4.604 at 1% level of significance				

Source: Visemih, (2019)

From the results in table 6, the established regression equation is:

$Y = 0.218 + 0.239X_1 + 0.392\ X_2 + 0.352X_3 + 0.284X_4 - 0.235X_5$

From the above regression equation, it was revealed that holding cash balances, customer deposits, loans, savings and leverage to a constant zero, financial performance (net profit) of BAPCCUL would be 0.218, meaning that the variables included in the model accounted for 78.2% of financial performance in BAPCCUL. The study also found that all the p-values were less than 0.05 which is an indication that all the variables were statistically significant in influencing financial performance of the Bamenda Police Cooperative Credit Union.

The coefficient of Cash Balance is 0.239 implying that Cash Balance has a positive effect on the profit of Bamenda Police Cooperative Credit Union. Hence, a 1 % increase in Cash Balance will result to a 23.9 % increase in net profit of Bamenda Police Cooperative Credit Union. To verify for the statistical significance, it is realised that the t-calculated which is 1.653 is less than the

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critical value at 1 %, 5 % and 10 % levels of significance. Thus, Cash Balance has a positive but insignificant effect on the net profit of Bamenda Police Cooperative Credit Union.

From the results above the coefficient of customers' deposit is 0.352 indicating customers' deposits has a positive effect on the net profit of BAPPCCUL and as such an increase in deposits by the customers will increases the profit of this financial institution. That is, a 1 % increase in deposits will result to 35.2 % increase in the net profit of the BAPCCUL. Looking at the t-statistics; we observe that it is statistically significant at 10 percent since the t-calculated value of 2.773 is greater than the table value of 2.132. This therefore implies deposits of customers have a significant positive effect on the financial performance of the Bamenda Police Cooperative Credit Union. Thus, customers' deposit is a significant determinant of the profitability of the Bamenda Police Cooperative Credit Union.

From table 6, the coefficient of leverage is -.235 implying it has a negative effect on the profits of BAPCCUL. Hence, a unit increase in leverage will result to 23.5 % decrease in the net profit. Looking at the value of the t-statistics, we observe that the coefficient of leverage is statistically insignificant. This implies leverage has a negative and insignificant effect on financial performance of Bamenda Police Cooperative Credit Union.

The coefficient of loans granted by BAPCCUL is 0.392 implying that loans has a positive effect on the net profits and as such, a 1% increase in the amount of loans granted would result to a 39.2% increase in the financial performance of BAPCCUL. To verify for the statistical significance, it is realized that the value of t-calculated is 2.634 which is greater than the critical value of (2.132) at 10% level of significance. Thus, loans have a positive and significant effect on net profit of Bamenda Police Cooperative Credit Union.

Also, the coefficient of savings is 0.284 indicating that savings has a positive effect on the financial performance of BAPCCUL, meaning that a 1% increase in the amount of savings will increase the level of performance of BAPCCUL by 28.4%. as far as the level of significance is concerned, the calculated value is 3.852 which is significant at 5% level of significance following the table value of 2.776 which is slightly below the calculated value. Thus savings is seen here to be a having a positive and at the same time a significant effect on the financial performance of BAPCCUL and a significant contributor to its profits.

The coefficient of the adjusted R-square is 0.698 which shows that about 69.8% variation in the net profit of the Bamenda Police Cooperative Credit Union is accounted for by the variables included in the model that is cash balance, customers' deposit, leverage, savings and loans. This is an indication that the variables fit the model well. To verify for the joint significance of the

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variables in determining the profit of Bamenda Police Cooperative Credit Union, we used the F-test. The coefficient of the F-statistics is 5.783 which is statistically significant at 1% level of significance indicating that the explanatory variables jointly have a statistical significant effect on the financial performance of the Bamenda Police Cooperative Credit Union. This shows that indicating that liquidity risk contributes to 57.83% of financial performance and hence we reject the null hypothesis and accept the alternative.

11. DISCUSSION OF RESULTS

This study seeks to examine the effects of liquidity risk management on the financial performance of the Bamenda Police Cooperative Credit Union. Based on the Ordinary Least Square Technique of estimation the findings reveal the following:

From the results of the study,57.83 % of the variation in the financial performance of BAPCCUL was explained by liquidity risks management, measured by liquid cash balances, customer deposits, savings, loans and leverage. This finding seemed to conform to Nyabateh (2013) in a study in which he argued that 56.12% of the disparity in financial returns of commercial banks in Kenya was determined by liquidity management. This result seemed to conform to the IMF report (2016), which noted a consecutive reduction in return on assets from 2011 to June 2016.

Also, customers' deposits and cash balances have positive significant effects on the net profit of the Bamenda Police Cooperative Credit Union which is in line with a prior expectation. Hence, we fail to accept the null hypothesis indicating that customer deposits/cash balances are significant contributors to the financial performance of the Bamenda Police Cooperative Credit Union. This is accounted for by the fact that the deposits made by the customers serve as the main capital to the cooperative out of which loans can be granted. The granting of these loans and the interest charge on them is a key revenue to the cooperative hence a significant determinant of the profitability. This finding is in line with the work of Nfor-Budi (2015) who did a researcher following this nature. Furthermore, loan, savings and was found to have a positive significant effect on the net profit of the Bamenda Police Cooperative Credit Union as such, we fail to accept the null hypothesis. This is an indication of the fact that as the volume of loan increases so too is the profitability of the Bamenda Police Cooperative Credit Union. Our finding ties with that of Nfor-Budi who did a similar study using Afriland First Bank as case study. The results also contradict with those of Mwangi (2016) who found out that liquid assets and total assets management had negative impact on financial performance in a study conducted in Kenya.

12. SUMMARY OF MAJOR FINDINGS

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This study seeks to investigate the effects of liquidity risk management on the financial performance of a Micro Finance institution and the findings of this study showed that leverage negatively affects the performance of BAPCCUL. From these findings, it can be concluded that the effects of liquidity risk to the performance of Micro Finance institutions can be avoided by maintaining a sufficient leverage ratio.

The findings showed that loans positively affect profitability which is in line with the work of Nfor-budi (2015) who also did a similar study using Afriland First Bank. These findings are interesting, and it could be influence by socio-political and economic conditions of the country in a given period. The current socio political crisis in the country have influence the way customers of BAPPCUL acquire loans. It has led to increase in acquisition of loans and the delinquent level is also in a rise since the means of repayment is not certain.

The level of customer deposits was seen to have a positive effect on the profitability of BAPCCUL as a result of its numerous branches spread over the national territory. The wide spread of branches will enable BAPCCUL to benefit from economies of scale and therefore leading to increase profitability. Since BAPCCUL has established a wide branch network, they are able to benefit from economies of scale and therefore leading to an improved profitability for the credit union.

The cash balances positively affect the profitability of Micro Finance institutions according to the findings. The availability of cash will enable the institution to be able to meet up with customer demands. When cash is available, members will be able to withdraw for their transactional and precautionary cash demands, acquire loans and the institution too will be able to benefit from investment opportunities and the management of their activities. Holding much cash to satisfy the customers is also in the detriment of the profit motive which usually comes from investments and granting of loans.

Savings also has a positive effect on the financial performance of BAPCCUL. This is the because savings the means through which funds enter the institution and it's a medium of income as these savings are in turn given out to members as loans or are involved in other investment activities all with the aim of generating wealth for the institution

Therefore, efficient management of liquidity risk in a Micro Finance institution will influence the level of its profitability, despite its negative relationship with leverage if conservative liquidity risk management is undertaken.

13. RECOMMENDATIONS

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Customer deposits have a positive effect on profitability and so BAPCCUL should therefore put in place many ways of motivating their customers to be carrying out more deposits, such as increasing the interest rate on deposits, giving awards to those carrying out much deposit in order to motivate them.

It is also important that BAPCCUL should establish required cash in each product segment and maintain optimal level despite the positive effects of cash on the profits before tax as this may in the long run lead to a decrease in profits if more cash is held than is being used up for profit activities such as lending to customers or purchasing of durable fixed income yielding assets.

Since loans has a positive effect on the profitability of BAPCCUL, there is a likelihood that a credit risk may occur and so the management of BAPCCUL should put in place periodic monitoring of long-term debtors. The amounts to be granted as loans too should not be in detriment to the amount of funds to serve customer's demands. Savings should also be encouraged as it the medium through which these institutions gets their funds. The leverage ratio according to the findings has a negative effect on profitability. Therefore, the institution is recommended to reduce the amount or rate of borrowings if it seeks to gain more profits.

Since most government institutions have large deposits in financial institutions, and since there is a relationship between deposits and performance as shown by the results of the study, large deposits should be properly matched, so that operational liquidity will not be greatly affected, if these deposits were withdrawn.

14. CONCLUSION

Due to the present economic situation of Cameroon, especially the socio-political crisis in the Northwest and Southwest regions of the country, the Micro Finance sector is facing a large number of risks. For this reason, this sector should emphasize on risk management through the various techniques of mitigating risk such as maintaining a sufficient level of liquidity in order to serve regular and irregular customers and maintaining standby accounts. Moreover, effective risk management is so important that it can enhance the success of projects.

Liquidity problems if unchecked may adversely affect the profitability of a given financial institution, its capital and under extreme circumstances, may lead to its collapse. In addition, a financial institution facing liquidity problems may face difficulties in meeting the demands of depositors; however, this liquidity risk can be mitigated by maintaining sufficient cash reserves, raising deposit base, maintaining a sufficient loans or credit management, encouraging the level of savings and reducing the ratio of leverage.

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It is important for the management of all financial institutions to be aware of liquidity problems in all its branches. This will help them to enhance their investment portfolio and provide a competitive edge in the market. It is the utmost priority of Micro Finance institutions to pay required attention to liquidity problems. These problems should be promptly addressed, and immediate remedial actions should be taken to avoid the consequences of illiquidity.

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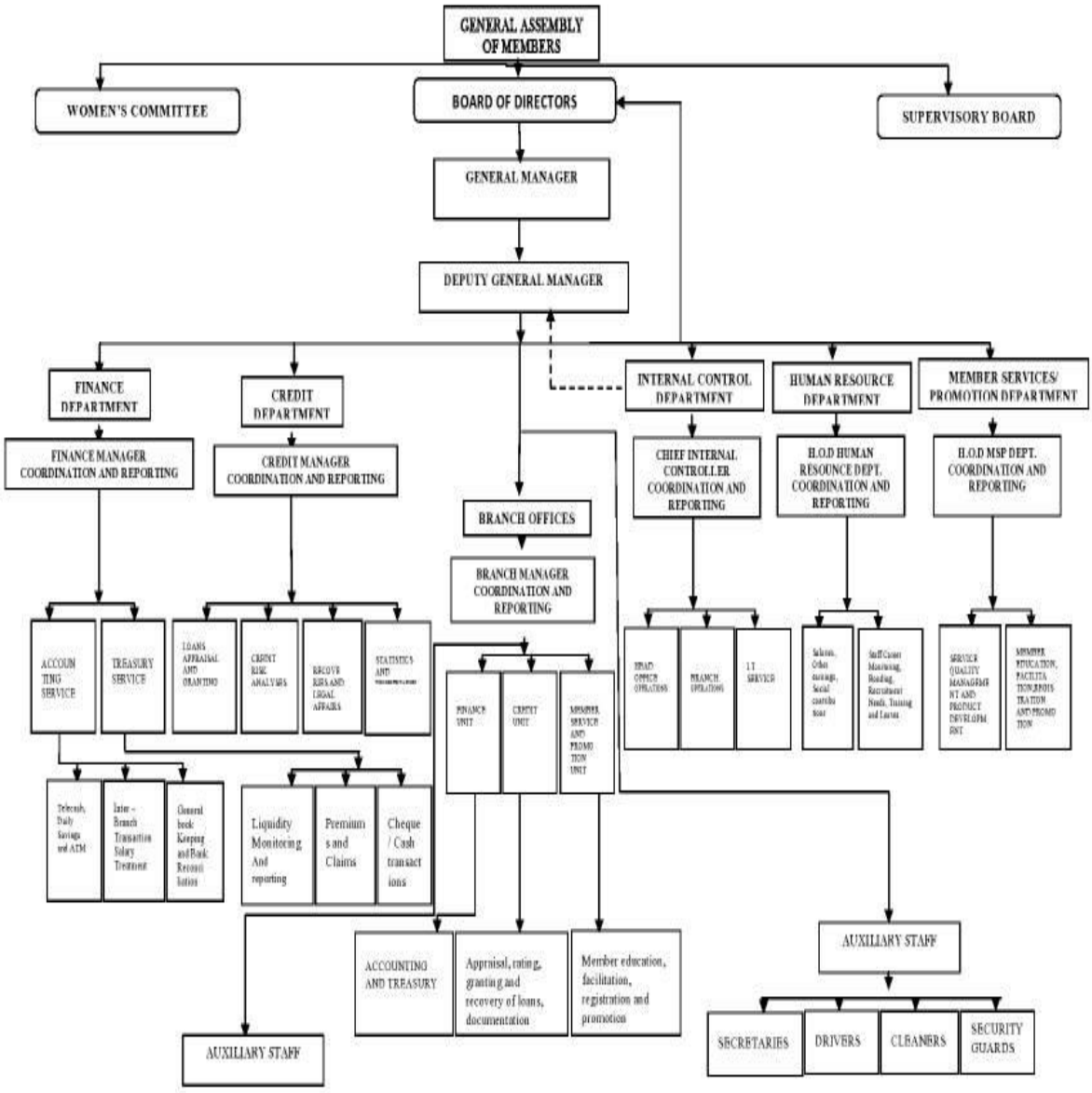
APPENDICES

Appendix 1: ORGANIGRAM OF BAPCCUL



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Appendix 2: DATA SET

YEAR	DEPOSITS	CASH	LOANS	Leverage (debt)	SAVINGS	NET PROFIT
2004	225999884	584883990	1678445849	163536772	2274893939	5995889
2005	249898863	599373883	1838536178	145332626	2317578841	6796100
2006	239832419	620004738	2460022335	245211561	2762519186	6903600
2007	451049783	651084884	2983267480	152536000	3473977631	7398806
2008	495010030	656821532	3331195494	178365930	4102934826	7788607
2009	607263244	680215485	4643800003	15536633	5122325494	7905269
2010	724982935	915921898	5678004028	176627733	5983871504	7340713
2011	782657108	1080343876	6718071488	263783772	7164020108	7789255
2012	964831794	330635453	9485528020	35626272	7777478748	8029401
2013	1017930840	788075987	9631560960	366262526	8863679878	9649713
2014	1276165198	1397475929	6945204479	244524561	10514176260	8070976
2015	1671829982	1535252640	9522322025	25525155	13398759279	9098970
2016	1710938834	194470833	10144016494	178277388	15355883231	9844759
2017	1732509192	186928386	18845482397	372827727	16027825189	2609871
2018	1600488393	142773903	17840900948	166277373	16738937939	2498930

