Implications of Financial Institutions Regulations on Assets and Liabilities Management in Depository Financial Institutions in Tanzania

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Abstract

Financial sector reforms in Tanzania had posed a number of challenges to the Depository Financial Institutions (DFIs), particularly on assets and liabilities management. In line with the reforms, are the regulations issued by the Bank of Tanzania as guidelines to maintain an efficient and sound financial system. The regulations pose a challenge to DFIs in their assets and liabilities management, since apart from the need for profit, they also need to comply with the regulations. This study was designed to analyze the impact of Financial Institutions (FIs) regulations on the assets and liabilities management in depository financial institutions in Tanzania. The study has used both primary and secondary data. Interviews were made with the senior officials of depository financial institutions in particular with emphasise to the members of Assets and Liabilities Committees (ALCO). The results show that, significant importance is given by the top management to the assets and liabilities management function. It also revealed that, there is a positive influence of regulations on the composition of assets and liabilities. However, the current FIs regulations promote efficient utilization of assets and liabilities in the FIs. The critical regulations and the general laws in implementation of assets and liabilities management were identified.

Key words: *Regulations, Depository Financial Institutions, Banks, Non Bank Financial Institutions, Assets and Liabilities Management, ALCO*.

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General Introduction and Statement of the Problem

Introduction

Financial Institutions (FIs) are traditionally supervised very closely by the central banks and other state agencies worldwide (Saunders, 1994). Limitations are imposed on the way they raise funds, on costs that can be incurred in doing so, on assets choice, on product and on geographical coverage. The initial justification is to protect the safety and soundness of the economic system (Gardner and Mills, 1988). Poorly functioning banking systems are said to impede economic progress, exacerbate poverty and destabilize economies (Barth, Carpio Jr and Levine, 2001).

Literature suggests numerous arguments for regulations (Greenbaum, S. and Thakor, A. V,1995; Ritter, L. S; Silbert, W. L; and Udell, G. F, 1997). These includes fostering competition and market structure of financial institutions, protecting institutional safety and soundness, consumer protection, credit allocation and monetary control.

The regulations regarding the operation of FIs, issued by the Bank of Tanzania (BOT) are the same for both types of depository institutions i.e. commercial banks and Non Bank Financial Institutions (NBFIs)[2]. The Banking and Financial Institutions Act (BFIA) of 1991, differentiates the scope of the activities between banks and NBFIs[3]. The main difference is on the ability of the commercial banks to make payments, subject to withdrawal by the use of cheques, whereas, NBFIs are not allowed by the law to maintain such accounts. However, NBFIs play a vital role in the flow of money and credit within the financial system and compete with commercial banks in their savings mobilization (Ritter et al; 1997).

Tanzania's financial system comprises about 20 commercial banks and 9 NBFIs[4]. A number of regulations regarding licensing and operation of FIs have been put in place. The regulations in Tanzania had been in place since 1991, following the implementation of the financial reforms in the economy and the enactment of the BFIA of 1991. The reforms in the FIs were put in place following the recommendations of the commission to review the financial sector formed in 1988, famously known as the Nyirabu Commission.

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[2] The BFIA, 1991 section 2 (1) states that "any subsequent regulation or circular issued by the BOT under powers extracted form the BFIA, 1991 applied to banks and non bank financial institutions". The BFIA was amended in the years 1995 and 1998.

[3] BFIA, 1991 and the Banking and financial institutions regulations (BFIR), 1997 part VII and IX.

[4] See www.bot-tz.org/operation/banksupervison visited May 30th 2002

Assets and Liability Compositions in Depository Financial Institutions in Tanzania

BOT reports show that, as at December 2000, commercial banks'[5] total assets were TZS 2,460,094.8 millions. Deposits were TZS 1,031,371.1 millions, which represent 41.9% of the banks total assets in the economy. Further, analysis shows that lending to deposit ratio by the commercial banks was 43.5%. The regulations require the commercial banks and NBFIs among other things, to maintain maximum lending to deposit ratio of 80%[6]. The above analysis shows that, the commercial banks have not secured enough investment potentials to invest. This affects domestic investment and further mobilization of credit in the economy.

FIs are business firms which, like any other business firms, should exist to acquire and use assets so that the value of their benefits exceeds their costs (Gardner and Mills, 1994). FIs within the regulatory framework, acquire and use financial assets from their creditors (deposits) and their owners to acquire financial claim, with the purpose of reducing transaction and information costs of their clients (Saunders, 1994). Like any business firm, FIs can operate efficiently if they perform their functions as profitably or more profitably within the legal and regulatory boundaries imposed by the regulators of FIs (Gardner and Mills, 1994). The regulations for the FIs thus need to create conducive environment for the successful business performance, and at the same time minimize the risk[7] associated with the performance of the banking business. Financial Institutions need to address risks in a structured manner, by upgrading their risk management and adopting more comprehensive Assets and Liabilities Management (ALM) practices[8].

The Role of Financial Institutions in the Economy

In an economy without FIs, the level of fund flows between the household savers and the corporate sectors is likely to be quite low. In a market oriented economy, FIs are vital for the economic well being and future growth (Saunders, 1994). FIs share the same operating and economic functions, but they vary in products they offer and financial assets in which they specialize (Gardner and Mills, 1994). Proper management of the financial assets and liabilities plays a major role in the undertakings of the FIs (Cornett and Saunders, 1999).

Many authors have written on the importance and specialness of FIs in the economy (Saunders, 1994; Gardner and Mills, 1994). The nature and scope of the service offered by the

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[5] The NBFIs data is not revealed in the statistics of the BOT for the same analysis.

[6] See "Management of Risk Assets Regulations, 2001". Section 5 (2)

[7] See the Management of the Risk assets regulations, 2001.

See also Asset Liability Management (ALM) System on http://www.securities.ru/public/public98/RBI/notification/not990423-1.html, Visited December 2001 also Chijoriga (1997) had the same observation

[8] Http://www.securities.ru opt cited.

FIs need to be regulated in order to provide a stable economy. The FIs produce, distribute and sell financial services which are mostly demanded by the public. Among the services most widely sought by the public and supplied by the FIs include payment services, thrift services, credit services and agency services (Rose, 1997)

The most important function of the financial system and hence the FIs in the economy is to facilitate the transformation of savings into real investments so that the economy can grow and improve living standards. FIs provide other important benefits that are unavailable with direct investment (Gardner and Mills, 1994). These benefits can be categorized as reductions in the costs of transactions, information, or both.

The Role and Setting of Assets and Liabilities Committees (ALCOs) in Financial Institutions

The performance of the FIs functions depends in a great extent, on the management of assets and liabilities. Interactive, dynamic and extensive use of personnel responsible in making strategic business for the institution is important. One of the decision mechanism used in the business strategies is the formulation of ALCOs. Each bank through the committee manages the trends of balance sheet items by the use of various techniques used by its members according to the objectives of the FI. Basically, ALCOs have two main responsibilities; one of strategic and other of control. Functions of the ALCO can be explained as9 responsible for measuring and monitoring interest rate risk, recommending pricing, investment, funding and market strategies.

The functions aim to achieve the desired trade-off between risk and expected return. The size (number of members) of ALCO depends on the size of each institution, business mix and organizational complexity (Korch and MacDonalds, 2000). More frequent sessions may be required in periods of increased economic activity, in times of unanticipated liquidity volatility, and when specific issues require immediate action. The ALCO process should be clearly understood by the top management so as to effectively meet the objectives of the institution[10].

Regulations and Assets and Liabilities Management

FIs are regulated in order to carry out the fiscal and monetary policies set by the government e.g., distribution of the loans to disadvantaged borrowers (Gardner and Mills, 1994; Korch and McDonalds, 2000). It is argued that, less developed countries (LDCs) face inherent obstacles in setting up efficient regulation, and building up a sound-banking sector. These are related to

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[9] These functions were extracted from the Internet by the use of search engine www.google.com/advanced search/ALCO functions.

[10] The information extracted from the Internet on "ALCO Update" Newsletter vol.4 (2) 1994. Visit www.riskflow.com for details

the presence of multiple tasks and multiple principals, poor institutions, lack of economies of scales in the banking sector as well as regulatory supervision, and the lack of reputation (Murshed and Subagjo, 2000). It is argued further that, financial regulations in a developing country like Tanzania focus mainly on the assets side of a balance sheet (Inyangete, 1995; Zubairi, 2001).

In order to ensure stability in the profit making of the FIs, assets and liabilities had been identified as a key factor by various researchers and scholars (Gardner and Mills, 1994; Saunders, 1994; Inyangete, 1995; Rose, 1997). The management of assets and liabilities had brought to the formation of ALCOs in most of the FIs[11] as a measure of controlling and monitoring liquidity. This is due to the complexity and multidimensional nature of the issues in the assets and liabilities management in FIs (Inyangete, 1995). The purpose of the committees is to match assets and liabilities to ensure best returns to the bank and risk reduction (Gardner and Mills, 1994).

Over 5 and 10 years from the enactment of the new BOT Act in 1995 and the BFIA of 1991, respectively; the average lending to deposit ratio for aggregate commercial banks was only 37.2%. The table below shows the composition of the aggregate commercial banks in Tanzania for the past 5 years (1995 - 1999).

Lending to Deposit Ratio of Commercial Banks and Non Bank Financial Institutions[12] in Tanzania

Year	Commercial Banks
1995	50.6
1996	25.4
1997	27.7
1998	33.8
1999	48.5
Average 5 years	37.2

Source: Bank of Tanzania, Economic and Operation Reports 1995-1999

The variations in the lending and deposits ratios had been creating some anomalies in the economy and some of the questions had not been addressed, given the role of FIs in the

[11] Adapted from http://www.bot.org under the Role of Central Bank in Interbank Settlement Systems. Visited 28th March 2002.

[12] Non Bank Financial Institutions data are not covered in the official publications of the Bank of Tanzania, though the contribution on the NBFIs is also vital to the economic development.

development of the economy. Studies on Small and Medium Scale Enterprises (SMEs) mention access to finance as one of the constraints for growth (Pissarides, 2001; Malima, 1997; Kulizwa et al; 1997; Chijoriga, 2000), while on the other hand FIs had been highly liquid. High liquidity in the FIs probably can mean that the FIs fail to use their resources to create more assets through viable investment projects in traditional banking business. Does FIs Regulations have a role to play?

Proper assets and liabilities management, according to the prudential regulations and with a minimum costs (impacts) to the implementers should thus create a sound financial system with much benefits to the society. According to Barth et al; (2001), regulation is a response to market failure. Regulations however may undermine other mechanisms in regulation regime. For example, excessive reliance on detailed and prescriptive rules may weaken incentive structures. Regulations may weaken corporate governance within banks.

In order to build a sound banking system which is responsible for transforming the monetary and fiscal policies, the impact of the financial regulations to the DFIs was the concern of this study. Questions addressed in this study were, does the senior management of the banks participate in the process of assets and liabilities management? Which regulations have an impact on the effective utilization of assets and liabilities in the management of assets and liabilities in the FIs? What has been the setting of the ALCOs in the FIs? Does the regulations promote effective utilization of assets and liabilities to DFIs.

Literature Review

Financial Institution Regulations

The regulations in FIs reflect the historical and traditional role of banks in accepting deposits and the provision of the credit to the households, businesses and the government. The frequent number of the bank failures forced the regulators to redesign their regulatory framework encompassing supervision and deposit insurance (Korch and McDonald, 2000). Regulations provide a room for the government to channel its monetary and fiscal policies while fostering the development of the economic sectors at the same time.

Why Regulations?

Korch and McDonald (2000) put forward five fundamental objectives of banking regulations which are also supported by Saunders (1994). The first cited objective is to ensure safety and soundness of banks and financial instruments. The purpose is to maintain domestic and international confidence, protect depositors and payers and maintain financial stability.

The second objective is to transfer the monetary and fiscal policies towards the financial system. This is aimed also at providing efficient payment system and controlling national money supply.

The third objective is to provide an efficient and competitive financial system. Restricting mergers and acquisitions that reduce the number of market power of competing institutions.

The fourth objective is to protect consumers from abuse by credit granting institutions. Historically, some individuals found it difficult to obtain loans for reasons not related to their financial condition.

The final objective is to maintain the integrity of the nation's payment system. Regulators of the bank ensure that the banks clear cheques and settle non cash transactions in a fair and predictable way. This creates confidence among the general public and builds a sound and safe financial system.

Korch and McDonald (2000), argue that the regulations cannot achieve certain things such as preventing bank failures[13], elimination of risk in the economic operation or in bank's normal operations. They do not guarantee that, bankers will make sound management decisions or act ethically.

The Specific Financial Regulation in Different Countries

Pakistan

State Bank of Pakistan (SBP) promulgated prudential regulations for the banking and the NBFIs in July 1992. These regulations focus mainly on the assets side of a balance sheet. Discussions done in Pakistan with the commercial banks revealed that, the SBP is directing its attention towards management of liabilities also (Zubairi, 2001). The concentration of the regulation on the assets and liabilities of the bank means that, these variables are very important and hence need proper management. The focus of the assets side of the balance sheet ignores the contribution of the liabilities which account for the most of the FI's assets.

Guyana

The Guyanese financial sector introduced regulations in the year 1995. Before the Act, the NBFIs were not subjected to bank regulations (BOG, 1996). The Act specifies that the minimum capital requirement is 8% of FI's total liabilities. On Credit concentration limits, Section 14(1) of the Financial Institutions Act, 1995 states that the total value of credit accommodation to be advanced to a single person should not be more than 25% of the FI's capital base and to a borrower group not more than 40% if the credit accommodation is fully

[13] See also the Capital Adequacy Regulation, 2001 section 4 (1).

secured. For partially secured credit, accommodation should not exceed 10% and 20% respectively, to the individual person and borrower group. The experience from Guyana shows that provision of the regulations rely on the recommendations of the Basle Committee of 1996 especially on the matter of the capital adequacy.

Banking and Financial Institutions Laws and Regulations in Tanzania

Pre – 1991 Laws

In Tanzania[14], the law governing the operations of the banking industry is traced as far back as in the colonial times through the enactment of Tanganyika Banking Ordinance No.31 of 1960. The Ordinance operated in conjunction with the Banking Rules, Cap 430, 1960.

Apart from the Banking Ordinance, 1960; the Bank of Tanzania Act, 1965, was another major law that was concerned with the banks and banking business immediately after the independence. Under this act, the Bank of Tanzania began the supervision of the banks and banking business at the end of 1966, but it never licensed any bank. Each of the financial institution operating before 1991, when the financial sector was liberalized, was governed by an independent law establishing it. For example, the National Bank of Commerce was established under the National Bank of Commerce (Establishment and Vesting of Assets and Liabilities) Act, 1967. The Banking Ordinance extended its application to Zanzibar in the 1966.

Other laws operated at that time include the Financial laws (Miscellaneous Amendment) Act, 1972 and the Banking Ordinance, 1960. The Bank of Tanzania Act, 1965 was amended in 1978. This led to the establishment of the Department of the Banking Supervision within the Bank of Tanzania, which was responsible for the supervision of the FIs. Despite the amendments made to the Bank of Tanzania in 1978 to give the regulatory and supervisory powers over the FIs, the amendments were inadequate.

Post -1991 Laws

The Bank and Financial Institutions Act, 1991

The BFIA, 1991 consolidates and harmonises all laws relating to banking business in Tanzania. The law aims to foster sound banking activities, regulates credit operations, etc. The law has adopted the Basle committee standards (Mlozi, 2002).

The BFIA, 1991, empowers the Bank of Tanzania to issue various regulations in order to promote stable and sound financial system in the economy[15.] Section 9(c) of the Act and

[14] See Mlozi, P. F (2002) "*The Legal Framework of Banking Regulation and Supervision: The case of Tanzania*", A paper presented in the Workshop organized by the Bank of Tanzania and Financial institutions held at Bagamoyo in July .

section 32(c) of the Banking and Financial Institutions Regulations (BFIRs) states that the BOT may revoke the license granted to any person (financial institution) if that person (financial institution) is among other things " carrying on its business in a manner detrimental to the interests of the depositors or has insufficient assets to cover its total liabilities". The law here emphasizes the need for proper management of the assets and liabilities of any FI in the economy. In the recognition of the proper management of the liabilities of the FIs, the law also requires them to protect the depositor's money[16].

The Bank of Tanzania Act, 1995

The BOT Act of 1995, is designed to take into account the most up-to-date developments in the central banking theory and practice as well as the need for the economy after the liberalization of the financial sector, which was set up by the BFIA, 1991. The Act has taken more updated functions than its successor, BOT Act, 1965. The Act empowers the Bank of Tanzania to supervise the banks and to supervise the macro economic variables in the economy.

The role of the BOT is to promote sound monetary, credit and banking conditions conducive to the development of the economy in Tanzania[17]. Section 46 of the BOT Act, 1995 explains the need for the bank to control the liquidity of the banks and FIs in the economy. Subsection 2 explains that "the bank (BOT) may prescribe the methods of computing the ratio for liquid assets …… or prescribe different kinds of deposits and other liabilities". The bank has power to impose on any bank or FI which fails to maintain the minimum ratio prescribed in the regulations issued by the BOT.

The Bank of Tanzania Regulations, Guidelines and Circulars

In order to guide the supervisors in performing their supervisory duties effectively, the BOT through the powers from the BFIA[18], 1991 and the BOT Act, 1995 has introduced several administrative guidelines. Some of the regulations, guidelines and the circulars which related to the functions of managing assets and liabilities to the FIs are discussed in this section.

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[15] Part IV of the BFIA states issues regarding to the supervision, regulation, coordination and control of the financial institutions in the economy. Among other things, section 17 (c) empowers the BOT to coordinate the investments, finance and credit policies of banks and financial institutions. See also Section 5 of the Act.

[16] Part V of the BFIA explains the protection of the depositors under the Deposit Insurance Fund (DIF). Section 26 of the act states the need and requirement for the DIF.

[17] BOT Act 1995, Section 5 (2).

[18] See Section 51 of the BFIA, 1991

The Liquid Asset Ratio Regulation, 2000

The regulation which has a direct impact on the liquidity management to the operations of a bank or FI is the Liquid Asset Ratio regulation. The regulation directs the board of every FI among other things to[19]:

- Establish and implement sound and prudent liquidity and funding policies which at minimum should meet benchmarks specified in the regulations.
- Develop and implement effective techniques and procedures to monitor, measure and control the institution's liquidity requirement positions.

The regulation specifies the need for the management to make internal inspection and audit on the liquidity and funding policies and procedures and ensure the effective controls applicable to the management of liquidity. Part III of the regulation states the required minimum liquid assets and maximum loans to the deposits ratio.

Section 8 of the regulation states that, "every bank and FI shall maintain liquid assets equivalent to not less than twenty percent (20%) of its liabilities…" and the bank or financial institution to compute the required daily balances and submit weekly balances to the BOT. Section 11 of the regulation regarding gross loan portfolio states that "every bank and financial institution shall maintain at all times its gross loan portfolio at levels not exceeding 80% of its total liabilities, inclusive of deposits of banks and foreign currency deposits".

The Credit Concentration and Other Exposures Limits Regulation, 2001

The objective of this regulation is, among other things, to encourage risk diversification and curtail excessive concentration of risk exposure of any bank and FI to one customer or group of customers, industry, economic sector, or activity, thereby enhancing the stability of the financial system[20]. The regulations state that "it restricts profitability and places undue constraints on the ability of the banks and other Financial Institutions to provide credit to a wider segment of the economy"[21]. Part IV of the regulations provides limits for the equity investment:

- The aggregate equity investments in all companies shall not exceed 25% of the core capital of the investing bank or financial institution.
- The equity investment in any single company shall not exceed 10% of the core capital of the investing bank or financial institution; and

[19] See Section 4 (a) and (b).

[20] Section 4 (1) of the Credit Concentration and other Exposure Limit Regulation

[21] See section 5 opt cited

- The equity investment in any single company other than a bereaux de change and a credit card company shall not exceed 5% of the total subscribed share capital of the investee company.

Capital Adequacy Regulation

Capital adequacy had been explained as important in the efficiency allocation of economic resources in the economy. The capacity and growth of the financial system depends largely on the strength of the capital positions of the individual components of the financial system22. A financial institution is required to maintain at all times a minimum core capital and total capital equivalent to 6% and 8%, respectively of its total risk weighted assets and off balance sheet exposures[23].

In this regard, it should be noted that, the capital of a financial institution had an impact on its assets and liabilities management. In the literature (BOG, 1996), the role of the bank capital has been examined from at least three different perspectives: 1) that of depositors and the monetary system, 2) that of the shareholders, and 3) that of functioning of banks and financial institutions as financial intermediaries. The BOT in dealing with the capital adequacy, mainly emphasizes on the depositors' interests. The capital adequacy regulation is applied in a global context under the Basle committee of the Bank for International Settlements (BIS) recommendations.

The Management of Risk Assets Regulations, 2001

In the management of the risk assets, the BOT vests powers and responsibility to the Board of directors on various issues including the formulation of credit policy, periodic review of assets portfolio and diversification of the credit risk. The provision of credit should be specified in the credit policy of every financial institution. This includes the review of the qualification of the limits set under the liquid asset ratio regulation on the classification of loans and other risk assets. The regulation calls for quarterly review of the loans and other risk assets and provides criteria on past due loans and advances[24.] Provisioning of losses of FIs had been set as follows[25]:

[22] The Capital Adequacy Regulations, 2001 Section 4

[23] The Capital Adequacy Regulations, 2001 Section 12

[24] See Section 10 and 11 of the regulation

[25] Section 20 of the regulation

Unclassified Assets:	Nil
Classified Assets:	
Loans/Assets Especially Mentioned	5%
Substandard	10%
Doubtful	50%
Loss	100%

Temporary investments in shares of companies, bond and government securities shall be valued at lower cost or market value. An allowance for the probable losses equivalent to at least 10% of the book value of the investment[26].

Apart from the management of assets and liabilities stated in the previous sections, the regulations also requires the banks and FIs to make minimum reserves of at least 10% of their total deposits[27]. The reserves form part of the FI liquidity position and form part of the depositor's insurance fund (DIF)[28].

Assets and Liabilities Management in Financial Institutions

In managing the assets and liabilities in the banks and NBFIs, various techniques/models had being used. Despite various computer software programmes being used by the banks in the assets and liabilities management, the following models are still famous. These are net interest margin, gap analysis, liquidity exposure rations and the liquidity index measures.

The Concept of Risk Management in Financial Institutions

According to Basle Committee on the Liquidity[29], the ability to fund for an FI can be measured by the increase in assets and the ability to meet obligations as they become due. Therefore, managing liquidity is among the most important activities conducted by FIs. Sound liquidity management can reduce the probability of serious problems. Indeed, the importance of liquidity transcends the individual bank, since a liquidity shortfall at a single institution can have system-wide repercussions. In management of the assets and liabilities, FIs incur two types of risks in their attempt to manage the liquidity. These are the liquidity risk and interest rate risk (Zubairi, 2001). The former arises when an FI's liability holders, such as depositors or insurance policy-holders demand immediate cash for their financial claims[30] (Cornett and Saunders, 1999) and the interest risk relates to the chance of variation in a bank's profitability

[26] Section 22 of the regulation

[27] BOT Act, 1995, section 45, Also Circular No. 1 on Reserves against Deposits and Borrowings as amended on 12th November, 1999 Part II.

[28] See BFIA 1991, Part V for details on the Deposit Insurance Fund

[29] See A Framework of Measuring and Managing Liquidity, 1992 and Appendix 7.

[30] When the problem facing many or similar FIs may cause what is known as "Bank Runs". See Saunders, 1994; Cornett and Saunders, 1999; Ritter, et at 1997.

due to the changes in interest rates caused by the mismatch of assets and liabilities (Cornett and Saunders, 1999; Saunders, 1994).

Empirical Evidence

Financial regulations had been debatable by various scholars from its optimality, the economics of it, towards the cost benefit analysis (Bhattacharya, 1998; Simpson and Andrews, 2000). While the issues related to the financial regulations had been debatable by the scholars in the developed countries, in the less developed countries (LDCs) it had been dormant. LDCs are argued to have inefficient financial regulations, the phenomena which is explained as the inherited obstacles in the setting of the financial institutions regulations. Lack of strong financial institutions had created unsound banking system in these countries (Murshed and Subagjo, 2000).

Relating to unsound banking system, is the issue of lack of proper management of the assets and liabilities. The management of liability portfolio of depository institutions, is unclear as banks concentrates in selecting assets in their portfolio mix (Inyangete, 1995). The impact of the prudential regulations towards the effective management of the assets and liabilities in the financial institutions had not yet been discussed by the scholars. Zubairi (2001), noted that, the central banks set the regulations to monitor the liquidity of the FIs. Related to this is that the banks and financial institutions have formal ways of handling the management of the assets and liabilities following the imposition of banking regulations. Whether there is an impact on the assets and liabilities management in the portfolio mix of the assets and liabilities, is not yet disclosed.

The emergence of new financial instrument due to financial reforms in developing countries, made the management of assets and liabilities to be critical to the FIs. Skills relating to the assets and liabilities management are important to the banks and regulators so as to foster economic development of the financial sector (Inyangete, 1995).

In the Tanzanian context, studies show that the monetary policies affect the commercial bank lending (Chijoriga, 1997). The banks and financial institutions in the economy had been found not to comply with the financial regulations issued by the regulators (Lalika, 2000; Hondi, 2001). High ratios of non performing assets, poor liquidity ratios which stem from the long term credit duration and the repayment schedule mismatch are noted to be among the factors which contribute to the destabilizing of the financial system (Malekano, 2000). A recent ministerial report from the Ministry of Finance and the Bank of Tanzania which are the regulators of the FIs argue that banks are highly liquid.

Research Methodology and Findings

Research Methodology

Research Design

The research covered the commercial banks and non bank financial institutions (NBFIs) operating in Tanzania, with headquarters in Dar es Salaam. The study employed descriptive analytical, qualitative and quantitative approaches. The study employs such methods due to the fact that, the impact of the regulations cannot easily be established and quantified.

Intensive literature review was done including collection of statistical data and qualitative information from published sources, especially the publications of the Bank of Tanzania. The review of the regulations regarding operation of FIs was done.

Interviews with key stakeholders in the financial system in Tanzania were conducted. Field research was conducted by targeting the opinion of the senior officers in DFIs. The study targeted senior officers because their experience in the management of the FIs would have a great contribution. Attributes based on the relevant education and experience in the financial institutions were important to determine the extent of the opinions given. The senior officials were as well assumed to be members of the ALCOs of their institutions, or providers of the necessary inputs to the ALCOs. Members of ALCO were taken into consideration due to the fact that the committees are recommended by the BOT in the assets and liabilities. The members are also well informed on the regulations in their day to day activities, which in most cases lie on the Assets and Liabilities management.

The study was based in Dar es salaam due to the time and financial constraints and also the concentration of the depository financial institution in the region which is also the commercial city of Tanzania.

Sample and Sampling Procedures

While many studies argue that the sampling should be within 30-500 samples in a population, successful research is possible with as small sample as 10-20 in size (Sekarah, 1984). The DFIs as a population of the study consists of 20 commercial banks and 9 NBFIs. Of these, four (4) commercial banks and three (3) NBFIs were excluded from the population and hence from the sample determination, due to either being out of the area of study (Dar es Salaam) or not in operation for at least one year.

Of the remaining banks and NBFIs, a sample of respondents was chosen for the study as shown in the table below. The estimated number of respondents was based on the fact that the minimum numbers of the ALCO member in the financial institutions is between 4-8, but the maximum depends on the complexity and size of the institutions.

Targeted sample for the respondents was 70. A sample of 70 respondents was fairly large and is suitable for the model employed in data analysis i.e. Chi-square test of independence. In order to use Chi-square test, the overall number of items should be at least 50 (Kothari, 1990). Therefore, in order to provide 20% of non response as suggested by literature (Kothari, 1990), and due to limitation of fund and time, the sample size was limited to 70.

Data collection Procedures and Analysis

Both primary and secondary data collection procedures were employed in the study. Primary data was collected by the use of questionnaire while the secondary data was based on the BOT publications on the assets and liabilities of commercial banks, reviewing of the BOT Act, 1995 and BFIA, 1991 and regulations and circulars issued by the BOT.

Data was analysed by the use of Statistical Package for Social Science Studies (SPPS) and Chi-square model was employed.

Research Findings

All banks and NBFIs with at least one year of operation and based in Dar es Salaam were visited during the data collection period of six weeks. The table below summarizes the status of the questionnaires distributed and collected for the DFIs.

Summary of the Field Survey for the Study

Financial Institution	Visited	Refused	Questionnaires		% of Total
			Distributed	Collected	
Banks	16	5	50	33	66
NBFIs	6	1	20	19	95
Total	22	6	70	52	74.29

Source: Field Survey

Statistical Analysis and Findings

Profile of Respondents

The profiles of the respondents was an important factor to include in the data collection since the researcher was much interested to the genuineness of the opinions provided. In the profiles

variables such as position of the respondent, age, education level and experience in the financial institutions sector was established.

Relevant Education

Most of the respondents seemed to have at least first degrees (78.8%) while the remaining (21.2%) are master degree holders. The implication to this is that since the issue of assets and liabilities management is complex and requires strong analytical skills, highly educated persons had to handle the tasks of managing the assets and liabilities. Furthermore, 94.2% of the respondents have a background in financial institutions management courses, while 82.7% claimed to have attended training relating to the Banking and FIs regulations and/or Assets and Liabilities Management.

ALCOs Status

The study findings show that almost all the financial institutions visited had a formal committee for the management of assets and liabilities. In most of the institutions there was no formal policy guiding the ALCO meetings. The financial institutions should establish the policies which will guide the ALCO members in the effective decisions in their undertakings. Observation from the field shows that most of the highly sophisticated financial institutions especially those which are subsidiaries to the banks operating from developed countries had well articulated policies and they had frequent meetings in the management of assets and liabilities than the institutions which are owned locally.

Membership of ALCO

Of all the respondents 65.4% were members of ALCOs in their institutions. Other members were reported to be involved in the assets and liabilities management as well. The size of the ALCO members in the institutions ranged from 4 to 9. One commercial bank which did not have a formal committee for assets and liabilities management had management meeting comprising of 20 members.

Frequency of meeting of the ALCOs from the institutions ranged from once per week (5.8%), twice a month (69.1%) and once a month (48.1%). One commercial bank claimed to meet everyday, while one of the non bank financial institution meet once in every 3 months. It was noted from the field that the size of members and the composition depends on the internal policy. Some of the subsidiary branch banks have a global policy on the membership, composition and operationability of their ALCOs.

Regulatory Status of ALCO

An ALCO is believed to be a decision making body for most of the financial institutions. About 70.6% of the respondents said that the ALCO is a decision making body while 25.5% said that it as an advisory body. 3.9% argued that the ALCOs are both decision and advisory

bodies. The respondents were asked to state whether the formulation of ALCO was due to the internal or regulatory requirements. Of all respondents, 73.1% said that the formulation was based on both the regulatory requirements and internal needs, while 26.9% reported that the ALCO was strictly formed due to internal need. In establishing whether the decisions in the ALCO are based on the reactive or proactive, 76.9% of the respondents revealed to use both techniques in the assets and liabilities management.

Assets and Liabilities Management Analysis Techniques used by ALCO Members

While it is believed that the information technology would help in making accurate investment decisions, few financial institutions had been reported to use specialised computer programmes in arriving at their decisions on assets and liabilities management. With an aid of spreadsheet programmes institutions had been using the techniques identified by the various literatures in reaching on the decisions for assets and liabilities management. These are the net interest margin, the gap analysis and the duration analysis.

ALM Techniques used by ALCO members in FIs

Method	Status Application		Total
	Yes	No	
Gap Analysis	40	10	50
Duration Analysis	41	9	50
Net Interest Margin	38	12	50
Liquidity Ratio Exposure	46	4	50
Liquidity Index Measures	18	31	49
Total	183	66	249
% of Total	73%	27%	100%

Source: Field Survey

Financial Institutions Regulations

The study results show that, some of the regulations relating to liquidity management seemed to be critical and strict in the implementation of the ALCO's decisions. These are identified as the Credit concentration limits regulation, liquidity ratio limits, management of risk assets limits, capital adequacy limits, foreign exposure and placements, purchases, sales and balances limits. These regulations had been identified by the financial institutions as to cause a lot of penalties in their non compliance. Since most of the institutions seemed to be faced with the same critical issues, stakeholders should find a way to minimize the impact of the penalties imposed and the benefits on the limits set.

Other general laws which seemed to be critical in the implementation of the decisions regarding the assets and liabilities management in the depository financial institutions include the land act and contract law. These laws affects the acquisition of the land which in most cases form collateral for the loans provided to the customers.

Implication of the Regulations in the Assets and Liabilities Composition

The respondents were asked to rank the regulations which had impact on liquidity management in FIs as follows: [4] Strongly agree, [3] Agree, [2] Somehow agree and [1] Not agree. Descriptive analysis of the regulations which strictly affect the assets and liabilities management is as presented in the table below.

Descriptive Statistics on the Strict Regulations Affecting Assets and Liabilities Management in FIs

	Statistics				
Regulation	**N**	**Minimum[a]**	**Maximum[b]**	**Mean[c]**	**Std. Deviation**
Credit Concentration Limit	*52*	*1*	*4*	*3.40*	*.75*
Liquid Ratio Limit	*52*	*2*	*4*	*3.58*	*.61*
Management of Risk Assets	*52*	*1*	*4*	*3.58*	*.67*
Capital Adequacy Ratio	*52*	*2*	*4*	*3.71*	*.61*
Valid N (listwise)	*52*				

a. The minimum value takes the consideration that 1= Not Agree, 2= Somehow Agree, 3= Agree and 4= Strongly agree

b. Takes the same values as footnote "a" above

c. Mean takes the average of all respondents to the opinion on the regulation under consideration. It can be shown that the mean is close to 4 which is "strongly agree".

Source: Field Findings

Further analysis of the critical regulations can be obtained from the aggregated scores of the four mentioned regulations as presented in table below A maximum point to be scored by an individual was 16, since the researcher identified only four regulations as shown in table above table.

Scores of Regulations Impacting Composition of Assets and Liabilities in FIs

			Status of the institution		
			Commercial Bank	Non Bank Financial Institution	Total
Count	Strict Regulations	16	*8*	*4*	*12*
		15	*7*	*5*	*12*
		14	*14*	*6*	*20*
		13	*3*	*1*	*4*
		10	*1*	*2*	*3*
		8		*1*	*1*
	Total		*33*	*19*	*52*
% of Total	Strict Regulations	16	*15.4%*	*7.7%*	*23.1%*
		15	*13.5%*	*9.6%*	*23.1%*
		14	*26.9%*	*11.5%*	*38.5%*
		13	*5.8%*	*1.9%*	*7.7%*
		10	*1.9%*	*3.8%*	*5.8%*
		8		*1.9%*	*1.9%*
	Total		*63.5%*	*36.5%*	*100.0%*

Source: Field Findings

Regulations Vs the Importance given by the Top Management of FIs in Managing Assets and Liabilities.

It was revealed that the FIs has formal committees but differ in the size and compositions. No proper internal policies guide the operations of the ALCOs in the financial institutions. The table below shows the chi-square test of the importance given by top management in the assets and liabilities management functions.

Test Statistics: Importance Given by the Top Management in ALM

	Chi-Square [a,]	df	Asymp. Sig.
Ensuring smooth operation of ALCO	*.077*	*1*	*.782*
Supervision of ALCO activities	*14.115*	*2*	*.001*
Effective implementation of ALCO decisions	*6.231*	*1*	*.013*
Managing Cash	*54.760*	*2*	*.000*
Managing the credit accommodations	*19.192*	*2*	*.000*
Managing Non performing loans	*16.462*	*3*	*.001*
Managing the deposits	*19.692*	*1*	*.000*
Managing Interest rate risk	*4.923*	*1*	*.027*
Managing Investment in TBs	*30.923*	*3*	*.000*
Managing Capital adequacy	*7.692*	*1*	*.006*

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 26.0.

b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 17.3.

c. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 16.7.

d. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 13.0.

Source: Field Findings

It can be revealed that there is a statistical significant for the importance given by the top management and the regulations in place. For Asymptotic Significance column is less than 0.05, the hypothesized distribution is significant. The results are in line with the views of Inyangete (1995) who stated that, the assets and liabilities management function is complex and it needs to ensure the skills of the bankers are exercised. It was also noted that the assets and liabilities management function concentrated much on the liquidity management. Penalties and sanctions to the management if proper maintenance assets and liabilities of their institutions posed a positive contribution through the participation is not observed. The sanctions are binding and can force a manager out of the field of financial institutions not only nationally but internationally.

The restriction of the Financial institutions regulations on the effective utilization of the assets and liabilities.

Results from the field shows that responses on the effective assets and liabilities utilization, 36.7% do not agree to the statement and 20.4% of which 14.3 are from commercial banks and 6.1% from NBFIs, strongly agree on the statement. The details are as presented in table below.

Regulatory Implication of Effective Assets and Liabilities in FIs

	Hypothesized Statement		Status of the institution: Commercial Bank	Status of the institution: Non Bank Financial Institution	Total
Count	Financial regulations: Do not promote efficient utillisation of the A/L	strongly agree	*7*	*3*	*10*
		agree	*5*	*6*	*11*
		Somehow agree	*6*	*4*	*10*
		Not agree	*13*	*5*	*18*
	Total		*31*	*18*	*49*
% of Total	Financial regulations: Do not promote efficient utillisation of the A/L	strongly agree	*14.3%*	*6.1%*	*20.4%*
		agree	*10.2%*	*12.2%*	*22.4%*
		Somehow agree	*12.2%*	*8.2%*	*20.4%*
		Not agree	*26.5%*	*10.2%*	*36.7%*
	Total		*63.3%*	*36.7%*	*100.0%*

Source: Research Findings

Statistical results shows a negative significance towards this assumption as shown in the table below.

Statistical Test on the Impact of Financial Regulations Vs Effective Assets and Liabilities Management

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	*2.364*[a]	*3*	*.500*
Continuity Correction			
Likelihood Ratio	*2.332*	*3*	*.506*
Linear-by-Linear Association	*.318*	*1*	*.573*
N of Valid Cases	*49*		

a. 3 cells (37.5%) have expected count less than 5. The minimum expected count is 3.67.

The results show that regardless of the regulations in place the effective utilization of the assets and liabilities is important i.e. whether there are regulations in place or not, the issue of effective assets and liabilities in the financial institutions is important. The above observations had two implications, one being the cost of holding liabilities by the FIs which should be met by the effective utilization of assets, and secondly is based on the traditional banking business concept i.e. to effectively manage the maturities of assets and liabilities.

Conclusion and Recommendation

Conclusion

The study of the FIs regulations to the assets and liabilities management to the DFIs is of importance for policy making and to the economic development. While the issue of assets and liabilities management had been identified as a critical and complex to the FIs, the issue of the regulatory impact towards the effective utilization of the liabilities and management of assets should not be underestimated to a developing country like Tanzania. The financial sector had been very liquid as opposed to the claims of many business sectors that they lack credit. The main question addressed by the study is that "Does FIs regulations have any impact on the effective utilization of assets and liabilities in FIs in Tanzania?"

The research was done by interviewing financial institutions officials who deal with a function of assets and liabilities management, through the use of a structured questionnaire. Interview with other stakeholders in the financial system were also done. This covers the Tanzania Bankers' Association, Tanzania Institute of Bankers, Bank of Tanzania and the Ministry of Finance. Review of the FIs in place was done. The study was limited to Dar es Salaam and the area was chosen due to the concentration of DFIs and economic activities.

From the results of the study it can be clearly shown that, although there are implications on the regulations on the assets and liabilities management, the regulations are necessary in order to promote the stability of the financial sector. Based on the fact that the regulations do not hinder the effective utilization of the assets and liabilities, the stakeholders should consider how well they should be designed in order to promote effective allocation of the assets and liabilities.

The identified laws and regulations to be reviewed should be taken into consideration by the regulators so as to promote sound financial system for the nation's development.

Recommendations to the Financial Sector Stakeholders

The Government

The Government officials who were interviewed at the Ministry of Finance revealed that most of the issues related to the operations of the financial institutions are left with the Bank of Tanzania. If a financial institution is not satisfied by the sanctions/penalties imposed by the BOT need to appeal to the Minister for Finance. When reaches the Minister's desk, same issue is returned to the BOT for advice since there is no department/section/experts in the ministry dealing with financial institution matters. The government through the Ministry of Finance should monitor the activities of the Bank of Tanzania.

Bank of Tanzania

The Bank of Tanzania as stated earlier is the sole supervisor of monetary issues relating to the undertaking of various institutions in the economy, including financial institutions. The role of the Bank of Tanzania seemed to be so wide in an extent that bank supervision itself is a complex and tasking issue.

Interview with the BOT officials revealed that the task of the Banking Supervision is not to protect bank failures but to make sure that the financial institutions comply with the regulations in place. BOT demands a lot of reports which can be used to have the signaling effects which may lead to bank failure from the financial institutions. The arguments of the BOT officials are inline with comments from Murshed and Subagjo, (2000); that the regulators in the LDCs have serious information and monitoring problems.

Financial Institutions

ALCOs in the institutions should provide a considerable time to the management of assets and liabilities not only for the institutional purposes, but to the development of the economy. The ALCOs should have proper policies on the reporting and monitory limits, provide scenarios by the use of computer based software tools on the likely impact of the assets and liabilities on balance sheet items. The depository institutions in Tanzania should rely on the provisions by the Basle committee on the Principles for the Assessment of Liquidity Management in Banking Organizations, whether as not observed by the BOT regulations and circulars.

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ANNEX 1: LIST OF ABBREIATIONAS AND ACCRONYMS

ALCO(S)	Assets and Liabilities Committees
ALM	Assets and Liabilities Management
BFIA	Banking and Financial Institutions Act
BFIR	Banking and Financial Institutions Regulations
BIS	Bank for International Settlements
BOG	Bank of Guyana
BOT	Bank of Tanzania
CBA	Cost-Benefit Analysis
DFI	Depository Financial Institutions
DIF	Depositors Insurance Fund
FI(S)	Financial Institution(s)
LDCS	Less Developed Countries
NBC	National Bank of Commerce
NBFIS	Non-Bank Financial Institutions
NIM	Net Interest Margin
SBP	State Bank of Pakistan
SMES	Small and Medium Scale Enterprises
SMRS	Special Minimum Reserves
TBA	Tanzania Bankers Association
TIOB	Tanzania Institute of Bankers
T.Shs/TZS	Tanzanian Shillings