

# Assessing the Exposure of Tanzania's Banks to the Risk of Failure

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**Abstract:** The liquidation of 8 banks-between 2016 and 2018 pointed to the re-emergence of the bank failure trend that characterized the 1990-2005 period, and raised questions as to the potential for a fully-fledged systemic banking crisis within Tanzania. Therefore, the study, though descripto-explanatory research design aimed at scanning for early warning indicators of bank failure risk arising from institution specific and regulatory deficiencies. Findings showed bank's internal control systems to be riddled with specific gaps despite to a large extent being robust; and the central bank to have inadequate minimum bank capital requirements, liberal licensing polices, to be overly reliant on offsite rather than onsite supervision and to be subject to political interference.

**Keywords:** Bank Failure, Risk, Banks, Tanzania.

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## I. INTRODUCTION

### A. Research Context and Problem

The correlation between bank failure and economic recessionary trends such as inflation, stagnated economic growth, reduced consumption and investment, expanding trade deficits and government debt, as well as unemployment, has been well documented (BOT 2011; Claessens & Kose, 2009). Vast empirical evidence partly attributes the 1873 Long Depression, the 1929 Great Depression and the 2008 Great Recession to the contagion and systemic risk exposure arising from the failure of "too big to fail banks" with extensive global footprints in capital and money markets (Bali, 2012). Defined as the closure and liquidation of a bank by a central bank entity, due to illiquidity and insolvency, bank failure has thus been a hall mark of and a preamble to all major global economic crises (Bennett, 2002). Africa itself has had its fair share of bank failures and the resultant economic crises. In Benin, with a loan portfolio characterized by 78% non-performing loans, the entire banking system succumbed to systemic risk in the mid-80s and early 90s, arising from credit risk. This accounted for losses equivalent to 17% of Benin's GDP. In Ghana, in the same period, seven out of the eleven audited banks were insolvent, the bail-out and restructuring of which cost the government about 6% of total national GDP (Caprio & Klingebiel, 1996, 2003; Daumont, Gall and Leroux, 2004).

Tanzania has equally registered a series of actual and near bank failures (World Bank 2017). The first occurrence was during the country's 1987 systemic banking crisis triggered by liquidity issues within "too big to fail banks"- all in arrears amounting to half of their loan portfolios (Daumont, et.al, 2004). This crisis led to losses equivalent to 10% of Tanzania's GDP, the bail out and restructuring of the insolvent banks, and the liberalization of the country's banking sector (Caprio and Klingebiel 1996; Chijoriga, 2000). The second was during the 1995 post liberalization systemic banking crisis, in which 60 to 80% of all loans within Tanzania's banking system were nonperforming, exposing banks to failure risk (Daumont, Gall and Leroux 2004). The 1995 crisis registered the first post liberalization bank failures in the country. Since then, there have been at least 13 more bank failures.

More recently, despite over a decade long financial sector stability, the insolvencies and liquidations of 8 banks-between 2016 and 2018- has pointed to the re-emergence of the bank failure trend, and raised questions as to the potential for a fully-fledged systemic banking crisis within Tanzania. (BOT, 2018; Reuters, 2017; Rwechungura, et.al, 2017).

The aim of the study therefore was to assess the soundness and stability of Tanzania's banking system through scanning for early warning indicators of bank failure, with a view to measuring the risk of bank failure in Tanzania's banking

system. The specific objectives were to analyse the exposure of Tanzania's banks to failure arising from institution specific and regulatory deficiencies.

## B. Literature Review

### 1)- History of Bank Failure Tanzania's Banking Sector:

Since independence, Tanzania has registered 20 incidences of bank failure and near bank failure. Table I summarises the country's pre and post liberalisation bank failure history. The introduction of paper contains the nature of research work, purpose of work, and the contribution of this paper. It contains the references of the previous work done. This template is in Word document, provides authors with most of the formatting specifications required by the author for preparation of their research paper.

No.	Failed Bank	Year Licenced	Year Insolvent	Justification for Licence Revocation	Status
<b>A POST LIBERALISATION ERA</b>					
1.	Covenant Bank for Women	2012	2018	Undercapitalisation	Liquidated
2.	Efatha Bank	2010	2018	Undercapitalisation	Liquidated
3.	Njombe Community Bank	2008	2018	Undercapitalisation	Liquidated
4.	Kagera Farmers' Cooperative Bank	2001	2018	Undercapitalisation	Liquidated
5.	Meru Community Bank	2011	2018	Undercapitalisation	Liquidated
6.	Mbinga Community Bank	2003	2017	Undercapitalisation	Liquidated
7.	FBME Bank Tanzania	2004	2017	Fraud, money laundering	Liquidated
8.	TWIGA Bancorp	1992	2016	Undercapitalisation	Statutory Management
9.	Delphis Bank	2002	2003	operational issues	Liquidated
10.	Karadha Company	1969	2000	Unspecified	Closed under purchase & assumption
11.	First Adili Bank	1995	2000	Undercapitalisation	Closed under purchase & assumption
12.	Greenland Bank	1995	1999	Undercapitalisation, parent bank failure	Liquidated
13.	Trust Bank Tanzania	*	1998	Parent bank failure	Closed under purchase & assumption
14.	Tanzania Housing Bank (THB)	1967	1995	Bankruptcy	Liquidated
15.	Meridian Biao Bank	1993	1995	Parent bank failure	Closed under purchase & assumption
16.	National Bank of Commerce (NBC)	1967	1995	Credit risk exposure	Bailed out & Restructured
<b>B PRE-LIBERALISATION ERA</b>					
17.	Tanzania Investment Bank (TIB)	1967	1987	Credit risk exposure	Bailed out & Restructured
18.	Tanzania Housing Bank (THB)	1967	1987	Credit risk exposure	Bailed out & Restructured
19.	Cooperative & Rural Development Bank (CRDB)	1967	1987	Credit risk exposure	Bailed out & Restructured
20.	National Bank of Commerce (NBC)	1967	1987	Credit risk exposure	Bailed out & Restructured

Source: Researcher compilation (2017) from Bank of Tanzania Economics and Operations Annual Reports (1995; to 2016); Bank of Tanzania Notice to Depositors and Creditors (2017;2018)

*Pre-Liberalization Bank Failure, 1961-1990:* In 1987, Tanzania's banking system was facing a systemic banking crisis triggered by credit risk exposure and liquidity issues within "too big to fail banks" (Daumont, et.al, 2004). NBC, TIB; CRDB, and THB were all in arrears amounting to half of their loan portfolios and insolvent (Caprio and Klingebiel 1996; Chijoriga, 2000). The systemic risk was symptomatic of several issues. First, banks were faced with a conflict of interest created by the government as the owner of the said banks, as well as that of debt ridden, un-creditworthy and government dependent parastatals, which made up the bulk of the banks' loan portfolios. The conflict of interest meant that banks were obligated to provide further loans to parastatals despite unsettled previous debts, and liquidity concerns. Loans were also issued out on the basis of political directives rather than borrower creditworthiness. Second, there were weaknesses in the corporate governance function of the banks. Given their government ownership status, political elements had a significant influence on bank board appointees. For instance, the banks were mandated to have the sitting president as the Chief Executive Officer, and appointments within the board were limited to members of the ruling party, with party allegiance taking precedence over competence (Chijoriga, 2000). The above issues thus pointed to significant internal control deficiencies characterized by a lack of adequate management control and oversight, poor risk management, limited segregation of duties, information asymmetry between management and the government as the sole shareholder, and poor monitoring and evaluation activities for correcting internal deficiencies (BCBS,1998). The pre-liberalization bank failure thus highlights the importance of a strong internal control function to mitigate operational, moral hazard, credit and liquidity risk.

*Post-Liberalization Bank Failure, 1990-2005:* This period saw 7 Tanzanian banks declared insolvent. These included THB; the Meidian Biao Bank, Trust Bank Tanzania, Greenland Bank, First Adhili Bank, and Karadha Company. During the same period, the NBC bank also faced insolvency but unlike the others, benefited from a government bail-out and restructuring process (Daumont, et.al; Kapinga, et.al, 2013). The common thread in the failures was weak internal

controls. THB, succumbed to failure from liquidity risk arising from poor lending policies and weak internal controls characterized by the application of short-term deposits in financing long-term real estate loans. Insolvency resulting from major losses of the parent banks was to blame for the failures of subsidiary Meridian Biao and Greenland Banks. Delphi's Bank on the other hand ran into problems during an acquisition of the company by new owners, thus destabilizing the bank's operational efficiency. (Rwechungura, et.al, 2017; Kapinga, et.al, 2013). The post-liberalization bank failure thus highlights the need for strong internal control function to limit failure risk.

*Post-Liberalization Bank Failure, 2006-2018:* The period following the enactment of the Tanzania Banking and Financial Institutions Act (2006) saw Tanzania register 8 bank failures by 2018. There is little empirical evidence analyzing the above failures, however that of the "too big to fail" FBME bank is attributable to moral hazard risk arising from failure to comply with anti- money laundering laws and that of 7 others- undercapitalization (Napier, 2016; Rwechungura, et.al, 2017).

### C. Theoretical Framework

1) *The Agency Theory and Internal Controls:* The agency theory explains the complex relationship between principles, - being bank shareholders- and agents -being bank executives. The theory, -which assumes the agent to be an entity that performs tasks on behalf of the principle, under a set of predefined terms, - is based on the principle-agent-problem. The principle-agent-problem postulates that in the event that an agent's incentives are misaligned with those of the principle, and that the monitoring and evaluation systems through which the principle can monitor the agent's actions are inadequate, the agent could potentially act against the principle's interests, for personal gain. The principle-agent-problem arises from conflicting incentives, characterized by a divergence between individual and organizational goals, and information asymmetry between the agent and the principle (Shah 2014; Akwaa-Sekyi and Gené 2017). Within the context of banking institutions, given the right conditions, and assuming the rational choice theory- which states that individuals make prudent and logical decisions on the basis of the option that will reap the greatest personal benefit, - the principle-agent problem may lead to moral hazard risk, arising from prioritization of individual goals by the executives at the expense of organizational strategic goals (Akwaa-Sekyi and Gené 2017).

Given the divergent interests and information asymmetry, internal control systems present as the solution to the principle-agent-problem for mitigating exposure to moral hazard risk. Internal control systems are characterised by management oversight and control culture, risk recognition and assessment, control activities and segregation of duties, information and communication, and monitoring systems for correcting deficiencies (BCBS, 1998). The postulation is that where a firm implements robust internal control systems, there is bound to be a convergence between agent and principle goals, interests, and incentives, thus minimising exposure to moral hazard risk. In contrast, where the opposite is true, the agents are likely to pursue personal interests at the expense of the organisation, unabated, thus exposing a firm to moral hazard risk (Akwaa-Sekyi and Gené 2017). The agency theory, and specifically, the principle-agent-problem is thus highly relevant to an analysis of bank failure risk exposure arising from internal control deficiencies. The theory provides the framework for analysing a bank's exposure to failure arising from moral hazard risk due to internal deficiencies that create a fertile ground for divergent principle-agent goals, and information asymmetry, especially with regarding to financial reporting mechanisms.

2) *Inspection Game Theory and Bank Supervision:* Originally proposed by Dresher (1962), the inspection game is a two-person non-cooperative game that attempts to explain the zero-sum relationship between an inspector, -who has limited resources- and an inspectee -who is predisposed to and has an incentive for non-adherence (Avenhaus and Stengel 1991; Stengel 2016). The game postulates that an inspector and inspectee have conflicting interests. While an inspector seeks to promote good behaviour and punish bad behaviour, an inspectee is predisposed to pursuing bad behaviour, provided that it goes undetected by the inspector. In technical terms, the theory postulates a hypothetical inspection game, given a specific time period, in which the inspector allocates a given interval of inspections. The inspection game assumes that the inspectee attempts to predict the inspection intervals, based on historical trend analysis, and can therefore anticipate the best time to act legally, and the most opportune time to violate regulations. Given the zero sum nature of the game, the payoff to the inspectee for legal action is zero, and the gain for violating regulations, undetected, equal to the potential loss if caught in the act (Avenhaus and Stengel 1991). Figure 1 below illustrates the inspection game as it relates to the supervisory relationship between the Bank of Tanzania, (BOT), as the inspector, and banks operating within Tanzania's banking system, as the inspected.

BOT (Inspector) Bank (Inspectee)	Inspection of Banks by BOT	No Inspection of Banks by BOT
Compliance with Banking Regulations	$V(n-1, m-1, k)$ BOT Inspection & bank compliance	$V(n-1, m, k)$ BOT non-inspection & bank compliance
Violation of Banking Regulations	$b.rk$ BOT inspection & bank violations	$V(n-1, m, k-1)-rk$ BOT non inspection & bank violations

Fig. 1: The Inspection Game Payoff Matrix as Applied to Tanzania  
 Source: Researcher, (2018), adapted from Stengel (2016)

In the inspection game pay-off matrix as summarised in **Figure 1** above, ‘ $V$ ’ is the value of the game as the equilibrium payoff to BOT as the inspector of banking operations, ‘ $m$ ’ is the number of inspections available to BOT, ‘ $n$ ’ is the time period, and ‘ $k$ ’ is the maximum number of intended violations by banks. The matrix represents four possible scenarios, of which one terminates the game. These scenarios are:- 1) BOT inspects banks but finds them to be compliant; 2) BOT does not inspect banks, although they are compliant; 3) BOT does not inspect banks and they are in violation, in which case the banks get away with the violations; and 4) BOT inspects banks and identifies violations, in which case the banks are penalised. The last scenario, ends the game and results in a zero sum game in which BOT’s gain, in identifying non-performing banks and mitigating systemic risk, results in the bank’s loss in paying penalties and possibly facing insolvency proceedings and closure.

Hence, in the inspection game, while the inspectee plays hide and seek to gain from violating regulations, the onus is on the inspector to develop adequate systems for detecting violations by distributing inspection intervals over a given number of inspection periods. This as proposed by Stengel (2016), could be through randomising inspections.

In the event that the inspectee commits a violation at the same time the inspector is undertaking a randomised inspection, the game ends. However, such detection systems are seldom 100% efficient due to the inspector’s limited resources (Smojver, 2012). In relation to exposure to bank failure risk arising from supervisory deficiencies, the Inspection game is highly relevant as it amply explains the relationship between the central bank, as a supervisor of banks, and individual banks as supervised entities. As applied, to banking supervision, the theory assumes that banks are predisposed to violating banking regulations aimed at protecting depositor funds and minimising bank failure and systemic risk. It is therefore the onus of the central bank to build adequate and robust supervisory systems, and do so while countering supervision resource limitations.

**D. The conceptual framework**

Figure 2 below illustrates the conceptual framework and the relationship between the study variables.

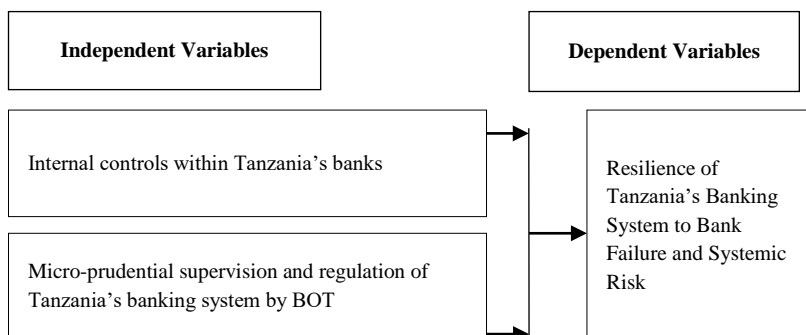


Fig. 2 Conceptual Framework and Relationship between Key Variables  
 Source: Researcher, 2018

**E. Materials & Methods**

The study employed descripto-explanatory research design. Two populations were targeted. The first was banking institutions within Tanzania, targeted to analyse the exposure to failure arising from institution specific deficiencies. The

second was Bank of Tanzania's (BOT) Banking Supervision Department, targeted to analyse the effectiveness of the central bank's supervision policies and practices in mitigating bank failure. Sample selection was through The study employed a non-probability, judgment sampling technique to select the samples. Data from banks was collected through a structured questionnaire, designed within the Basle Committee on Banking Supervision framework for evaluating the soundness of internal control systems (BCBS, 1998). Data on the effectiveness of banking supervision was collected through a semi-structured questionnaire designed within the BOT's Risk based Supervision framework (BOT, 2010).

## II. RESULTS & DISCUSSION

### A. *Internal Deficiencies and Bank Failure Exposure*

This section addressed the research question: "To what degree are Tanzania's banks exposed to failure arising from institution specific deficiencies?" The study assessed banks' compliance with the internal control standards established under the Tanzania 'Banking and Financial Institutions Internal Control and Internal Audit Regulations, 2014', and the Basle Committee 'Internal Control Systems in Banking Organizations, 1998'. The standards provided the yardstick for identifying the extent to which banks in Tanzania were operating under a safe and sound internal control environment, as a gauge of their ability to identify and pre-empt early warning indicators of bank failure. As per the standards, the core analysis components were "management oversight and control culture; risk identification and assessment; control activities and segregation of duties; information communication; and monitoring activities and correcting deficiencies" (BCBS, 1998; URT, 2014). The sample comprised of 26 banks, of which 85%, (n=22) were fully privately owned; 12%, (n=3) partially privately and state owned and 4%, (n=1) was fully state owned. By institution category, 54%, (n=14) were commercial banks, 19%, (n=5) community banks, 15%, (n=4) development banks and 12%, (n=3) micro finance banks.

#### *1) Management Oversight and Control Culture:*

The effectiveness and efficiency of banks' internal control systems in identifying and pre-empting early warning indicators of bank failure was assessed from the perspective of management oversight, accountability, and control culture. This was in due consideration of past empirical evidence showing bank failures to be the outcome of "inadequate management oversight and accountability and failure to develop strong control culture" (BCBS, 1998). This was as per a set of principles set out as the yardstick for effective management and oversight. This included an assessment of board competency and independence, board strategic planning; management strategy implementation, and the ethics and integrity culture within banks.

The board competency and independence factor assessed the objectivity, competence, knowledge and expertise of bank boards in managing risks associated with the business of banking; and the degree to which the boards were compliant with the "arms-length principle" for related party transactions. From the analysis, by board composition, the majority (65%, n=17) comprised of a mix of individuals with a background in finance and banking as well as other disciplines and (35%, n=9) of persons with purely finance backgrounds. Further, while 96%, (n=25) of the banks were open to related party transactions as opposed to 4% (n=1), the majority were in compliance of the arm's length principle to insider lending. The majority (65%, n=17) as opposed to 27%, (n=7) did not give priority to insiders when making lending decisions and 77%, (n=20) as opposed to 19%, (n=5) required that board members be absent from meetings related to approval of personal loan applications. The findings thus showed given their composition, boards in most banks were competent in detecting bank risks, and thus preventing failure. Further exposure to moral hazard risk arising from insider lending perpetrated by the boards was minimal given adherence to arm's length principles for related party transactions.

The board efficiency and quality of strategic planning factor assessed the degree to which bank boards were putting in place strategies and policies aimed at limiting bank exposure to risks that could culminate in failure. The assessment analysed the presence, within banks of key strategic and policy documents. From the analysis, 96%, (n=25) as opposed to 4%, (n=1) had a 5-year strategic plan; and corporate governance, risk management, ethics and code of conduct policies in place. 92%, (n=24) as opposed to 8%, (n=2) had internal control policies in place. However, it was significant to note that of the sampled banks, only 73%, (n=19) had an asset and liability management policy while 4%, (n=1) did not and in 23%, (n=6) of the banks, respondents were unsure of its existence. Further, of the sampled banks, only 65%, (n=17) had a succession plan in place while 23%, n=6 lacked one and 12%, (n=3) of respondents were unsure of its existence in their banks. Further, only half of sampled banks had in place an updated annual business plan. Therefore, although bank boards had to a large extent been successful in putting in place strategic and policy interventions to limit bank exposure to risk, and inadvertently to failure, there was a significant gap in succession planning policies.

The senior manager's decision-making process factor assessed the quality and efficiency of senior management communication and implementation proficiencies in setting appropriate internal control policies approved by the board. This was to assess the degree of management laxity, or lack thereof in effectively implementing policies and strategies designed by the board to limit bank exposure to risks that could culminate in failure. The findings revealed that 77%, (n=20) of the banks' senior management made decisions without consulting with lower level staff while 23%, (n=6) made decisions collectively. The findings thus revealed reporting and communications gaps with the potential of creating a disconnect between staff operations and policies and procedures thus exposing banks to potential moral hazard risk and operational risk.

The ethics and integrity factor assessed the quality, execution and upholding of ethical values and integrity. The analysis focused on the frequency of personnel ethics and code of conduct trainings, the level of strictness of penalties for non-compliance and the regularity of periodic bank compliance audits. The findings revealed that the majority of the banks forty-six percent (46%, n=12) provided trainings to staff on ethics and code of conduct a few times a year while 42%, (n=11) of the banks had ethics trainings once in a while, 4% (n=1) never, and only 8% (n=2) several times a year. Additionally, 77%, (n=20) as opposed to 23% (n=6) gave very strict penalties for non-compliance and 77%, (n=20) opposed to 33% (n=6) of the banks conducted regular ethic compliance audits test. However, the findings also revealed a bank ethics compliance gap for 12%, (n=3) of the banks that did not perform regular ethic compliance audits test as this provides opportunities for errors to go unnoticed and exposing the banks to moral hazard risk.

### *2) Risk Assessment and Risk Recognition:*

The effectiveness and efficiency of banks' internal control systems in identifying and pre-empting an early warning indicator of bank failure was assessed from the perspective of risk assessment and risk recognition. This was in due consideration of past empirical evidence showing bank failures to be the outcome of inadequate detection and assessment of on and off balance sheet risk (BCBS, 1998). The study thus assessed the adequacy or lack thereof of systems and practices designed to detect and quantify risk from on or off-balance sheet activities so as to mitigate adverse risks that could potentially culminate in bank failure. The risk management framework factor assessed the degree to which banks had put in place structures and systems to adequately pre-emptively identify risks that could culminate in failure in a timely and effective manner. The majority of sampled banks (89%, n=23) as opposed to 12%, (n=3) had a risk management department. While 62%, (n=16) a risk management information system, 19%, (n=5) did not and 19%, (n=5) were unsure of its existence. Only 31%, (n=8) had an updated annual risk management plan in place while 27%, (n=7) did not and the majority (42%, n=11) of respondents were unaware of the existence of one in their bank. Thus, while most banks had put in place some form of risk management framework either through structures or systems, there were still gaps in pre-emptively planning for risk.

The study evaluated risk assessment practices as an indicator of bank exposure to risk from eight (8) perspectives. The assessment used a 5-point likert scale with '1' being strongly agree and '5' to gauge respondents' perceptions on their banks' risk assessment practices. The majority, either agreed or strongly agreed with the statements: - "risk assessment is done at the bank headquarters and not at branch level" (65%, n=17); "the bank always assesses risk when introducing new products and services" (69%, n=18); "the bank always undertakes internal and external environment analysis when introducing new products and services" (69% n=18), "management regularly monitors and evaluates its risk management policies" (61% n=16). The majority remained neutral on the statement: - all employees have a printed copy of the banks risk management policy" while 35%, (n=9) disagreed and 15%, (n=4) agreed. Therefore, the findings revealed a failure of banks to decentralize the risk assessment practice at branch levels, and to adequately educate staff on risk management practices. This gap could potentially expose banks to operational risk and culminate in failure.

### *3) Control Activities and Segregation of Duties:*

The effectiveness and efficiency of banks' internal control systems in identifying and pre-empting an early warning indicator of bank failure was assessed from the perspective of risk control and segregation of duties. This was in due consideration of past empirical evidence showing bank failures to be the outcome of a failure or absence of "key control structures and activities" (BCBS, 1998). The study thus assessed the adequacy or lack thereof of control structures including segregation of duties, verifications, reconciliation and operating performance reviews as an indicator of bank failure risk. The study assessed control activities and segregation from two perspectives as being information processing controls, and segregation of duties. On information processing controls, the study analysed the existence or lack thereof of policies guiding transaction approvals, verifications, and reconciliation of bank balances to ensure integrity of bank

operations and minimize operational risk. using a 5-point liker scale with '1' being strongly agree and '5' being strongly disagree, the study therefore assessed the respondent's perception of respondents on the existence. the majority agreed or strongly agreed that policies and procedures existed to: -sure: - decisions are made with appropriate approvals, (100%, n=26); independent verification of bank transactions (100%, n=26); and independent reconciliation of bank balances. Therefore, the findings showed the information processing controls within banks to be adequate to manage the risk of failure arising from control structures and activities. On segregation of duties, the study assessed the presence or lack thereof of appropriate segregation of duties to minimize conflict of responsibilities within banks. On a 5-point liker scale with '1' being strongly agree and '5' being strongly disagree, the majority (65%, n=17) either agreed or strongly agreed with the statement "bank personnel roles and responsibilities often overlap" while 8%, (n=2) disagreed and 27%, (n=7) were neutral. This was indicative of poor segregation of duties within the majority of sampled banks. Thus, the banks were susceptible to failure arising from operational risks caused by inadequate segregation of duties.

#### *4) Information and Communication Systems:*

The study also assessed the efficiency and effectiveness of communication of policies and procedures designed by the board to limit banks to risk exposure. This was in due consideration of past empirical evidence showing bank failures to be the outcome of inadequate communication and information flow to and from management (BCBS, 1998). Using a 5-point liker scale with '1' being strongly agree and '5' being strongly disagree, the study assessed the perception of bank staff on a series of statements. All respondents (100%, n=26) either agreed or strongly agreed with the statement "the bank regularly generates operational, financial, managerial and compliance". The findings thus provided evidence of strong communication systems based on timely delivery of information to facilitate management decision making with a view to pre-empting bank exposure to risk.

#### *5) Monitoring Activities and Correcting Deficiencies:*

The effectiveness and efficiency of banks' internal control systems in identifying and pre-empting an early warning indicator of bank failure was assessed from the perspective of monitoring and correcting deficiencies. This was in due consideration of past empirical evidence showing bank failures to be the outcome of "inadequate or ineffective audit programs and monitoring activities" (BCBS, 1998). The study used a 5-point liker scale with '1' being strongly agree and '5' being strongly disagree assessed the perception of bank staff on a series of statements. All respondents either agreed (35%, n=9) or strongly agreed (65%, n=17) with the statement, "the bank's audit reports contain sufficient detail" while 96%, (n=25) with the statement "audit reports are timely enough to allow resolution and appropriate action". Therefore, the findings provided evidence of adequate and effective audit programs and monitoring activities within the sampled banks. As such the risk of failure within Tanzania's banks arising from poor monitoring and corrective activities was significantly improbable.

### ***B. Supervisory Deficiencies and Bank Failure Exposure***

This section addressed the question: "To what degree are Tanzania's banks exposed to failure arising from regulatory deficiencies?" The assessment was based on an analysis of the robustness of Tanzania's banking system supervisory practices to detect and adequately manage the risk of bank failure. The analysis was through a structured questionnaire administered to staff working within BOT's directorate of banking supervision. The sample comprised of respondents from BOT's small (50%, n=3), medium (17%, n=1) and large (33%, n=2) bank divisions. The respondents were either examiners in charge (67%, n=4), department heads (17%, n=1) or relationship officers (17%, n=1).

#### *1) The Minimum Capital Requirement Factor:*

The study analysed the robustness of the existing supervision framework in detecting early warning indicators of bank failure. This was from the perspective of the adequacy of the minimum bank capital requirements to adequately deter financially inept and non-performing entities from joining and staying within the banking system. The majority of respondents (83%, n=5) opined that BOT's supervisory framework was robust enough to ensure the soundness and safety of the country's financial system. Further, where there had been shortfalls of which BOT was in the process of correcting the gaps. For instance, to limit sensitivity of banks to external shocks and non-performing loans, BOT had recently revised its statutory minimum requirements upwards and had further mandated that banks implement capital charges over operational risks. However, a small but significant minority disagreed (17%, n=1), opining that BOT's supervisory framework, despite reforms was still not adequate to address the risk of bank failure. For instance, one pointed out that the statutory minimum requirements were the lowest as it related to comparator countries such as Uganda and Kenya.

Uganda's minimum requirement was for instance over US\$ 5 billion, and that of Kenya 2.5 billion as compared to Tanzania's 2.3 billion for commercial banks. For community banks, the threshold was much lower with BOT only requiring a statutory minimum of approximately US\$ 100,000 for start-up. Therefore, it was deduced that the minimum bank capital requirements were inadequate to adequately deter financially inept and non-performing entities from joining and staying within the banking system.

#### *2) The Licensing Policies Factor:*

The study analysed the robustness of the existing supervision framework in detecting early warning indicators of bank failure. This was from the perspective of the strictness or lack thereof of the licensing policies in place in adequately deterring financially inept and non-performing entities from joining and staying within the banking system. On the strictness or lack thereof of bank licensing policies, and the impact on the robustness of the supervisory framework in managing bank failure risk, the majority (67%, n=4) agreed that the policies were rather lenient. This some pointed out was as a result of earlier government efforts to engage more local entrepreneurs in the business of banking. A few opined that the recent spate of failures of banks owned by locals were particularly the result of the licensing liberalization agenda that saw the country's number of banks shoot up in the 2000s. A small number of respondents (33%, n=2) felt that the licensing policies were strict enough justifying their views with that fact that they had been sufficient in controlling systemic risk thus far. Table II below summarizes the licensing trend within BOT in the five-year period from 2012 – 2016. Thus, the licensing requirements were too liberal to adequately deter financially inept and non-performing entities from joining and staying within Tanzania's banking system

#### *3) The Supervisory Tools Factor*

The study, further analysed the robustness of the existing supervision practices in detecting early warning indicators of bank failure. This was done through analysing the frequency with which BOT utilized the set of supervisory tools stipulated under the BOT 'Risk Based Supervision Framework'. As per the responses, by order of frequency, the banking supervision department frequently utilized targeted examination; offsite surveillance and planned and ad hoc meetings with the bank's management entities. However, as per the respondent's opinions, full scope supervisions (50%, n=3) and meetings with bank auditors (17%, n=1) were less preferred as supervision tools. The findings thus underscored BOT's heavy reliance on off-site surveillance systems and bank self-reporting. This posed a risk given information asymmetry between BOT as a supervisor and banks as the inspected. Under the assumption that banks will always do whatever it takes to get away with non-compliance, even in falsifying facts while self-reporting, the reliance on banks to self-report as a supervisory measure poses a risk for regulatory capital arbitrage.

#### *4) The Political Interference Factor:*

The study, further analysed the robustness of the existing supervision practices in detecting early warning indicators of bank failure from the perspective of the role of political interference in shaping bank supervision policy. The respondents were asked whether or not they were in agreement with statements as published in the media insinuating recent bank closures to be a response to government directives to close non-performing banks. All (100%, n=6) of respondents cited the insinuations to be true, pointing to a scenario in which political interference plays a significant role in shaping BOT's bank supervision policy. This places the supervisor at risk of being guided by political directives, positive or negative, rather than by well-established principles of sound bank supervision. This could also potentially create a conflict of interest in meeting the executive's interests at the expense of managing the sound operation of the country's banking system to mitigate bank failure risk.

#### *5) The Staffing and Capacity Factor:*

The study, further analyzed the robustness of the existing supervision practices in detecting early warning indicators of bank failure from the perspective of institutional capacity and staff resourcing. Using a 5 point likert scale with 1 being strongly agree and 5 being strongly disagree, the respondents were asked the extent to which they agreed with a series of statements with regards to supervision challenges. The majority (50%, n=3) disagreed with the statement "low supervisory staff to bank ratio is a challenge to effective banking supervision", 33%, n=2 remained neutral and a small 17%, n=1 agreed with the statement. All (100% n=6) respondents disagreed with the statements: - "limited financial resources is a challenge to effective banking supervision" and "limited supervisory skills is a challenge to effective banking supervision". The findings were further corroborated with desk research from BOT's directorate of banking supervision reports, (2012-2016). The reports showed that in the period between 2012 and 2016, BOT had sponsored



group trainings in advanced banking supervision courses to familiarize staff with various banking regulations and frameworks, anti-money laundering, Islamic banking supervision, among others. The bank had also invested heavily in individual capacity building. The findings thus showed BOT's banking supervision unit to have the institutional capacity and staff resourcing to adequately supervise and detect for bank failure risk.

### III. CONCLUSION

The conclusion drawn from the findings on the soundness of bank internal control systems was that there was: - poor succession planning; inadequate short term strategic planning practices; failure of banks to decentralize the risk assessment practice at branch levels, and to adequately educate staff on risk management practices; and inadequate segregation of duties- All of which if not addressed could expose banks to a series of risks and culminate in failure., several conclusions were made From the analysis of the soundness, efficiency and effectiveness of bank supervision policies and practices. The first was that the minimum bank capital requirements were inadequate and the licensing requirements too liberal to adequately deter financially inept and non-performing entities from joining and staying within the banking system. BOT was overly reliant on off-site surveillance systems and bank self-reporting which posed a risk of capital arbitrage given information asymmetry and political interference played a significant role in shaping BOT's bank supervision policy. However, BOT's banking supervision unit to had the institutional capacity and staff resourcing to adequately supervise and detect for bank failure risk.

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