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Crisis Management, Organisational Learning and Sense Making: A Study of Ghanaian Banks

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Abstract

This study primarily focused on financial crises in Ghana's banking sector. The study analysed banking crises across three major banks and examined how learning and sense-making influence crisis management in these banks. Qualitative data through semi-structured interviews formed the backbone of the research. Fifteen bank executives from three Ghanaian banks were interviewed. A combination of theoretical, empirical and conceptual models was used to comparatively analyze the data from the multiple cases. The results show four major banking crises including liquidity crisis, fluctuation in currency, natural disasters, corporate governance failures, scandals and frauds that occurred during these crisis periods: 2000-01, 2011-12, 2014-15 and 2017-2020 with different causes, consequences and severities. Shocking, some crises have been repetitive. The banks initiated different crisis management strategies to resolve crisis events including crisis resolution committees, customer grievance redressal, fraud prevention cells, crisis communication and prevention plans, automated messaging systems and disaster alert systems. Different levels of organisational learning and sense-making decisions have been developed and implemented by the banks. Transboundary crisis management covered enterprise risk management, business continuity management and disaster risk management at varying degrees. Regrettably, the banks did not document their crisis learning processes, leading to the design of crisis management frameworks.

Keywords: Crisis Management, Organisational Learning, Sense Making, Enterprise Risk Management, Disaster Risk Management, Business Continuity Management, Banking.

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1. Introduction

There have been numerous crises that have occurred globally (Lauridsen, 1998; Corsetti, Pesenti & Roubini, 1999) and across multiple sectors and industries (Sathye, Mohamed & Viverita, 2016). Some scholars highlighted banking crises for two sets of periods 1980-89 and 1990-99 and suggested that African countries had the highest number of crises occurring during both periods 1980-1989 and 1990-1999 (see Table 1). During such periods, Ghana successfully implemented the Financial Sector Adjustment Programme (FINSAP), joining other African countries in the process of overcoming the financial sector crises of the 1980s and 1990s. During such reforms in Ghana, the Central Bank was mandated to regulate and supervise all forms of banking operations and supervision, regulation, risk governance and crisis management (Caprio & Klingebiel, 2002; Kroszner, Laeven & Klingebiel, 2007; Ruppel, 2009; Xiao, 2009).

Table 1. Details of regional banking crises

Region	Countries having Banking crises between the Years 1980-1989	Countries having Banking crisis between the Year 1990 - Year 1999
Africa	Zimbabwe (1995) Cameroon (1987), Cape Verde (1993), Central African Republic (1988), Congo (1982), Cote d'Ivoire (1988), Ghana (1982), Kenya (1985), Madagascar (1988), Morocco (1980), Niger (1983), Senegal (1988), South Africa (1989), Tanzania (1988)	Algeria (1990), Zimbabwe (1995) Burundi (1994), Cameroon (1995), Egypt (1991), Kenya (1993), Nigeria (1991), Swaziland (1995), Tunisia (1991)
South America	Chile (1981), Colombia (1982), Mexico (1981), Nicaragua (1989), Panama (1988), Peru (1983), Uruguay (1981)	Costa Rica (1994), Mexico (1994), Venezuela (1994), Bolivia (1994)
Europe	Turkey (1982)	Finland (1991), Norway (1990), Sweden (1991), Turkey (1994)
Asia	Kuwait (1986), Malaysia (1985), Nepal (1988), Philippines (1983), Sri Lanka (1989)	India (1993), Indonesia (1992, 1997), Japan (1992), Jordan (1989), Korea (1997), Malaysia (1997), Philippines (1998)

Source: Kroszner, et al., (2007)

Crisis management in banking involves handling unexpected events that threaten the financial stability and reputation of banks (Kroszner et al., 2007). Managing crises in banking is deemed critically important to control credit and liquidity failures, reputational damage and eventual collapse of banks. These crises can be triggered by single or multiple events (Xiao, 2009). Therefore, understanding crises is significant due to the frequency and impacts, and the difficulty in identifying the cause and type of crises; as there is no universally applicable strategy for managing crises (Beck, Demirgüç-Kunt & Levine, 2006; Blankson, Amewu & Anarfo, 2022; Mikes & Kaplan, 2015). The banking crises of 2017 - 2020 created more awareness of crisis management practices in Ghana. In 2018 alone, five local banks were merged to form the Consolidated Bank Ghana. These five banks were Unibank Ghana, The Royal Bank, Beige Bank, Sovereign Bank, and Construction Bank. The collapse was attributed to some internal and external crisis factors faced by these banks. The 2017-2020 banking crises resulted in the collapse of nine local banks and more than 26 savings and micro-finance institutions. The 2017-2020 financial system cleanup cost a total of 25 billion cedis ($2 billion) (Agboola, Motilewa, Odunayo, Kehinde, Ogueyungbo, Akinbode, Akinde & Atolagbe, 2020; Osei, Yusheng, Caesar, Tawiah & Angelina, 2019).

Even though the country experienced many crises in the past, there is a dearth of empirical research that specifically addresses the nature of these crises and how sense-making and learning were facilitated (Maitlis & Sonenshein, 2010; Weick, 1988). This study employed a multiple case study technique to conduct a comparative examination of how selected banks handled crises. Also, to investigate whether the crisis management strategies adopted by these banks align with Boin's (2009) five-task theoretical framework on organisational learning and sense-making under pressure. The study used qualitative data gathered from 15 bank executives across three banks using a semi-structured interview protocol.

2. Literature Review

2.1 Crises in Banking

A crisis is a situation that threatens the high-priority goals of the decision-making unit, restricts the amount of time available for response before the decision is transformed and surprises the members of the decision-making unit by its occurrence (Fink,1986). Crises are threats that impact the basic structure, fundamental values, beliefs, and norms of a social system in uncertain situations which require critical decisions (Fink, 1986). Crises may occur from single or multiple events (Seeger, Sellnow & Ulmer, 1998). This invariably creates a high level of uncertainty and endangers an organization's goals. Crises can be international, domestic, local or regional Agboola, et al.,2020; Griffith-Jones & Ocampo, 2009) with varying degrees of severity, impact and dimensions. Crises dimensions may be presented in any of these forms: 1) Natural crisis caused by earthquakes, hurricanes, droughts or floods; 2) Failure in machines and technology; 3) Internal disputes and workplace violence; 4) Social and reputational risk that is traceable to the employee; 5) Crisis due to adoption of unethical behaviours, misconduct or deception by the organization; 6) Crisis emanating from mismanagement and bad governance 7) Crisis due to bankruptcy. According to Gregory (2005) and Fink (1986), crises may have negative or positive consequences, high consequence and low probability with an overlay of risk and uncertainty. Rosenthal, Boin and Comfort (2001) describe an organisational crisis to include: 1). Threat to high priority goals and organizational culture; 2). Provides less time for decision-making; 3). Occurs unexpectedly; 4). Decision-making during the crisis has a high impact and 5). Triggered by single or multiple events; 6). Having positive or negative consequences within an organization.

Osei, et al., (2019) describe banking crisis as the occurrence of a significant decline in banks' capacity to fulfil their duty as intermediaries. Limiting access to just a small number of banks results in a crisis that is confined to a certain area, whereas the complete failure of the financial system leads to a crisis that affects the whole system (Davis & Karim, 2008). Banking crises may generally be categorized into two types; sudden and smouldering crisis (James & Wooten, 2005). The sudden crisis occurs in a situation which is beyond a bank's control and occurs without early warning systems (EWS) (Davis, et al., 2008). Therefore, bank executives are often not blamed for this type of crisis. However, the smouldering crises reflect negligence from bank executives by overlooking early warning signals (James, et al., 2005). This research focuses on the latter, the smouldering crisis which can further be categorized as an internal and external crisis (Mitroff, 1987). The dimensions of Internal and external crises of banks can be grouped into technical, economic, people, social and organizational specific factors (see Table 2). An internal crisis is one that the bank has under control whereas, with external crises, the bank does not have control (Mitroff, et al., 1987).

Banking crises affect economies worldwide, leading to economic downturns, loss of public confidence, and substantial fiscal costs; and is more commonly known as a financial crisis that arises directly from banks. These crises may be due to bank runs affecting a single bank, panic in banking, a group of banks, and banks in a particular region, banks providing a particular set of services/investments or a country experiencing a large number of defaults and sometimes due to financial institutions and corporates having difficulties in payment of debts/loans (Kaminsky, & Reinhart, 1999; Sathye, et al., 2016). Therefore, crisis management in banking involves managing unexpected events that threaten the financial stability and reputation of banks; and it is significantly important to reducing the causes and consequences on people, planet and profit (Kaminsky, et al., 1999). This is possible when banks incorporate practice-based organizational learning and sensible decision-making to control and prevent crises. Boin's five-stage process of learning in crisis; provides a structured framework for understanding crisis management practices (Boin, 2009)

Table 2. Corporate crises

Internal Crises	External Crises
Technical/ Economic factors	*Technical/ Economic factors*
Product/services defects	Industrial accidents and environmental problems
Plant defects/industrial accidents	Large-scale systems failure
Computer breakdown	Natural disasters
Defective, undisclosed information	Hostile takeovers
Bankruptcy	Government and International crises
People/social/organizational factors	*People/social/organizational factors*
Failure to adapt to change	Terrorism
Organizational breakdown	Executive kidnapping
Miscommunication	Symbolic projections
Sabotage	Sabotage
On-site product tampering	Off-site product tampering
Counterfeiting	Terrorism
Rumors, illegal activities, harassment	Boycott

Source: Adopted Mitroff et al., 1987

2.2 Crisis Management in Banking

Crisis management is a technique for dealing with risk and uncertainty, unexpected and emergencies (Xiao, 2019). Some researchers (Veil, 2010) explored crisis management from the viewpoint of crisis models (see Table 3). A crisis management model serves as the theoretical structure that encompasses all elements related to the preparation, prevention, response, and recovery from the crisis (Boin, 2009). A crisis model typically involves three major steps associated with managing a crisis: pre-crisis, crisis and post-crisis (Beldad, van Laar & Hegner, 2018), however, there is inadequate literature available on how the learning from a crisis can be used to develop sense-making abilities among managers in a corporate crisis (Reinhart & Rogoff, 2009).

Table 3. Models of Crises

Author	Crisis Model	Details
Fink & Association (1986)	Four-stage crisis model	Prodromal: when warning signals of a crisis emerge Acute: when trigger event and potential damage of crisis occur Chronic: When lasting effects of crisis continue Resolution: When stakeholders are no longer worried about the crisis
Mitroff (1994)	Five-stage crisis model	Signal detection, probing and prevention, damage containment, recovery, Learning, reviewing, and critiquing the crisis management process
Birch,(1994), Guth (1995) and Seeger et al.(2003)	Three stage approach	Pre-crisis: Involves crisis preparation and planning and triggers. Crisis: Trigger event and ensuing damage, and Post-Crisis: Learning, resolution and informing pre-crisis stage

Source: Adopted Chemli (2018).

Crisis management in banking therefore encapsulates the management of risk and uncertainty, business disruptions, and emergency planning and methods to deal with threats to banking operations. It involves a daily commitment to planning and supporting employees, customers, the community, the local economy and the country at large from harm to investment and bank failure (Argyris, 1993; Schön & Argyris, 1996). Crisis management in banking is aimed at ensuring adequate preparation to control and minimize crises and potential chaos in the banking sector (Blankson, et al., 2022). Some earlier researchers explored the four Cs of crisis management to understand the causes, consequences, cautions and coping with crisis. This study also explores the four Cs in the cases as part of the conceptual analysis. However, some recent studies have incorporated the fifth 'C' for creativity in crisis management. Banks are therefore deploying innovative and creative approaches to crisis management as opposed to the traditional methods and approaches. These approaches go beyond traditional methods of warning, detection, planning, and prevention. These approaches also include damage control, business planning, continuity and recovery, learning and post-crisis communication (Bundy, Pfarrer, Short & Coombs, 2017; Gregory, 2005; Lalonde, 2007; Wang & Belardo, 2005).

2.3. The Frameworks of the Study

Understanding the theoretical, empirical and conceptual frameworks surrounding crises in general, banking crises and crisis management is critical for developing effective prevention and mitigation strategies. Hence, the study uses a combination of these frameworks and models to explore and analyze crisis management in banking in Ghana. While the theoretical approach highlights risky behaviour, liquidity mismatch, excessive risk-taking and bad loans as issues underlying banking crises, the empirical evidence from historical events and data, analysis of cases, and the use of key indicators from learning and sense-making decisions become reliable sources for understanding and controlling banking crisis effectively. The study also highlights the use of regulatory and crisis management frameworks as reliable learning techniques in understanding systemic and smouldering banking crises from a conceptual perspective. These frameworks emphasize the importance and relevance of crisis management in banking.

2.3.1 Theoretical Framework

The theoretical understanding of banking crises is grounded in several key models and theories. The study reviewed Diamond-Dybvig, Minsky and Moral Hazard and Adverse Selection:

1. Diamond-Dybvig Model

This model explains banking crises through the lens of liquidity mismatch between short-term deposits and long-term loans. Banks are susceptible to runs when depositors panic, fearing that the bank will be unable to return their funds (Diamond & Dybvig, 2000).

2. Minsky's Financial Instability Hypothesis

The framework claimed that financial markets are inherently unstable due to speculative borrowing during economic booms. This leads to excessive risk-taking and subsequent crashes when debt cannot be repaid, thereby causing banking crises (Minsky, 1977).

3. Moral Hazard and Adverse Selection

These concepts, rooted in information asymmetry, explain how banks may engage in risky behaviour if they expect government bailouts (moral hazard) or how those with high risk are more likely to seek loans45(adverse selection) (Schuermann, 2014).

2.3.2 Empirical Framework

Empirical studies also provide evidence on the causes, consequences, and resolution of banking crises. This study discussed three empirical models namely: Historical analysis, Econometric and Case analysis.

1. Historical Analysis Approach

Historical data analysis helps identify patterns and triggers of banking crises. Minsky (1977) analyses centuries of financial crises, highlighting common factors such as excessive debt accumulation and speculative bubbles (Bryman & Bell, 2003).

2. Econometric Modelling

Econometric techniques are used to identify indicators of banking crises. Stiglitz and Weiss (1981) employ a signals approach to predict crises, identifying key indicators like declines in asset prices, increases in interest rates, and currency depreciation.

3. Case Studies Approach

Detailed case studies of specific banking crises provide in-depth insights into the causes and policy responses. Their study offers comprehensive case studies of banking crises across different countries, analyzing the effectiveness of various policy interventions (Laeven & Valencia, 2020; Yin, 2012).

2.3.3 Conceptual frameworks

Conceptual frameworks offer structured ways to understand and approach banking crises. This study discussed three major conceptual frameworks in support of the banking crisis in Ghana:

1. Crisis Management Frameworks

These frameworks outline the stages of crisis management, including prevention, preparedness, response, and recovery. Boin's five-stage process of preparation, initial response, maintenance, resolution, and evaluation is a notable example that emphasized organizational learning and sensible decision-making (Lockwood & SPHR, 2005; Sapriel, 2003).

2. Regulatory Frameworks

Effective regulatory frameworks are critical in preventing banking crises. The Basel Accords (Basel I, II, III) provide a set of international banking regulations to improve the regulation, supervision, and risk management within the banking sector (BCBS, 2011).

3. Stress Testing and Scenario Analysis

These tools are used to evaluate the resilience of banks under hypothetical adverse conditions. Stress testing helps banks and regulators identify vulnerabilities and prepare contingency plans (Schuermann, 2014).

2.4 Organisational Learning and Sense-Making

Organizational learning can take the form of individual learning, process learning, cultural learning, knowledge sharing and continuous improvement (Schön, et al., 1996). Individual learning usually starts with staff training and development. Learning and sense-making capabilities of bank managers during a crisis are crucial (Maitlis & Sonenshein, 2010). Argyris (1996) highlight the importance of single-loop learning and double-loop learning in the context of informed decision-making. A triple loop learning is based on the future state of the organization rather than simply addressing what is wrong and how to correct and prevent existing errors (Veil 2010; Wang, 2003). Organizational learning can be in many forms such as individual learning, process learning, cultural learning, knowledge enhancement and continuous improvement (Drew & Smith, 1995; Fiol & Lyles, 1985; Wang, 2003).

Boin's (2009) framework challenges crisis management to bring about policy changes in organisations. The study also supports regulatory and policy effects from theoretical and organizational learning frameworks (BCBS, 2011). Boin's five-task process of organizational learning during crisis and sensible decision-making includes: 1). Preparation, 2). Initial response, 3). Maintenance, 4). Resolution and 5). Evaluation. Boin (2019) describes five transboundary management factors that affect sense sense-making abilities of managers thereby making crisis management difficult: 1). Manager's experience to recognise crisis as a warning signal 2). Role of media in assessing and evaluating information 3). Unique differences among individuals due to different backgrounds and experiences 4). Categorisation and classification of information and understanding of same 5). Unique circumstances of every crisis reflect variability in decision-making (Davis & Karim, 2008; Hensgen, Desouza & Kraft, 2003; Schön & Argyris, 1996; Wang 2003).

This study also explored the efforts of the three banks in reducing disaster risk as a systemic application of a conceptualized crisis management framework in banking. The Hyogo Framework for Action (HFA) (Olowu, 2010), require alignment to control and mitigate crises emanating from disasters. The HFA identified five key areas for action to reduce disaster risk impacting on individual, institutional, national or international levels: 1). Prioritizing disaster risk reduction, 2). Identifying risks and taking appropriate action, 3). Creating risk awareness, 4). Reducing risk and 5). Ensuring adequate preparation and readiness to take action.

2.5 Crisis Management Boundary

Crisis boundary refers to the limits or borders that define the scope and impact of a crisis. These boundaries can be physical, organizational, temporal, or conceptual, and they help to determine who is affected by the crisis, the extent of its impact, and the areas that need to be managed and controlled during the crisis (Mitroff & Anagnos, 2000). Understanding crisis boundaries is crucial for effective crisis management as it helps in identifying the stakeholders involved, the resources required, and the strategies needed to mitigate the crisis (Pearson & Clair, 1998). The concept of crisis boundaries involves defining the scope and limits within which crisis management activities are performed, helping organizations prioritize their response efforts and allocate resources effectively (Coombs, 2015). Boin (2019) describe some transboundary management issues that directly or indirectly influence crisis management. These transboundary management issues are either treated as standalone management strategies or integrated into crisis management as a comprehensive management program. There is, however, no size fit all approach to the treatment of these factors (Caprio & Klingebiel, 2002; Mikes & Kaplan, 2015).

Businesses often combine Business Continuity Management (BCM) with crisis management as a systematic framework to effectively handle emergencies. They augment the additional value provided to consumers and strengthen the competitive prowess of the firm. Effective business continuity management (BCM) and crisis management need the continual updating of processed records, rigorous testing, and the training of competent staff.

2.5.1 Disaster Risk Management

Disaster Risk Management (DRM) and crisis management are interconnected fields, whereby a catastrophe refers to an abrupt and catastrophic incident that disrupts a community or civilization, resulting in human, material, and economic damages that are beyond the community's capacity to handle. Crisis management is focused on the management of crises, while disaster management encompasses a series of interconnected tasks (Olowu, 2010).

2.5.2 Enterprise Risk Management

Enterprise Risk Management (ERM) is a continuous procedure that involves the identification of possible hazards and assists organisations in managing uncertainty. Risks pertain to actions that can be anticipated, while uncertainty pertains to regions where anticipation is not feasible (Hermann, 1972; Hiles, 2010).

2.5.3 Business Continuity Management

Business Continuity Management (BCM) is a comprehensive management process that identifies possible risks to an organisation and assesses their effects on company operations. It offers a structure for constructing organisational resilience and efficient reaction to protect the interests of stakeholders, reputation, brand, and activities that create value (Moeller, 2007).

3. Research Methodology

3.1 Research Purpose and Design

The primary focus of this qualitative study (Yin, 2012) is to understand the nature of financial crises that Ghanaian banks face and to explore how organisational learning and sense-making decisions influence crisis management resolution through the combined application of theoretical, empirical and conceptual frameworks. Typical models including but not limited to Boin's (2009) five-task theoretical framework on learning and sense-making under pressure, and Hyogo's framework for action have been explored to understand crisis management in these three commercial banks in Ghana with over 20 years of banking experience.

This qualitative research used semi-structured interviews, to collect the views of 15 participants from three banks as multiple case studies (see Table 4). Case study research provides an in-depth view of a social phenomenon; therefore, multiple cases have been selected.

Table 4. Detail of interviewees of the Banks

Interviewee Name	Sex	Profile	Senior/Middle Management	Bank Experience
Bank A				
Interviewee I	Male	Director	Senior Management	31 years
Interviewee II	Male	Executive Director	Senior Management	25 years
Interviewee III	Male	Head Payments	Middle Management	25 years
Interviewee IV	Female	Accounts Manager	Middle Management	29 years
Interviewee V	Male	Branch Manager	Middle Management	28 years
Bank B				
Interviewee VI	Male	CEO	Senior Management	29 years
Interviewee VII	Female	Director	Senior Management	23 years
Interviewee VIII	Male	Customer Service Manager	Middle Management	23 years
Interviewee IX	Male	Regional Manager	Middle Management	25 years
Interviewee X	Male	Risk Manager	Middle Management	24 years
Bank C				
Interviewee XI	Male	General Manager Risk	Senior Management	38 years
Interviewee XII	Male	General Manager, Finance and Strategy	Senior Management	28 years
Interviewee XIII	Male	Manager- claims	Middle Management	25 years
Interviewee XIV	Male	HR Manager	Middle Management	29 years
Interviewee XV	Male	Risk Manager	Middle Management	24 years

3.2 Research questions

The two main research questions have been used to guide in realising the objective of the study. The first question was aligned with the types and kinds of crises faced by the three banks. Thus, this requires details of crises such as the number of crises faced, types, duration, period of occurrence and reasons for occurrence. The second research question leads to the learning and sense-making strategies adopted by the three banks to overcome their banking crises. The techniques deployed by the banks to overcome their specific crises and what lessons have been learnt. The final part of the research question addresses crisis management boundary as relating to Enterprise Risk Management (ERM), Disaster Risk Management (DRM) and Business Continuity Management (BCM) in banking.

3.3 Purposive sampling

All three banks were purposefully selected based on the unique experiences of the banks in surviving two decades of banking crises. Accessibility to the bank executives at the head office was critical for the inclusion of a bank in the study. To provide data for analytical and comparative studies, three commercial banks in Ghana were selected. The banks represent state-owned, public and private participation in the study. A bank's versatility and experience in crisis management were key factors for being considered.

Bank A is one of the most popular and the most experienced banks in Ghana. The bank represents a bank with more than 23 years of experience. The bank has over 1 billion GHS in value and is known for its customer-friendly attitude with excellent working environment. Bank B provides sector-based specific banking services including credit facilities for development, modernisation and allied industries. The bank is responsible for 85% of institutional credits in those sectors in which it operates. Bank B is a top 10 commercial bank with more than 26 years of operations and has over 1.5 billion dollars in value. Bank B is known for its extensive use of information technology and comprehensive range of services. Bank C is an autonomous public bank that is focused primarily on promoting and strengthening rapid industrialization. The bank has played a major role during the country's economic crises. The bank provides about 70% of its loan portfolio to the private sector and it's recognised as one of the major lenders to the manufacturing, building, construction, service and agro-processing sectors. The bank is one of the oldest and most experienced banks in Ghana. The bank is over 70 years old and crucial to maintain stability of the industry with over 70% of its portfolio supporting the private sector.

4. Results and Discussion

4.1 Comparative Crisis Analysis

This section answered the first research question of the study. What crises have the three banks been exposed to and for how long between the period 2000 and 2020?

The three banks faced crises related to poor corporate governance practices, liquidity crises, physical damage to assets and employees, foreign exchange fluctuations, non-performing loans and operational losses. Specifically, Bank A highlights two major crises but significantly different and occurred more than 10 years apart. Bank B presents three major crises including fraud and disasters whereas Bank C brought attention to three crises – one with a significant gap and two occurring within a short period. All three banks faced and survived these four seasons of banking crises within the 20 years: 2000 -01, 2011-12, 2014-15 and 2017-2020. The causes included natural disasters, excessive risk-taking and extension of credits without approved guarantees, fraud, and operational, regulatory and corporate governance failures. A comparative analysis is made in Table 5 in response to research question one: crisis types, crisis periods, duration of the crisis and causes among the Banks.

Table 5. Crises details of the Banks

Comparative Crisis Analysis		
Bank A		
Detail of Crisis	Reason of occurrence	Type of crisis
- Two crises happened in the year 2000-01 and 2013 - Two crisis durations were 2 -3 years and 1.5 years	- Bad Corporate governance practices - Overexposure to few customers - High fixed deposits - Huge withdrawals of top 3 customers - Low deposit mobilization drive - Reluctance of the Central bank to provide liquidity support	Liquidity, Profitability and Capital Inadequacy, Foreign exchange losses
Bank B		
- Three crises happened in the year 2012, 2015, and 2018 - Three crisis durations were 2 - 3 years, 1.5 years and 2 years	- Melcom Building collapse - Heavy downpour caused flooding of three branches	Physical damage to assets and health and safety of employees Reputational damage Staff Fraud
Bank C		
- Three crises occurred in the year 2000, 2011-2014 and 2019 - Three crisis durations were 5 years, 1.5 years and 1.5 years	- Huge foreign exchange fluctuations/losses - Non-performing Loan - Huge Operational Losses	Market Risk Lack of Corporate Governance, Scams and fraud risk Operational Risk

Note: Interview data

From a theoretical perspective, the three banks faced both internal and external crises. The empirical evidence from the respondents shed more light on the causes of the crises. The respondents (I, IV, and V), identified poor corporate governance practices, over-exposure to few customers, high fixed deposits, and huge withdrawals by the top three customers, low deposit mobilisation drive as internal crises faced by Bank A. On external crises, respondents II and III from Bank A pointed to delays and reluctance by the Central bank to provide liquidity support when it was needed the most. The root cause of Bank A's crises was poor corporate governance and poor banking supervision, as stated by every single respondent. Diversification of risks is one of the fundamentals of portfolio risk management. Moreover, adherence to regulatory requirements is necessary to survive in the market. Bank A has failed to perform both functions in a timely and effective manner. Meanwhile, Bank B encountered a natural disaster that disrupted the banking operations of a strategic branch for months (IX). Bank B faced liquidity, non-compliance and dealing with client data (VII). Organizing data is one of the major challenges faced by Bank B (VI). The bank lacked essential software to store, share and comprehend the data (X). Respondents XI and XV posit that Bank C was internally exposed to operational losses and non-performing loans. Bank C faced huge foreign exchange losses (XII). Bank C faced three crises in the years 2000, 2011 and 2014. The bank faced fluctuations in the exchange rate from 2000-05 due to corporate financing. The bank suffered from one of the highest currency exchange exposures due to currency fluctuation (XII). Employee fraud and cheque fraud were some of the reasons which resulted in losses in 2011 and 2014. XI and XV reported three types of cheque fraud: Counterfeit - cheques not written or authorized by a legitimate account holder, Forged - Stolen cheques not signed by the account holder and Altered - an item that has been properly issued by the account holder but has been intercepted and the payee and/or the amount of the item have been altered. The cause for the loss incurred by the bank was attributed to employee dishonesty, and the decision by the top executive to show favouritism by signing a loan without the necessary guarantees. These actions ultimately led to significant financial loss. Poor corporate governance posed significant risks to the bank's reputation and regulatory compliance (XIV). Figure 1 presents a summary of the types of crises faced by the three banks.

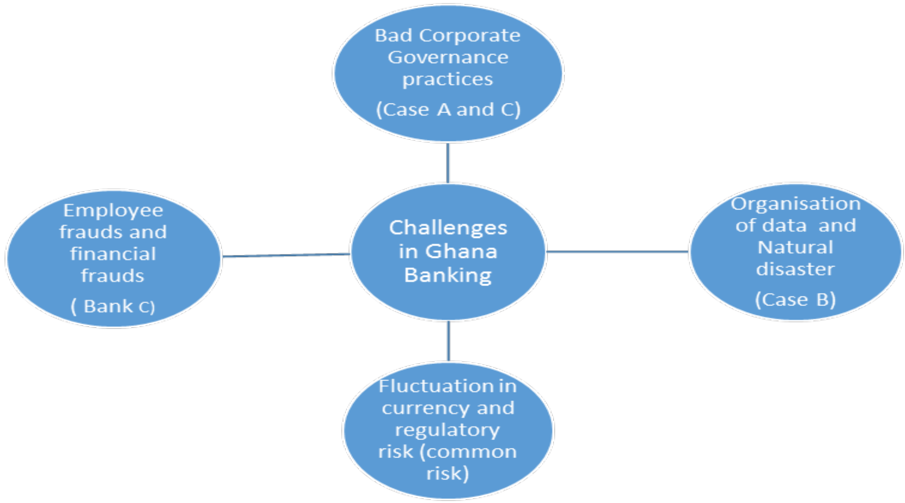

Figure 1. Summary of crises in the Banks

*4.2 **Crises Management Strategies by the Banks***

This section explores responses to the second research question - what strategies and techniques have been deployed by the three banks to overcome their specific crises based on the framework of learning under crisis (Boin Framework), organisational learning and sense-making strategies?

Bank A initiated several business strategies and sensible decisions. According to I and V, the options to raise fresh capital, reduce the face value of old debt, increase commercial paper, change existing policies and the organisational structure and leadership, and training at individual and team levels were considerations made during the bank's strategic sessions.

The bank implemented some of the short-term strategies and structural changes to address short to medium crises under the control of the bank. A Crisis Resolution Committee (CRC) to map out the strategy for crisis resolutions and strategy implementation (II, IV) was set up by the Board. Respondent III mentioned that CRC was formed to deal with issues of liquidity and corporate governance inefficiencies. V claimed that the committee developed an understanding of the bank's current crises, developed the process to identify and evaluate the crises, and assigned roles and responsibilities for crisis prevention and resolution.

Figure 2. Crisis management process in Bank A

The breakthrough for Bank A on the CRC was in identifying systemic instability that was traceable to three major risk factors; excessive risk concentration of few customers (setting controls), excessive concentration of counterparty risks in certain markets such as OTC, derivatives and moral hazard problems (I). Based on these factors, several structural and policy changes were suggested and implemented (IV). Later, controls were established as a part of corporate governance practices such as single borrower obligor strictly observed for one year. If there are further doubts, then checks and balances are made (1V). There was strict monitoring placed on loans and advances (III). Also, it was made mandatory that all loans requested by staff go through a credit committee of the bank (I). Respondents I and V posit that, there was a problem with knowledge management and learning from crises because some executives and middle managers had different understandings of crises exposure and early warning signals. With the current state of affairs in the bank, engaging employees in crisis management makes sense but learning at such a crucial time is daunting (II, V). There was also a problem with the categorization of risks under liquidity, credit and financial risks (III). Another challenge the bank faced with learning from the crisis is that the control measures created negative reactions among employees even though there was a positive outcome from customers. Customer complaints dropped drastically (V). To address these problems, a grievance redressal system was established to record the issues and to respond to them in a specific timeframe (I). A special task force was allocated this responsibility. Initially, a task force was assigned to handle complaints from three key stakeholders to test the grievance redressal system; and then when it became successful, the system was opened to all other stakeholders (II). Improved customer visits to the bank, and enhanced capital injection (IV). An intensive advertisement and social media marketing boosted investor confidence and helped in re-gaining the bank's reputation (V).

All the respondents from Bank B were actively involved in crafting the crisis management strategy of the bank. The bank categorized crisis into pre-crisis, crisis and post-crisis. "This made the bank's system more robust and resilient in dealing with internal crisis" (VII). In pre-crisis, the bank hired an automated messaging system (AMS) from a reputable agency in Ghana (X). The bank later develops a Crisis Communication and Prevention Plan (CMPP).

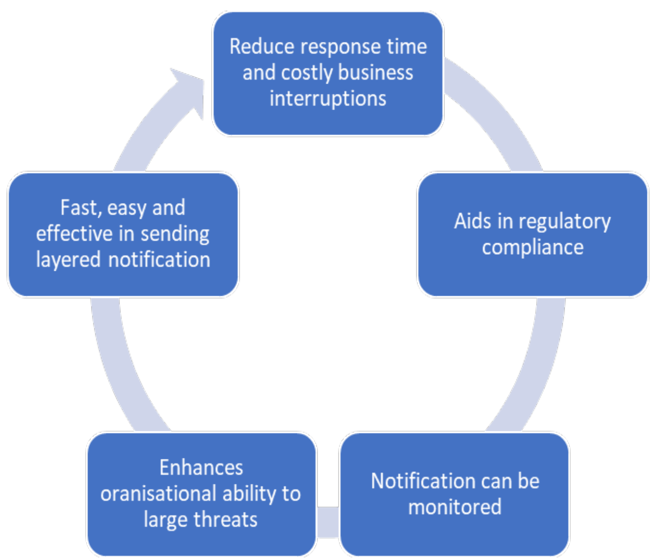

Figure 3. Benefits of automated messaging system

Under CMPP, the bank created awareness among employees through extensive training on how to prevent, contain and deal with the crisis (IX). "Since crisis management requires clarity in roles and responsibilities, and communication; the bank further developed a nine-step implementation guide for the CMPP which was divided into three phases: 1). Involved communication, 2). Promoted understanding of risk and dissemination of information and 3). Professional crisis training with an educational institution to provide basic certification to all staff; and advanced certification for risk managers. This approach was to offer educational opportunities, and learning from crises, and to gain support for new policies and strategies" (X, VIII).

Bank C also took measures to prevent and reduce crises during and after the crisis period. The bank reduced currency exchange exposure by enhancing its netting process across branches, product lines, and currency markets. The Bank also collected sufficient data to overcome the problem of incomplete data and data variations across systems for efficient analysis and computation. Additional measures were implemented to enhance the utilisation of capital, necessitating substantial modifications to capital management strategies and a thorough evaluation of the portfolio. To deal with the operational losses and the growing number of frauds within the Bank; the bank hired a team of experts under the Fraud Protection Cell (FPC). The FPC worked for an initial six months to understand different cases that happened in the bank and made recommendations to gain confidence (XIV). Precautionary measures were taken across the bank to reduce fraud, and to provide clarity in the allocation of responsibilities where no one person is responsible for cheque issuance and reconciliation, and internet banking platform. The Bank strengthens its internal controls on the re-ordering of cheques and laser printing of cheques to reduce cheque and employee fraud (XIII). The Bank trained staff on money laundering. XV mentioned that "fraud alerts general instructions, and cautions are regularly issued to customers through the Bank's SMS platform".

From a theoretical and conceptual perspective, the three Bank's crisis management strategies and techniques followed the five-task approach by Boin (2009). Table 6 compares the results of the three banks.

Table 6. Comparative analysis of learning from crisis

Boin (2009) Five Task	Bank A	Bank B	Bank C
Task 1: Preparation of crisis	Establishment of a Crisis Resolution Committee and establishing controls	Divided crises into: - Pre-crisis period - Current crisis period - Post-crisis period	Crises are divided into: - Financial risk - Operational losses - Frauds
Task 2: Making sense of emerging and evolving crisis	To develop employee engagement, a grievance redressal forum was established Crisis prevention has been given priority	Used AMS and Crisis communication and prevention plan	Fraud protection cell, several initiatives and precautionary measures Training for money laundering
Task 3: Managing large response networks	Developing engagement with employees and stakeholders	AMS and training	Senior management changed. Spoke to media
Task 4: Maintaining credibility	Through advertising and improved customer visits	Acting fast and spreading communication	Faced difficulty in establishing credibility but managed by showcasing employee's vast experience
Task 5: Learning under pressure	Development of Corporate Governance guidelines Dealing with liquidity issues	Reduced crisis response time, aided regulatory compliance and enhanced the organization's ability to deal with larger threats.	Improvement in technology and quality of cheques Improved risk awareness

Note. Comparative Analysis

4.3 Organisational Learning

All three banks used staff training and development as the basis for knowledge sharing and learning from crisis and under pressure. Bank A promoted staff training at individual and team levels. Bank B awarded professional certificates to trained staff from a professional institution. The training was provided at basic and advanced levels. Bank C provided training on money laundering. Therefore, individual learning in the banks occurred in three forms: general staff training, professional training with certification and specific topical training.

The second level of learning is through the enhancement of information processing and problem-solving capabilities based on experience. Experience does not mean repetitive actions over a long period rather it depends upon an increase in knowledge and abilities to solve problems from different perspectives using techniques and tools for improvement in processes and systems. Bank B used information processing AMS services for the speedy dissemination of information among employees and promoted sensible decision-making. Bank C uses grievance resolution to access information. Bank A uses a crisis resolution committee to get information. Enhancement of information processing and problem-solving capabilities as a part of organisational learning in Ghana banking is at a nascent stage.

Designing an organizational learning culture is one of the most desired goals of corporate governance (Drew, et al., 1995). All three banks demonstrated a high sense of learning with strategies for restructuring, business continuity planning and corporate transformation; and have shown preparedness to deal with both current and future crises. Comparatively, Bank B is ahead of the other two banks (A and C) as it segregated the crisis into three parts – pre-crisis, crisis period and post-crisis. The next useful state of learning is to develop knowledge management. It not only involves knowledge acquisition, dissemination, improvement, creation and implementation but also the need to associate knowledge with past and future activities (Fiol, 1985). Bank B is struggling with big data issues and needs to work on knowledge management.

Argyris (1993) double loop learning explores an organization's capacity after a financial crisis and that double-loop learning is necessary in the context of practitioners making informed decisions in rapidly changing and uncertain circumstances. The crises faced by all three banks did not measure up with double-loop learning. The banking crises did not emerge from a crisis precipitated by some other events such as a recession competition a new management political interference or takeovers. There was no situation where the crisis was created by the existing management of any of the three banks to cause a change in governance (Schön, et al., 1996). Rather all three banks have adopted triple-loop learning as an approach beyond single and double-loop learning to anticipate the future state of the bank rather than simply addressing existing threats and how to control and prevent risks (Veil 2010; Wang, 2003).

4.4 Sensible Decision-Making by Managers

The segment highlights actions involved in sensible decision-making during a crisis (Weick, 1988) and the need to understand how actions are taken about commitment, capacity, and expectation. An analysis is drawn based on comparing learning of banks A, B and C with previous literature which affects the sense-making abilities of the managers during a crisis (Boin, 2009).

These factors include: 1) Managers rely on past experiences to recognise warning signals such as repeated successes or failures can change decisions even though; it might not affect the probability and impact of the crisis. In the case of Bank A, crises were attributed to bad corporate governance and lack of effective diversification of risk. The error leading to the first crisis was repeated in the second crisis as well. EWS was not observed. In the second case, the crisis occurred due to natural disasters. Bank B had no control over the crisis but used AMS which resulted in no deaths and low financial loss. Fast and reliable communication and EWSs of flood helped the bank to manage risk proactively. Fraud is repeated in two separate crisis periods. In Bank C, fraud was repeated over time without management noticing the crime. Observing EWSs can help bank managers. 2) There is a wider role of media in information dissemination. Effective deployment of the media is perceived as reliability, expertise and attractiveness for an organization (Coombs, Holladay, Millar & Heath, 2004; Hoeken & Renkema, 1998). In Bank A, it was difficult for the bank to regain the confidence of customers after a liquidity crisis. The bank uses mass publicity campaigns for its rebranding efforts to regain support from stakeholders. In Bank B, after the Melcom disaster and flood disasters, the bank received huge media attention. The bank faced difficulties in its day-to-day operations, as the media continued to hype its woes, and the bank continued to lose deposits. In Bank C, the media created a reputation loss and questioned the credibility of the bank. It took 1.5 years for the bank to regain its confidence by showing its vast industry network and experience. 3) Managers are unique individuals with different backgrounds and experiences, hence, their decision-making. It also holds for the three Banks. All banks operate under the same regulatory pressure although, faced different crises and adopted different strategies. Under Bank A, a crisis resolution committee and grievance redressal forum were formed however, bank B used AMS and a Crisis communication and prevention plan. Bank C rather used a fraud protection cell, initiatives and precautionary measures to deal with its crises. 4) Managers classify the information based on their experience and understanding of the world, therefore the more knowledgeable and experienced the manager is, the more likely the chances to comprehend the information appropriately (Burke, 1984). 5). The context of every crisis is unique therefore, the decision varies according to circumstances and the degree of the complexity or uniqueness of the crisis (Perrow, 1999). Crises in banks A, B and C occurred due to different reasons such as bad corporate governance, poor maintenance of liquidity levels, fluctuation of currency and natural disasters. While some crises are controllable; others are not.

4.5 Transboundary Crises Management

This section discusses the cross-boundary issues in crisis management and its relatedness to Enterprise Risk Management (ERM), Disaster Risk Management (DRM) and Business Continuity Management (BCM). Several perspectives were noted throughout the interviews.

All participants from Bank A expressed significant support for the inclusion of crisis management in the framework of Enterprise Risk Management (ERM), Disaster Risk Management (DRM), and Business Continuity Management (BCM). Crisis management is not a stand-alone (IV). Crisis management is embedded in our risk and disaster profiling (V) and business continuity management (III). All respondents from Bank B expressed the same support for the inclusion of crisis management as a component of ERM and DRM. However, BCM is neither planned, discussed or implemented (X). All participants surveyed at Bank C unanimously agreed that the Bank does not adhere to crisis management practices as part of its ERM, DRM, and BCM efforts.

These observations indicate a broader adoption of crisis management approaches in the banks, driven by the banks' understanding, scope, and implementation strategy. There is no size-fits-all approach to the adoption and implementation of crisis management in the three banks. Bank A categorized its current risks into three overarching groups for convenience and treatment: 1) Manageable risks; 2) Operational risks and 3) Unmanageable risks. (I, III). The first group mostly encompasses environmental threats, whereas the second category includes risks such as fraud, theft, and employee dishonesty. The third group often encompasses hazards that are discretionary or beyond control. ERM includes the comprehensive management of all bank risks, including operational, financial, and IT risks. ERM aids in the management of hazards that may arise in various market conditions, including crises. The Bank sees crisis management as a component of ERM (II). The bank strictly adheres to the COSO ERM framework (V).

The results also show that all three Banks have actionable programs in response to enterprise risk and disasters either as standing, comprehensive programs or as an emergency response, ad-hoc committee. Theoretically, these actionable programmes confirm the implementation of the Hyogo (2005-2015) framework for action (HFA) on disaster risk management in all three Banks aimed at reducing disaster losses.

The responses show that Bank A implements HFA in three strategic areas: training given to employees, disaster risks days to enhance knowledge sharing on different topics, theme days, disaster preparedness initiatives, contacts of ambulance and fire services and purchasing of equipment needed for emergency, training and annual maintenance (I, II, V). BCM is at the beginning stage in the bank and not yet embedded in the bank's culture. BCM is yet to be taken seriously (III) by top management.

Bank B adheres to enterprise risk management practices as part of its corporate governance framework, with direct risk reporting responsibility on the head of risk (X). Audits further aid in the identification of weaknesses in credit management, as well as deviations from credit restrictions. The bank implemented disaster risk management by initiating an automated messaging service to communicate disaster risk. Crisis management is a significant part of this approach (IX) and using EWSs. The bank has yet to consider business continuity management (VIII) as a strategy to control crises. However, the bank uses remote branch operations, data backup systems, employee training, delineation of roles and duties, and the use of emergency numbers and addresses in case of emergencies.

Bank C started examining risk holistically, but this is still in the early stages of implementation (XIII). The respondents want senior management to fully understand the COSO ERM framework. Although there is a risk and audit committee, the discussion of risk tends to be fragmented rather than comprehensive (XIV).

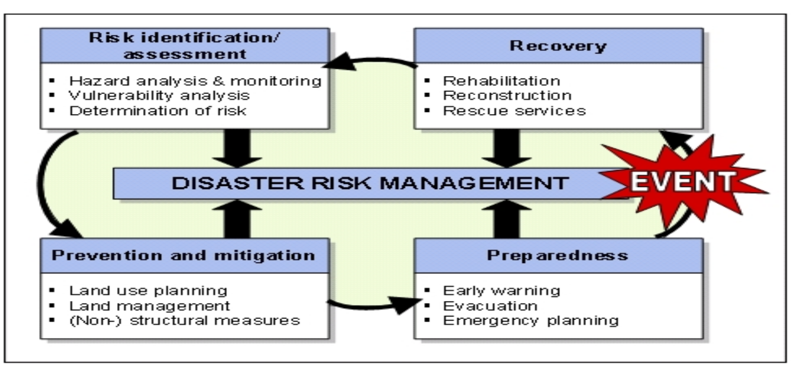

Figure 4. Disaster risk map of Bank C

The Bank set clear limits for both the upper and lower bounds of the maximum number of risks (risk appetite) and the maximum exposure per occurrence (XII). Disaster risk management in the bank (see Figure 4) covers hazard and vulnerability analysis, determination of risk, prevention and mitigation, preparedness and recovery (XI). The Bank also recognised the need for business continuity management. The bank drafted a BCM strategy and hired a business manager to be responsible for BCM strategic planning and implementation across the branches.

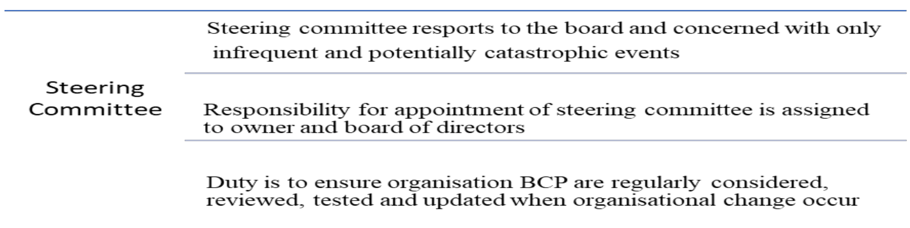

Figure 5. Steering committee of Bank C

Before the BCM strategy formulation, the management outlined enough justification for implementing a strong BCM system. The board of directors understood the current crises of the bank prioritized crisis management, and resource allocation and assigned responsibilities to teams and committees based on the level of intensity and severity of the business crisis the bank was going through (XV). The bank has set up a steering committee (see Figure 5) responsible for harnessing the business continuity planning strategies of the bank.

5. Conclusion

This study primarily answers two principal questions: (1) What type of banking crises have Ghanaian banks been exposed to? This question is broadened to include the nature of the crisis, crisis duration, causes and possible consequences (2) What crisis management strategies have been implemented to resolve the crises and what lessons and sense-making decisions have been documented to guide against future crises? A part of this question is also extended to understand the crisis management boundary in banking. Firstly, there is a global concern for banking crises in emerging and developing countries. Hence a recommendation for the recognition and integration of banking crises and management into the supervisory and regulatory risk framework of banks. Secondly, there is a debate on crisis management strategies and appropriateness or fit into the banking sector thereby drawing on organisational learning and sensible decision-making under pressure and crises. Finally, the theoretical, conceptual and empirical frameworks of crisis management have supported divergent methods and cross-boundary approaches to effectively manage and control crises in banking. The banks experienced different types of crises, internal and external. Shockingly, some crises have been repetitive thereby questioning the learning and knowledge management of these banks. The four major banking crises identified over the two decades of banking crises in Ghana are liquidity crises, currency fluctuation crises, natural disaster crises, corporate governance failures, scandals, and frauds. The 2017-2020 crisis was the most severe and worst of all four crisis periods. The banks initiated different crisis management strategies to resolve the crisis events including crisis resolution committees, customer grievance redressal, fraud prevention cells, crisis communication and prevention plans, automated messaging systems and disaster alert systems. Different levels of organisational learning and sense-making decisions have been developed and implemented by the banks. Transboundary crisis management covered enterprise risk management, business continuity management and disaster risk management at varying degrees. Regrettably, the banks did not document their crisis events, approaches and learning, leading to the design of crisis management frameworks. One common challenge was that as part of learning and sensible decision-making, the banks failed to conduct a thorough review of their crisis events, including what happened, how it was managed, and what could be improved. Again, there was no documentary record of lessons learned from past experiences to improve future crisis management and responses.

This study has both theoretical and practical implications that are worth mentioning. For researchers, the study provided roadmaps and highlighted theoretical, conceptual and empirical frameworks for exploring crisis management in banking, thus providing a foundation for future studies. For policymakers, this review underscores the challenges and opportunities in promoting crisis management in banking and emphasizes the need for an integrated transboundary crisis management practice, organisational learning and sensible decision-making during crises to reduce the incidence of re-occurrence. Specifically, the Central bank should (1) improve regulatory standards to enhance crisis management and improve banking sector stability. Banking sector reforms are required to align banking operations to experience, and sensible decision-making practices to ensure resilience, (2) use empirical methods like case study analysis and historical analysis, to identify early warning signals (EWS) and exercise pre-emptive measures to mitigate potential smouldering crises.

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