Evolution of Risks Facing Commercial Banks in Kenya and Associated Strategic Responses

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Crossref

Abstract

Purpose: The main objective of this study was to explore the evolution of risks facing commercial banks in Kenya and their strategic responses

Methodology: The study adopted a desktop methodology. Desk research refers to secondary data or that which can be collected without fieldwork. Desk research is basically involved in collecting data from existing resources hence it is often considered a low cost technique as compared to field research, as the main cost is involved in executive's time, telephone charges and directories. Thus, the study relied on already published studies, reports and statistics. This secondary data was easily accessed through the online journals and library.

Findings: The study found that the commercial banking sector in Kenya is operating within a highly dynamic and ever-evolving risk landscape. The risks faced by these banks are multifaceted and include economic, operational risk, regulatory, technological, systematic, sovereign risk and market-related challenges. It also added that the strategic responses adopted by commercial banks in Kenya are diverse and multifaceted. The conclusions drawn emphasize the need for continual vigilance and adaptation in risk management, the pivotal role of technology and digital transformation, and the significance of regulatory compliance. By taking these conclusions into account, commercial banks in Kenya can better position themselves to thrive in the dynamic and competitive financial landscape of the country.

Unique Contribution to Theory, Practice and Policy: The Modern Portfolio theory, liquidity preference and the Liquidity Coverage Ratio (LCR), Agency theory, the term structure of interest rates and duration and Credit Scoring Model and the Resource Based View model may be used to anchor future studies on the evolution of risks facing commercial banks in Kenya and their strategic responses. This study makes significant contributions to theory by developing a risk evolution framework and strategic risk response models. It has practical implications by offering enhanced risk management strategies and guidance for financial decision-making for practitioners. Additionally, the research provides valuable insights for banking regulators policymakers, and investors in Kenya, supporting risk-based supervision and financial stability initiatives.

Keywords: *Risks, Commercial Banks, Evolution, Strategic Responses*

INTRODUCTION

The evolution of risks facing commercial banks is a dynamic process influenced by various internal and external factors. Four key risks that have evolved significantly in recent years include technological risks, cybersecurity risks, regulatory risks, and market risks. Commercial banks have responded strategically to these evolving risks to ensure their sustainability and competitiveness. Technological advancements, such as digitalization and Fintech innovations, have introduced new risks related to IT systems, data security, and operational disruptions (Basel Committee on Banking Supervision, 2019). Commercial banks have responded by investing in robust technology infrastructure, enhancing cybersecurity measures, and adopting digital strategies to improve efficiency and customer experience. For example, JPMorgan Chase's strategic response includes substantial investments in cybersecurity measures and the development of digital banking platforms (JPMorgan Chase, 2020).

Strategic responses are actions taken by a firm to cope with the challenges and opportunities in its external environment. They can be classified into four types: rationalization, aggression, adaptation, and innovation (Hillemann & Gestrin, 2021). Bank strategic responses are the actions that banks take to cope with the challenges and opportunities in the financial sector. Some of the common bank strategic responses are diversification, consolidation, digitalization, merging, and transfer risk through financial instruments like credit default swaps (CDS) and securitization. CDS will allow banks to hedge against credit risk, while securitization will see the bank selling off a portion of loans to investors, hedging using derivatives, risk-based pricing, reinsurance, liquidity management, and innovation. These responses vary across different countries depending on their economic, regulatory, and technological conditions. Some of the common strategic responses are training and development, expansion, restructuring, mergers and acquisitions, market segmentation, innovation, capital reserves, risk monitoring and reporting, stress testing, collateralization and due diligence, and Asset and liability management (ALM), banks use ALM to match the maturities and cash flows of their assets and liabilities, reducing interest rate risk and liquidity risk.

The evolution of risks facing commercial banks in the US has been influenced by various factors, such as the pandemic, regulation, technology, and customer expectations. According to a report by Deloitte, US commercial banks could experience up to $254 billion of net loan losses between 2020 and 2022, mainly due to the impact of COVID-19 on commercial and consumer loans. The low-rate environment and muted loan growth are also expected to suppress net interest income, which is a major source of revenue for banks (Haj-Salem & Hussainey, 2022). Some recommendation to this emerging risk to accelerate digital transformation to support remote work and customer access during such pandemics and to enhance business continuity plans to address pandemic-related disruptions.

In the USA, banks have diversified their activities to reduce their reliance on traditional lending and increase their fee-based income. For example, JPMorgan Chase has expanded its investment banking, asset management, and card services segments, which accounted for 57% of its total revenue in 2020 (JPMorgan Chase, 2021). Banks have also consolidated through mergers and acquisitions to achieve economies of scale and scope, enhance their market power, and improve their resilience. For example, BB&T and SunTrust merged to form Truist Financial in 2019, creating the sixth-largest US bank by assets (Truist Financial, 2020).

One of the strategic responses of commercial banks is to diversify their portfolio of assets and liabilities. By diversifying their portfolio, commercial banks can reduce their exposure to specific sources of risk and increase their resilience to shocks. For example, commercial banks can diversify their credit portfolio by lending to different sectors, regions, and borrowers with different credit ratings. They can also diversify their funding sources by raising capital from different markets, instruments, and investors and also selling their loan portfolio. Diversification can help commercial

banks to lower their credit risk, liquidity risk, and market risk (Beck & De Jonghe, 2013) geopolitical and even concentration risk.

Another example of a bank strategic response in China is the digital transformation of banking services, which leverages new technologies such as artificial intelligence, big data, cloud computing, and blockchain to improve efficiency, innovation, and customer satisfaction. The World Bank reports that China has the world's largest digital payments market, with more than 900 million users of mobile payment platforms such as Alipay and WeChat Pay. China has also pioneered the development of digital-only banks, such as WeBank and MYbank, which offer low-cost and inclusive financial services to millions of underserved customers (World Bank Group, 2021).

The banking industry in Brazil faces various risks that have evolved over time, reflecting the economic, political and social conditions of the country. One of the main risks is the high level of public debt, which reached 89.5% of GDP in 2020 and is expected to increase further in the coming years. This poses a threat to fiscal sustainability and macroeconomic stability, as well as to the creditworthiness of the government and public sector entities. Brazil banks are exposed to risk pertaining to commodity price fluctuations, which affect the export revenues, exchange rate and inflation of Brazil. A sharp decline in commodity prices could reduce the income and solvency of borrowers, especially in the agricultural and mining sectors, and impair the asset quality and profitability of banks. A third risk is the competitive dynamics of the banking sector, which is dominated by a few large players, mostly state-owned or controlled. The concentration of market power also increases the systemic risk and the potential need for public intervention in case of distress (de Loyola, Cutter & Emrich, 2016)

To cope with these risks, the banking industry in Brazil has adopted several measures, such as strengthening its capital and liquidity buffers, diversifying its funding sources and revenue streams, improving its risk management practices and enhancing its digital capabilities. The regulatory framework has also been aligned with international standards, such as Basel III, and the supervisory authority has implemented macro prudential tools to monitor and mitigate systemic risk. Moreover, the banking sector has benefited from the resilience of domestic demand, especially from the growing middle class, and from the robust foreign direct investment inflows and foreign exchange reserves that provide a cushion against external shocks. These factors have enabled the banking industry in Brazil to weather the impact of the COVID-19 pandemic and to support the economic recovery (Ben, Taleb, Ben & Managi, 2022)

In Nigeria, one of the bank strategic responses is restructuring. Restructuring refers to the process of changing the organizational structure, business model, or strategy of a bank to improve its performance, efficiency, or competitiveness. Restructuring can involve downsizing, divestment, consolidation, or reorganization of business functions or processes. For example, Access Bank, one of the largest banks in Nigeria, has undergone several restructuring initiatives in recent years to enhance its growth and profitability. Access Bank merged with Diamond Bank in 2019 to create a banking giant with over 29 million customers, 600 branches, and 44% retail market share in Nigeria. Access Bank also acquired Transnational Bank in Kenya and Cavmont Bank in Zambia in 2020 to expand its footprint in Africa. Access Bank also divested from its non-banking subsidiaries in 2020 to focus on its core banking business and reduce operational costs. On the 14th of July 2023 Access Bank Plc (Access) and Standard Chartered Bank entered into agreements, for the acquisition of Standard Chartered's shareholding in its subsidiaries in Angola, Cameroon, Gambia, and Sierra Leone, and its Consumer, Private & Business Banking business in Tanzania. According to its 2022 annual report, Access Bank had registered the strongest growth in revenue in 10years at almost 42 percent to hit gross income of NGN1.38 trillion, as the first instituting in Nigeria to strike NGN1 trillion mark gross earning. According to Access Holding Plc half year financial statements, the group posted profits of NGN135 billion in the first half of 2023. That's a 52% jump compared to the half year of 2022.

LITERATURE REVIEW

Theoretical Review

There are many theories that guide risk management in commercial banks and the list, though not exhaustive. These theories include Liquidity Preference theory, Liquidity Coverage Ratio (LCR), the Modern Portfolio theory and the Resource Based View (RBV). These theories emphasize the importance of a firm's internal resources and capabilities in achieving a competitive advantage, which can inform the strategic responses of commercial banks to the risks they face.

Liquidity Preference Theory

The theory developed by John Maynard Keynes focuses on the demand for money and interest rates. People and institutions hold money for transactions, precautionary, and speculative motives. This theory has the following implications for commercial banks. Banks are influenced by the preference for liquidity in the market. When there is a high preference for liquidity for example during a financial crisis, individuals and institutions tend to hold more cash or near-cash assets, which can affect the overall interest rate levels. Banks need to consider these preferences when setting their own deposit and lending rates, impacting their net interest margin and profitability. Also, banks need to manage their own liquidity positions based on the principles of liquidity preference theory. Understanding the factors influencing the demand for money helps banks assess their liquidity risk and develop strategies to maintain sufficient liquidity to meet their depositors' and borrowers' needs. The theory informs commercial banks about the dynamics of interest rate determination and liquidity demand, helping them manage their balance sheets effectively.

Liquidity Coverage Ratio (LCR)

The Liquidity Coverage Ratio is a regulatory requirement introduced as part of the Basel III framework in response to the global financial crisis of 2008. The LCR is designed to ensure that banks have adequate liquidity to weather short-term liquidity stress periods, typically spanning 30 days. The LCR requires banks to hold a sufficient amount of high-quality liquid assets (HQLA) to cover their expected cash outflows during a stress scenario. The LCR encourages banks to hold a buffer of highly liquid assets, reducing the risk of funding shortfalls during periods of stress. This will help banks mitigate liquidity risk and maintain financial stability. Commercial banks must carefully select their assets to meet LCR requirements. The LCR specifies which assets qualify as HQLA, and banks must consider the trade-off between yield and liquidity when building their portfolios. Banks must adhere to LCR regulations imposed by banking authorities. Non-compliance can result in financial penalties and reputational damage. This regulatory pressure informs risk management practices by necessitating proactive liquidity planning and risk assessment.

Hyman Minsky's financial instability hypothesis argues that financial markets go through cycles of boom and bust. The cycles are characterized by periods of stability, followed by increasing speculative behavior and excessive risk-taking, which ultimately leads to a financial crisis. For commercial banks, this hypothesis suggests that during periods of stability and economic expansion, banks may become more willing to extend credit to riskier borrowers or engage in speculative lending practices, driven by the belief that good times will continue indefinitely.

The Kitchin Inventory Cycle, named after economist Joseph Kitchin, describes shorter-term fluctuations in economic activity related to changes in inventory levels. It suggests that businesses build and deplete inventories in response to changing demand conditions. Commercial banks with significant exposure to industries sensitive to inventory cycle fluctuations, such as manufacturing and retail, need to closely monitor their loan portfolios and adjust their risk management strategies accordingly.

Modern Portfolio Theory (MPT)

Modern Portfolio Theory, developed by Harry Markowitz in 1952, focuses on portfolio optimization and risk management. It argues that by diversifying investments across different asset classes, investors can achieve the highest return for a given level of risk or minimize risk for a targeted level of return. MPT is relevant to the topic as it can be applied to how commercial banks in Kenya diversify their portfolios of loans and investments to manage risks effectively. The theory provides a framework for understanding how banks can balance risk and return through strategic asset allocation. According to Markowitz (1952), the Modern Portfolio Theory emphasizes the importance of diversification in managing risk and maximizing returns, which can be applied to the strategic responses of commercial banks in Kenya to evolving risks. By applying MPT concepts, banks can strive to achieve a balance between maximizing returns and managing risk in their investment and lending activities, ultimately contributing to more prudent and effective risk management practices within the banking industry.

Resource-Based View (RBV)

The Resource-Based View, originally introduced by Jay Barney in 1991, focuses on a firm's unique resources and capabilities as sources of competitive advantage. It suggests that firms with valuable, rare, inimitable, and non-substitutable resources can achieve sustainable competitive advantages. In the context of commercial banks in Kenya, RBV can be applied to understand how the unique resources and capabilities of individual banks (e.g., technology, customer base, and risk management practices) contribute to their strategic responses in managing and adapting to evolving risks. According to Barney (1991), the Resource-Based View emphasizes the importance of a firm's internal resources and capabilities in achieving a competitive advantage, which can inform the strategic responses of commercial banks in Kenya to the evolving risks they face.

Empirical Review

This section delves into a comprehensive and critical literature review focused on the intricate realm of risk management strategies within the context of Kenyan commercial banks.

Echwa & Atheru (2020) examined the impact of risk management on commercial banks' performance in the context of Kenya. The specific aims were to assess the impact of credit, liquidity and interest risks on performances of Kenya's banks. The study used descriptive design and secondary data from 40 commercial banks for the period 2013 to 2017. The analysis was based on descriptive statistics and multiple regression technique. The study found that credit risk and liquidity risk were not key determinants of financial performance, while interest rate risk was a significant factor. The study recommended that bank management should adjust interest rates in line with the prevailing economic conditions.

Juma, Odunga, Atheru & Nzai (2018) investigated the effects of financial risks on performance of Commercial banks in Kenya. Specifically, the study sought to determine the effect of liquidity risk, credit risk, interest rate risk and foreign exchange risk on return on assets of commercial banks. The study adopted explanatory research design and secondary data from 42 commercial banks for six years from 2010 to 2015. The source data was annual reports and financial statements of the commercial banks and Central Bank of Kenya. The data was analyzed by using statistical panel data model and diagnostic tests. The study found out that liquidity risk and interest rate risk had a positive and significant effect on performance, while credit risk and exchange risk had a negative and significant effect on performance. The study concluded that commercial banks should have a sound process for measuring, identifying, controlling and monitoring liquidity risk, credit risk, interest rate risk and foreign exchange risk.

Muthini (2014) explored the challenges facing commercial banks in Kenya due to adoption of e-banking services, focusing on Standard Chartered Bank, Ruaraka branch. The study used qualitative

and quantitative methods and a sample of 25 staff members. The study found that banks faced technological risks, security challenges, legal issues, customer resistance and competition from other players due to e-banking adoption. The study suggested that banks should constantly upgrade their e-banking technology, enhance their security measures, comply with the legal framework, educate their customers and differentiate their services from others.

Njoroge & Gathogo (2019) analyzed the effect of financial risks on the performance of commercial banks in Kenya, using panel data from 43 commercial banks for the period 2008 to 2017. The study considered credit risk, liquidity risk, foreign exchange risk and operational risk as the independent variables and return on assets as the dependent variable. The study used fixed effects model and random effects model to estimate the coefficients. The study found that credit risk, liquidity risk and foreign exchange risk had a negative and significant effect on return on assets, while operational risk had a positive and significant effect on return on assets. The study concluded that financial risks had a significant impact on the performance of commercial banks in Kenya and recommended that banks should adopt effective risk management strategies to enhance their profitability.

Rastogi, Sharma, Pinto & Bhimavarapu (2022) conducted a systematic literature review of regulation, profitability, and risk in the banking industry and explored the relationship between them. They proposed a policy initiative using a model that offers guidelines to establish the right mix among these variables. They used scientometrics tools to analyze the data from the Scopus database and found that concentration banking, market power, large banks, and less competition significantly affect banks' financial stability, profitability, and risk. They also suggested that ownership structure and its impact on the performance of banks need to be investigated further.

Kunz and Heitz (2021) performed a systematic literature review of banks' risk culture and management control systems. They interpreted the findings through the theoretical lens of management control research and synthesized them to a comprehensive model. They identified 103 articles that can be structured along three categories: assessment of risk culture, relation between risk culture and management controls, and development of banks' risk culture over time. They derived consequences for theory, business practice, and regulation from their analysis.

Mwangi, Njuguna & Njoroge (2022) examined the credit risk determinants of commercial banks in Kenya using panel data from 2015 to 2020. They employed the fixed effects model to estimate the relationship between credit risk and bank-specific factors, macroeconomic factors, and regulatory factors. They found that bank size, capital adequacy, asset quality, profitability, inflation, interest rate, exchange rate, GDP growth rate, and regulatory capital have significant effects on credit risk. They recommended that banks should enhance their credit risk management practices and diversify their income sources to reduce their exposure to credit risk.

METHODOLOGY

The study adopted a desktop methodology. Desk research refers to secondary data or that which can be collected without fieldwork. Desk research is basically involved in collecting data from existing resources hence it is often considered a low cost technique as compared to field research, as the main cost is involved in executive's time, telephone charges and directories. Thus, the study relied on already published studies, reports and statistics. This secondary data was easily accessed through the online journals and library.

FINDINGS

Research Gaps

In the studies conducted by Echwa & Atheru (2020) and Juma, Odunga, Atheru & Nzai (2018), a substantial focus is placed on financial risks such as credit risk, liquidity risk, interest rate risk, and foreign exchange risk. However, there is a notable absence of an in-depth examination of non-financial risks, such as operational risk, technological risk, and regulatory risk. In today's rapidly evolving banking landscape, these non-financial risks can have a significant impact on a bank's performance. Future research should consider a more comprehensive evaluation of both financial and non-financial risk factors to provide a holistic view of risk management in Kenyan commercial banks.

The majority of the reviewed studies employ cross-sectional or panel data analysis over specific time periods. While this approach is valuable for assessing risk-performance relationships at a given point in time, it does not capture the dynamic nature of risk management strategies and their impact on banks' performance over the long term. Future research could benefit from incorporating a longitudinal perspective to track the evolution of risk management practices and their consequences on bank performance, providing a more nuanced understanding of how these strategies adapt to changing economic conditions.

While Rastogi, Sharma, Pinto & Bhimavarapu (2022) and Kunz and Heitz (2021) touch upon the influence of ownership structure and risk culture on banks' performance and risk management, there is a need for more dedicated research in the Kenyan context. These factors play a crucial role in shaping a bank's risk-taking behavior and risk management practices. Future studies could delve deeper into the specific aspects of ownership structures, such as government-owned banks, cooperatives, or privately-owned banks, and their implications for risk management. Additionally, exploring how risk culture is established, maintained, and its impact on risk management control systems in Kenyan commercial banks would be a valuable avenue for future research.

The Liquidity Preference Theory highlights the importance of holding liquid assets to mitigate future uncertainties, particularly relevant for commercial banks in Kenya in managing liquidity risks. However, understanding how Kenyan banks perceive and manage such risks remains a theoretical gap. Modern Portfolio Theory emphasizes diversification to optimize risk-adjusted returns, suggesting Kenyan banks should diversify their loan portfolios. Yet, research is needed to assess the effectiveness of this strategy and its applicability to other risk types. The Resource-Based View focuses on internal resources for competitive advantage, suggesting that Kenyan banks can leverage their unique resources to address evolving risks. However, the dynamic nature of these resources and their adaptability require further investigation. Future research should explore these aspects to enhance risk management capabilities in Kenyan commercial banks.

The study should acknowledge the dynamic nature of risks in the banking industry. Risks evolve over time due to changes in the economic, regulatory, and technological landscapes. The theoretical frameworks discussed do not explicitly address how banks in Kenya adapt their risk management strategies to address new and emerging risks. Future research should explore how banks continuously assess and respond to evolving risk profiles. While liquidity risk and credit risk are covered to some extent in the theories and frameworks discussed, there is a gap in addressing macroprudential perspectives. Macroprudential policies and regulations play a crucial role in shaping the risk environment for banks. Future research could delve into how macroprudential policies in Kenya impact banks' risk management strategies and responses. The theories primarily focus on quantitative aspects of risk management. However, understanding the behavioral aspects of risk-taking and risk management decisions among bank executives and employees can provide valuable insights. Future

research could incorporate behavioral economics principles to explore the cognitive biases and heuristics that influence risk-related decisions within Kenyan commercial banks.

CONCLUSION AND RECOMMENDATIONS

Conclusion

The study on the Evolution of Risks facing commercial banks in Kenya and their strategic responses has yielded several significant conclusions that provide valuable insights into the banking sector's dynamics in this East African nation.

First and foremost, it is clear that the commercial banking sector in Kenya is operating within a highly dynamic and ever-evolving risk landscape. The risks faced by these banks are multifaceted and include economic, regulatory, technological, operational risk, regulatory, systematic, sovereign risk and market-related challenges. These risks are not static but are constantly changing, underscoring the need for a proactive and adaptable approach to risk management.

Secondly, the strategic responses adopted by commercial banks in Kenya are diverse and multifaceted. One of the key findings is the emphasis on technology and digital transformation as a strategic response to evolving risks. The adoption of digital banking services and investments in cybersecurity measures have become pivotal in safeguarding customer data and ensuring operational continuity. Moreover, these technological advancements have enabled banks to offer innovative products and services, enhancing their competitiveness in the market.

Additionally, the study highlights the critical importance of robust risk management practices within commercial banks. These banks have recognized the significance of risk assessment and mitigation strategies to navigate the complex and uncertain environment they operate in. This includes sophisticated risk modeling, stress testing, and comprehensive risk governance frameworks, all of which are integral to their strategic responses.

Moreover, the study underscores the importance of regulatory compliance for commercial banks in Kenya. The evolving regulatory landscape has a direct impact on the strategic choices these banks make. Regulatory alignment is not just a matter of compliance but also a strategic imperative, as it can significantly affect a bank's ability to operate and compete in the market.

The conclusions drawn emphasize the need for continual vigilance and adaptation in risk management, the pivotal role of technology and digital transformation, and the significance of regulatory compliance. By taking these conclusions into account, commercial banks in Kenya can better position themselves to thrive in the dynamic and competitive financial landscape of the country.

Contributions to Theory

Risk Evolution Framework: The study contributes to theory by developing a comprehensive framework for understanding the evolution of risks facing commercial banks in Kenya. By analyzing historical data and identifying emerging trends, the research offers a theoretical foundation that can be applied to assess the evolution of risks in other banking contexts.

Strategic Risk Response Models: This research advances theoretical models that describe how commercial banks can strategically respond to evolving risks. By examining the strategic responses employed by Kenyan banks, the study contributes to the development of theoretical frameworks for risk management in dynamic financial environments.

Contributions to Practice

Enhanced Risk Management Strategies: The study provides practical insights for commercial banks operating in Kenya and similar emerging markets. It outlines specific strategic responses and risk

management practices that have proven effective in addressing evolving risks. Banks can leverage these insights to refine their risk management strategies and improve their resilience.

Guidance for Financial Decision-Making: Practitioners in the banking industry can benefit from the study's recommendations regarding strategic responses to evolving risks. These recommendations offer guidance on making informed decisions related to risk mitigation, asset allocation, and capital allocation. Such practical guidance is invaluable for bank executives and risk managers.

Adaptation to Local Context: Commercial banks in Kenya can apply the study's findings directly to their operations, tailoring their risk management strategies to the local financial landscape. This adaptation contributes to the practical application of global risk management theories in a specific regional context.

Contributions to Policy

Policy Insights for Regulators: The study's findings and strategic responses offer valuable insights for banking regulators and policymakers in Kenya. Regulators can use this research to assess the effectiveness of existing banking regulations in addressing evolving and emerging risks and consider potential adjustments to enhance the stability of the banking sector.

Support for Risk-Based Supervision: The study aligns with the global trend toward risk-based supervision in the banking industry. Policymakers can use the research to bolster the implementation of risk-based supervision practices, ensuring that regulatory frameworks are aligned with the evolving and emerging risk landscape faced by commercial banks.

Strengthening Financial Stability: By addressing the strategic responses of commercial banks to evolving and emerging risks, the study indirectly contributes to financial stability at the national level. Policymakers can leverage these insights to create a more resilient banking sector that can withstand economic shocks and external pressures.

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