A Study on the Dynamics and Competition of Financial Intermediaries in the Banking Sector Using the GRA Method

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Abstract: *The banking sector functions as a sophisticated intermediation system, in which assets such as loans serve as the bank's outputs, while liabilities such as deposits serve as inputs that finance these outputs. This relationship is essential for understanding how banks connect lenders with borrowers and facilitate the flow of capital. Semi-structured interviews with bank leaders and government experts provide important qualitative perspectives on industry operations. These insights help refine theoretical models, test assumptions, and identify challenges that affect bank performance. Furthermore, differences in deposit maturities and asset-liability management approaches differentiate state-owned banks from commercial banks and shape their respective strategies. The research underscores the need to view the banking sector as a multifaceted interdependent system, in which assets and liabilities play distinct roles while being interconnected. Bank assets, such as loans, act as outputs, while liabilities, such as deposits, act as important inputs that generate income through loans and other financial activities. This dynamic highlight the important role that banks play in facilitating the flow of capital between borrowers and lenders. The study draws on semi-structured interviews with bank leaders and government experts to address theoretical gaps, test assumptions, and identify industry-specific challenges. The research further examines the differences in deposit maturities between state-owned and commercial banks, noting that state-owned banks typically hold longer-term deposits as they focus on longer-term assets such as real estate loans. The study also reflects the diverse landscape of the banking sector, with institutions expanding beyond traditional services to offer a wider range of financial products. By analyzing factors such as capital structure, competition, and regulatory frameworks, the research seeks to provide valuable insights into how these elements affect bank performance and stability. Alternatives: Market A, Market B, Market C, Market D, Market E. Evaluation Parameters: Stock Market Growth (%) (Benefit), FDI Inflows ($B) (Benefit), Inflation Rate (%) (Non-Benefit), Currency Volatility (%) (non-benefit). The results show that Market C received the highest quality, whereas Market D received the lowest quality. According to the GRA method, Market C ranks highest in terms of dataset value for international financial markets.*

Key words: *Bank Assets, Bank Liabilities, Financial Intermediaries, Loans and Deposits, Capital Structure, Deposit Maturity, Bank Performance, Regulatory Framework.*

1. INTRODUCTION

While bank assets resemble final outputs, almost all analysts would agree that bank liabilities share characteristics with inputs, as they provide essential sources of investment funds while representing the uses of funds that generate the bulk of a bank's direct income. From an asset perspective, banks are viewed solely as financial intermediaries, connecting those who hold loans with those who receive bank funds. Loans and other assets are considered the bank's outputs, while deposits and other liabilities act as inputs in the intermediary process. [1] Semi-structured interviews were conducted with bank managers and executives from eight large commercial banks and six industry professionals working in key government agencies. Because the study was exploratory, these qualitative insights were not intended to generate theories. Rather, they were intended to (1) address potential gaps between our theoretical framework and empirical models, (2) validate the assumptions in our empirical models, (3) identify industry-specific barriers or common assumptions that could enhance our understanding, and (4) explain our findings. [2] State and national banks maintain

similar average capital and liquidity ratios, indicating that their capital structures remain relatively comparable throughout the sample period. However, there is a significant difference in the average maturity of deposits between the two banking systems, with a larger proportion of state banks' total deposits held for longer periods. One possible explanation for this disparity is that commercial banks aim to align the maturity structure of their assets and liabilities. Since state banks hold a higher percentage of long-term assets (such as real estate loans), their overall deposit maturities tend to be longer. [3] The commercial banking industry is highly varied, with many institutions now functioning as both commercial banks and investment banks or insurance companies. Due to this diversity and the significant number of successful firms compared to those that fail, the model's failure probability is skewed to the left. To assess the significance of small private bankers, I measure their proportion in the total number of commercial banks within a state. A high percentage of private bankers suggests that many banks operate in the state and depend on their reputation to conduct business. [4] The statutory definition of an insured commercial bank is updated periodically to reflect changes in the structure of the commercial banking industry and banking regulations. Currently, it includes national banks, state-chartered banks, trust companies (excluding savings banks), and national and state-chartered commercial banks insured by the FDIC Bank Insurance Fund. It also includes other financial institutions operating under the FDIC Savings Insurance Fund, authorized to accept deposits under the General Banking Codes or the FDIC Savings Insurance Fund, and institutions with obligations that are treated as deposits for deposit insurance purposes. [5] Competition in the banking sector is crucial for financial stability and economic growth. Without insight into the extent of competition, policymakers will struggle to formulate effective and targeted public policies, particularly on collective pricing. Tanzania provides a valuable case study for examining competition in commercial banks, particularly following the transformation of its business environment following the collapse of the socialist development model. Liquidity stability reflects the regulatory framework governing banks, which sets legal limits on the liquidity assets held by commercial banks. [6] Despite differences in the scope of banking activities permitted across countries, many European Union and G-10 countries have faced similar banking problems in recent years. However, these challenges stem primarily from losses related to the decline in commercial real estate values rather than from problems with loans, securities, or insurance activities. An analysis presented in Appendix 1 suggests that bank performance can be improved by considering a number of factors, including the scope of banking powers. [7] It must be acknowledged that while banking historians generally focus on the history of banks, studies of the business structure, including working methods, labor relations, and technology selection, are generally neglected. Despite this oversight, these elements of commercial banking are of significant interest to economists and economic historians because they challenge many long-held historical assumptions. Although banks are often viewed as a singular entity, and their products are seen as magical or invisible to some, the study of the banking system and its performance can provide valuable insights into an often-overlooked aspect of modern economic development. Three interrelated themes that reveal important and underappreciated factors in the evolution of modern commercial banks [8] These changes led to significant instability in the commercial banking sector. During this time, several banks failed, while others faced serious financial difficulties and narrowly avoided collapse. This wave of failures raised awareness among the remaining banks, prompting them to learn from these incidents in an effort to improve their chances of survival.[9] The overall and group-wise performance improvements of all commercial banks operating in India were measured and compared with the performance scores of each group. The findings show a significant improvement in the industry's performance following the adoption of information technology in Indian banking, along with an increase in the scores of individual bank groups. This improvement is primarily driven by technological advances, which have expanded production possibilities, stimulated financial innovation and led to the adoption of new strategies to improve the performance of banks. [10] It contributes to the empirical analysis of how competition affects performance in the banking sector. It can also serve as a reference in formulating strategies to improve the performance of banks. Furthermore, this research can be used as a foundation for future studies on the impact of competition on bank performance in Indonesia. [11] The data were examined for inconsistencies and outliers. In cases where two banks merged before the end of the sample period, although they had previously operated separately, they were consolidated into a single consolidated entity for the entire period. In addition, Sonali Bank, a foreign bank, was excluded from the sample after it was consistently identified as an outlier across all input-output factor specifications. It is considered more appropriate to treat this bank as a homogeneous entity rather than adjusting its size according to the approach used to handle super-efficient units. [12] All three countries were part of the SFR Yugoslavia and gained independence in the early 1990s. Before 1990, banks in these countries operated primarily as financial institutions with the aim of supporting the central planning framework. After independence, the new governments faced the challenge of quickly establishing modern commercial banking systems. In addition, the competitive influx of foreign capital into the banking sector highlighted the importance of effective management, which could improve overall competitiveness and stimulate developments in the banking sector. [13] The effects of these crises reveal significant differences. The S&L crisis saw a higher number of commercial bank failures compared to the GFC, the latter involving a higher proportion of failed bank deposits. This is consistent with the prevailing view that the GFC represented the most severe systemic disruption to the banking sector since the Great Depression. Examining these crises from different perspectives helps to assess whether global guidelines for managing banking crises can be developed. [14] The data from the respondents were analyzed using descriptive statistics, including means, percentages, and tables. Correlation analysis was conducted with factor analysis to examine the relationships between the study variables. Specifically, factor analysis

was used to identify and quantify the benefits and challenges faced by commercial banks when implementing e-commerce products and services. This approach involves simplifying a complex set of interrelated variables into a small number of distinct, conceptually meaningful, and easily interpretable factors.[15] Deregulation enabled commercial banks to add risky financial assets to their balance sheets and to combine operations with investment banks. This expanded the range of services they offered and the fees they charged, which later became a more significant part of their revenues. In addition, commercial banks took advantage of the lower reserve requirements that applied to investment banks, allowing them to increase lending and achieve higher profits. [16] A bank like GCB acknowledges that customer satisfaction (CS) is a key component of a successful business strategy. However, the specific role it plays, the best approaches to managing satisfaction, and the extent of management's influence are unclear. Efforts to improve satisfaction have the potential to increase sales performance. Significant efforts are being made in the banking industry, particularly at Ghana Commercial Bank (GCB), to conduct CS studies. However, most of the data collected is used to track specific attributes such as overall satisfaction over time. Without assessing the impact of customer satisfaction on revenue, managers lack a solid foundation for effectively allocating resources. [17]

2. MATERIALS AND METHODS

Using KDM as the input, the entropy method is applied to calculate objective weights. Additionally, subjective weights are determined using the AHP approach. These two types of weights are then optimized through game theory to derive comprehensive weights, which serve as one of the key inputs for KE-GRA-TOPSIS. The AHP method is combined with KE to structure user requirements hierarchically as part of the evaluation framework. Specifically, AHP is employed to establish the hierarchical structure, while KE is utilized to define the criteria and indices for the analysis. [18] Fuzzy AHP and improved GRA are used to evaluate six entertainment, tourism and commercial projects in Isfahan megacity, guided by the principles of sustainable development. This study focuses only on investment projects that are under construction or ready to operate. The projects differ in nature, and only entertainment and tourism initiatives are focused on. For the application of the improved GRA method, opinions from 20 experts are collected through questionnaires on evaluating alternatives against sub-criteria. Then, a gray relational decision matrix is generated using the arithmetic mean of the gray values obtained from the opinions of these 20 experts. [19] multi-response optimization of various unconventional machining processes has been a significant focus of research in recent years, and the GRA technique has been effectively used by many researchers for this purpose. It has proven to be a widely accepted method for identifying optimal combinations of controllable parameters in machining operations to achieve desired response outcomes. [20] The next step in the GRA process involves establishing a fuzzy gray relational matrix, which reflects the proximity of the design alternatives to the ideal design. Higher values of the elements in the matrix indicate closer alignment of the design concept with the ideal. The fuzzy gray relational matrix is usually obtained using a unique or resolution coefficient, which helps to adjust the range of values by compressing or expanding the elements in the gray relational matrix.[21] The AHP "evaluators" for specific criteria comprise a group of procurement analysts. However, the AHP is not suitable for handling uncertain relationships between a key factor and other factors within a system. These relationships can be conceptually considered as a "gray set." GRA, a widely recognized method for addressing decision-making challenges, combines qualitative and quantitative data by using either the largest-best or smallest-best evaluation criteria. In summary, the proposed approach to evaluating potential suppliers combines AHP and GRA, providing comprehensive and timely supplier information using BIM and GIS. [22] The overall gray correlation score is calculated by averaging the gray correlation coefficients associated with the selected responses. The performance of the multi-response process is evaluated based on this calculated gray correlation score. This method transforms the multi-response optimization problem into a single-response optimization task, with the overall gray correlation score serving as the objective function. The optimal parameter combination to achieve the highest gray correlation score is then identified. [23] Time difference and loading magnitude were not included in the multivariate analysis since they did not exhibit significant differences between tertiles. The age variable was split at 65 years of age, while the other variables were classified dichotomously. The next step involved performing a multivariate logistic regression analysis to find independent RPA factors. using these variables as dependent factors. [24] Efforts were undertaken to identify and engage with relevant experts. In this process, 20 professionals were selected to finish the surveys. These experts meet at least one of the following requirements: they are enrolled in a master's program in project management, they have notable portfolios in sustainable development and project management, and they possess in-depth knowledge of the construction projects under study. related engineering disciplines, or having practical experience in researching, conducting, and managing infrastructure projects. [25] Gray relational analysis (GRA) is an essential method for examining gray data in uncertain systems. This study highlights that, due to variations in the shape and threshold of different sequences, A particular model that is sensitive to data normalization is the absolute GRA (AGRA) model. Hence, normalization should be conducted as an initial step before performing gray correlation analysis.[26]

Creation of a weight matrix and decision matrix For an MCDM issue with m criteria and n choices, let $D = x_{ij}$ be a

decision matrix, where $x_{ij} \in R$

$$D = \begin{bmatrix} x_{11} & x_{12} & \cdots & x_{1n} \\ x_{21} & x_{22} & \cdots & x_{2n} \\ \vdots & \vdots & \ddots & \vdots \\ x_{m1} & x_{m2} & \cdots & x_{mn} \end{bmatrix} \qquad 1$$

Decision matrix normalization Equation 2 or 3, respectively, is used to evaluate the normalization of the two types of data, i.e., better when higher type or better when lower type. Following normalization, the data falls between 0 and 1.

$$M_{ij} = \frac{N_{ij} - \min (N_{ij})}{\max (N_{ij}) - \min (N_{ij})} \qquad 2$$

$$M_{ij} = \frac{\max (N_{ij}) - N_{ij}}{\max (N_{ij}) - \min (N_{ij})} \qquad 3$$

Where $i, j = 1, 2, 3, \cdots, n$

Step 1. $Deviation = the\ \max value\ after\ normalization - value\ of\ the\ current\ row$ 4
Step 2. Calculation of Gray relation coefficient

$$C_{ij} = \frac{\Delta_{min} - \xi \Delta_{max}}{Current\ value - \xi \Delta_{max}}, where\ \xi\ is\ distinguishing\ coefficient \qquad 5$$

Step 3. Calculation of Gray relation grade

It's the average of Gray relation coefficient.

Stock Market Growth (%):
Represents the annual growth in stock indices such as the S&P 500 (USA), FTSE 100 (UK), Nikkei 225 (Japan) or MSCI Emerging Markets Index.

For example, the S&P 500 grew by approximately 15% in some high growth years.

Foreign Direct Investment (FDI) Inflows ($B):

Represents the total foreign direct investment (FDI) flowing into a country, as derived from World Bank or UNCTAD reports.

Example: The USA received over $60 billion in FDI in 2023, while emerging markets such as India saw $75 billion in FDI in the same year.

Inflation Rate (%):

Based on Consumer Price Index (CPI) data obtained from the IMF or central banks.

Example: In 2023, the inflation rate in developed economies such as Germany was 2-3%, while some emerging markets experienced higher rates.

Currency Volatility (%):

Indicates the annual volatility of exchange rates (e.g., EUR/USD, USD/JPY) based on foreign exchange market data.

Example: Emerging market currencies such as the South African Rand or Indian Rupee have a volatility of around 5-7%, while the Euro or Japanese Yen typically show lower volatility.

3. ANALYSIS AND DISSECTION

TABLE 1. International Financial Markets

Alternative	Stock Market Growth (%) (Benefit)	FDI Inflows ($B) (Benefit)	Inflation Rate (%) (non-benefit)	Currency Volatility (%) (non-benefit)
Market A	12.4	60	2.3	4.5
Market B	8.7	45	3.7	6.2
Market C	15.2	75	1.9	3.8
Market D	7.1	38	4.1	7
Market E	10.5	52	2.8	5.1

The dataset compares five international financial markets using key economic indicators, providing insights into their growth potential and associated risks. Among the parameters assessed, stock market growth and FDI inflows are positive indicators, while inflation rate and currency volatility act as negative indicators. Market C emerges as the best contender, showing a higher stock market growth of 15.2% and FDI inflows of $75 billion. These figures point to strong economic performance and strong investor confidence. In addition, its low inflation rate of 1.9% and relatively low currency volatility of 3.8% underline its economic stability, making it an attractive option for investors seeking growth with low risk. Market A, with a stock market growth of 12.4% and FDI inflows of $60 billion, demonstrates strong performance. Although slightly behind Market C, these values still indicate healthy economic growth. Its inflation rate of 2.3% and currency volatility of 4.5% suggest manageable risks, albeit slightly higher than Market C, indicating a fair trade-off between growth and stability. Market E presents a more balanced profile, with stock market growth of 10.5% and FDI inflows of $52 billion. Although its growth is lower than that of Markets A and C, its inflation rate of 2.8% and currency volatility of 5.1% are moderate, albeit less optimal, alternatives. In contrast, Market D presents more significant risks, with low stock market growth (7.1%) and FDI inflows ($38 billion), high inflation (4.1%) and high currency volatility (7%), indicating an unfavorable environment for investment. Market B is in between, with moderate stock growth (8.7%) and FDI inflows ($45 billion), but high inflation (3.7%) and currency volatility (6.2%), making it a risky option compared to the others.
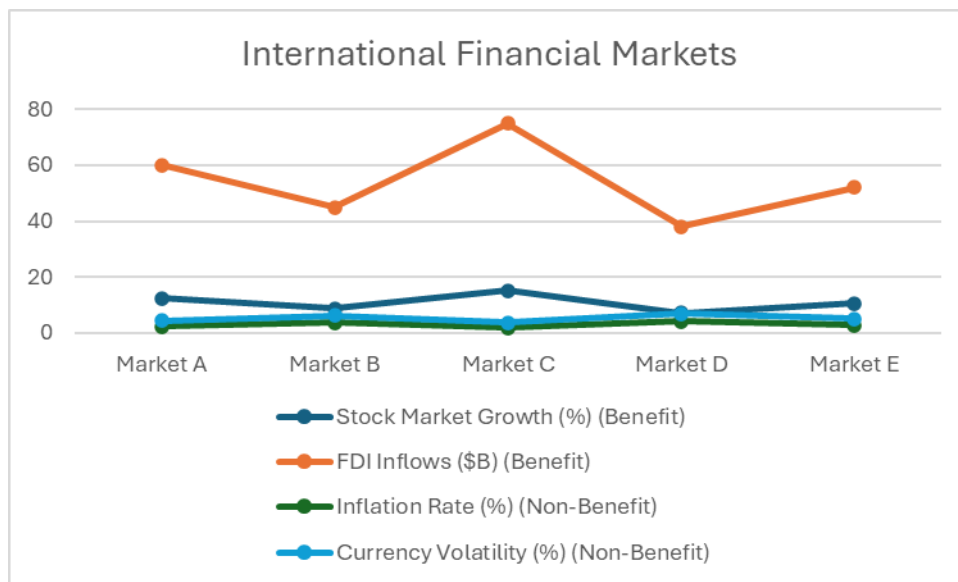

FIGURE 1. International Financial Markets

The image appears to represent a line graph comparing several international financial markets across four key parameters: Stock Market Growth (%), FDI Inflows ($B), Inflation Rate (%), and Currency Volatility (%). Each parameter is evaluated for five different markets (Market A, Market B, Market C, Market D, and Market E), with two benefit parameters (Stock Market Growth and FDI Inflows) and two non-benefit parameters (Inflation Rate and Currency Volatility). rom the graph, we can observe the following trends: Market C stands out in terms of FDI Inflows, consistently leading with the highest values. Its stock market growth is also the highest, reflecting strong market performance. This suggests that Market C is an attractive choice for investment, supported by stable inflation and relatively low currency volatility. Market A shows a steady performance across all parameters, with moderate values for both stock market growth and FDI inflows. Its inflation and currency volatility are also relatively stable, making it a stable but less dynamic choice compared to Market C. Market D shows the lowest performance in stock market growth and FDI inflows, coupled with the highest inflation and currency volatility, signaling a higher-risk environment. Market B and Market E fall in between, offering moderate benefits and higher risks than Market A and Market C.

TABLE 2. Normalized Data

Normalized Data			
Stock Market Growth (%) (Benefit)	FDI Inflows ($B) (Benefit)	Inflation Rate (%) (non-benefit)	Currency Volatility (%) (non-benefit)
0.6543	0.595	0.81818	0.7813
0.1975	0.189	0.18182	0.25
1	1	1	1
0	0	0	0
0.4198	0.378	0.59091	0.5938

Normalized data serves as an essential tool for comparative analysis, assessing various factors such as stock market growth, foreign direct investment, inflation rates, and currency volatility. In this dataset, benefit-oriented measures such as stock market growth and FDI inflows are increased, while non-benefit-oriented measures such as inflation and currency volatility are reduced to standardize their influence. A maximum normal value (1) for stock market growth sets the standard for strong economic performance, while a low (0) indicates weak outcomes. Similarly, FDI inflows follow this trend, with a value of 1 indicating maximum capital attraction and 0 indicating minimal inflows. For non-profit indicators such as inflation rates and currency volatility, lower normal values indicate greater economic stability. A value of 0 indicates optimal conditions with minimal economic disruptions, while 1 indicates high challenges. Intermediate figures, such as 0.81818 for inflation or 0.7813 for currency volatility, indicate varying levels of volatility. The dataset highlights scenarios of moderate performance across all metrics. For example, a normalized stock market growth of 0.6543, combined with FDI inflows of 0.595, reflects a relatively balanced economic state despite moderate inflation and volatility. Conversely, a low normalized value of 0.1975 for stock market growth indicates weak economic activity, coupled with subdued FDI inflows and persistent inflation and volatility. Thus, normalization enables clear, objective comparisons, providing important insights into economic strength and the investment landscape.

TABLE 3. Deviation sequence

Deviation sequence			
Stock Market Growth (%) (Benefit)	FDI Inflows ($B) (Benefit)	Inflation Rate (%) (non-benefit)	Currency Volatility (%) (non-benefit)
0.3457	0.405	0.18182	0.2188
0.8025	0.811	0.81818	0.75
0	0	0	0
1	1	1	1
0.5802	0.622	0.40909	0.4063

Deviation series provide important insights into the extent to which different measures deviate from benchmark values. In this dataset, deviations for stock market growth, foreign direct investment, inflation rate, and currency volatility reveal performance gaps, highlighting how closely or far apart each case is from ideal conditions. For useful indicators such as stock market growth and FDI inflows, smaller deviations indicate better alignment with optimal criteria. For example, a deviation of 0.3457 for stock market growth and 0.405 for FDI inflows shows close to ideal performance, indicating a relatively favorable economic environment. In contrast, larger deviations, such as 0.8025 for stock market growth and 0.811 for foreign direct investment, reveal significant gaps that reflect weak economic activity and low investment attractiveness. For useless measures such as inflation and currency volatility, lower deviations are more desirable because they indicate greater stability. A deviation of 0.18182 for inflation and 0.2188 for currency volatility indicates relatively stable economic conditions. Conversely, higher deviations, such as 0.81818 for inflation and 0.75 for currency volatility, indicate high economic instability and challenges. Intermediate deviations, such as 0.5802 for stock market growth and 0.622 for FDI inflows, indicate a moderate gap from the ideal. When combined with inflation and volatility deviations, such as 0.40909 and 0.4063, these values depict an economy with mixed performance across indicators. Examining the deviation ranges provides a comprehensive view of economic strengths and weaknesses, supporting informed decisions and comprehensive performance assessments.

TABLE 4. Grey relation coefficient

Grey relation coefficient			
Stock Market Growth (%) (Benefit)	FDI Inflows ($B) (Benefit)	Inflation Rate (%) (non-benefit)	Currency Volatility (%) (non-benefit)
0.5912	0.6	0.7333	0.696
0.3839	0.4	0.3793	0.4
1	1	1	1
0.3333	0.3	0.3333	0.333
0.4629	0.4	0.55	0.552

The Gray Relational Coefficient (GRC) measures the relationship between an alternative and a benchmark across a range of criteria. In this dataset, the GRC values for stock market growth, FDI inflows, inflation rate, and currency volatility indicate how closely each alternative matches the optimal performance for both the benefit and disadvantage indicators. For the advantage criteria, high GRC values indicate strong alignment with the best criterion. A coefficient of 1 for both stock market growth and FDI inflows reflects excellent performance. Values such as 0.5912 for stock market growth and 0.6 for FDI inflows indicate moderate alignment, suggesting favorable but not ideal conditions. In contrast, GRC values of 0.3333 and 0.3 for these indicators highlight weak alignment, suggesting less favorable economic performance. In the case of non-rewarding measures such as inflation and currency volatility, higher GRC values indicate better outcomes by indicating greater stability. For example, coefficients of 0.7333 for inflation and currency volatility indicate significant stability, whereas lower values such as 0.3333 for both measures indicate greater economic instability. Intermediate GRC values, such as 0.55 for inflation and 0.552 for currency volatility, reflect moderate levels of stability and performance. These GRC values provide important insights into varying degrees of economic strength and vulnerability. They serve as

an essential tool for assessing economic performance, facilitating strategic decisions based on the alignment of each measure with ideal conditions.

TABLE 5. GRG

	GRG
Market A	0.6431
Market B	0.3862
Market C	1
Market D	0.3333
Market E	0.5026

The Gray Relational Grade (GRG) serves as an overall indicator of how closely each alternative aligns with the best reference point across multiple criteria. In this dataset, the GRG values of markets A through E provide a clear comparison of their relative performance. Market C, with the highest GRG value of 1, shows the closest alignment to the ideal, indicating optimal conditions. This highlights the superior economic performance and stability of Market C compared to other markets. Market A, with a GRG of 0.6431, shows moderate alignment, reflecting favorable but not optimal performance. While this does not match the level of Market C, it suggests promising conditions and the potential for competitive advantage. Market E follows a GRG value of 0.5026, indicating average alignment. Its performance is balanced, with both strengths and weaknesses clearly visible across the assessed criteria. Market B shows a GRG of 0.3862, indicating weak alignment, below-average performance, and potential challenges in achieving the best benchmarks. Market D, with a low GRG value of 0.3333, shows the largest deviation from the ideal, indicating significant areas for improvement. GRG values effectively rank market performance, providing decision makers with a comprehensive view of relative strengths and vulnerabilities. Higher GRG values indicate markets are in a better position for economic stability and growth, while lower values suggest areas where strategic efforts are needed to increase overall competitiveness.

TABLE 6. Rank

	Rank
Market A	2
Market B	4
Market C	1
Market D	5
Market E	3

Markets A to E are ranked in a concise comparison of their overall performance based on specific assessment criteria. These rankings are determined by the Gray Relational Grade (GRG), which assesses the degree of alignment of each market with a better reference point. Market C takes first place, emerging as the best performer. This indicates that Market C achieves a more favorable balance across the criteria that demonstrate strong economic conditions, stability, and strong competitiveness. Market A takes second place, reflecting a high level of performance. While it does not outperform Market C, its ranking indicates a solid alignment with the ideal, highlighting its ability to remain competitive and attract investment opportunities. Market E is in third place, indicating moderate performance. While it lags behind Markets C and A, it demonstrates a mix of strengths and weaknesses, positioning itself slightly above average, but with room for improvement. Market B, ranked fourth, reflects a weaker alignment with the ideal compared to the top three markets. Its ranking indicates enabling conditions, pointing to potential obstacles to economic growth or investment attractiveness. Market D, ranked fifth, represents the lowest alignment with the ideal. This ranking highlight significant gaps in performance, emphasizing the need for focused efforts to address its weaknesses and improve its competitiveness. These rankings provide valuable insights to decision-makers and help them allocate resources more effectively. They can then focus on building on the strengths of higher-performing markets while developing strategies to improve the positions of those ranked lower.
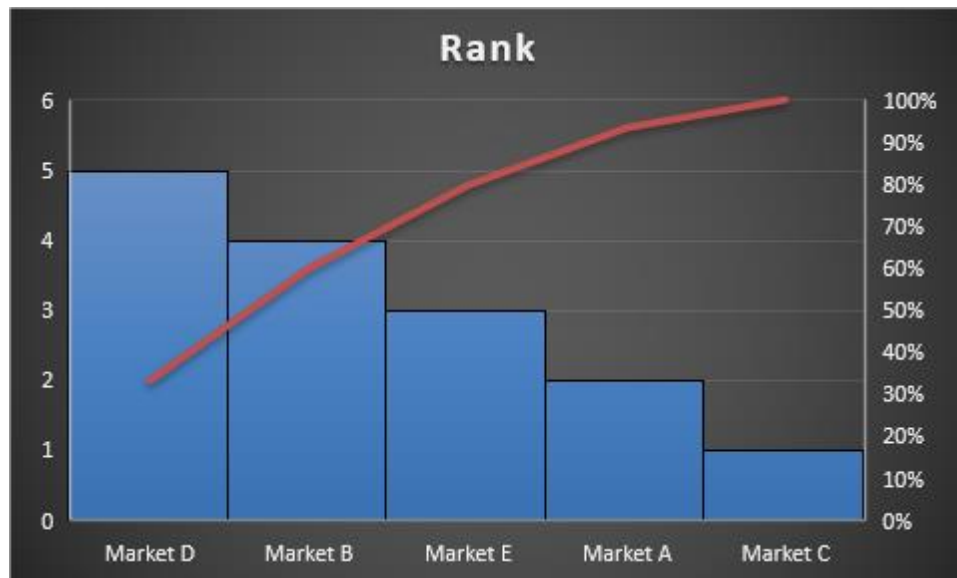
FIGURE 2. Rank

The chart depicts the rankings of Markets A through D, highlighting their performance based on specific evaluation criteria. The blue bars represent the rank of each market (on a scale from 1 to 5), while the red line illustrates the cumulative percentage of overall alignment with the ideal. Market C, positioned on the far right with a bar value of 1, holds the highest rank. This signifies its exceptional alignment with ideal benchmarks, making it the strongest performer in terms of economic stability and competitiveness. Market A follows in second place, with a bar value of 2, reflecting relatively strong performance. While it does not reach Market C's level, its ranking underscores its ability to maintain competitiveness and favorable conditions. Market E, ranked third with a bar value of 3, demonstrates average performance. It balances strengths and weaknesses, indicating a moderately competitive market that could benefit from targeted improvements. Market B, holding the fourth rank with a bar value of 4, shows weaker alignment with the ideal. This performance suggests potential economic challenges and areas for development compared to the higher-ranked markets. Market D, ranked fifth with the highest bar value of 5, indicates the least favorable alignment with ideal conditions. Its position highlights significant performance gaps, requiring strategic efforts to enhance its competitiveness. The cumulative red line effectively visualizes each market's contribution to overall performance, providing decision-makers with insights to prioritize improvements and allocate resources effectively.

4. CONCLUSION

The banking sector operates in a complex system where the distinction between assets and liabilities is crucial to understanding how financial intermediaries operate. Banks generate income by managing assets such as loans, which represent the outputs of their financial activities. On the other hand, liabilities such as deposits act as inputs, providing the funds needed for these activities. This fundamental understanding of the banking system, how financial institutions bridge the gap between those who provide funds and those who need them, positions banks as key intermediaries in the economy. Insights gleaned from semi-structured interviews with bank executives and government agency experts shed light on the dynamic nature of the banking sector. Although these interviews are exploratory in nature, they serve to validate and refine existing theoretical frameworks, address potential gaps, and highlight industry-specific challenges that affect understanding bank performance. Notably, the difference in deposit maturities between state and commercial banks reflects different strategies for managing assets and liabilities, particularly long-term investments such as real estate loans. This difference highlights the diversity within the banking sector, where banks shape their strategies based on their financial structure and market focus. Furthermore, the relationship between competition and financial stability is a significant factor in the evolution of the banking sector. The Tanzanian case study illustrates how changes in the business environment, such as the collapse of a socialist development model, can affect bank competition. This change emphasizes the importance of regulatory frameworks in maintaining liquidity stability and a sound banking system. At the global level, while banking systems differ across countries, there are shared vulnerabilities, particularly in the area of losses in commercial real estate. This commonality provides opportunities for comparative analysis, which can inform strategies to improve bank performance and manage financial crises. The modernization of the banking sector, particularly through the integration of information technology in India, demonstrates how technological advances have enhanced business efficiency and innovation. The ability of banks to integrate e-commerce and new financial products has contributed to their growth, despite the increasing challenges of deregulation and competitive pressures. At the same time, the rise of cross-border financial services, including the merger of commercial and investment banks, highlights the need for strong governance to maintain competitiveness.

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