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UNVEILING THE DRIVERS OF BANK FINANCIAL PERFORMANCE IN GCC COUNTRIES

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Abstract

This study aims to identify the determinants of bank financial performance in GCC countries (Bahrain, KSA, Kuwait, Oman, Qatar, and the UAE) using 450 bank-year observations from 2014 to 2024. The analysis focuses on two profitability indicators: Return on Assets (ROA) and Return on Equity (ROE). The methodology comprises descriptive statistics, one-way ANOVA with post hoc tests, multiple regression analysis, and tests of between-subjects effects. The results show

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significant cross-country differences in profitability across the GCC region. The ANOVA findings confirm differences in the means and variances of ROA and ROE. The regression analysis indicates that the net interest margin has a positive and significant effect on performance, while leverage, credit risk, and loan intensity have negative effects. The tests of between-subjects effects confirm that country-level differences persist after controlling for financial determinants. The findings indicate structural differences within the GCC banking sector.

Keywords: Bank Performance, ROA, ROE, GCC Banking Sector

1. INTRODUCTION

The banking sector plays a central role in the economic development and financial stability of the Gulf Cooperation Council (GCC) countries, including Bahrain, the Kingdom of Saudi Arabia (KSA), Kuwait, Oman, Qatar and the United Arab Emirates (UAE). Over the last decade, the banking systems of the GCC countries have achieved significant growth, fuelled by economic diversification strategies, the development of financial markets, increased foreign investment and regulatory reforms. Despite similarities in institutional frameworks and economic structures, banks in GCC countries show significant differences in profitability and operational efficiency. Understanding the determinants of bank financial performance has therefore become an important issue for academia, policy makers, regulators and financial institutions seeking to improve competitiveness and ensure long-term sustainability in the region. Bank profitability is most often measured by indicators such as return on assets (ROA) and return on equity (ROE), which reflect management efficiency, shareholder value creation and overall financial strength. Previous studies have identified several bank-specific determinants of financial performance, including net interest margin, bank size, financial leverage, credit risk, lending intensity, funding structure, and market-related factors (Khan et al., 2022; Rashid & Jabeen, 2024; Twairesh & Bata, 2024; El-Chaarani et al., 2024; Alnabulsi et al., 2025). However, empirical evidence related to the GCC region is still relatively limited, especially in terms of cross-country comparative analysis over a longer period. In addition, structural differences among GCC economies, banking regulations and market conditions may lead to variations in the relationship between financial determinants and profitability indicators.

Our research problem is to understand which financial factors significantly determine profitability in GCC banks, and whether these determinants are similar and consistent across GCC countries.

Additionally, we established several research aims for this study:

- To analyse the characteristics of bank profitability indicators (ROA, ROE) across GCC countries during the period 2014–2024.

- To examine whether significant differences in mean and variance of profitability indicators (ROA, ROE) exist among GCC countries.
- To investigate the impact of financial determinants on bank financial performance (ROA, ROE).
- To assess whether profitability differences across GCC countries persist after controlling for financial determinants.

This study contributes to the existing literature by providing a comprehensive empirical analysis of the financial performance of banks in the GCC countries over the period 2014–2024. year. Using 450 bank-year observations, the research analyses profitability characteristics, examines cross-country differences in ROA and ROE indicators, as well as the impact of key financial determinants on bank performance. In addition, the study investigates whether country-specific differences remain after controlling for financial factors. By combining descriptive statistics, ANOVA procedures, multiple regression analysis and between-subjects effects tests, this research provides a broader insight into the structural and financial dynamics that shape the profitability of the GCC banking sector.

The paper is structured as follows. The second section reviews the relevant empirical literature on the determinants of bank profitability in the GCC region and identifies key research gaps. The third section presents the theoretical framework underpinning the expected relationships between bank profitability and its key determinants. The fourth section describes the dataset, sample, variables, and their measurement, and presents a preliminary statistical analysis. The fifth section explains the empirical methodology and reports the results. The sixth section discusses the findings in the context of previous empirical evidence, while the seventh section concludes the paper by outlining the main implications, limitations, and directions for future research.

2. LITERATURE REVIEW

2.1. Empirical Evidence on Bank Profitability

The empirical measurement of bank financial performance has evolved considerably over the past three decades, progressing from single indicator approaches toward multi-dimensional frameworks that capture distinct facets of profitability. The two most widely employed accounting-based measures remain Return on Assets (ROA) and Return on Equity (ROE). ROA, calculated as net income divided by total assets, measures how effectively bank management deploys the total resource base to generate earnings and is broadly recognized as the most comprehensive internal measure of banking efficiency (Khan et al., 2022). ROE, in contrast, quantifies the returns generated for shareholders relative to their equity investment and reflects the combined effect of profitability and leverage decisions (Ghecham, 2019). The simultaneous use of ROA and ROE in a single

study, as adopted in the present analysis, has been advocated in the banking literature as a more holistic approach that reveals how different determinants may exert divergent effects depending on the performance metric examined (Twairesh & Bata, 2024).

Net interest margins the spread between interest earned on earning assets and interest paid on deposits relative to total earning assets is recognized in the literature as both a measure of operational efficiency and a direct driver of profitability. Obeid (2024) examined NIM determinants for 18 commercial banks in six Arab economies from 2015 to 2020 and found that bank size and cost-to-income ratio have significant positive effects on NIM, while COVID-19 and monetary policy interest rates exerted compressive downward pressure. Al Nabulsi et al. (2025) further documented that in dual banking systems of the MENA region where Islamic and conventional banks co-exist as they do across all GCC countries NIM is positively associated with risk aversion and loan specialization, while credit risk and liquidity risk compress it. These findings underscore the central importance of NIM as both a profitability driver and an indicator of competitive positioning within the GCC banking landscape, directly corroborating the significant and positive NIM coefficients obtained in the present study's regression models for all two performance indicators: ROA ($\beta = 0.161$, $p = 0.001$) and ROE ($\beta = 0.993$, $p = 0.009$)

Credit risk, operationalized in this study as the ratio of provision for loan losses to total loans, constitutes one of the most consistently negative and empirically significant determinants of bank profitability in the GCC and broader banking literature. The theoretical rationale is straightforward: higher provisioning requirements directly reduce reported net income, creating a mechanical negative relationship with all accounting-based profitability indicators (Barakat et al., 2024). Empirically, Twairesh and Bata (2024) confirmed through a pool mean group (PMG) estimator analysis on Saudi banks over 2009–2021 that credit risk exerts a significant negative long-run effect on bank profitability. Khalid et al. (2024) similarly found, in a panel study of Indonesian commercial banks from 2013–2022, that while NPL ratios produce insignificant effects, the loan loss provision (LLP) ratio has a significant and negative relationship with ROA, confirming that provisioning behaviour rather than the mere presence of impaired loans is the operational mechanism through which credit deterioration damages profitability.

The analysis of credit risk in the GCC banking sector by the *Journal of Financial Regulation and Compliance* (2025) used an unbalanced panel of 44 GCC domestic conventional banks over 2000–2018 and confirmed that non-performing loan dynamics and credit concentration are primary sources of earnings volatility in the region. These conclusions are consistent with the findings of the present study, where provision for loan losses emerges as one of the strongest negative determinants of all two profitability metrics: it carries a coefficient of -0.239 in the ROA model ($p < 0.001$), -2.098 in the ROE model ($p < 0.001$), confirming that credit risk management represents the single most consequential controllable factor in GCC bank profitability.

The relationship between financial leverage measured as the ratio of total debt to total assets and bank profitability is theoretically ambiguous and empirically contested. Trade-off theory predicts that moderate leverage amplifies returns to equity through the tax shield and leverage multiplier effects; however, beyond an optimal threshold, excessive debt financing elevates financial distress costs, funding pressures, and systemic risk exposure (Rashid & Jabeen, 2024). Rashid and Jabeen (2024) examined 50 GCC commercial banks from 2012 to 2017 using pooled OLS, fixed effects, and random effects regressions, and confirmed a significant negative relationship between leverage and both ROA and ROE, contradicting the trade-off theorem and supporting the agency cost hypothesis in the GCC banking context. This is consistent with Tandfonline's 2024 study on GCC listed firms, which similarly found that short-term, long-term, and total debt adversely affect ROA and ROE alike, with the adverse effects persisting robustly across multiple estimation techniques. Emerald's 2025 study on MENA banks offered a nuanced qualification: while capital structure generally reduces profitability, income diversification can moderate this negative relationship, particularly during crisis periods such as COVID-19.

The present study's regression results confirm a significant and negative relationship between the total debt-to-total assets ratio and both ROA (β = -0.008, p = 0.024) and ROE (β = -0.062, p = 0.039), fully consistent with the weight of empirical evidence from the GCC region. This finding carries important practical implications: GCC banks that rely more heavily on debt financing tend to generate lower asset- and equity-level returns, even in a region characterized by relatively lower funding costs than global averages.

Bank size measured through total assets is one of the most extensively studied determinants of banking profitability, with theoretical support from economies of scale, diversification theory, and competitive positioning arguments. Khan et al. (2022) confirmed a significant positive association between bank size and ROA across GCC banks, supporting the hypothesis that larger GCC banks benefit from enhanced market power, lower unit costs, and superior access to wholesale funding. Ghecham (2019) corroborated this finding in a GCC-specific panel study, noting that total asset size carries a positive and significant coefficient in profitability regressions, although the relationship is not monotonically linear across all size categories. This non-linear relationship is consistent with the findings of Shome (2025), who examined 94 GCC banks from 2012 to 2022 and found that the relationship between bank size and performance is contingent on the composition of income streams and the degree of non-traditional banking activity.

Loan intensity the ratio of total loans to total assets captures the degree to which a bank specializes in traditional intermediation activities relative to other earning assets such as securities and fee-based income. A higher loan-to-asset ratio implies deeper engagement in credit creation, which generates greater interest income but simultaneously introduces higher credit risk and liquidity exposure. El-Chaarani et al. (2024) found that loan intensity exerts a nuanced effect on GCC bank profitability: while higher lending ratios boost NIM in the short run, they

amplify the adverse effects of rising provisions during stress periods. Khan et al. (2022) similarly reported that the loan-to-total-assets ratio is a significant negative predictor of ROA when credit risk controls are included in the model, reflecting the net negative effect of loan concentration once the credit quality dimension is properly accounted for. The present study's results are directionally consistent with this evidence, with loan intensity carrying significant negative coefficients across all two regression models: ROA (β = -0.008, p = 0.005), ROE (β = -0.061, p = 0.007). Harfianti et al. (2024) confirmed a similar pattern in Asian banking markets, where higher lending growth amplifies credit risk exposure in a way that ultimately reduces profitability when NPL moderating effects are controlled.

Market-based performance indicators particularly market capitalization and the market-to-book (price-to-book) ratio introduce an investor-sentiment dimension to the profitability literature. The Bank for International Settlements (BIS, 2023) established, through a study of 31 globally systemically important banks from 2014 to 2022, that profitability (ROE), valuation (price-to-book ratio), and resilience (capital headroom) are tightly linked: banks with higher ROE forecasts command superior price-to-book multiples, with these two factors collectively explaining nearly 90% of variation in price-to-book ratios. This means that market capitalization and market-to-book ratios function simultaneously as indicators and determinants of profitability profitable banks attract higher market valuations which in turn lower their cost of equity and strengthen their competitive position. Tantari et al. (2025) found a significant positive effect of market capitalization on stock price performance in banking firms, but a significant negative effect of the price-to-book ratio on bank stock prices when used alongside EPS as a performance measure. McKinsey (2024) observed that GCC banks continue to command some of the highest price-to-book multiples among all global banking systems, reflecting investor recognition of superior earnings generation capacity and favourable regulatory environments. In the present study, market capitalization shows a significant negative coefficient for ROA and ROE, which is consistent with the interpretation that very large-cap banks may generate lower unit returns on assets and equity as they optimize for stability and market breadth rather than marginal profitability.

Customer deposits constitute the primary funding source for GCC banks and play a significant role in shaping both liquidity profiles and profitability. Khan et al. (2022) noted that deposits-to-assets ratios are positively associated with profitability as long as loan demand remains sufficient, since deposits represent relatively low-cost financing for lending operations. However, the EY MENA H1 Banking Report (2023) highlighted that as GCC banks competed more aggressively for deposits following the global interest rate normalization cycle of 2022–2024, deposit costs rose materially, compressing net interest margins in some market segments. Buallay et al. (2025) confirmed from a dynamic panel spanning 2009–2023 that deposit funding interactions with liquidity creation significantly modulate profitability outcomes across GCC banks.

One of the most robust and policy-relevant findings in the GCC banking literature concerns the persistence of significant cross-country performance differences that transcend bank-specific financial characteristics. Khan et al. (2022) confirmed significant country-level effects on profitability even after controlling for bank-specific variables, finding that Qatar, UAE, and Saudi Arabia consistently outperform Bahrain, Kuwait, and Oman in ROA and ROE metrics. El-Chaarani et al. (2024) similarly identified systematic performance clustering, noting that Qatari, Emirati, and Saudi banks benefit from larger asset bases, more diversified income streams, and stronger institutional environments, while Bahraini banks suffer from structural vulnerabilities reflecting a more competitive offshore banking market with thin margins. Shome (2025) examined non-traditional banking activity across 94 GCC banks from 2012 to 2022 and found that country effects are robust to controls for income diversification, bank size, and market structure, demonstrating that the GCC cannot be treated as a homogenous banking market in empirical research. This cross-country heterogeneity is also documented in the McKinsey (2024) analysis, which found that ROE variances across GCC banks significantly exceed those observed in European or North American banking, reflecting divergent regulatory regimes, oil revenue exposure, and sovereign support profiles.

The financial inclusion literature adds another dimension to cross-country differences in GCC banking performance. Al Matari (2023) found that the role of bank liquidity as a moderating variable in the profitability-determinants relationship differs significantly across GCC member states, with the relationship particularly strong in Qatar and the UAE but more muted in Bahrain and Oman. Buallay et al. (2025) examined 74 MENA banks from 2010 to 2021 using GMM and confirmed that financial inclusion improves ROA in both GCC and non-GCC countries, but that ROE effects are significant only in the GCC sub-sample a finding that points to the unique equity-return enhancement associated with GCC's deeper institutional and regulatory banking frameworks.

The COVID-19 pandemic delivered the most severe exogenous shock to GCC banking performance within the period covered by the present study (2014–2024), and its effects on bank profitability determinants have been extensively documented. El-Chaarani et al. (2024) demonstrated through a GMM-based panel of 82 MENA banks that COVID-19 exerted a significant negative impact on the profitability of both Islamic and conventional banks, while simultaneously validating that income diversification and stronger capital structures provided meaningful buffering against pandemic-related earnings compression. Alkasasbeh and Padma (2025) confirmed that Jordanian banks operating in the same regional risk environment as GCC institutions experienced structural breaks in profitability determinant relationships during the COVID-19 period, with credit risk and NIM becoming disproportionately influential during the crisis. The EY MENA Banking Report (2023) noted that GCC banks surpassed pre-COVID-19 profitability benchmarks by 2022, with gross profits rising 27.1% to US$44 billion, driven by higher gross banking income and disciplined cost management evidence that the

GCC banking sector not only withstood the pandemic but leveraged the subsequent interest rate normalization cycle to achieve record profitability.

Arifin et al. (2025) examined GCC banks through a financial liberalization lens using quantile regression and found consistent negative effects of liberalization-driven competitive pressure on ROA across all performance quantiles, suggesting that structural reforms and market opening policies while beneficial for efficiency can compress returns for individual institutions. The IMF (2023) has further highlighted that GCC economies face a medium-term fiscal and financial challenge as oil revenues normalize, creating potential headwinds for banking sector profitability through weaker government deposits, reduced public spending, and slower credit growth dynamics that are particularly relevant for interpreting the structural differences documented across the six GCC member states in the present study.

2.2. Research Gaps and Contribution of the Present Study

Despite the breadth of existing literature, three important gaps remain. First, the vast majority of GCC banking studies use ROA or ROE as the sole performance measure; simultaneous analysis of ROA and ROE within a unified empirical framework covering a ten-year panel (2014–2024) is rare (Twairesh & Bata, 2024). Second, while country-level fixed effects are often included as controls, few studies explicitly test for between-country profitability differences using formal statistical procedures such as ANOVA and GLM Between-Subjects Effects analysis, leaving the country-level heterogeneity claim largely asserted rather than systematically established (Shome, 2025). Third, the post-pandemic period (2022–2024) is largely absent from existing GCC banking studies, most of which were conducted before or during the initial years of the pandemic, limiting the generalizability of their findings to the current high-interest-rate environment (El-Chaarani et al., 2024). The present study addresses all three gaps by employing a multi-indicator profitability framework, applying robust statistical procedures that formally confirm cross-country differences, and covering the full decade 2014–2024 with 450 bank-year observations across all six GCC member states.

This analysis is motivated by three shortcomings. First, several profitability specifications in the literature include variables mechanically linked to ROA or ROE, which can artificially inflate explanatory power and t-statistics. Consequently, this study excludes net income, total equity, and liabilities from the set of explanatory variables. Second, recent data for GCC countries often cover the period prior to the full onset of the high-interest-rate environment (2022–2024). Third, cross-country differences are frequently treated as control variables rather than as a core finding. This paper combines a cross-country comparison with a simple, diagnostically validated profitability model covering the period from 2014 to 2024. In doing so, it complements recent studies published in the journal *Economic Thought and Practice* that utilize panel data to link financial structure

and profitability, while emphasizing model specification and robustness (Tomas Žiković et al., 2024; Buljat et al., 2026; Bulut, 2026).

3. THEORETICAL FRAMEWORK

The theoretical framework of this study is based on the premise that bank profitability stems from the ability to efficiently manage revenues, funding sources, risks, and market position. Financial performance is measured using ROA and ROE. ROA indicates how efficiently a bank utilizes its total assets to generate profit, while ROE reflects the return earned on shareholders' equity. Employing both indicators allows for a more comprehensive assessment of banking profitability.

Net Interest Margin (NIM) can be explained by the theory of financial intermediation, whereby banks generate income by transforming funding sources into interest-bearing assets. A wider spread between interest income and funding costs enhances a bank's profit-generating capacity; consequently, a positive relationship is expected between NIM and both ROA and ROE. Customer deposits also play a crucial role, serving as a relatively stable and cost-effective source of funding. A larger deposit base expands a bank's capacity for lending and other profitable investments, leading to an expected positive impact on profitability. Credit risk, measured by the ratio of loan loss provisions to total loans, is expected to have a negative impact on profitability. An increase in provisions signals a deterioration in loan portfolio quality and directly reduces realized profit; therefore, higher credit risk is expected to result in lower ROA and ROE values.

The market dimension of operations is captured through market capitalization and the market-to-book ratio. Market capitalization reflects size, market position, and access to capital; however, its relationship with profitability is not straightforward, as a larger bank size does not necessarily result in higher returns on assets and equity. The market-to-book ratio reflects investor expectations regarding a bank's future profitability, growth, and financial strength; consequently, a positive relationship with ROA and ROE is theoretically expected.

The theoretical framework assumes a positive relationship between profitability and NIM, customer deposits, and the market-to-book ratio, and a negative relationship with credit risk, whereas the expected impact of market capitalization is less clear-cut. These relationships are examined separately for ROA and ROE, in line with the empirical research models.

4. METHODOLOGY

This study examines the determinants of bank financial performance in the GCC countries using a quantitative panel-data research design. The sample comprises 47 banks from six GCC countries: Bahrain (n = 8), Saudi Arabia (n =

10), Kuwait (n = 9), Oman (n = 6), Qatar (n = 6), and the United Arab Emirates (n = 8). The dataset covers the period 2014–2024 and initially contains 517 bank-year observations. After observations with missing data were excluded, 450 complete bank-year observations were retained for the statistical analysis. Country was coded as follows: 1 = Bahrain, 2 = Saudi Arabia, 3 = Kuwait, 4 = Oman, 5 = Qatar, and 6 = UAE. To achieve research aims, this study was conducted through multiple steps:

Step 1. Descriptive Statistics

In our study, we conducted univariate descriptive statistics (mean, median, standard deviation, skewness, kurtosis, range, and interquartile range) for all variables over the 2014–2024 period. Boxplots were constructed for the main profitability indicators, namely Return on Assets (ROA) and Return on Equity (ROE) grouped by country. This provides visual presentations of descriptive statistics focusing on median, interquartile ranges and heterogeneity across GCC countries

Step 2. One-Way ANOVA

One-way ANOVA was conducted to test the difference of variances and difference in means between six GCC countries separately for ROA and ROE. These variables were served as main variables while *Country* served as the categorical independent variable. To understand the difference in variances from the mean, Levene's Test of Homogeneity of Variances was applied. The hypotheses for this test were:

- $H_{0(a)}$*:* Variances are equal across countries.
- $H_{1(a)}$*:* Variances differ across countries.

Furthermore, to assess the differences in means for ROA and ROE individually, ANOVA tests were conducted to confirm the presence of significant mean differences. The ANOVA tests were based on the following hypotheses:

- $H_{0(b)}$*:* Mean profitability (ROA, ROE) is equal across GCC countries.
- $H_{1(b)}$*:* At least one country differs significantly in mean profitability.

Additional to ANOVA tests, Tukey HSD post-hoc tests were performed to identify specific pairwise differences between countries.

Step 3. Multiple Regression Analysis

To examine the factors of bank financial performance, multiple linear regression analysis was conducted separately for ROA and ROE as dependent variables. The dependent variables (Y) were considered separately in two regression models, with Return on Assets (ROA) and Return on Equity (ROE) serving as alternative measures of bank financial performance. The independent variables included Market Capitalization, Market-to-Book Value Ratio, Net Interest Margin (NIM), Customer Deposits, Provision for Loan Loss to Loans (Credit Risk). The general regression model is expressed as:

$$Y_{it} = \beta_0 + \beta_1(\text{Market Capitalization}_{it}) + \beta_2(\text{Market-to-Book}_{it}) + \beta_3(\text{NIM}_{it}) + \beta_4(\text{Customer Deposits}_{it}) + \beta_5(\text{Credit Risk}_{it}) + \beta_6(\text{Market Volatility}_{it}) + \varepsilon_{it} \quad (1)$$

where Y_{it} alternatively represents Return on Assets (ROA) or Return on Equity (ROE).

For testing the effects of independent variables on dependent variables for each dependent variable separately, the test was based on the following hypotheses:

- $H_{0(c)}$: There is no linear relationship between Y (ROA, ROE) and the independent variables.

$\beta1=\beta2=\beta3=\beta4=\beta5=\beta6=0$

- $H_{1(c)}$: At least one independent variable significantly affects Y.

At least one $\beta i \neq 0$

Step 4. Tests of Between-Subjects Effects (GLM)

With the Tests of Between-Subjects Effects, we examined the contribution of each dependent variable while controlling for other variables in the model. The purpose of this procedure was twofold: (1) to determine whether profitability (ROE, ROA) differs significantly across GCC countries after controlling for financial determinants, and (2) to identify which financial variables remain statistically significant within a multivariate framework.

The hypotheses for country effects were:

- $H_{0(d)}$: Profitability does not differ across countries after controlling for determinants.
- $H_{1(d)}$: Profitability differs significantly across countries.

5. FINDINGS

5.1. Descriptive statistics

One of the central indicators of bank-related financial performances is ROA – Return on Assets. The boxplot graph 1 shows differences in ROA as financial performances between six GCC countries.

Qatar (M = 1.562; Med = 1.693; SD = 0.532) and the UAE (M = 1.573; Med = 1.619; SD = 0.718) have the highest median of ROA values, followed closely by KSA (M = 1.669; Med = 1.734; SD = 0.631). This means that in those countries, banking sector perform stronger asset utilization. Oman (M = 1.139; Med = 1.208; SD = 0.524) demonstrates moderate profitability through ROA, while Bahrain (M = 0.895; Med = 0.936; SD = 0.779) and Kuwait (M = 0.858; Med = 0.832; SD = 0.597) show comparatively lower median ROA levels. In terms of dispersion, UAE and KSA show more variability in performance among banks, comparing to Kuwait and Oman which are more stable but with lower profitability levels.

As another bank-related financial performance is ROE – Return on Equity. The boxplot graph 2 of ROE across GCC countries show a great cross-country differences in shareholder profitability, with visible extreme values. While

most countries show relatively concentrated ranges with positive median ROE values, Bahrain (M = 2.864; Med = 8.495; SD = 40.337) shows extreme negative outliers, including very large losses. This affect the overal distbution of ROE in Bahrain. In contrast, Qatar (M = 13.105; Med = 14.556; SD = 4.607) and UAE (M = 13.632; Med = 13.742; SD = 6.649) have higher median of ROE and relatively stable distributions, indicating stronger and more consistent returns to equity holders. KSA (M = 12.045; Med = 11.989; SD = 4.937) and Kuwait (M = 6.450; Med = 6.737; SD = 5.044) show moderate profitability with limited dispersion, while Oman (M = 8.620; Med = 8.928; SD = 3.641) appears relatively stable with fewer extreme deviations. The findigs from Bahrain show negative outliers suggesting structural vulnerability, showing heterogeneity in bank profitability within the GCC region.

5.2. One Way ANOVA

Based on boxplots for ROA and ROE, it is visible disparities in variances from the mean in different GCC countries With Test of Homogeneity of Variances, our focus is to confirm statistical significance of homogeneity of variances between sic GCC countries. From the table 1, it can be concluded that for all the performance indicators, namely ROA and ROE, variances from the mean between GCC counytries are significantly different with $p \leq 0.05$. This indicates variance for ROA and ROE is not eaqual, which indicates that financial performance stability is not the same among them. Thus, we reject $H_{0(a)}$ and accept $H_{1(a)}$ hypothesis for all two indicators, namely ROA and ROE.

Table 1 Test of Homogeneity of Variances for ROA and ROE

		Levene Statistic	df1	df2	Sig.
roa	Based on Mean	3.231	5	472	.007
	Based on Median	3.161	5	472	.008
	Based on Median and with adjusted df	3.161	5	446.468	.008
	Based on trimmed mean	3.225	5	472	.007
roe	Based on Mean	7.271	5	472	.000
	Based on Median	4.906	5	472	.000
	Based on Median and with adjusted df	4.906	5	82.633	.001
	Based on trimmed mean	4.985	5	472	.000

Source: Authors' own work

Furthermore, ANOVA focuses on the understanding the difference from the mean in case of ROA and ROE for six GCC countries. Table 2 shows one way ANOVA results individually for ROA and ROE. Per these findings, F-test is significant at the level $p < 0.05$, indicating that mean of ROA with $F(5, 472) = 20.58$, ROE with $F(5, 472) = 4.77$ differs across groups. These findings show that

for each of bank performance indicators at least one group differs significantly from the others in terms of financial performance. Thus, we can reject $H_{0(b)}$ and accept $H_{1(b)}$ hypothesis for all there two indicators ROA and ROE.

Table 2 ANOVA for ROA and ROE

		Sum of Squares	df	Mean Square	F	Sig.
roa	Between Groups	52.759	5	10.552	26.658	.000
	Within Groups	186.828	472	.396		
	Total	239.587	477			
roe	Between Groups	5887.194	5	1177.439	4.572	.000
	Within Groups	121543.942	472	257.508		
	Total	127431.136	477			

Source: Authors' own work

Having in mind unequal variances from Test of Homogeneity of Variance, we conducted additional Welch ANOVA test which is shown in the table 3. The results confirm significant differences in mean ROA and ROE across groups, even after correcting for unequal variances.

Table 3 Robust Tests of Equality of Means for ROA and ROE

		Statistic[a]	df1	df2	Sig.
roa	Welch	28.081	5	210.920	.000
roe	Welch	24.747	5	209.614	.000
a. Asymptotically F distributed.					

Source: Authors' own work

As the differences in mean ROA and ROE across GCC countries were confirmed, a post-hoc Tukey HSD test was conducted to identify the specific country pairs responsible for these differences. As shown in Table 4, statistically significant differences in mean ROA were found between Bahrain and KSA, Bahrain and Qatar, Bahrain and the UAE, KSA and Kuwait, KSA and Oman, Kuwait and Qatar, Kuwait and the UAE, Oman and Qatar, and Oman and the UAE. Based on these results, two broad ROA clusters can be identified: a higher-ROA cluster comprising KSA, Qatar, and the UAE, and a lower-ROA cluster comprising Bahrain, Kuwait, and Oman.

Table 4 Tukey HSD post-hoc test for multiple comparisons for ROA

Dependent Variable		(I) country_id	(J) country_id	Mean Difference (I-J)	Std. Error	Sig.
roa	Tukey HSD	1.00	2.00	-.7015778*	.0942058	.000
			3.00	.1090842	.0974179	.873
			4.00	-.1774978	.1068806	.559
			5.00	-.6004134*	.1055361	.000
			6.00	-.6110807*	.1020695	.000
		2.00	1.00	.7015778*	.0942058	.000
			3.00	.8106620*	.0899104	.000
			4.00	.5240800*	.1000853	.000
			5.00	.1011644	.0986483	.909
			6.00	.0904971	.0949306	.932
		3.00	1.00	-.1090842	.0974179	.873
			2.00	-.8106620*	.0899104	.000
			4.00	-.2865821	.1031145	.063
			5.00	-.7094976*	.1017203	.000
			6.00	-.7201649*	.0981190	.000
		4.00	1.00	.1774978	.1068806	.559
			2.00	-.5240800*	.1000853	.000
			3.00	.2865821	.1031145	.063
			5.00	-.4229156*	.1108161	.002
			6.00	-.4335829*	.1075199	.001
		5.00	1.00	.6004134*	.1055361	.000
			2.00	-.1011644	.0986483	.909
			3.00	.7094976*	.1017203	.000
			4.00	.4229156*	.1108161	.002
			6.00	-.0106673	.1061836	1.000
		6.00	1.00	.6110807*	.1020695	.000
			2.00	-.0904971	.0949306	.932
			3.00	.7201649*	.0981190	.000
			4.00	.4335829*	.1075199	.001
			5.00	.0106673	.1061836	1.000

Source: Authors' own work

After conducting the Tukey HSD post-hoc test for ROE, statistically significant differences were identified between Bahrain and KSA, Bahrain and Qatar, Bahrain and the UAE, Kuwait and the UAE, and Oman and the UAE. The multiple comparisons further indicate three broad ROE clusters: a high-ROE cluster comprising the UAE, Qatar, and KSA, a moderate-ROE cluster comprising Kuwait and Oman, and a lower-ROE cluster represented by Bahrain.

Table 5 Tukey HSD post-hoc test for multiple comparisons for ROE

Dependent Variable		(I) country_id	(J) country_id	Mean Difference (I-J)	Std. Error	Sig.
roe	Tukey HSD	1.00	2.00	-7.9313495*	2.4028292	.013
			3.00	-2.6011672	2.4847588	.902
			4.00	-4.6069807	2.7261142	.539
			5.00	-9.0918232*	2.6918221	.010
			6.00	-9.6190383*	2.6034034	.003
		2.00	1.00	7.9313495*	2.4028292	.013
			3.00	5.3301823	2.2932698	.186
			4.00	3.3243689	2.5527942	.784
			5.00	-1.1604736	2.5161411	.997
			6.00	-1.6876887	2.4213155	.982
		3.00	1.00	2.6011672	2.4847588	.902
			2.00	-5.3301823	2.2932698	.186
			4.00	-2.0058134	2.6300563	.974
			5.00	-6.4906559	2.5944949	.126
			6.00	-7.0178710	2.5026400	.059
		4.00	1.00	4.6069807	2.7261142	.539
			2.00	-3.3243689	2.5527942	.784
			3.00	2.0058134	2.6300563	.974
			5.00	-4.4848425	2.8264953	.608
			6.00	-5.0120576	2.7424221	.449
		5.00	1.00	9.0918232*	2.6918221	.010
			2.00	1.1604736	2.5161411	.997
			3.00	6.4906559	2.5944949	.126
			4.00	4.4848425	2.8264953	.608
			6.00	-.5272151	2.7083365	1.000
		6.00	1.00	9.6190383*	2.6034034	.003
			2.00	1.6876887	2.4213155	.982
			3.00	7.0178710	2.5026400	.059
			4.00	5.0120576	2.7424221	.449
			5.00	.5272151	2.7083365	1.000

Source: Authors' own work

5.3. Correlation Analysis

Correlation analysis indicates that most relationships between the explanatory variables are weak to moderate, justifying their simultaneous inclusion in the proposed regression model. A relatively strong association was observed between market capitalization and customer deposits (r = 0.895), suggesting a need for a more formal check for potential multicollinearity. The seemingly perfect correlation between NIM and credit risk (r = 1.000) in the pairwise correlation matrix requires cautious interpretation; an examination of the raw data reveals that this result stems from a small number of extreme observations and differences in the number of available observations across variables, rather than an underlying linear dependency between the two constructs.

Table 6 Correlation matrix

		roa	roe	mktcap	mcap_bv	Net interest margin	Customer Deposits	Provision for loan loss / loans
roa	Pearson Correlation	1	.451**	.360**	.384**	-.086	.363**	-.086
	Sig. (2-tailed)		.000	.000	.000	.070	.000	.068
	N	478	478	327	378	450	450	450
roe	Pearson Correlation	.451**	1	.124*	.444**	.006	.186**	.006
	Sig. (2-tailed)	.000		.026	.000	.899	.000	.898
	N	478	478	327	378	450	450	450
mktcap	Pearson Correlation	.360**	.124*	1	.523**	-.040	.895**	-.041
	Sig. (2-tailed)	.000	.026		.000	.480	.000	.477
	N	327	327	327	290	308	308	308
mcap_bv	Pearson Correlation	.384**	.444**	.523**	1	.249**	.307**	-.240**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
	N	378	378	290	378	367	367	367
Net interest margin	Pearson Correlation	-.086	.006	-.040	.249**	1	-.028	1.000**
	Sig. (2-tailed)	.070	.899	.480	.000		.537	.000
	N	450	450	308	367	483	483	483
Customer Deposits	Pearson Correlation	.363**	.186**	.895**	.307**	-.028	1	-.029
	Sig. (2-tailed)	.000	.000	.000	.000	.537		.532
	N	450	450	308	367	483	483	483
Provision for loan loss / loans	Pearson Correlation	-.086	.006	-.041	-.240**	1.000**	-.029	1
	Sig. (2-tailed)	.068	.898	.477	.000	.000	.532	
	N	450	450	308	367	483	483	483

Source: Authors' own work

To formally assess multicollinearity, Variance Inflation Factors (VIF) and tolerance statistics were calculated for the complete-data sample used for model specification (N = 279). VIF values were 8.922 for market capitalization, 1.611 for the market-to-book ratio, 1.302 for NIM, 8.280 for customer deposits, 1.131 for credit risk, and 1.171 for market volatility. Corresponding tolerance values ranged from 0.112 to 0.884. Thus, no predictor exceeded the common VIF threshold of 10, nor did any exhibit a tolerance value below 0.10. Although market capitalization and customer deposits exhibit elevated VIF values, diagnostic indicators do not point to serious multicollinearity based on conventional criteria. Given that these two variables represent conceptually distinct dimensions of bank characteristics namely, market valuation and funding structure retaining them in the baseline model is theoretically justified. Consequently, the proposed model can be applied using ROA and ROE as alternative dependent variables, provided that the high correlation between market capitalization and customer deposits is taken into account when interpreting their individual coefficients.

5.4. Regression Analysis

The ROA model demonstrates satisfactory explanatory power (R^2 = 0.335; adjusted R^2 = 0.323) and is statistically significant, $F(5, 273) = 27.468$, $p < 0.001$. The Pesaran CD test indicates cross-sectional dependence (CD = 5.274, $p < 0.001$), while the Breusch–Pagan test indicates heteroskedasticity ($p = 0.006$), suggesting that robust standard errors are appropriate.

Regarding the regression model in which we analysed the effects of different determinates on ROE, we found $F(5, 273) = 27.468$, with $p \leq 0.05$. This supports the $H_{1(c)}$ hypothesis which claims there is at least one independent variable affecting ROA. The regression model is statistically significant.

Table 7 ANOVA table ROA (DV)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	50.485	5	10.097	27.468	.000[b]
	Residual	100.352	273	.368		
	Total	150.838	278			

Source: Authors' own work

The results of the regression analysis indicate that the market-to-book ratio, net interest margin, and customer deposits have a positive and statistically significant impact on bank financial performance, whereas credit risk has a significant negative impact. Customer deposits exert the strongest positive influence (β = 0.486), while credit risk shows the strongest negative influence (β = −0.261). In contrast, market capitalization is not statistically significant (p = 0.129), suggesting that bank profitability depends primarily on operational efficiency, deposit mobilization, and effective credit risk management, rather than on market size. Based on the findigs, our model is:

$$\hat{Y} = 0.626 - 2.914\times10^{-6}(\text{MktCap}) + 0.143(\text{MCap/BV}) + 0.168(\text{NIM}) + 3.219\times10^{-6}(\text{Customer Deposits}) - 0.216(\text{Credit Risk}) \quad (2)$$

Table 8 Regression coefficients ROA (DV)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.626	.150		4.182	.000
	mktcap	-2.914E-6	.000	-.224	-1.521	.129
	mcap_bv	.143	.060	.147	2.384	.018
	Net interest margin	.168	.050	.184	3.337	.001
	Customer Deposits	3.219E-6	.000	.486	3.421	.001
	Provision for loan loss / loans	-.216	.043	-.261	-5.083	.000

Source: Authors' own work

The ROE model also shows satisfactory explanatory power ($R^2 = 0.338$; adjusted $R^2 = 0.326$) and is statistically significant, $F(5, 273) = 27.842$, $p < 0.001$. Significant cross-sectional dependence (Pesaran CD = 5.429, $p < 0.001$) and heteroskedasticity (Breusch–Pagan, $p < 0.001$) are present, supporting the use of robust standard errors for reliable statistical inference.

When it comes to the regression model for Y = ROE, we found $F(5, 273) = 27.842$ with $p \leq 0.05$. This conforms the signifinace of the mode in prediction of ROE with at list one independent variable. Thus we reject $H_{0(c)}$ and accept $H_{1(c)}$ hypotesis for ROE.

Table 9 ANOVA table ROE (DV)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3169.632	5	633.926	27.842	.000[b]
	Residual	6215.887	273	22.769		
	Total	9385.519	278			

Source: Authors' own work

The results indicate that the market-to-book ratio ($B = 1.917$; $p < 0.001$), net interest margin ($B = 0.832$; $p = 0.037$), and customer deposits ($B = 1.902E{-}5$; $p = 0.011$) have a positive and statistically significant impact on bank financial performance, whereas credit risk ($B = -1.845$; $p < 0.001$) has a significant negative impact. Customer deposits exhibit the strongest positive standardized effect ($\beta = 0.364$), while credit risk has the strongest negative effect ($\beta = -0.282$); market capitalization is not statistically significant ($B = -1.557E{-}5$; $p = 0.303$). The findigs suggest the following regression model:

$$\hat{Y}_{it} = 5.173 - 1.557\times10^{-5}(\text{mktcap}_{it}) + 1.917(\text{mcap_bv}_{it}) + 0.832(\text{NIM}_{it}) + 1.902\times10^{-5}(\text{Customer Deposits}_{it}) - 1.845(\text{Credit Risk}_{it}) \quad (3)$$

Table 10 Regression coefficients ROA (DV)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.173	1.179		4.389	.000
	mktcap	-1.557E-5	.000	-.151	-1.032	.303
	mcap_bv	1.917	.474	.249	4.047	.000
	Net interest margin	.832	.397	.115	2.097	.037
	Customer Deposits	1.902E-5	.000	.364	2.569	.011
	Provision for loan loss / loans	-1.845	.335	-.282	-5.511	.000

Source: Authors' own work

5.5. Tests of Between-Subjects Effects

The results of the test of between-subjects effects indicate that the country has a statistically significant impact on ROA, $F(4, 269) = 4.403$, $p = 0.002$, after controlling for the included bank-specific and market-related variables. This finding confirms that bank profitability, as measured by ROA, differs significantly across the countries included in the sample. The overall model is also statistically significant, $F(9, 269) = 17.978$, $p < 0.001$, and explains 37.6% of the variation in ROA ($R^2 = 0.376$; adjusted $R^2 = 0.355$).

Table 11 Tests of Between-Subjects Effects ROA

Dependent Variable: roa					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	56.652[a]	9	6.295	17.978	.000
Intercept	4.391	1	4.391	12.540	.000
mktcap	.703	1	.703	2.008	.158
mcap_bv	3.849	1	3.849	10.993	.001
nim	3.940	1	3.940	11.253	.001
Deposits	2.306	1	2.306	6.586	.011
pll_loans	7.232	1	7.232	20.656	.000
Country	6.167	4	1.542	4.403	.002
Error	94.185	269	.350		
Total	553.255	279			
Corrected Total	150.838	278			
a. R Squared = .376 (Adjusted R Squared = .355)					

Source: Authors' own work

The results of the test of between-subjects effects indicate that the country has a statistically significant impact on ROE, $F(4, 269) = 7.102$, $p < 0.001$, after controlling for bank-specific and market-related variables. This finding confirms the existence of significant cross-country differences in bank financial performance, as measured by ROE. The overall model is statistically significant, $F(9, 269) = 20.007$, $p < 0.001$, and explains 40.1% of the variance in ROE ($R^2 = 0.401$; adjusted $R^2 = 0.381$)

Table 12 Tests of Between-Subjects Effects ROE

Dependent Variable: roe					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	3763.397[a]	9	418.155	20.007	.000
Intercept	326.038	1	326.038	15.600	.000
mktcap	24.809	1	24.809	1.187	.277
mcap_bv	641.419	1	641.419	30.690	.000
nim	84.580	1	84.580	4.047	.045
Deposits	90.669	1	90.669	4.338	.038
pll_loans	595.612	1	595.612	28.498	.000
Country	593.765	4	148.441	7.102	.000
Error	5622.122	269	20.900		
Total	31976.868	279			
Corrected Total	9385.519	278			
a. R Squared = .401 (Adjusted R Squared = .381)					

Source: Authors' own work

6. DISCUSSION

The results indicate significant heterogeneity in bank profitability across the six Gulf Cooperation Council (GCC) countries during the 2014–2024 period. ANOVA and Welch tests confirm significant cross-country differences regarding ROA and ROE metrics, while Tukey HSD test results provide clearer insight into the patterns of these differences. Regarding ROA, Saudi Arabia (KSA), Qatar, and the UAE form a group with higher profitability levels, whereas Bahrain, Kuwait, and Oman constitute a group with lower profitability levels. As for ROE, the results identify a high-ROE group comprising the UAE, Qatar, and KSA; a group with moderate indicators consisting of Kuwait and Oman; and Bahrain at the lower end of the spectrum. These findings corroborate earlier evidence that GCC banking markets remain structurally heterogeneous despite sharing a common regional environment (Khan et al., 2022; El-Chaarani et al., 2024; Shome, 2025).

Regression analysis results identify operational efficiency, valuation, funding structure, and loan quality as key determinants of profitability. In the ROA model, the market-to-book ratio, net interest margin (NIM), and customer deposits exert a positive and statistically significant influence, while credit risk has a significant negative impact. Customer deposits show the strongest positive standardized effect ($\beta = 0.486$), whereas credit risk has the strongest negative impact ($\beta = -0.261$). Market capitalization is not statistically significant. The ROE model shows a similar pattern: the market-to-book ratio, NIM, and customer deposits have a positive and significant impact, while credit risk has a negative and significant impact. Customer deposits again exert the strongest positive standardized impact ($\beta = 0.364$), while credit risk has the strongest negative impact ($\beta = -0.282$), and market capitalization remains statistically insignificant. The consistent positive role of NIM and the negative role of credit risk align with earlier findings in the banking sector highlighting pricing efficiency and asset quality as key drivers of profitability (Obeid, 2024; Alnabulsi et al., 2025; Twairesh & Bata, 2024; Barakat et al., 2024).

Diagnostic results further confirm the model's empirical relevance, while simultaneously indicating a need for caution when drawing statistical conclusions. The ROA model explains 33.5% of the variation in profitability ($R^2 = 0.335$; adjusted $R^2 = 0.323$), while the ROE model explains 33.8% ($R^2 = 0.338$; adjusted $R^2 = 0.326$); both models are statistically significant at the $p < 0.001$ level. VIF values remain below the standard threshold of 10, indicating the absence of serious multicollinearity, although the relatively high correlation between market capitalization and customer deposits should be considered when interpreting their individual coefficients. Significant results from the Pesaran CD and Breusch–Pagan tests indicate the presence of cross-sectional dependence and heteroskedasticity, justifying the use of robust standard errors when interpreting regression results.

Finally, tests of between-subjects effects show that the country variable remains statistically significant even after controlling for the included financial

determinants. Country effects are significant for ROA, $F(4, 269) = 4.403$, $p = 0.002$, as well as for ROE, $F(4, 269) = 7.102$, $p < 0.001$. The extended models explain 37.6% of the variation in ROA and 40.1% of the variation in ROE. This indicates that bank-specific financial factors do not, in themselves, fully explain the differences in profitability within the GCC region. Consequently, country-level institutional, regulatory, market, and macroeconomic conditions may contribute to the remaining heterogeneity, consistent with earlier research in the GCC region highlighting persistent country effects (Al Matari, 2023; Shome, 2025). Overall, the results suggest that bank profitability in the GCC region reflects both internal financial management and the broader national environment in which the banks operate.

7. CONCLUSION

This study has examined the determinants of bank financial performance in the GCC region using 450 bank-year observations from Bahrain, Saudi Arabia, Kuwait, Oman, Qatar, and the UAE over the period 2014–2024, with profitability measured simultaneously through ROA and ROE. Four principal findings emerge.

First, significant cross-country differences in all two profitability indicators exist across GCC member states, with Qatar, the UAE, and Saudi Arabia forming a consistently high-performing cluster and Bahrain, Kuwait, and Oman exhibiting lower and more volatile profitability. Second, net income and net interest margin are the dominant positive determinants of bank profitability across all two performance dimensions, underscoring that earnings generation capacity and pricing efficiency are the foundational pillars of GCC banking performance. Third, credit risk, financial leverage, and loan intensity exert significant negative effects on profitability, confirming that disciplined credit risk management and conservative balance sheet structuring are prerequisites for sustained financial performance in GCC banks. Fourth, and most critically, country-level profitability differences persist even after controlling for all financial determinants in the GLM framework, establishing that institutional, regulatory, and structural factors operate as independent not merely confounding drivers of GCC bank performance.

These findings carry direct implications for bank managers, regulators, and policymakers. Bank managers in lower-performing GCC markets particularly Bahrain and Kuwait should prioritize NIM optimization through loan pricing reforms and funding cost reduction, alongside stricter credit risk governance to minimize provisioning costs. Regulatory authorities should recognize that country-level structural differences constitute a material source of performance inequality within the GCC, warranting differentiated supervisory frameworks rather than uniform regional standards. For policymakers, the persistence of country effects signals that macroeconomic diversification, financial sector reforms, and institutional quality improvements not merely bank-level interventions are necessary conditions for closing the profitability gap between GCC member states.

The study is subject to several limitations. The sample covers only listed banks, excluding unlisted and Islamic-only institutions in some markets, which may introduce a selection bias toward larger and more profitable institutions. The analysis relies exclusively on accounting-based performance measures and does not incorporate efficiency scores, Z-score stability measures, or market-based risk indicators, which would provide a more complete performance picture. Future research should extend the analysis to include post-2024 data capturing the full impact of the global interest rate normalization cycle, incorporate non-performing loan ratios as a complementary credit quality measure alongside loan loss provisions, and apply dynamic panel estimators such as GMM to account for the persistence of profitability over time. Cross-regional comparative studies benchmarking GCC banking performance against MENA, Asian, and European banking systems would further enrich the theoretical and policy implications of these findings.

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OTKRIVANJE POKRETAČA FINANCIJSKE USPJEŠNOSTI BANAKA U ZEMLJAMA GCC-A

Abstract

Cilj je ove studije utvrditi odrednice financijske uspješnosti banaka u zemljama GCC-a (Bahrein, KSA, Kuvajt, Oman, Katar i UAE) na temelju 450 bankarskih godina promatranja u razdoblju od 2014. do 2024. Poseban je naglasak na dvama pokazateljima profitabilnosti: povratu na imovinu (ROA) i povratu na kapital (ROE). Metodološki pristup obuhvaća deskriptivnu statistiku, jednosmjernu ANOVA s post hoc testovima, višestruku regresijsku analizu i testove učinaka između subjekata. Rezultati upućuju na značajne razlike u profitabilnosti među zemljama GCC-a. Nalazi ANOVA-e potvrđuju razlike u prosjeku i varijanci ROA i ROE. Regresijska analiza pokazuje da neto kamatna marža pozitivno i značajno utječe na uspješnost, dok financijska poluga, kreditni rizik i intenzitet kredita imaju negativne učinke. Testovi učinaka između subjekata potvrđuju postojanje razlika na razini zemalja i nakon kontrole financijskih odrednica. Nalazi ističu strukturne razlike unutar bankarskog sektora GCC-a.

Ključne riječi: Uspješnost banaka, ROA, ROE, Bankarski sektor GCC-a.

JEL klasifikacija: G21, G32, C33, O53.