

## Risk Dynamics and Profitability in Islamic Banking: Comparative Evidence from Saudi Arabia and the United Arab Emirates

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### Abstract

This study aims to analyze the influence of credit risk, leverage, and liquidity risk on the profitability of Islamic banks in Saudi Arabia and the United Arab Emirates for the period 2020–2024. This research gap is based on the inconsistency of previous empirical results regarding the impact of liquidity and capital structure on the financial performance of Islamic banks. Both countries were selected because they are the largest Islamic financial centers in the Gulf region with different structural characteristics. Saudi Arabia dominates the retail market, while the UAE excels in digital innovation and sukuk. The novelty of this study lies in the simultaneous comparative analysis approach in these two major markets to test the consistency of profitability determinants under different regulatory authorities. The research method used is a quantitative approach with panel data regression on 10 full Islamic banks. The results show that credit risk has a significant negative effect and leverage has a significant positive effect on profitability, while liquidity risk has no significant effect. This study contributes to the Islamic finance literature by providing a new empirical resolution to the sensitivity of profitability to productive assets, as well as providing a practical reference for bank management and regulators in optimizing leverage limits and credit screening efficiency.

### Keywords

*Credit Risk, Leverage, Liquidity Risk, Profitability*

## INTRODUCTION

Islamic banking has developed into one of the most dynamic financial sectors in the world, especially in the Middle East, South Asia and North Africa. (Ali, 2022). According to a report by the Islamic Financial Services Board (IFSB), total global Islamic financial assets will surpass US\$4 trillion by 2024, with the largest contributions coming from Gulf countries such as the United Arab Emirates (UAE) and Saudi Arabia. This growth demonstrates that Islamic banking is not only an alternative financial system but also a vital

driver for driving sustainable economic development in the Islamic world. (Rofik et al., 2025).

The United Arab Emirates (UAE) and Saudi Arabia were chosen as research locations based on the fact that these two countries are the largest Islamic financial centers in the Middle East. Saudi Arabia has the largest Islamic financial market share globally, while the UAE is known as a hub for Sharia-based digital banking innovation. (Hanif, 2025). Both countries also have a strong regulatory framework, high levels of sharia adoption, and economic stability that supports the development of Islamic banking. (Gassouma et al., 2023). Saudi Arabia's market structure is dominated by domestic retail banking activities, with a significant volume of consumer and housing financing driven by the Vision 2030 national project. From a regulatory perspective, the Saudi Central Bank (SAMA) implements highly conservative macroprudential oversight and strict liquidity ratios. Meanwhile, the market structure of the United Arab Emirates (UAE) is much more internationally integrated, acting as a global financial hub focused on large-scale corporate financing, cross-border investment, and digital financial innovation. The Central Bank of the UAE (CBUAE) is gearing up for progressive regulatory measures toward the adoption of Islamic fintech and the structuring of global sukuk. Thus, comparing the performance of Islamic banks in these two countries will provide a comprehensive understanding of the effectiveness of risk and liquidity management in influencing profitability.

Profitability measured through Return on Assets (ROA) is a very important financial indicator, showing how efficient and capable the management of Islamic banks is in converting all productive assets and managed funds into net profits that are halal and free from usury. (Auliyah & Saleh, 2024). The ability to generate optimal and consistent profitability is a key driver in funding large projects for the national economic diversification agenda (Vision 2030 in Saudi Arabia and We the UAE 2031 in the UAE), as well as a guarantee of trust for customers to prevent large-scale fund transfers (displaced commercial risk) due to changes in profit sharing in Mudharabah investment contracts. By maintaining healthy profitability, Islamic banks in both countries can not only independently reduce credit risk through the formation of reserves for impairment losses, but also serve as empirical evidence of the effectiveness of SAMA's conservative regulations in Saudi Arabia and its progressive approach. The UAE's digital CBUAE is equally capable of supporting the long-term resilience of the Islamic finance industry in the Gulf region.

Among the various challenges faced, liquidity risk, credit risk, and leverage are three fundamental factors determining the profitability of Islamic banks. Credit risk reflects a bank's ability to manage non-performing financing, which directly impacts revenue and financial stability. Leverage indicates the extent to which a bank relies on external funding, which can increase profits but also increases risk if not managed carefully. Meanwhile, liquidity risk reflects a bank's ability to meet short-term obligations and maintain operational stability. (Alqsass & Maali, 2023). In the context of Islamic banking, which is based on the principles of profit sharing and prudence, these three variables have different characteristics compared to conventional banks.

The Risk-Return Trade - Off Theory asserts that increased risk will impact changes in return levels. In Islamic banking, an increase in Non-Performing Financing (NPF) reflects a decline in the quality of the financing portfolio, which leads to increased provisioning costs and decreased profit-sharing income, potentially depressing Return on Assets (ROA). On the liquidity side, Financing to The Deposit Ratio (FDR) reflects the aggressiveness of financing distribution. An FDR that is too high can increase income but increase liquidity

pressure, while an FDR that is too low can indicate idle funds that reduce asset efficiency. Meanwhile, the Trade -Off Theory explains that banks seek a balanced funding structure between debt and equity; leverage (DER) can increase profitability through additional expansion funds up to an optimal point, but can decrease it if it is excessive due to increased solvency risk and funding costs. Thus, the expected relationship is that NPF has a negative effect on ROA, DER tends to be positive up to an optimal limit, while the effect of FDR on ROA is contextual, depending on the efficiency of financing distribution and regulatory policies.

The research gap in this study is based on the fragmentation and sharp inconsistencies in previous empirical results regarding the effect of liquidity risk and leverage on the profitability of Islamic banks. Some previous research by Alqsass & Maali (2023) showed that liquidity has a positive impact on profitability, while other research by Mennawi (2020) confirmed a decrease in profit efficiency due to the phenomenon of overleverage. liquidity or the increase in solvency risk due to uncontrolled leverage. Meanwhile, Al-Shrari (2023) and Amijaya & Alaika (2023) found that credit and liquidity risks had a significant negative effect. Filling this gap, the main novelty of this study comes through a simultaneous comparative analysis approach between Saudi Arabia and the United Arab Emirates (UAE) for the period 2020–2024. This approach specifically examines whether profitability determinants operate uniformly or differently under two contrasting jurisdictions and market structures: Saudi Arabia, which is dominated by the domestic retail market under conservative macroprudential regulations of SAMA, compared to the UAE, which acts as a global financial hub characterized by large-scale corporate financing and digital innovation under the progressive policies of CBUAE.

This study contributes to the literature by simultaneously examining credit risk, leverage, and liquidity risk on the profitability of Islamic banks in two countries with the most dominant Islamic industries: Saudi Arabia and the United Arab Emirates (UAE). Previous studies have generally focused on a single country or regional aggregates, such as the MENA or GCC, thus failing to explain whether the determinants of profitability operate similarly across the two largest Islamic markets with different regulatory characteristics and risk structures. By using panel data on 10 Islamic banks during 2020-2024, this study provides more comparative and contextual empirical evidence. Furthermore, this research also has practical value for regulators and bank management in formulating risk, financing, and liquidity management policies to maintain the stability and sustainability of financial performance. The objective of this study is to analyze the effect of liquidity risk, credit risk, and leverage on the profitability of Islamic banks in the UAE and Saudi Arabia.

## **THEORETICAL BASIS**

Research on the factors influencing the profitability of Islamic banks globally has yielded mixed results and requires in-depth review. Regarding credit risk, research conducted by Al-Shrari, (2023) and Nanda & Damayanthi, (2018) Consistently, credit risk is a major factor negatively impacting profitability due to the requirement to build asset reserves. However, differences between theoretical and empirical perspectives begin to emerge when analyzing variables such as leverage and liquidity risk. Menacer et al., (2020) argue that additional leverage serves as a positive driver that increases the financing capacity of Islamic banks in the Gulf region, which contradicts the findings of Mennawi (2020) who stated that if the leverage level exceeds a certain limit, this can actually cause financial problems and reduce profits. A similar gap is also seen in liquidity management. Some

literature links a high FDR ratio with increased aggressiveness in obtaining profits through the distribution of productive funds, while Alqsass & Maali (2023) indicates a saturation point, where the high FDR reflects the bank's inability to anticipate urgent fund withdrawals, which can lead to high liquidity costs and ultimately reduce the bank's operational profit margin.

### **Risk Return Trade Off Theory**

Risk-Return Trade- Off Theory, the principle that higher returns are always accompanied by higher risks. In banking, financing expansion and funding decisions can increase returns, but also have consequences in the form of increased default risk and liquidity pressures (Alemany et al., 2023). This study uses the trade-off logic. The trade-off theory explains that the influence of risk variables on profitability can be bidirectional, beneficial up to an optimal point, but detrimental if the risk exceeds tolerance limits and triggers risk costs, funding costs, or stability pressures. This theory states that to obtain a higher rate of return, an entity must be willing to assume a higher level of risk (high risk, high return). The dynamics of this trade-off operate specifically on each independent variable as follows:

**Credit Risk to ROA:** To achieve high returns, Islamic banks often take risky measures by relaxing regulations on providing financing to vulnerable sectors. When default risks arise, banks must increase their Allowance for Impairment Losses due to the impact of operating costs, which directly reduces net income and ROA.

**Leveraging ROA,** increasing debt through the use of Sukuk or interbank Wakalah contracts, was deliberately done to increase long-term repayment risk and increase working capital. As long as the external funds were used for large, productive projects in Saudi Arabia and the UAE that yielded higher returns than the cost of capital, this risk-taking decision successfully increased profitability.

**Liquidity Risk to ROA:** This theory illustrates the classic dilemma between the safety of high liquidity and the benefits of low liquidity. However, amidst the tightening of macroprudential regulations in SAMA and CBUAE, this trade-off has been affected, resulting in a uniformity of interbank liquidity variation, transforming the role of liquidity from a variable that pursues short-term profits to merely a tool for maintaining stability.

### **Agency Theory**

Agency theory explains the principal-agent relationship (shareholders as principals and managers as agents) that has the potential to create conflicts of interest and information asymmetry (Wang, 2024). Based on agency theory, information discrepancies between managers and capital owners can create moral hazard, leading to a reduction in governance quality, which in turn can increase problem financing. On the other hand, increasing debt through Sukuk instruments or third-party funds serves as a means of disciplining management. When managers face profit-sharing obligations to investors, they are encouraged to invest more efficiently in large projects in Saudi Arabia and the UAE to increase profitability. Furthermore, the constraints on managerial actions imposed by SAMA and CBUAE macroprudential regulations to mitigate the risk of massive fund transfers impact the uniformity of interbank liquidity, which reduces their ability to influence short-term profits and transforms their role into merely a tool for maintaining stability. In the banking context, managerial decisions regarding funding, asset management, and information disclosure can influence investor and stakeholder confidence, ultimately

impacting bank performance. Therefore, performance is viewed as the outcome of managerial decisions in effectively managing assets and capital structure (Abadi & Lutfi, 2025) .

The concept of actualization of financial theories such as Agency Theory and Trade Off Risk Return, cannot be applied directly without modification according to the unique characteristics of Islamic banking in the Gulf region , particularly in Saudi Arabia and the United Arab Emirates (UAE). In Agency Theory, the relationship between agents and owners in Islamic banks has many dimensions because managers are not only responsible to shareholders , but also to depositors who act as mudharabah investment partners who desire Sharia compliance. The characteristics of the Gulf region are characterized by high domestic liquidity due to commodity yields and the deep integration of global Islamic capital markets. especially as a sukuk center in the UAE causing the implementation of Trade Off Risk Returns are dynamic. Islamic banks in both countries must find a balance between fulfilling attractive profit-sharing contracts and preventing massive withdrawals by customers.

## **Hypothesis**

### **The Effect of Leverage on the Profitability of Islamic Banks**

Before formulating the influence of leverage, there are conflicting results from previous studies. On the one hand, Menacer et al. (2020) and Francis et al. (2025) show that increasing leverage has a significant positive relationship with net income of banks in the Gulf region. However, this finding is questioned by Mennawi (2020) , who proves that leverage levels exceeding safe limits can actually lead to bankruptcy costs, which negatively impact profitability. To explain this contradiction, a theoretical argument underlying this hypothesis is constructed using the Risk-Return Trade-Off theory and Agency Theory as a means of disciplining management. Theoretically, the manager's (agent's) decision to increase the DER ratio does increase long-term solvency risk, but this step is taken to increase the bank's working capital capacity to capitalize on high-yielding investment opportunities (Al-Aaraji, 2024) . In the empirical context of Saudi Arabian and UAE Islamic banks, this dynamic will work well because Saudi Arabia and the UAE are in a phase of significant non-oil economic expansion, namely Vision 2030 and We the UAE 2031. High international liquidity and active secondary Islamic capital markets, especially through the issuance of global Sukuk in the UAE financial center and mudharabah investment contracts in Saudi Arabia, enable Islamic banks to raise funds from third parties and external capital efficiently (Abubakar & Anyonje, 2025) . The collected funds are then channeled back into corporate financing and large infrastructure projects that generate profits much higher than the cost of capital (Murombi & Mohammed, 2025) . Thus, the courage of banks in taking risks related to capital structure can be transformed into a profit driver, so the formulated hypothesis is as follows:

H1: Leverage has a positive effect on the profitability of Islamic banks.

### **The Influence of Credit Risk on the Profitability of Islamic Banks**

Empirical disagreement regarding the effect of asset quality on banking profitability requires careful review. Most of the literature, as described by Al-Shrari (2023) , Nanda & Damayanthi (2023) , and Amijaya & Alaika (2023), consistently finds that credit risk has a significant negative impact on profitability. However, in some volatile financial market situations, an alternative view exists that suggests that a certain level of non-performing financing does not necessarily harm profits, especially if banks can set very high profit

margins on trade-based products to compensate for the risk of default. To strengthen its theoretical basis, this hypothesis is created by combining the concept of asset quality decline with the Risk-Return Trade-Off and the existence of information asymmetry in Agency Theory. When bank managers (agents) fail in management or are influenced by moral hazard to relax the customer screening process to achieve financing growth targets, this information asymmetry will result in a vulnerable asset portfolio (Hartanto, 2023). Empirically, the characteristics of the Islamic banking industry in Saudi Arabia and the United Arab Emirates are highly vulnerable to this increase in risk costs. In Saudi Arabia, the massive growth in retail financing and domestic mortgages makes bank profitability highly sensitive to changes in consumer purchasing power. Meanwhile, in the United Arab Emirates, the concentration of corporate financing in the large property sector exposes banks to high volatility risks. Based on this critical thinking, the following hypothesis is formulated:

H2: Credit risk has a negative effect on the profitability of Islamic banks.

### **The Influence of Liquidity Risk on the Profitability of Islamic Banks**

The most striking inconsistency in research findings in the Islamic finance literature arises from the liquidity risk variable. Several studies, including Al-Shrari (2023) and Mennawi (2020), suggest that a high FDR reflects optimal aggressiveness in the intermediary role of channeling funds into productive assets that generate profits. Alqsass & Maali (2023) suggest that an excessively high FDR can pose a costly liquidity threat, while an excessively low FDR indicates inefficiency in the form of an accumulation of unused assets that hinders profit potential. This hypothesis is based on the principles of the Risk-to-Return Theory. This theory illustrates the classic banking dilemma between maintaining security (low risk, low return) and pursuing profit (high risk, high return). When Islamic bank managers choose to reduce their liquidity cushion to channel maximum financing to the real sector, the Financing-to-Deposit Ratio (FDR) will experience a significant increase. Theoretically, the decision to take on high liquidity risk (high risk) is made in the hope of generating a large return margin. Empirically, in the context of Islamic banking in the Gulf region, although Saudi Arabia and the UAE have liquid capital markets, the growth of large corporate financing in the UAE and the domestic retail sector in Saudi Arabia face high volatility risks. If the FDR is allowed to remain too high, Islamic banks will experience liquidity difficulties. To meet emergency funding needs due to sudden withdrawals by depositors, Islamic banks are forced to seek short-term funding in the interbank market or issue emergency liquidity instruments that have high costs (Arfiyanti & Pertiwi, 2020). Payment of these expensive liquidity charges directly reduces the bank's operating profit margin, thereby directly lowering the ROA value. Based on this critical thinking, the following hypothesis is formulated:

H3: Liquidity risk has a negative effect on the profitability of Islamic banks.

### **RESEARCH METHODOLOGY**

This study uses a quantitative approach. The data used are secondary data sourced from the annual financial reports of Islamic banks operating in the United Arab Emirates (UAE) and Saudi Arabia during the period 2020 – 2024. The population in this study is all full Islamic banks registered with their respective national financial authorities, namely the Central Bank of UAE and Saudi Central Bank (SAMA). The sampling technique was carried out using purposive sampling, with the following criteria: (1) banks that consistently publish

annual financial reports during the study period, (2) have complete data on relevant financial ratios such as NPF, DER, FDR, and ROA.

Table 1. Sample List

Saudi Arabia	Albilad Bank	<a href="https://www.bankalbilad.com.sa/en/">https://www.bankalbilad.com.sa/en/</a>
	Al Rajhi Bank	<a href="https://www.alrajhibank.com.sa/en/">https://www.alrajhibank.com.sa/en</a>
	Saudi Awwal Bank	<a href="https://www.sab.com/en/">https://www.sab.com/en/</a>
	Arab National Bank	<a href="https://anb.com.sa/web/anb">https://anb.com.sa/web/anb</a>
	Saudi Investment Bank	<a href="https://www.saib.com.sa/en">https://www.saib.com.sa/en</a>
	Al Jazeera Bank	<a href="https://www.aljazirabank.com.sa/en">https://www.aljazirabank.com.sa/en</a>
UAE	Abu Dhabi Islamic Bank	<a href="https://adib.ae/">https://adib.ae/</a>
	Al Hilal Bank	<a href="https://www.alhilalbank.ae/en/">https://www.alhilalbank.ae/en/</a>
	Dubai Islamic Bank	<a href="https://www.dib.ae/">https://www.dib.ae/</a>
	Emirates Islamic Bank	<a href="https://www.emiratesislamic.ae/en">https://www.emiratesislamic.ae/en</a>
	Ajman Bank	<a href="https://www.ajmanbank.ae/site/">https://www.ajmanbank.ae/site/</a>
	Sharjah Islamic Bank	<a href="https://www.sib.ae/">https://www.sib.ae/</a>

Source: Data processed by researchers, 2026

The dependent variable in this study is profitability, which is measured using Return on Assets (ROA). The independent variables consist of Liquidity Risk as measured by the Financing to Deposit Ratio (FDR), Credit Risk as measured by the Non-Performing Financing (NPF) ratio, and Leverage, which is measured by the Debt to Equity Ratio (DER). Data analysis was performed using panel data regression using Eviews software. The panel data analysis process begins with the estimation of three alternative models: the Common Effect Model (CEM), the Fixed Effect Model (FEM), and the Random Effect Model (REM). Next, testing is carried out to determine the best model sequentially through the Chow Test and the Hausman Test, as well as the Lagrange Multiplier Test if necessary. After the best model is determined, the next stage is the Classical Assumption Test which focuses on detecting multicollinearity and normality. The analysis series ends with a Hypothesis Test, which includes an F Test to assess the simultaneous influence, a T Test to prove the direction and significance of the partial influence of each risk variable on ROA, and an Adjusted R square analysis to measure how effective the model is in explaining variations in the stability of Islamic bank profitability in Saudi Arabia and the UAE.

Table 2. Operational Definitions of Variables

1	Profitability	ROA	The ability to generate profits for shareholders from assets (Mennawi, 2020) .	$\text{Net Profit} / \text{Total Assets} \times 100\%$	Ratio (%)
2	Leverage	DER	The level of dependence of company funding on debt compared to equity (Menacer, et al., 2020) .	$\text{Total Liabilities} / \text{Total Equity} \times 100\%$	Ratio (%)
3	Credit Risk	NPF	The level of problematic financing in Islamic banks (financing with problematic collectibility) (Al-Shrari, 2023)	$\text{Problem financing} / \text{Total financing} \times 100\%$	Ratio (%)
4	Liquidity Risk	FDR	The liquidity capacity of Islamic banks shows how much third-party funds are channeled into financing (Jallow, 2023) .	$\text{Total financing} / \text{DPK} \times 100\%$	Ratio (%)

Source: Data processed by researchers, 2026

## DISCUSSION RESULTS

### Research Object Description

This research focuses on fully Islamic banks operating in the two strongest economies in the Gulf region, Saudi Arabia and the United Arab Emirates (UAE), during the observation period from 2020 to 2024. The selection of fully Islamic banks as the research objects aims to ensure the uniformity of financial data. The Islamic banking industry in these two countries is crucial because the financial sector in the Gulf region is undergoing significant structural changes due to the drive to reduce economic dependence and diversify after the pandemic. From 2020 to 2024, this research object faces complex macroeconomic dynamics, including the recovery of global crude oil prices, the acceleration of national strategic projects, and changes in international benchmark interest rates that directly affect the liquidity management, credit risk exposure, and internal capital structure of each Islamic bank.

Although both countries are under the same regional economic organization, there are significant differences in the institutional characteristics, market structure, and business orientation of the existing research objects. The Islamic banking landscape in Saudi Arabia is dominated by a very large domestic retail market, where financing growth is driven intensively by the consumer sector, housing finance, and support for local entrepreneurs in accordance with the Vision 2030 transformation agenda. On the regulatory side, Islamic banks in Saudi Arabia operate under the supervision of the Saudi Central Bank (SAMA), which is known to apply a very conservative macroprudential approach, with strict restrictions on leverage, and establish a tight liquidity corridor to maintain domestic monetary stability. These characteristics result in Islamic banks in Saudi Arabia having a stable third-party funding base from local depositors with low costs, but are highly sensitive to fluctuations in people's purchasing power and domestic inflation rates.

Islamic banking in the United Arab Emirates operates within a financial ecosystem that tends to be international and oriented toward large corporations. The UAE market is

driven by the financing of mega-infrastructure projects, the global commercial property sector, international trade, and cross-border investment under the strategic vision of We the UAE 2031. The UAE banking regulator, the Central Bank of the UAE (CBUAE), adopts a more progressive and flexible regulatory approach, supporting innovation in digital Islamic financial products and global capital market integration. This difference has resulted in a significantly more diverse funding structure for Islamic banks in the UAE, relying not only on domestic third-party funds but also utilizing international instruments such as global Sukuk issuances listed on the Nasdaq Dubai international exchange and transactions in the interbank money market under Wakalah or Murabahah commodity schemes. This fundamental difference creates variations in the operation of the independent variables; Islamic banks in Saudi Arabia must be resilient in dealing with domestic credit risk, while Islamic banks in the UAE need to be agile in managing international liquidity risk and global capital structure volatility to maintain stable profitability.

**Panel Data Regression Model Selection**

In conducting panel data regression testing, to determine the most appropriate estimation model for use in this study, we conducted three tests: the Chow test, the Hausman test, and the Lagrange Multiplier (LM) test. The Chow test is used to select the best model between the Common Effect Model (CEM) and the Fixed Effect Model (FEM) in panel data analysis. The Hausman test is used to determine whether the Fixed Effect Model (FEM) or the Random Effect Model (REM) is more appropriate for estimating panel data. Meanwhile, the LM test is used to select between the CEM and REM models to be used in the panel data estimation process.

Table 1. Chow Test

Effects Test	Statistics	df	Prob.
Cross-section F	2.144999	(9.37)	0.0500
Cross-section Chi-square	20.993264	9	0.0127

Source: Eviews 12, Data processed by the Authors, 202 6

Table 2. Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. df	Prob.
Random cross-section	7.928671	3	0.0475

Source: Eviews 12, Data processed by the Authors, 202 6

The results of panel data analysis of 10 Islamic banks in the UAE and Saudi Arabia for the period 2020–2024 show that the best model used is the Fixed Effect Model (FEM), as indicated by the results of the Redundant Fixed Effect Test and Hausman Test (Prob. 0.0127 and 0.0475 < 0.05), so the classical assumption test must be carried out.

Classical Assumption Test

The classical assumption tests used are multicollinearity and heteroscedasticity.

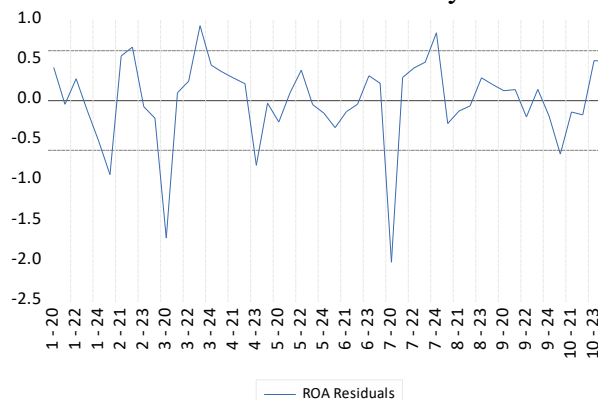
Table 3. Multicollinearity Test

test results	X1	X2	X3
NPF	1,000,000	0.067879	-0.246562
DER	0.067879	1,000,000	-0.148519
FDR	-0.246562	-0.148519	1,000,000

Source: Eviews 12, Data processed by the Authors, 202 6

The multicollinearity test results indicate that all independent variables have a correlation coefficient <0.85, indicating no strong linear relationship between the NPF, DER, and FDR variables. Therefore, the research model is free from multicollinearity, ensuring that the regression estimation results are unbiased and can be interpreted validly. This condition strengthens the argument that credit risk, leverage, and liquidity are distinct aspects of bank operations that operate through non-overlapping mechanisms. In accordance with theoretical studies, credit risk is related to the quality of the financing portfolio, leverage is related to the bank's funding and capital structure, while liquidity is related to the bank's ability to meet short-term obligations.

Picture 1. Heteroscedasticity Test



Source: Eviews 12, Data processed by the Authors, 202 6

The residual analysis results from the ROA regression model show that the residuals move randomly around the zero line, without forming a specific repeating pattern. This random residual pattern indicates that the regression model has met the basic assumption of randomness of errors. The symmetrical distribution of residuals around the zero line indicates that the classical regression assumptions are met, particularly regarding the absence of autocorrelation and visual heteroscedasticity. Thus, the irregular residual pattern in this study indicates that the FEM model used has provided stable predictions and meets the criteria for good panel regression.

Hypothesis Test

Table 4. T-test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.749697	2.124775	-0.352836	0.7262
NPF	-0.352724	0.118684	-2.971965	0.0052
DER	0.240870	0.084264	2.858510	0.0070
FDR	0.021921	0.020807	1.053547	0.2989

Source: Eviews 12, Data processed by the Authors, 202 6

The regression results indicate that credit risk (NPF) has a significant negative effect on profitability. This finding is consistent with the Risk-Return Trade- Off Theory, which asserts that the higher the credit risk borne, the greater the potential decline in bank revenue. This is understandable considering that non-performing financing reduces profit-sharing income and increases the burden of provisioning for financing losses. From a sharia perspective, an increase in NPF also contradicts the hifz al-mal principle in Maqasid al-shariah because it indicates a bank's inability to maintain its financial stability. Therefore, this empirical finding reinforces the urgency of credit risk management through feasibility assessment, financing supervision, and selection of appropriate contracts to minimize moral hazard risk. However, these dynamics operate slightly differently in the two countries. In Saudi Arabia, the massive expansion of Islamic financing is driven by the retail and residential mortgage sectors, supported by the Vision 2030 program. When global economic shocks occur, inflationary pressures can impact individual customers' repayment capacity. Meanwhile, in the UAE, the expansion of corporate financing in the real estate and infrastructure sectors has left Islamic banks highly exposed to financing concentration risk. The high sensitivity of NPF demonstrates that aggressive asset growth in the Gulf region is not always linear with profitability if customer screening is lax. At a macro level, these results reflect the failure to fulfill the hifz al mal principle within the maqasid al syariah due to moral hazard or information asymmetry between banks and borrowers. These findings align with several previous studies showing that increased credit risk or non-performing financing depresses the profitability of Islamic banks, such as the findings of Mennawi (2020) in the Sudanese Islamic banking sector and the study by Alqsass & Maali (2023) in the MENA region. These results are also consistent with Trad et al. (2017), who emphasized that asset quality is a critical determinant of Islamic bank profitability .

The research results also show that leverage (DER) has a significant positive effect on the profitability of Islamic banks. The DER coefficient of 0.240870 with a significance value of 0.0070 indicates that a 1% increase in leverage can increase ROA by 0.24%. This finding supports Trade Off -Theory in the growth phase. Islamic banks in the Gulf region , particularly in the UAE, are highly adept at utilizing international leverage instruments through global Sukuk issuances and interbank Wakalah schemes to raise low-cost funds . These abundant external funds are then channeled into sustainable energy and infrastructure projects that generate high returns, thereby covering funding costs. In Saudi Arabia, strong domestic liquidity is leveraged through Mudharabah investment financing schemes. The industry implication is that the deep capitalization of Islamic capital markets in the GCC region allows leverage to act as a safe "lever" for profitability, provided the region's macroeconomic growth remains positive. This positive finding aligns with the expansion

strategies of Islamic banks in the UAE and Saudi Arabia, which are known for their aggressive financing of infrastructure, real estate, and energy projects. Prudently managed increases in leverage significantly boost profitability, confirming that DER is a key factor in improving Islamic bank performance. This positive effect of leverage indicates that the use of external funding can increase financing capacity and boost ROA, provided it is maintained at an efficient level. This finding aligns with studies highlighting the role of leverage in driving Islamic bank performance/value, such as Ahmad et al. (2025) and Handriani (2025)'s study of the determinants of Islamic bank profitability. However, according to Trade Off Theory, the implications of leverage still depend on the optimal limits and the quality of risk management.

Unlike the two previous variables, liquidity risk, as proxied by the Financing to Deposit Ratio (FDR), does not significantly influence ROA. The FDR coefficient of 0.021921 with a significance level of 0.2989 indicates that, although the relationship is positive, its influence is not strong enough to directly increase profitability. This can be explained by the Risk-Return Trade- Off Theory, which states that both too high and too low liquidity can reduce profit potential. The efficiency of financing distribution between banks also varies, so the FDR does not always reflect a bank's ability to generate income. This insignificant result is due to the very strict macroprudential regulatory framework of SAMA (Saudi Arabia) and the Central Bank of the UAE. Both monetary authorities require banks to maintain high minimum liquidity ratios and implement sophisticated daily liquidity absorption instruments. As a result, FDR variability among Islamic banks in the Gulf region tends to be homogeneous and stable within a safe zone. Liquidity in this region does not function as a speculative instrument for pursuing short-term profits, rather than a profit driver, but rather serves purely as a stability buffer to mitigate sudden withdrawals. In the context of tight regulation, liquidity that is too stable and well-managed loses its sensitivity in influencing profitability variations. This finding may differ from some empirical evidence in the MENA region that found significant liquidity risk on profitability (Alqsass & Maali, 2023), but also strengthens the argument that the impact of liquidity is highly dependent on variations in FDR, financing distribution strategies, and monetary authority policies in each country.

Table 5. F Test

R-squared	0.532134
Adjusted R-squared	0.380394
SE of regression	0.619736
Sum squared residual	14.21070
Log likelihood	-39.49623
F-statistic	3.506878
Prob(F-statistic)	0.001619

Source: Eviews 12, Data processed by the Authors, 202 6

Simultaneously, the three independent variables were proven to have a significant effect on profitability, as indicated by the F-statistic value of 3.506878 with a significance value of 0.001619. This indicates that together, credit risk, leverage, and liquidity have the ability to explain variations in ROA in Islamic banks. However, the Adjusted R<sup>2</sup> value of 0.380394 indicates that only 38.03% of the variation in profitability can be explained by these three variables, while the rest is influenced by other variables not included in the model, such as the capital adequacy ratio (CAR), operational efficiency (BOPO), asset

growth, governance, and macroeconomic factors such as inflation and GDP growth. This condition indicates that the profitability of Islamic banks is influenced by many interrelated aspects, and NPF, DER, FDR are only some of the elements that influence bank performance. This limitation indicates that the profitability of Islamic banking in the Gulf region is strongly influenced by governance variables, the level of operational cost efficiency, capital adequacy of core capital, and external macroeconomic shocks that affect Islamic pricing instruments.

The growth of the Islamic banking industry in Saudi Arabia and the United Arab Emirates is reflected in research findings, where credit risk, as measured by Non-Performing Financing (NPF), has been shown to have a significant negative impact on profitability. This indicates that despite the strong growth of the GCC Islamic banking industry, financing quality remains a major challenge that directly impacts bank performance. Thus, there is a consistent relationship between industry phenomena and empirical findings, where rapid growth also opens up opportunities for problematic financing, which impacts Return on Assets (ROA). These findings demonstrate that expansion does not always equate to profitability if not balanced with adequate risk management.

The results of the study indicate that the relationship between credit risk, leverage, and liquidity with the profitability of Islamic banks is in line with the theories that underpin the research. Credit risk (NPF), which is proven to have a significant negative effect on ROA, reflects the basic principle of the Risk-Return Trade- Off Theory, namely that increased risk that is not managed effectively will reduce potential returns. In the context of the Islamic banking industry in the GCC, the increase in non-performing financing influenced by global economic volatility and the characteristics of the financing sector is indeed a major factor suppressing profitability. Therefore, this finding is not only consistent with the theory but also illustrates the real phenomenon of Islamic bank operations. On the other hand, leverage (DER), which has a significant positive effect on ROA, is fully in line with the Trade-Off Theory, where optimal use of external funding can increase financing capacity and ultimately increase profitability, especially in the Islamic financial systems in the UAE and Saudi Arabia that utilize Sharia-based leverage instruments such as sukuk and wakalah. The phenomenon of strong financing expansion in both countries also strengthens the relevance of this finding. Unlike these two variables, liquidity (FDR) does not significantly impact ROA, as liquidity that is too stable and low in variability, as is the case in GCC Islamic banks due to strict monetary regulations, does not significantly impact profitability directly. Thus, these three variables demonstrate a clear link between theory and industry phenomena, while also illustrating that the profitability of Islamic banks in the GCC is more sensitive to credit risk and leverage effectiveness than to operational liquidity levels.

The research findings demonstrate a consistent relationship between industrial development phenomena, financial theories, and empirical results. Credit risk remains a central issue depressing the profitability of Islamic banks in Saudi Arabia and the United Arab Emirates. Leverage has proven to be an effective instrument for increasing profitability when managed carefully. Meanwhile, liquidity serves more as a stabilization mechanism than a profit driver. Thus, the research findings not only reinforce theory but also provide a concrete picture of how Islamic banks in the UAE and Saudi Arabia address risk dynamics and maintain the sustainability of their financial performance.

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## CONCLUSION

The results of this study successfully confirm that the determinants of risk and capital structure do not work uniformly, but rather depend heavily on the institutional regulatory landscape of each country in the Gulf region. The main novelty of this study is empirically proving the asymmetry of profitability sensitivity between Islamic banks in Saudi Arabia, which is characterized by a conservative domestic retail market under the auspices of SAMA, and the United Arab Emirates (UAE), which operates as an aggressive global financial hub under the jurisdiction of CBUAE throughout the volatile period of 2020-2024. Through a simultaneous comparative approach, this study provides a new empirical contribution to the literature on Islamic banks in the Gulf region by breaking the generalization bias that has dominated previous research. These findings confirm that the level of capital leverage has succeeded in becoming a pure profit accelerator thanks to the Gulf mega project ecosystem, while credit risk (NPF) and liquidity risk tightening (FDR) are proven to actually trigger swelling operational mitigation costs that suppress the efficiency of Islamic banking profitability in both jurisdictions.

research is expected to develop through three main, interconnected focuses. First, future researchers are advised to integrate contemporary macroeconomic variables relevant to the characteristics of the Gulf region, such as fluctuations in global crude oil prices, volatility in global benchmark interest rates, and domestic inflation rates, to capture the effects of long-term shocks on profitability. Second, geographic scope needs to be expanded in contrast to include other Gulf countries with unique market characteristics, such as Kuwait, a pioneer in Islamic banking, or Qatar, with its concentration in sovereign financing, to produce a more comprehensive mapping of industrial resilience clusters at the regional level. Third, future research can deepen the analysis by incorporating qualitative variables into the empirical model, such as the Sharia governance index. Based on these findings, it is recommended that Islamic banks strengthen credit risk management through financing screening mechanisms, strict portfolio oversight, and the implementation of digital systems and smart contracts that can mitigate moral hazard. Banks also need to optimally manage leverage while adhering to the principle of prudence so that increased external funding truly generates added value for profitability.

## THANK-YOU NOTE

The author would like to express his gratitude to Ms. Indah Yuliana and Mr. Muhammad Sulhan, his supervisors, for their guidance and support throughout this research. He also thanks the Islamic banks in Saudi Arabia and the United Arab Emirates for providing financial reports that enabled this research to be conducted.

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