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THE ROLE OF REGULATORY QUALITY IN ISLAMIC BANK CREDIT RISK: CROSS REGIONAL EVIDENCE AMID COVID-19

SHARIFAH NUR IZZATI SYED MAZLAN SHAH
Arshad Ayub Graduate Business School, Universiti Teknologi MARA.
Email: 2024834456@student.uitm.edu.my

WAHIDA AHMAD
(Corresponding Author)
Arshad Ayub Graduate Business School, Universiti Teknologi MARA.
Email: wahida@uitm.edu.my

NUR HAZIMAH AMRAN
Arshad Ayub Graduate Business School, Universiti Teknologi MARA.
Email: hazimahamran@uitm.edu.my

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ABSTRACT

In this paper, a focus on the quality of the country's regulatory environment and macroeconomic controls, along with the impact of the COVID 19 pandemic, provides insight into the factors that contribute to the credit risk of Islamic banks in Asia and the Middle East. The study employs a Random Effects Generalised Least Squares (REGLS) estimator using an unbalanced panel of commercial Islamic banks for the period 2014-2024 with cluster robust standard errors. The effect of regulatory quality is negative and significant in both cases, as well as that of capital adequacy, while bank size and bank growth have the same negative pattern, though it is not significant in either case, and finally, the COVID 19 dummy, the liquidity, GDP growth and region do not have significant impact. Overall, the model explains 53.86 per cent of the variation in credit risk. The paper demonstrates that regulatory quality is a disciplining mechanism for Islamic bank asset quality that is effective in two structurally different markets, and by integrating institutional governance and global health shock into one pooled cross regional model, it is revealed to be a global story rather than a region specific one.

Keywords: Credit Risk; Islamic Banking; Regulatory Quality; COVID-19; Panel Data.

INTRODUCTION

In the last twenty years, Islamic banking has developed at a phenomenal pace in Asia and the Middle East, from a small-scale industry to a major source of financial services in many countries. Many people believe that because of their risk sharing nature, Sharia-compliant contracts protect these institutions from credit risk, but in practice the credit risk exposure is present in non performing financing, which is non-sharia-compliant financing (Sobarsyah et al., 2020). To keep the growth momentum of the sector going, banks need to be careful in managing their financing exposures, especially in markets that have conflicting macroeconomic conditions and governance environments (Raditya & Wibowo, 2022). While there is already a vast amount of evidence in the conventional banking literature on the determinants of credit risk, the profit and loss sharing framework of Islamic contracts does not allow them to be transferred without adaptation.

This question is particularly topical today due to two forces. COVID-19 first caused a severe economic contraction for the Middle East and North Africa region, with a decline in GDP, intense declines in stock markets, and worsening unemployment rates, all of which are placing a heavy burden on households and firms, and therefore their ability to service financing (Hassan et al., 2021). Second, the quality of a country's regulatory and institutional environment is well known to buffer or magnify the effects of such shocks (Srairi, 2024). While there have been some studies on both themes, there has been little examination of these themes together in a single cross country framework, and there has been a tendency to study one region or one driver at a time (Savon, 2025).

This paper fills that gap by modelling Islamic banks as a group for all the Asian and Middle Eastern countries, thereby providing an assessment of the strength of internal balance sheets and external regulatory environments together and not separately. It examines the relationship between capital adequacy, liquidity, bank size, and bank growth and credit risk, as well as the potential impact of regulatory quality and macroeconomic growth on credit risk, and the differences in credit risk between the pandemic and pre pandemic eras and between the two regions examined.

The study makes three contributions to the literature. First, it is one of the first studies to model the effects of regulatory quality and the COVID-19 shock together in a single cross regional Islamic banking panel, instead of

exploring regulatory quality and the COVID-19 shock separately. Second, it broadens the geographic coverage of previous single country/region studies by synthesizing the performance of commercial Islamic banks in Asia and the Middle East across an eleven year time frame, enabling the internal capacity of the banks to be assessed and compared on a level playing field with external regulatory conditions. Third, it is hoped that the findings will directly guide the work of the Islamic Financial Services Board and the AAOIFI in harmonising prudential standards in the jurisdictions where they operate, with some having structurally different regulatory environments, in order to demonstrate to supervisory authorities and bank management the levers that most effectively control credit risk, both internally and externally.

LITERATURE REVIEW

This section summarizes the existing literature on the determinants of Islamic bank CR, particularly in Asian and Middle Eastern countries. It elaborates the theory behind the different risk properties of Islamic financial contracts, provides an overview of evidence on regulatory quality as an external governance mechanism and recaps the available knowledge on the impact of the COVID-19 shock on banks' asset quality, and concludes with the hypotheses tested in this study.

Theoretical Literature

The theories used in this study include Financial Intermediation Theory, Agency Theory and Institutional Quality Theory. Apart from the fact that banks offer convenience and protection, financial intermediation theory and the economics of imperfect information helps to understand why banks are needed to resolve information problems among depositors and users of funds (Diamond, 1984). Diamond's delegated monitoring model highlights the ability for an intermediary to reduce monitoring costs by aggregating the funds of multiple depositors and reducing the diversifiable component of default risk. This becomes more difficult to do in a clean manner for intermediaries when they share profit and loss, instead of a fixed return. Sobarsyah, et al. (2020) state that in Islamic banking the gap between these two often grows larger in equity based contracts like Mudharabah and Musyarakah due to monitoring deficiency and insufficient control over an entrepreneur project, which makes it easy to cause moral hazard and adverse selection. Agency Theory introduces a second layer by outlining issues arising from differences between the shareholders and managers (Eisenhardt, 1989), where managers might prefer to boost asset size or undertake

more aggressive short-term earning strategies than thorough credit screenings in the absence of strong management controls. Eisenhardt (1989) conceptualizes this friction as a principal-agent problem, which is the basis of the problem that allows outcome based contracts (OBCs) and external monitoring to play a role in alleviating it. Srairi (2024) emphasizes the importance of good governance structures in minimizing agency problems, as they deter management from undertaking excessive financing and risky transactions. These theoretical lenses point to regulatory quality as the key external constraint and structural cushion to keep these managerial incentive problems within check.

Nguyen (2024) used a third theory, institutional quality theory, which views regulatory quality as part of the broader institutional structure when examining the impact of bank risk taking. According to Nguyen (2024), institutions are formal and informal rules that organize political, economic and social interactions, and institutional quality determines the transaction costs of interactions, hence the efficiency of an economy's financial system. This infrastructure comprises of the rule of law and government effectiveness, the conditions that influence the actions of economic actors and their interactions. This view is that high quality institutional environment is crucial to minimize issues in the context of information asymmetry and transaction costs. A sound institutional structure reduces moral hazard and adverse selection, and makes bank managers more careful about their loans to meet regulations. Islamic banking institutions' strength in a country, in turn, affects the uniformity of prudential supervision as it influences the credit risk that a bank will assume when it enters into a financing contract. This theory thus supports Agency Theory by attaching the cause of regulatory discipline to the quality of the institutional environment in which those regulators and managers work, as well as the supervisory relationship.

Empirical Studies on Regulatory Quality and Credit Risk

Much debate exists in the literature on the impact of regulation on asset quality. Another view, which is sometimes referred to as the regulatory discipline perspective, suggests that robust laws and strong institutions reduce excessive risk taking and promote prudent credit appraisal, which is borne by the evidence from the banking systems of the Gulf Cooperation Council (GCC) (Srairi, 2024). An alternative theory is that stringent regulations limit a bank's capacity for diversification, thereby exposing it to more shocks than it can withstand. Belabes (2022) speaks from an Islamic monetary viewpoint, echoing a similar sentiment: private banks have credit and money creation constraints within the frameworks

of laws and regulations that central banks often fail to enforce, which is why the quality of the regulatory environment is just as important as its existence when it comes to the stability of the credit cycle. Going by evidence from a wider cross country panel across Asian and Middle Eastern dual banking systems, higher institutional quality also correlates with lower risk of default pointing to the regulatory discipline channel is not limited to the GCC only (Fakhrunnas et al., 2025). The pathway of this discipline is generally one of supervisory intensity: countries with higher scores at both rule of law and government effectiveness have more consistent application of loan classification and provisioning rules, meaning that the scope of exposure rollover or reclassification, as opposed to recognition, of the distressed exposures is more narrowly defined (Srairi, 2024). This channel also seems to be present in both civil and common law legal traditions (Fakhrunnas et al. 2025), hence the present study does not limit the analysis to one legal or geographic setting, but rather includes regulatory quality as a pooled cross regional construct. There is a recent cross country study which provides a useful counterpoint to this discipline narrative. In their analysis of the non performing loans of a sample of Islamic banks in 30 countries, Othman and Gabbori (2024) do not find a negative correlation between AAOIFI membership and NPLs, but a positive one due to the extra compliance and provisioning requirements which follow the introduction of Shariah specific accounting and impairment requirements like FAS 30. Therefore, introducing a more stringent standard can actually increase reported non performing exposures in the short term, while at the same time the standard is implemented and will result in an increase in the underlying rigour of risk recognition, which is not necessarily correlated with the direction of the bank's headline credit risk ratio, even in a deeper sense of being a measure of better governance.

Empirical Studies on the Impact of COVID-19 and Macroeconomic Factors

In the literature, COVID-19 has always been viewed as a serious negative macroeconomic shock. Lockdowns during the pandemic affected not only the health of people and communities, but also affected the cash flow of households and companies, resulting in GDP contraction, losses in stock markets, and an increase in unemployment rates in the MENA region, including the GCC and the rest of the Middle East region (Hassan et al., 2021). The profitability and leverage ratios were also negatively impacted at the bank level as soon as the pandemic hit, with some banks posting negative ROA and a decline in profit margin in 2020 (Makni, 2022). Banks subject to financing moratoria experienced

immediate relief from financial effects via central bank facilities, but the level of recovery has varied in the sector since. Similar findings of declining profitability and asset quality indicators have been documented for Islamic banks in the MENA region up to the early of the pandemic by El-Chaarani (2023), with the severity of the impacts measured by country, based on the strength of loan moratoria programmes and pre-pandemic deposit insurance coverage in each country. In general, macroeconomic factors like monetary policy stance and GDP growth are still considered as relevant though not necessarily determining factors of Islamic bank credit risk (Savon, 2025).

Empirical Studies on Political Stability and the Institutional Environment

As the World Bank's Worldwide Governance Indicators, which underlie this study's Regulatory Quality measure, include a dimension on political stability, evidence of political instability directly relates to the institutional construct at the heart of this paper's regulatory quality hypothesis. Zaiane and Ben Moussa (2021) investigate a cross section of Islamic and conventional banks in the MENA region and conclude that, the Arab Spring had a strong negative impact on the performance of both types of banks, while the effect of regulatory quality was estimated separately and had a different impact on Islamic and conventional banks. Their results of political unrest being correlated with institutional quality but not the same suggests that the issue of institutional quality is a composite of multiple dimensions, rather than one. A similar result is obtained from a geopolitical risk index for banks in the Middle East and North Africa, by Aledeimat and Bein (2025b), who conclude that there is a negative and significant relationship between geopolitical risk and NPLs and financing in both Islamic and conventional banks. This evidence suggests that the political stability dimension which is part of Regulatory Quality does not appear to be incidental to the influence of the institutional story tested in this study, although the model does not include it as a separate variable, but as part of the composite score of the WGI Regulatory Quality dimension.

Empirical Studies on Bank Specific and Macroeconomic Determinants

In addition to institutional governance and the pandemic shock, there is a separate body of literature that correlates Islamic bank credit risk with the strength of banks' balance sheets. This work highlights the importance of capital buffers, as a mechanism of safeguarding banks from the negative impact of credit risk , which measured as non performing financing (NPF), as can be seen in the findings of Abdeljawad et al. (2024), who find capital buffer is significantly

and negatively associated with NPF in the MENA region; and in terms of economies of scale, Zuhroh (2022) documents that the larger the entity, the better the cushioning effect on non performing financing (NPF) among Asian Islamic banks. Similarly, Badarin et al. (2025) draw the same conclusion for Middle Eastern banks in particular, thus establishing size as a risk buffer shared across the two areas. The capital buffer finding aligns with the direction of the Islamic Financial Services Board's capital adequacy standard which includes exposures under profit and loss sharing arrangements due to the logic that a higher capital cushion would provide management greater flexibility to withstand losses on financing without being required to sell distressed assets or reduce their credit exposures. However, the picture regarding liquidity is not as clear-cut, as Mohammad et al. (2020) and Kusnandar (2022) both suggest that Islamic banks hold liquid assets for profit and loss sharing contract-related reasons, rather than as a deliberate move to hedge against credit risk, thus explaining the relatively weak or inconsistent liquidity findings across the literature. The growth of banks is also double edged. Rapid growth in financing can result in asset quality issues that are not immediately apparent and become visible only through a denominator effect, as illustrated by Sobarsyah et al. (2020), the consequences of which are relevant for the interpretation of growth in this study. The macroeconomic growth completes this set of determinants, because the Indonesian Islamic banks' credit risk is highly sensitive to the country level regulatory environment, as observed by Fakhrunnas et al. (2022) and Savon (2025) that the fundamentals of the Islamic banks is likely to be more important than the aggregate economic cycle in this sector.

Therefore, to combined, this collection of writings raises two questions that inspire the current investigation. One, most research so far has focused on individual country or individual region, without examining how they correlate in the case of Islamic banking in Asia and Middle East at a time. Second, and more centrally, regulatory quality and the COVID-19 shock are not commonly specified together with these internal determinants, making it uncertain whether institutional governance still has a disciplining effect when these other bank level determinants and a global health shock are included together in the same specification. The following hypotheses have been constructed to close both gaps in one cross regional panel.

Hypothesis Development

H1: Credit risk is significantly related to Capital Adequacy (Abdeljawad et al., 2024).

H2: There is a strong correlation between liquidity and credit risk (Kusnandar, 2022; Mohammad et al., 2020).
H3: There is a significant positive relationship between bank Growth and credit risk (Sobarsyah et al., 2020).
H4: There is a considerable relationship between bank size and credit risk (Badarin et al., 2025; Zuhroh, 2022).
H5: There is a significant connection between Regulatory Quality and credit risk (Fakhrunnas et al., 2025; Nguyen, 2024).
H6: Credit risk is significantly related to the state of the Economy (Fakhrunnas et al., 2022; Savon, 2025).
H7: Credit risk is statistically different during the COVID-19 period compared with before the pandemic (El-Chaarani, 2023; Srairi, 2024).
H8: There is a significant difference in the average level of credit risk between Islamic banks in Asia and the Middle East (Aledeimat & Bein, 2025a; Misman & Bhatti, 2020).

METHODOLOGY

Data Description and Variables

The sample of the study consists of an unbalanced annual panel of selected commercial Islamic banks in selected Asian and Middle Eastern countries covering the period 2014-2024. The panel consists of two types of source data: financial statement variables at the level of the individual banks were sourced from the commercial financial database FitchConnect; the scores for institutional governance at the country level and the macroeconomic indicators were sourced from the World Bank's Worldwide Governance Indicators (WGI) and World Development Indicators (WDI) respectively.

Credit Risk (CR) is measured by the Non Performing Financing (NPF) ratio which is non performing financing over gross financing. The two main independent variables are Regulatory Quality (RQ) from the WGI dataset, and a dummy variable for the COVID-19 (0 for 2014-2019 and 1 for 2020-2024). Control variables are Capital Adequacy (CAR), Liquidity (liquid assets/total assets), Bank Size (Ln of total assets), Bank Growth (gross financing year on year growth), real GDP growth and Region dummy (1 – Asia, 0 – Middle East).

Table 1: Description of Variables and Proxies

Variable	Stata Name	Measurement	Source
Credit Risk	creditrisk	$\frac{Impaired\ Loans\ (NPLs)}{Gross\ loans}\ x\ 100$	Fitch Connect (2023)
Capital Adequacy	capital	$\frac{Tier\ 1\ Capital}{Risk\ Weighted\ Assets} x\ 100$	Abdeljawad (2024)
Liquidity	liquidity	$\frac{Liquid\ Assets}{Total\ Assets} x\ 100$	Fitch Connect
Bank Size	banksize	Natural log (Ln) of Total Assets (USD)	Purwohandoko & Iriani (2021)
Bank Growth	bankgrowth	$\frac{Total\ Assets_t - Total\ Assets_{t-1}}{Total\ Assets_{t-1}} x\ 10$	Shubita (2021)
Regulatory Quality	regulatoryquality	WGI Index Score (−2.5 to 2.5)	World Bank WGI; Fakhrunnas (2025)
Economy	gdp	Annual GDP Growth Rate (%)	World Bank WDI; Savon (2025)
COVID-19 Period	coviddummy	$0 = Non - Covid$ $(2014 - before\ 11\ March\ 2020\ and\ after\ 5\ May\ 2023);$ $1 = Covid$ $(11\ March\ 2020 - 5 - May\ 2023)$	World Health Organization (2020, 2023)
Region	region	Binary: 1 = Asia; 0 = Middle East	Misman & Bhatti (2020)

Econometric Specification

The static panel regression model is specified as:

$$NPF_{it} = a + \beta_1 CAP_{it} + \beta_2 LIQ_{it} + \beta_3 GROWTH_{it} + \beta 4\ SIZE_{it} + \beta_5 REGQ_{it} + \beta_6 GDPit + \beta_7 COV_{it} + \beta_8 REGION_i + \varepsilon_{it}$$

where i denotes each of the banks and t denotes each of the years in the panel; α is the model intercept, β_1 to β_8 are the slope coefficients to be estimated, and εit is the composite disturbance term.

Estimation Technique

The iterative Cook's Distance outlier detection and removal, descriptive and correlation analysis (Pearson pairwise correlation), and Hausman specification test were performed in Stata in three successive steps, respectively. The necessary outlier trimming and eliminating of banks with fewer than three years of observations resulted in a final estimation sample of 371 bank year observations from 48 banks. Descriptive statistics and Pearson pairwise correlation coefficients were reviewed for all variables prior to estimation and indicated that there was no significant multicollinearity (correlation between independent variables were less than 0.30 in magnitude; the variance inflation factor check returned a mean VIF of 1.38; no single variable had a value greater than 1.95 < 10). The Hausman test has a chi squared value of 10.45 ($p = 0.1647$) which is not significant, thus supporting the consistent and efficient estimator, Random Effects (RE). Prior to excluding banks with fewer than 3 years of data, groupwise heteroskedasticity was also diagnosed (Modified Wald test, $chi2(56) = 3115.41$, $p < 0.01$) as well as first order serial correlation (Wooldridge test, $F(1,44) = 26.62$, $p < 0.01$). Both of these findings led to the final model being estimated by RE Generalised Least Squares with cluster robust standard errors (vce cluster idbank) to account for both heteroskedasticity and serial correlation within each bank.

FINDINGS AND DISCUSSION

Empirical Regression Analysis

Cluster robust standard errors are used in the estimation of the Random Effects specification. Overall model fit is good: The Overall R squared is 0.5386; thus, the model explains about 54 per cent of the cross bank, cross year variation in credit risk. The null hypothesis that all of the slope coefficients are jointly zero is rejected by a Wald $\chi 2$ of 119.31 ($p = 0.0000$), which also provides support for model significance. Each of the hypotheses was tested at the 5% significance level.

Table 2: RE GLS Regression with Cluster Robust Standard Errors (Dependent Variable: Credit Risk)

Variable	Coefficient	Std. Error
Regulatory Quality	-1.0916***	0.1757
COVID-19 Pandemic	0.0730	0.0787
Capital Adequacy	-0.0544***	0.0128
Liquidity	-0.0019	0.0087
Bank Size	-0.2106**	0.0802
Bank Growth	-0.0178***	0.0026
GDP	0.0093	0.0080
Region	0.2109	0.1798
Constant	7.9711***	1.9726

Notes: *Observations = 371; Groups = 48; Overall* $R^2 = 0.5386$*; Wald* $\chi^2 = 119.31$***. *Standard errors in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels respectively.*

Note: The results reported in the discussion below are reported against the 1%, 5% and 10% bands reported in Table 2 and not against the 5% mark only as a strict pass/fail line. Two coefficients (Liquidity and Region) are just outside of the 5% band but still within the 10% band, and are thus to be interpreted as providing weak, suggestive evidence, not to be summarily rejected as is the common practice in applied econometrics of drawing one conventional cut-off line and dismissing the others.

The Effect of Regulatory Quality on Credit Risk

A negative coefficient is found for the institutional governance variable with respect to the credit risk variable, which is statistically significant at the 1% level ($\beta = -1.0916$, $p < 0.01$); credit risk is found to be negatively correlated with the institutional governance variable, meaning that a one-unit increase in the WGI regulatory quality scale results in an approximately one-unit decrease in the credit risk ratio. The most apparent explanation for this result is given by Agency Theory. As supervisory bodies strengthen, banks become more underwritten and credit files are more closely examined, thus reducing the discretion that managers have in attempting to increase asset size at the cost of deteriorating screening

quality, the incentive problem at the very core of the shareholder manager relationship pointed out by Agency Theory. This external check seems to be more important for Islamic banks than for conventional banks, given the high level of moral hazard risk that these Islamic contracts already impose due to limited monitoring of the way financed projects are managed. The finding reported here is in line with the findings of Srairi (2024) and Raditya and Wibowo (2022).

The Effect of the COVID-19 Pandemic on Credit Risk

The coefficient of COVID-19 dummy is positive but statistically insignificant ($\beta = 0.0730$, $p = 0.354$).The panel observes that, while there was some modest increase in credit risk ratios between 2020 and 2024, it does not see this as a reliable trend, likely because financing moratoria and regulatory forbearance throughout Asia and the Middle East did not always shift registered asset quality, but appeared to keep the ratings at relatively steady levels.

Control Variables

Capital Adequacy is one of the control variables that emerges significantly negative at the 1% level ($\beta = -0.0544$, $p < 0.01$). This is consistent with the findings of Sobarsyah et al. (2020) and Abdeljawad et al. (2024) which show that a higher capital cushion gives banks more flexibility to absorb financing losses without these losses being treated as impaired assets. Liquidity, on the other hand, is negative, but statistically not significantly different from zero ($\beta = -0.0019$, $p = 0.827$); once the other predictors enter the model, the amount of liquid assets holds by Islamic banks does not reliably predict the credit risk ratio, which is consistent with the findings of Mohammad et al. (2020) and Kusnandar (2022) who attribute the creation of liquid assets in Islamic banks to the requirements of the profit and loss sharing contract rather than to deliberate credit risk management. Supporting H4, and in line with results found by Zuhroh (2022) and Badarin et al. (2025), Bank Size has a significant negative coefficient at the 1% level ($\beta = -0.2106$, $p < 0.1$), which suggests that larger balance sheets tend to lead to economies of scale in credit evaluation, as well as a more diversified and broadened financing book.

Bank Growth is highly significant and negative at the 1% level ($\beta = -0.0178$, $p < 0.01$); this coefficient should not be interpreted as an increase in the safety of banks. A simple arithmetic explanation is that when the gross financing base grows rapidly, the denominator grows faster than defaults can be added to the numerator, thus the credit risk ratio mechanically declines without any

change in the underlying quality of the loans (Sobarsyah et al., 2020). The results of the regression analysis of the growth rate of GDP in the panel regressions obtained positive but insignificant values, so that in this panel the growth rate of GDP is more explained by the condition of bank specific fundamentals than the overall economic cycle, as in the findings of Savon (2025) and Fakhrunnas et al. (2022). The Region dummy is positive but not statistically significant (β = 0.2109, p = 0.241) indicating that after controlling for bank specific and institutional factors, this pooled model does not discern a statistically reliable average difference in credit risk between Asian and Middle Eastern Islamic banks, broadly in line with Misman and Bhatti (2020) and Aledeimat and Bein (2025a). It is important to note that this model pools both regions, and that this test is not about the difference in effect of individual risk drivers by region but rather whether there is a difference in the average level of credit risk.

LIMITATIONS AND FUTURE RESEARCH

The pooled specification used in this paper assumes that a common set of coefficients applies across Asia and the Middle East and that Region is used only as an intercept shift. This paper does not cover estimating region specific sub sample because the coefficients would be different for each region, including Regulatory Quality. The sample is also confined to commercial Islamic banks with data from at least three years and Regulatory Quality is assessed using the WGI index on an annual basis, which would not reflect within year changes in the supervision practice. Finally, for the same reasons as most other panel studies of this type, the reverse causality between bank specific fundamentals (e.g., size, growth) and bank risk (financial and credit risk) cannot be completely excluded, and future studies might utilize instrumental variable methodology or region specific sub sample models that extend the research findings.

CONCLUSION

This study analyzed the institutional, bank specific, and macroeconomic factors influencing credit risk of the commercial Islamic banks in selected Asian and Middle Eastern countries from 2014 to 2024. Regulatory Quality contributed greatly to lowering credit risk by having good governance and lower moral hazard. The COVID-19 pandemic did not result in a significant increase in credit risk; this is attributed to the payment moratoria and regulatory forbearance that helped maintain asset quality during the pandemic. It was confirmed that capital buffers and bank size are significant internal factors determining financial soundness and that the negative coefficient on bank growth is a short term

denominator effect and does not actually indicate improved credit quality. The regional average difference in credit risk, the liquidity, and GDP growth were not statistically significant in this pooled specification.

RECOMMENDATIONS

The results lead to three implications. At the supervisory level, the strong negative correlation between regulatory quality and credit risk provides a clear incentive for both authorities to strive to improve the quality of national supervisory frameworks towards the standards set by the Islamic Financial Services Board and AAOIFI, as it is the rigour of supervision, not simply its existence, that helps ensure that unscreened credit expansion does not become impaired financing. For the institution level, it is not enough that banks are regulated, it is also important that they build up their internal stress testing capability around less conventional shocks, for example health crisis or supply chain disruption, and that they create counter cyclical provisioning buffers during good years, for example, so that they are better prepared before the next downturn. Finally, after controlling for bank fundamentals and institutional quality, the case for a region-specific banking system seems less compelling than the case for region convergence; harmonizing governance standards and legal recovery mechanisms in Asia and the Middle East would increase the collective resilience of the dual banking system, but not necessarily require each of the two regions to become more resilient individually.

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