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ASSESSING THE STABILITY OF THE ISLAMIC BANKING INDUSTRY AMID THE COVID-19 PANDEMIC

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The IFSB is an international standard-setting organisation which was officially inaugurated on 3 November 2002 and started operations on 10 March 2003. The organisation promotes and enhances the soundness and stability of the Islamic financial services industry by issuing global prudential standards and guiding principles for the industry, broadly defined to include banking, capital markets and insurance sectors. The standards prepared by the IFSB follow a lengthy due process as outlined in its Guidelines and Procedures for the Preparation of Standards/Guidelines, which includes issuing exposure drafts and holding of workshops and, where necessary, public hearings. The IFSB also conducts research and coordinates initiatives on industry-related issues, and organises roundtables, seminars and conferences for regulators and industry stakeholders. Towards this end, the IFSB works closely with relevant international, regional and national organisations, research/educational institutions and market players.

For more information about the IFSB, please visit **www.ifsb.org**.

ABBREVIATIONS

AAOIFI	Accounting and Auditing Organization for Islamic Financial Institutions
DCR	Displaced Commercial Risk
GN	Guidance Note
IAH	Investment Account Holder
IFRS	International Financial Reporting Standards
IFSB	Islamic Financial Services Board
IMF	International Monetary Fund
PSIA	Profit-Sharing Investment Account
PSIFIs	Prudential and Structural Islamic Financial Indicators
RPSIA	Restricted Investment Account
RSAs	Regulatory and Supervisory Authorities
RWA	Risk-Weighted Assets
UPSIA	Unrestricted Profit-Sharing Investment Account

GLOSSARY

Islamic Window	That part of a conventional financial institution (which may be a branch or a dedicated unit of that institution) that provides both fund management (investment accounts) and financing and investment that are Sharīʿah -compliant – that is, with separate funds. It could also provide *takāful* or *retakāful* services.
Muḍārabah	A partnership contract between the capital provider (*rabb al-māl*) and an entrepreneur (*muḍārib*) whereby the capital provider would contribute capital to an enterprise or activity that is to be managed by the entrepreneur. Profits generated by that enterprise or activity are shared in accordance with the percentage specified in the contract, while losses are to be borne solely by the capital provider unless the losses are due to misconduct, negligence or breach of contracted terms.
Murābaḥah	A sale contract whereby the institution offering Islamic financial services sells to a customer a specified kind of asset that is already in its possession, whereby the selling price is the sum of the original price and an agreed profit margin.
Mushārakah	A contract between the institution offering Islamic financial services and a customer whereby both would contribute capital to an enterprise, whether existing or new, or to ownership of real estate or a movable asset, on either a temporary or a permanent basis. Profits generated by that enterprise or real estate/asset are shared in accordance with the terms of the *mushārakah* agreement, while losses are shared in proportion to each partner's share of capital.
Sharīʿah	The practical divine law deduced from its legitimate sources: the Qur'ān, Sunnah, consensus (*ijmāʿ*), analogy (*qiyās*) and other approved sources of the Sharīʿah.
Sharīʿah Board	An independent body set up or engaged by the institution offering Islamic financial services to supervise its Sharīʿah compliance and governance system.
Sharīʿah Non-Compliance Risk	An operational risk resulting from non-compliance of the institution with the rules and principles of Sharīʿah in its products and services.
Ṣukūk	Certificates that represent a proportional undivided ownership right in tangible assets, or a pool of tangible assets and other types of assets. These assets could be in a specific project or specific investment activity that is Sharīʿah-compliant.
Tawarruq or Commodity *Murābaḥah*	A *murābaḥah* transaction based on the purchase of a commodity from a seller or a broker and its resale to the customer on the basis of deferred *murābaḥah*, followed by the sale of the commodity by the customer for a spot price to a third party for the purpose of obtaining liquidity, provided that there are no links between the two contracts.

ABSTRACT

This working paper assesses the preliminary effects and implications of the abrupt and pervasive COVID-19 pandemic for the stability of the Islamic banking industry in eight IFSB member jurisdictions. Data used for the analysis are extracted from the IFSB Prudential and Structural Islamic Finance Indicators (PSIFIs) from 1Q 2018 to 3Q 2020. Data for 1Q 2020, 2Q 2020, and 3Q 2020 are compared across the core prudential indicators in the PSIFIs to observe quarter on quarter changes. Also, a pre-COVID-19 and co-COVID-19 repeated measures t-test is conducted to assess the statistical significance of preliminary effects of the pandemic. Z-score as a proxy for Islamic banking sector stability is also computed for each country and each quarter. Findings indicate that, while the Islamic banking sector across jurisdictions in the sample are stable and still recorded prudential indicators well above the minimum regulatory and historical average thresholds, changes are also observed across indicators and countries following COVID-19 outbreak. The implications of the findings are also discussed.

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SECTION 1: INTRODUCTION

Unlike the 2007–8 Global Financial Crisis (GFC), which originated from the financial ecosystem and mainly in the developed economies, the COVID-19 shock is abrupt and pervasive. Although it is essentially a health crisis, the pandemic has had a devastating effect on the real sector to which the Islamic banking industry is highly exposed.[1] There has been a significant disruption to production and sales activities as well as supply chains due to movement and travel restrictions, job losses, reduced demand for goods and services, reduced commodity prices etc.

Islamic banks (IBs) entered the current financial crisis induced by the COVID-19 pandemic relatively better capitalised, more profitable and more liquid than when the GFC occurred just over a decade ago. This is mainly due to gains from the implementation of comprehensive banking reforms after the GFC. The Islamic Financial Services Board's (IFSB) *Islamic Financial Services Industry (IFSI) Stability Report 2020* also projected a sense of optimism in its outlook for the Islamic banking segment in the near term. However, the report also added a caveat that the favourable projections would need to be reconsidered due to the impact of the COVID-19 shock.

The implications of the COVID-19 pandemic for the Islamic banking segment's stability depend on among other factors how IBs respond to a flurry of emergency prudential policy measures taken by the regulatory and supervisory authorities (RSAs) in their respective jurisdictions.[2] While these policy measures generally apply to both the IBs and their conventional counterparts, there are peculiar implications for the former due to (among other factors) the size and portfolio components of their balance sheet relative to the latter.

Cognisance is taken that some of these emergency policy measures are inconsistent with prudential recommendations, which can also generate new risks,[3] have a limited effect if the pandemic persists, and result in a further contraction in the real economy. For instance, as noted, the flexibility granted by the RSAs to the banks in the application of prudential standards and the treatment of potentially impaired financings may not immediately reflect adversely on their regulatory capital ratios but could eventually leave banks in an unsound position.[4]

RSAs have also allowed IBs in their jurisdictions to use capital and liquidity buffers to absorb the impact of the shock from COVID-19. In the event that the pandemic is

[1] Approximately 87% of IBs' financing exposure is to the real sector and remains largely concentrated in the wholesale and retail trade (27%) and household (26%) and manufacturing (18%) sectors. Other sectors include real estate (6%), construction (6%) and agriculture (4%).
[2] The IFSB COVID-19 policy compendium and policy tracker provide details on a range of regulatory and supervisory measures that are being pursued in its various member jurisdictions to find a balance between ensuring financial stability and supporting economic activity: https://www.ifsb.org/page_covid19.php.
[3] *COVID-19: The Regulatory and Supervisory Implications for the Banking Sector*: A Joint IMF–World Bank Staff Position Note (2020). https://www.imf.org/-/media/Files/Publications/Miscellaneous/English/2020/IMFWBSPNEA2020001.ashx
[4] Toronto Centre (2020). *Supervisory Responses to the Impact of COVID-19 on Credit Quality*. https://www.google.com/search?q=supervisory+response+to+covid+19%2Btoronto&rlz=1C1GCEU_enMY890MY890&oq=supervisory+response+to+covid+19%2Btor&aqs=chrome.1.69i57j33i160.16341j1j4&sourceid=chrome&ie=UTF-8#

prolonged, and losses materialise gradually, depleted buffers may slow the recovery or undermine the stability of the IBs during the later stages of the crisis.[5]

In many jurisdictions, especially throughout summer and autumn of 2020 there was a gradual relaxation of the movement restriction orders put in place to flatten the curve of the spread of the pandemic. Similarly, the various fiscal measures introduced by governments to stimulate the economy and reduce the burden on citizens were also gradually being relaxed. As many countries were entering the recovery phase of the first wave of the pandemic and gradually further easing restrictions, a new wave was recorded and subsequently compounded by the discovery of a more infectious mutation of the SARS-CoV-2 virus.[6] This has led to reintroduction of new personal and economic restrictions. More fiscal measures are also put in place to absorb the economic shock.

Ultimately, only the widespread availability and usage of a vaccine may overcome the COVID-19 pandemic and its economic implications. For now, the impact and duration of the pandemic, as well as pattern of economic recovery remains unclear.[7] In this case, the effect of the first and subsequent waves of the pandemic especially on households and businesses will likely start to manifest in the last quarter of 2020 or early 2021 and reflect in (but not limited to) the significant increase in financing delinquencies, operating costs, and strained market liquidity.

Due to unavailability of data, along with the limitation of using macro data to model the effects of tail events like a pandemic, it is difficult to nowcast or forecast economic conditions,[8] or to assess the likely impact of the pandemic on the Islamic banking segment. As such, few studies, albeit conceptual, have focused on the specificities of Islamic financial services and on the state of the economy of those countries where Islamic banking is currently being practised.

Nonetheless, safeguarding the financial stability of the Islamic banking industry is very important, as its links to the real economy make it inseparable from the overall performance of the economy. Moreover, the Islamic banking segment currently accounts for 72% of the asset worth of the global IFSI, grew 12.4% y-o-y in 2019, and now systemically important in 13 jurisdictions.[9] In most instances in countries where Islamic banking is practiced, Sharīʿah-compliant financing to households, non-financial corporations, government and the rest of the world accounts for more than 70% of total assets of IBs.[10]

This working paper assesses the preliminary effects and implications of the COVID-19 pandemic for the stability of the Islamic banking segments in some IFSB member jurisdictions. The remainder of this working paper is structured as follows. Section 2

[5] M. Drehmann, M. Farag, N. Tarashev and K. Tsatsaronis (2020), "Buffering COVID-19 Losses – the Role of Prudential Policy", *BIS Bulletin*, No. 9: https://www.bis.org/publ/bisbull09.htm

[6] Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is the strain of coronavirus that causes coronavirus disease 2019 (COVID-19), the respiratory illness responsible for the COVID-19 pandemic.

[7] For several potential patterns of economic recovery, see L. Sheiner and K. Yilla (2020), *The ABCs of the Post-COVID Economic Recovery*. Hutchins Centre on Fiscal and Monetary Policy at Brookings: https://www.brookings.edu/blog/up-front/2020/05/04/the-abcs-of-the-post-covid-economic-recovery/

[8] C. Foroni, M. Marcellino and D. Stevanovic (2020). *Forecasting the COVID-19 Recession and Recovery: Lessons from the Financial Crisis.* Centre for Interuniversity Research and Analysis on Organizations (CIRANO): https://ideas.repec.org/p/cir/cirwor/2020s-32.html.

[9] Islamic banking assets account for at least 15% of the total value of domestic banking in these jurisdictions.

[10] IFSB PSIFIs for various quarters and for various countries. https://www.ifsb.org/psifi_01.php

focuses on the data and methodology adopted in this paper. Section 3 focuses on the implications of COVID-19 for the stability of the Islamic banking industry in the selected countries, while section 4 presents a conclusion and recommendations.

SECTION 2: DATA AND METHODOLOGY

The eight jurisdictions[11] covered in this working paper have attained different levels of Islamic banking development, with four attaining systemic significance. It is assumed that the abruptness and pervasiveness of COVID-19 should moderate comparison among the countries. Moreover, the Islamic banking sector in a country is viewed as a whole rather than on an institution-by-institution basis. This is not prejudicial to the fact that there may be weaker Islamic banking institutions within a jurisdiction that may find it relatively more difficult to face the challenges arising from the COVID-19 pandemic.

The quarterly data from 1Q 2018 to 3Q 2020 have been extracted from the IFSB PSIFIs database.[12] The core prudential indicators from the PSIFIs – capital adequacy, earnings, assets quality, leverage, and liquidity – are subjected to descriptive analysis based on quarter-on-quarter (q-o-q) change between 1Q 2020 and 2Q 2020, as well as percentage points change in 3Q 2020. The inferential analysis is based on repeated measure t-tests, to observe the changes and statistical significance between the pre-COVID-19 (4Q 2019 – 1Q 2020) and co-COVID-19 (2Q 2020 – 3Q 2020) periods.[13]

Except for a few indicators that have global regulatory minimum benchmark values – for instance, 8% for the capital adequacy ratio (CAR) and 3% for leverage ratio – most other indicators are assessed on either a country cross-sectional or time trend comparative analysis basis. These indicators have been calculated and aggregated by the respective RSAs that submit data to the IFSB's PSIFIs database.

As a measure of stability, the CAR Z-score[14] for each quarter is computed and analysed. This method is quite popular for assessing the soundness of a financial institution or system, and how far it is from insolvency, especially where it is constructed without returns data to avoid a potential measurement bias due to smoothing practices.[15] Moreover, the CAR Z-score is risk-adjusted since the denominator in the CAR computation is the risk-weighted assets. This method is proven to be effective at capturing bank risk.[16]

The CAR Z-score is calculated by dividing the difference between the CAR for each jurisdiction, and the IFSB and global regulatory threshold of 8% in the numerator, by

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[11] These include: Afghanistan, Malaysia, Nigeria, Pakistan, Palestine, Saudi Arabia, Turkey, and the United Arab Emirates. Cumulatively, these countries account for 50% of the global Islamic banking assets. Only the full-fledged IBs are considered given that these jurisdictions segregate the data on Islamic finance activity of conventional banks.

[12] The data coverage period is based the earliest available data for all the eight countries selected for the study.

[13] The pre-COVID-19 period is based on the fact that the lockdown started towards the end of the first quarter of 2020 in the respective jurisdictions. See: *IMF Policy Responses to COVID-19*: https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19#S

[14] For details on the regulatory capital Z-score, see: V. Bouvatier, L. Lepetit, P. Rehault, and F. Strobel (2018). Bank insolvency risk and Z-score measures: caveats and best practice. https://hal-unilim.archives-ouvertes.fr/hal-01937929/document

[15] Some IFSB jurisdictions allow for "smoothing" of returns practices. An exception in this regard is Malaysia, where such a practice has been discontinued since the introduction of investment account guidelines in 2015. Using the regulatory capital Z-score mitigates the potential spurious variability in total assets in a ROA-based Z-score. While this may be attenuated using a ROE-based Z-score, the construction of either return-based Z-scores is still susceptible to the likely tendency of IBs to engage in income smoothing behaviour.

[16] X, Li, D.W.L. Tripe, and C.B. Malone. (2017). Measuring Bank Risk: An Exploration of Z-Score. Available at SSRN: https://ssrn.com/abstract=2823946 or http://dx.doi.org/10.2139/ssrn.2823946

the standard deviation of CAR for each banking sector for each quarter from 1Q 2018 to 3Q 2020 in the denominator. The higher the CAR Z-score obtained, the further is the Islamic banking sector in a jurisdiction from insolvency.

Notwithstanding its wide applicability and popularity as a measure of bank soundness, especially where market data are not available, the Z-score is criticised for being based purely on accounting data and is only as good as the underlying accounting and auditing framework. Moreover, it does not take into consideration the interconnectedness of financial institutions.[17]

The impact of these concerns is attenuated by the fact that the PSIFIs database used in this study consists of macro-level prudential and structural data of IBs in various jurisdictions in an aggregate form as compiled by the RSAs, thus ensuring a high level of data integrity. Moreover, it is argued that the availability of market data is not a strong justification for using a market-based model, which may not provide early warning signals of a crisis, as "by the time they spiked, the market would have tanked already".[18]

Another common criticism of Z-score especially for Islamic banking is that the regulatory capital is underestimated due to an additional protective buffer provided by the risk-sharing contracts on the liability side of the Islamic bank's balance sheet. A counter-argument is offered that the layer of protection is still reflected in the return and capital, given that investment accounts can be withdrawn at a relatively short notice and the profit-sharing rate is predetermined.[19]

The IFSB also proposes a supervisory discretion formula for calculation of the capital adequacy ratio. A parameter, "α" (alpha)[20] is used to reflect the average exposure of IBs in a jurisdiction to displaced commercial risk (DCR) – namely, the transfer or displacement of variability in profits from the UPSIA holders to shareholders arising from smoothing practices. If investment losses are passed through unbuffered, α is equal to 0. If profit smoothing and loss avoidance are at a maximum, α is equal to 1.

SECTION 3: ASSESSING THE STABILITY OF IBs AMID COVID-19

The term "stability" refers to a steady state of the financial system in terms of its efficient and operational functionality. Even in the event of disturbances, further system-wide episodes (crises) that may infringe on such operational efficiency and functionality are not triggered in a stable financial system. In other words, stability is an equilibrium state of resilience in which both the probability of balance sheet shocks to cause systemic instability and the possibility of occurrence of such balance sheets shocks are minimised.[21] In the context of this working paper, "stability" assesses the ability of the

[17] https://www.worldbank.org/en/publication/gfdr/gfdr-2016/background/financial-stability
[18] S.M. Markose (2012), *Systemic Risk from Global Financial Derivatives: A Network Analysis of Contagion and its Mitigation with Super-Spreader Tax*, IMF Working Papers No. 12/282. Washington, D.C.: International Monetary Fund.
[19] M. Čihák, and H. Hesse (2008), *Islamic Banks and Financial Stability: An Empirical Analysis*. IMF Working Paper WP/08/16: www.imf.org
[20] A. Adewale and S. Archer (2019), *Risk Sharing in Islamic Banking.* IFSB Working Paper No. WP-10/05/2019: https://www.ifsb.org/download.php?id=5160&lang=English&pg=/sec03.php
[21] A.W. Salter and V. Tarko (2017), *Governing the Financial System: A Theory of Financial Resilience*. Mercatus Working Paper, Mercatus Center at George Mason University, Arlington, VA. https://www.mercatus.org/system/files/salter-financial-governance-mercatus-working-paper-v1.pdf

Islamic banking system to maintain a steady state of achieving prudential requirements amid vulnerabilities or shocks such as COVID-19.

As stated in the IFSB PSIFIs' compilation guide,[22] the core indicators for assessing the stability of the IBs are grouped into six main categories in line with both Basel III and the International Monetary Fund's (IMF) Financial Soundness Indicators (FSIs). These indicators which include: capital adequacy, asset quality, earnings, leverage, liquidity, and sensitivity to risks[23] have been adjusted accordingly where necessary to reflect the specificities of Islamic banking. They are thus considered adequate to capture both the strengths and vulnerabilities of the sector across reporting jurisdictions.

Capital Adequacy

This first category measures the amount of a jurisdiction's Islamic banking sector regulatory capital expressed in terms of its risk-weighted assets. Adequate capital is needed as a buffer against balance sheet shocks and unexpected losses. As a measure of the degree of systemic solvency, CAR reflects an Islamic banking system's capacity for loss absorbency and operational expansion.

The numerator of this ratio is further decomposed into two: Tier 1 and Common Equity Tier (CET1), to reflect the highest degree of liquidity and capital certainty. Reporting of either or both depends on the level of implementation of Basel III in a jurisdiction. The denominator is also adjusted for jurisdictions where smoothing practices[24] are not allowed on profit pay-outs by an IB to its investment account holders (IAH). Given that losses are fully passed back to the IAH, IBs are not required to hold regulatory capital for both credit and market risks arising from assets funded by the profit-sharing investment accounts (PSIA).

As stated in the IFSB's *Revised Capital Adequacy Standards* (RCAS),[25] Islamic banks are expected to have, at all times, at the minimum, eligible capital (Tier-1 capital plus Tier-2 capital) of 8% of total risk-weighted assets (RWAs), a minimum CET1 capital of 4.5% of RWAs, and a minimum Tier-1 capital (CET1 plus AT1) of 6.0% of RWAs.

As shown in Figures 1 and 2, a cross-country comparison of the CAR between 1Q 2020 and 2Q 2020 indicates that the Islamic banking sector in Pakistan and Saudi Arabia, and United Arab Emirates (UAE), as well as the participation banking sector in Turkey recorded an increase in the indicators of CAR. A decline is noted between the periods for the Islamic banking sector in Afghanistan, Malaysia, Nigeria, and Palestine respectively.

A similar trend is observed when the ratios of Tier-1 capital to RWA, and of common CET1 to RWA, are computed, except that a slight increase is noted for Malaysia in these instances between 1Q 2020 and 2Q 2020 but later slightly declined again in 3Q 2020. For all the three capital adequacy ratios and across the countries, the IBs CAR

[22] https://www.ifsb.org/download.php?id=5512&lang=English&pg=/psifi_08.php
[23] Sensitivity to risk is excluded from the analysis because jurisdictions covered in this working paper have either not reported any, or reported different sub-indicators.
[24] IFSB, GN-3 (2010), *Guidance Note on the Practice of Smoothing the Profits Pay-Out to Investment Account Holders*. Kuala Lumpur: Islamic Financial Services Board: https://www.ifsb.org/download.php?id=4388&lang=English&pg=/published.php
[25] IFSB-15: *Revised Capital Adequacy Standard for Institutions Offering Islamic Financial Services [Excluding Islamic Insurance (Takaful) Institutions and Islamic Collective Investment Schemes].*

is well in excess of the required threshold as per IFSB-15.[26] Moreover, except for Malaysia in terms of CAR, and Pakistan in terms of all three capital adequacy indicators, no statistical significance is observed between the pre-COVID-19 and co-COVID-19 period among other jurisdictions based on a repeated measure t-test at an alpha level of 0.05.[27] (See: Table 3.1).

Figure 1. CAR 1Q18 – 3Q20

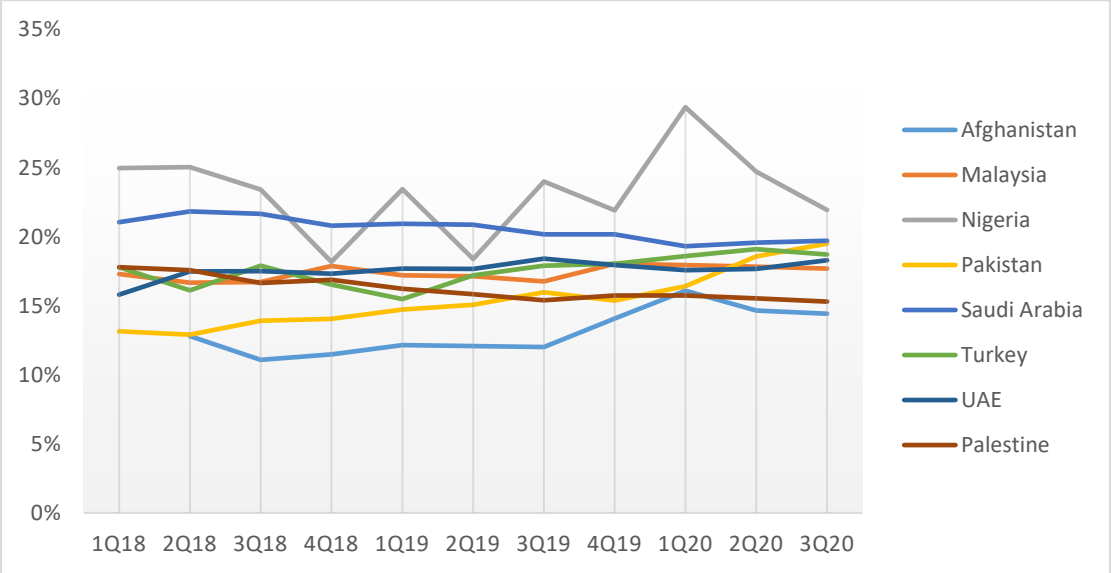
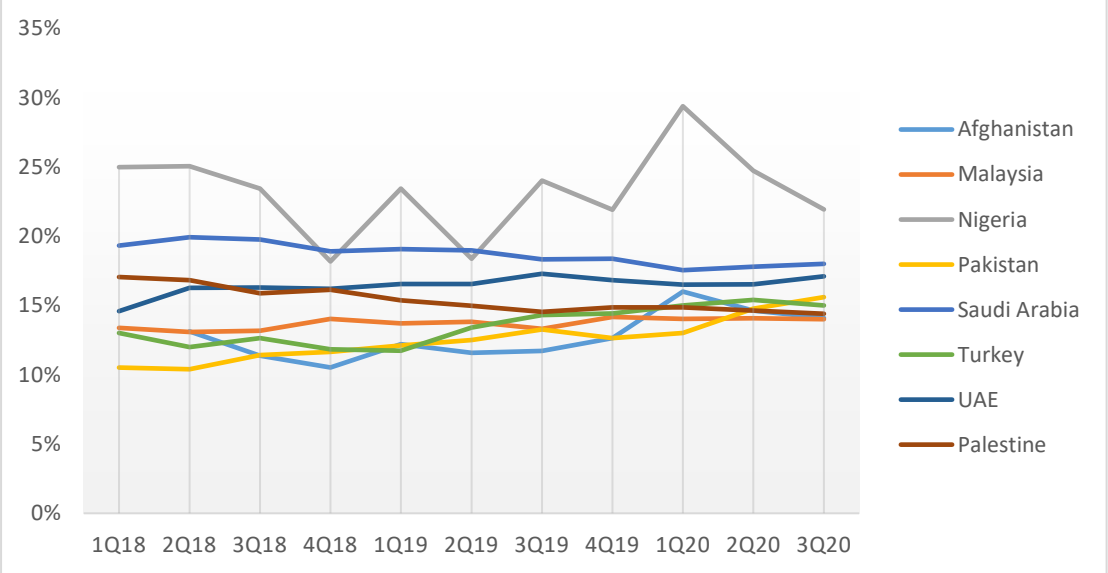


Figure 2 Tier 1 to RWAs 1Q18-3Q20



Source: IFSB PSIFIs

[26] In Afghanistan, the regulatory threshold is 12% of the RWAs. In Nigeria, the threshold is 15% for banks with international authorization and 10% for banks with national or regional authorization. In the UAE, the threshold is 13%. In Turkey, while the regulatory threshold is 8%, the targeted threshold is 12%.
[27] Similar test is conducted on other stability core indicators based on same alpha level of 0.05 (two-tailed).

Table 3.1 Capital Adequacy[28]

Country	Capital Adequacy indicators	1Q 2020	2Q 2020	Q-o-Q change	Pre-COVID	Co-COVID	Change (sig)
Afghanistan	CAR	16.09%	14.66%	-8.90%	13.04%	15.37%	17.89%
	Tier-1 capital /RWA	16.00%	14.62%	-8.63%	12.18%	15.31%	25.69%
Malaysia	CAR	17.95%	17.83%	-0.65%	17.99%	17.75%	-1.33%*
	Tier-1 capital /RWA	14.03%	14.08%	0.38%	14.10%	14.03%	-0.51%
	CET1 capital/ RWA	13.5%	13.5%	0.50%	13.57%	13.49%	-0.56%
Nigeria	CAR	29.38%	24.72%	-15.9%	25.64%	23.33%	-9.01%
	Tier-1 capital /RWA	29.38%	24.72%	-15.9%	25.64%	23.33%	-9.01%
Pakistan	CAR	16.42%	18.57%	13.09%	15.89%	19.05%	19.87%***
	Tier-1 capital /RWA	13.01%	14.77%	13.51%	12.83%	15.18%	18.37%*
	CET1 capital/ RWA	11.5%	13.2%	14.31%	11.44%	13.60%	18.91%*
Palestine	CAR	15.74%	15.53%	-1.37%	15.74%	15.43%	-2.02%
	Tier-1 capital /RWA	14.86%	14.63%	-1.59%	14.86%	14.53%	-2.25%
Saudi Arabia	CAR	19.31%	19.56%	1.31%	19.74%	19.64%	-0.50%
	Tier-1 capital /RWA	17.54%	17.80%	1.47%	17.96%	17.89%	-0.37%
	CET1 capital/ RWA	17.54%	17.80%	1.47%	17.96%	17.89%	-0.37%
Turkey	CAR	18.60%	19.10%	2.69%	17.12%	18.85%	10.13%
	Tier-1 capital /RWA	15.00%	15.40%	2.67%	12.92%	15.20%	17.67%
	CET1 capital/ RWA	12.60%	13.00%	3.17%	11.69%	12.80%	9.47%
United Arab Emirates	CAR	17.57%	17.66%	0.50%	17.75%	17.96%	1.18%
	Tier-1 capital /RWA	16.50%	16.53%	0.50%	17.75%	17.96%	1.18%
	CET1 capital/ RWA	13.13%	13.20%	0.53%	13.27%	13.49%	1.64%

Source: IFSB PSIFIs

Statistical significance: * <.10, **<0.05, and *** <0.01.

The interpretation of the capital adequacy ratios needs to consider how both the numerator and denominator affect its value. Based on the PSIFIs figures between 1Q 2020 and 2Q 2020 no substantial q-o-q increase or decrease is noted in either the regulatory capital or RWAs respectively across the jurisdictions. The capital adequacy indicators for both quarters and the quarterly change are shown in the Table 3.1.

In Afghanistan, the CAR for the Islamic banking sector declined by -1.43 percentage points (pp) (-8.90% q-o-q) to 14.66% in 2Q 2020 compared to the CAR of the entire Afghan banking sector which increased by 0.72pp to 26.69% during the same period. A similar trend is observed for the Tier-1 capital to RWA ratio for the Islamic banking sector which also declined by -1.38pp (-8.63% q-o-q) to 14.62% as at end 2Q 2020.

The decline recorded in the capital adequacy indicators is caused by declining profitability, and lower rate of increase in regulatory capital compared to the RWAs of the Afghan IBs during the period. Specifically, the Afghan Islamic banking sector's regulatory capital increased by less than 1pp even though RWAs increased by 10pp. This is contrary to the performance of the entire banking sector that recorded an increase of 8.56pp in net equity position due to gain in revaluation of assets 'Available for Sale' (AFS) and remarkable profitability in 2Q 2020. Notwithstanding, the CAR for the Afghan Islamic banking sector is higher than the 12% threshold set by Da Afghanistan Bank.

The slight decline observed in the CAR for the Malaysia Islamic banking sector between 1Q 2020 and 2Q 2020 is reflective of the trend observed in the country's entire banking sector since the outbreak of the pandemic. Both the domestic banking sector CAR and Tier 1 capital ratio were 17.1% and 14.5% respectively in April 2020 representing the lowest monthly CAR recorded since November 2019. However, while the CAR for the entire banking sector in Malaysia increased to 19.1% as at end 2Q

[28] The CET1 capital to RWA for Afghanistan, Nigeria and Palestine is not available.

2020 that of the Islamic banking sector recorded a decline of -0.12pp (-0.65% q-o-q) to 17.83% during the same period. A similar observation is made regarding the CET1 capital to RWA ratio which also declined by -0.50% q-o-q as at end 2Q 2020.

The increase recorded in the Tier-1 capital to RWA ratio in 2Q 2020 is explained by the relatively higher increase of 2.80% q-o-q in Tier-1 capital compared to the 2.41% q-o-q increase in RWA. The Bank Negara Malaysia (BNM) also noted that most banks within its jurisdiction are shoring up their capital buffers through for instance, new capital issuances, dividend deferment, dividend reinvestment plans etc.

Although the CAR for the entire banking sector in Malaysia has marginally increased in 3Q 2020, the CAR for the Malaysia full-fledged IBs declined further by -0.16pp to 17.68%, Tier 1 to RWA by -0.12pp to 13.97%, and the CET1 to RWA by -0.11pp to 13.44%. Notwithstanding, all ratios are well above the BNM regulatory capital thresholds of 8.0%, 6.0%, and 4.5% respectively. Moreover, with an excess capital buffer of RM123.7 billion as at end 3Q20, the sector is expected to continue to cope well during the pandemic by providing the needed intermediation support to the real economy.

In Nigeria, the CAR for the Non-Interest Banking (NIB) sector declined by -4.66pp (-15.9% q-o-q) between 1Q 2020 and 2Q 2020. A similar trend is recorded in 3Q 2020 as the CAR declined further by -2.78pp. This is due to the increased RWAs following the implementation of the policy measure by the Central Bank of Nigeria (CBN) to stimulate the economy by providing financing to the real sector.

Although, there was a corresponding increase in total qualifying capital, this had a higher moderating impact on the conventional banks in Nigeria as the total banking system CAR only declined by -0.3pp to 15.0% as at end of 2Q 2020. The limited impact on the CAR of the NIB sector in Nigeria is explained by its relatively small size of only about 0.05% of the total banking assets in the country. Nonetheless, the CAR for the NIB sector at 24.72% as at end 2Q 2020 is well-above the 10% threshold set by the CBN.

Similar pattern is observed in Palestine where the CAR for the Islamic banking sector declined by -0.21pp (-1.37% q-o-q) between 1Q 2020 and 2Q 2020. The trend continued in 3Q 2020 where the sector recorded a further decline of -0.21pp in both its CAR and CET1 to RWA ratio. The slight decline over the period is basically due to the increase in the RWAs as Palestinian IBs comply with the policy measures of the Palestinian Monetary Authority (PMA) to increase financing to the real economy especially the small and medium enterprises.

In the case of Pakistan, the Islamic banking sector recorded an increase in CAR by 2.15pp (13.09% q-o-q) to 18.57%, and an increase in Tier 1 capital ratio by 1.76pp (13.51% q-o-q) to 14.77%. This reflects similar pattern recorded in the entire domestic banking sector with an increase of 3.2pp and 0.7pp to end 2Q 2020 at 18.8% and 14.7% respectively.

Notably, while the regulatory capital especially Tier 1 capital increased due to improved profitability and general reserves, Tier 2 capital increased on the back of unrealised gain on AFS and a rise in foreign exchange translation reserve due to depreciation in the Pakistani Rupee. Moreover, reduction in RWA in 2Q 2020 is observed only in Pakistan among the sampled countries. This is due to both a contraction and shift in financing to less risky assets such as federal government securities and Sukuk and rated corporate exposure given the challenging operating environment during the period. However, the RWA increased marginally by 1pp as at end 3Q 2020.

Nonetheless, the CAR also increased by 0.96pp to 19.53%, Tier 1 to RWA by 0.82pp to 15.59%, and the CET1 to RWA by 0.83pp to 14.01%. All capital adequacy indicators are well-above the regulatory minimum of 10% for CAR, 7.5% for Tier 1 to RWAs, and 6.0% for CET1 to RWA set by the State Bank of Pakistan (SBP).

An increase in the CAR indicators between 1Q 2020 and 2Q 2020 is recorded in Saudi Arabia reflecting the pattern in the entire banking sector of the country. While the CAR increased by 0.25pp (1.31% q-o-q), the Tier-1 capital to RWA increased by 0.26pp (1.47% q-o-q) in 2Q 2020. As at end 3Q 2020, both capital adequacy indicators increased further by 0.16pp to 19.72%, and 0.18pp to 17.98% respectively.

The key drivers of the increasing capitalisation in the Saudi Islamic banking sector are the corresponding increases in both the regulatory capital and RWAs.[29] Specifically, the 3.20% and 3.36% q-o-q increase in both regulatory capital and CET1 capital are higher than the 1.86% q-o-q increase in RWAs as at end Q2 2020. Moreover, the non-payment of dividends, strengthened internal capital generation, and limited financing by some institutions due to challenging operating environment also account for the improved capitalisation of the Islamic banking sector in Saudi Arabia.

In the case of Turkey, the CAR for the participation banks increased by 0.50pp (2.69% q-o-q) in 2Q 2020. Similarly, the Tier 1 to RWA ratio increased by 0.40pp (2.67% q-o-q), and the CET1 to RWA ratio increased by 0.40pp (3.17% q-o-q) during the same period. As at end 2Q 2020, with a CAR of 19.10%, Tier 1 to RWA ratio of 15.40%, and a CET1 to RWA ratio of 13.0%, all three capital adequacy ratios are above both the regulatory threshold of 8.0% and targeted threshold of 12.0% set by the Banking Regulation and Supervision Agency (BRSA).

Generally, the increase in CAR in the domestic banking sector is due to the increase in subordinated debts and profitability, and the effect of increase in equity position due to the announcement by the BRSA, Turkey in March 2020. The BRSA announced that value losses in the portfolio of securities at fair value through other comprehensive income should not be included in the computation of CAR until after 31 December 2020. More so, in April 2020, the BRSA have also permitted banks to use a risk-weight of 0% on foreign exchange obtained from the central government of Turkey when calculating their risk exposure. This is to minimise the implication of exchange rate volatility on the CAR of banks in the country.

In the UAE, the Islamic banking sector's capital adequacy ratio is well above the threshold of 10% set by the Central Bank of the UAE (CBUAE). Specifically, in 2Q 2020, the Islamic banks recorded an increase of 0.50pp (0.61% q-o-q) in CAR. The Tier 1 capital to RWA ratio also increased by 0.61pp (0.19% q-o-q), and the CET1 to RWA ratio also increased by 0.59pp (0.53% q-o-q). This performance is similar to those obtained in the entire UAE banking sector in which case the Tier 1 and CET1 capital increased by 0.6pp and 0.8pp respectively in 2Q 2020.

The capitalisation of the UAE Islamic banking strengthened further in 3Q 2020 by 0.6pp on the average across the three capital adequacy indicators and on the back of declining RWAs. The CBUAE's enhanced Targeted Economic Support Scheme (TESS) provides a temporary relief to the micro, small and medium enterprises (MSMEs) by banks to defer payments until June 2021. This is in addition to reduction in risk weights applicable to rated MSMEs to 75% and unrated MSMEs to 85%.

[29] The increase in RWAs may have offset some of the impact on CAR due to increase in regulatory capital.

Asset Quality

The second category of the core indicators is the asset quality that measures the capacity of a jurisdiction's Islamic banking sector to sustain its operation and contribute to economic development through the strength of the financial assets it holds. This indicator is further decomposed to reflect the proportion of non-performing assets to total assets, as well as non-performing financing to capital. Furthermore, the availability of funds to absorb operational losses can also be assessed by factoring the amount of provisions held against non-performing assets.

In this paper, the three indicators used to assess asset quality are: gross non-performing financing (GNPF), net non-performing financing (NNPF), and provisions for gross non-performing financing (PGNPF). The performance of the Islamic banking sector of the various countries across the three indicators and between 1Q 2018 and 3Q 2020 is shown in Figures 3 to 5.

Figure 3. GNPF 1Q18 – 3Q20

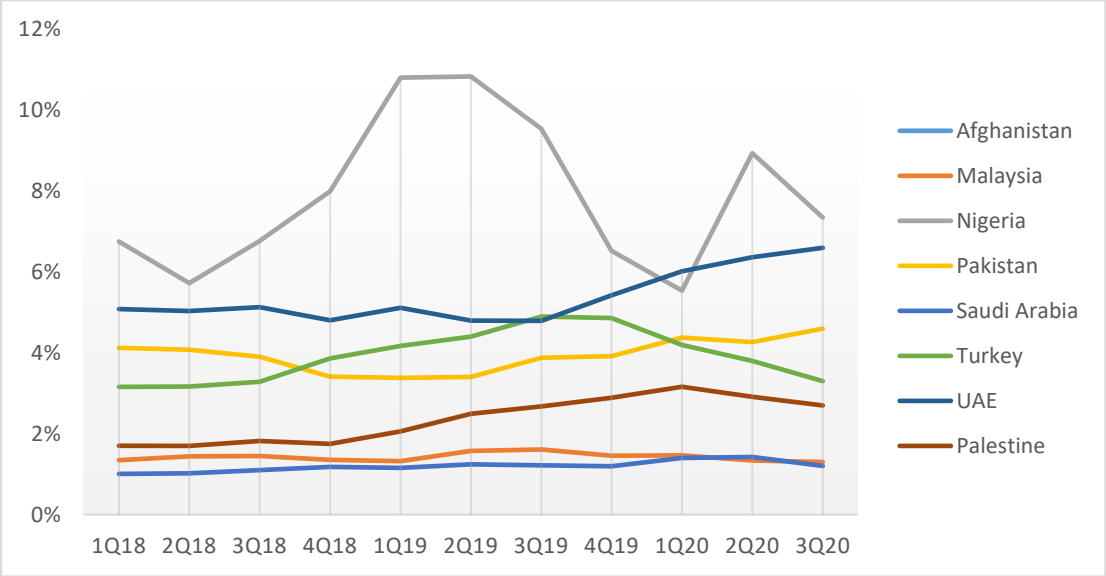


Figure 4. NNPF 1Q18 – 3Q20

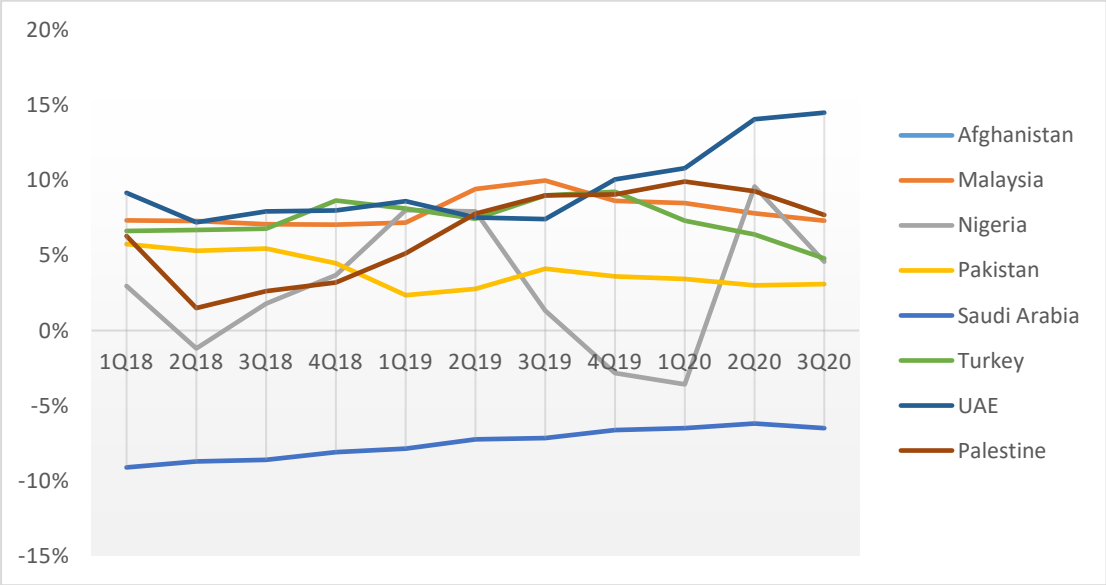
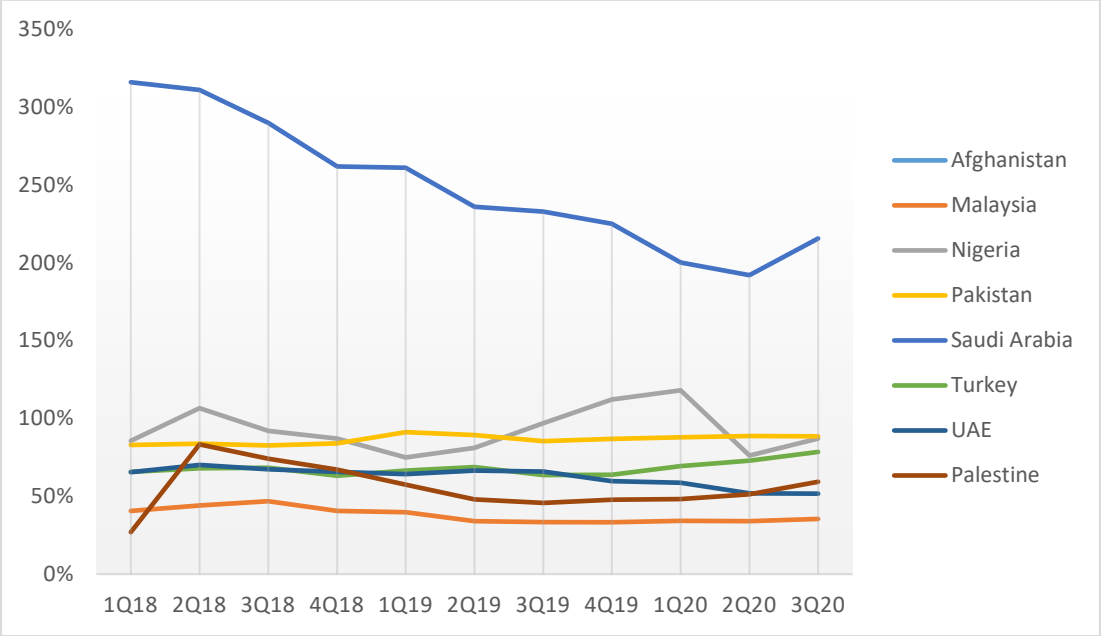


Figure 5. PNPF 1Q18 – 3Q20



Source: *IFSB PSIFIs*

An increase in both GNPF and NNPF indicates asset deterioration. As shown in Table 3.2, a cross-country comparison of the countries included in this working paper generally indicates that jurisdictions with a declining GNPF and NNPF in 2Q 2020 compared to 1Q 2020 also recorded increasing provisioning between the two quarters.

Table 3.2 Asset Quality Ratios[30]

Country	**Asset Quality indicators**	1Q 2020	2Q 2020	Q-o-Q change	Pre-COVID	Co-COVID	Change (sig)
Malaysia	GNPF	1.47%	1.34%	-8.67%	1.46%	1.30%	-11.28%
	NNPF/capital	8.47%	7.80%	-7.99%	8.55%	7.55%	-11.71%
	PGNPF	34.29%	33.96%	-0.94%	33.81%	34.72%	2.67%
Nigeria	GNPF	5.54%	8.94%	61.31%	6.03%	8.14%	34.98%*
	NNPF/capital	-3.58%	9.59%	-367.63%	-3.21%	7.09%	-321.11%
	PGNPF	118%	76%	-35.50%	115.15%	81.68%	-29.07%***
Pakistan	GNPF	4.38%	4.27%	-2.54%	4.15%	4.41%	6.39%
	NNPF/capital	3.43%	3.00%	-12.48%	3.52%	3.06%	-13.10%
	PGNPF	87.96%	88.83%	0.99%	87.44%	88.73%	1.48%
Palestine	GNPF	3.16%	2.97%	-5.96%	3.03%	2.85%	-5.87%
	NNPF/capital	9.92%	9.73%	-1.85%	9.49%	8.71%	-8.25%
	PGNPF	48.16%	50.25%	4.36%	48.00%	54.77%	14.09%
Saudi Arabia	GNPF	1.40%	1.43%	2.00%	1.30%	1.31%	1.35%
	NNPF/capital	-6.51%	-6.19%	-4.85%	-6.57%	-6.36%	-3.10%
	PGNPF	200.18%	192.01%	-4.08%	212.59%	203.76%	-4.15%
Turkey	GNPF	4.20%	3.80%	-9.52%	3.98%	4.00%	0.60%
	NNPF/capital	7.30%	6.40%	-12.33%	7.82%	6.85%	-12.38%
	PGNPF	69.30%	72.80%	5.05%	66.01%	71.05%	7.63%
United Arab Emirates	GNPF	6.02%	6.37%	5.76%	5.72%	6.50%	13.52%
	NNPF/capital	10.81%	14.06%	30.08%	10.43%	14.29%	37.01%***
	PGNPF	58.75%	51.90%	-11.67%	59.29%	51.79%	-12.65%***

Source: IFSB PSIFIs
Statistical significance: * <.10, **<0.05, and *** <0.01.

[30] Asset quality data for Afghanistan is not available

The improved asset quality performance of the entire Malaysian banking sector is also reflected in that of the country's Islamic banking sector. As at end 2Q 2020, the former recorded an expansion in financing to both households at 3.8% (1Q 2020: 3.7%), and SMEs at 3.9% (1Q 2020: 3.4%). Specifically, the Malaysia Islamic banking sector recorded an improvement in asset quality reflected in the decline in both GNPF of -0.13pp (-8.67% q-o-q) and NNPF to capital of -0.68pp (-7.99% q-o-q) between 1Q 2020 and 2Q 2020 respectively as shown in Table 2, a trend observed since the 2Q 2019. However, the NNPF to capital is positive which indicates the value of provisioning which declined by -0.32pp (-0.94% q-o-q) is lesser than the GNPF as at end 2Q 2020.

In 3Q 2020, the IBs increased provisioning against future credit losses by 1.51pp (2Q 2020: 33.96%) to ensure continued resilience against potential rise in impairments given the increasing uncertainty surrounding the recovery phase of the pandemic. As such, the asset quality improved further in 3Q 2020 as indicated by a decline in GNPF by -0.08pp (2Q 2020: 1.34%), and the NNPF to capital by -0.49pp (2Q 2020: 7.80%).

The asset quality of the Malaysian banking sector remains healthy on account of the blanket loan/financing moratorium granted by the Bank Negara Malaysia in March 2020 up to September 2020. A three-month extension was granted to all bottom 40% income earners and small and medium enterprises (SME) borrowers. Subsequently, IBs have also continued with rescheduling and restructuring of financing of viable and deserving customers still struggling to service their existing financing. Furthermore, for the IBs in Malaysia, the Sharīʿah Advisory Council (SAC) of Bank Negara Malaysia ruled that based on the principle of *ihsan* (beneficence) accrued profits on both restructured and rescheduled financing extended to customers affected by COVID-19 pandemic should not be capitalised.

In the case of Nigeria, the GNPF of 8.94% in 2Q 2020 is higher than the NPL of 6.4% for the entire domestic banking sector and the 5.0% threshold set by the CBN. The NIBs recorded a deterioration in asset quality based on an increase recorded in the GNPF of 3.40pp (61.31% q-o-q) to end 2Q 2020 at 8.94%. The NNPF to capital also increased by 13.17pp (367.63% q-o-q), while the provisioning declined -41.91pp (-35.50% q-o-q) as at end 2Q 2020. This is evident by the sufficient provisioning of 118% made in 1Q 2020 with NNPF to capital of -3.58% compared to the provisioning of 76% and NNPF to capital of 9.59% in 2Q 2020.

The NIBs recorded improved asset quality in 3Q 2020. The GNPF decreased by -1.59pp, the NNPF to capital decreased by -5pp, while provisioning increased by 11.05pp. This could be linked to the sustained recoveries, write-offs and disposals of pledged collaterals generally recorded in the domestic banking sector in the country. Moreover, the CBN's regulatory forbearances allow banks to temporarily restructure or reschedule financing to businesses and households that are most affected by the COVID-19 pandemic.

The Islamic banking sector in Pakistan recorded improved asset quality with a decline in GNPF of -0.11pp (-2.54% q-o-q), NNPF to capital decline of -0.43pp (-12.48% q-o-q), and an increase in provisioning by 0.87% (0.99% q-o-q) as at end 2Q 2020. The impact of the disruption in economic activities due to the outbreak of the COVID-19 pandemic on asset quality was notably lessened by the permission granted by the SBP to the banks to consider the deferment, rescheduling or restructuring of financing upon the request by borrowers.[31]

The Pakistani Islamic banking sector's asset quality slightly deteriorated in the 3Q 2020. The GNPF increased by 0.29pp, NNPF to capital increased by 0.12pp, while provisioning decreased by 0.19pp. Nonetheless, with a GNPF of 4.6%, NNPF to capital of 3.1%, and PGNPF of 88.6%, the average asset quality of the full-fledged IBs in the country generally seems better than the average for the entire commercial banks that recorded NPLs to total financing of 9.9%, NNPL to total capital of 7.6%, and provisions to net financing of 84.7% as at end 3Q 2020.

The IBs also outperform the Pakistani banking sector as whole. The latter recorded increase in both the Non-Performing Loans (NPLs) to total loans by 1.1pp (2Q20:9.7%), and Net NPL to capital by 1.1pp(2Q20:9.0%) respectively even though provisioning also slightly increased by 0.2pp (2Q20:1.9%). Comparing pre-COVID-19 to the co-COVID-19 periods, Pakistan full-fledged IBs recorded a statistically significant decline in NNPF to capital and increase in provisioning respectively.

The movement restrictions due to COVID-19 had significant impact on most sectors in Palestine especially on the household, tourism, transportation, accommodation and food services, and wholesale and trade etc. These sectors accounted for up to 40 percent of the value of GNPF as at end 2Q 2020. Nonetheless, IBs in Palestine recorded improved assets quality based on declining GNPF by -0.19pp, and NNPF to capital by -0.19pp. An increase in PGNPF of 2.09pp is also recorded over the two quarters.

The negative NNPF to capital value recorded by IBs in Palestine is an indication of sufficiency of the provisioning for GNPF which has been increasing over the previous four quarters. Moreover, the Palestine Monetary Authority's (PMA) intervened to suspend procedures on default classification for four months, and to reduce the number of cheque books granted to customers especially to individuals. This seems to have yielded favourable outcome as Palestinian IBs sustained the improvement in asset quality in Q3 2020. The GNPF decreased further by -0.25pp to 2.72%, NNPF to capital decreased by -2.05pp to 7.68%, while PGNPF increased by 9.03pp to 59.28%.

Turkey's participation banks also recorded improved performance in terms of asset quality as at end 2Q 2020. The GNPF declined by -.40pp (-9.52% q-o-q), while the NNPF to capital declined by -0.90% (-12.33% q-o-q). The participation banking sector

[31]State Bank of Pakistan Half-Yearly Performance Review of the Banking Sector, H1CY20. https://www.sbp.org.pk/publications/Pub-HPR.htm

also recorded an increase in PGNPF by 3.50pp (5.05% q-o-q) between 1Q 2020 and 2Q 2020.

The improved performance in asset quality could be explained by the BRSA's decision in March 2020 to increase payment deferral period for NPFs from 90 days to 180 days till 31 December 2020. The period for the delayed payment of stage 2 loans was also increased from 30 days to 90 days. Moreover, the economic recovery in the third quarter of 2020 has strengthened both the cash flow of firms and capacity of households to service their financing obligations. While the asset quality of the Turkish participation banks may deteriorate in the period ahead due to approaching maturities of postponed payments, the impact is expected to be moderated by increased provisioning.

The Islamic banking sector in Saudi Arabia recorded deteriorating asset quality indicated by increases in both the GNPF by 0.03pp (2.00% q-o-q), and NNPF to capital by 0.32pp (4.85% q-o-q). The trend is similar to that of the domestic banking in the country that recorded 0.4% increase in NPL (1Q20: 1.9%, 2Q20:2.3%). Nonetheless, the negative value of the NNPF to capital indicates that the declining PGNPF of -8.17% (-4.08% q-o-q) sufficiently covers the GNPF.

As at end 3Q 2020, the asset quality of the Saudi Arabia full-fledged Islamic banks recorded a rebound on the back of the forbearance measures by the Saudi Central Bank (SAMA), and the relatively lower risk due to Islamic banks' retail focus, and increased provisioning. Specifically, in 3Q 2020, the Saudi Arabia Islamic banking sector recorded a decline of 0.17pp in GNPF, 0.33pp in NNPF to capital, and an increase of 23.49pp in PGNPF.

As at end 2Q20 the IBs in UAE also recorded deteriorating asset quality indicated by an increase in GNPF of 0.35pp (5.76% q-o-q), while the NNPF to capital also increased by 3.25pp (30.08% q-o-q). However, the UAE Islamic banking sector recorded a decline of -6.18pp (-11.67% q-o-q) in PGNPF. The UAE IBs' NNPF to capital is also positive, indicating that the decline in provisioning makes the NNPF further lower compared to the value of the GNPF in the jurisdiction. A similar trend is observed in the 3Q 2020. The UAE IBs GNPF slightly increased by 0.02pp, NNPF to capital by 0.04pp, while provisioning slightly decreased by 0.02pp.

In both Saudi Arabia and the UAE, the dual shock generated by the COVID-19 pandemic the oil price volatility, had effect on the asset quality of their Islamic banking sectors especially up to 2Q 2020. This is due both to the pandemic's significant disruption of real economic activities, and to Islamic banking's exposure to the wholesale and trade sector. The real estate sector which is already weakened by oversupply supply and fall in demand due to challenging economic condition.

Nonetheless, the impact of the economic recovery activities including waiver of lockdowns, resumption of economic activities and other prudential measures put in place in both countries reflects more in the 3Q 2020 performance of the Islamic banking

sector in Saudi Arabia compared to the UAE. While the former's asset quality indicators recorded a rebound, the latter's improvement is not enough to upturn the negative momentum since 1Q 2020.

Earnings

Earnings is the third category of the core indicators. Its relative importance derives from the fact that maintaining it at a stable level bolsters the capital certainty of the IBs, allows for building capital and buffers against shocks, and it expands in line with market opportunities. While it may also signal excessive risk taking when unusually high, ensuring this indicator is maintained at a high and stable level is also very important to both the shareholders and the IAHs as residual claimants.

Four sub-indicators are used to analyse the implications of COVID-19 pandemic on the earnings of the Islamic banking sector in the jurisdictions covered in this working paper. These are the ROA, ROE, Net Profit Margin (NPM) and Cost to Income (CTI) ratio. While ROA and ROE indicate the level of profit generated by every unit of assets and equity, respectively, the latter two indicators measure percentage of earnings from financing and level of operational efficiency, respectively. Except in few jurisdictions like Afghanistan and Nigeria, no significant upward or downward spike is observed in capitalisation, assets, or income across jurisdictions between 1Q 2020 and 3Q 2020 as shown in Figures 6 to 9.

Figure 6. ROA 1Q18 – 3Q20

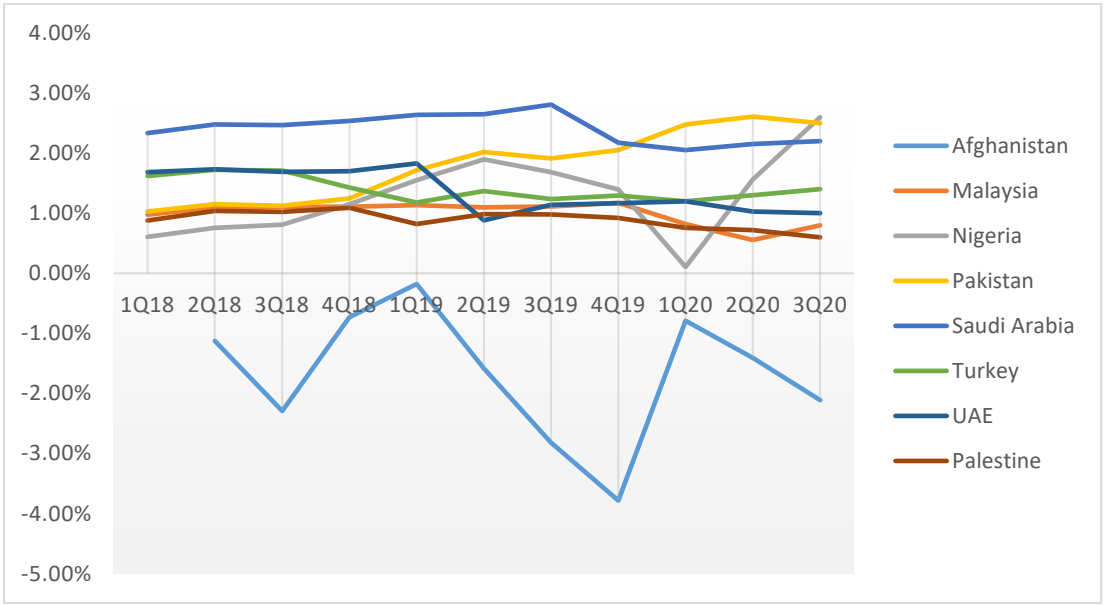


Figure 7. ROE 1Q18 – 3Q20

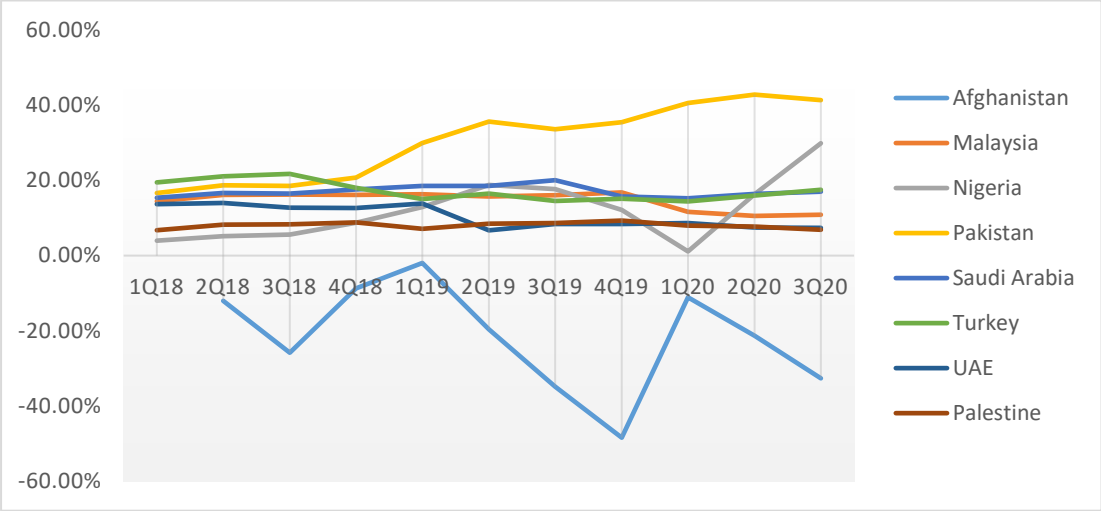


Figure 8. Net Profit Margin 1Q18 – 3Q20

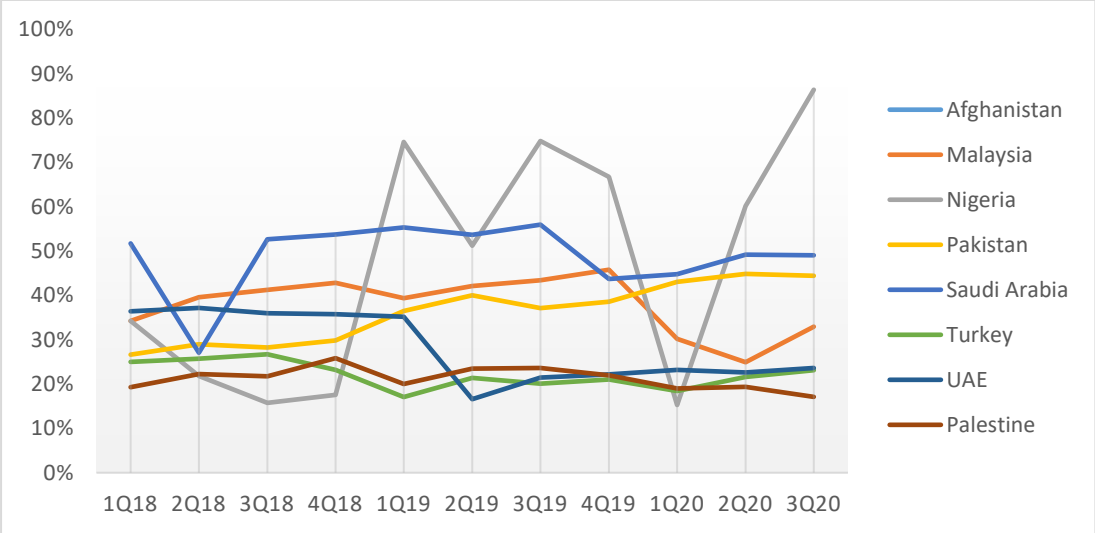
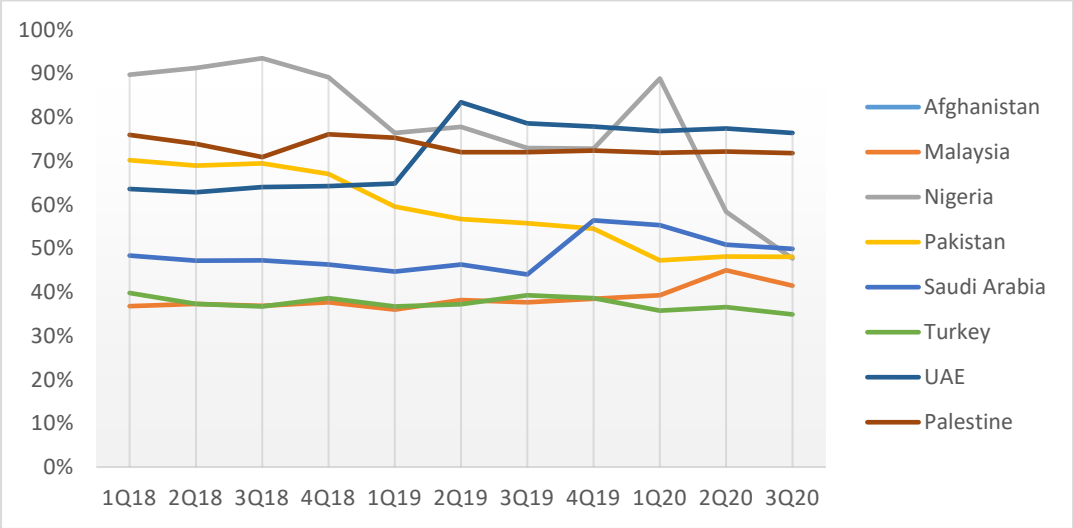


Figure 9. CTI Ratio 1Q18 – 3Q20



Source: IFSB PSIFIs

Table 3.3 Earnings Ratio

Country	Earnings indicators	1Q 2020	2Q 2020	Q-o-Q change	Pre-COVID	Co-COVID	Change (sig)
Afghanistan	ROA	-0.79%	-1.41%	78.03%	-3.30%	-1.10%	-66.70%***
	ROE	-11.6%	-21.33%	92.86%	-41.60%	-16.20%	-61.06%***
	NPM	-304%	-368%	21.07%	-599.62%	-335.77%	-44.00%***
	CTI	552%	638%	15.44%	908.47%	595.08%	-34.50%***
Malaysia	ROA	0.82%	0.56%	-32.22%	1.00%	0.67%	-33.11%
	ROE	11.63%	10.54%	-9.33%	14.21%	10.73%	-24.50%
	NPM	30.15%	24.91%	-17.37%	37.96%	28.92%	-23.83%
	CTI	39.29%	44.99%	14.50%	38.89%	43.24%	11.17%
Nigeria	ROA	0.11%	1.56%	1359.19%	0.75%	2.08%	177.11%
	ROE	1.11%	16.26%	1360.77%	6.63%	23.05%	247.59%
	NPM	15.27%	60.17%	294.01%	41.00%	73.26%	78.68%
	CTI	88.86%	58.39%	-34.29%	80.82%	53.06%	-34.35%
Pakistan	ROA	2.48%	2.61%	5.21%	2.27%	2.57%	13.52%
	ROE	40.54%	42.79%	5.54%	37.98%	42.04%	10.69%
	NPM	43.05%	44.83%	4.15%	40.81%	44.62%	9.35%
	CTI	47.26%	48.13%	1.84%	50.90%	48.12%	-5.45%
Palestine	ROA	0.76%	0.72%	-4.85%	0.84%	0.67%	-20.31%
	ROE	7.97%	7.72%	-3.21%	8.64%	7.31%	-15.41%
	NPM	19.01%	19.37%	1.86%	20.47%	18.23%	-10.95%*
	CTI	71.86%	72.15%	0.40%	72.13%	72.00%	-0.18%
Saudi Arabia	ROA	2.05%	2.16%	5.05%	2.11%	2.19%	3.89%
	ROE	15.23%	16.41%	7.73%	15.47%	16.68%	7.83%
	NPM	44.74%	49.15%	9.86%	44.20%	49.06%	11.02%*
	CTI	55.29%	50.87%	-7.98%	55.85%	50.37%	-9.80%***
Turkey	ROA	1.20%	1.30%	8.33%	1.45%	1.25%	-13.52%
	ROE	14.40%	16.00%	11.11%	17.68%	15.20%	-14.03%
	NPM	18.40%	21.60%	17.39%	22.51%	20.00%	-11.14%
	CTI	35.80%	36.60%	2.23%	38.03%	36.20%	-4.82%
United Arab Emirates	ROA	1.20%	1.03%	-14.03%	1.18%	1.01%	-14.30%
	ROE	8.61%	7.49%	-13.01%	8.51%	7.45%	-12.49%*
	NPM	23.16%	22.61%	-2.37%	22.65%	23.11%	2.05%***
	CTI	76.84%	77.39%	0.71%	77.35%	76.89%	-0.60%***

Source: IFSB PSIFIs
Statistical significance: * <.10, **<0.05, and *** <0.01.

As shown in Table 3.3, as at end of 2Q20, the full-fledged Islamic banks in Afghanistan recorded a decline in ROA by -0.62pp (-78.03% q-o-q), and a decreased ROE by -10.27pp (-92.86% q-o-q). The NPM also declined by -64pp (21.07% q-o-q), while the CTI increased by 15.44pp (86% q-o-q). Afghanistan's full-fledged IBs recorded statistically significant differences between the pre-COVID-19 and co-COVID-19 periods across the four profitability ratios.

Notwithstanding the q-o-q growth in revenue from financing, investments in *ṣukūk*, and fee-based income by 63pp, 110pp, and 120pp respectively as at end 2Q 2020, profitability declined on account of net income which dipped by -91.20pp and operating costs that increased by 82pp as at end 2Q 2020. In addition to the challenging economic situation due to COVID-19, the decline in profitability is also explained by the reintegration of provisions and gains on revaluation which affected net profit during the period.

The Islamic banking sector in Malaysia recorded declines in ROA, ROE, and NPM, as well as an increase in CTI during the period between 1Q 2020 and 2Q 2020. Malaysia IBs' ROA declined by -0.26pp (-32.22% q-o-q), and ROE declined by -1.09pp (-9.33%

q-o-q). The IBs' NPM also declined by -5.24pp (-17.37% q-o-q), while CTI increased by 5.70pp (14.50% q-o-q).

The decline in the profitability indicators as at end 2Q 2020 is due mainly to slower financing growth and reduced margin recorded in the domestic banking sector early in the quarter following cut in overnight policy rate. Although Malaysia IBs' asset quality only improved marginally the NPM declined in response to downward repricing of floating rate financing. Moreover, Malaysia IBs' earnings were also impacted by a one-off contract modification loss due to waiver of additional charges on fixed rate Islamic financing under the BNM's moratorium measures.

The Malaysia IBs are expected to remain profitable on account of their concentrated exposure to retail financing which is less vulnerable to economic downturn relative to corporate financing. This is already manifesting as the IBs recorded improvements in all profitability indicators as at end 3Q 2020. ROA increased by 22pp and ROE increased by 37pp. The IBs' NPM also increased by 8.01pp, while CTI declined by 3.51pp. Moreover, some of the largest IBs that are also subsidiaries of the largest domestic banking groups would be able to leverage on group's infrastructure to drive down operating costs There are also ongoing digitalisation efforts which though will have initial impact on the profitability of the IBs will nonetheless subsequently enhance their operational efficiency.

In Nigeria, the full-fledged NIBs recorded increased ROA of 1.46pp, ROE of 15.15pp, and NPM of 44.90pp between 1Q 2020 and 2Q 2020. The NIBs also recorded a decline of -30.47pp in CTI ratio between the two quarters. The earnings performance is mainly due to substantial gross earnings from *ṣukūk* and fee-based income. A similar earnings performance is observed in 3Q 2020 in which the NIBs recorded an increase in ROA of 1.04pp, ROE of 13.57pp, and NPM by 26.19pp, while the CTI reduced by -10.7pp.

In Pakistan, between 1Q 2020 and 2Q 2020, the full-fledged IBs recorded increased ROA of 0.13pp (5.21% q-o-q), and ROE of 2.25pp (5.54% q-o-q). Similarly, the NPM increased by 1.79pp (4.15% q-o-q), while CTI ratio also increased by 0.87pp (1.84% q-o-q). Compared to the entire domestic banking sector in Pakistan, the full-fledged IBs seems more profitable and efficient.[32]

The improved performance of the Pakistani IBs is accounted for largely by revenues from investing, financing, and fee-based activities which yielded q-o-q increases of 106pp, 88pp, and 80pp respectively as at end 2Q 2020. Moreover, the SBP's policy measures in response to the economic impact of COVID-19 such as a relaxation in capital conservation buffer have positively impacted on Pakistani banks' profitability.

The Islamic banking sector in Palestine recorded declines in ROA, ROE, and NPM, as well as an increase in CTI during the period between 1Q 2020 and 2Q 2020. Specifically, IBs in Palestine recorded ROA decline of -0.04pp (-4.85% q-o-q), and ROE decline of -0.26pp (-3.21% q-o-q). Palestine also recorded statistically significant increase in NPM between pre-COVID-19 and co-COVID-19 periods which also

[32] On the average, the Pakistani banking sector recorded before tax ROA and ROE of 1.9% and 25.2% respectively, and a CTI of 48.9% as at end 2Q20.

improved by 0.35pp (1.86% q-o-q) as at end 2Q 2020. However, the CTI also increased by 0.29pp (0.40% q-o-q).

The improved earnings performance is sustained in the 3Q 2020 in which case the ROA, ROE, and NPM increased by 0.05pp, 0.74%, and 1.30% respectively. The CTO also declined by -2.61pp. This performance is explained by the improvements recorded in earnings from both financing and investment activities which though started on a declining note at the beginning of 2020 has consistently increased over the three quarters to 3Q 2020.

The participation banks in Turkey recorded increased ROA of 0.10pp (8.33% q-o-q), ROE of 1.60pp (11.11% q-o-q), and increased NPM of 3.20pp (17.39% q-o-q). This performance, which is mainly explained by the 46.8% q-o-q increase in investment income is also similar to those of the entire banking sector in Turkey which for instance also recorded ROA of 1.20% as at end 2Q 2020. However, the CTI ratio of the participation banks also increased by 0.80pp (2.23% q-o-q) due to among other reasons the positive duration gap on rates cut due to COVID-19. The pass-through from cuts on funding expenses occurred faster than on margin on financing provided due to longer maturity of the latter.

The IBs in Saudi Arabia recorded increase in their ROA, ROE, and NPM, as well as a decrease in CTI during the period between 1Q 2020 and 2Q 2020. ROA increased by 0.11pp (5.05% q-o-q) and ROE improved by 1.18pp (7.73% q-o-q). NPM also improved by 4.41pp (9.86% q-o-q), while CTI decreased by -4.41pp (-7.98% q-o-q). Other than the NPM that declined by -0.18pp, Saudi Arabia IBs recorded improvements in other earnings indicators. Specifically, the ROA increased by 0.08pp, ROE increased by 0.56pp, while CTI decreased by 1.00pp in the 3Q 2020.

Notwithstanding the challenging economic condition due to COVID-19, the Islamic banking sector in Saudi Arabia recorded improved performance across all earnings indicators. Profitability is driven mainly by the retail focus of the IBs which make them less prone to the effect of the economic downturn. Earnings is also supported by the growth recorded in both fee-based income and financing activities of 55% and 48% q-o-q respectively. The decline in the CTI of Saudi Arabia IBs is due to the strict approach to cost optimisation especially on administrative and travel expenses especially during the lockdown.

Conversely, UAE IBs' ROA declined by -0.17pp (-14.03% q-o-q), and ROE by -1.12pp -13.01% q-o-q) as at end 2Q 2020. During the period, NPM also declined by -0.55pp (-2.37% q-o-q), while CTI increased by 0.56pp (0.71% q-o-q). As at 3Q 2020, a further slight decline of -0.03pp in ROA, and -0.09pp in ROE is recorded by the UAE Islamic banking sector. However, the NPM increased by 1.00pp, while the CTI decreased by 1.00pp.

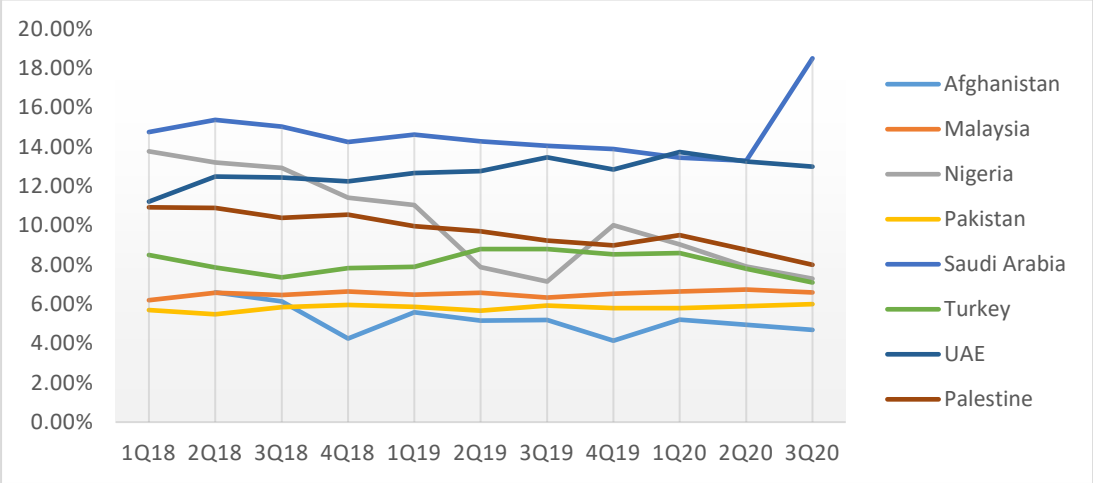
In the UAE, the challenging economic condition due to COVID-19 and low oil prices impacted on asset quality and credit demand with implications for the profitability of the IBs in the jurisdiction. Fee-based income waivers or reductions were also granted on account of various provisions under the Targeted Economic Support Scheme (TESS).

Leverage

The fourth core indicator, leverage, also measures the solvency of an Islamic banking system but uses Tier-1 capital as the highest degree of liquidity and capital certainty in the numerator, and the total assets in the denominator. Leverage measures the extent to which the IBs in a jurisdiction provide Sharīʿah-compliant financing and make investments from funds mobilised through, for instance, accepting deposits or investment accounts, issuing securities, or incurring other liabilities other than the IB's own funds.

This ratio is reported to perform better than risk-weighted capital ratios in predicting bank failure and is associated with financial instability at the macro level.[33] Based on the leverage ratio reported in the *IFSI Stability Report 2020*, Islamic banks across jurisdictions are less prone to engaging in high-leverage products due to their focus on the real economy and Sharīʿah restrictions. As shown in Figure 10, all jurisdictions recorded leverage ratios higher than the 3% threshold.

Figure 10 Leverage Ratio 1Q18 – 3Q20



Source: IFSB PSIFIs

As indicated in in Table 4, between 1Q 2020 and 2Q 20202, except for Malaysia and Pakistan which recorded increases in leverage ratio of 0.09pp (1.36% q-o-q) and 0.10pp (1.62% q-o-q), all the other jurisdictions reported a declining leverage ratio. Only Nigeria recorded a statistically significant decline, between the pre-COVID-19 and co-COVID-19 periods.

Nonetheless, all the countries covered in this working paper recorded leverage ratios above the 3% threshold as per the BCBS and IFSB standards. This indicates that, on average, in the event that the quality of assets deteriorates and Islamic banks have to bear asset impairments, the sector is capable of writing down its own capital portion given that the portion funded by the restricted profit-sharing investment account (RPSIA) holders and depositors cannot be written down.

[33] New Economics Foundation (2015), *Financial System Resilience Index: Building a Strong Financial System*, p. 44: https://neweconomics.org/2015/06/financial-system-resilience-index.

Table 3.4 Leverage Ratio

Country	**Leverage indicators**	1Q 2020	2Q 2020	Q-o-Q change	Pre-COVID	Co-COVID	Change (sig)
Afghanistan	Capital/Assets	5.20%	4.94%	-5.01%	4.67%	5.07%	8.67%
Malaysia	Capital/Assets	6.65%	6.74%	1.36%	6.59%	6.69%	1.51%
Nigeria	Capital/Assets	9.03%	7.92%	-12.31%	9.52%	7.61%	-20.10%*
Pakistan	Capital/Assets	5.79%	5.89%	1.62%	5.79%	5.93%	2.31%
Palestine	Capital/Assets	9.50%	8.76%	-7.85%	9.24%	8.38%	-9.35%
Saudi Arabia	Capital/Assets	13.45%	13.29%	-1.16%	13.67%	13.38%	-2.10%
Turkey	Capital/Assets	8.60%	7.80%	-9.30%	8.20%	8.20%	0.03%
United Arab Emirates	Capital/Assets	13.25%	13.04%	-3.57%	13.29%	13.14%	-1.13%

Source: IFSB PSIFIs
Statistical significance: * <.10.

Liquidity

Liquidity, as the fifth core indicator, measures the capability of an Islamic banking industry to fulfil its short-term financial obligations. The relative importance of this ratio derives from the fact that an initial indication of solvency may be attenuated by poor management of short-term liquidity. In the PSIFIs, this indicator is further decomposed into two, vis. the liquid assets ratio and the liquid-assets-to-short-term-liabilities ratio. While the former provides an indication of the capability of the Islamic banking sector to meet both expected and unexpected cash obligations, the latter indicates the extent to which short-term withdrawal of funds can be met without facing liquidity problems when existing short-term funding expires.

Four indicators of liquidity are considered in this working paper: liquid assets ratio (LAR) and liquid assets to short-term liabilities ratio (LASLR). Both the LCR and NSFR are also considered for jurisdictions that have commenced implementation of Basel III and have also reported both the LCR and NSFR to the IFSB's PSIFIs database.

The LCR provides that institutions offering Islamic financial services (IIFS) must hold unencumbered high-quality liquid assets against the possibility of cash outflows during a one-month period of financial stress. The NSFR, on the other hand, is the portion of capital and liabilities expected to be available over a one-year period. Both LCR and NSFR are set to be equal to a minimum of 100%.[34]

The importance of liquidity in enabling IBs to meet balance sheet fluctuations can be linked to their inherent susceptibility to liquidity risk, due to the maturity transformation of converting short-term funding especially through UPSIA to long-term investments. This is added to the fact that, compared to conventional banks, there are relatively few Sharīʿah-compliant liquidity risk management options available to IBs. They are also faced with the small size of the existing liquid market for Sharīʿah-compliant high-quality liquid assets, as well as with the lack of Islamic deposit insurance schemes in many jurisdictions to protect IBs against unexpected liquidity shortfalls.

As shown in Figures 11 and 12, as at end 3Q 2020, Afghanistan, Nigeria, Saudi Arabia, Malaysia, and Palestine recorded declines in their LAR as a measure of adequate liquidity to meet both expected and unexpected demands for cash.

[34] *Guidance Note on Quantitative Measures for Liquidity Risk Management in Institutions Offering Islamic Financial Services [Excluding Islamic Insurance (Takâful) Institutions and Islamic Collective Investment Schemes]:* https://www.ifsb.org/download.php?id=4391&lang=English&pg=/published.php

Conversely, Pakistan, Turkey and UAE recorded increase in their LAR during same period. All jurisdictions also recorded similar pattern as the LAR for the LASLR as a measure of structural gap in funding.

Figure 11. LAR 1Q18 – 3Q20

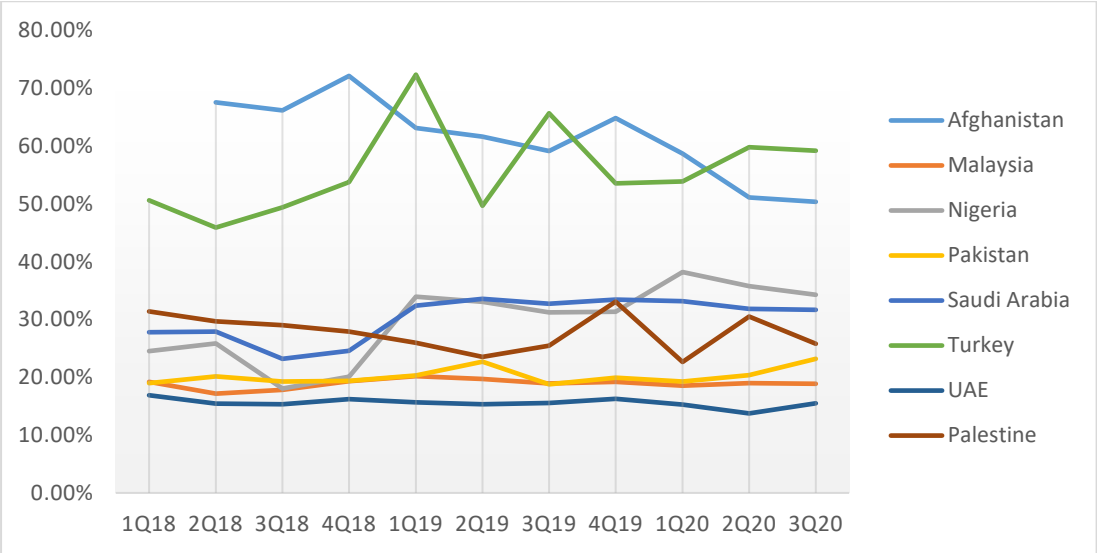
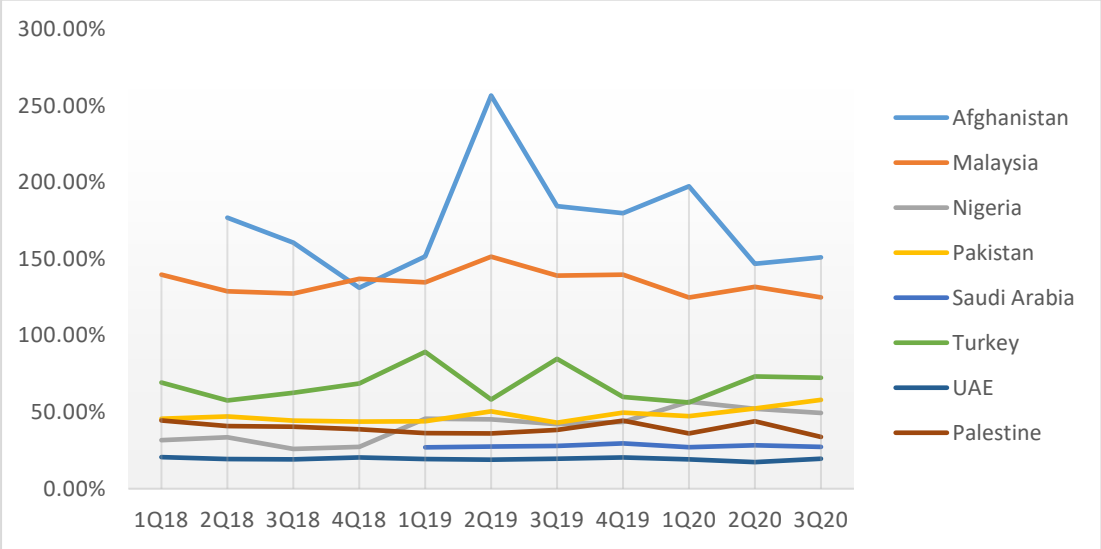


Figure 12. LASLR 1Q18 – 3Q20



Source: IFSB PSIFIs

As shown in Table 3.5, the full-fledged IBs in Afghanistan recorded a decline in both LAR of -7.59pp (12.93% q-o-q), and LASLR of -50.00pp (-25.58% q-o-q) as at end 2Q 2020. Nonetheless, the liquidity position of the full-fledged banks in Afghanistan are well above the 15% threshold for LAR and 20% threshold for LASLR adopted in the jurisdiction. In 3Q 2020, while the LAR declined slightly by -1.54pp, the LASLR increased by 7pp indicating improvement in structural funding gap.

Table 3.5 Liquidity Ratio

Country	Liquidity indicators	1Q 2020	2Q 2020	Q-o-Q change	Pre-COVID	Co-COVID	Change (sig)
Afghanistan	LAR	58.72%	51.13%	-12.93%	62.00%	54.92%	-11.42%
	LASLR	197%	147%	-25.58%	182.2%	172.0%	-5.57%
Malaysia	LAR	18.56%	18.99%	2.32%	18.89%	18.93%	0.22%
	LASLR	124.80%	131.7%	5.57%	132.3%	128.3%	-3.02%
Nigeria	LAR	38.22%	35.80%	-6.33%	34.79%	35.07%	0.79%
	LASLR	56.77%	52.17%	-8.10%	50.16%	50.83%	1.34%
Pakistan	LAR	19.25%	20.38%	5.90%	19.58%	21.81%	11.40%
	LASLR	47.40%	52.40%	10.55%	48.49%	55.19%	13.82%
	LCR	239.9%	265.2%	10.53%	213.7%	240.6%	12.62%
	NSFR	159.4%	165.2%	3.67%	156.8%	161.7%	3.11%
Palestine	LAR	22.66%	30.53%	34.77%	27.87%	28.19%	1.13%
	LASLR	36.02%	43.95%	22.04%	40.21%	38.86%	-3.35%
	LCR	195.6%	218.3%	11.61%	226.3%	185.3%	-18.15%**
	NSFR	159.2%	137.00%	-13.96%	161.0%	131.5%	-18.34%*
Saudi Arabia	LAR	33.18%	31.87%	-3.94%	33.33%	31.76%	-4.70%**
	LASLR	27.16%	28.43%	4.64%	28.38%	27.89%	-1.70%
	LCR	157.1%	148.4%	-5.58%	157.8%	147.0%	-6.82%**
	NSFR	124.1%	123.2%	-0.78%	126.5%	122.6%	-3.08%
Turkey	LAR	53.90%	59.80%	10.95%	55.14%	56.85%	3.11%
	LASLR	56.30%	73.20%	30.02%	68.80%	64.75%	-5.89%
	LCR	237.0%	228.4%	-3.91%	231.1%	233.1%	0.84%*
United Arab Emirates	LAR	15.31%	13.76%	-10.12%	15.79%	14.63%	-7.35%
	LASLR	19.23%	17.37%	-9.70%	19.84%	18.42%	-7.19%

Source: IFSB PSIFIs
Statistical significance: * <.10, and **<0.05.

With a LAR increase of 0.43pp (2.32% q-o-q), and LASLR increase of 0.95pp (5.57% q-o-q), the full-fledged IBs in Malaysia are very liquid. Although the 3Q 2020 data indicate that Malaysia IBs LAR slightly declined by -0.12pp and LASLR declined by -6.89pp their funding and liquidity position is expected to strengthen on the back of slower financing growth, and the BNM's statutory reserve requirements (SRR) measures such as reduction of the LCR threshold below 100% and NSFR to 80% until September 2021. Other factors that are expected to strengthen Malaysia IBs' liquidity include growth in retail deposit, investment accounts, sukuk issuance and support from both government and parent groups.

The Malaysian banking system' excess liquidity buffer which is over RM220 billion reflects the capacity of banks including IBs to support financial intermediation activities and also meet other liquidity needs as they arise. Moreover, the industry recorded loan-to-fund (LFT) ratio of 82.2% and loan-to-fund-and-equity (LFE) ratio of 71.7% as at end of August 2020 as a signal of its liquidity capability.

In Nigeria, the NIBs recorded declines in both the LAR and LASLR. In terms of the former, the NIBs recorded a decline of -2.42pp (-6.33% q-o-q), while in terms of the latter recorded a decline of -4.60pp (-8.10% q-o-q). This trend is similar to that experienced in the domestic market in which case the liquidity ratio for the banking industry declined almost 8pp to 65.1% as at end 2Q 2020. Both LAR and LASLR of the NIBs, however declined by -1.46pp and 2.68pp respectively in 3Q 2020. Nonetheless, the liquidity position of the NIBs, which have also benefited from the one-

year moratorium on all repayments on CBN intervention facilities is well above the regulatory threshold of 10%.[35]

The full-fledged IBs in Pakistan also improved liquidity performance between 1Q 2020 and 2Q 2020. Specifically, the IBs' LAR increased by 1.14pp (5.90% q-o-q) and LASLR increased by 5.00pp (10.55% q-o-q). Compared to the average LAR of 53.3% and LASLR of 106.3% for all banks in Pakistan, the IBs' performance is lower. In terms of both the LCR and NSFR, the IBs in Pakistan recorded performance above the 100% threshold with an increase of 25.27pp (10.53% q-o-q) in the former, and 5.86pp (3.67% q-o-q) in the latter.

Both deposit and investment accounts grew by 4.32pp and 4,61pp respectively in 3Q 2020 thus impacting both the LAR and LASLR that also increased by 2.86pp and 5.56pp respectively during the same period. Though both the LCR and NSFR declined by -15pp and -4.30pp respectively, both ratios are still well-above threshold. The funding and liquidity position of the Pakistani full-fledged IBs is expected to remain strong especially due to growth in retail deposit and investment accounts.

Palestinian IBs recorded improvements in both LAR and LASLR between 1Q 2020 and 2Q 2020. Specifically, LAR increased by 7.88pp (34.77% q-o-q), while LASLR also increased by 7.94pp (22.04% q-o-q). The strength of the short-term liquidity position of the IBs in Palestine is reflected in improvements in LCR by 22.71pp (11.61% q-o-q) though a decline of -22.21pp (-13.66% q-o-q) is recorded in NSFR.

The improvement could be linked to the intervention of the PMA that provided additional liquidity of USD1.5 billion to banks in mid-March 2020 to last over a four-month period to mid-July 2020. However, given the limited intervention capability of the PMA in the absence of a national currency and comprehensive monetary policy tools, the strength of the liquidity position of the IBs will be tested by the economic implications of the COVID-19 pandemic. For instance, data for 3Q 2020 indicate a decline in all four liquidity indicators for the Palestinian IBs. The LAR declined by -4.7pp, LASLR by -10.2pp, LCR by -30.1pp, and NSFR by -8pp. Moreover, the decline in both LCR and NSFR between the pre-COVID-19 and co-COVID-19 periods is statistically significant.

The participation banks in Turkey recorded improvements in all liquidity indicators including both the LCR and NSFR. Specifically, the participation banks' LAR increased by 5.90pp (10.95% q-o-q), and LASLR by 16.90pp (30.02% q-o-q). However, in terms of LCR, the participation banks recorded a statistically significant decline of -9.30pp (-3.91% q-o-q) based on figures between pre-COVID-19 and co-COVID-19 periods. This is due to the BRSA's action for instance, to grant temporary exemption to Turkish banks regarding compliance with minimum LCR threshold in order to strengthen domestic liquidity. This is expected to further enhance the capability of the participation banks to manage both Turkish Lira liquidity and foreign exchange liquidity.

Although the liquidity position of Islamic banks in both the UAE and Saudi Arabia recorded a decline, it is still above regulatory threshold. As oil exporting countries, both

[35] In Nigeria, the minimum liquidity ratio threshold for commercial banks is 30%, while it is 20% for merchant banks, and 10% for NIBs.

economies have had to cope with the effect of low oil prices in addition to the impact of the COVID-19 pandemic.

In Saudi Arabia, between 1Q 2020 and 2Q 2020, the Islamic banking sector recorded decline in LAR by -1.31pp (-3.94% q-o-q), though an improvement of 1.26pp (4.64% q-o-q) is recorded for LASLR. Declines are also recorded in terms of -8.77pp (-5.58% q-o-q) for LCR and -0.96pp (-0.78% q-o-q) for NSFR. The comparison between the pre-COVID-19 and co-COVID-19 periods also indicate that the decline in both the LAR and LCR is statistically significant.

As at end 3Q 2020, all four liquidity indicators declined further for the Saudi Arabia full-fledged IBs. Specifically, the LAR declined by 0.22pp, while the LASLR also declined by 1.07pp. Both the LCR and NSFR also decreased by 1.67pp and 1,10pp respectively. Nonetheless, the Saudi Arabia IBs is very strong on the back of stable non-profit deposit, retail focus which reduces funding concentration, and massive SAR 50 billion (USD 13.3 billion) liquidity injection into the banking system by SAMA.

Specifically, the UAE recorded decline in LAR by -1.56pp (-10.12% q-o-q), while LASLR declined by -1.87pp (-8.70% q-o-q) as at end 2Q 2020. On the back of various policy measures put in place by the Central Bank of the UAE, there is a rebound in the liquidity position of the Islamic banking sector in the country. Specifically, the LAR increased by 1.74pp, and the LASLR increased by 2.10pp as at end 3Q 2020. It is expected that the liquidity position of the UAE Islamic banking sector will further strengthen on the back of the of the Zero Cost Facility (ZCF) provided by the CBUAE to the banks to encourage financing of the MSMEs. The TESS measures which have been extended to June 2021 also allow banks to reduce NSFR by 10% to 90% and also increase Advances to Stable Resources Ratio (ASRR) by 10% to 110%.

Z-score

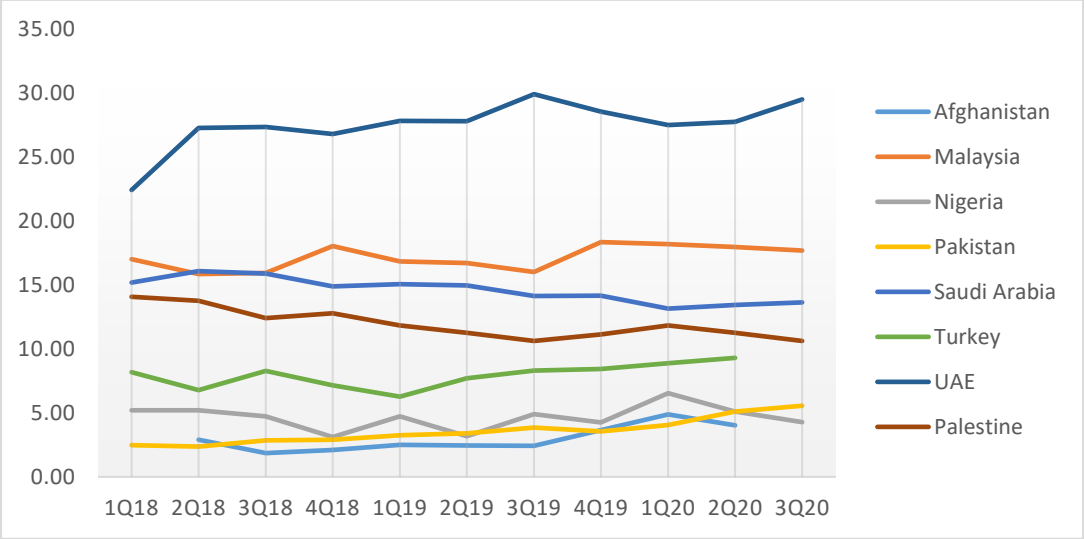
In terms of distance to insolvency measured by the CAR Z-score, all jurisdictions included in this report have positive scores indicating the stability of their respective Islamic banking sectors as shown in Figure 13. Four among the eight jurisdictions recorded q-o-q improvement while another four recorded a decline. Among the former group, three jurisdictions including Pakistan, Saudi Arabia, and UAE have assumed Islamic banking systemic significance, while in the former only Malaysia Islamic banking sector is systemically significant. Among the eight countries, a statistically significant difference is observed in the regulatory Z-score for Malaysia, Saudi Arabia, Turkey between the pre-COVID-19 and co-COVID-19 periods.

Table 3.6 CAR Z-Score

Country	**Financial Stability**	1Q 2020	2Q 2020	Q-o-Q change	Pre-COVID	Co-COVID	Change (sig)
Afghanistan	CAR Z-score	4.88	4.02	-17.70%	2.56	4.45	73.89%
Malaysia	CAR Z-score	18.19	17.98	-1.18%	18.27	17.84	-2.39%*
Nigeria	CAR Z-score	6.54	5.12	-21.79%	5.40	4.69	-13.10%
Pakistan	CAR Z-score	4.06	5.10	25.52%	3.81	5.33	40.01%
Palestine	CAR Z-score	11.85	11.26	-4.99%	11.49	10.94	-4.76%
Saudi Arabia	CAR Z-score	13.15	13.45	2.24%	13.66	13.54	-0.84%*
Turkey	CAR Z-score	8.88	9.30	4.72%	8.65	9.30	7.51%*
UAE	CAR Z-score	27.51	27.76	0.91%	28.03	28.63	2.14%

Source: IFSB PSIFIs
Statistical significance: * <.10.

Figure 13 CAR Z-score 1Q18 – 3Q20



Source: IFSB PSIFIs

As shown in Table 3.6, the CAR Z-score of 27.76 as at end 2Q 2020 for the Islamic banking sector in the UAE is the highest among the countries included in this paper. Although a decline is observed in the 1Q 2020, the sector recorded a rebound in 2Q 2020 with a q-o-q increase of 0.91pp, which further increased by another 0.19pp to end 3Q 2020 at 13.64. This could be linked to the impact of the TESS measures adopted in the country which allows payment deferral by MSMEs as well as reduction in applicable RWA for both rated and unrated MSMEs.

The Malaysia Islamic banking sector's distance to insolvency is the second highest at 17.98 as at end 2Q 2020 signifying the strength of its stability. This is notwithstanding a decline of -1.18pp q-o-q and a further slight decline of 0.28pp to end 3Q 2020 at 17.70. On average the CAR declined by 0.22pp between the pre-COVID-19 and co-COVID-19 periods due to a higher increase in RWA compared to regulatory capital. This also explains statistically significant difference in the average CAR Z-score for the country between the two periods.

Saudi Arabia Islamic banking sector regulatory Z-score of 13.45 as at end 2Q 2020 is the third highest among the countries included in this paper. In addition to a 2.24% q-o-q increase in the distance to insolvency during the period, the sector further improved its CAR Z-score by 0.19pp as at end 3Q 2020. However, a statistically significant decline is observed between the pre-COVID-19 and co-COVID-19 period suggesting a higher average CAR Z-score prior to COVID-19.

Palestinian Islamic banking sector's CAR Z-score declined by -0.59pp (-4.99% q-o-q) to end 2Q 2020 with a score of 11.26. While its distance to insolvency score is one of the highest, it however declined by -0.63pp as at end 3Q 2020. The PMA has encouraged the banks in the jurisdiction to step up financing to the MSMEs which are the mainstay of the economy. This has increased the RWAs and consequently caused a decline in the CAR from 1Q 2020 onwards. Nonetheless, the Islamic banking sector in the jurisdiction is stable.

The participation banking sector in Turkey recorded improvement in their regulatory Z-scores between 1Q 2020 and 2Q 2020. Specifically, the sector recorded an increase of 0.42pp (4.72% q-o-q) to end 2Q 2020 with a CAR Z-score of 9.30. A statistically significant difference is also obtained between the pre-COVID-19 and co-COVID-19 Z-scores indicating improving stability notwithstanding the challenging conditions brought about by the pandemic. Notable reasons include the measures by the BRSA to exclude the value losses in the portfolio of securities at fair value through other comprehensive income in the computation of CAR, and permission granted to banks to use a risk-weight of 0% on foreign exchange obtained from the central government.

Notwithstanding its relatively low CAR Z-score[36], the Islamic banking sector in Pakistan recorded improvement as well as the highest increase q-o-q change of 25.52% to end 2Q 2020 with a score of 5.10. As at 3Q 2020, the CAR Z-score has further improved by 0.46pp. This is on the back of improvements in CAR due to a decline in RWAs as the IBs shifted focus to less-risky assets especially government securities and rated corporate assets. Although not statistically significant, the sector also recorded a 40.01% increase in its regulatory Z-score between the pre-COVID-19 and co-COVID-19 periods as signal of its stability.

The Islamic banking sector in Afghanistan and the NIB sector in Nigeria both recorded relatively high and negative q-o-q changes in regulatory Z-score between 1Q 2020 and 2Q 2020. The former recorded a -17.70% decline to end 2Q 2020 with a score of 4.02. However, a comparison of its pre-COVID-19 and co-COVID-19 scores indicate that there is a 73.89% improvement in distance to insolvency. The latter on the other hand recorded a decline of -21.79% to end 2Q 2020 with a score of 5.12, and a further 0.42pp decline to end 3Q 2020 with a score of 5.12. Although not statistically significant, the comparison between the pre-COVID-19 and co-COVID-19 regulatory Z-score indicate a decline of -13.10%. Nonetheless, the Islamic banking sector and the NIB sector in Afghanistan and Nigeria remain very stable.

SECTION 4: IMPLICATION AND CONCLUSION

This working paper discusses the implications of the effect of the COVID-19 pandemic on the core Islamic financial sector stability indicators, based on early aggregated data available in the IFSB's PSIFIs as at 2Q 2020 and up to 3Q 2020 in some instance. As more data become available in the coming quarters, patterns and implications of the pandemic for these core indicators will become clearer. Nonetheless, some initial effects can be observed based on the analysis in the paper. While most values are still above the regulatory minimum and their historical averages, and the Islamic banking sector across jurisdictions remain stable, preliminary effects are also noted.

Financial institutions, including IBs, entered this financial crisis induced by COVID-19 relatively better capitalised, more profitable and more liquid than when the GFC occurred just over a decade ago. The IFSB's *IFSI Stability Report 2020*, on the basis of the prudential and structural analysis contained therein, also projected a sense of optimism and a positive outlook for the Islamic banking segment in the near term. Nonetheless,

[36] This is due to the relatively high standard deviation of the CAR at 0.21 for the period between 1Q 2018 and 3Q 2020, This could also be due to exclusion of the Islamic banking windows for the jurisdiction.

the exposure of the Islamic banking sector to the real economy makes safeguarding and ensuring its stability very important especially during the COVID-19 pandemic.

Generally, the capital adequacy ratios are well above the regulatory threshold across all jurisdictions but declined in three out eight jurisdictions. While in the short term a reduction in credit risk weights would allow IBs to provide more financing without much infringement on CAR, RWAs are expected to rise in due course as small to medium enterprises (SMEs) and households draw on existing financing commitments. The implications of this could be severe where there is no credible restoration plan, especially if the pandemic is prolonged, the number of non-performing financing (NPFs) grows and the value of collateralised assets deteriorates.[37]

Moreover, the effect of the introduction of regulatory forbearance, for instance, adopting a blanket suspension of provisioning requirements or a temporary breach of capital, solvency or liquidity requirements remains unclear. However, this will further expose IBs with very low buffer margins to significant risks in the medium term, as buffers will be needed for quite some time as per previous episodes of recessions. This will also affect IBs' capacity to provide financing to the real economy, especially those that are bogged down with poor-quality assets and depleted buffers.[38]

It is worthy to state that added to the fact that the data used are still very preliminary, one of the drawbacks of the CAR is that it fails to account for expected losses in a crisis situation, such as the present one. As such, the true impact of COVID-19 on the regulatory capital of the Islamic banking industry will not be fully captured for now.

Asset quality deterioration is also observed in a few jurisdictions. Provisions have increased across jurisdictions even though in some instances the NNPF remains positive indicating that the provisioning is less than the gross non-performing financing. This could be due to differences in regulatory environment from one jurisdiction to another for instance permission for partial provisioning for NPF or the use of time - based (ageing) criterion for NPF.

Despite the gradual easing of the lockdown restrictions and the resumption of economic activities in many jurisdictions, most SMEs' operational resilience is being put to the test and many have ceased operation completely. Households that have been subjected to compulsory leave, pay cuts, job losses or constrained employment opportunities could also default.[39] These implications will only crystallise when the moratorium period is over and governments ultimately withdraw their stimulus packages. IBs will therefore face increasing NPF volumes, rising costs of risk, declining asset quality and a likely consequential rise in RWAs, which could also have implications for capital adequacy.

Most RSAs took wide-ranging measures to ensure a continuous funding supply to the real economy, especially SMEs and households, in an attempt to achieve a balance

[37] As stated in the IFSB's *Compendium of Responses to COVID-19*, Bank Negara Malaysia, for instance, requires that banks restore their buffers within a reasonable period after 31 December 2020: https://www.ifsb.org/page_covid19.php?p=2

[38] M. Drehmann, M. Farag, N. Tarashev and K. Tsatsaronis (2020), "Buffering COVID-19 Losses – the Role of Prudential Policy", *BIS Bulletin*, No. 9, p. 7: https://www.bis.org/publ/bisbull09.htm

[39] This is not withstanding massive fiscal and monetary policy stimulus packages put in place in most jurisdictions where Islamic banking is practised. See IFSB, *Compendium of Policy Responses to COVID-19*: https://www.ifsb.org/page_covid19.php?p=2; and IMF, *Policy Responses to COVID-19*: https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19#S

between ensuring financial stability and promoting economic recovery. As such, SMEs and households, in an attempt to rebuild their cash flow position, will continue to draw on existing credit lines, especially in jurisdictions where there is a government guarantee and moratorium. The solvency of households and SMEs will be significantly impacted depending on the pattern and pace of economic recovery, as well as new waves of the pandemic. While an uncollaterised credit portfolio portends a higher risk of asset quality deterioration, the Islamic banking sector is also exposed to collaterised exposures such as real estate prices.

Based on the *IFSI Stability Report 2020*, as at 3Q 2019 about 12% of total Sharīʿah-compliant financing is to the real estate and construction sectors. Increasing digitalisation and adaptability to the "new normal" of working from home will have substantial implications for the viability of this business segment. The consequence is a likely further deteriorating effect on the real economy, in which case IBs would either constrain credit availability or provide it at a higher cost of capital to the real sector to avoid further losses.

There could also be issues arising from accounting treatment of the likely significant increase in credit risk (SICR) and amount of Expected Credit Loss (ECL) to be recognised. This is more so given the peculiarities of IBs such as varying stages of contract, treatment of profit and loss sharing contracts which the IFRS 9 discountenances.

Profitability declined marginally in a few but also improved in some jurisdictions. Maintaining a stable and adequate level of earnings is crucial to enable IBs to build needed buffers against shock and unexpected losses. COVID-19 is expected to exert increased pressure on the earnings of IBs due to the sudden cessation of or restriction in economic activities in the real sector. Moreover, the cuts in financing rates and flexible repayment options, as well as extended moratorium on existing financing will affect the earnings of the IBs across jurisdictions.

Furthermore, recognition of credit losses and its implications for IBs' earnings will only manifest in the quarters ahead. This is due to accounting and legal processes, and the moderating impact of the stimulus measures put in place by various governments, especially on SMEs and households, to stimulate the economy. Market losses will also likely increase due to mark-to-market losses on the IBs' financial instruments suffering a price dip.

The COVID-19 outbreak has quickened the need for a comprehensive digitalisation of financial services, including those offered by IBs. For instance, in addition to yielding to competitive pressure, these institutions will also have to get used to the new normal of staff working from home by developing their human capital base[40] and enhancing their teleworking and remote access capabilities without compromising the integrity of their technology network. In an IFSB survey, 92% of the respondent IBs indicate that the proportion of their spending on digital transformation will likely increase due to the

[40] The digital transformation process requires highly specialised human capital and domain experts. Therefore, IBs will need to retrain and reskill existing talent – staff reduction at this time may trigger reputational risk – even as they make efforts to attract new ones that fit the imminent digital transformation of the banking workforce.

COVID-19 pandemic.[41] While these changes are expected to yield a favourable outcome in the future as IBs leverage on technology to develop new areas of income, it will put immediate pressure on the cost-to-income ratios of the Islamic banking sector.

Generally, following an initial decline observed in the liquidity ratios in some jurisdictions, a positive rebound is observed in the subsequent quarters. The jurisdictions that recorded initial improvements also recorded sustained performances in the later quarters.

Nonetheless, liquidity mismatches that may arise due to delayed cash inflows as households and SMEs take advantage of the moratorium offered will put IBs in a difficult liquidity position. This is likely because of the lack of Sharī'ah-compliant avenues for liquidity management, draw-downs of credit lines due to liquidity shortages, macroeconomic pressures, runaway inflation rates and negative economic outlooks.

As IBs draw down on their liquidity buffers, a persistent pandemic may lead to a liquidity crunch in some jurisdictions that were already facing liquidity shortages pre-COVID-19. These projections might be aggravated given the new waves of the pandemic and with the possibility of morphing into a solvency risk subsequently.

There has been a suite of swift monetary, fiscal and other policy responses from the various RSAs[42], governments and international organisations aimed at promoting financial stability and supporting economic activities. Examples include allowing the use of various capital and liquidity buffers, debt moratoria, restructuring or rescheduling financing facilities, tax holidays, credit guarantees (especially to households and SMEs), etc. to boost aggregate demand, preserve businesses and create job opportunities. However, there may be concerns relating to such stimulus packages, especially in terms of their targeting, to limit (if it proves impossible to avoid) leakages to unintended targets, timing in terms of duration so that while trying to avoid fiscal pressures arising from massive public spending growth rate of output is also not stymied by abrupt stopping of a stimulus.

The IFSB has, in line with treatments prescribed by the International Accounting Standards Board (IASB), the Basel Committee on Banking Supervision (BCBS), and the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI), issued guiding statements to its member jurisdictions. This includes issues bordering on relaxation of transitional measures including (but not limited to) treatment of prudential and accounting matters, respectively, arising from the pandemic.[43] The IFSB continues to monitor the prudential indicators for the Islamic banking industry in its member jurisdictions amid the pandemic with focus on jurisdictional peculiarities in terms of structural composition, Sharī'ah rulings and considerations, level of banking industry, and economic development.

[41] A. Adewale and R. Ismal (2020). *Financial Stability Implications of the Operational and Regulatory Digital Transformation of Islamic Banking.* IFSB Working Paper WP--19/12/2020. https://www.ifsb.org/sec03.php

[42] It is important that RSAs should strengthen the applicable regulatory framework and strategies even after the COVID-19 pandemic subsides.

[43] https://www.ifsb.org/press_full.php?id=530&submit=more