Harmonizing and constructing an integrated *maqāṣid al-Sharīʿah* index for measuring the performance of Islamic banks

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Abstract

Purpose – This paper aims to develop a performance measure for Islamic banks (IBs) by harmonizing related studies. Furthermore, this work uses the developed yardstick to analyze the performance of a sample of 11 IBs from across different countries.

Design/methodology/approach – This paper uses the mix-mode method. The qualitative approach is engaged first to construct the IBs performance yardstick. Following this, the quantitative approach is applied through the use of the performance yardstick to measure the sample's performance.

Findings – This study develops a *maqāṣid*-based performance yardstick adapted from previous works. The developed model in this study is called an integrated *maqāṣid al-Sharīʿah*–based performance measure (IMSPM). By using this performance measure, the present paper finds that the sample performed highest on the objective of *nafs* (self) over the three-year period. In addition, this study identifies the information which best indicates the sample's performance during the analysis.

Research limitations/implications – This paper uses the sample's annual reports. The analysis is thus limited to informational disclosure.

Practical implications – Islamic banking and financial institutions may use the IMSPM to communicate a measurable report on their promotion of the *maqāṣid al-Sharīʿah* (objectives of Islamic law).

Social implications – The evidence from 11 IBs is indicative of their efforts to realize *maqāṣid al-Sharīʿah* in the banking industry. This point may best challenge the practice of stigmatizing IBs for not being in line with the Sharīʿah (Islamic law) or of imitating conventional banks.

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Originality/value – The novelty of this study lies in two points. First, this study harmonizes previous works to integrate financial and religious measures in a single yardstick. Second, by using the developed standard, this study offers a fresh insight into the global IBs' performance, represented by 11 IBs worldwide.

Keywords Harmonization, Islamic banks (IBs), Banking performance, *maqāṣid al-Sharīʿah* index (MSI)

Paper type Research paper

Introduction

The debate on how to correctly measure the performance of Islamic banks (IBs) has been proceeding for at least a decade. It began when some experts employed conventional yardsticks to compare the performance of IBs and conventional banks (CBs), which resulted in the claim that IBs are inferior to CBs in performance (Mohammed *et al.*, 2008). The most beneficial outcome in employing conventional yardsticks to analyze banks' performance is their strength in revealing financial circumstances. This result is important given that the banking industry is profit-oriented.

The main disadvantage of employing conventional benchmarks to measure IBs' performance is that they fail to investigate Sharīʿah (Islamic law) facets (Muhammed and Md Taib, 2015). The rationale for the establishment of IBs is the promotion of equitable distribution of wealth (Khan, 1997), Sharīʿah ethics and values (Bedoui, 2012; Hudaefi and Bisyri, 2014; Bedoui and Mansour, 2015), religious business philosophy (Haniffa and Hudaib, 2007), Islamic moral economy (Asutay, 2012) and Islamic worldview (Laldin and Furqani, 2013). Thus, IBs are expected to bring *maṣlaḥah* (public interest) for human well-being. With this in mind, IBs' performance should be measured by considering not only their financial aspects but also their religious features.

Former studies that attempted to develop IBs' performance measure include the Islamicity disclosure index (IDI) and Islamic quantitative index (IQI) (Mohamed Ibrahim *et al.*, 2004), ethical identity index (EII) (Haniffa and Hudaib, 2007), *maqāṣid al-Sharīʿah* index (MSI) (Mohammed *et al.*, 2008), the adoption of Law of Sines on *maqāṣid al-Sharīʿah*-based performance measure (Bedoui, 2012; Bedoui and Mansour, 2015), social performance evaluation (Sairally, 2013; Asutay and Harningtyas, 2015), Islamicity measurement (Ascarya and Sukmana, 2016) and Sharīʿah compliance rating (Ashraf and Lahsasna, 2017; Hanif, 2018).

In this work, the authors attempt to harmonize the above studies to develop a yardstick which best measures both religious and financial performances. Following this, the benchmark is used to analyze the performance of the sampled 11 IBs. The purpose of doing so is to evaluate the performance of the IBs based on the comprehensive yardstick developed in this study, called an integrated *maqāṣid al-Sharīʿah*-based performance measure (IMSPM).

The importance and originality of this study lie in two aspects. First, this study synchronizes previous works to advance the existing IBs' performance measure. Second, this work offers fresh evidence of the global IBs' performance by using the developed yardstick. This work is relevant to academics, industry professionals and other related stakeholders in gaining reasonable insight on the extent to which IBs have been promoting *maqāṣid al-Sharīʿah*.

The remaining part of this paper is organized as follows: the second section elaborates the literature review. The third section discusses the research method used in developing the IBs' performance yardstick. The fourth section discusses the results using the developed measure. The last section concludes the paper.

Literature review

Previous studies which have measured IBs' performance can be classified into three categories. The first group comprises comparative works analyzing IBs and CBs with conventional yardsticks, such as CAMELS rating and other financial ratio benchmarks of profitability and efficiency.

The second group consists of mix-mode studies which have modified the measure of the "S" component in CAMELS, which is "sensitivity to market risk," into "Sharīʿah" performance measurement[1]. However, the Sharīʿah benchmarks proposed within those studies have not clearly identified the subject matters. The third group includes theoretical and exploratory works, which usually begun with a qualitative approach to construct the yardsticks, followed by their use in analyzing the IBs' performance.

Limitation of conventional yardstick in measuring Islamic banks' performance

The CAMELS rating system is an internationally standardized approach (Muhmad and Hashim, 2015) that academic works have extensively employed to examine the financial condition of a bank. It refers to "Capital adequacy," "Asset quality," "Management quality," "Earnings," "Liquidity," and "Sensitivity to market risk" (Koch and MacDonald, 2015). The efficacy of CAMELS as a standard benchmark has been proven in numerous studies (Nik Mohd Rashid *et al.*, 2017).

In addition to CAMELS, other conventional benchmarks such as productivity and efficiency measures have been employed to compare IBs' and CBs' performances. For example, Samad (1999) examined the productive and managerial efficiency of Malaysian CBs and IBs using return on asset (ROA) and return on equity (ROE), respectively. He found that the sampled IBs were less efficient. Similarly, Yudistira (2004) measured technical, pure technical, and scale efficiency of 18 IBs. He found IBs to be less efficient. In addition, Hassan (2006) investigated the relative efficiency of IBs worldwide using conventional accounting measures. The findings supported both those of Samad (1999) and Yudistira (2004).

The studies that employ conventional benchmarks to compare IBs' and CBs' performance have problematic implications. This is because traditional yardsticks do not take into account the Sharīʿah-compliance aspect of IBs. Furthermore, those attempts might have worsened the social image of IBs. For example, they may supply ammunition for the portrayal of IBs as not being Islamic or of being imitative of CBs. Considering this, therefore, the performance of IBs should be correctly measured such that the yardsticks fit the nature of IBs. Consequently, the measurement should be based on the IBs' foundations as captured in the *maqāṣid al-Sharīʿah* theory (Mohammed *et al.*, 2008).

The rationale of developing Islamic banks' performance yardsticks

The logic to developing tailor-made IB performance measures is best found by referring to Koch and MacDonald (2015), who state that evaluating banking performance should consider specific characteristics of the business, the intensity of competition and organizational and business structure. Additionally, the following facts may best support the reasons to do so:

- First, conventional yardsticks do not consider the Sharīʿah aspect as they take into account only financial measures.
- Second, (as it will be elaborated in the following sections), none of the previous developed yardsticks for measuring IBs performance have precisely represented both the financial and religious aspects that are specific characteristics of IBs.

Reviewing related works attempting at developing Islamic banks' performance measure

The Islamicity Disclosure Index and Islamic Quantitative Index. Mohamed Ibrahim *et al.* (2004) developed IDI and IQI to evaluate the performance of Bahrain Islamic Bank (BIB) and Bank Islam Malaysia Berhad (BIMB). IDI measures an IB's ability to provide relevant information to their stakeholders. The indicators of IDI include Sharīʿah compliance, corporate governance, and environmental contribution.

Meanwhile, IQI evaluates zakat (almsgiving) performance, equitable distribution, director-employee welfare, Islamic and non-Islamic investment, and Islamic and non-Islamic income. Using the developed IQI and IDI, Mohamed Ibrahim *et al.* (2004) found that BIB outperformed BIMB on the provision of information to stakeholders. Even though this benchmark does not include financial performance measures, the original idea of IDI and IQI is deemed essential for consideration in developing IBs performance yardstick.

The Ethical Identity Index. Haniffa and Hudaib (2007) established the EII to investigate the performance of IBs in the Arabian Gulf region. EII compares the ideal identity of an IB and its real identity as reflected in annual reports.

Haniffa and Hudaib (2007) identified five themes of IBs' ideal ethical identity, with eight dimensions and 78 constructs. The study adopted a checklist method to evaluate the data from annual reports. A high EII implies that the actual performance of the IBs compares well with the ideal benchmark. Meanwhile, a low EII indicates that the IBs should improve their communication in their annual reports for competitive advantage purposes. Applying this methodology, they found that the Bahrain Islamic Bank (BIB) outperformed another six samples.

While EII was considerably adapted from the capitalistic context and Western influence, Sharīʿah was less specifically discussed during its construction (Haniffa and Hudaib, 2007). Even so, this paper shall consider EII due to the novelty of its contribution.

Crediting maqāṣid al-Sharīʿah theory when developing Islamic banks' performance yardstick. Maqāṣid al-Sharīʿah acts as the basis for determining whether particular IBs are practicing Islamic principles (Dusuki and Bouheraoua, 2011). Hence, an understanding of the subject matter is required.

Auda (2011) synchronized jurists'[2] views on *maqāṣid al-Sharīʿah.* The term is understood to refer to the objectives, purposes, intents ends and principles behind Islamic rulings. It includes the wisdom behind the texts and provides criteria for judging the appropriateness of juridical analogy. It forms the basis for juridical preference, the premise behind the presumption of continuity principle, and a large number of other tools for *ijtihād* (juristic efforts to obtain Islamic rulings). Further, Auda (2008) identified the authentic interpretations of Muslim scholars on *maqāṣid al-Sharīʿah.* These include al-Juwayni's (d.478 AH/1085 CE) "public needs", al-Ghazālī's (d.505 AH/1111 CE) "order of necessities", al-'Izz's (d.660 AH/1209 CE) "wisdom behind the rules", al-Qarāfī's (d.684 AH/1285 CE) "classification of prophetic actions", Ibn Qayyim's (d. 748 AH/1347 CE) "what Sharīʿah is all about" and al-Shātībī's (d. 790 AH/1388 CE) "*maqāṣid* as fundamentals".

Maqāṣid al-Sharīʿah theory of recent scholars. It is critical to refer to a new explanation of *maqāṣid al-Sharīʿah* adapted to the present context (Hudaefi and Heryani, 2019), notably when developing IBs' performance measure. In this regard, the study of Chapra (2007) is compatible with the subject matter. He referred to al-Ghazālī, al-Shātībī, and Fakhr al-Dīn al-Rāzi to explain his symbiotic *maqāṣid al-Sharīʿah.* He mentioned that the five objectives – faith, self, intellect, posterity and wealth – are interdependent and support each other in realizing human well-being (Chapra, 2007).

Chapra (2007) mainly elaborated *maqāṣid al-Sharīʿah* with reference to the recent case of human development. Even though his work does not explicitly relate to the context of IBs,

the authors of this paper found some relevant information which best relates to the topic in the present discussion.

Reviewing related works which developed a maqāṣid-based performance measure

The study of the maqāṣid al-Sharīʿah index. The innovative research of Mohammed *et al.* (2008) pioneered a new approach in measuring IBs' performance derived from the *maqāṣid al-Sharīʿah* theory. The study derived numerable items from the theory. Their developed yardstick is called *maqāṣid al-Sharīʿah* index (MSI).

The study traverses three stages in its development of the MSI. First, they referred to Abū Zahrah's theory of *maqāṣid al-Sharīʿah* and employed Sekaran and Bougie's (2003) concept of operationalization to translate the theory. This stage resulted in the performance ratio measures. Second, they appointed 16 experts to weigh the developed MSI. This resulted in the weights for the established variables. Third, they adopted Hwang and Yoon's (1981) method of Simple Additive Weighting (SAW). This stage was conducted to quantify the performance ratios of the samples and the weights assigned to the three objectives along with the developed variables. The findings indicate that the Islamic International Arab Bank of Jordan outperformed the other five samples.

The MSI does not cover the conventional profitability and efficiency measures, which are important for investigating a bank's financial performance. Even so, the current study adopts the MSI as the primary reference given its substantial impact on the related literature.

From reviewing the above, one may understand that conventional measures have failed to investigate Sharīʿah aspects of IBs, while the yardsticks developed by the related scholarly articles have ignored the traditional benchmarks which are critical for a financial measure. As such, this study attempts to harmonize the related works to develop a new benchmark covering both religious and financial aspects for measuring IBs' performance. Subsequently, the established parameters will be used to analyze the performance of the 11 IBs located worldwide.

Research methodology

Qualitative approach

This study used first the qualitative approach to harmonize previous works to construct the IBs' performance measure based on *maqāṣid al-Sharīʿah*. In doing so, this study followed Mohammed *et al.* (2008) in using Sekaran and Bougie (2003) concept of operationalization. The benefit of this concept is that it enables the decoding of abstract ideas into measurable criteria. The operationalization method is not meant to see the correlation, reasons, consequences or antecedents; instead, it describes its observable characteristics for measurement purposes (Sekaran and Bougie, 2003).

The operationalization concept can be understood through the abstract idea of thirst (C). To measure "thirst," one may break it down into "drinking water," which then is called dimension (D). The "drinking water" is then further detailed into "number of glasses," which is called element (E). Hence, the concept of "thirst" is measurable through "drinking of water" calculable with "the number of glasses" to drink (Sekaran and Bougie, 2003). Figure 1 illustrates this concept.

In this study, the abstract concept "C" applies to *maqāṣid al-Sharīʿah* as explained by Chapra (2007). "D" represents the dimensions for objectives of Sharīʿah. Element "E" comprises the indicators of the Sharīʿah objectives, along with the developed performance ratios (PRs) adapted from the relevant studies.

Table I shows the IMSPM which was established in this study. In IMSPM, the study of Sharīʿah auditing (Khan, 1997), alternative informational disclosure (Mohamed Ibrahim *et al.*, 2004), ideal ethics benchmark (Haniffa and Hudaib, 2007), *maqāṣid*-based performance measure (Mohammed *et al.*, 2008; Asutay and Harningtyas, 2015; Mohammed *et al.*, 2015) and conventional finance benchmark (Jaffar and Manarvi, 2011) were harmonized. To some degree, the IMSPM may further advance the benchmark for measuring IBs' performance.

Assigning weight in the developed IMSPM

To quantify the qualitative IMSPM as in Table I, the authors used simple additive weighting (SAW), referring to Mohammed *et al.* (2008). SAW is one solution method in multiple attribute decision-making (MADM). A weighted sum of performance ratings is determined for each developed qualitative variable (Fishburn, 1967 cited in Darmastuti, 2013).

SAW is a value function established based on a simple addition of scores, and it represents the goal under each criterion multiplied by the particular weights (Qin *et al.*, 2008, cited in Velasquez and Hester, 2013). The weights are then multiplied by the corresponding attribute values for each alternative and then summed up across alternatives (MacCrimmon, 1968). Therefore, it is necessary to assign the weights firstly into the developed IMSPM to determine the coefficient of the variables (Hwang and Yoon, 1981). MacCrimmon (1968) explained how to find a reasonable basis when assigning the weights. In this study, the weights are assigned equally adopting the concept of balance, as stated in *Sūrah al-Baqarah* (Qur'ān 2:143). Thus, the weights assigned to the developed IMSPM shall be as delineated in Table II.

Quantitative analysis

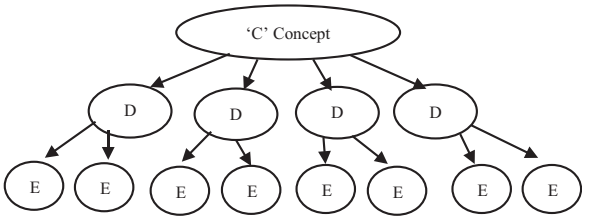
Sample and data set. The population for the current quantitative analysis is IBs in the world. Using the logic of purposive judgment sampling method, this paper selected a sample of 11 IBs as noted in Table III and considered the data published in their annual reports over three years from 2013 to 2015.

Data analysis. This paper referred to Mohammed *et al.* (2008) to develop the IMSPM equations derived from the SAW approach as follows:

Equation (1): Performance Indicator for Objective Faith (*Dīn*) (PI01)

$$PI\,(O1) = W_1^1 \times E_1^1 \times R_1^1 + W_1^1 \times E_1^2 \times R_1^2$$

or,



Source: Sekaran (2003)

Figure 1.
The concept of operationalization

Table I.
Integrated *maqāṣid al-Sharī ah*-based performance measure (IMSPM)

Concept (C)	Dimensions (D)		Referred studies	Elements (E)	Performance ratios (PR)	Referred studies
Maqāṣid al-Sharī ah promoted by M. Umer Chapra (2007)	Faith (*dīn*)	D1. Non-negative elements	Mohammed *et al.* (2008) in Asutay and Harningtyas (2015)	E1. Interest-free products	R1. Interest-free income/ Total income	Mohammed *et al.* (2008)
		D2. Creating awareness of Islamic banking		E2. Publicity	R2. Publicity expense/ Total expense	
	Self (*nafs*)	D3. Justice	Chapra (2007)	E3. Charity	R3. Charity gained/Total charity distributed	Mohamed Ibrahim *et al.* (2004), Chapra (2007)
				E4. Employee welfare	R4. Employees' expenses/Total income	
		D4. Removal of poverty		E5. Zakat fund	R5. Zakat paid/Net assets	
		D5. Job opportunities	Haniffa and Hudaib (2007)	E6. Total no. of branches	R6. Total no. of branches this year/ Total no. of branches in the previous year	Mohammed *et al.* (2015)
	Intellect (*ʿaql*)	D6. Education	Chapra (2007), Mohammed *et al.* (2008)	E7. Education grant	R7. Education grant/ Total income	Mohammed *et al.* (2008)
		D7. Research		E8. Research expense	R8. Research expense/ Total income	
	Posterity (*nasl*)	D8. Health environment	Chapra (2007)	E9. Agricultural financing	R9. Bayʿ al-salam (agriculture) financing/ Total financing	Mohammed *et al.* (2015)
		D9. Moral development		E10. Training	R10. Training expense/ Total expenses	Mohammed *et al.* (2008)
	Wealth (*māl*)	D10. Affordable products and services	Mohammed, Abdul Razak, and Md Taib (2008)	E11. Non-performing financing (loan) (NPF(L))	R11. NPF(L)/Total investment (financing)	Mohammed *et al.* (2008)
		D11. Profit sharing ratios	Khan (1997), Mohamed Ibrahim *et al.* (2004)	E12. *Muḍārabah* financing	R12. *Muḍārabah* financing/Total financing	Mohamed Ibrahim *et al.* (2004), Mohammed *et al.* (2015)

(*continued*)

Table I.

Concept (C)	Dimensions (D)	Referred studies	Elements (E)	Performance ratios (PR)	Referred studies
			E13. *Mushārakah* financing	R13. *Mushārakah* financing/Total financing	
	D12. Restructured financing	Haniffa and Hudaib (2007), Mohammed *et al.* (2008)	E14. Restructured *muḍārabah* financing	R14. Total restructured *muḍārabah* financing/Total restructured financing	Authors' Recommendation
			E15. Restructured *mushārakah* financing	R15. Total restructured *mushārakah* financing/Total restructured financing	
	D13. Earning ability	Khan (1997); the CAMELS rating system	E16. Return on Asset (ROA)	R16. Net income/Total asset	Jaffar and Manarvi (2011) in Asutay and Harningtyas (2015)
			E17. Return on Equity (ROE)	R17. Net income/Total equities	
	D14. Management quality		E18. Operational efficiency	R18. Operating expenses/Operating revenue	

Source: Adapted from related studies

Maqāṣid al-Sharī'ah promoted by Chapra (2007)	Average weight (Out of 100%)	Elements	Average weight (Out of 100%)
Faith (*dīn*)	0.20	E1. Interest-free products	0.50
		E2. Publicity	0.50
		Total	100%
Self (*nafs*)	0.20	E3. Charity	0.25
		E4. Employee welfare	0.25
		E5. Zakat fund	0.25
		E6. Total no. of branches	0.25
		Total	100%
Intellect (*'aql*)	0.20	E7. Education grants	0.50
		E8. Research expenditure	0.50
		Total	100%
Posterity (*nasl*)	0.20	E9. Agricultural financing	0.50
		E10. Training	0.50
		Total	100%
Wealth (*māl*)	0.20	E11. Non-performing financing (loan)	0.125
		E12. *Muḍārabah* financing	0.125
		E13. *Mushārakah* financing	0.125
		E14. Restructured *muḍārabah* financing	0.125
		E15. Restructured *mushārakah* financing	0.125
		E16. Return on Asset (ROA)	0.125
		E17. Return on Equity (ROE)	0.125
		E18. Operational efficiency	0.125
Total	100%	Total	100%

Source: Adapted from Mohammed *et al.* (2008)

Table II.
Assigned weights in IMSPM based on the concept of balance

	Representative IBs			
Continent/ Regions	Country	Name of IB	Abbreviation	IB's website
Middle East	Bahrain	Bahrain Islamic Bank	BISB	www.bisb.com
	Qatar	Qatar International Islamic Bank	QIIB	www.qiib.com.qa
	Saudi Arabia	AlRajhi Bank	ARB	www.alrajhibank.com.sa
South and Southeast Asia	Bangladesh	Islami Bank Bangladesh	IBB	www.islamibankbd.com
	Indonesia	Bank Syariah Mandiri	BSM	www.syariahmandiri.co.id
	Malaysia	Bank Islam Malaysia Berhad	BIMB	www.bankislam.com.my
	Pakistan	Meezan Bank	MB	www.meezanbank.com
Africa	Egypt	Faisal Islamic Bank of Egypt	FIBE	www.faisalbank.com.eg
	Sudan	Al Shamal Islamic Bank	SHIB	www.shib.sd
Others	Turkey	Albaraka Türk Participation Bank	ATPB	www.albaraka.com.tr
	UK	Al Rayan Bank	UK-RYB	www.alrayanbank.co.uk

Source: Authors' own

Table III.
Sample of the study

$$PI\,(O1) = W_1^1\left(E_1^1 \times R_1^1 + E_1^2 \times R_1^2\right)$$

where:

($O1$) = the first of the *maqāṣid al-Sharī'ah*, which is faith (*dīn*);

W_1^1 = the weight assigned to ($O1$) (see Table II);

E_1^1 = the weight assigned to the first element of ($O1$) (see Table II);

E_1^2 = the weight assigned to the second element of ($O1$) (see Table II);

R_1^1 = the evaluation for the performance ratio corresponding to E_1^1 of ($O1$) (as applied in Table I); and

R_1^2 = the evaluation for the performance ratio corresponding to E_1^2 of ($O1$) (as applied in Table I).

Furthermore,

$$\mathrm{PI}(01) = \mathrm{PI}11 + \mathrm{PI}12 \tag{1.1}$$

where:

$$\mathrm{PI}11 = W_1^1 \times E_1^1 \times R_1^1 \tag{1.2}$$

$$\mathrm{PI}12 = W_1^1 \times E_1^2 \times R_1^2 \tag{1.3}$$

Equation (2): Performance Indicator for Objective Self (Nafs) (PI02)

$$PI\,(O2) = W_1^2 \times E_2^3 \times R_2^3 + W_2^2 \times E_2^4 \times R_2^4 + W_2^2 \times E_2^5 \times R_2^5 + W_2^2 \times E_2^6 \times R_2^6$$

Or,

$$PI\,(O2) = W_2^2\left(E_2^3 \times R_2^3 + E_2^4 \times R_2^4 + E_2^5 \times R_2^5 + E_2^6 \times R_2^6\right)$$

where:

($O2$) = the second of the *maqāṣid al-Sharī'ah*, which is self (*nafs*):

W_2^2 = the weight assigned to ($O2$) (Table II);

E_2^3 = the weight assigned to the first element of ($O2$) (Table II);

E_2^4 = the weight assigned to the second element of ($O2$) (Table II);

E_2^5 = the weight assigned to the third element of ($O2$) (Table II);

E_2^6 = the weight assigned to the fourth element of ($O2$) (Table II);

R_2^3 = the evaluation for the performance ratio corresponding to E_2^3 of ($O2$) (as applied in Table I);

R_2^4 = the evaluation for the performance ratio corresponding to E_2^4 of ($O2$) (as applied in Table I);

R_2^5 = the evaluation for the performance ratio corresponding to E_2^5 of ($O2$) (as applied in Table I); and

R_2^6 = the evaluation for the performance ratio corresponding to E_2^6 of ($O2$) (as applied in Table I).

Furthermore,

$$\mathrm{PI}(02) = \mathrm{PI21} + \mathrm{PI22} + \mathrm{PI23} + \mathrm{PI24} \tag{2.1}$$

where:

$$\mathrm{PI21} = W_2^2 \times E_2^3 \times R_2^3 \tag{2.2}$$

$$\mathrm{PI22} = W_2^2 \times E_2^4 \times R_2^4 \tag{2.3}$$

$$\mathrm{PI23} = W_2^2 \times E_2^5 \times R_2^5 \tag{2.4}$$

$$\mathrm{PI24} = W_2^2 \times E_2^6 \times R_2^6 \tag{2.5}$$

Equation (3): Performance Indicator for Objective Intellect (ʿAql) (PI03)

$$PI\,(O3) = W_3^3 \times E_3^7 \times R_3^7 + W_3^3 \times E_3^8 \times R_3^8$$

or,

$$PI\,(O3) = W_3^3\left(E_3^7 \times R_3^7 + E_3^8 \times R_3^8\right)$$

where:

($O3$) = the third of the *maqāṣid al-Sharīʿah*, which is intellect (*ʿaql*),

W_3^3 = the weight assigned to ($O3$) (Table II);

E_3^7 = the weight assigned to the first element of ($O3$) (Table II);

E_3^8 = the weight assigned to the second element of ($O3$) (Table II);

R_3^7 = the evaluation for the performance ratio corresponding to E_3^7 of ($O3$) (as applied in Table I); and

R_3^8 = the evaluation for the performance ratio corresponding to E_3^8 of ($O3$) (as applied in Table I).

Furthermore,

$$\mathrm{PI}(03) = \mathrm{PI31} + \mathrm{PI32} \tag{3.1}$$

where:

$$\mathrm{PI31} = W_3^3 \times E_3^7 \times R_3^7 \tag{3.2}$$

$$\mathrm{PI32} = W_3^3 \times E_3^8 \times R_3^8 \tag{3.3}$$

Equation (4): Performance Indicator for Objective Posterity (Nasl) (PI04)

$$PI\,(O4) = W_4^4 \times E_4^9 \times R_4^9 + W_4^4 \times E_4^{10} \times R_4^{10}$$

or,

$$PI\,(O4) = W_4^4\left(E_4^9 \times R_4^9 + E_4^{10} \times R_4^{10}\right)$$

where:

($O4$) = the fourth of the *maqāṣid al-Sharī'ah*, which is posterity (*nasl*);

W_4^4 = the weight assigned to ($O4$) (Table II);

E_4^9 = the weight assigned to the first element of ($O4$) (Table II);

E_4^{10} = the weight assigned to the second element of ($O4$) (Table II);

R_4^9 = the evaluation for the performance ratio corresponding to E_4^9 of ($O4$) (as applied in Table I); and

R_4^{10} = the evaluation for the performance ratio corresponding to E_4^{10} of ($O4$) (as applied in Table I).

Furthermore,

$$\mathrm{PI}(04) = \mathrm{PI41} + \mathrm{PI42} \tag{4.1}$$

where:

$$\mathrm{PI41} = W_4^4 \times E_4^9 \times R_4^9 \tag{4.2}$$

$$\mathrm{PI42} = W_4^4 \times E_4^{10} \times R_4^{10} \tag{4.3}$$

Equation (5): Performance Indicator for Objective Wealth (Māl) (PI05)

$$\begin{aligned} PI\,(O5) = {} & W_5^5 \times E_5^{11} \times R_5^{11} + W_5^5 \times E_5^{12} \times R_5^{12} + W_5^5 \times E_5^{13} \times R_5^{13} + W_5^5 \times E_5^{14} \times R_5^{14} \\ & + W_5^5 \times E_5^{15} \times R_5^{15} + W_5^5 \times E_5^{16} \times R_5^{16} + W_5^5 \times E_5^{17} \times R_5^{17} + W_5^5 \times E_5^{18} \times R_5^{18} \end{aligned}$$

or,

$$\begin{aligned} PI(O5) = W_5^5\Big(& E_5^{11} \times R_5^{11} + E_5^{12} \times R_5^{12} + E_5^{13} \times R_5^{13} + E_5^{14} \times R_5^{14} + E_5^{15} \times R_5^{15} \\ & + E_5^{16} \times R_5^{16} + E_5^{17} \times R_5^{17} + E_5^{18} \times R_5^{18}\Big) \end{aligned}$$

where:

($O5$) = the fifth of the *maqāṣid al-Sharī'ah*, which is wealth (*māl*);

W_5^5 = the weight assigned to ($O5$) (Table II);

E_5^{11} = the weight assigned to the first element of ($O5$) (Table II);

E_5^{12} = the weight assigned to the second element of ($O5$) (Table II);

E_5^{13} = the weight assigned to the third element of ($O5$) (Table II);

E_5^{14} = the weight assigned to the fourth element of ($O5$) (Table II);

E_5^{15} = the weight assigned to the fifth element of ($O5$) (Table II);

E_5^{16} = the weight assigned to the sixth element of ($O5$) (Table II),

E_5^{17} = the weight assigned to the seventh element of ($O5$) (Table II);
E_5^{18} = the weight assigned to the eighth element of ($O5$) (Table II);
R_5^{11} = the evaluation for the performance ratio corresponding to E_5^{11} of ($O5$) (as applied in Table I);
R_5^{12} = the evaluation for the performance ratio corresponding to E_5^{12} of ($O5$) (as applied in Table I);
R_5^{13} = the evaluation for the performance ratio corresponding to E_5^{13} of ($O5$) (as applied in Table I);
R_5^{14} = the evaluation for the performance ratio corresponding to E_5^{14} of ($O5$) (as applied in Table I);
R_5^{15} = the evaluation for the performance ratio corresponding to E_5^{15} of ($O5$) (as applied in Table I);
R_5^{16} = the evaluation for the performance ratio corresponding to E_5^{16} of ($O5$) (as applied in Table I);
R_5^{17} = the evaluation for the performance ratio corresponding to E_5^{17} of ($O5$) (as applied in Table I); and
R_5^{18} = the evaluation for the performance ratio corresponding to E_5^{18} of ($O5$) (as applied in Table I).

Furthermore,

$$\mathrm{PI}(05) = \mathrm{PI51} + \mathrm{PI52} + \mathrm{PI53} + \mathrm{PI54} + \mathrm{PI55} + \mathrm{PI56} + \mathrm{PI57} + \mathrm{PI58} \tag{5.1}$$

where:

$$\mathrm{PI51} = W_5^5 \times E_5^{11} \times R_5^{11} \tag{5.2}$$

$$\mathrm{PI52} = W_5^5 \times E_5^{12} \times R_5^{12} \tag{5.3}$$

$$\mathrm{PI53} = W_5^5 \times E_5^{13} \times R_5^{13} \tag{5.4}$$

$$\mathrm{PI54} = W_5^5 \times E_5^{14} \times R_5^{14} \tag{5.5}$$

$$\mathrm{PI55} = W_5^5 \times E_5^{15} \times R_5^{15} \tag{5.6}$$

$$\mathrm{PI56} = W_5^5 \times E_5^{16} \times R_5^{16} \tag{5.7}$$

$$\mathrm{PI57} = W_5^5 \times E_5^{17} \times R_5^{17} \tag{5.8}$$

$$\mathrm{PI58} = W_5^5 \times E_5^{18} \times R_5^{18} \tag{5.9}$$

Equation (6): Overall Integrated Maqāṣid al-Sharī'ah-based Performance (IMSPM)

$$\text{IMSPM} = PI(O1) + PI(O2) + PI(O3) + PI(O4) + PI(05) \quad (6.1)$$

Results

The sample's performance ratios (PRs) as applied in IMSPM analysis (Table I) was computed first. Following this, the above equations were employed to multiply the sample's PRs with the weights assigned to the developed variables (as in Table II). The computation was carried out in Microsoft Excel for accuracy and practicability reasons. The result of the present IMSPM analysis is as provided in Table IV.

As shown in Table IV, the value 0 (zero) within some columns means the sample did not provide the information as required in the first IMSPM analysis. In this respect, the sample which provided complete data for the first step analysis was BSM, while the sample with the least provided data was UK-RYB. Due to this limitation, this paper conducted a one-sample Kolmogorov–Smirnov test using IBM SPSS (Statistical Package for the Social Sciences) version 20.0 and selected significance level of 0.05. The test involved each sample's three-year mean PR. The result indicated a Kolmogorov–Smirnov result of 0.793. Thus, the data were normally distributed.

Further, Table IV shows the results of the individual and general performance of the sample. The individual performance of the sample can be seen in the 3-year mean IMSPM column. It is evident that the range of the three-year mean IMSPM was between 0.139 and 0.995. This means that BSM and UK-RYB performed 90 (highest) and 14 per cent (lowest) on the indicators of IMSPM analysis, respectively.

Meanwhile, the general performance of the sample can refer to the overall mean PI (performance indicator) and total PI columns. The overall mean PI represents the sum of the sample's 3-year mean of each PI. The total PI presents the sum of the sample's PI. The highest overall mean PI was for the objective of self (1.718), followed by faith (1.007), wealth (0.530), posterity (0.084) and intellect (0.020). This inferred that the overall sample performed highest on the objective of self (*nafs*) in the present IMSPM analysis over the three years.

Further qualitative validation

The objective of faith (dīn). The sample which recorded the highest proportion for this objective is IBB with a three-year mean of 0.232. This achievement of IBB might be portrayed from Bangladeshi's commitment to state-level initiatives towards IBs' establishment. According to Mannan (2016):

> [. . .] On 4 April 1981, Ministry of Finance issued a letter to Bangladeshi banks, directing all state-owned banks of the country, to open separate Islamic banking counters in all their branches in towns and villages and to keep separate ledgers for them [. . .] (p. 14).

The objective of self (nafs). The sample which recorded highest for this objective is BSM with its three-year mean of 0.819. This realization of BSM might be perused within its Sharīʿah committee's commitment to continuously upgrading the quality of Sharīʿah compliance. Quoting Prof. Dr. H. Komaruddin Hidayat, Chairman of the Sharia Supervisory Board:

> Sharīʿah advisory council provides guidance and reinforcement of "Contracts and Products of Islamic Banking" to the staffs at the branches by conducting "Sharīʿah Clinic Forum", to answer the complaints and hear the recommendation to fix further and upgrade the quality of Sharīʿah-compliance aspect [. . .] (PT Bank Syariah Mandiri, 2015, p. 37).

Table IV.
Results of the sample's performance analyzed using IMSPM

Country	Saudi Arabia			Turkey			Malaysia			Bahrain			Indonesia			Egypt	
Samples	ARB			ATPB			BIMB			BISB			BSM			FIBE	
Examined year	2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015
Faith *(Dīn)* (PIO1)																		
PI11	0.068	0.072	0.072	0.078	0.065	0.061	0.083	0.086	0.087	0.088	0.073	0.089	0.082	0.085	0.086	0.043	0.044	0.044
PI12	0	0	0	0.001	0.002	0.002	0.025	0.019	0.020	0.009	0.005	0.008	0.007	0.005	0.005	0	0.005	0.005
PI(O1)	0.068	0.072	0.072	0.079	0.067	0.063	0.108	0.105	0.106	0.097	0.078	0.097	0.089	0.089	0.091	0.043	0.049	0.049
Total PI (O1)		0.213			0.209			0.319			0.272			0.270			0.141	
3-year Mean (O1)		0.071			0.070			0.106			0.091			0.090			0.047	
Self *(Nafs)* (PIO2)																		
PI21	0	0	0	0	0	0	0.104	0.171	0.052	0.017	0.036	0.105	0.001	0.782	0.665	0	0.050	0.050
PI22	0.017	0.018	0.020	0.022	0.018	0.027	0.039	0.039	0.039	0.014	0.027	0.024	0.286	0.212	0.173	0.032	0.029	0.030
PI23	0	0	0	0	0	0	0.001	0.000	0.001	0.010	0.001	0.002	0.042	0.070	0.069	0.000	0.000	0.000
PI24	0.051	0.052	0.052	0.061	0.060	0.053	0.052	0.053	0.051	0.058	0.037	0.045	0.056	0.051	0.050	0	0.053	0.052
PI(O2)	0.069	0.071	0.072	0.082	0.078	0.080	0.197	0.263	0.143	0.098	0.100	0.176	0.384	1.114	0.957	0.032	0.133	0.132
Total PI (O2)		0.211			0.240			0.603			0.374			2.456			0.296	
3-year mean (O2)		0.070			0.080			0.201			0.125			0.819			0.099	
Intellect *(ʿAql) (PIO3)*																		
PI31	0	0	0	0.002	0.001	0.001	0.001	0.002	0.003	0.0004	0.0004	0	0.002	0.017	0.001	0	0.002	0.009
PI32	0	0	0	0	0	0	0.0002	0.0002	0.0002	0	0	0	0.001	0.001	0.001	0	0	0
PI(O3)	0	0	0	0.002	0.0008	0.0005	0.002	0.002	0.003	0.0004	0.0004	0	0.003	0.018	0.002	0	0.002	0.009
Total PI (O3)		0			0.003			0.007			0.0008			0.023			0.011	
3-year mean (O3)		0			0.001			0.002			0.000			0.008			0.004	
Posterity *(Nasl)* (PIO4)																		
PI41	0.0005	0.0003	0.0003	0.001	0.001	0.001	0.001	0.001	0.001	0	0	0	0.001	0.001	0.009	0	0	0
PI42	0	0	0	0	0	0	0.006	0.006	0.008	0.003	0.005	0.003	0.004	0.002	0.004	0	0.014	0.014
PI(O4)	0.0005	0.0003	0.0003	0.001	0.001	0.001	0.007	0.008	0.009	0.003	0.005	0.003	0.005	0.003	0.013	0.000	0.014	0.014
Total PI (O4)		0.001			0.003			0.024			0.010			0.021			0.028	
3-year mean (O4)		0.0004			0.001			0.008			0.003			0.007			0.009	
Wealth *(Māl)* (PIO5)																		
PI51	0.0004	0.0003	0.0004	0.001	0.001	0.001	0.0003	0.0003	0.0003	0.005	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001
PI52	0.002	0.002	0.002	0	0	0	0	0	0	0	0	0	0.009	0.007	0.005	0.003	0.001	0.001
PI53	0	0	0	0	0	0	0	0	0	0.005	0.005	0.004	0.016	0.018	0.020	0	0	0
PI54	0.015	0.017	0.013	0.107	0.074	0.058	0.013	0.052	0.038	0	0	0	0.010	0.008	0.004	0	0	0
PI55	0	0	0	0	0	0	0	0	0	0.006	0.007	0.015	0.015	0.017	0.021	0	0	0
PI56	0.001	0.001	0.001	0.004	0.003	0.003	0.004	0.004	0.004	0.001	0.001	0.002	0.004	−0.001	0.014	0.001	0.001	0.001
PI57	0.001	0.001	0.001	0.004	0.004	0.004	0.004	0.005	0.005	0.001	0.002	0.001	0.004	−0.024	0.015	0.001	0.001	0.001
PI58	0.012	0.012	0.012	0.011	0.013	0.014	0.009	0.008	0.008	0.007	0.013	0.013	0.017	0.019	0.017	0.006	0.007	0.007
PI(O5)	0.030	0.032	0.028	0.127	0.094	0.079	0.031	0.069	0.056	0.025	0.031	0.039	0.075	0.045	0.097	0.011	0.010	0.010
Total PI (O5)		0.091			0.301			0.156			0.094			0.217			0.032	
3-year mean (O5)		0.030			0.100			0.052			0.031			0.072			0.011	
IMSPM	0.168	0.175	0.172	0.292	0.241	0.223	0.344	0.447	0.318	0.222	0.214	0.314	0.557	1.270	1.159	0.086	0.208	0.214
Total IMSPM		0.515			0.756			1.109			0.751			2.986			0.508	
3-year mean IMSPM		0.172			0.252			0.370			0.250			0.995			0.169	

Source: Computed by authors

(*continued*)

Table IV.

Country	Bangladesh			Pakistan			Qatar			Sudan			United Kingdom				
Samples		IBB			MB			QIIB			SHIB			UK-RYB		Total	Overall
Examined year	2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015	PI	Mean PI
Faith *(Dīn)* (PIO1)																	
PI11	0.190	0.179	0.171	0.035	0.038	0.038	0.091	0.092	0.091	0.073	0.068	0.063	0.091	0.098	0.098	3.022	1.007
PI12	0.055	0.050	0.052	0.001	0.002	0.002	0.004	0.005	0.003	0.002	0.005	0.003	0	0	0		
PI(O1)	0.245	0.229	0.223	0.036	0.041	0.040	0.095	0.097	0.094	0.075	0.073	0.066	0.091	0.098	0.098		
Total PI (O1)		0.696			0.117			0.285			0.214			0.287			
3-year Mean (O1)		0.232			0.039			0.095			0.071			0.096			
Self *(Nafs)* (PIO2)																	
PI21	0	0	0.000	0.076	0.058	0.061	0.001	0.001	0.001	0.001	0.001	0.001	0.004	0.004	0.003	5.155	1.718
PI22	0.001	0.001	0.001	0.007	0.007	0.008	0.005	0.005	0.005	0.015	0.016	0.017	0.021	0.021	0.021		
PI23	0.000	0.0005	0.000	0.00001	0.00001	0.00001	0	0	0	0.000	0.004	0.002	0	0	0		
PI24	0	0.051	0.052	0.057	0.061	0.064	0.050	0.056	0.056	0.050	0.050	0.055	0	0	0		
PI(O2)	0.002	0.053	0.053	0.140	0.126	0.134	0.056	0.063	0.062	0.066	0.071	0.075	0.025	0.025	0.024		
Total PI (O2)		0.107			0.400			0.181			0.212			0.075			
3-year mean (O2)		0.036			0.133			0.060			0.071			0.025			
Intellect *('Aql) (PIO3)*																	
PI31	0.0001	0.0001	0.0001	0.0003	0.0002	0.0001	0.00003	0.0001	0.000005	0.000	0.001	0.000	0	0	0	0.060	0.020
PI32	0	0	0.0005	0.0002	0.0002	0.0002	0	0	0	0.004	0.005	0.003	0	0	0		
PI(O3)	0.0001	0	0.0006	0.0004	0.0004	0.0003	0.00003	0.00009	0.000005	0.004	0.006	0.004	0	0	0		
Total PI (O3)		0.0008			0.001			0.0001			0.013			0			
3-year mean (O3)		0.0003			0.000			0.00004			0.004			0			
Posterity *(Nasl)* (PIO4)																	
PI41	0.001	0.001	0.001	0.011	0.012	0.016	0	0	0	0.016	0.016	0.014	0	0	0	0.252	0.084
PI42	0.003	0.003	0.005	0.0002	0.0002	0.0001	0.021	0.016	0.021	0.002	0.004	0.002	0	0	0		
PI(O4)	0.004	0.004	0.006	0.011	0.013	0.016	0.021	0.016	0.021	0.018	0.020	0.016	0	0	0		
Total PI (O4)		0.014			0.039			0.057			0.054			0			
3-year mean (O4)		0.005			0.013			0.019			0.018			0			
Wealth *(Māl)* (PIO5)																	
PI51	0	0	0	0.090	0.095	0.083	0.0003	0.0002	0.0004	0.00002	0.000002	0.00001	0	0	0	1.589	0.530
PI52	0.001	0.0002	0.0003	0.007	0.006	0.008	0.0003	0.0002	0.0004	0	0	0	0	0	0		
PI53	0.000	0.00003	0.00002	0.002	0.004	0.006	0.00004	0.00001	0.000005	0	0	0.004	0	0	0		
PI54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
PI55	0	0	0	0.005	0.126	0.030	0	0	0	0	0	0	0	0	0		
PI56	0.002	0.002	0.001	0.0003	0.0003	0.0003	0.001	0.001	0.001	0.000	0.002	0.002	0.000	0.000	0.001		
PI57	0.000	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.004	0.005	0.004	0.004	0.003	0.005		
PI58	0.011	0.012	0.006	0.011	0.011	0.013	0.005	0.006	0.007	0.020	0.017	0.021	0.001	0.024	0.018		
PI(O5)	0.015	0.016	0.009	0.116	0.243	0.140	0.008	0.008	0.009	0.024	0.024	0.031	0.006	0.027	0.023		
Total PI (O5)		0.040			0.499			0.026			0.079			0.056			
3-year mean (O5)		0.013			0.166			0.009			0.026			0.019			
IMSPM	0.265	0.302	0.291	0.304	0.422	0.330	0.180	0.184	0.186	0.188	0.193	0.191	0.122	0.151	0.145	10.08	3.359
Total IMSPM		0.858			1.056			0.549			0.572			0.418			
3-year mean IMSPM		0.286			0.352			0.183			0.191			0.139			

The objective of intellect (ʿaql). The sample which recorded highest for this objective is again BSM with a three-year mean of 0.008. This achievement might be portrayed in its 2014 annual report slogan "Strengthening the Foundation, Growing Sustainably". According to its annual report (2014):

> A robust firm does not look at a material benefit in a short period. A firm, as a business community, has perpetual responsibility in addition to maintaining the growth of profit balance [. . .] BSM has a certain direction to becoming a firm which strongly commits on sustainable growth[. . .] (p. 1).

The objective of posterity (nasl). The sample which made the highest contribution for this objective is QIIB with a three-year mean of 0.019, followed by SHIB with 0.018. The achievement of QIIB might be a result of the commitment of both the Government and the Qatari people in supporting Islamic banking. Citing Al-Thani (2015):

> [. . .] QIIB was able to achieve significant increase and growth in its various banking activities over the past year which was reflected in the positive reaction of clients and shareholders as well as their confidence in the bank's ability, status and strong financial position (p. 21).

The objective of wealth (māl). The sample which registered highest under this objective is MB with a three-year mean of 0.166 followed by ATPB with a three-year mean of 0.100. The achievement of MB may best be explained from the following quote:

> [. . .] Meezan Bank has always had a calling higher than that of achieving business success: to spearhead the spread of Islamic banking in the country, living up to its vision statement of establishing "Islamic banking as banking of the first choice." The success of Meezan Bank in the industry, evidenced by its classification amongst the top ten banks of the country, has paved the way for other Islamic banks to grow [. . .] (Meezan Bank, 2015).

Discussion of results

This paper has engaged firstly a qualitative approach to establish IMSPM. By further employing the benchmark, the present work has analyzed the performance of a sample of 11 banks. The results, as described in the above section, did not provide any evidence to assert that one particular IB is better than the other IBs, or, one sampled IB is more Islamic than the other sampled IBs.

Even though BSM was found to perform highest in the individual performance with the three-year mean IMSPM of 0.99, this finding suggests that BSM provided enough information as required during the IMSPM analysis. This interpretation disproves that of the previous studies of Antonio *et al.* (2012), Ascarya and Sukmana (2016) and Saoqi (2017), who claimed that one particular bank they studied was better than other sampled banks, and one specific bank in a country was more Islamic than the sampled IBs of other countries.

The sample's highest overall performance on IMSPM was with regard to the objective of self (*nafs*). This finding is best interpreted as providing insight into the sample's achievement in promoting *maqāṣid al-Sharīʿah* in the banking sector. The authors do not interpret this as the IB sector falling short with regard to *maqāṣid al-Sharīʿah* as did Asutay and Harningtyas (2015). A possible explanation for this different interpretation is the fact that all the sampled banks did not disclose the information needed for the analysis. In addition, the nature of the concept of operationalization, which grounds the establishment of IMSPM, is not meant to see the correlation, reasons, consequences or antecedents (Sekaran and Bougie, 2003); thus, this best provides the rationale to interpret the results in this way.

Conclusion

The current study set out to develop a model for measuring IBs' performance based on scholarly works. The paper established the IMSPM, which measures both religious and financial aspects of IBs. By further using the IMSPM, the paper analyzes the performance of a sample of 11 banks worldwide. The overall sample performed highest on the objective of self (*nafs*) in the three-year selected period. To some degree, this evidence can best challenge the issue of IBs not being in line with the Sharīʿah.

This paper contributes in several ways to our understanding of the appropriate benchmark for measuring IBs' performance and provides a basis for interpreting the results of IBs' performance using IMSPM. An implication from these findings is that both financial and religious measures should be taken into account when analyzing an IB's performance. The Islamic banking industry may employ the IMSPM to communicate the *maqāṣid al-Sharīʿah* performance in their reports for business and Sharīʿah-compliance advantages. In addition, future studies may employ the IMSPM to measure the recent performance of Islamic financial institutions, so that more evidence indicating their positions in promoting *maqāṣid al-Sharīʿah* in the financial industry is further supported by scholarly discussion.

Notes

1. For example, Muljawan (2005) adjusted financial ratios measures in CAMELS rating to be compatible with IBs nature. Nevertheless, the study did not take Sharīʿah discussion into account. The study of Sarker (2006) proposed to add Sharīʿah rating in 'S' of CAMELS becoming CAMELSS, yet the proposed rating was not based on the *maqāṣid al-Sharīʿah* theory. The study by Ratnaputri (2013) used Sharīʿah conformity along with CAMEL(S) rating system. Nonetheless, the elaboration of Sharīʿah conformity was unclear. The work of Abdul Rahman and Masngut (2014) used Sharīʿah compliance in CAMELS analysis. However, Sharīʿah compliance of the study was limited to Sharīʿah rules and regulation issued by a Sharīʿah advisory council. It neither formed a method nor considered the theory of *maqāṣid al-Sharīʿah*. Ismail and Che (2015) studied the indicators of IBs financial soundess covering both financial and Sharīʿah facets. However, neither an index of Sharīʿah measurement was developed nor empirical evidence was presented.
2. Jurists who are discussed in Auda (2011) are Muḥammad al-Ṭāhir ibn ʿĀshūr (1325AH), Dhia' ul-Din Abd al-Malik ibn Yusuf al-Juwayni al-Shafi'i (d.478 AH/1085 CE), Abū Ḥāmid Muḥammad ibn Muḥammad al-Ghazālī (d.505 AH/1111 CE), Shihāb al-Dīn al-Qarāfī (d.684 AH/1285 CE), Sayf al-Din al-Amidi (1404AH), Ibn Qudāmah al-Maqdīsī (1399AH), Ahmad ibn al-Tayyib al-Sarakhsi and Ibn Abdul Samad.

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