Islamic Business and Finance Series

BENCHMARKING ISLAMIC FINANCE

A FRAMEWORK FOR EVALUATING FINANCIAL PRODUCTS AND SERVICES

Edited by
Mohd Ma'Sum Billah

ROUTLEDGE

BENCHMARKING ISLAMIC FINANCE

Pricing or benchmarking is a process of evaluating the performance of a financial company's products and services or systems, against other businesses, considered to be at the top of their field, by applying a measurement of "best in performance".

This book includes contributions from the leading global experts in the field who tackle topics such as whether the Islamic financial system has been dependent on the LIBOR/EURIBOR in its benchmarking exercises to date and, thus, whether it will be affected negatively by the predicted non-existence of the LIBOR/EURIBOR from 2021 onwards. They also address the question of whether the Islamic financial system requires benchmarking of its products and services and consider the emergence of Sharīʿah-justified benchmarking in today's Islamic financial system. Additionally, they look at how benchmarking formulas should be adapted to ensure the satisfaction of customers within the principles of Maqasid al-Sharīʿah.

It takes a legal and institutional approach to the subject, which readers will find particularly valuable, as there are various forms of Islamic finance institutions that do not conform to established models in the finance industry. Furthermore, there are emerging business models that will benefit from this line of investigation.

This book offers a timely analysis of these issues and redresses the existing misconceptions and misinterpretations pertaining to benchmarking in an Islamic finance context and, as such, provides guidance and strategies for future directions. It will appeal to researchers of Islamic banking, finance, and insurance, as well as practitioners, particularly standard-setting bodies, regulators, and policy makers.

Mohd Ma'Sum Billah is a Senior Professor of Finance at the Islamic Economics Institute, King Abdul Aziz University, Jeddah, Kingdom of Saudi Arabia.

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THIS BOOK IS, DEDICATED TO THE REMEMBRANCE OF MY MOST BELOVED PARENTS *ALLAMAH MUFTI NUR MOHAMMAD (R)* AND *USTAZAH AKHTARUN NISA' (R)* WHO HAVE NOURISHED ME WITH THEIR LOVE AND WISDOM. MAY *ALLAH (SWT)* SHOWER THEM WITH HIS LOVE AND MERCY AND GRANT THEM *JANNAT AL-FERDAUS*. I WOULD ALSO LIKE TO DEDICATE THIS BOOK TO MY LOVELY WIFE DR KHAMSIAH BINTI NAWAWI (HEAD, OSHE-HOSPITAL UKM) AND OUR LOVING KIDS DR AHMAD MU'IZZ BILLAH (HCTM), AHMAD MU'AZZ BILLAH (OP-RMC CADET), AHMAD MUNIFF BILLAH (OP-RMC CADET) AND AKHTARUN NABA' BILLAH (ANSARA MRSM) FOR THEIR CONTINUOUS SUPPORTS AND SACRIFICES.

MAY ALL BE BLESSED WITH *MUWADDAU WA RAHMAH*, *QURRATU A'YUN* AND *MARDHAATI ALLAH (SWT)* IN THE LIFE AND THE NEXT.

THIS BOOK IS ALSO DEDICATED TO THE *UMMAH* AND THE WHOLE OF HUMANITY

MOHD MA'SUM BILLAH, PHD

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FOREWORD

Contemporary Islamic financial activities began in 1963. In the last 58 years Islamic finance has significantly secured its global platform with utmost appreciation. It is not merely confined within Muslim countries, but has crossed the border into the non-Muslim world with a red-carpet welcome. The asset size of Islamic finance hits nearly USD 3 trillion, while its annual growth rate is about 15–18%, a significant achievement as compared to what the conventional counterpart achieves. Islamic financial products and services are not a new dimension in the contemporary economic era, and have been rapidly growing with utmost appreciation from different classes of the global markets, despite numerous shortcomings that are surrounding them. People across the world and particularly Muslim communities are expecting niche Sharīʿah-compliant financial products to meet the demand in the multi-dimensional markets with accurate ratings and valuations. It has been observed that no adequate customer-friendly Islamic financial products are available yet. It is due perhaps to the fact that the interbank benchmarking mechanisms are still mainly influenced by the LIBOR in the absence of any comprehensive Sharīʿah solution to benchmarking. It is worth noting here that there are numerous product rating agencies who claim to have designed enough Shari'ah financial products with interbank benchmarking in the certain jurisdictions, but they do not have globally effective results yet.

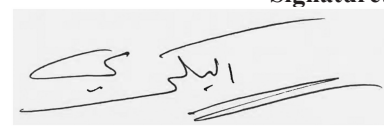
There are books, articles, and other items of research on rating, valuation, and benchmarking Islamic finance, perhaps theoretical, but no comprehensive practical solutions to Islamic financial benchmarking exist yet to meet the global demand for a Sharīʿah-compliant benchmarking formula to Islamic financial products and services designed by the academia, industries, professionals, and policy makers today.

The LIBOR is expected to cease its execution in mid-2021. A series of questions arise: does Islamic finance require benchmarking? Does Islamic finance depend on the LIBOR in its benchmarking? What will happen for Islamic finance in its benchmarking in the absence of the LIBOR? Is Islamic finance prepared with its own Sharīʿah-compliant benchmarking? What will be the framework or technical know-how of Islamic benchmarking to meet the demand of the world Islamic financial industries in the demise of the LIBOR?

In resolving those queries and problems faced by the Islamic financial industries in their interbank benchmarking exercises within the principles of Maqasid al-Sharīʿah, the initiative of the world-renowned and highly respected Islamic finance scholar Prof. Dr Mohd Ma'Sum Billah of Islamic Economics Institute, King Abdul Aziz University, in producing this book is timely to meet the demand of the contemporary world to benefit from Sharīʿah-compliant benchmarking solutions to financial products and services. I found this book, which addresses the subject with comprehensive analysis, intellectual discussions, and empirical solutions, to be among the pioneer guides and references for academia, researchers, professionals, industrialists, customers, entrepreneurs, decision makers, promoters, programmers, students, and people in general who are involved in or interested in Sharīʿah compliance benchmarking financial products and services.

It is my privilege with honor to write this foreword for this prestigious title. May we all be blessed with true knowledge and its rightful practices.

Signature:



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PREFACE

The issue of benchmarking Islamic financial products and services is an emerging chapter of utmost concern across the world of Islamic banking and finance. It has been observed that despite a significant achievement is Islamic financial products and services since 1963 with gradual effect, their interbank benchmarking exercise had depended mainly on the LIBOR (an interest-bearing benchmarking platform) without having a Sharīʿah-compliant benchmarking formula yet. There are numerous literatures on Islamic finance as well as resource centers, but undesirably it has been observed that there is no comprehensive literature addressing exclusively Sharīʿah-compliant solutions to benchmarking Islamic financial products and services. The impact of such a phenomenon is that the industry, customers, promoters, professionals, and even academia are suffering with confusion. This book is therefore timely to contribute with numerous Sharīʿah-justified solutions to benchmarking Islamic finance. This book, however, contributes with a Sharīʿah paradigm of benchmarking Islamic financial products and services, their policies, technical know-how, mechanisms, and empirical analysis. The book addresses some core and specialized issues with Sharīʿah solutions to benchmarking Islamic finance as an alternative to LIBOR, which are in four parts with 17 specialized chapters besides an introduction and an index.

Part I provides an analytical submission with a goodbye to the LIBOR while focusing on the emergence of benchmarking in the Islamic financial system, which consists of five chapters addressing different core issues of benchmarking. Chapter 1 contributes on whether Islamic finance needs benchmarking and, if so, how its framework may be. Chapter 2 discovers a solution to the query on why Islamic finance requires benchmarking. Chapter 3 provides a paradigm of an alternative Islamic interbank benchmarking mechanism. Chapter 4 focuses on Islamic finance, benchmarking, and the LIBOR transition. Chapter 5 contributes a SWOT analysis of benchmarking in the Islamic finance industry.

Part II focuses on the Sharīʿah analysis of benchmarking Islamic finance, which consists of seven chapters with Sharīʿah and jurisprudential solutions to benchmarking Islamic financial products and services. Chapter 6 discusses the Qurʾānic solution to benchmarking the financial system. Chapter 7 discovers how Sunnah recognizes a benchmarking formula for the Islamic financial system.

Chapter 8 advocates the Sharīʿah analysis of benchmarking in the Islamic financial system. Chapter 9 presents a fiqh analysis of benchmarking in the Islamic financial products and services. Chapter 10 contributes with an analysis of fatwas governing benchmarking Islamic financial products and services. Chapter 11 also provides a fatwa analysis of benchmarking in the Islamic financial system. Chapter 12 analyzes traditional benchmarking experiences from a Maqasid al-Sharīʿah perspective.

Part III contributes on law and compliance to facilitate benchmarking Islamic finance. The part consists of two chapters contributing on legal and compliance solutions. Chapter 13 discusses on legal and compliance reform for Islamic financial benchmarking. Chapter 14 contributes on the implications of the regulatory shift from LIBOR to the SONIA benchmark for the Islamic banking industry in the UK.

Part IV contributes on testing and experiences in benchmarking Islamic finance. The part consists of three different tests and experiences of benchmarking formulas applicable in Islamic financial products and services, which are presented in three specialized chapters. Chapter 15 provides a comprehensive analysis of how benchmarking matters in Islamic microfinance. Chapter 16 analyzes on what the benchmarking formula in Islamic SME financing may be. Chapter 17 contributes with an analysis of foreign currency and rate derivatives on firm value.

It is submitted that, in the event of a goodbye to the LIBOR, the idea of benchmarking Islamic finance and its emergence are capturing the attention and appreciation of all levels of Islamic financial industries across the contemporary world, yet no significant or comprehensive research with applied solution to benchmarking Islamic finance is ready yet, so there are few reliable references for continuing academic research or industrial solutions in meeting the demand of practicality with technical know-how in benchmarking Islamic financial products and services, except jurisprudential thoughts available in the library and/or as occasional research or in social media. Thus, this title (*Benchmarking Islamic Finance: A Framework for Evaluating Financial Products and Services*) is expected to be among the pioneers with organized and comprehensive applied solutions to Sharīʿah-compliant benchmarking solutions for Islamic financial products and services led by holistic approach of divine principles, which may be a guide to academia, researchers, financial industries, practitioners, decision makers, programmers, professionals, promoters, and students for their technical know-how, future research, and development of furtherance solutions to benchmarking Islamic finance. It is not impossible that the book contains shortcomings. We are thus grateful to all readers should any shortcoming be notified to us for further improvement.

Mohd Ma'Sum Billa
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ACKNOWLEDGMENT

There is no strength and power except in *Allah (swt)*, To Him comes the praise, the Savant, the Wise, the Omniscient, the most beautiful names belong to Him. May the blessing of Allah (swt) and peace be upon *Muhammad (saw)* and all the Prophets (*aws*) from the first to the last.

I am humbly privileged to acknowledge King Abdulaziz University, Kingdom of Saudi Arabia and its prestigious wing Islamic Economics Institute for supporting us with every facility in research, academic, human capital and professional development activities outreaching the global *Ummah*. It is also a great honor for me to humbly acknowledge His Excellency Professor Dr Abdulrahman Obaid AI-Youbi, the President of King Abdulaziz University, Professor Dr Amin Yousef Mohammad Noaman, the Vice President of King Abdulaziz University and Dr Abdullah Qurban Turkistani, the Dean of the Islamic Economics Institute (IEI), King Abdulaziz University (KAU), Dr Mohammad A. Naseef (Vice Dean, IEI-KAU), Dr Maha Alandejani (Vice Dean, IEI, KAU), Dr Faisal Mahmoud Atbani (Head, Department of Insurance, IEI-KAU), Dr Adnan M. A. Al-Khiary (Head, Department of Finance, IEI-KAU) and Dr Albara Abdullah Abulaban (Head Department of Economics) for their continuous supports and encouragements towards dynamic professional development, excellent academic contributions and specialized advance scientific research activities. Heartiest acknowledgement is also extended to my respected fellow-colleagues from the Islamic Economics Institute, King Abdulaziz University including Dr Omar Zuhair Hafiz, Prof Dr Ahmed Mahdi Belouafi (Editor-in-Chief, JKAU-IE), Prof Dr Abderrazak Belabes, Dr Hichem Hamza, Dr Majed Mohammad Rafea Aljuhani (Director, Administrative Division) and my talented colleague Mr Mohammed Alabdulraheem, Lecturer in FinTech and Islamic finance. I would like to express my full-hearted thanks with appreciation to Y. Bhg. Tan Sri Ahmad Zaki Ansore Bin Mohd Yusof (Former Director General, Implimentation Coordination Unit, Prime Minister's Department, Malaysia), Major Sharif Mahmud Hasan (Rtd), Mr Nazrul Islam Azad (Chairman, Starktree Group), Dr Adil Abdelaziz Hamid

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INTRODUCTION

Pricing or benchmarking is a process of evaluating the performance of a financial company's products and services or processes against those of another business considered to be the best in the corporate sector by applying a measurement of "best in performance". The prime objective of benchmarking is to identify the internal opportunities for a furtherance progress and due achievement. In analyzing financial companies with high achiever performance, breaking down what makes such high achiever performance foreseeable, and then comparing those processes to how one's financial activities are implemented, one may make changes that will yield significant impact. It may denote tweaking a financial product's features to more closely match a competitor's offering in the market, or changing the scope of services one offers, or establishing a new customer relationship management (CRM) system to enable more personalized communications with customers as to significant results. There are two important factors in creating opportunities with significant goals, namely continuous and dramatic. Continuous upgrading is incremental, involving only small adjustments to reap sizable improvements. Dramatic upgrading can only come about through reengineering the whole internal work process as to reality.

It is hearsay that the influence of the LIBOR or EURIBOR may be said goodbye to in 2021; thus, there is concern over whether the Islamic financial system has been depending on the LIBOR or EURIBOR in its benchmarking exercise. Will the Islamic financial system be affected negatively by the non-existence of the LIBOR or EURIBOR? Does the Islamic financial system practice any benchmarking? Does the Islamic financial system really need benchmarking in its products and services? How will a Sharīʿah-justified benchmarking emerge in today's Islamic financial system, particularly in the competitive global market? How will a benchmarking formula be adapted by the Islamic financial system in its best performance and assure customer satisfaction within the Maqasid al-Sharīʿah?

Analyzing the aforementioned queries, this book is timely in submitting that the Islamic financial system does not need to be dependent on the LIBOR or EURIBOR, nor be affected by their non-existence. Thus, the book intends to focus and provide solutions with a comprehensive Sharīʿah-justified benchmarking formula and its technical know-how for the Islamic financial system, aiming at

advancing the progress of the Islamic financial system as to its innovative products and best customer service. The title will continue in contributing an alternative benchmarking for the Islamic financial system as to its criteria, model, formula, and technical know-how within the ambit of Maqasid al-Sharīʿah. The book aims at contributing a series of chapters with specialized treatment (solutions) addressing the market niche and need as to Sharīʿah-compliant benchmarking for Islamic financial products and services. Furthermore, the book also focuses on the emergence of benchmarking in the Islamic financial system and its reality paradigm with technical know-how.

Part I

GOODBYE TO THE LIBOR?

The emergence of benchmarking in the Islamic financial system

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DOES ISLAMIC FINANCE NEED BENCHMARKING?

Mustapha Abubakar, Suleiman Dalhatu Sani, and Isiaka Ahmed Halidu

Introduction

The fallout from the 2008 global financial crisis provided further credence to the operations of the Islamic finance services industry, as more investors became disenchanted with conventional finance. Islamic finance and banking, which operate as an interest-free system, are being viewed as an attractive alternative and a safe corridor against high volatility in interest rates experienced in the conventional financial markets. Evidently, the Islamic finance services industry (IFSI), though occupying a minute portion in comparison to the conventional counterpart, has positioned itself as a relevant player in the global financial system with assets value reaching USD 2.19 trillion in 2018 (IFSB, 2008). Within its framework of operations, the IFSI is anchored on asset-based financing transactions, thus leaning more towards financing the real economy. In the conventional landscape, however, charging interest on loans, which is forbidden in Islam, is the landmark feature in the operations of its various financial institutions. This clearly is contrary to the tenet of Islamic finance arrangement that recognizes the economic value of time and not the time value of money. The former underscores the principle of earning returns as being attainable mainly through a mutually agreed mechanism of sharing based on a rate of profit that is derived from real economic exchange activities, while the latter does not.

Generating sufficient returns to cover the cost of funds is a major consideration for an Islamic financial institution while granting financing. The smooth operations of the Islamic financial institutions (IFIs) with respect to credit financing have, however, incurred questions and doubts based on some perceived gaps that suggest its credibility is tainted. One of the recurring questions is how an Islamic finance institution determines its pricing of credit to customers in a way that truly reflects Islamic tenets. For a long time, the determination of the pricing of credit instruments has been based on conventional benchmarks such as the London Interbank Offered Rate (LIBOR), the Euro Interbank Offered Rate (EURIBOR),

the Kuala Lumpur Interbank Offered Rate (KLIBOR), and many others that accommodate interest. For example, the LIBOR is only an estimation of the interest rates that prevail in the money market and thus an index measuring the cost of funds to banks. An aberration is thus seen in many quarters, suggesting that not much difference can be found between the existing Islamic credit prices and the conventional ones as real economic output and growth are not a factor in the determination of the pricing of Islamic credit instruments benchmarked against interest-based parameters. Indeed, the LIBOR benchmark rates are established to be fraught with scandals in their determination process, which necessitated the planned discontinuation of its use effective from the end of 2021.

Furthermore, rate of interest as the indicator for returns in the conventional arrangement differs from rate of profit, which the Islamic finance alternative recognizes in many respects. There are a number of dividing lines between the two. Firstly, in the case of Islamic rate of profit, its determination is guided by Sharīʿah principles, whereas for the conventional system, the interest rate is mainly determined through human effort. Secondly, in accounting for the interest income as in the conventional arrangement, earning is recognized upfront even before real economic activity that generates profit takes place as in the Islamic arrangement for profit rate. Again, the application of simple and/or compounded charges of interest as in the conventional arrangement derives its so-called legitimacy from the concept of time value of money.

There are a range of opinions on the potential of having an Islamic benchmark for pricing that decouples from the conventional one. One of the opinions revolves around the perception that it is highly improbable for the IFSI to introduce its unique benchmark due to the arbitrage activities in the financial cycle, and the minute portion the IFSI occupy (Azad et al., 2018). Another opinion suggests, however, that having a benchmark that is acceptable in Sharīʿah parlance has the potential of exercising price control that ensures transparency, justice, and fairness in financial and wealth circulation.

Given the foregoing issues as some of the factors that continue to generate thoughts among scholars, academic communities, and practitioners as well, this chapter seeks to argue for the need to come up with an alternative benchmark for pricing Islamic credit financial products that reflects Sharīʿah tenets. The chapter is organized into discussions on the LIBOR, EURIBOR, and their defects from an Islamic perspective, pricing mechanisms in Islamic financial products, current phenomena of IF products pricing, benchmarking in Islamic finance, future modeling directions and formulas for benchmarking in Islamic finance, including recommendations, and a conclusion.

LIBOR, EURIBOR, and their defects from an Islamic perspective

The LIBOR is an acronym for London Interbank Offered Rate. It is a benchmark interest rate derived from an average of hypothetical (not actual) interest rates at which the largest and most financially healthy banks operating in London are

willing to borrow (not lend) money from one another. The LIBOR is based on unsecured wholesale transactions to the greatest extent possible, with a waterfall to ensure rate publication (Coyle, 2001; Federal Reserve Bank, 2014; ICE, 2019).

EURIBOR is the interbank offered rate at which large banks in the European Union borrow from each other. Though both the LIBOR and the EURIBOR perform similar roles, they are different in terms of the question asked of the panel banks. While the LIBOR asks each respondent the interest rate at which the bank itself can borrow, EURIBOR asks about the funding ability of the average panel bank. The benefit of the EURIBOR methodology is to better approximate the true rate of borrowing by dampening the psychological impact of overconfidence (Federal Reserve Bank, 2014).

The LIBOR and the EURIBOR both indicate the spread between bank credit and a risk-free interest rate, which means the estimate of interest rate submitted by one contributing bank reflects the credit risk (financial health) of that bank when borrowing, thus in aggregate the LIBOR is a pointer on the financial health of the banking system (Duffie and Stein, 2015).

These two benchmarks (particularly the LIBOR) are widely used by financial institutions globally to guide their loan pricing decisions (Financial Stability Board, 2019). Islamic banks also use the LIBOR as a benchmark when pricing certain Islamic financing products. Naturally, Islamic financing products are products whose profit is known and can be precisely calculated, fixed, and agreed upfront between the transacting parties. Common Islamic products include Murabaha, Ijarah, Salam, and Istisna (SHAPE and REDmoney, 2012; Trisiladi, 2019).

It means, for example, it is permissible in a murabahah for a bank to buy a car worth USD 100,000 and sell it to a client for a fixed profit of USD 20,000, totaling a sale price of USD 120,000, thus making the client indebted to the bank (with the profit amount). There are, however, other Islamic financing products that are naturally uncertain because their profit is unknown and cannot be precisely calculated, fixed, and agreed upfront because the profit (or loss or breakeven) can only be known after the outcome of the financed venture such as the common mushārakah and muḍārabah. It means, for example, that it is not permissible in a mushārakah for a bank to partner in a client's business by injecting capital of USD 100,000 and require the client to pay a fixed profit of USD 20,000 totaling USD 120,000 because it cannot be guaranteed that the client business will make the USD 20,000 profit; as such it is uncertain. Islamic banks are permitted to use the LIBOR as a benchmark for pricing only the naturally certain Islamic financing products (AAOIFI, 2015).

There is a plethora of literature on the debate of Sharīʿah permissibility or non-permissibility of using the LIBOR/EURIBOR as a benchmark for pricing Islamic finance products (see ISRA, 2010). However, the majority of Sharīʿah opinions, based on fatwa (resolutions) from the industry's Sharīʿah standard setters – Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI), Organisation of Islamic Cooperation (OIC) International Islamic

Fiqh Academy (IIFA), as well as Sharīʿah Boards of numerous Islamic Financial Institutions – have ruled its use as a permissible benchmark (AAOIFI, 2015; Ansari, 2019; JIBM, 2014; Kuwait Finance House Fatwa, 2019).

Nonetheless, the main defect associated with the LIBOR/EURIBOR is that they are intrinsically based on the interest (ribā) rate; as such, in the minority opinion of some scholars, it should be non-permissible. Therefore, based on this shade of opinion, the Islamic finance industry should have an Islamic benchmark rate to avoid the reputation risk of resembling the conventional finance industry. An interesting question to ponder over is, for example, if the perfect Islamic benchmark rate existed today and the conventional banks used this as a benchmark to price their interest-based loan contracts with customers, would this make the loan contracts permissible? The answer is that it certainly would not.

The LIBOR as it is today is due to be abolished in 2021 by Britain's Financial Conduct Authority (FCA) due to a number of its operational defects (Arnold et al., 2017; Financial Conduct Authority, 2017). Two major defects led to the abolishment. Firstly, the volume of interbank transactions has depleted significantly since the 2007/2008 credit crunch. Secondly, the LIBOR suffered a loss of confidence due to rigging of the rate by some of the panel banks in order to conceal their dwindling financial health as well as to earn profits from their derivatives trading contracts benchmarked against the LIBOR (Alex, 2017; Financial Stability Board, 2014; Duffie and Stein, 2015).

Other defects include that the LIBOR has been unregulated since its inception in the 1960s until the FCA started regulating in 2013 (Financial Conduct Authority, 2017). Furthermore, the survey question posed to the panel banks for the LIBOR computation – "At what rate could you borrow funds, were you to do so by asking for and then accepting interbank offers in a reasonable market size just prior to 11 am?" – is highly subjective in terms of what exactly a "reasonable market size" is. What exactly is "prior to 11 am"? Additionally, the whole question was for a bank to make a hypothetical rate quote and not an actual rate quote (Federal Reserve Bank, 2014; Financial Stability Board, 2014).

Prerequisites of Islamic financial products pricing

In the wealth creation process, Islam does not place a cap on profit in trade; rather it encourages moderation in profit. A good trade or business model will therefore be one that rewards hard work and promotes even and equitable distribution of wealth. A model choice, at a point in time, and the price determination mechanism that follows it are key in achieving the goal of IF. The pricing approach of IF products should thus be one that reduces the wealth gap in societies. The passing of wealth to the majority of society should take precedence over huge profit-making and not the converse. Thus the guiding principle for IFIs' financing model should be anchored on maṣlaḥah, the principle of that which serves the public interest. For instance, with global inequality, Islamic financing should focus on taking more people out of poverty by encouraging entrepreneurship,

financing venture capitals, and encouraging micro, small, and medium enterprises (MSMEs) to grow through innovative equity financing modes. This should not just be a side priority but should dominate their business preference.

Pricing mechanism in Islamic financial products

Islam promotes a market price determination and permits price fixing when necessary. Extant literature provides evidence in this regard. A market price is one determined by the interplay between demand and supply. Such a price does not restrain the bargaining rights of market agents in establishing a mutually agreed upon price as value for a negotiated product. It portrays the concept of mutual consent in trading espoused in Chapter 4:29 of the Qur'an (ISRA, 2010). There is also ample evidence from the Sunnah, which clearly indicates that the Prophet (PBH) in several instances refused to fix prices and insisted on the allowance of price to be determined by market forces. In the ḥadīth of Anas bin Malik and Abu Hurayrah, the Prophet likened price fixing to being tyrannous and taking people's rights.

From Anas bin Malik:

> *The people said: Apostle of Allah, prices have shot up, so fix prices for us. Thereupon the Apostle of Allah (PBUH) said: Verily, Allah S.W.T. determines the climate of economic affluence and gloom. I do not want to take any action to fix the prices because I do not want, later in hereafter, any among you to demand for the return of your property and blood from me because of my tyranny (in fixing the prices).*

Abu Hurayrah narrated:

> *A man came and said: Apostle of Allah, fix prices. He said: (No), but I shall pray. Again the man came and said: Apostle of Allah, fix prices. He said: It is Allah Who makes the prices low and high. I hope that when I meet Allah, none of you has any claim on me for doing wrong regarding blood and property*.

While a market price is more desirable, prices can be fixed when adjusted as a result of unethical practice of participants. For instance, the practice of hoarding essential commodities can create artificial scarcity and twist out market functioning. In this case, the government or Islamic state is allowed to intervene and fix prices. The reason is that the state is responsible for the citizenry and an adjusted price from market indiscipline by participants can be corrected by the state. A classic example of the occurrence of this is the hisbah institution in Islamic history. The institution derives its mandate from Chapter 3:110 of the Qur'an. Its generic responsibility is promoting good and forbidding evil. Ensuring discipline and fairness in the market is embedded in this function.

Benchmarking in Islamic finance

Benchmarks are standard references for making decisions. Financial institutions make reference to certain benchmark rates when pricing their products or financial instruments. It is argued that benchmarks reduce search cost, better market participation, and enhance matching efficiency.

The practice of benchmarking Islamic credit finance products to LIBOR has drawn considerable criticism and remains a major controversy in the industry. Pricing products based on interest rate benchmarks for an industry with a foundation of interest prohibition is seen as obscuring any difference between Islamic finance and conventional finance.

Nevertheless, opinion exists among some scholars in the industry that mere benchmarking of interest rates does not make Islamic finance contracts the same as a conventional loan contract. One of the most cited arguments for benchmarking interest rates is that advanced by Usmani (2007). He posits that so long as the conditions of Murabaha are met and a true sale exists, mere benchmarking interest for pricing does not render the contract invalid. Usmani, however, admits alternatives should be sought, as benchmarking interest is not desirable. At the least, it does not advance the objective of Islamic economy by impacting the system of distribution. It is implied, therefore, that benchmarked interest prices create a case of arbitrary prices that do not reflect the true price in a sale exchange. A true price will be one that is reflective of the exchange condition of the market for the product under sale.

To decouple Islamic finance from interest, efforts have been made to create a price benchmark for the industry. From the efforts so far there is no agreed-upon benchmark for Islamic IFIs. A point of convergence, however, is that a price benchmark model for IFIs should be one developed from real economic activities. Currently, about 90% of Islamic banks financing in the Gulf Cooperation Council (GCC) are in murabaha (Miah and Suzuki, 2020). This indicates Islamic banks' preference for murabaha contracts over Profit and Loss Sharing (PLS) contracts. PLS contracts like muḍārabah and mushārakah are the classical financing contracts in Islam. One reason for Islamic banks' preference for mark-up financing is that they are able to lock their prices through supporting contracts of wa'ad (unilateral promise) and take collateral to secure their position in the case of default by customers. Deploring more of PLS modes of financing on the assets side of their balance sheet is an important step in creating a unique asset class with unique risk-return profile. It could serve as an end to the issue of benchmarking interest, as IFIs will no longer have a need for it in PLS contracts.

Current phenomena of Islamic financial products pricing

The origin of the LIBOR dates back to 1969, innovated by an employee (Zombanakis) of modern-day JP Morgan bank, with the main objective of introducing variable/floating interest rate loans, because, before the advent of the LIBOR, loan interest rates were fixed rate only (Ridley and Jones, 2012). In

essence, a fixed interest rate is a constant growth rate for debt (loan) to keep growing regardless of the economic realities of growth of the real economy required to service the debt. The syndicate of banks involved in the introduction of the LIBOR wanted to provide long-term loans (adjustable to market conditions) but not at a fixed rate because in the long run if the real economy's growth rate surpasses their fixed interest rate, the banks would lose out since their deposit funding was short-term and based on floating interest rates (Ridley and Jones, 2012).

Even with the introduction of the floating rate, when the LIBOR was nearing negative rates territory in times of economic downturn, banks began to introduce interest rate floors to their loan contracts so that they would not have to pay their loan customers (Prior, 2019). The point is that the LIBOR implants the notion that banks evade the reality that even in loan business the future "return" could be a "loss". This thinking is reinforced by conventional finance with the illusion of an imaginary risk-free rate, which clearly does not hold in the real world, which is full of risks (Al-Suwailem, 2020; Ansari, 2019). The government rates in the Eurozone and even Japan have been in negative territory (Kihara and Koranyi, 2019), the British government recently issued a negative interest rate bond (Katrina Bishop, 2020) and governments such as Greece have defaulted on their so-called risk-free bonds (Schneider, 2012).

The current phenomenon, as shown by various authors, is that the majority of Islamic banks also use the LIBOR or EURIBOR or some other interest rate benchmark when pricing their naturally certain Islamic finance products (Ercanbrack, 2015; IFN, 2020; Ansari, 2019; Visser, 2019; Blake and Redha, 2017; Alshubaily, 2018; Trisiladi, 2019). This includes Sukuk (Cornish and Smith, 2018) as well as Islamic derivatives (Justin and Jon, 2020). Perhaps the industry has aligned with the view of the industry's International Sharī ʿah Standards Setter AAOIFI on the permissibility of the use of such a benchmark, or it is the absence of a robust Islamic benchmark that has led them in this direction. Regardless of the reason, this is the current phenomenon in the industry today.

It is acknowledged that there are some Islamic banks that expose themselves to Sharī ʿah non-compliance risks by muddling up conventional banking terms and conditions under the name of Islamic finance contracts, thus replicating the LIBOR structure of a conventional interest-based contract, resulting in uncertainty, which has been discouraged by AAOIFI (IFN, 2020). The current phenomenon shows the Islamic finance market uses the LIBOR or other countries' specific interest rate benchmarks in pricing Islamic finance products.

Future modeling direction and formula for benchmarking in Islamic finance

Various valuable research works have proposed diverse solutions in developing an Islamic benchmark for the Islamic finance industry. The prior solutions proposed are summarized and opined upon by the authors of this chapter, before proposing the authors' solutions.

S/N	Proposed model/formula of Islamic benchmark	Research proponents	Our opinion
1	Islamic Interbank Benchmark Rate (IIBR) was the only international Islamic benchmark proposal that has been actually implemented in real life to date. It was introduced on 22 November 2011, as the first Islamic benchmark by 16 Middle Eastern banks (Islamic banks and windows) in collaboration with Thomson Reuters, Islamic Development Bank (IsDB), and AAOIFI (Azad et al., 2018; Thomson Reuters, 2011). It was designed similarly to the LIBOR survey question based on asking the banks to provide an expected (not actual) profit rate they would pay to receive Sharī ʿah-compliant funding. The IIBR project provided a good starting point, and valuable lessons were learned in hindsight for the industry even though the IIBR was unsuccessful because it was neither widely adopted by all the contributing banks nor the global industry (JIBM, 2014). Azad et al. (2018) reviewed the relationship between the IIBR and the LIBOR using daily data from 14 April 2012 to 9 October 2015. The findings revealed that both in short-term and long-term relationships the IIBR is strongly influenced by, and dependent on, the LIBOR. The study suggested that achieving a unique Islamic benchmark depends on a significant change in the Islamic banking model and products.	Thomson Reuters was the IIBR administrator (Thomson Reuters, 2011)	The model based on asking for an estimated profit rate that was similar to the LIBOR, which asked for an estimated interest rate. The challenge with this was that the contributing Islamic banks, in submitting their individual estimated profit rates, actually used the LIBOR or some other local interest-based risk-free rate as a reference benchmark in order to estimate the individual profit rate they submit. Thus the aggregated IIBR was indirectly embedded with the LIBOR. The similarity of the IIBR survey question to the LIBOR question also meant it suffered the same subjectivity defect discussed in the first section above.
2	The rate of return on financial assets in the Islamic economic system (rate of Islamic bank financing) has been proposed to be used as an Islamic benchmark.	(Khan and Mirakhor, 1987)	The challenge with this proposal is that the Islamic banks make reference to the LIBOR or some other local interest-based risk-free rate as a reference benchmark in order to estimate their financing rates. Thus, the LIBOR will also indirectly impact the rate of Islamic bank financing.

3	The Islamic profit rate calculated using the formula of: "Growth rate of GDP + overhead costs/muḍārabah investor funds + return on assets (RoA)" has been proposed to be used as benchmark.	(Trisiladi, 2019)	The challenge is that there is usually a considerable time lag in the publication of GDP statistics and an international Islamic benchmark will beg the question of which country or countries' GDP growth rate will be the basis. Furthermore, overhead costs would have to be well-defined to limit the spectrum of subjectivity and ensure simplicity of computation.
4	It is advocated that the rate of profit be determined by the authorities (Central Bank), and the value should not exceed one-third or 33% to get the blessing from Allah (SWT) as Ḥadīth Prophet of the principle of "al-thuluth kathir", which means one-third profit rate is already considered as excessive profit (ghaban fahish).	(Al-Zuhaili, 2002)	Though the proposal justifies a cap based on the ḥadīth, the determination of the actual profit rate gives the government the power to unilaterally determine a profit rate similar to the illusion of a risk-free rate assumption without a robust justification tied to the underlying real economic activities.
5	Benchmark in the real sector by using the index rate of industrial profit on financial transactions in Islamic banks. The benchmark approach can be executed by using the index in the market for goods and services in the real sector such as home or car rental rates at the local, regional, or national level issued by the competent governmental authorities.	(Trisiladi, 2019)	The challenge would be how representative a car rental benchmark would be for agricultural produce financing or other purposes; does it mean that a specific benchmark will be required for each class of goods, considering the international scale of an international benchmark?
6	Islamic financing should take both systematic and firm-specific factors into consideration. Therefore, it was proposed that the Islamic pricing benchmark should be the bank's cost of capital, based on the market risk plus the perceived unique risk involved.	(ISRA, 2010)	The determination of market risk component is also influenced by interest rate.
7	Zakat and other components involving luxury goods, necessities, and a Sharīʿatic determined premium.	(Choudhury, 2017)	The zakat rate is fixed, and the other components are highly subjective, especially on an international scale for an international Islamic benchmark.

Recommendations to reality

In formulating our proposal, we have tried to examine some of the key factors that shape the practical realities of actually implementing such a proposal because a lot of the prior proposals have been silent in acknowledging the genuine trade-offs of the real world.

Key factors

The LIBOR past and future: Assuming the LIBOR or any other interest-based benchmark did not exist in the world today, how would conventional banks price their loans? Well, if we take a walk through history before the coming of the LIBOR, each bank had a self-computed prime rate and then added a spread. Interestingly, borrowers gained from shopping around and also the individual banks' prime rates moved closer together (Duffie and Stein, 2015). It is probable that the prime rates converged because of market competition and/or because the banks used the same Government/Central Bank interest-based risk-free rate as a benchmark to determine their individual prime rate. Fast forward to the current day. The LIBOR is due to end in 2021, how would conventional banks price their future loans? Different countries have different proposals; however, one striking characteristic of the proposals is they are all directly or indirectly linked to the Government/Central Bank determined interest-based "risk-free" rate. The takeaway here for the Islamic banking industry is that directly or indirectly the Islamic benchmark will ultimately be impacted by the Government/Central Bank determined interest-based rate, which reflects the imaginary risk-free rate used to achieve the monetary policy stance of the government.

Transition implications: What happens to existing long-term Islamic finance contracts that are already based on the LIBOR? What are the Sharīʿah, legal, IT systems, accounting, and tax implications of trying to switch to the new Islamic benchmark as a change of pre-agreed contractual terms? No doubt disagreements are likely to arise between counterparties without a regulatory backing to the transition.

Market depth: The failure of the LIBOR today has been attributed to the significant decline in actual interbank market transactions since the 2007/2008 credit crunch (Alex, 2017). Also, the proposed solutions such as the US Federal Reserve Bank's Secured Overnight Financing Rate (SOFR) or the UK's Sterling Overnight Index Average (SONIA) are also challenged by having actual transactions for all the tenors spanning from overnight to a year required so the current solution is to use compounding of the overnight rate to generate future rates. So the new Islamic benchmark will have to address this or may risk falling into the issue of compounded interest if the conventional industry is mimicked.

Reinforcing liquidity management: The interbank borrowing market reinforces the notion of an opportunity cost for idle money, which justifies the concept of interest on money. It dictates that banks should manage their idle liquidity (cash)

by lending to other banks to earn interest. The LIBOR rate determines the interest amount for the interbank money borrowed. Conversely, Islamic finance does not share this view of opportunity cost of idle money, since money's primary function is a medium of exchange. In order to earn profit, that idle money has to become working money through investment in the real economy and not merely placed with another bank to earn interest. Products such as the interbank commodity murabahah replicate the economic effect of earning on idle money in the name of liquidity management as such; the LIBOR rate is used to facilitate these transactions. The question is: is the new Islamic benchmark aimed at supporting these commodity murabahah transactions or transactions with real value to the real economy?

Market competition: Islamic banks were introduced as alternatives to compete and replace conventional banking needs with Sharīʿah-compliant solutions. As such, the real trade-off of this constant competition needs to be acknowledged and may eventually make the new Islamic benchmark rate closely mirror the conventional LIBOR rate in order for Islamic bank offerings to remain competitive.

Recommendations

1. Islamic banks should negotiate and agree on individual rates with their clients, and the Islamic banks should be compelled or incentivized by the Central Bank to submit these rates daily (because banks already submit a lot of daily returns (financial data) to the Central Bank, adding this new requirement should be practically feasible). These rates will then be aggregated by the Central Bank to produce the Islamic benchmark. This process will be more reflective of the actual market realities. The Central Bank can also compel or incentivize Islamic banks not to reference the LIBOR within their individual contracts but rather use this newly introduced aggregate.
2. Government determining not "risk-free" rates but rather "near-risk-free" rates by issuing Sharīʿah-compliant Treasury bills or sukuk with actual exposure to the underlying risks in the real economy. This "near-risk-free" rate can be used as the new Islamic benchmark.
3. A consumer price index of the average prices of the top ten most commonly financed client goods by Islamic banks can be used as the Islamic benchmark. This rate will have to be generated on a daily basis from real market traders of those goods, which can be achieved with the existing advancement of data analytics technologies.
4. The Islamic interbank benchmark should be based on Qard (interest-free loan) rate, which is either zero or based on the actual cost of providing the Qard because this is the only type of monetary loan transaction permissible in Islamic finance. Some regulators already use Qard for mopping up liquidity, and Qard is the foundation of Islamic bank deposits structured as current accounts (Mohamad and Rosylin, 2020; Islamic Financial Services Board, 2008).

Conclusion

In the current dispensation, where the Islamic finance industry displays potential for growth and expansion, reforms and innovations that reflect true Islamic principles are imperative. In the face of the competitive environment of its operations globally, measures that seek to promote financial inclusion of many segments of Islamic societies through Islamic finance service provision are essential. One of the measures is the deliberate institution of pricing technique that results in a reduced wealth gap in societies. The proposals made in this work are anchored on the principle of maṣlaḥah and rukhsa, where the underlying issue in all the proposed alternatives to the existing benchmarks highlighted negotiation, real economic outcomes, and non-inclusion of interest as a factor.

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2

WHY DOES ISLAMIC FINANCE REQUIRE BENCHMARKING?

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Introduction

Islamic finance has been steadily progressing and expanding since its formal inception in 1975. The industry has been growing steadily at an average of 10% per annum (ICD-REFINITIV, 2019), a growth that is faster than its conventional counterpart. The total assets of Islamic finance increased to an estimated USD 2.44 trillion in 2019 from USD 2.19 trillion in 2018 (IFSB, 2020). The performance of Islamic finance in 2019 projected a sense of optimism for 2020 but the combined effects of the shock from the COVID-19 pandemic, oil price volatility, and global trade wars, among others, slowed down the growth pace of Islamic finance (IFSB, 2020). Nevertheless, the recent progress in COVID-19 vaccines has brought back optimism and positive sentiments to the industry, and the global economy at large.

Islamic finance has rapidly expanded and the areas of products and services that it offers now include capital and money markets products, an interbank money market, sukuk or Islamic bonds markets, Sharīʿah-compliant stocks or equity markets, in addition to establishing various funds responding to the different risk appetites of its investors. Recently, Islamic finance has ventured into the fintech ecosystem. Islamic finance also provides financial literacy, education, and training programs in the related fields. These arrays of products and services continue to respond proportionately to the increasing global demand and markets for Islamic finance. This global demand is also manifest in the market share and asset size of Islamic finance worldwide, and an increasing number of institutions offering Islamic finance products and services, including in Muslim minority countries, due to the ethical appeal of Islamic finance.

While Islamic finance may share some functional features with conventional finance at the operational levels in such functions as savings, wealth, and policy, there are fundamental differences between the two systems. Islamic finance is guided and operates based on the Sharīʿah. Hence, Islamic finance prohibits ribā (which includes interest), gharar (speculation), and maysir (gambling) in its operation.

Prior to the establishment of Islamic banking and finance, Muslim scholars envisaged that the industry would be just, fair, able to achieve efficiency and profitability, ensure equitable distribution of income and wealth, create investments in the real sector and enhance human welfare, among other benefits. For example, Chapra (1992) opined that Islamic economics and finance have an inbuilt "moral filter mechanism" at the institutional and operational levels. Siddiqi (2000) and Rosly and Bakar (2003) suggest that ideally the balance sheet structure of Islamic finance is dominated by profit and loss sharing (PLS) on both the assets and liabilities sides.

Kamel (1997) was of the view that the impact of implementing Islamic finance should be reflected in economic development, value creation, increased exports, fewer imports, job creation, and training of capable resources. It was also expected that Islamic finance would aspire to achieve justice, fairness, and a balanced society. it is supposed to be community oriented and entrepreneur friendly, emphasizing productivity, and contributing to the growth of the real economy; and it will promote brotherhood and cooperation (Chapra, 1985; Siddiqi, 2000; Naqvi, 2000). Furthermore, Chapra (1985) extended the features of Islamic finance to include the role in promoting public interest or maslahah, catalyst for development, enhancing economic well-being, and establishing social and economic justice.

Meanwhile Ali (1994) stated that Islamic society expects Muslim firms in their accounting reporting to include, besides profitability, liquidity, solvency, and efficiency, how income is generated and distributed, how business firms treat their employees, keep their promises, and fulfill their contracts, care for the environment, contribute towards socio-economic development, and abide by Islamic ethics.

Muslim scholars, as discussed above, had various expectations about the ideals of Islamic finance once it was established. These expectations, however, did not provide the detail and theory of pricing in the context of Islamic finance. The assumption was that, as pointed out by some of these scholars, Islamic finance products and services would be priced based on the pricing theories of the renowned Islamic contracts such as murabahah, muḍārabah, mushārakah, ijārah, wadi'ah, and wakalah, among others. These contracts were used in activities of the real economy. These scholars, however, did not envisage a situation where Islamic finance would operate on conventional rules and regulations, and hence would rely on conventional theories and practices including pricing. Furthermore, they did not imagine that Islamic finance would be doing financing rather than real buying and selling. In financing, pricing is done on the liability side of the balance sheet. Such a system of pricing, using the conventional financing model, creates a mismatch with the concept of pricing using Islamic contracts in the real economy. Similarly, benchmarking on this pricing system is different from the benchmark in the real economy, which relates to prices of equivalent goods and services, and the pricing is done on the asset side of the balance sheet.

By operating in accordance with conventional rules and regulations (Khan and Chapra, 2003), Islamic finance has attracted a lot of criticisms, which of recent

include criticisms of its use of the interest rate-based benchmark. Critics, for example Al-Salamee (2006) see the entire structure of conventional finance as debt based. The debt structure is based essentially on lending and borrowing, treats money as a commodity, operates using the interest rate mechanism, and defines the customer–bank relationship as a debtor–creditor relationship. The entire conventional rules and regulations are formulated to support and sustain this debt-based structure. Given the small size of Islamic finance assets relative to global finance assets, there is little chance that any Sharī ʿah-based alternative would have a noticeable impact on the conventional system. On the contrary, Islamic finance is seen over time as converging towards conventional finance and replicating its products (Al-Salamee, 2006; El-Gamal, 2006).

The use of conventional benchmarks for pricing Islamic finance products is seen as one of the by-products of this convergence. Over-reliance on the conventional interest rate benchmark raises few pertinent issues. Firstly, is there a gap between the theory and practice of pricing in Islamic finance? Secondly, is the literature confusing pricing products and services in real economic activities and benchmarking in financial market products and services? Thirdly, why has there been a lack of a viable Islamic finance pricing model, despite several attempts to develop one? Fourthly, does Islamic finance need a pricing model or a benchmark?

This study primarily aspires to examine whether there is a genuine need for benchmarking in Islamic finance. To achieve this main objective, the study has adopted an exploratory research design. It has used a qualitative method in the literature survey and analysis based on the following steps: firstly, it has used a survey of the literature for works on pricing and benchmarking related to Islamic transactions and finance. Secondly, the study has conducted a meta-analysis to identify issues and trends on pricing and benchmarking in Islamic transactions and finance. Thirdly, it has used a thematic analysis to identify research gaps based on which the study has provided direction for future research.

This chapter is divided into five sections including the introduction. The second section examines the principles of pricing in Islamic transactions or muamalat. The third section deliberates on the practice of pricing in Islamic finance. The fourth section analyzes the issues to establish the extent to which Islamic finance needs benchmarking. This section is further subdivided into three subsections. First, the confusions between pricing and benchmarking. Secondly, the theory versus the practice of Islamic finance relative to pricing. Thirdly, the drawbacks in the various efforts expended towards developing pricing models for Islamic finance. The fifth and final section concludes the study and provides suggestions for ways forward.

Principles of pricing in Islamic transactions or muamalat

A review of the classical literature shows that past Muslim jurists used three varying terms in their works to refer to pricing or determining price. Those terms

are tathmin (pricing a commodity or service), tas'ir (administrative pricing), and taqwim (valuation). These terms have far-reaching implications for the misconceptions found in modern literature discussing pricing and benchmarks. As will be shown later, benchmark is a modern term in finance, and its various components do not qualify benchmark for pricing in the context of the discussion of early Muslim jurists.

The classical jurists in their works defined thaman as: "the counter-value agreed upon by the seller and buyer as compensation for the item sold" (Al-Qari, 2005; Ministry of Awqaf and Islamic Affairs, 1983). Al Khudair (2002) defined tathmin as: "estimating the counter-value of the item sold based on intuitions and prediction". Therefore, tathmin is the price that is agreed upon between the seller and the buyer based on mutual consent over whether such price is more or less than the value of the good.

The use of tathmin among the jurists was associated with the counter-value agreed upon by the seller and buyer as compensation for the item sold. Therefore, the price is considered one of the cornerstones of the contract in the Sharīʿah according to most of the jurists (Malikis, Shafi'is, and Ḥanbalīs) except the Ḥanafīs. Hence, according to most of the jurists a contract without defining the price is considered invalid (Ministry of Awqaf and Islamic Affairs, 1983).

There is no restriction, limitation, or Sharīʿah prescription on a specific method of determining price, whether the sale price is based on bargaining (buyu' al-musawamah) or on trust, as long as the contracting parties agree on the price mutually. Therefore, the Sharīʿah has permitted different types of sales with prices varying from one sale to the other depending on the consent of the contracting parties. For example, in a murabahah sale (cost-plus sale) the seller can charge the buyer profit. In a tawliyah sale (sale at cost) the seller can sell his goods at cost price without any profit. In a wadhi'ah sale (sale at a loss) the seller is permitted to sell his goods at a loss (Al-Zuhayli, 2001). The price could include profit and the Sharīʿah has put no limit to it as long as it was mutually agreed between the parties to the contract, and free from deception or hoarding.

Meanwhile tas'ir is an administrative pricing due to the intervention of the government or its agencies under certain circumstances to determine market prices of the goods to ensure price stability. Unlike thaman, where the contracting parties have the freedom to agree upon it based on mutual consent, tas'ir is determined by the government or its agencies and is imposed on the people through the market.

The issue of pricing is related to whether profit has a limit from the Sharīʿah perspective or not. As mentioned earlier, in normal circumstances, the parties to the contract are free to determine the price, which includes profit. There are many instances in the Sunnah that confirm that profit has no limit in normal circumstances. There are incidents cited that the Prophet (peace be upon him) allowed profits of up to 100%, and some of the Companions earned more than 100%. Al-Bukhari and others narrated a ḥadīth where the Prophet (peace be upon him) gave Urwah one dinar to purchase a goat. Urwah bought two goats with that one dinar. Afterwards he sold one of the goats for one dinar. He came back to the

Prophet (peace be upon him) with a goat and one dinar. The Prophet (peace be upon him) then prayed that he be blessed in his trade (al-Bukhari: ḥadīth no. 632). Zubayr ibn Awwam, one of the Companions who was given glad tidings of paradise during his lifetime, bought a piece of land from a wealthy person in Medina for 170,000 dinars; his son later sold it for 1,600,000 dinars; nine times more than the original price (al-Bukhari: ḥadīth no. 3129).

The above incidents from the Sunnah show clearly that the parties to the contract have the freedom to determine the price and its profit. Based on that the classical scholars had the following opinions on the intervention of the government in the market to set prices. The first view relates to the majority of the classical jurists of the Ḥanafī, Maliki, Shafi'i, and Ḥanbalī schools, who were not in favor of the interference of the government in determining the prices in the market and they considered it unlawful based on the prohibition by the Prophet (peace be upon him) in the ḥadīth, which was narrated by Anas:

> Prices rose during the time of the Messenger of Allah (ﷺ), and they said: "O Messenger of Allah, prices have risen, so fix the prices for us." He said: "Indeed God is the One who fixes prices, who withholds, gives lavishly and provides, and I hope that when I meet my Lord none of you will have any claim on me for an injustice regarding blood or property."
>
> (at-Tirmidhi, ḥadīth no. 1314)

The second view of Imam Malik allows administrative pricing. The third view of some Ḥanafī scholars allows it when the sellers of foodstuffs raise the price too high. The fourth view, Imam Malik, allows it when the prices become too expensive. This the most accepted one among the scholars. It was adopted by the International Islamic Fiqh Academy in its resolution no. 46 (8/5) concerning Limitation of the Profit Margin of Traders. The Council of the Islamic Fiqh Academy resolves that:

> First: The basic principle in the Qur'an and the Sunnah of the Prophet (PBUH) is that a person should be free to buy and sell and dispose of his possession and money, within the framework of Islamic Sharīʿah, in accordance with the divine command: ("O ye who believe! Consume not each other's property in vanities, unless there is trade based on mutual acceptance").
>
> Second: There is no restriction on the percentage of profit a trader may make in his transactions. It is generally left to the merchants themselves, the business environment, and the nature of the merchant and of the goods. Care should be given, however, to ethics recommended by the Sharīʿah, such as moderation, contention, leniency, and indulgence.
>
> Third: Sharīʿah texts have spelt out the necessity to keep the transactions away from illicit acts like fraud, cheating, deceit, forgery,

> concealment of actual benefits, monopoly, which are detrimental to society and individuals. Fourth: Government should not be involved in fixing prices except only when obvious pitfalls are noticed within the market and the price, due to artificial factors. In this case, the Government should intervene by applying adequate means to get rid of these factors, the causes of defects, excessive price increase and fraud.
>
> (Islamic Fiqh Academy, 2000)

According to Ibn Taymiyyah,

> If people are dealing their goods in the normal ways without any injustice on their part and the price rises either due to shortage of the goods (i.e. decrease in supply) or due to increase in population (i.e. increase in demand), then it is from Allah. In such cases, to force the sellers to sell their goods at a particular price is a wrongful pressure.
>
> (Ibn Taymiyyah, n.d.)

Ibn Taymiyyah interprets the saying of the Prophet (peace be upon him) when the Prophet refused to intervene in the market to fix prices despite an appeal by his followers. Ibn Taymiyyah said: "It was a special case and not a general ruling. There was nothing in the report that someone had refrained from selling or doing something which was obligatory or charged more than the equivalent countervalue ('iwadh al-mithl)". According to him, the price hike was caused by market forces and not by imperfections in the market. It was a case of shortage, i.e. decrease in supply due to decrease in production and not a case of the sellers hoarding or withholding supply. He proved that the Prophet (peace be upon him) himself imposed a just price upon two individuals in disputes: firstly when, in a case of emancipation of a jointly owned slave, he decreed that the just price (qimah 'adl) of the slave be determined without any addition or reduction (La Wakasa Wa La Shatata) and each one be given his share and the slave be set free (Ibn Taymiyyah, n.d.).

The second occasion is reported as a dispute between two persons – one having a tree on the other's land. The landowner found the trespassing on his land by the tree owner to be a nuisance and so took the matter to the Prophet (peace be upon him). The Prophet (peace be upon him) ordered the tree owner to sell the tree to the landowner and accept compensation, or simply give it to him. The man did neither. So the Prophet (peace be upon him) allowed the landowner to cut it down, and he made the landowner pay the price of the tree (Ibn Taymiyyah, n.d.).

After citing these cases at two different places in his book, Ibn Taymiyyah argued that what the Prophet (peace be upon him) did in both cases was administrative pricing. He further says: "If pricing could be done in response to one person's need, it is more logical to do it for the common public's need for food, clothing and housing, as these public needs are of far greater importance than the need of one individual" (Ibn Taymiyyah, n.d.).

However, there are cases where the pricing and the intervention of the government to fix the prices is required such as in times of emergency like famine, war, and whenever there are market imperfections. In the first case, lbn Taymiyyah recommends price-fixing by government and forced sale of essential commodities like foodstuffs. He says: "It is for the authority to compel a person to sell his goods at a fair price when people are in need of it. For example, when he has surplus food and people are faced with starvation, he should be forced to sell at a just price". According to him, compulsion to sell is impermissible without sufficient reason, but with such reason it is permissible (Ibn Taymiyyah, n.d.). Apart from conditions of drought and war, Ibn Taimiyah recommends price-fixing by the government whenever imperfections enter the market. For instance, if sellers (arbab al-sila') abstain from selling their goods except at a higher price than the normal one (al-qimah al-ma'rufah) and at the same time people need these goods, they will be required to sell them at the "price of the equivalent good" (Ibn Taymiyyah, n.d.).

An obvious example of market imperfection is the case of monopoly in food and homogeneous goods. In such a case the authorities should fix the price (qimah al-mithl) for their sale and purchase. A monopolist should not be left wholly free to exercise his power; otherwise he will set a price in his own favor, threatening injustice to people (Ibn Taymiyyah, n.d.).

The scholars who allowed tas'ir proposed that it should be based on "the price of the equivalent or market price". Ibn Taymiyyah defined it as: "The price or (si'r) at which people sell their goods and which is commonly accepted as equivalent or market price for similar goods at that particular time and place" (Ibn Taymiyyah, 2004). In his other book, *Al-Hisbah*, he clearly referred to equivalent price as that which is established by the free play of market forces – of supply and demand (Ibn Taymiyyah, n.d.). The proposed price of the equivalent is to be used as base for pricing according to Ibn Taymiyyah during market imperfections. He added, "For instance, if sellers (arbab al-sila') abstain from selling their goods except at a higher price than the normal one (al-qimah al-ma'rufah) and at the same time people need these goods, they will be required to sell them at the 'price of the equivalent'" (Ibn Taymiyyah, n.d.). In another instance he cites example where administrative pricing is imperative, saying:

> An obvious example of imperfection in the market is that of monopoly in food and similar goods. In such a case the authorities should fix the price (qimah al-mithl) for their sale and purchase. A monopolist should not be left wholly free to exercise his power; otherwise he will set a price in his own favour, threatening injustice to people.
>
> (Ibn Taymiyyah, n.d.)

Other scholars proposed a mechanism based on negotiation, discussion, and consultation with the people concerned to fix the prices. This mechanism was proposed by the Maliki scholar Ibn Habib, who was cited by Ibn Taymiyyah, saying:

> the Imam (authority in charge) should call a meeting of market representatives. Others also should be invited to the meeting so that they could verify their statement. After negotiation and investigation about their sale and purchase he should persuade them to a price that can support them as well as the common people. Thus, they all might agree. Price cannot be fixed without consent and agreement.
>
> (Ibn Taymiyyah, n.d.)

To justify the purpose of forming a committee for consultation, he quotes another jurist, Abul WaIid, who says:

> The logic behind this provision is to find out, in this way, the interests of sellers and buyers and fix a price that should bring advantage and satisfy the needs (of the sellers) and that would involve no embarrassment for the people (the buyers). If a price is imposed without the consent (of the sellers) leaving them no profit, such a price would be corrupt, foodstuffs would be hoarded, and the people's goods would be destroyed.
>
> (Ibn Taymiyyah, n.d.)

Taqwim is used mainly to evaluate goods in certain circumstances like in the case of compensation or discharging obligation. The term is sometimes used synonymous to tas'ir. The need for evaluation according to the jurists arises in the compensation or discharging of obligation in the following cases:

a. When a person is held responsible for causing injury to others' lives (nufus), or property (amwal), or virginity, or profit (manafi').
b. When a person is under obligation to repay equivalent goods or profits, or to recompense for injury to some part of the body (ba'dh al-nufus).
c. When a person is asked to settle invalid contracts (al-'uqud al-fasidah) and valid contracts (al-'uqud al-Sahihah) in the event of a defect (arsh) in lives and property.
d. Grants made by the governor to Muslims, orphans, and trusts (waqf).
e. Compensation by a business agent (wakil) who is appointed for the payment of compensation.
f. Remuneration by/to a business partner (al-musharik wa'l-mudharib), etc. (Ibn Taymiyyah, 2004).

In the above cases where taqwim or evaluation is required, "compensation of the equivalent value" ('iwadh al-mithl) and "price of the equivalent good" (thaman al-mithl) are used. "Compensation of the equivalent" arises when discharging moral or legal obligations is at stake, perhaps (but not necessarily) in connection with goods and applies to payment of dues, compensation and other financial obligations (Ibn Taymiyyah, 2004). According to the jurists, the value of the goods and services are determined by the desire of the people. Ibn Taymiyyah, in

defining "compensation of the equivalent", says that it "is the equivalent amount of that particular object in the prevailing usage ('urf). It is also referred to as the rate (si'r) and custom ('adah)" (Ibn Taymiyyah, 2004). Moreover, he goes on: "The correct evaluation of the just compensation will be based on the analogy and assessment of a thing by its equivalent. And this is real justice and real accepted usage" (Ibn Taymiyyah, 2004).

Practice of pricing in Islamic finance: the case of sale contract

It is common knowledge that Islamic finance uses conventional benchmarks to price its products and services. The components of the conventional benchmark pricing used by Islamic finance in the case of sale contract are annuity factor, periodic payment, sale price, and profit rate. Table 2.1 below shows these components of the benchmark.

As can be seen above, several components of the benchmark are contentious. For example, the two elements of the Annuity Factor, namely (i) and (n). The (i) is basically the rate of cash reserve ratio, an interest rate variable determined by policy makers for both Islamic and conventional finance. What the Islamic finance industry does is to rename or label it profits, without any substantial effect on the way it is determined. Meanwhile the (n) component is to price the financing, basically the loan with reference to time. The more time one takes for repayment, the higher is the amount of financing or loan. Hence, it is purely financing and has nothing to do with sale, which is used as a label to justify the financing. The Sharī ʿah does not approve that loans should vary with time. This is like ribā nasi'ah or ribā jahiliyyah, which were prohibited by the Prophet (peace be upon him).

It is also obvious from the formula used that the pricing is on the liability side of the balance sheet, meaning it is related to the cost of fund used to purchase the asset. Even in the case of determining the profit rate, the following elements are taken into consideration: (1) the funding cost incurred for raising funds to finance or lend, (2) operating costs of servicing the loan or financing such as processing

Table 2.1 Components of benchmark price: the case of sale contract

Element	*Computation formula*	*Description*
Annuity Factor [AF]	$i[1+i]^n/[1+i]^n - 1$	i=Rate of CRR n=Total number of periodic payments
Periodic payment	AF X Financing amount	Financing amount=Purchase price
Sale price	PR X n	PR=Periodic repayment
Profit amount	[PR X n] – Financing amount	Sale price – purchase price
To calculate annuity factor • i=Annualize profit rate, say 7%/100 X 12 = 0.0084 • n=180 installments, then insert values in the formula		

fee, wages, and salaries, (3) risk premium to compensate for the degree of default risk inherent in the loan request, and (4) profit margin on each loan or financing that adequate return on its capital. For example, a customer requests Islamic home financing of USD 250, 000. The Islamic finance institutions must source funds, say at a cost of 3%, the overhead for servicing the financing applied for is 2%, the premium to compensate default risk is 1%, and all financing amounts will be charged a profit margin of 1%. Adding all these elements together will yield a profit rate of 7% for the Islamic finance institution. Therefore, all these components of the benchmark are related to the sources of funds and it is hard to argue that it is related to buying and selling.

Analysis of the issues with benchmarking in Islamic finance

There seems to be a confusion among contemporary researchers of Islamic finance on the difference between pricing and benchmarking. A review of the works of past Muslim scholars shows that they are very clear about the concepts of pricing and benchmarking. They have used three concepts for pricing: thaman or tathmin, referring to pricing of goods and usufruct based on the mutual consent of the buyers and sellers; tas'ir, which refers to administrative pricing by the state intervening in a distorted market to bring about price stability; and taqwim, which means a valuation for the purpose of compensation. On the other hand, they looked at a benchmark (thaman mithli) as the prices of equivalent goods that allow buyers and sellers to use for a price bargain. Benchmark also refers to the market price when the government intervenes in the market to restore price stability. Today, modern researchers developing a pricing model for Islamic finance have hardly benefited from these concepts. Instead, they have relied on the conventional finance variables, setting, rules, and regulations to develop their models, which are basically benchmarks. But this concept of benchmarking does not fit the description provided by those early scholars. To them, a benchmark is prices of equivalent goods. What, then, is that equivalent good that Islamic finance is benchmarking on? Interest rate, cost of fund, annuity factor, etc. Are all these equivalent goods to Islamic finance? If yes, then the concept of benchmarking is flawed. If no, then we do not need a benchmark but a tathmin and taqwim.

The confusion between benchmarking and pricing has led Islamic finance institutions and researchers alike to adopt the conventional finance benchmark. They have moved away from the sound theoretical foundation provided by the works of early Muslim scholars. This has created huge gaps between the theory and practice of Islamic finance. Apparently, the practice is growing and expanding at a dramatic pace driven by the conventional theories that have filled in the vacuum left behind by the absence of viable Islamic finance theories. The time has come for reflection, pondering, and devising strategies for developing sound theories and models based on firm and sound Sharīʿah foundations. Only then shall Islamic finance be able to bridge the gap between theory and practice, beginning with the benchmark.

There have been several attempts by researchers to develop alternative pricing models for Islamic finance. But nearly all these models have several drawbacks in common. First, they try to develop a benchmark, not a pricing model. Secondly, they have developed their model based on the present setting of Islamic finance, which largely operates on conventional rules and regulations. This setting has received several criticisms as discussed in the introductory section of this chapter. Finally, the models have inherited most of the ills associated with the interest-based benchmark. Below are some of the attempts made to develop Islamic finance pricing models.

Selim (2008), using the conventional beta-risk of investments, found that mushārakah financing yields a lower beta-risk of investments compared to other financing modes in the market. In another study, Shubber and Alzafiri (2008) explored the difference of computing the cost of capital for Islamic and conventional banks. The findings show that deposit accounts based on PLS contracts in Islamic banks are not a liability per se; hence, Islamic banks can acquire as much finance as needed by way of deposits, without incurring any extra risk. They also concluded that there is no interest rate risk for Islamic banks. This is misleading, especially when it is common knowledge that Islamic finance relies on an interest rate benchmark. Another benchmark model was developed by Mirakhor (1996) to measure cost of capital based on "Tobin's Q". Although the model is not based on the current conventional setting, its application is limited to investments that may not be practical for Islamic finance in the present setting. Hasan (2009) produced another study that recognized the current setting. It proposed that both conventional and Islamic financial institutions operate in the same market and determine their own interest rates and profit rates, respectively, based on the Overnight Policy Rate (OPR) issued by the Central Bank of Malaysia (CBM). In any case, several Islamic financial institutions in various jurisdictions are exactly doing what is proposed in the study. Thomson Reuters (2020) in collaboration with AAOIFI introduced Islamic Interbank Benchmark Rate (IIBR). IIBR determined pricing in a similar way to the LIBOR. The new IIBR in form measures profit, not interest, but in substance it is the same as the LIBOR. Other researchers, for example, Redzuan and Kassim (2018) proposed the use of the Housing Price Index (HPI), i.e. the equilibrium of property rental values, as an alternative to the interest rate in pricing house-financing products. This attempt looks interesting, but its application is limited to the housing sector. A study by Meera et al. (2010) is perhaps an exceptional attempt that is near to the goal of a pricing model. The authors developed for Malaysia an Islamic pricing benchmark model based on profit rates that originates from the real sector tied to real economic activity and is subject to risk taking.

Conclusion

This chapter has discussed the most critical contemporary issue that continues to be at the center of debate – the Islamic finance benchmark. Previous studies

mostly focused on the contentions surrounding the use of the interest rate-based benchmark by Islamic finance. The chapter has reviewed the works of past Muslim scholars and found that the concept of pricing used then had three distinct meanings: pricing the good or usufruct based on the mutual consent of the buyers and sellers, administrative pricing, and valuation for the purpose of compensation. Modern researchers developing a pricing model for Islamic finance have hardly benefited from these concepts. Instead, they have relied on the conventional finance variables, setting, rules, and regulations to develop their models. This has created huge gaps between the theory and practice of Islamic finance. In the end, these researchers have produced benchmarks rather than pricing models. The novelty of this chapter, therefore, lies in setting this new direction of research based on the fundamental principles and treasures readily available in Islamic Turath.

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3

GOODBYE TO THE LIBOR

An alternative Islamic interbank benchmarking mechanism

Fauzia Mubarik

Inroduction

Modern Islamic banking and finance (popularly known as Islamic finance) came into existence in the 20th century, though it had had a "grass-roots" existence since the inception of Islam. The basic intuition behind the concept of Islamic finance is the confirmation of financial activities according to the legal maxims of Islam[1] (Maqasid-ul-Sharīʿah) (Laldin, 2016). The most prominent feature that differentiates Islamic finance from conventional finance is ribā (interest).

Islamic law (Sharīʿah or Maqasid-ul-Sharīʿah) recognizes money only as a medium of exchange but not as a medium of trade in a financial transaction. Islamic finance has deepened its roots in the modern world because of some of its striking features:

- Ribā-free transactions.
- Asset-backed financing.
- Equity-based transactions.
- Prohibition of gharar (uncertainty).
- Prohibition of speculation (gambling).
- Investment in halal businesses.

The recognition of money merely as a medium of exchange, according to Islamic law, is to discourage extended transactions of money on money, which actually gives birth to ribā (commonly known as interest in the modern world).

In the teachings of the Qur ʾān and that of our Holy Prophet (peace be upon him), ribā has been strongly discouraged because it enhances inequality in society and promotes speculation, gambling, hoarding in financial markets, as well as economic activities to fulfill the short-term needs of profitability. Therefore, to emphasize the evils of ribā, the Qur ʾān has revealed numerous versus of the Surah(s) that discourage humankind to get involved in this grave sin for their own good (30:39, 4:161, 3:130-2, 2:275-81).[2]

To comply with the teachings of Islamic law, a prominent role has been played by Islamic financial institutions to promote ribā-free financial and economic

activities worldwide. Since the 20th century, the practical concept of Islamic finance has been understood and applied worldwide. It is an accolade for the Islamic financial institutions that the non-Muslim world has also developed trust and confidence in Islamic assets, seeing them as more secure than conventional finance assets in lieu of more socially responsible industry.

According to the report[3] (2018), the Islamic financial assets have tremendously increased with a 10%–12%[4] annual growth with USD 2.2 trillion in the year 2016 which is expected to grow to USD 3.8 trillion by 2022. Moreover, capital asset growth rate of the assets has increased to 6%, from USD 2.2. trillion to USD 2.44 trillion in the year 2017 if compared with the statistics of 2012. The global Islamic finance assets commonly comprise Islamic banking (financial and non-financial institutions) along with its 207 windows, capital markets (sukuk), takāful (insurance), and Islamic funds. According to the statistics in 2017,[5] a total of 505 Islamic banks are operational worldwide, among which the Gulf Cooperation Council (GCC) countries (Saudi Arabia, United Arab Emirates, Kuwait, Qatar, and Bahrain) and Malaysia are the most prominent.

Benchmarking of Islamic financial institutions

The London Interbank Offered Rate, commonly known as the LIBOR, is the benchmark rate used by Islamic financial institutions to settle their transactions on a daily basis. According to Alshubaily (2018), a huge amount of debt instruments, totaling USD 2 trillion in interbank transactions, sukuk issuance, and direct banking are priced on the LIBOR rate because of the international clientele base.

The LIBOR is one of the most popular interest-based benchmark rates used worldwide, benchmarking about USD 350 trillion in the financial contracts respectively. Therefore, to survive in this competitive environment of growth and sustainability, there is no harm for the Islamic institutions to benchmark LIBOR as far as the business is halal (Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) Standard 27, Indices).[6] But this could have been true until 2011, before the introduction of the Islamic Interbank Benchmark Rate (IIBR). This is a globally accepted Islamic benchmark rate, launched by Thomson Reuters in collaboration with 19 Islamic financial institutions, the Islamic Development Bank, the AAOIFI, the Bahrain Association of Banks (BAB), the Hawkamah Institute for Corporate Governance, and the Statistical Economic and Social Research Center for Islamic Countries (SESRIC),[7] respectively.

To promote ribā-free transactions, the IIBR is computed on the methodology of the expected cost of the short-term interbank market funding on average as the base price for the money markets, capital markets, and fixed income structures. Since the inception of Islamic finance in the modern world, the Muslim jurists have been inclined to eradicate interest-based benchmarks for Islamic assets as it dissents from the actual teachings of Islamic finance (Omar et al., 2010).

According to the reports,[8] the LIBOR tends to phase out by the end of 2021, which provides an optimum opportunity to the IIBR to deepen its roots in the global financial system with its own market worth of trillion of dollars in Islamic financial assets worldwide. Therefore, in the quest of the appropriate benchmark rates by various economies after the end of the LIBOR, it is a desirable opportunity for Islamic financial institutions to pop up with the rigor to sustain an Islamic benchmark on the global financial terminals. The IIBRs offered over the time period are shown in Figure 3.1.

This research study is an attempt to empirically investigate whether the globally acceptable IIBR impacts the global Islamic market index returns in the same manner as the interest-based LIBOR. If the results co-integrate, the alternative benchmark rate based on Islamic norms could replace the interest-based benchmark rates and could be utilized by Islamic financial institutions worldwide.

To empirically model and analyze, the present study aims to examine the co-integration relationship of the LIBOR and IIBR with the Dow Jones Islamic market index returns over the time period of November 2011 to April 2016.[9] This study had access to many Islamic interbank rates of various countries of the current period but the main focus of this study is to empirically examine and model the globally accepted and regulated IIBR.

The Dow Jones Islamic market index is employed in the dataset because of it being the first Islamic index launched in Bahrain in 1999, comprising 44 countries covering almost 95% of the Sharīʿah-compliant assets.

The present study contributes to the existing field of research by empirically modeling and analyzing the vector autoregressive co-integration relationship between the two prominent global benchmark rates with the Dow Jones market index return. The previous studies have contributed extensively by either

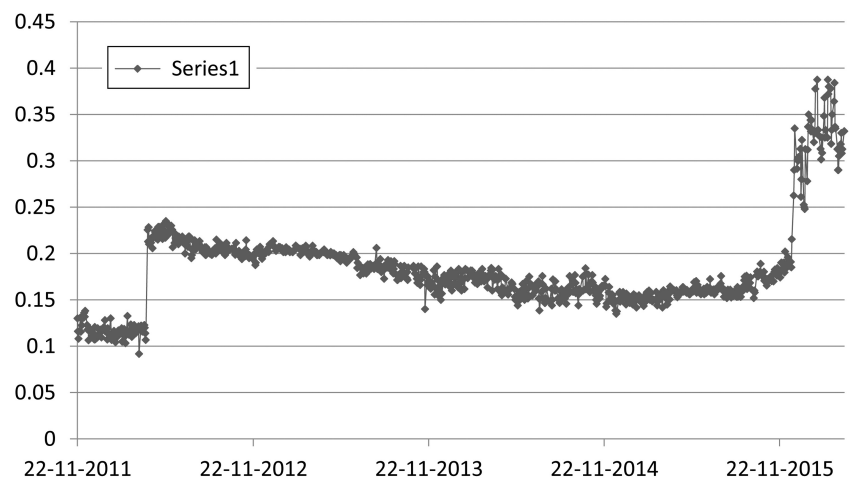

Figure 3.1 Islamic Interbank Benchmark Rates (IIBR): 2011–2016

theoretically proposing (Jaman, 2011; Selim, 2008) or empirically employing various local interbank offer rates such as Overnight Policy Rate, Kuala Lumpur Interbank Offer Rate, and Interbank Money Rate to carry out the Sharī ʿah-compliant transactions (Khan, 2010; Hassan, 2009) specifically in Islamic countries.

This study is significant in analyzing the long relationship of the IIBR with the Islamic returns with the market of trillions of dollars of Islamic financial assets optimally with an active international clientele base. At a time when the LIBOR is about to be phased out, it is a bright opportunity for the global Islamic financial institutions to join hands to promote and sustain the globally launched IIBR, which has unfortunately become internationally "dormant".

Literature review

The Islamic finance industry has gained prominence in recent decades. The practitioners, academicians, and policy makers have focused their attention towards theoretical and empirical contributions in the field.

Nechi and Smaoui (2019) compare the behavior of an IIBR with conventional (interest-based) interbank rates. The authors examine five Islamic countries. The study used co-integration analysis, correlation analysis, Granger causality, and a VAR approach for the study. The authors conclude that IIBR shows a long-term equilibrium relationship with conventional interbank rates in Saudi Arabia, UAE, and Bahrain but not with Qatar and Kuwait. Further studies by Chong and Liu (2009), Khan (2010), and Beck et al. (2013) investigate the relationship between conventional deposit rates and Islamic investment rates in Malaysia. The authors find that only a small portion of profit and loss sharing is strictly followed in Islamic bank financing. Moreover, the Islamic deposit rates, being non-interest, still closely attach to deposit rates of conventional banks.

Ahmed et al. (2018) attempt to investigate the Islamic pricing benchmarks that are applicable rather than market interest rates being used as Islamic finance benchmark rates. The authors consider the Islamic pricing benchmark model (IPBM) and the LIBOR for analysis. The authors suggest that there is a possibility of depending on the IPBM model while considering it as an Islamic benchmark in order to price Islamic financial transactions. Furthermore, it is expected that Islamic finance could be freed from conventional benchmarks, such as BLR, KLIBOR, or LIBOR, and can become independent from conventional finance.

Azad et al. (2018) examine the relationship between the IIBR and the LIBOR; the authors use daily data of the time period from 2012 to 2015. Authors find the long-term and short-term active relationship among two rates having significant evidence of co-movement. Another study by Chong and Liu (2009) reveal that efforts were made in order to create a unique Islamic benchmark that would be different from conventional interest rates, but any effort to make a separate Islamic benchmark would not be successful because of limited size and less potential. Ayub (2007) states that the benchmark rates that Islamic banks used on their

trade-based assets and deposit accounts are fixed to the conventional banks' interest rates.

Ajmi et al. (2014) study the relationship between global stock markets and Islamic stock markets; the authors use heteroscedasticity-robust linear Granger causality and non-linear Granger causality tests and find the significant relationship of linear and non-linear causality among the conventional stock markets as well as Islamic stock markets. Fitri (2007) tries to evaluate the pricing method used by Islamic banks in order to propose the pricing model of the two most important agreements, which are ijara and murabahah. These two products are suggested by Malaysian Islamic financial organizations. Moreover, the author suggests that Islamic financial organizations should recommend reasonable rates for a dual banking system in Malaysia.

Ali and Azmi (2014) propose the model that can be used as an alternative to a benchmark for pricing. The authors suggested the model of Tobin's Q^2 to attain the cost of capital (CoC). The authors empirically test Malaysian firms by this model. From the results, the authors specify that the model of CoC can be used in an interest-free environment. On the contrary, Liang et al. (2013) proposed this model for measuring banks' performance by studying the roles of their branches, while Choi and Han (2013) applied the Q^2 model in their study to explain investment opportunities along with the restructuring of firms' value. Usmani (2007) contributed to the research by proposing the concept of investment in asset-backed instruments. According to the author, banks should make a shared pool of asset-backed instruments such as ijārah and mushārakah, while most of the asset pool will be in tangible form; it could be sold and then purchased according to its net value and these assets will be useful for overnight financing. Those banks having excess liquidity will purchase these assets and, when they need liquidity, they can sell them; in this way the interbank market can be created and banks can use the net value of these assets as an indicator in order to calculate profit

Omar et al. (2010) conducted research to investigate the practical Islamic pricing benchmarks that could be used other than market interest rates. The authors computed a weighted average of sectoral benchmarks for analysis and suggest that Islamic finance has to propose alternative pricing benchmarks to calculate CoC in order to become independent from conventional benchmarks such as the LIBOR and the KIBOR. Hassan (2009) proposes that there are various interest rates that can be determined such as the KLIBOR, Interbank Money Market, and Overnight Policy Rate (OPR). The author suggests that Islamic banks could use the OPR in accordance with Sharīʿah principles, which will prove to be suitable for conventional banks as well as Islamic banks. Another study conducted by Shubber and Alzafiri (2008) recommend that the CoC be used by Islamic banks. The authors state that deposit accounts are not a liability for Islamic finance as they are a part of a profit and loss sharing instrument. The authors find high correlation between the size of deposits and banks' market value in Islamic banks. Selim (2008) attempts to examine the theory-based aspects of Islamic finance

based on mushārakah, relative to the capital asset pricing model (CAPM). The author finds that financing on mushārakah leads to lower risk (beta) as compared to the market investments.

Covrig et al. (2004) propose that market-wide factors and intrinsic bank risk are the two factors upon which the differential between two interbank benchmark rates depend. Umer and Sahatah (2000) propose that an Islamic benchmark could be formed by the dividends that are distributed from Islamic banks to their depositors, as it would reduce the doubt and risk by replacing the interest rate with a profit rate, moreover it would be useful to get a mathematical index rather than its conventional counterpart.

Data and methodology

The author intends to empirically contribute by employing econometric techniques in the study with the research question of whether Islamic finance can compete and survive with the IIBR relative to the conventional interest-based benchmark rate (LIBOR), respectively.

Data analysis

This chapter conducts the long-run co-integration analysis of the conventional interest-based benchmark rate (LIBOR) and the IIBR with the Dow Jones Islamic market index returns over the time period of November 2011 to April 2016 based on the daily frequency of the data.

The market expected returns vary over time and adjust according to the market; information well researched since the concept introduced by Mandelbrot (1963) and Fama (1965). Voluminous literature is available on the theories supporting stock market mean returns and their volatilities; *Capital Asset Pricing Theory* by Sharpe (1964), *Efficient Market Hypothesis* by Fama (1970), *Arbitrage Pricing Theory by Ross* (1976) along with many methodological developments in the time series data – Granger (1969); Engle (1982); Bollerslev (1986); and Johansen and Juselius (1990) respectively.

The daily closing market prices of the Islamic market index are collected from the website[10] of the Dow Jones Islamic market index over the time period of November 2011 to April 2016. The sample period is based on the daily frequency period extended from November 2011 to April 2016.

As explained earlier, the Dow Jones Islamic market index is selected as it was the first index to launch the Islamic market index. This study has employed the global market index to prominently obtain the co-integrating relationships between the globally accepted benchmark rates of the IIBR and the LIBOR, which comprises an active international clientele base.

For the IIBR and the LIBOR, the daily frequency real interbank offer rates are also obtained from the websites.[11]

Econometric framework

Following the CAPM theory (Sharpe, 1964),[12] this study's main aim is to test the long-run co-integration relationship between the conventional LIBOR and the IIBR with the Dow Jones Islamic market index returns (DJIA_ISI), therefore the Johansen-Juselius (1990) co-integration test is employed for statistical analysis as expressed below:

$$\Delta yt = \alpha 0 + \Pi yt - 1 + \sum \Gamma i \Delta yt - i + \varepsilon t(2)\, p - 1 i = 1 \tag{1}$$

Where Π and Γ*i* indicate the coefficient matrix, Δ represents difference operator, and p indicates the lag information criterion.

The co-integration relationships between the variables are statistically measured by the trace test and maximum Eigenvalue test employed within the Johansen and Juliseus (1990) co-integration test.

The trace test statistic is the co-integration rank test expressed as:

$$(r) = -T \sum \ln(1 - \lambda i)\, ni = r + 1 \tag{2}$$

Where T represents the sample size, r represents the co-integrating relations between the variables considering that the series is stationary.

$$\lambda \max (r, r + 1) = -T \ln (1 - \lambda r + 1) \tag{3}$$

Where r represents the co-integrating relations between the variables against the r + 1 alternative co-integrating relations.

To obtain the co-integrating vectors (equations), the time series data is assumed to be non-stationary at level and the test is run on the series when differenced at the order 1. When integrated at the same level, the co-integration test turns to show the long run co-integrating coefficients at various ranks (Gupta and Jain, 2019).

The daily Islamic market closing prices are converted into the market returns by employing the logarithmic formula:[13]

$$R_{mi} = \ln (p_{ti}) - \ln(p_{ti-1}) \tag{4}$$

Where R_{mi} represents the Islamic market return, p_{ti} represents the log of the closing price of the Islamic market index today, and P_{ti-1} represents the log of the closing price of the Islamic market index the previous day.

Pre-estimation tests

Unit root test. To test for stationarity, the Augmented Dickey Fuller (ADF) test is employed on the time series data as expressed below:

$$\Delta y_t = \cap_0 + \gamma y_{t-1} + \cap_0 t + \sum_{i=1}^{p} \beta_i \Delta y_{t-1+} e_t \tag{5}$$

Where Δy_{t-1} represents stationarity and the error term ε_t shows the noise process.

Lag selection criterion. To set the lag interval criterion in the Johansen and Juselius (1990) co-integration test, the Akaike Information Criterion (AIC) developed by Akaike (1974) is used, which is expressed as:

$$\mathrm{AIC} = 2\frac{\mathrm{l}}{T} + 2\frac{\mathrm{k}}{T} \tag{6}$$

Where T is the number of observations, k is the number of parameters, and l is the value of the log likelihood function.

Empirical results and discussion

This chapter has investigated the long-run co-integration relationship between the real benchmark rates that are the LIBOR and IIBR, and the Dow Jones Islamic market index returns over the period of November 2011 to April 2016, with daily frequency.

This section covers the summary statistics (descriptive statistics) of the variables under study and a detailed analysis of the empirical results of the Johansen and Juliseus (1990) co-integration test.

Summary statistics of the study

The distributional characteristics of the sample data are reported in Table 3.1. The mean value of the Islamic market returns turns out to be very low, which indicates that investors invest more in the conventional financial markets than the Islamic financial markets. The IIBR indicates a higher mean than the LIBOR, from which it could be derived that the IIBR is more suitable for the Islamic market index than the conventional benchmark rate. The only effort required is to create awareness among Muslim communities, international investors, and blue-chip Islamic

Table 3.1 Summary statistics

Variables	*Mean*	*Std. Dev.*	*Skewness*	*Kurtosis*	*Jarque-Bera*	*Prob.*	*obs*
DJIA_ISI*	0.0005	0.0078	-0.0048	4.9489	140.70	0	889
IIBR*	0.1828	0.0472	1.7720	7.4939	1213.36	0	889
LIBOR*	0.1256	0.0267	-0.0815	1.5305	80.97	0	889

*DJIA_ISI stands for Dow Jones Islamic Index Return, IIBR stands for Islamic Interbank Benchmark Rate, LIBOR stands for London Interbank Offered Rate.

companies to invest in Islamic market, which is now worth trillions of dollars and intends to increase 10–12% every year.

The statistics of the skewness, kurtosis, and Jarque-Bera test reject the normality of the data and find the data to be leptokurtic non-normal data. It is significant from these statistics because the sample data consists of the time series data where the series are non-stationary. It is further interesting to note that the Islamic market returns (DJIA_ISI) and the IIBR are negatively skewed, which again emphasizes the endeavors needed to promote, sustain, and grow the Islamic financial assets worldwide, which has already been progressed but still lags in the dominant conventional interest-based global financial structure. For example, according to the Global Islamic Finance Development Center (2018), the Islamic Financial Services Board (IFSB) of Malaysia are planning to promote Islamic banking services to low-income people to widen the portfolio of the Sharīʿah-compliant assets, and are also keenly focusing on outreach to the consumers through technology and social finance.

Empirical results

The results of the Johansen-Juliseus co-integration test initiates with the pre-estimation measure of the unit root analysis. All the variables were non-stationary at intercept and on the first difference, the variables are stationary at order 1(I). The unit root results are reported in Table 3.2.

Johansen-Juliseus co-integration test

After the time series data is differenced at order 1(I), the vector autoregressive co-integration test is applied. The results are reported below.

VAR long run co-integration statistics (two co-integrating equations)

Table 3.3 indicates the trace statistics of the co-integrating relationships between the Dow Jones Islamic market index returns with the IIBR and the LIBOR at rank 2. The trace statistics' main purpose is to validate that the series are stationary

Table 3.2 Augmented Dickey Fuller: unit root test

Variables	*Level*	*1st Diff*	*Order*
DJIA_ISI	–2.0057	–33.7709	I(1)
	(0.2845)	(0.000)*	
IIBR	–1.6609	–21.9844	I(1)
	(0.4509)	(0.000)*	
LIBOR	0.21711	–11.1118	I(1)
	(0.9736)	(0.0001)*	

*indicates significance at 1% level.

Table 3.3 VAR co-integration test: unrestricted trace statistics

Hypothesized no. of CE(s)	*Eigenvalue*	*Trace statistic*	*0.05 (critical value)*	*Prob.***
None *	0.1937	192.5436	29.7970	0.0001
At most 1	0.0018	2.2132	15.4947	0.9916
At most 2	0.0006	0.5782	3.8414	0.447

Trace test indicates two co-integrating equations at the 0.05 level
* Denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) indicates the p-values

Table 3.4 VAR co-integration test: unrestricted maximum Eigenvalue statistics

Hypothesized no. of CE(s)	*Eigenvalue*	*Max-Eigen statistic*	*0.05 (critical value)*	*Prob.***
None *	0.1937	190.3303	21.1316	0.0001
At most 1	0.0018	1.634942	14.2646	0.9968
At most 2	0.0006	0.578291	3.841466	0.447

Max-Eigenvalue test indicates two co-integrating equations at the 0.05 level
* Denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

and a stationary unrestricted vector autoregressive technique could be applied on the variables under study. Rank 1 and rank 2 indicate that the trace statistics have identified two co-integrating relationships between the variables, hence proving that the variables are stationary in the same order.

The rank test of the Maximum Eigen Value confirms the two-co-integration relationships between the variables as reported in Table 3.4 (Azad et al. 2018; Nechi and Smaoui 2018). The probability values (p) of 0.9968 at rank 1 and 0.447 at rank 2 indicate the long-run co-integration relation of the Islamic market index returns with the IIBR and LIBOR. It is very encouraging for the Islamic finance industry to see itself compatible with the LIBOR. The similarity of the denominated currency of US dollars[14] of the IIBR to that of the conventional interest-based benchmark rate, with an added advantage of interest-free transactions, means it has paved the way to successful outreach to the international clientele base.

The adjustment coefficients (α) reported in Table 3.5 signify the long-run co-integrating relationship between the IIBR with the Islamic market returns (Nechi and Smaoui, 2018). According to the global Islamic finance market (2018–2019), the Islamic finance industry has diversified itself into various key sectors from capital markets to money markets, sukuk, takāful, microfinance, financial technology, social welfare finance, and social finance. In USD terms, an 8.3% growth in the Islamic assets was observed in the year 2017.

Amongst various Islamic assets, the global sukuk issuance has captured the international market; the leading role played by Saudi Arabia. Sukuk benefits in

Table 3.5 Co-integrating coefficients β & α

Normalized co-integrating coefficients (β)		
DJIA_ISI	ON_IIBR	LIBOR
1	0.0045	–0.0057
	(–0.0051)	(–0.0088)
Adjustment coefficients (α)		
D (DJIA_ISI)	**D(ON_IIBR)**	D(LIBOR)
-1.1409	–0.0697	–0.0069
(-0.0791)	(–0.1102)	(–0.0202)

***Standard error in parentheses, log Likelihood 10048.73**

itself due to the asset-backed principle, irrespective of the conventional bonds that are interest-based.

The era of globalized and integrated technology has turned out as a reward for Islamic banking and finance. The industry has and plans to reach to far destinations catering all types of consumers to promote the Islamic finance instruments worldwide, such as mobile banking recently surveyed by PwC (2018).[15] The achievement of Islamic banks to open up the digital subsidiaries worldwide is another milestone set by the Islamic industry to stand along with the conventional interest-based benchmark rates.

Moreover, the Islamic industry has entered an era when it has to boost up all its energy to take advantage of the end of the LIBOR, whose market worth is about USD 350 trillion financial assets. According to the Pew research center,[16] the projected Islamic financial assets that reach the Muslim population worldwide may grow to 26% by 2030, which is a very small proportion, and the Islamic wealth management groups need to divert their attention to grow this small proportion into the big numbers in the years to come and revive the dormant IIBR.

Conclusion

The present study has empirically investigated, modeled, and analyzed the long-run co-integration relationship between the Dow Jones Islamic market index returns (DJIA_ISI) and the two benchmark rates; one is the IIBR and the other is the LIBOR. The study analyzes the fiscal time period of November 2011 to April 2016, with daily frequency. The analysis of the study is conducted by employing the Johansen and Juliseus (1990) co-integration technique to check for any long run relationship that exists between the Islamic returns and the benchmark rates. It is very striking to find out that the Islamic market returns have a long-run relationship with the IIBR, along with the conventional interest-based benchmark rate (LIBOR).

This study is the most current of its type when the LIBOR is about to phase out in the year 2021 and the global conventional financial structure is looking

for a suitable benchmark rate for their trillions of dollars market worldwide. It is the optimum time for the Islamic finance industry to make efforts to make the globally introduced IIBR (which has become dormant) deepen its roots again in the existing global financial structure with Islamic financial assets of more than USD 2 trillion dollars. In a nutshell, it is not wrong to say that the core advantage of Islamic finance over conventional finance are the ribā-free transactions and asset-backed financing, which surprisingly has also attracted and retained the international clientele base. The only thing needed by the global Islamic asset management groups is a vision to say a humble goodbye to the LIBOR.

Future implications

This study suggests that the future of the Islamic finance industry tends to be optimistic due to its advantage of being an equity-based and asset-backed socially responsible industry. With a total Muslim population of 2.25 billion worldwide,[17] the Islamic finance industry can play a pivotal role and "clutch the claw" to become compatible with the conventional global financial structure. The global Islamic finance industry has already experimented with the launch of IIBR, and the phasing out of the LIBOR provides a desirable opportunity to the Islamic world to overcome the weaknesses of the IIBR (subjectivity) and endeavor for its rebirth. Nonetheless, the other prominent benchmark indicators cannot be ignored, such as the real estate investment trusts and zakat rate, respectively.

Notes

1 Legal maxims (Al-qawāʿid al-fiqhīyah) of Islam are the articulations of fiqh, which contributes in the creation of Islamic law. There are five prime maxims out of 99 legal maxims of Islam, which play an integral role in providing solutions to various case(s) related to Islamic finance. Nonetheless, the importance of the rest of the 94 legal maxims of Islam cannot be denied as all of the legal maxims of Islam are diligently correlated. Source: www.global-islamic-finance.com/2009/07/99-islamic-legal-maxims.html

2 *Surah al-Rum, verse 39, Surah al-Nisa, verse 161, Surah Al 'Imran*, verses 130-2, *Surah al-Baqarah*, verses 275-81, Nisar, S., 24 September 2008, www.global-islamic-finance.com/2008/09/riba-in-islam-riba-in-quran-hadith-and.html

3 https://ceif.iba.edu.pk/pdf/Reuters-Islamic-finance-development-report2018.pdf

4 www.worldbank.org/en/topic/financialsector/brief/islamic-finance

5 Dublin, March 20, 2019 (GLOBE NEWSWIRE) – The Global Islamic Finance Market Growth, Trends, and Forecast (2018–2024).

6 Accounting and Auditing Organizations for Islamic Financial Institutions (AAOIFI), 2015.

7 www.finyear.com/Thomson-Reuters-Launches-World-s-First-Islamic-Interbank-Rate_a20395.html

8 www.pwc.com/gx/en/industries/financial-services/publications/libor-reference-rate-reform.html, www.refinitiv.com/perspectives/regulation-risk-compliance/the-libor-transition-what-you-need-to-know

9 The data for IIBR is available until the time period of April 2016 from the authentic source of Thomson Reuters Eikon database. That is why the whole sample period ends at 2016.
10 https://finance.yahoo.com/quote/%5EDJI?p=%5EDJI
11 https://fred.stlouisfed.org, Thomson Reuters Eikon database.
12 Capital asset pricing model estimates the assets beta (risk) linked with the market portfolio and based on risk free rate to calculate the expected rate of return.
13 The returns are calculated based on the continuous growth rate because of the high frequency data.
14 www.thomsonreuters.com/content/dam/openweb/documents/pdf/tr-com-financial/fact-sheet/iibr.pdf
15 www.pwc.com/us/en/industries/financial-services/library/digital-banking-consumer-survey.html
16 https://ceif.iba.edu.pk/pdf/Reuters-Islamic-finance-development-report2018.pdf
17 http://muslimpopulation.com/World

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4

ISLAMIC FINANCE, BENCHMARKING, AND THE LIBOR TRANSITION

Impacts and implications

Mohammad Abdullah

Introduction

In its origin, the precept and philosophy of Islamic finance substantially differs from the model and underpinnings of conventional banking and finance (Siddiqui, 1983; Sadr, 1982). Prohibition of interest (ribā), gambling (maysir), and excessive ambiguity (gharar) is the main distinguishing feature of Islamic finance compared to its conventional counterpart (Abdullah and Sarwar, 2019). In their modalities, the two systems diverge in their underlying contractual roles. While the conventional system of banking and finance is majorly concentrated on an intermediary role, Islamic finance assumes a plethora of roles in providing similar functions and services (Iqbal, 2013; Ahmad, 2000). Due to this theoretical divergence in the precepts of Islamic vis-à-vis conventional financial institutions, the relationships and risk profiles of the two systems are believed to be different (Dusuki, 2008). The relationship structure within the conventional financial system is relatively simpler and more straightforward. The intermediary role of a conventional bank warrants a simple function of collecting the funds from the surplus units of the economy at a lower interest rate and dispensing the same to the deficient units at a higher rate. The spread in between makes the profit of the bank. Managing different maturities along with the counterparty risks requires expertise and accuracy, yet discovering and determining the cost of fund as well as well as its margin for conventional banks remains a simpler task. The lender–borrower relationship between a conventional bank and its customers at both sides of the balance sheet ensures comparatively more clarity and predictability of its reference rate.

In contrast, the lender–borrower relationship is untenable for Islamic finance. A loan contract, within the precepts of Sharīʿah, is inherently benevolent in its nature (Usmani, 2008). Thus, charging a margin or profit in a loan-based contract is strictly prohibited, be it in the context of banking and finance or outside of it, as stipulating any excess or margin over and above the loaned amount constitutes ribā (interest/usury) in Sharīʿah (Abdullah, 2015). With this limitation in place, the challenge for Islamic banks is to provide intermediary

services but without assuming the pure intermediary role in a conventional sense (Ariff, Iqbal and Mohamed, 2012). Conventionally, the role of financial intermediation is played by quoting fixed rates at the two sides of the balance sheet. However, since stipulation of fixed rates with contractual obligations in any form of deposit or investment is out of the scope of Islamic finance, the relationship structure, risk profile, and the certainty of rate of return changes altogether (Iqbal, 2013).

In the absence of loan-based contracts, Islamic banks refer to investment and service-oriented alternatives, which generally entail different types of unique risks (Askari et al., 2012). These investment-based or service-oriented structures of contracts change the risk profile for the involved parties along with bringing uncertainty of rate of return. To mitigate the implications of such risks, in practice, some technical tweaking is resorted to by the Islamic financial institutions (IFIs). For this, the mechanism of an indicative or expected rate of return on investment of funds is utilized by IFIs at both sides of the balance sheet (Hanif, 2010). So far as discovery of cost of fund is concerned for IFIs, generally IFIs refer to national or international base rate benchmarks (Yusof et al., 2011). Most such benchmarks are representative of base interest rates. The London Interbank Offered Rate (LIBOR) is one of the most famous and frequently used interest-based benchmarks.

In a conventional sense, the benchmark rate is important as it serves many purposes. For example, it works as a standard reference to price the products. A benchmark rate helps to determine the rate of return on savings and deposits, it facilitates deciding the financing costs and profit, it enables discovery of discounting valuations for securities, and it is widely used to price derivatives. Similar to their conventional counterparts, IFIs too adopt certain benchmarks to price their products and services (ISRA, 2010). It is normal for IFIs to link their indicative or expected rates for financing or for deposits with the LIBOR or other similar benchmarks (Paul et al., 2020). This practice is widely adopted by IFIs, with the argument that using a certain benchmark merely as a reference brings clarity to parties and is not against the tenets of Sharīʿah (ISRA, 2010).

In the last few years, the contention that the LIBOR is no longer a true representative of an actual rate has emerged and received acceptability among stakeholders. This phenomenon, coupled with the allegations of possible manipulation in the LIBOR, has accelerated demand for its replacement with an alternative benchmark mechanism (McBride, 2016). In this context, the LIBOR is set to be replaced with an alternative interest rate benchmark. The transition of the LIBOR to an alternative benchmark is expected to be accomplished by the end of 2021 (Paul et al., 2020). The alternative benchmark is widely touted as the risk-free rate (RFR). One of the key differences between the LIBOR and the proposed alternative rate mechanism is that the latter provides a backward-looking reference rate rather than a forward-looking rate mechanism of the former. For being widely used as a reference rate by IFIs, the LIBOR transition to alternative rate matters to IFIs as much as it matters to conventional institutions (Clifford Chance, 2020).

This chapter attempts to critically analyze the concept and mechanism of benchmarking, its needs and significance for IFIs, and the Sharīʿah criteria for developing a benchmark, followed by examining the status of using interest-based benchmarks for IFIs. The study analyzes the methodologies of conventional vis-à-vis Islamic benchmarks, their Sharīʿah merits, and the way forward. The study is an outcome of a library-based research. The study utilizes the available academic as well as industry-based literature, policy papers, reports, and established Sharīʿah standards and resolutions on the topic to draw conclusions.

Benchmarking in Islamic finance

In the context of banking and finance, a benchmark refers to a reference rate that serves as a guiding point in determining the pricing of a security, a financial instrument, or an investment. A benchmark helps guide the expectation of the counter parties of a financial transaction. The role of a benchmark is critical in dispelling the underlying pricing-related ambiguities and in providing a performance measurement yardstick (ISRA, 2010). To compare the pricing of a financial product and evaluate the performance of an investment, the benchmark works as a measuring standard. In conventional terms, a rate benchmark generally represents an interest rate, which is also referred as "base rate" or "reference rate". Central banks in different jurisdictions are tasked with setting the reference rate or base interest rate (Ghauri, 2015). Some of the common examples of such interest rate benchmarks are the London Interbank Offered Rate (LIBOR), the Kuala Lumpur Interbank Offered Rate (KLIBOR), and the Emirates Interbank Offered Rate (EIBOR). Once the benchmark is published, the financial institutions use their relevant benchmarks to price securities, products, and services by adding a margin over and above the given reference rate in a forward-looking manner.

In Islamic financial practices, the role and involvement of a benchmark is as prevalent as it is in the conventional system of banking and finance (Ghauri, 2015). Generally, the IFIs require a benchmark to relate pricing of their products and services. Since the global banking infrastructure is built on conventional principles, the customary practice of benchmarking relies on interest-based concepts and ingredients. The IFIs, having to function as a sub-set of the global system of banking, cannot easily shun some of the established conventions of the financial paradigm. Being accommodative to globally acceptable benchmarks constitutes one of many such examples for IFIs. Though, in principle, any benchmark that represents the cost of fund is against the fundamental ethos and values of Sharīʿah, usage of such benchmarks by the IFIs as an indicator for pricing their products and services is a common practice. In this context, adoption of the LIBOR by IFIs as a point of reference, for example, is generally a normal exercise.

There is a long-standing dispute of opinion among the Sharīʿah scholars on the status and treatment of conventional benchmarks (Ghauri, 2015; Mirakhor, 1996). There are disagreements, for example, on the Sharīʿah permissibility of using a benchmark that represents movement of, inter alia, interest rate on the

basis of demand and supply of money. The opponents of this practice argue that adoption of an interest-based benchmark in IFIs defeats the ethos and philosophical underpinnings of IFIs (Ghauri, 2015), as such practice helps promote the custom and prevalence of an interest-based system, which contradicts the Sharī ʿah principles. In contrast, the proponents of using such benchmarks contend that merely referring to a benchmark as an indicator to provide some guidance should not affect the essence of a Sharī ʿah-compliant contractual relationship (Usmani, 2008). Also, according to the proponents, due to the duality of the financial system and environment in which the IFIs function, a complete avoidance of widely accepted benchmarks is not feasible. Thus, IFIs need to use such well-established and widely known benchmarks as a point of reference for measuring the performance of their sale, lease, partnership, and agency-based contracts (ISRA, 2010).

Scholars such as Usmani (2008) have allowed the usage of a conventional benchmark on the basis of necessity. According to Usmani (2008), there is no Sharī ʿah issue in using a conventional benchmark such as the LIBOR or the KLIBOR merely as an indicator or as a point of reference for determining the price of Islamic banking products and services. As per the opinion of Usmani (2008), usage of the LIBOR, for example, as a reference point to determine the margin or mark up of a murabahah contract does not render the contract impermissible, provided the murabahah-related Sharī ʿah conditions are duly met. Similarly, the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI, 2017) Sharī ʿah Standard permits the usage of a conventional benchmark, provided it is used merely as an indicator, without affecting the pricing of an executed sale contract. The AAOIFI (2017) Sharī ʿah standard (27/5/3) holds:

> It is permissible to use an index like the LIBOR, or a certain share/commodity price index, as a basis for determining the profit of a Murabaha pledge, provided that the contract is to be concluded on a specific profit that does not vary with further changes in the index.

Notwithstanding the scholars' opinion on Sharī ʿah acceptability of using a conventional benchmark, a majority of scholars believe that though using an interest-based benchmark is permissible, it is not desirable from a Sharī ʿah perspective (Ghauri, 2015; ISRA, 2010). Thus, by inference, permissibility in this context does not necessarily imply preferability. Rather, there is an emphasis in the opinion of scholars on developing a benchmark that is free from prohibited elements. To this end, as early as in 1993 the Fiqh Academy of the OIC in its resolution urged for development of an alternative Sharī ʿah-compliant benchmark for pricing products and services at IFIs (Majallat, 1993). Similarly, despite believing in permissibility of using a conventional benchmark, Usmani (2008) contends that IFIs should shun the practice of using an interest-based benchmark and create their own benchmarks. An alternative benchmark should be in line with Islamic philosophy and reflect the actual economic activities undertaken by Sharī

ʿah-compliant contracts. Thus, the desired benchmark for IFIs should be consistent with the principles and precepts of Sharīʿah (AAOIFI, 2017).

It is argued that since the role of an IFI is not restricted only to that of a financial intermediary, creating a pricing benchmark for IFIs on the basis of a single variable such as cost of fund is not suitable. Practically, compared to conventional banking mechanisms, the nature of Islamic banking and financial contracts and activities is more comprehensive. The wide spectrum of relationships within the IFIs include seller–purchaser, lessor–lessee, principal–agent and partnership-based relationships, to name a few (Askari et al., 2012; Hanif, 2010). Thus, to create a rate benchmark for IFIs, the different structures, mechanisms, and relationships should be taken into consideration in order to represent the true nature of the underlying Islamic financial activities and any underlying return from them.

In view of the unique nature of IFIs and their activities, different models of Islamic benchmarks have been proposed by different stakeholders. Some of the proposed models include the rate of profit mechanism model, the rate of dividend paid to depositors of IFIs, and a rate based on the Net Asset Value (NAV) of Islamic asset-backed instruments (ISRA, 2010). The proposed "rate of profit" model relies on referring to the rate of profit in the money market in order to deduce a benchmark rate for IFIs (Ghauri, 2015; ISRA, 2010). However, due to lack of clarity and its perceived impracticability, the proposal could not garner much favor among the stakeholders. In comparison, as per the proposed dividend model, a reference rate can be developed by referring to the rate of dividends distributed by IFIs on deposits with them. Comparatively, the proposal by Usmani (2008) holds that a reference rate for IFIs can be established by developing a general pool for investment in asset-backed instruments such as mushārakah, ijārah, etc., followed by classifying the pool into units to be purchased based on their NAV. The unit price should be determined periodically. There may be scope for negotiating the price of these units by different parties, and the reference rate can be deduced with reference to the price of such units. In theory, there are many more proposed models for creating a homogenous benchmark for IFIs, but none could succeed in attracting a unanimous agreement and adoption.

In terms of practical application, the stakeholders of IFIs developed the first Islamic Interbank Benchmark Rate, known as the IIBR, in 2011 (Thomson Reuters, 2011). However, the IIBR did not receive as wide acceptance among the stakeholders as was initially believed. In hindsight, the development and adoption of the IIBR as a distinctive benchmark for IFIs is indicative of the market players' aspiration to move from the external benchmark mechanism to an internal one for the Islamic banking industry. In terms of a methodological difference, ideally the IIBR is reached through measuring the expected profit of specific Islamic banks in different jurisdictions (Azad and Ahsan, 2014). In other words, there are certain IIBR contributors who provide their expected rate of returns generated by their underlying Islamic assets, which is used to calculate the IIBR (Tlemsani, 2019). Thus, the IIBR simply measures expected profit rate, unlike the conventional benchmarks, which measure interest rates (Thomson Reuters, 2011).

This mechanism is, purportedly, an indicator of dynamic and real economic activities rather than being static in nature (Jaffar, 2018). At its initial stage of development, the expectation was of a gradually growing wider usage of the IIBR as the indigenous benchmark for the Islamic financial industry (GIFR, 2015); however, almost ten years on, there is still a general reluctance in the industry to adopt and apply the same. The global acceptance of the IIBR aside, the benchmark has so far failed to gain any significant traction in terms of being used by IFIs to price their interbank liquidity placements or to determine the rate of return on different financing. Similarly, there is rarely any notable usage of the IIBR among the Islamic corporate and investment banking segments in terms of being a reference rate for Islamic syndicated financing or for pricing sukuk issuance.

One obvious reason for this indifference of IFIs to adopt the IIBR stems from the contention of some stakeholders that the calculation of the IIBR is not essentially different from conventional benchmarks (Tlemsani, 2019). The allegation of the critics is that the IIBR is scarcely based on real economy activities. Leaving aside the validity of this contention, the existence of such a perception among the stakeholders of IFIs evidences the practical flaws in the measurement of the IIBR. Thus, the IIBR is unable to establish uniqueness in its measurement mechanism or draw a clear demarcation of its calculation methodology over interest-based benchmarks.

LIBOR transition: implications for IFIs

For the global financial market, the LIBOR constitutes one of the primary benchmarks to determine the cost of fund or interest rate, which is used to price different financial products, securities, and derivatives. Being a globally accepted and adopted rate benchmark, the LIBOR is considered as a clear and convenient point of reference for financial institutions to calculate their cost of fund and to base their margin rate over and above the benchmark. The convenience of reliance on the LIBOR is generally supported by its easily available published rate on a daily basis for the contracting parties. From a calculation method angle, LIBOR refers to an indicative rate at which different LIBOR contributing banks can secure unsecured funds for different short-term maturities in any of the five LIBOR currencies from the London interbank market (Tlemsani, 2019). The five currencies in which the LIBOR is calculated and published include GBP, USD, EUR, JPY, and CHF. The LIBOR published rates are offered for seven maturities which include overnight, one week, and one, two, three, six, and 12-month terms. The rate is reached through the available transaction data, which is submitted by a group of LIBOR contributing banks and is decided and published by Inter-Continental Exchange (ICE). As per some estimations, currently the LIBOR-linked deals are worth USD 300 trillion worldwide (Standard Chartered, 2019).

Being widely used as one of the key benchmarks of interest rates for approximately 60 years, the LIBOR has, over the years, received several criticisms from various fronts. Some of the areas in which criticism has been made against the

LIBOR include scope, incidence, and possibility of manipulation, the credibility of its calculation method, lack of true reflection of the market interest rate through the LIBOR, and a diminishing stakeholders' interest in it (McBride, 2016). Consequently, over the years, the demand and quest for a better, more active, and reliable alternative to the LIBOR grew among the various stakeholders, and finally the plan to phase out the LIBOR received the consent of the FCA (Financial Conduct Authority) in the UK. As a result, the LIBOR is set to be replaced by an alternative benchmark by the end of2021 (Standard Chartered, 2019).

The proposed alternative benchmarks are being widely touted as risk-free rate (RFR). One of the key differences between the two mechanisms of benchmarks lies in their calculation methods. The LIBOR, for example, is a forward-looking interest rate benchmark and is published at the beginning of a borrowing period for different maturity tenures such as one month, three months, and six months, etc. In comparison, the mechanism for calculating the proposed alternative benchmark relies on a backward-looking approach (Clifford Chance, 2020). Thus, it is published at the end of a borrowing tenure. There are different proposed RFR mechanisms that are being considered to replace the LIBOR. The proposed alternative RFRs represent overnight near risk-free rates without considering the term structure and bank credit risk (Standard Chartered, 2019).

The key challenges of the LIBOR transition to RFRs include the treatment of the existing contracts that are based on the LIBOR. Any such contracts will need to transition from their existing reference rate to the alternative benchmark rates. The transition exercise from the LIBOR to RFRs needs adjustment for credit and tenure gaps. Thus, in the context of ongoing long-term contracts that are to continue beyond 2021, the stakeholders will be faced with the challenge of replacing the LIBOR-based pricing with the alternative benchmark rate.

In hindsight, a change in the method or mechanism of an interest-based benchmark should not affect the Islamic finance industry simply for the reason that Islamic finance is detached from interest and interest-based contractual relationships. However, this is not the case in practice for the Islamic finance industry, at least, so far as usage of benchmarks is concerned. Practically, the LIBOR finds a frequent reference in the pricing of Islamic products and services, particularly in large ticket size as well as cross-border transactions. Thus, a considerable number of Islamic financial products are based on the LIBOR or similar interest-based benchmarks. As per some estimations, debt-based instruments of global Islamic finance including banking products, interbank transactions, and sukuk that are currently based on the LIBOR or similar benchmarks are worth USD 2 trillion (Standard Chartered, 2019).

For the Islamic finance industry, one of the key implications of LIBOR transition is that the industry will need to change its mechanism of pricing, inter alia, fixed-rate, or debt-based instruments. Murabahah, for instance, which is a cost-plus-margin sale and is a frequently used financial instrument of Islamic finance, will require a change of mechanism in terms of pricing. Currently, in general, being benchmarked against the LIBOR, a murabahah-based instrument is priced on a forward-looking

reference rate basis. However, with the transformation of the forward-looking reference rate to a backward-looking mechanism i.e. in RFR, any murabahah-based instrument will need to be priced with an estimation or judgment of reference rate to be discovered after the passage of a specific tenure. In other words, with RFR the discovery of cost of fund will be possible only after the contract is already executed. This is certain to give rise to specific pricing challenges for Islamic debt-based instruments such as murabahah from a Sharīʿah perspective. In terms of Sharīʿah guidelines, determination of price and profit is a must for execution of a murabahah contract. As per AAOIFI Sharīʿah Standard 8/4/6 on murabahah:

> It is an obligation that both the price of the item and the institution's profit on the *Murabaha* transaction be fixed and known to both parties on the signature of the contract of sale. It is not permitted under any circumstances to subject the determination of the price or the profit to unknown variations or variations that are determinable in the future, such as by concluding the sale and making the profit dependent on the rate of the LIBOR that will prevail in the future. There is no objection to referring to any other known indicators during the promise stage as a comfort indicator to determine the rate of profit, provided that the determination of the Institution's profit at the time of concluding the *Murabaha* is based on a certain percentage of the cost and is not tied up with LIBOR or a time factor.
>
> (AAOIFI, 2017: 8/4/6)

However, in contrast to the AAOIFI requirement of determination of price, the RFR mechanism involves discovery of reference rate in future. The severity of this challenge magnifies from a Sharīʿah perspective for the existing murabahah-based financing contracts that are going to extend beyond the discontinuation of the LIBOR in December 2021. Any adjustment in pricing of the existing Islamic debt-based contracts is dependent on meeting legal, regulatory, risk, and Sharīʿah requirements; a process that may be lengthy as well as cumbersome for the involved parties.

Similar to the case of murabahah-based financing, the same challenges of pricing apply to some other instruments of Islamic finance such tawarruq (commonly known as commodity murabahah) and ijarah contracts. With reference to ijārah, generally the ijārah rentals are fixed by referring to the LIBOR or other similar interest-based benchmarks. According to the AAOIFI Sharīʿah Standard 5/2/3 on ijārah:

> In case the rental is subject to changes (floating rental), it is necessary that the amount of the rental of the first period of the ijārah contract be specified in lump sum. It is then permissible that the rentals for subsequent periods be determined according to a certain benchmark.
>
> (AAOIFI, 2017: 5/2/3)

Thus, in such cases, determination of reference rate at the commencement of subsequent ijārah period will become a challenge with RFR. In the majority of cases, the current practice is to determine the rental of first ijārah (lease) period in a lump sum, while the rentals of subsequent ijārah periods are tied with the LIBOR or similar benchmarks. However, due to non-discovery of the reference rate at the start of the subsequent ijārah period, there will be a gap between the AAOIFI requirement of clarity in floating rate-based subsequent ijārah rentals and the requirement of RFR.

Compared to this, pricing a hybrid sukuk with a tawarruq element in its structure will also make a challenge for the industry after the LIBOR transition and commencement of RFR. Similarly, pricing Islamic trade finance instruments such as letter of credit (LC), letter of guarantee (LG), and trust receipt, etc. will be challenging in the absence of backward-looking rate benchmarks, as these products and service are, in general, priced based on the LIBOR or similar forward-looking rate benchmarks. The immediate major test for the Islamic finance industry is to amend and adjust the pricing mechanism of the executed debt-based Islamic financial contracts that will mature after the discontinuation of the forward-looking reference rate benchmark by the end of 2021.

Conclusion

Though they evolved with a unique socio-economic precept and philosophical background, the IFIs happen to function as a sub-set of the global banking and financial industry. While avoiding prohibited elements of conventional intermediaries through alternative Sharīʿah-compliant structures, the Islamic finance industry is unable to do away with the established legacy and traditions of banking. For instance, achieving certainty over uncertainty of rate of return is one of the key pillars of banking business. From capital protection to certainty of return on deposits, a conventional mindset expects a pre-determined future stream of cash flow. To meet the expectations of clients as well as shareholders of banks in terms of rates, a base rate benchmark is vital as a point of reference. The reference rate serves the purpose of bringing certainty for the bank and other related parties. Banks need to establish their costs of fund to apply margins, and the clients need to ascertain the reference rate to receive or pay the margins on their investment or financing.

In terms of cost of funds, ideally the Islamic banks should be above this phenomenon. For a conventional bank the concept of cost of fund or funding rate originates from the loan-based fund-raising mechanism. A conventional bank in general discovers its cost of fund with reference to an assumed short-term fund-raising cost from the market in consideration to the prevalent basket of risks in a particular day. In contrast, ideally the cost of fund for an Islamic bank should be zero, as it does not need to repay a fixed or pre-determined excess over the deposits it receives. The relationship structures of Islamic banks ought to entail a complete paradigm shift due to their underlying philosophy of no extra payment

on loan-based deposits and no stipulated return on either agency or profit and loss-based investments. The outcome of funding at the assets side of the balance sheet should be transparently transmitted to the liability side. In this ideal scenario, a pre-determined rate of return does not make an integral constituent of cost of fund for an Islamic bank. Though there are administrative costs in raising the funds for IFIs, the compensation for such costs can be made from the agency services it provides to the principals, i.e. depositors.

Though a pre-determined rate of return on deposits is not feasible in the context of Islamic finance, there is no harm in expressing an indicative or expected rate. An expected rate of return brings some conceptual clarity, and serves as a reference point in different forms of banking relationships. The possibility of providing an expected rate on either side of a balance sheet opens the door for IFIs to pitch their products and services in a competitive manner with their conventional counterparts. In this context, the scope of tying the reference rates with national and international benchmarks emanates. In general, the majority of national and international benchmarks are dependent on interest-based factors and methodologies.

Being an international interest rate benchmark, the LIBOR is frequently used by conventional as well as IFIs as a point of reference for pricing their securities and other products. The implication of this phenomenon appears in the existence of a marked similarity between the products of the two systems, at least in terms of pricing. Thus, the implication of an up or down in the LIBOR rate is as much reflected in IFIs' products and services as is the case for their conventional counterparts.

In recent years, with the stakeholders' agreement on phasing out the LIBOR and similar forward-looking interest rate benchmarks by the end of 2021, and with the proposal to replace the LIBOR with RFRs as alternative benchmarks, the global financial industry will need to change its pricing mechanisms. Functioning as a sub-set of the global financial system, IFIs are no exception in this regard. The severity of the challenge for IFIs multiplies with the change of pricing mechanism from a forward-looking benchmark to a backward-looking one. Since the pricing of most of Islamic debt-based financing instruments must be fixed at the time of contract execution, the challenge for IFIs grows if they are required to adjust their pricing post-execution of contracts due to the application of RFR. This is because the discovery of cost of fund under RFR is possible only after passage of a certain tenure. With reference to RFR, the pricing challenge for IFIs continues for lease-based as well as certain service-based contracts. Some of the Islamic service-based contracts in which pricing challenge will arise for IFIs include Islamic trade finance instruments such as issuing letter of credit (LC), letter of guarantee (LG), etc., which are generally priced based on the LIBOR or similar benchmarks. In addition, the pricing of such hybrid sukuks, which are structured on the basis of murabahah plus ijārah or wakala, etc., will also be a challenge in the context of RFR-based rate benchmarks.

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5

SWOT ANALYSIS OF BENCHMARKING IN THE ISLAMIC FINANCE INDUSTRY

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Introduction

SWOT analysis is a framework tool that was mainly developed among several other tools that enable businesses to formulate their strategic plans. SWOT stands for strength, weakness, opportunity, and threat. In essence, it "summarizes the key issues … and the strategic capability … that are most likely to impact on strategy development" (Johnson et al., 2008, p. 119). According to Johnson et al. (2008, p. 119) the goal for an organization is to identify the extent to which its internal strengths and weaknesses are capable of coping with the changing business environment relative to their competitors.

To conduct a SWOT analysis, one should first list the content of each key factor (strength, weakness, opportunity, and threat), and then create a three-by-three matrix. One has the option to place the contents of strengths and weaknesses in the column headings while putting the contents of opportunities and threats in the row headings, or the other way around. In this way one can develop the analysis into what is known as strategic window. The example of a SWOT strategic window is shown in Table 5.2 of this chapter. The strategic outcomes from analyzing strengths with opportunities, strengths with threats, weaknesses with opportunities, and weaknesses with threats are filled in the corresponding remaining cells of the three-by-three matrix. An organization might exist in an institutionally enabled region, like the EU, and therefore might have more strengths than weaknesses. In contrast, political unrest or strict governmental requirements might exert downward pressure on organizations, rendering the surrounding threats higher than the available opportunities. In other words, one can seldom find an organization where the lists of strengths, weaknesses, opportunities, and threats are equal.

The significance of SWOT analysis can be viewed from two perspectives. Firstly, the extent of the values and benefits it provides to organizational leaders and policy makers. Antonakis and House (2014) compared the laissez-faire leadership model to SWOT analysis. The two authors described the former as a

motivational and reward/sanction-based leadership model, which is full-range-transformational and transactional, is short of facing the externalities, and fails to realize objectives that incorporate the external environment. In contrast, the latter is more a full-fledged leader, the "instrumental leader" (Antonakis and House, 2014) who probes both the internal and external environments and charts strategic objectives accordingly. Thus, SWOT analysis helps organizational leaders to realize their internal environments through understanding their strengths and weaknesses while simultaneously recognizing the external environment that surrounds them through understanding the threats and opportunities. SWOT analysis can therefore help an effective leader go beyond the full-range-transformational, transactional, laissez-faire leadership model towards the instrumental leadership model.

Secondly, the tools of SWOT analysis have been widely used and extend beyond the private sector, to the public sector and the not-for-profit sectors. SWOT analysis has become a popular tool in many areas other than the administrative managerial application, although it was initially developed for and used by corporates and businesses. For example, Grant (2020) maintains that it is often now used by governments, nonprofit organizations, investors, and entrepreneurs. Besides its capability for formulation of strategic plans, it has also been used for other purposes, such as being a comparative tool or a framework for evaluations.

The application of SWOT analysis is wide and varied. SWOT's main application has been in developing strategies. For example, Gottfried et al. (2018, p. 632) conducted a methodological approach, which SWOT analysis was part of, to develop strategies that serve as a foundation for Chinese policy makers to promote private investments in the Chinese biogas sector. In their SWOT analysis, they targeted financial stakeholders such as banks, insurance companies, pension funds, and private equity funds. In another study, SWOT analysis has been used as a comparative tool to aid in a selection process. For instance, Lakatos and Arsenopoulos (2019) used the SWOT analysis to outline the challenges and limitations of several financial instruments and programs to combat energy poverty in the EU. Such a comparison was intended for beneficiaries to assist them in their choice of applying to the most appropriate financial program. SWOT analysis has also been used as a method for determining courses of improvement. For example, it was used to assess the organizational and financial aspects of the Danish health service in order to determine how it should be organized (Christiansen, 2002). There are a few studies that applied SWOT analysis to analyze financially related matters like investments, financial aspects, financial stakeholders, and financial programs to industries other than the finance industry. For example, Billah (2019) applied SWOT analysis to the issues of a halal (permissible) cryptocurrency structure.

With regards to benchmarking, SWOT analysis has been applied largely to non-financial related benchmarks. For example, a study by Monteiro et al. (2018) conducted SWOT analysis to identify the main advantages and value of the FAIRMODE benchmarking approach compared with other methodologies. Other

studies examined the applications of SWOT analysis in the health and medical tourism industries in Turkey (Aslan et al., 2014), the Philippines (Picazo, 2013), and Italy (Visconti, 2016). In the former two studies, benchmarking was employed to complement SWOT analysis of the health sector in Turkey and the medical tourism industry in the Philippines. In Turkey, benchmarking utilized experiences of other countries, while in the Philippines, benchmarks used were associated with strategy setting, organization and management, service quality, care, travel and accommodation, and financing. In contrast, in the latter case (Italy), contractual fine-tuning in the Italian health sector based on shared international experiences and databases and benchmarked by cost was identified as an opportunity within the conducted SWOT analysis (Visconti, 2016, p. 127).

The present chapter examines the application of SWOT analysis to benchmarking in the Islamic finance industry. It is common knowledge that the Islamic finance industry adopts the conventional interbank benchmark rates, like the London Interbank Offered Rate (LIBOR), to price its products and services. There are contentions about the suitability of such a benchmark as a reference for the Islamic finance industry, partly because the rates in this benchmark are interest-based and partly because they do not reflect the true cost of funds and risk structures of Islamic financial institutions. There are a few studies that have examined the implications for Islamic finance using such a benchmark rate, the challenges involved, the issues, the risks, and the Sharīʿah compliance. Whereas several researchers have investigated financial and non-financial related matters based on SWOT analysis, there is a dearth of literature on the applications of SWOT analysis on benchmarks related to Islamic finance. There is a clear lack of such studies. Few studies that are extant have directly applied SWOT analysis to benchmarks that are not related to financial or pricing benchmarks, though traces of SWOT analysis and financial benchmarks have been found.

The present chapter primarily conducts a SWOT analysis of benchmarking in the Islamic finance industry. To achieve this main objective, the study has a qualitative research method in the form of a survey of the literature on issues related to SWOT analysis and benchmarking in the Islamic finance industry; conducts SWOT analysis of benchmarking in the Islamic finance industry; and provides policy implications and suggest the way forward.

The chapter is divided into three further sections. One reviews the related literature on SWOT analysis and benchmarking in the Islamic finance industry to identify the research gaps; the next conducts a SWOT analysis of the benchmark in the Islamic finance industry; and the last concludes the chapter, delineates the policy implications, and suggests the way forward.

Review of related literature on SWOT analysis of benchmarking in the Islamic finance industry

Since there is a lack of studies that have approached the subject of benchmarks in the Islamic finance industry based on SWOT analysis, a review of the measures of

strengths, weaknesses, opportunities, threats, and their issues on Islamic finance benchmark from previous research is not readily available nor possible. However, there are three points of reference that can be looked at to conduct a review of the related literature, from which one can construct a SWOT analysis of pricing and/or cost of funds benchmarks in the Islamic finance industry. The first point of reference is to look at the critical points, discussions, and issues in the previous works prior to the birth of the first Islamic pricing benchmark. While this perspective might touch upon potential strengths and weaknesses of an Islamic benchmark, such findings will be limited because these internal characteristics (strengths and weaknesses) would have not been experienced yet at the time. It will mainly reveal the threats and opportunities Islamic financial institutions would face for not having an Islamic benchmark. This group of literature is categorized as "towards a benchmark in Islamic finance". The second point of reference is to survey literature on the issues, including the strengths, weaknesses, opportunities, and threats faced by the existing conventional benchmark. The approach will equip this study with a comparative lens whereby both the internal capabilities and external environment can be related to benchmarks in Islamic finance. This group of literature is referred to as "issues of benchmarking in conventional finance". The third point of reference is to utilize works that studied the critical points and issues on the benchmark in Islamic finance. From this perspective, actual internal capabilities and the actual external environment of an Islamic benchmark can be retrieved. This group of literature is categorized as "issues of benchmarking in Islamic finance".

Towards a benchmark in Islamic finance

A review of the literature that studied the vitality and pressing need of having the first Islamic benchmark rate revealed a couple of opportunities and highlighted an inevitable threat. The review also showed a few potential strengths that the Islamic benchmark rate could possess. However, as expected, the review emphasized the external environment of the Islamic benchmark rate more than its internal capabilities.

Omar et al. (2010, p. 44) stated that an Islamic benchmark rate or cost of funding has to be based on profitability and riskiness. Due to the nature and modes of their financing, which is based on real assets, Islamic financial institutions have different sets of risk structures from the conventional financial institutions. Therefore, the conventional benchmark is far from being suitable for an Islamic financial institution and thus an Islamic-based pricing benchmark is clearly needed. Yet, the Islamic banks and financial institutions continue to use conventional interest-based benchmarks to calculate their cost of funding, despite the difference in their risk profiles and without taking into consideration the regional particularities of Islamic banks (Thomson Reuters, 2011, p. 1). A clear unequivocal opportunity emerges here to develop a benchmark that truly reflects Islamic banking costs of funds and echoes their risk structure.

Meanwhile, Usmani (2007, p. 13) argued that if we are to continue to run behind international ratings agencies, which do not distinguish between permissible and impermissible products, it will never be possible to advance Islamic products that serve the purpose of Islamic economics. Although he did not point to benchmark ratings per se but focused on investment gradings of financial products, Usmani's (2007, p. 13) point is still valid to all kinds of ratings. Running behind all these international ratings forms an obstacle toward advancing Islamic economics. The opportunity to progress Islamic economics would thus be realized by freeing Islamic benchmarks and ratings from their conventional counterparts.

But proponents of an Islamic benchmark rate stumble upon the issue that it creates, namely price fixing. There is an element of price control in a benchmark, since it is used as a guide and indicator for pricing (Omar et al., 2010, p. 13). This is problematic because the majority of scholars' opinions are against fixing of prices. Nonetheless, Omar et al. (2010, pp. 13–14) argued that people cannot avoid modern Islamic banking products, implying that a benchmark that has an element of price control becomes acceptable in Sharīʿah despite the fact that the latter combats price fixing. They base their conclusion on the two conditions set by Ibn Taymiyyah (n.d., p. 22) that make price fixing eligible. Those conditions stipulate that if the price changes are not due to scarcity nor due to increase in population, and the price changes are related to basic needs, then the government can impose price fixing. In other words, they are of the opinion that since modern Islamic financing is unavoidable, thus needed, and there is no scarcity nor population increase, then price control/fixing represented by a pricing benchmark is acceptable by Sharīʿah. But to what extent financial institutions become basic needs and whether they fall under Ibn Taymiyyah's category of basic needs is debatable. Unless it is proven to be a basic need, the argument remains weak. A question might arise, though: does a benchmark have elements of price control? The fact that it is an indicator makes the benchmark more inclined towards being a guide for financial institutions to set their prices in accordance with "best" market prices, rather than necessarily following it. Although that is the case, interbank transactions and exchanges continue at the fixed benchmark rate. Thus, though minor, the threat of violating Sharīʿah law remains valid. The aforementioned argument clearly justifies the merits of a SWOT analysis.

While price control might be harmful to the market, the benchmark rate's virtues for the market cannot be denied. Having a determined benchmark pricing can help avoid possible ghubn, that is any uncertainties or possible deceptions. Furthermore, it may help regulators ensure that fraud and manipulation do not exist in the market (Ahmed et al., 2018, p. 2908; Omar et al., 2010, pp. 13, 19).

Issues of benchmarking in conventional finance

A review of the extant literature that discusses issues of the conventional interbank benchmark rates outlines both their internal capabilities (strengths and weaknesses) and their external environment. The latter reveals an existential threat to

the interbank benchmark rates. This was the result of diminishing trust in the financial markets.

Perhaps the strengths mentioned by the proponents of having an Islamic benchmark rate have been deduced from the experience of the non-Islamic interbank benchmark rates. Theoretically, the conventional interbank benchmark rates possess huge potential and provide countless advantages to the market. Among these are: reducing search costs in bilateral over-the-counter markets, leading to higher market participation, having better matching efficiency, reducing asynchronous information between the contracting parties, and lowering moral hazard in delegated execution (Duffie and Stein, 2015, pp. 194–195). The first three advantages occur as a consequence of transparency on market rates. The last two advantages, that is reducing asynchronous information and lowering moral hazard, have the effect of fighting fraud and any potential manipulations between market players.

However, the revelation of widespread manipulation of the LIBOR in 2008 news reports threatened the integrity of this benchmark and undermined trust in financial markets (Duffie and Stein, 2015, p. 191; Schrimpf and Sushko, 2019, p. 29). The LIBOR is calculated overnight through a formula by Thomson Reuters using data of cost of funds sent by participating member banks over the globe. While the rate might have really contributed to reducing in-market manipulations, lack of a proper audit and monitoring body caused the manipulation in calculating the cost of funds by member banks so as to affect the rate to their advantage. This revealed a weakness in all interbank benchmark rates, that they are prone to manipulation, and resulted in a huge threat, questioning their integrity and trustworthiness to the extent that researchers are conducting studies to replace these benchmarks with other more trustworthy alternatives like the interbank risk-free reference rates and/or term rates; see, for example Dabrowski, 2018; Kudenholdt, 2018; Wilner, 2018.

Issues of benchmarking in Islamic finance

In this group, research works focus on the issues of the Islamic Interbank Benchmark Rate (IIBR) and draw comparisons with the conventional benchmark rates. As such, the review of these works reveals a weakness in the IIBR and a couple of threats. These results pertain mainly to the nature of the Islamic banks and their operation within the constraints of Sharīʿah.

Conventional banks can reflect interest rate changes, dictated by authorities like the central banks, rapidly because they use floating rate instruments and interest rate swaps, which allow them to mitigate exposure to interest rate risks (Archer and Abdel Karim, 2019, p. 197). Islamic banks, in contrast, cannot reflect these changes because their instruments are based on sale credit or venture and partnerships unless they opt to violate Sharīʿah laws; except perhaps for lease-based contracts that allow for periodic changes in the rentals. Archer and Abdel Karim (2019, pp. 197–198) explain that the threat in this case might extend beyond the micro-level exposure to rate of return (RoR) risk for Islamic banks to evolve into

macro-level implications of risk and threats to financial stability, which would encourage the relevant authorities to adopt policies and proper measures to counter such issues.

Due to the abovementioned intrinsic issue, higher rates might be charged by the IIBR. Supplying Sharīʿah compliance combined with good news and credit ratings even allows panel banks of the IIBR to really charge a higher rate over their conventional counterparts (Azad et al., 2018, p. 121). While the notion of being Sharīʿah-compliant no doubt appeals to millions of Muslims for dealing with Islamic financial institutions, charging higher rates attracts strong criticism and renders the Islamic financial institutions on the verge of struggling to compete with their conventional interest-based counterparts.

In direct comparison with the conventional benchmark rates, in the research into whether there is any correlation Azad et al. (2018, p. 121) found both long-term and short-term dynamic relationships between the IIBR and the LIBOR, suggesting significant evidence of their convergence and co-movement. These results match the results of several other similar research papers such as the ones conducted by Nechi and Smaoui (2019) and Jatmiko (2017). All these studies agree that the IIBR is influenced by and dependent on international benchmark rates. The reasons for this might be due to market forces and arbitrage activities forcing Islamic rates to converge with the global rates (Azad et al., 2018, p. 122). It is worth noting that more recent research contradicts the said findings. In his research, Tlemsani (2020, p. 259) finds a significant negative correlation between the IIBR and the LIBOR (except for the overnight rate); he explains the negative linear relationship to be due to the IIBR representing a substitute investment for international investors in times when traditional rates fall in relation to the IIBR. A closer look at Azad et al.'s (2018) paper reveals that they applied unit root and co-integration tests and identified long-term co-movement but without detecting causal relationship. Then they followed this with the application of GARCH-DCC for causal short-term test. In contrast, Tlemsani (2020) simply used correlations, Granger causality, and OLS procedures; the methodology of this paper is clearly weak. The former is methodologically more viable. Combined with supporting findings from other papers, the IIBR seems susceptible to criticism for the inability to free itself from the interest-based benchmarks.

Based on the review of the literature above, it is obvious that there seems to be a lack of formal SWOT analysis on an Islamic benchmark rate. SWOT analysis could be instrumental to critically examine the relationships between the IIBR and the path of its counterpart, the LIBOR, that it emulates. It will also examine the two in terms of the methodology used for determining their rates. Although the availability of a second committee concerned with Sharīʿah compliance in the IIBR sets it apart and ensures that it is not prone to manipulation issues that its counterpart the LIBOR has fallen into, freeing the IIBR from the interest-based rates has not been achieved and the Islamic benchmark is still vulnerable to criticism and scrutiny.

SWOT analysis of benchmarking in the Islamic finance industry

The focus of this section is to take all the information gathered from the three points of reference in the literature reviewed and to conduct a SWOT analysis of an Islamic benchmark rate. From this exercise, it is hoped that the gap identified would be minimized and the findings would provide fertile ground for a more holistic view for a future improvement of the existing Islamic benchmark rate or development of a completely new one with all the SWOT dimensions in mind.

Strengths of having an Islamic benchmark

The meta-review of the literature produced three main strengths for an Islamic benchmark rate. The availability of the rate itself reduces asynchronous information between the contracting parties and as a result eliminates any uncertainties, fraud, or in-market manipulations that might face investors otherwise. Moreover, the knowledge of the rate would reduce any deception performed by morally insincere delegated brokers for investors, as an example. Prior to the initiation of benchmark rates, market participants used to physically search for the best offers in over-the-counter markets. This needed time and effort, and therefore was not market participation-inducing. Like its counterpart, the Islamic benchmark rate will have the effect of reducing search costs, increasing market participation, and causing better matching efficiency.

Weaknesses in having an Islamic benchmark

An Islamic benchmark rate has been long sought. Its availability is appealing to many Muslims, just like it was when Islamic banks were introduced to the world. That being said, it might seem that charging higher rates than its counterpart is intuitive. Of course, there are many other factors involved in explaining the higher rate, owing to the fact that Islamic banks' risk structures are more complex, and the financing modes are different. While the ability to charge higher could be thought of as a strength, the reputational consequences might be more harmful. Therefore, this research sees higher charging rates as a weakness.

The LIBOR scandal raised the question of how much other benchmark rates are prone to manipulation. The IIBR was initiated on the same methodology of the LIBOR, where participating member Islamic banks provide their cost of funds overnight to Thomson Reuters. While the IIBR has an additional Sharīʿah committee to oversee compliance of the whole process, the concentration of member banks in one region, the Gulf Cooperation Council (GCC), and the political influence thereof even gives a small possibility of the IIBR being prone to manipulation. On the other hand, there is significant evidence that the IIBR moves parallel with conventional rates like the LIBOR and is thus unable to free itself from global rates.

Opportunities of having an Islamic benchmark

Opponents of adopting an Islamic benchmark rate argue that using a conventional benchmark rate does not render the Islamic bank's operations impermissible and therefore, so they say, an Islamic benchmark rate is not justifiable. Despite that, having a true Islamic benchmark rate will help the Islamic finance industry to reflect its true costs of funds and incorporate its risk structures caused by its different real asset-based modes of financing. The realization of this opportunity will be a step towards another opportunity, which is the progress in offering Islamic products and services, and in turn progress in the discipline of Islamic economics.

Threats of having an Islamic benchmark

Charging higher rates than its counterparts and its inability to free itself from the global rates attracts criticism to the Islamic benchmark rate and renders it unable to compete with the conventional ones. Furthermore, the inability of Islamic rate to respond to rapid changes in external interest rates exposes it to RoR risks. On the other hand, the fact that a benchmark rate has an element of price control in it exposes the Islamic benchmark rate to the risk of violating Sharīʿah law. Careful scrutiny on this subject is deemed vital in order to ensure eliminating any possibility of violating the very essence on which the Islamic financial industry is built. In addition to that, manipulations that occurred with the LIBOR will have trust repercussions and reputational risks on the financial markets, affecting even the Islamic rate.

SWOT analysis results

With the advent of the IIBR, a few of the long-sought issues have been resolved, most importantly that which includes adopting a rate that sets itself apart from the ribā (interest)-based benchmark rates. However, a thorough SWOT analysis reveals that the weaknesses and risks (threats) it brings about negatively influence the subject in as much as the strengths and opportunities positively influence it. The result exhibited is a manifestation that the Islamic finance industry is still a subset of conventional finance and is still performing in the same direction, albeit with permissible instruments. Table 5.1 lists the key SWOT factors of the Islamic benchmark rate.

Based on the SWOT analysis results in Table 5.1, further analysis can be carried out via creating a strategic window in order to acquire a strategy. Table 5.2 portrays the strategic window of the SWOT analysis of the Islamic benchmark rate and produces several important strategic recommendations.

Conclusion, policy implications, and the way forward

Since the Islamic finance industry is still in its infancy, so are its products. The need for an Islamic benchmark rate does not stop at the Sharīʿah requirement of

Table 5.1 SWOT list of key factors of Islamic benchmark rate

Factor	*Content*			
Strength	1. Reduces asynchronous information, thus eliminating all forms of fraud, deception, uncertainties, or in-market manipulations.	2. Lower moral hazard in delegated execution.	3. Market participation and efficiency-inducing (reduces search costs, increases market participation, and causes better matching).	
Weakness	1. Higher charging rates.	2. Prone to manipulation.	3. The IIBR is correlated with the LIBOR and is unable to decouple from global rates.	
Opportunity	1. Reflects the true costs of funds of the Islamic finance industry and incorporates its risk structures.	2. Progress in the discipline of Islamic economics.		
Threat	1. Attracting criticism and inability to compete with conventional counterparts.	2. Exposure to RoR risk due to lack of flexibility to respond rapidly to changes in external interest rates.	3. Risk of Sharī'ah law violation due to price control.	4. Risk of diminishing trust in the financial markets due to manipulations.

Table 5.2 Strategic window of SWOT analysis of Islamic benchmark rate

	Opportunity	**Threat**
	O_1: Reflects the true costs of funds of the Islamic finance industry and incorporates its risk structures. **O_2**: Progress in the discipline of Islamic economics.	**T_1**: Attracting criticism and inability to compete with conventional counterparts. **T_2**: Exposure to RoR risk due to lack of flexibility to respond rapidly to changes in external interest rates. **T_3**: Risk of Sharīʿah law violation due to price control. **T_4**: Risk of diminishing trust in the financial markets due to manipulations.
Strength **S_1**: Reduces asynchronous information, thus eliminating all forms of fraud, deception, uncertainties, or in-market manipulations. **S_2**: Lower moral hazard in delegated execution. **S_3**: Market participation and efficiency-inducing (reduces search costs, increases market participation, and causes better matching).	**SO** **SO_1**: Direct morality and efficiency to maintain reflection of true costs and echoing a true Islamic economics.	**ST** **ST_1**: Direct moral strengths of Islam to seek other risk-free reference alternatives. **ST_2**: Ensure continuous scrutiny on the Islamic benchmark rate committees. **ST_3**: Raise awareness about the moral strength and Sharīʿah compliance of the Islamic reference rate.
Weakness **W_1**: Higher charging rates. **W_2**: Prone to manipulation. **W_3**: The IIBR is correlated with IBOR and is unable to decouple from global rates.	**WO** **WO_1**: Direct efforts towards freeing the Islamic reference rate from its correlation with the conventional counterparts.	**WT** **WT_1**: Research into ways to reduce costs of funds and embrace technological advancements that can help in this endeavor. **WT_2**: Incorporating additional Islamic banks as member determinants of the Islamic benchmark rate to be more representative in terms of quantity and Islamic region coverage.

isolating itself from its ribā-based counterparts, but it goes further to cater for its own intrinsic nature and risk structures. The search for an alternative, albeit Islamic benchmark is in itself an evidence that the Islamic finance industry runs after developing the same products created by the conventional finance, but ones that are Sharīʿah-compliant. This is a manifestation of being a subset of

conventional finance. Nonetheless, the search for and improvement of an Islamic benchmark rate should work towards contributing to the independence of the Islamic finance industry and the advancement of Islamic economics.

In this chapter, SWOT and strategic window analyses were performed on an Islamic benchmark rate to identify the favorable and unfavorable factors and understand the challenges and issues. An overall picture was drawn by understanding the internal capabilities (strengths and weaknesses) and external environment (opportunities and threats) of the Islamic benchmark rate and by looking at how these compare. Seven strategic recommendations were developed, which will have vital policy implications. Three of these recommendations are built upon the moral strength of Islam to continue reflecting the true cost of funds, seek better alternative risk-free reference rates, and raise awareness to the public of the integrity of the Islamic rate. Another two recommendations are directed towards the member committee; one to ensure their continuous scrutiny and the other to add more members to make the committee more representative in terms of quantity and coverage of the Islamic region. The remaining two deal with researching ways to reduce the cost of funds and freeing the Islamic benchmark rate from converging with its conventional counterpart.

Essentially, the SWOT analysis identified the internal characteristics (strengths and weaknesses) and external environment (opportunities and threats) of the Islamic benchmark rate. The study has made use of the strategic window SWOT analysis, a holistic comparison between the internal characteristics and the external environment factors that develops a clear understanding of the issues and provides strategic recommendations. The end result is a recognition of the challenges and obstacles faced, which in turn will help formulate strategic plans to guide scientific decisions (Wang and Wang, 2020).

The strategic window analysis (Table 5.2) has developed several important thematic strategies, which will manifest into essential policy implications. Financial practitioners, Islamic finance industry policy makers, Islamic finance committee members, and academics will benefit from these recommendations. There were seven strategies drawn. Firstly, the morality of Islam and the efficiencies of an Islamic benchmark rate in the markets should be directed to maintain the Islamic rate's reflection of the true costs of funds and echoing of a true Islamic economics. Secondly, in line with the strength of morality in Islam, research has to be conducted to seek other reference rate alternatives that might prove more efficient under Sharīʿah constraints than the current Islamic benchmark rate. Thirdly, to ensure continuous scrutiny of the Islamic benchmark rate committees in order to eliminate any potential manipulations. Fourthly, to raise awareness among the public about the moral strength and Sharīʿah compliance of the Islamic reference rate. Fifthly, to direct efforts and research towards freeing the Islamic reference rate from its convergence to the global rates. Sixthly, to research into ways to reduce cost of funds in the Islamic finance industry and embrace technological advancements that can help in this endeavor. Seventhly, to incorporate additional Islamic banks as member determinants of the Islamic benchmark rate in order to

be more representative in terms of quantity and Islamic region coverage and in order to eliminate political influences.

This analysis can be taken a step further into more inclusive areas. In addition to the three points of reference reviewed in the literature, the SWOT and strategic window analyses (Table 5.2) can be conducted in future with major stakeholders from practitioners, policy makers, and academicians.

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Part II

SHARI'AH ANALYSIS OF BENCHMARKING ISLAMIC FINANCE

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6

WHAT IS THE QUR ʾĀNIC SOLUTION TO BENCHMARKING THE FINANCIAL SYSTEM?

Rusni Hassan and Muhamed Benaicha

Introduction

Islamic finance is a set of principles and contracts based on the Sharīʿah that guide financial transactions. The Sharīʿah is composed of the Qur ʾān, the holy book revealed by Allah (God Almighty) to Prophet Muhammad (the Prophet, peace be upon him), and the Sunnah, which is the Prophet's sayings, actions, and approvals. Islamic finance offers a unique approach to the transfer and distribution of funds from excess units to deficit units in the economy. The Islamic financial system is composed of Islamic banking, Islamic capital markets, and takāful (Islamic insurance).

The Qur ʾān and Sunnah, referred to as the Sharīʿah texts, are the primary source of Islamic finance, just as they are for other domains of Sharīʿah like family law, judiciary, and ritual worship. However, Islamic finance has also greatly benefited from the contributions and literature of the Islamic jurists (referred to as "the jurists" – fuqaha) since they have analyzed the Sharīʿah texts and devised a system of laws based on this interpretation called fiqh. Hence fiqh is simply a collection of legal cases (precedents) based on the jurists' interpretation of the Sharīʿah texts. The Sharīʿah texts and fiqh literature then form the primary sources of Islamic finance. The fiqh literature is so vast and extensive that it has led to another domain known as the fiqh maxims (qawāʿid fiqhīyah). Among these fiqh maxims are those that are specific to financial transactions. Although fiqh maxims are not independent of the fiqh literature, they form a unique source for Islamic finance in that they represent the principles of juristic thinking in developing the fiqh precedents.

Out of the Qur ʾān, Sunnah, and fiqh literature sources, the Qur ʾān is the most prominent due to the fact that it is revealed by Allah. The Qur ʾān is the words of Allah transmitted exactly as He pronounced them through the angel Gabriel (Jibreel) to the Prophet, who taught it to his companions, who transmitted it to the

next generation of Muslims in its authentic form and so on until today. This renders it the principal and most authentic reference for Sharīʿah rules (sing. ḥukm, plur. aḥkām), including those that pertain to Islamic finance. An example of a Sharīʿah rule is the prohibition of ribā (often interpreted as usury), the obligation of giving alms (zakāh), etc. Since the Qurʾān has been preserved though writing and word of mouth on the basis of tawātur (which means that it was transmitted to the current generation by masses of Muslims who had taken it from the generation preceding and so on until today), it precludes the possibility of conspiring to lie or fabricate its verses (Al-Qattan, 2000, pp. 17–20). Due to this distinction, the Qurʾān is the central and timeless reference for the scholars of Sharīʿah in general, and Islamic finance experts specifically.

A review of the Qurʾān allows one to conclude that it may convey rules in a brief and general sense (known as ijmāl), or it may convey elaborate rules in detail (tafṣīl). When the Qurʾān speaks of the general principles and rules of Sharīʿah, such as justice or fairness (ʿadl) and the prohibition of ribā respectively, they are conveyed in a brief and general sense without elaborating their detailed elements. The words and expressions in the Qurʾān tend to be clear and apparent in their connotations because their purpose is to serve as a basis for the more detailed rules. In other words, the scholars tend to have closely matching interpretations of what they read in the Qurʾān – things like what is meant by mutual consultation (shūrá), what is meant by justice, ribā, fulfillment of contracts (al-wafāʾ bi al-ʿuqūd), etc. Admittedly, there are exceptional cases where the Qurʾān does convey rules in detail such as rules regarding shares of inheritance (mīrāth) and certain criminal penalties (ḥudūd). The general principles of the Qurʾān are what forms the basis of Islamic finance and will be the basis on which to build an Islamic finance benchmark.

Core Qurʾānic principles of Islamic finance

The Qurʾān contains a variety of extensive principles that pertain to various aspects of human life such as justice, and others that pertain to specific aspects of human life like financial transactions (muʿāmalāt mālīyah), such as the prohibition of extreme uncertainty (gharar). Both types of principles are essential to Islamic finance. Some of the general principles of the Sharīʿah that also pertain to Islamic finance include justice, honesty (ṣidq), responsibility (masʾūlīyah), trust (amānah), development (iʿmār), and the list goes on. The specific principles that are almost exclusive to financial dealings are the fulfillment of contracts, the prohibition of ribā, excessive uncertainty (gharar) and gambling (maysir). Furthermore, there are principles that are inferred from the Qurʾānic verses and that exposit the objectives of Islamic finance. They include: the objective of justice in financial dealings; the objective of hifẓ, which refers to the preservation of wealth; the objective of thabāt, which is stability of financial dealings through registration and such; the objective of wuḍūḥ, which refers to transparency in financial dealings; and the objective of rawāj, which relates to the circulation and liquidity of funds.

General Principles of Islamic Finance	Specific Principles of Islamic Finance	Objectives of Islamic Finance
• Justice *('adl)*	• Fulfilment of contract *(ifa')*	• Justice in financial dealings *('adl)*
• Honesty *(sidq)*	• Mutual consent *(taradi)*	• Preservation of wealth *(hifz)*
• Responsibility *(mas'uliyyah)*	• Prohibition of riba, gharar, maysir	• Stability of financial dealings *(thabat)*
• Trust *(amanah)*	• Measure or balance *(kayl)*	• Transparency in financial dealings *(wuduh)*
• Development *(i'mar)*	• Custom *(urf)*	• Circulation & liquidity of funds *(rawaj)*

Figure 6.1 Core Qur'ānic principles of Islamic finance. Source: Authors' own

The Qur'ānic principles that pertain to Islamic finance are the most relevant here and are elaborated briefly since a number of them will contribute to formulating the Qur'ānic approach to Islamic finance benchmarking. Ribā is simply an increment to any one party in a transaction that is not justified. The prominent example is an interest-based loan, since the principal and interest are guaranteed but without risk of capital loss to the lender. The lack of risk does not justify increments here, which is the interest payment. Maysir is another major prohibition of the Qur'ān and refers to games of chance. Maysir entails uncalculated speculation. All forms of maysir are prohibited and include modern examples such as lotteries and casinos. The basis for prohibition of maysir is its nature to squander property and lead to disputes among people. Furthermore, there are explicitly prohibited (ḥarām) activities or products for consumption that are detailed in the Qur'ān, which include blood, dead animals, alcohol, prostitution, etc. Tarāḍī is a Qur'ānic concept that refers to mutual agreement among transacting parties. It is a subject of emphasis in the Qur'ān and delegates the determination of the nature of transactions to the judgment of the transactors and their mutual agreement. Kayl refers to measure or balance and is attached to just and fair ('adl) measure in the Qur'ān. Financial dealings have to be fair, honest, and transparent in order to realize justice. 'Urf (custom) is yet another important Qur'ān principle, which generally refers to something that is well-known and accepted. It is understood as something that is approved by society and seen as good. The Prophet is commanded in the Qur'ān to uphold 'urf, which is one of the core principles of human interactions, especially financial dealings, and which is why the Qur'ān pays such high regard to it.

The other set of principles are actually objectives of Islamic finance, conveniently defined by Ibn 'Āshūr (2004, v. 3, p. 470). They are inferred directly from

the Qur'ān and directly pertain to Islamic finance. They will be elaborated in their appropriate section, but they are abbreviated as follows: Allah emphasizes in the Qur'ān the objective of justice ('adl) financial dealings, the objective preservation of property (hifẓ), stability (thabāt) of financial dealings embodied in the registration of contracts, circulation (rawāj) of funds among different participants and segments in the financial system, and transparency (wuḍūḥ) in financial dealings.

Before detailing the Qur'ānic proposition for benchmarking, it is important to define benchmarking and what purpose it serves, as well as provide examples of benchmarking in Islamic finance today.

Understanding benchmarking

A basic abstract definition of benchmarking can be "the act of measuring the quality of something by comparing it with something else of an accepted standard" (Cambridge Dictionary, n.d.). According to this definition, benchmarks can take many forms. The focus here is to propose a Qur'ānic solution for benchmarking for the Islamic financial system. Hence, a technical financial definition of a benchmark is needed, which could be "an instrument, index, or rate that will serve as a basis of comparison or from which an observation will be taken for purposes of setting a rate on a floating rate instrument [or otherwise]. In the latter context, it is often called a reference asset, reference index, or reference rate" (Marshall, 2000, p. 19). While this definition is one of the best out there, the purposes of benchmarking are not limited to the one in the definition, which is why the authors have added "or otherwise" in square brackets to indicate their addition on top of Marshall's definition. The purposes of benchmarking go beyond simply setting a rate on floating-rate instruments, as will soon become clear.

Beyond being a standard rate for pricing floating rate instruments, benchmarks serve purposes including:

- Benchmarks serve as an indicator of equilibrium price levels of different assets and markets. Since benchmarks are influenced by the supply and demand of the underlying reference assets/rates, they serve as an indicator of equilibrium price levels of those assets/rates.
- Benchmarks harmonize pricing practices of products and services for the financial services industry. In conventional finance, the interbank offer rate is a good measure of money market instrument prices – the price of money. In Islamic finance, as will be discussed shortly, several such benchmarks have been developed, such as the Islamic Interbank Rate, whose reference asset is the Mudharabh Interbank Investment money market instrument traded on Malaysia's Islamic Interbank Money Market. Since Islamic financial institutions price their products based on their cost of funds – besides other things – a common rate that represents this cost of funds would allow for a common base price of their products and services (the Islamic Interbank Rate plus a risk spread).

- The next important purpose of a benchmark is that it acts as a standard to aid in the management of risk of financial institutions. Having a benchmark that represents asset values (including money), such as interest for interbank money market instruments in conventional finance, or such as the Mudharabah Interbank Investment money market rate, provides banks with the ability to match their uses of funds with their sources of funds. Hence, income to the bank from floating rate financing similarly allows the bank to meet its floating rate liabilities. If this is not done, it exposes the bank to rate mismatches (interest for conventional banks and profit rate for Islamic banks). Another dimension of risk management is the bank's ability to offer floating rate derivatives products to its clients, since Islamic derivatives use the profit rate, either a fixed for floating or floating for fixed profit rate, for hedging purposes.
- A benchmark serves Islamic financial institutions uniquely in that they base their financing on the real economy. An example is a term for a finance product that uses ijārah finance (Islamic financial lease) or muḍārabah finance (investment in a venture). Hence, it would be prudent to price such financing products based on the value of ijārah assets, or set the profit-sharing ratio of muḍārabah based on the nature of the underlying muḍārabah venture. Changes in property rental rates, for example, will mean greater income for the Islamic bank, while changes in the prospects of the customer's muḍārabah venture elicits changing the profit-sharing ratio. From this angle, benchmarks realize the spirit of Islamic financing and allow for greater prudence and proactive risk management.
- A benchmark serves as an invaluable tool for monetary authorities to manage liquidity in the financial markets, and in turn the economy, by adjusting the rate in central bank securities and central bank funds (such as repo rates, which will directly affect the benchmark based on money market instruments). In this method, the central monetary authority is able to influence the benchmark rate when the situation calls for it, and in order to lower or raise the availability of funds.
- Benchmarks allow financial institutions to offer more complex financial products, which have provided greater financing and investment variety in the financial markets. Indexed funds are good examples of investment funds that based their holdings on the securities underlying a certain benchmark index. Another example is Islamic structured products, which may index the profit maximization leg (the other leg being the capital preservation leg) of the product to a recognized benchmark.

Currently, a variety of Islamic finance benchmarks exist in Islamic banking and Islamic money and capital market sectors. As for Islamic banking, both hubs of Islamic banking, Malaysia and Gulf Cooperation Council (GCC) countries, have developed interbank money market rates. Malaysia's Islamic Interbank Rate is based on muḍārabah instruments, while the GCC countries depend on

the murābaḥah-based Islamic Interbank Benchmark Rate. Both benchmarks measure the cost of funds of Islamic banks and are used for several purposes mentioned above (Thompson Reuters, 2011, p. 1). While these benchmarks mainly work to serve Islamic banks, they don't provide customers with the most transparency, which is why another benchmark is referenced in financial products known as the base financing rate. It takes into account, among other things, the cost of deposits (Omar et al., 2010, p. 32). Furthermore, its methodology is available to the public and regulated by the financial regulators, such as the Bank Negara Malaysia (the Malaysian Central Bank). The following section will discuss the Qurʾānic solutions to Islamic finance benchmarking and presents other forms of benchmarks that have been called for, like the rental rate and profit-sharing ratio benchmarks.

Qurʾanic guidance on benchmarking solutions for Islamic finance

The Qurʾān, being a legislation, which aims to lay down the general principles of conduct in human interactions, has given due attention to financial transactions. As noted earlier, justice, honesty, responsibility, trust, and development are all Qurʾānic principles and important values in economic dealings shared by humans in general. More specifically, the Qurʾān delineates certain principles that prove key to Islamic finance which are the fulfillment of contracts, the prohibition of ribā and gambling, as well as the concept of mutual consent, kayl, and custom. The latter three will be of specific interest as benchmarking solutions provided by the Qurʾān. Furthermore, the core set of Islamic finance objectives are derived directly from the Qurʾān and include justice, preservation, stability, transparency, and circulation. These principles and objectives provide important guidance for consideration when creating an Islamic finance benchmark.

Qurʾānic mechanisms for benchmarking

There are three main concepts in the Qurʾān that prove as useful solutions or mechanisms for benchmarking. They are referred to as mechanisms to distinguish them from the objectives used to gauge the quality of a benchmark that will be discussed later.

Mutual consent (tarāḍī)

Tarāḍī refers to mutual consent and is at the core of Islamic finance and happens to be an important Qurʾānic principle, which is in perfect harmony with human reason. The Qurʾānic verse that conveys this concept reads: "Oh believers, do not usurp each other's property, but it should be commerce (transactions) conducted based on mutual consent (tarāḍī) between you" (4:29). Naturally, before a transaction is conducted, the transactors want to be sure that it is done subject to their free will without any element of coercion. Mutual consent, through the use of words or

documents that indicate an offer and acceptance, provides explicit evidence that the transaction is conducted by the free will of the transactors. This is essential to the enforcement of contractual rights following the conclusion (signing) of the agreement or contract. The Qur ʾān delegates the freedom to transact in the various ways according to this principle of mutual consent, knowing that the nature of human interactions will evolve, including their financial transactions. But the Qur ʾān also closely considers the elements that are fixed and are necessarily required to ensure the stability of the system of human transactional dealings.

Mutual consent is an ideal solution for an Islamic finance benchmark, since the very purpose of a benchmark is to standardize a price, which market participants use as a reference. To demonstrate this, consider a common financing rate that Islamic banks want to use to price their financing products. Islamic banks want a reference that will fairly represent the cost of funds to them. The cost of funds calculation incorporates several variables, among which is the price they pay their depositors, the price they pay to maintain statutory reserves (represents a foregone opportunity to earn a return on those reserves), etc. Since these factors are common to Islamic banks, they may agree to make them a basis for calculating the financing rate. This base financing rate will change as its reference – deposit and statutory reserve rates – changes. Mutual consent regarding the reference rates/assets (henceforth referred to as reference rates) here is, in a sense, realized among Islamic banking sector participants. Furthermore, when it comes to the disclosure of the application of the benchmark, there is mutual consent regarding the risk spreads that individual Islamic banks charge their customer for financing based on the extra costs to the Islamic bank and based on the customer's credit rating. This is further disclosed to the customer, leaving no chance for decisions, which can be considered compulsion (ikrāh), which contradicts the idea of mutual consent. Thus it is demonstrated that in theoretical construction and application of the benchmark, mutual consent is an effective mechanism without which the benchmark may not prove sustainable or effective.

Here, a simple example is given to demonstrate how mutual consent ties directly with a benchmarking mechanism, but benchmarks are not so easy to formulate, so it may be the case that more sophisticated benchmarks are required and that perhaps better cater to the unique nature of Islamic finance. The base financing rate is a praiseworthy initiative developed to distinguish Islamic finance from conventional finance, especially when one considers the difficult environment in which Islamic finance exists and in which conventional financial institutions dictate the terms of the greater financial system. However, if Islamic finance is to advance, it will require answering more difficult questions and overcoming greater obstacles. The unique asset-based nature of Islamic finance means that real assets form the basis of its transactions and contracts. Islamic bank financing facilities all involve the provision of financing based on an underlying asset, whether it is the direct asset being financed (like ijārah) or an indirect asset that is not the subject of finance (like the murābaḥah commodity program). The questions that then arise are: should the pricing look the same for every asset being

financed? Furthermore, what if the pricing does not even consider an asset, but rather is the funding of ventures, as is the case with muḍārabah and mushārakah financing? How is the mutual consent mechanism to play a role in developing these more sophisticated benchmarks?

The Qurʾānic proposal of and emphasis on mutual consent is concise yet extensive. That is to say, the flexibility in determining mutual terms and conditions of transactors and market participants aims to allow for flexibility while at the same time ensuring justice is achieved through the upholding of mutual consent. This means that the choice of benchmarking techniques, underlying references, and purposes of benchmarking is left up to the participants of the market. Therefore, if it is desired that a more suitable benchmark be developed for unique asset-based financing such as ijārah- or istiṣnā‘-based financing, then mutual consent delegates the technicalities of developing such a benchmark to the expert participants of the Islamic banking sector. What is essential is that the benchmark is developed fairly, with the contribution of the relevant Islamic banks who are significant players and that the authorities, such as regulators, give such a benchmark due consideration. Therefore, the determination of such a benchmark cannot be a one-sided initiative, such as an imposition from the central bank, to which other participants do not agree to or view to be unmanageable. Besides, doing so would prove disadvantageous to all as this would create arbitrage and unfair advantage to some who are not bound by the benchmark.

To demonstrate, consider a rental rate benchmark, which has been a subject of long debate, and as a result of which, no practical propositions have materialized. This benchmark is a pricing benchmark of Islamic bank property and possibly vehicle (and other asset) financing. In an attempt to mutually agree on a benchmark that fairly represents property prices and which is practical for Islamic banks to adopt, several factors and their influence will have to be prudently considered. Examples include: what standard of properties or localities are to be considered? How is an average or weighted rental rate of the selected properties or localities to be determined? How and who will determine the sampling methodology of properties as basing a benchmark on every property in existence is impractical if not impossible? What of the constituents of the sample change? Are there ceilings and floors to be set in consideration for Islamic banks' risk management requirements? Attaining a consensus on such an issue is not an easy feat, which is why the development and adoption of a rental rate benchmark for Islamic bank financing products is yet to be developed. Despite this, mutual consent does not preclude the validity of these considerations as neglecting any one of them may seriously discomfort some Islamic banks or deter them from participating in such an initiative. Furthermore, if such a hypothetical benchmark were to become a reality, it would be unjust to impose it as binding regulation on Islamic banks who have not consented fully to it to begin with. Thus it is demonstrated how mutual consent has extensive implications on benchmark development for Islamic finance.

Custom (ʿurf)

ʿUrf refers to something good and customarily approved by society. This concept, which is based in the Qur'ān, serves as another important solution for benchmarking. The verse that conveys this concept reads: "and pardon (oh Muhammad), enjoin that which is good (ʿurf) and turn away from the ignorant" (7:199). ʿUrf is interpreted in this verse to refer to which are good and righteous and is alternatively known as maʿrūf, which bears the same meaning (Al-Qurṭubī, 1964, v. 7, p. 344). In commenting on the verse, Al-Qurṭubī and Ibn Kathīr (1999, v. 3, p. 532) further list a set of examples that are generally deemed good by society within the bounds of obedience to Allah. ʿUrf similarly refers to something that is customarily approved, hence something that is customary is also something that is deemed good and acceptable by society. This concept of ʿurf and consideration for people's customs is also emphasized by the Sunnah. Due to this reason, ʿurf is an important concept in the Sharīʿah and is often used to justify tailoring religious verdicts (fatwa), which suits the practice of the people. In fact, an established principle in fiqh holds that something that is customary practice for traders is considered an explicit stipulation in the practice (Al-Zarqa, 1989, p. 239). In other words, things that are established as convention and widely practiced do not need to be explicitly mentioned but are considered as part of the agreement. A classic example is when determining the maintenance costs of leased assets. If the practice is that it is done by the lessor, then this does not need to be explicitly stipulated.

The concepts of a benchmark and of ʿurf are very much complimentary to one another. While ʿurf itself is used as a valid basis to justify the development and enforcement of a common Islamic finance benchmark, such a benchmark works to standardize Islamic finance industry pricing conventions. In fact, the injunction in the Qur'ān comes as a command to uphold ʿurf, meaning that it is not so much a matter of choice of whether to standardize or not, but a matter of obligation. The Qur'ān's categorical stance on upholding ʿurf may be to maintain stability and security in society at large, and in its institutions specifically. This includes the Islamic financial system and its institution. When one ponders on the benefits of standardized pricing, the stabilizing benefits of benchmarking become very clear. These will be elaborated further in the next section on the objectives of Islamic finance and benchmarking; suffice it to say here that benchmarking realizes stability due to standardization for various stakeholders such as Islamic banks and their regulators, Islamic capital market regulators, customers of Islamic financial institutions, etc.

The other dimension of ʿurf is that it is based on something widely accepted as fair. An Islamic finance benchmark has to realize that fairness. To demonstrate using a profit-sharing ratio benchmark, muḍārabah or mushārakah financing may consider an industry benchmark based on which the determination of the profit-sharing ratio between the Islamic bank and customer is done. This benchmark may realize fairer industry practice with regards to splitting profits among Islamic banks and customers. Some of the variables in this benchmark may include the

type of customer, their credit rating, payment track record, period of financing and liquidation terms of the financing (since muḍārabah and mushārakah are equity-based and not debt-based financing). The benefit of a profit-sharing ratio benchmark is in its ability to regulate Islamic banks not to over-profit from a well-performing financing of a customer. At the same time, there is no hindrance to the customer observing his fiduciary duty in managing the funds of the Islamic bank with trust, honesty, integrity, etc., since the profit ratio is maintained. This is in line with the concept of ʿurf and is a means to achieving fairness in standardizing pricing practice for more unique Islamic banking products. The benefits of a profit-sharing ratio are not limited to Islamic bank financing product pricing but may extend to its benefit as a monetary policy tool by regulators to manage the supply of funds in the Islamic financial system by raising and lowering profit-sharing ratios to encourage or deter equity-based financing. While it is not the purpose here to detail all the workings of the profit-sharing ratio benchmark, there are a variety of ways to construct such a benchmark so as to embody ʿurf and fairness.

Measures (kayl)

The final Qurʾānic concept that represents effective guidance in the development of an Islamic finance benchmark is kayl. Kayl is used in the Qurʾān to refer to weights and measures: "and fulfill the measure (kayl) and the balance justly" (6:152); "and fulfill the measure (kayl) whenever you measure and weigh according to a just balance" (17:35). Technically, kayl refers to measure based on volume, since it is referred to in measure such as saʿ (roughly 2.5 liters), which differs from wazn, which refers to measure based on weight (Almaany, n.d.a). This is further understood from its use in the Sunnah and the fiqh literature. Kayl is specifically relevant in measuring counter-values in transactions such as the quantity of commodity being exchanged for the value of currency that is paid in return. However, the purpose of kayl is to uphold justice through accurate measures of counter-values. Relating this to benchmarking, an Islamic finance benchmark that represents cost of funds of Islamic banks must be very accurate and reflect the actual costs. Furthermore, spreads that are added to the benchmark when pricing a product for a potential customer must observe a proper and transparent methodology as the benchmark will not mean much if the spread calculation is not fair. This is extended to other Islamic finance benchmark propositions.

Kayl traditionally referred to physical commodities, but inference would imply that it applies to all quantifiable counter-values in order to achieve justice. Islamic banks offer products in the form of financing in which the counter-value is the sale of the asset. There is no meaning in having the assets accurately defined if the price that is paid by the customer is not fairly determined to reflect that value. This is where the role of the benchmark comes in, namely in ensuring a standard and accurate pricing mechanism and a basis on which to determine the spread. While it may be argued that Islamic financial institutions are free to determine their prices the way they wish since they operate in a free market environment, which

is coherent with the Islamic worldview, the customer is not as free to behave in this "free market", since they lack knowledge of the cost of funds and hence must rely on the honesty of the Islamic financial institution to determine a fair profit rate for itself. The presence of a benchmark reassures the customer that what the Islamic financial institution is charging is accurate and fair, while other regulations ensure that the spread determination is based on a sound, transparent, and approved methodology and do not discriminate or exploit customers.

Qur'ānic objectives of benchmarking

The Qur'ānic principles that create the framework of objectives for Islamic finance can be used as a check for the quality of the benchmark. To illustrate how that can be the case, the objectives of Islamic finance as well as their relation to Islamic finance benchmarking are discussed one by one.

The principal objective in Islamic finance is achieving justice (al-'adl fi al-māl) which must be distinguished from the ultimate goal of Islamic economics, which is material and spiritual success (falāḥ). Islamic finance is contained within the overall Islamic economic system in which the former provides a mechanism for the transfer of funds from providers of funds to the users of funds. In this regard, justice of the overall Islamic economic system must be realized by its individual parts, including arguably its most important part, the financial system. This is why the Qur'ān is emphatic on the objective of justice in financial dealings; it says: "and do not consume (usurp) each other's property unjustly" (4:29). In the preceding discussion, there were repeated allusions to this objective of justice and fairness. An Islamic finance benchmark may not only create a fair pricing standard among Islamic financial institutions, but it also can create a fair market for customers of Islamic financial services to confidently access. This is then the first check, namely the level of fairness among Islamic financial institutions in reference to a certain Islamic finance benchmark, and the benchmark's ability to instill confidence in customers. This is easy to conceptualize for a base financing rate benchmark for Islamic banks, since it mainly depends on the prices of money market instruments, statutory reserves, etc. The money market with its various products and central bank participation will determine the price of funds available to Islamic banks. The nature of the closely interlinked funds (money) market easily determines the price of capital based on its ease of access and quality. It is easier in that case to claim that the base financing rate is fair as a basis for pricing Islamic bank financing products.

However, when one considers the more complex forms of benchmarking, such as the rental rate or profit-sharing ratio benchmarks, the claim that the benchmark achieves justice becomes all the more difficult to justify. For example, how will the reference units be determined for a rental rate benchmark so as to be fair to both Islamic banks and customers? What if the benchmark does not consider certain localities in which rental rates are low, and in which the customer who owns the property may not be able to generate effective revenue from renting

the property to meet the installments on financing? It is quite common to see investors invest in property and rent it out to pay back financing. These property owners are effectively carrying the risk of changing market prices that the Islamic bank does not have to carry, since it is guaranteed the exact payment of installments on financing. The issue of fairness appears very plainly in this case. There are so many factors to consider that balancing the interests of all the parties whom the benchmark concerns becomes a near-impossible task. This is not to say that it should not be attempted. In fact, even simple initiatives to develop such a benchmark are indicative of the willingness of Islamic banks to move towards a fairer practice. Regardless, the concept of justice remains the ultimate objective of Islamic finance and of an Islamic finance benchmark and should thus never be factored out of the equation as Islamic finance benchmarking grows in sophistication.

The next important objective of Islamic finance is the preservation of wealth (hifẓ al-māl) which refers mainly to the preservation of its value. The Qur ʾān is emphatic on this objective and states in that regard: "and do not give spendthrifts (sufahā ʾ) your property which Allah has made a source of sustenance for you" (4: 5). The preservation of wealth is done through protecting it from loss of value and through ensuring its growth. It was mentioned before that benchmarking aids financial institutions in their risk management endeavors, which have extensive implications for the preservation of wealth objective. A miscalculation of risk could cost an Islamic financial institution dearly and smear its reputation – besides affecting the value of its customers' funds. Hence, an Islamic finance benchmark should accurately reflect levels of the reference rate and move in tandem with the change in the reference rate. This will greatly facilitate the risk management work of Islamic financial institutions. As is the case with the base financing rate benchmark in attaining the objective of justice, it may be easy to track the prices of reference money market instruments or deposits in order to define the base financing rate benchmark. However, lack of accuracy in rental rate benchmarking can prove detrimental to the risk management efforts of Islamic banks that offer lease-based financing. As stated before, the reference rental rate of respective localities underlying the benchmark may not always remain fixed and may change to accommodate the changing dynamics of real estate. Ensuring accurate representation of these changes is not easy, but failing to do so may hinder the Islamic bank's ability to hedge properly. It is not the goal here to list the issues that arise in the different benchmarks and their methodologies, but instead to show that ensuring wealth preservation through a benchmarking that facilitates hedging is an important albeit difficult task. This argument can be extended for the profit-sharing ratio benchmark since an important factor of such a benchmark may be the volatility of the economy and business environment.

The third objective of Islamic finance is the stability of transactional dealings (thabāt al-māl/al-mu ʿāmalāt). Specifically, the Qur ʾān advises Muslims to record their financial dealings in case doubt may arise; it says: "Oh believers! If you lend (and borrow) among yourselves (tadāyantum), then register it" (2:282).

The purpose of registration of transactional dealings is to render them enforceable in case a dispute arises. This process ensures that order is maintained in the financial system, or else transactors would not respect the terms and conditions of contracts. An Islamic finance benchmark plays a role in providing a transparent pricing basis about which there can be no doubt. Hence, if ever the two parties disagree on the recorded price, a pricing benchmark may partially resolve the problem by proving a basis on which to start working to resolving the pricing dispute, while it is admitted that benchmarking will not resolve all of the problems that may arise as a result of non-fulfillment of terms of contracts. Furthermore, the clarity of the benchmark and its related regulation helps to deter parties from contriving fake evidence, since the historical benchmark rates are published and archived. This is ideally what an Islamic finance benchmark should aim to achieve and how it should ensure the enforcement of basic terms and conditions.

The fourth objective is transparency in transactional dealings (wuḍūḥ al-māl/al-mu'āmalāt). That means disclosing all material information to the concerned parties and stakeholders. Transparency is emphasized by the Qur'ānic verse mentioned above (2:282) and is a witness to the extensive implications of the Qur'ānic commands and how they are able to convey a great deal of guidance in such concise expressions. Clarity and honesty are required to be transparent as emphasized by the verse. In reference to an Islamic finance benchmark, one may quickly realize the importance of this objective in ensuring an Islamic finance benchmark that is transparent and honest in its methodology. On the other hand, the presence of a benchmark to standardize pricing in Islamic finance means that the terms relating to the pricing and methodology are clear and in fact independently determined to ensure greater transparency. The issue of methodology endures when considering the complex forms of benchmarking mentioned earlier. Therefore, transparency must be a top priority of the benchmarking methodology, not only so that it can be accessed by concerned parties, but also to ensure fairness in the benchmarking methodology is maintained.

The final objective of Islamic finance is the circulation of funds (rawāj al-māl) among different players in the financial system, including the less privileged segments such as unbankables. This is emphasized by the Qur'ānic verse stating:

> whatever Allah grants His messenger (Muhammad) as spoils (as a result of a war that were declared on the Muslim community), then such spoils should be distributed to Allah and His messenger (in reference to community/state treasury), to kin and kith, to the orphans, to the needy, and to the wayfarer so that it (the wealth acquired through spoils) may not be circulated only among the rich of you.
>
> (59:7)

This verse speaks volumes about the emphasis of Islamic finance on financial inclusion. The whole idea of an Islamic finance benchmark is to facilitate the very transfer of funds from providers to users through standardizing the price at which

funds are accessed. Hence, the objective of circulation can be seen as complimentary to the Islamic financial system in that the ultimate goal of a benchmark is to facilitate the transfer of funds and reduce friction in the Islamic financial system. This may have implications on the construction of the benchmark, or on the choice of benchmark, as in which benchmarks or benchmark elements require more attention to better achieve this objective of circulation and to reduce friction in the transfer of funds. An Islamic finance benchmark that works to hinder the transactions of the financial system goes against this objective.

An example was demonstrated regarding Islamic banks' reluctance to use rental benchmarks due to the inherent risks that they are not equipped to deal with – at least not yet. Even if such a benchmark was adopted, Islamic banks may purposefully refuse to offer financing to customers of certain localities that experience volatile rental rate trends, claiming that the risk to the Islamic bank is too excessive. Technically, the Islamic bank is required to provide fair access to financing for all customers in the market without discrimination, as long as the objective requirements of the Islamic banks are met, such as credit evaluations and so forth. This may work to discriminate against certain customers, which may only increase friction in the Islamic financial system. This may not just be a benchmarking issue, but rather there needs to be a clear definition of what constitutes an objective assessment of the customer's financing needs and what constitutes discrimination.

This is a brief demonstration of how the objectives of Islamic finance, based in the Qurʾān, can provide an effective check for an Islamic finance benchmark and work to compliment the mechanisms of mutual consent, ʿurf, and kayl.

Figure 6.2 sums up the discussion on Qurʾānic mechanisms and objectives that provide solutions for developing Islamic finance benchmarks. A set of Qurʾānic principles provide specific mechanisms for the development of an Islamic finance benchmark and which include mutual consent, ʿurf, and kayl. As a result of these mechanisms, things such as fair representation, acknowledgment and adoption, and accuracy were presented as examples of features of good Islamic finance benchmarks. The objectives of Islamic finance work as a check to help ensure the proposed benchmark is in harmony with the overall objectives of Islamic finance

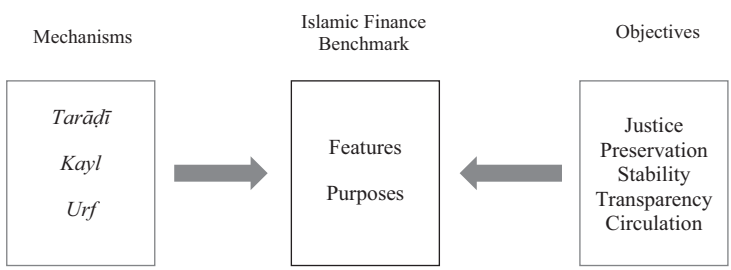

Figure 6.2 Mechanisms and objectives of Islamic finance benchmarking. Source: Authors' own

in the Qur'ān. Furthermore, the mechanisms proposed must provide solutions that are in agreement with the overall objectives of Islamic finance discussed.

Conclusion

Qur'ānic guidance is intended to be comprehensive yet concise in the way it is conveyed. When inferring from the Qur'ān, one finds the principles of mutual consent, 'urf, and kayl, to provide concise guidance on Islamic finance benchmarking. Mutual consent requires that a benchmark is developed fairly with the contribution of the relevant and significant players and that the authorities, such as regulators, see to its adoption. 'Urf entails standardizing a benchmark price that is mutually agreed and that is fair and acceptable by participants. Kayl entails that benchmarking is accurate and fair in order to elicit customer confidence in benchmark pricing.

The Qur'ān also defines a set of objectives that guide Islamic finance and that should guide benchmarking. An Islamic finance benchmark works to realize the objective of justice by creating a fair pricing standard among Islamic financial institutions and customers and hence should adopt something that is as fair and reasonable as possible. Furthermore, benchmarking aids financial institutions in their risk management endeavors, which have extensive implications on the preservation of wealth. Benchmarks should be accurate to facilitate this. An Islamic finance benchmark plays a role in providing a transparent pricing basis over which there can be no doubt, which helps to realize the objective of preservation of wealth through registration of contractual terms. Transparency must be a top priority of the benchmarking methodology, not only to facilitate access to it by concerned parties, but also to ensure fairness in the benchmarking methodology. The objective of circulation means that the ultimate goal of a benchmark is to facilitate the transfer of funds and reduce friction in the Islamic financial system.

In observing these mechanisms and objectives, the Islamic finance benchmark is likely to provide the greatest value-addition to Islamic finance, especially in reorienting Islamic finance practice with its spirit and ideals.

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7

HOW DOES THE SUNNAH RECOGNIZE BENCHMARKING FORMULA FOR THE ISLAMIC FINANCIAL SYSTEM?

Rusni Hassan and Muhamed Benaicha

Introduction

Sunnah literally means a way or a path in Arabic. Technically, it is defined by the jurists to mean that which issues forth from Prophet Muhammad (the Prophet) including words, actions, or tacit approvals (Al-Zuhaili, 2006, v.1 p. 187). Put differently, it is the Prophet's sayings, actions, and indirect approval of the conduct of his companions. Examples of sayings, actions, and approvals will be given when discussing the classifications of the Sunnah. The Sunnah represents the second source of Islamic law and is one of the two components – the other being the Qurʾān – of the Sharīʿah. The Sunnah plays the role of elaborating what is in the Qurʾān and is considered a form of revelation since the Prophet was inspired directly by Allah, as the Qurʾān states: "and he (Muhammad) does not speak based on desire/whim; it (his speech) is only revelation that is revealed to him; taught by One (Allah through angel Jibrīl) of stern might" (53: 3–5).

The Sunnah is a much more elaborate source of rules than the Qurʾān. While the principles of Islamic finance in the Qurʾān are short and concise, the Sunnah may demonstrate them in a more elaborate manner. The prohibition of ribā, for example, is only mentioned in a couple of verses in the Qurʾān, and in a very concise and eloquent manner. The Sunnah defines ribā in greater length and elaborates its categories. The contracts briefly alluded to by the Qurʾān, including sale (bayʿ) and lease (ijārah), were elaborated by the Sunnah in terms of some of their parameters. The two bases of Islamic finance, the principles and contracts, then rely heavily on the Sunnah for clarification and really cannot be understood fully well without the Sunnah.

The Sunnah has been classified in a variety of ways. The following are some of the most prominent classifications (Al-Zuhaili, 2006, v.1, pp. 186–190, 205).

The Sunnah may be divided into sayings (qawli), actions (fi'li) and tacit approvals (taqriri) of the Prophet. An example of a saying of the Prophet is: no harm is

Mode of communication	Narration	Authenticity	Subject matter
• Saying • Action • Tacit approval	• Mutawatir • Ahad	• Sahih • Hasan • Daif • Mawdu'	• Legal • Non-legal

Figure 7.1 Classification of Sunnah

to be caused nor is harm reciprocated (Ibn Majah, 2009, v. 3, p. 430, ḥadīth no. 2340). Examples of his actions include the exact form of his prayer (ṣalāh), or that he would transact at the market, like any other man. A tacit approval is when something is done in the Prophet's presence without him detesting it. The Prophet had arrived at an agricultural society in Medina after his migration from Mecca. He witnessed the people conduct commodity forward contracts (bayʿ al-salam) and did not detest it (Al-Bukhari, 2001, v.3 p. 85, ḥadīth no. 2240).

As regards the strength of report or narration, Sunnah may be divided into mutawātir and āḥād. Mutawātir refers to reports that are widely transmitted among people, which makes them popular; the other type is āḥād reports, in which the reports are transmitted from one or a couple of person(s) to the next. The authenticity of the mutawātir Sunnah may not be challenged by anyone because it is statistically very authentic, whereas the āḥād Sunnah's authenticity may easily be challenged since many doubts arise as to its transmission. Most of the Sunnah relating to Islamic finance, and otherwise, is āḥād, which allows for a healthy variety of competing opinions. Figure 7.2 demonstrates the differences between mutawātir and āḥād due to their significant implications.

From the perspective of its authenticity, Sunnah can be classified into ṣaḥīḥ, which refers to reports that have extremely authentic historical transmission; ḥasan, which are reports that are fairly reliable; ḍa īf, which are reports that are weak and historically inaccurate. There are also completely fabricated reports (mawḍū ʾ). Note that all such categories fall under the second category (āḥād) of the previous classification, since they are solitary chains of narration (narrated by one or two people during each time period). This classification is important for Islamic finance since all such reports are āḥād and can be overlooked if stronger evidence based on human reason exists, such as if the āḥād report contradicted general Sharī ʿah principles. This is a well-established practice of the Ḥanafī school of fiqh and of contemporary scholarship (Al-Zuhaili, 2006, v.1, p. 215).

Another important classification of Sunnah is that which is legal and that which is non-legal. The legal Sunnah (tashrī īyah) means that the Prophet acted in the capacity of a messenger of Allah in teaching people their faith, such as the way he prayed and conducted commerce. The non-legal Sunnah (ʿādīyah) refers to the Prophet's behavior in the capacity of regular human being, including the his choice of clothing, food, etc. The first type requires that Muslims act according to it, while the second type is not binding practice on Muslims (Al-Zuhaili, 2006, v.1 p. 189–190).

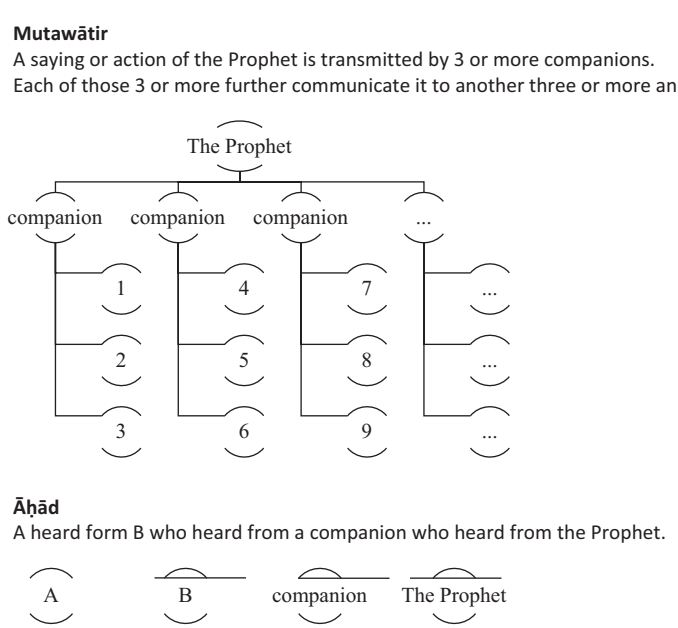

Figure 7.2 The difference between mutawātir and āḥād Sunnah. Source: Authors' own

The importance of the Sunnah in Islamic finance

The importance of the Sunnah, as the scholars have determined, is due to the role that it serves in relation to the Qur ̓ān. It was stated before that the Sunnah elaborates the rules found in the Qur ̓ān. Since the Qur ̓ān is conveyed in an eloquent and concise manner in order to facilitate easy memorization and preservation throughout history, it needs something to clarify it and exposit its injunctions, which is the role of the Prophet. But the scholars have gone further to assign three distinct roles to the Sunnah, namely the supplementary (tashrī ̓ī) role, the confirmative (ta ̓kīdī) role, and the expository (tafṣīlī/tabyīnī) role. Due to the importance of these roles and their relevance to the topic at hand, they are explained briefly:

- Supplementary role: the Sunnah supplements the rules that are found in the Qur ̓ān with greater detail and perhaps with additional related rules. An example is the prohibition of certain impermissible (ḥaram) activities mentioned in the Qur ̓ān, which are further detailed in the Sunnah. Specifically, there are some details related to commerce in swine and alcohol that were mentioned in the Sunnah, which supplemented the Qur ̓ānic prohibitions (Al-Bukhari, 2001, v.3 p. 59, 82, ḥadīth no. 459 and no. 2223). This is incorporated in Islamic finance investment screening methodologies.
- Confirmative role: the Sunnah may confirm the rules found in the Qur'an such as the various commands related to prayer (ṣalāh) and alms-giving

(zakāh). These Qur'ānic injunctions are further emphasized by the Prophet in his words and actions. Another example is the prohibition of consuming each other's property unjustly, which is found in the Qur'ān and emphasized in the Sunnah (Al-Zuhaili, 2006, v.1 p. 221).

- Expository role: the Sunnah mainly serves to exposit and elaborate Qur'ānic injunctions. There may be general rules in the Qur'ān that are specified by the Sunnah, or unqualified (undefined) rules that are qualified (defined) by the Sunnah, or ambivalent rules that are clarified by the Sunnah. Zakāh refers to the amount due on a wealthy individual's property, which must be paid to certain vulnerable categories of society. However, the amount that must be paid is not detailed in the Qur'ān but in the Sunnah (see, for example: Al-Bukahri, 2001, v.2 p. 118, ḥadīth no. 1454).

These divisions are essential knowledge in order to determine which reports of the Sunnah are valid evidence and a solid basis from which to extract the rules of Islamic finance, and which reports were specific to a certain historical context and were merely practices relevant to a certain time and should be not be imposed today.

Sunnatic principles of Islamic finance benchmarking

Considering the expository role of the Sunnah, it must extend some of the concepts in the Qur'ān further. This is true for a lot of the principles related to Islamic finance found in the Qur'ān, and also for the specific ones relating to benchmarking. For example, the Qur'ān established that tarāḍī is the basis on which contracts are concluded while the Sunnah details this further by allowing Muslims to dictate whatever conditions in transactions they wish to. The concept of justice in financial dealings is elaborated by the Sunnah to include principles of free markets and fair access to markets. Moreover, manipulative and unfair practices have been banned by the Sunnah. The prohibition of maysir by the Qur'ān is elaborated in the Sunnah to include gharar, which is a form of uncertainty but less severe, yet it is still unacceptable due to its manipulative nature. Furthermore, the concept of 'urf in the Qur'ān is demonstrated by the Sunnah in reference to standard valuation practices in society.

It should also be noted that what gives these Sunnatic concepts validity and authority is that they are based in the Qur'ān and so, even if they are transmitted as āḥād, they are strengthened by the fact that they completely agree with the Qur'ānic principles. These concepts in the Sunnah are key in guiding Islamic finance benchmark development and are discussed in detail below.

The freedom to dictate the terms and conditions of a transaction

The Prophet is reported to have said: "Muslims are allowed to arrive at a conciliation and make settlements (ṣulḥ); Muslims are bound by their conditions (shurūṭ)"

(Al-Tirmidhi, 1975, v. 3 p. 626, ḥadīth no. 1352). This statement refers to the terms and conditions of all sorts of contracts, be they treaties, settlements, financial contracts, etc. This Prophetic saying is an extension of the concept of mutual consent in the Qur ʾān in which Allah has given transactors the freedom to conduct their transactions as per their mutual consent. The terms and conditions that are the main features of a transaction are also dictated by the transacting parties according to their wishes. The obvious exception is stipulating terms and conditions that contradict the principles of Sharī ʿah.

This wisdom behind this license of the Sharī ʿah is to accommodate the changing nature of transactions throughout human existence. It would not be realistic to limit the permissible terms and conditions in transactions to a fixed set, since human life evolves. This is something of which Allah is well aware and is why He has allowed flexibility in setting terms and conditions as human life grows in complexity. This ties in directly to the case of benchmarking in Islamic finance. The basic solution proposed by Al-Tirmidhi's (1975) Sunnah report is that transactors must fulfill their terms and conditions, and are not to be forced to accept terms and conditions they do not accept. Furthermore, the terms and conditions should not explicitly permit something that is originally prohibited, and vice versa. This provides huge flexibility when devising a methodology of an Islamic finance benchmark while at the same time binding the benchmarking methodology so that it is not tampered with unnecessarily.

Considering the vast implications of this Prophetic guidance, it is concluded that Islamic finance benchmarking can be based on any methodology deemed suitable by the industry but must firmly adhere to a mutual recognition by industry players. Furthermore, in its application, officially published benchmark rates must be adhered to by the concerned parties. Any spreads added or reduced from the benchmark are done at the sole discretion of Islamic financial institutions, but must be disclosed to the customer. Therefore, when an Islamic financial institution cites a certain benchmark (ABC) as its reference, it must retrieve its value from the official publisher. It cannot refer to its owned amended version (XYZ) while citing benchmark ABC. If this is done, the complete amended benchmarking methodology of benchmark XYZ and how it differs from the original reference, ABC, should be disclosed. Any spreads considered in pricing must also be fully disclosed. This is because an officially published benchmark is based on a methodology with elements that are mutually recognized by the industry.

Any reference to the benchmark in pricing is considered an affirmation of that methodology, which entails that the effects of the benchmark must be fully accepted by the Islamic financial institution in its pricing. If an Islamic financial institution decides to amend that methodology on its own discretionary basis for its personal use (which is not the same as adding a spread), this must be clearly disclosed, as it is akin to a change in the terms and conditions of the contract with its customers.

This is best demonstrated through a practical example. If a customer wishes to take out a home financing facility from an Islamic bank, both parties may wish to

set an officially published rental rate benchmark as the floating rate. The Islamic bank may alternatively see too much risk in reference to such a benchmark and may offer to refer to the same benchmark but offer to amend the methodology used to exclude some of the riskier localities or samples that are used as references. Not only would this give rise to uncertainty and subjectivity, it can be considered manipulative to refer to the official benchmark only in name and not in substance. If this is done, it must be clearly stated to remove any ambiguity and there should be nothing that gives off an impression of reference to the official benchmark. A similar case can be made for profit-sharing ratio benchmarks, where the Islamic bank opts to amend the benchmark calculation to exclude certain elements in order to reduce its risk. Such practices are a direct contravention of the terms and conditions set forth when agreeing to use the official benchmark.

Free markets, intervention, and controls

The general license granted by the Qur ʾān is for people to conduct their market activities based on their mutual consent. The extensiveness of this principle can be seen when the Islamic economic theory of markets is considered. The Qur ʾānic injunction essentially allows market participants to behave freely (free markets) as long as property rights and Sharī ʿah limits are observed. The Sharī ʿah upholds free markets and allows intervention in limited circumstances. This is emphasized by the Sunnah, when the Prophet was asked to cap prices since they had risen too high, to which he responded: "surely, Allah is the determiner/setter (musa ʿ ir) of prices" (Al-Tirmidhi, 1975, v. 3 p.597, ḥadīth no. 1314). This is understood to refer to the law of supply and demand, which only behaves naturally when market freedom is upheld. Bashar's (1997, pp. 48–49) well-rounded study on this issue concludes that intervention in the free market was not commonplace and was done – if ever – for a justified interest (such as capping the price of essential food items). The debate on price control in an Islamic economy is extensive with such a topic having taken place on both the fiqh and Islamic economics levels. In the Sunnatic report by Al-Tirmidhi mentioned above, the Prophet continues to say: "I hope to meet Allah without having done injustice to anyone" (Al-Tirmidhi, 1975, v. 3 p. 597, ḥadīth no. 1314). One can trace the wisdom behind the Prophet's refusal to set prices (ceilings and floors) and his latter saying, namely in order not to render an advantage to buyers and a disadvantage to sellers. This is affirmed through the Prophet's other actions, since he was not reported to have intervened in setting prices but simply set forth controls that prevent the creation of an unfair and inaccessible market, controls including prohibiting monopoly, and manipulation through lying, cheating, shill bidding, etc.

Having established that prices are determined by market forces, a benchmark that attempts to represent a certain market or certain prices must then follow a similar mechanism. An Islamic finance benchmark that claims to fairly represent the reference rate or market in question must follow a methodology that achieves that. Furthermore, intervention in amending the methodology is done in the

interest of those concerned by the benchmark and should not deviate significantly from fairly representing the reference assets and markets. Looking at Malaysia's Islamic Interbank Rate, the bid and ask prices on these muḍārabah certificates, which are the reference asset for this rate to gauge the demand and supply for funds in the money market. The more complicated the benchmarks get, the more difficult it is to maintain this "fair representation" of the market. The base financing rate, for example, changes based on the reference rates, including deposit and statutory reserve rates. While these represent fair costs to the Islamic bank, any change in the major source of costs for an Islamic bank will entail amending the methodology to fairly represent the cost of funds to Islamic banks. An even more complicated example is the rental rate benchmark, since it is almost impossible to gauge the performance of the entire market in a single figure benchmark. Hence, determining what is fair representation, how sampling of localities is performed, how prices are standardized (into benchmark format), etc., must not forget that a benchmark reflects, as accurately and fairly as possible, the underlying reference rates or markets as per the understanding of the Prophet's saying discussed above. This is even true for a profit-sharing ratio benchmark where the profit-sharing ratios are published on a daily basis, and which change according to the readiness of Islamic banks to offer equity capital financing considering broader economic and financial conditions.

Finally, since market intervention is not prohibited totally and may in fact at times be necessary, the same applies to an Islamic finance benchmark in that the agreement to amend its methodology is not problematic as long as it serves a public interest and does not render an unfair advantage or disadvantage to market participants.

Fair market practices

A brief allusion was made previously to the emphasis of the Sunnah on setting up controls that prevent unfair markets from developing with minimal intervention from the authorities. This goes well with the "prevention is better than cure" argument. Instead of constant interference, where the judgments of the market authorities may not be extensive enough to consider the interests of all participants, a set of controls to prevent hindrance of fair and stable markets are set up. This has extensive implications for Islamic finance benchmarking, as will be shown.

Among the most important controls set up are those to prevent unfair access to markets and unfair market practices. These allow anyone to enter the market and have a seamless experience once inside. To demonstrate this in the context of 6th-century Arabia, when the Prophet lived, he is reported to have explicitly banned people from meeting trade caravans outside the city of Medina to buy the goods from them before they got to the city's markets. He is also reported to have prohibited that an urban resident (ḥādhir) act as a broker to sell goods to Bedouins (bādī) (Al-Bukhari, 2001, v. 3 p. 72, ḥadīth no. 2162). The main reason for these prohibitions is that they render an unfair advantage to those who live outside of

the city who are not well-informed of the environment and general price levels in the city's markets. Furthermore, the buyers may be manipulative in their bargaining (called najash) and misinform those caravans arriving at the city's markets, or Bedouins who may have never accessed the city's markets.

These two controls prevent unfair market access and manipulative practices. Specifically, in not knowing the local market prices, the caravan traders and Bedouins are disadvantaged. At the same time, some market participants would not be able to make a fair offer to the caravan traders or Bedouins if they had not yet arrived at the market to begin with (Al-Zuhaili, 1997, v. 4 p. 2697). While this example may seem completely out of touch with the modern world, it is a demonstration that controls were implemented to deter unfair and manipulative practices of market participants. Another control is the prohibition of monopoly with regards to which the Prophet is reported to have said: "whoever practices monopoly (iḥtikār), then he is wrong" (Muslim, 2003, v. 3 p. 1227, ḥadīth no. 1605). Monopoly has been prohibited for the obvious reasons that it leads to abusive practices such as excessively high pricing, supply manipulation, and so forth (Al-Zuhaili, 1997, 8: 6270). Another manipulative practice is shill bidding (najash) in which prices of goods are purposefully bid up by the seller's co-conspirators to deceive the buyer into thinking them to be more valuable than initially thought (Ibn Hajar, 1960, 4:355).

From these four controls, it can be concluded that manipulative practices in general, as determined by market convention, are prohibited by the Sharī ʿah. There is one more manipulative practice known as gharar, whose discussion shall be deferred to its own section due to its unique nature and importance to Islamic finance and benchmarking.

The manipulative and unfair controls have serious implications on Islamic finance benchmarking. From one angle, benchmarking will help curtail such practices due to an official and transparent pricing standard, which can only be manipulated if its underlying reference is manipulated. It is hard to conceive the manipulation of an entire market, such as the commercial real estate market, or such as the money market reference instruments. From another angle, the benchmark itself, once developed and officiated, essentially becomes the base price for Islamic finance products. Therefore, the methodology must emphasize fairness and must be able to withstand manipulation attempts.

To demonstrate, consider an Islamic bank that is about to sign a huge financing deal and intends to lock in a profitable rate. In reference to its cost of funds, the Islamic bank may intentionally attempt to dry up liquidity in the money market and jack prices up through the purchase of large quantities of money market instruments at cheaper than normal block prices in an attempt to increase its reference cost of funds. It is hard to plan out such a manipulative attack, since the Islamic bank may itself incur huge costs in such an attempt, which do not weigh well against the benefit of locking in a higher financing rate. However, there have been instances in over-the-counter unregulated markets where banks have taken opposite positions relative to their customers to benefit, essentially exploiting their

customers. There have even been successful attempts at benchmark manipulation, such as Goldman Sachs' 2016 attempt to manipulate the ISDAFIX benchmark, for which it has been heavily punished (Thomson Reuters, 2016). Such instances could just as well occur in Islamic over-the-counter money markets, which are less regulated than exchanges and less formally organized among Islamic financial institutions.

The special case of gharar

The final and unique manipulative and unfair practice is gharar. Gharar occurs in a transaction where the details and specifications of the exchanged goods are not clear, which is likely to lead to dispute. The Sunnah prohibits the presence of gharar in Islamic financial dealings (Muslim, 2003, v.3 p. 1153, ḥadīth no. 1513). An example that is related to pricing is if goods are sold without specifying the price. The prohibition of gharar has created divided opinion over floating rate benchmarks, with some prohibiting floating rates due to the uncertainty of future values of the benchmarks, whereas others have allowed them, arguing that the two parties have agreed on an official and transparent benchmark and have no reason to disagree or dispute over its future value – even if it is technically unknown at the time of signing the contract. The latter opinion appears preponderate as the purpose of prohibiting gharar is to minimize disputes and if that is ensured, there is no reason to prohibit floating rate benchmarking.

Gharar is viewed by the Sharīʿah as something that is a manipulative and unfair practice while, in conventional finance it is not. For example, conventional insurance contains a lot of uncertainty as to the magnitude, time, and chance of occurrence of an indemnification event that would justify the premium payments made. This is a clear demonstration of the kind of gharar that the Sharīʿah prohibits. What are the implications of the prohibition of gharar as a unique manipulative and unfair practice on Islamic finance benchmarking? As noted before, the Islamic finance benchmark, once officiated, becomes the base value of the price charged for Islamic financial products and instruments. The Sharīʿah requires that gharar be absent, which requires clarifying everything related to the price as well as the goods and services that are exchanged. An Islamic finance benchmark must be very transparent and accurate to mitigate any dispute that arises as a result of its usage. This means that the Islamic finance pricing benchmark should very closely track the reference rate.

This is easier said than done. Rental rate benchmarks resurface as a problem since the reference rates may change due to changing sample localities and weighting methodologies. For example, city center localities may have a higher influence on the benchmark than greater city areas (suburban localities). Discretionary judgment may be required more often than not when revising the different components of the rental rate benchmark methodology. This discretionary judgment may give rise to inaccuracies in tracking the underlying assets, which may give rise to the presence of gharar. Needless to say, operations of such complexity as

Table 7.1 Sunnatic principles related to Islamic finance benchmarking and their implications

Sunnatic principles	*Implications on Islamic finance benchmarking*
Freedom to dictate the terms and conditions of transactions	An Islamic finance benchmark can be based on any methodology deemed suitable by the industry but must firmly adhere to a mutually recognized opinion. Example: If the Islamic bank attempts to tamper with a benchmark rate that is mutually agreed by the Islamic bank and the customer, the benchmark, as an official reference, is voided and the customer is left with proceeding against the Islamic bank, or a price is renegotiated based on a subject benchmark as per the initial agreement.
Free markets with controls and occasional intervention	An Islamic finance benchmark that claims to fairly represent the reference rate or market in question must follow a methodology that achieves that. Furthermore, intervention in amending the methodology is done in the interest of those concerned by the benchmark and should not deviate from fairly representing the reference rates and markets. Example: For a rental rate benchmark, determining what is fair representation, how sampling of localities is performed, and how prices are standardized (into benchmark format) must keep in mind that a benchmark reflects as accurately and fairly as possible the underlying assets or markets in order to closely trace the free movement of prices in the market.
Fair market practices	From one angle, benchmarking may help to curtail unfair market practices due to an official and transparent pricing benchmark. From another angle, the benchmark itself, once developed and officiated, essentially becomes the base price for the respective Islamic finance products. So, its methodology must emphasize fairness and must be able to withstand manipulation attempts. Example: Islamic banks may use their large capital to manipulate money market benchmarks. The benchmark should then have a mechanism to detect that.
The prohibition of gharar	Gharar occurs when something about the transaction is uncertain, such as when goods are sold without specifying their price. Gharar is a manipulative practice, which must be totally absent from Islamic finance practice, including from benchmarking methodologies. Example: The sampling methodology for a rental rate benchmark must not be left to arbitrary judgment – although the actual sample of localities may change.
Standard compensation	An Islamic finance benchmark should aim to accurately gauge the real value of the reference rate. The method of doing so is left to the judgment of those who develop the benchmark. Example: A money market benchmark is measured by the shortest-term, safest, and liquid cash-equivalent solutions such as government securities because they are the closest thing to represent the price of cash-equivalent funds.

dealing with rental rate benchmark methodologies call for relaxing the Sharīʿah requirements not as a matter of abandoning the Sharīʿah guidance, but as a concession that is granted by the Sharīʿah, such as a rule that states: "when a matter (of Sharīʿah-relevance) becomes too constrained, it elicits relaxing its rules" (Zaydan, 2001, p. 65). Even with this concession, gharar is not to be taken lightly. Instead, in order to ensure the prohibition of gharar rule is not compromised, accuracy becomes the focal point of an Islamic finance benchmark as well as the benchmark's ability to represent the reference rates as closely as possible.

Standard compensation (ʿiwaḍ al-mithl)

Al-Quradaghi (1988) explores the concept of standard compensation (ʿiwaḍ al-mithl) in the fiqh literature and attributes its origination to the Qurʾān and Sunnah. Since this chapter looks at the Sunnatic principles related to Islamic finance benchmarking, the focus will remain on the Sunnah, where the fiqh-related discussion will be deferred to the next chapter. The Prophet is reported to have decreed that a woman who had married should receive a standard dowry (ṣadāq nisāʾihah) if her dowry (ṣadāq/mahr) was not specified during the marriage contract (Al-Tirmidhi, 1975, v. 2 p. 441, ḥadīth no. 1145). In other words, if no dowry is defined when consummating the marriage contract, the automatic dowry that is defined is the standard dowry for a woman of her standard. This decision of the Prophet would form the basis for jurists after him to refer to standard rates as a reference, including standard wages and standard indemnification (ajr al-mithl and ʿiwaḍ al-mithl respectively).

The reasoning of the Prophet was that, since the dowry was a show of value, respect, and gratitude of the husband towards the wife, a woman of her standard deserves a dowry of her standard as it is the fairest and most objective way to compensate her without undervaluing her nor overburdening her husband. This has huge implications for Islamic finance benchmarking, since benchmarking attempts to gauge a standard value or price of some asset by referring to the most accurate reference possible. That is why a money market rate is not measured by longer-than-one year instruments and is usually measured by the shortest-term, most liquid, and safest instruments available. This Prophetic guidance provides justification for creating a comprehensive benchmark, which will reduce friction due to valuation and pricing in the Islamic financial system. It also provides guidance on what an Islamic finance benchmark should aim to do, namely to gauge the real value of the reference rate. The method of doing so is left to the judgment of those who develop the benchmark. The industry's approval of the benchmarking methodology is indicative of its fair and accurate representation of the prices.

Conclusion

The Sunnah is an invaluable source of the Sharīʿah that serves to emphasize the principles of the Qurʾān and further elaborate them. This provides more insight

into such principles and specifically benefits Islamic finance in allowing for more intricate parameters of financial transactions to be set up. Developing an Islamic finance benchmark would benefit greatly from reference to the Sunnatic principles of freedom to dictate terms and conditions of contracts, free markets with controls, fair market practices including the prohibition of gharar, and considering the concept of standard compensation. The freedom to dictate terms and conditions allows an Islamic benchmarking methodology freedom but requires that such a methodology be based on the mutual recognition of industry players. The free market principle means that the market determines real prices and rates of goods and services, so an Islamic finance benchmark must accurately and fairly represent this to the best possible extent. The Sunnah's fair market practice principle also requires that a benchmarking methodology be reasonably fair to all concerned benchmark users and that it be resistant to manipulation. The concept of standard compensation requires that an Islamic finance benchmark emphasize accuracy in representing the underlying reference without compromising fairness.

An Islamic finance benchmark guided by these principles is expected to produce good results for the industry. There should never be an inclination to deviate from these principles as they are in themselves flexible and at the same time provide the best guidance on the ideal benchmark formulation.

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8

SHARĪʿAH ANALYSIS OF BENCHMARKING IN THE ISLAMIC FINANCIAL SYSTEM

Ruslan Sabirzyanov, Mohamed Cherif El Amri, and Mustafa Omar Mohammed

Introduction

The definition of a benchmark is a process to evaluate or check by comparison with a standard. The concept of benchmarking is used across different industries, not only the financial one. There are prevalent benchmarks for a variety of goods and assets including gold, silver, oil, and gas.[1] Benchmarks are also applied to manufactured products, like vehicles and pharmaceuticals (Gencarelli, 2002, 2005), for price transparency.[2] Amongst further functions, benchmarks lessen search frictions by reducing the informational asymmetry between dealers and their "buy-side" customers.

Moreover, when it comes to the financial industry, different sectors use different benchmarks. For example, mutual funds and unit trusts use a certain index as a benchmark to measure their performances. It provides an indicative value of how much one's investment should have earned, which can be compared against how much it has earned in reality. In some jurisdictions, it is obligatory to declare a benchmark index for all types of investment options.

In the foreign exchange market, the WM/Reuters daily fixings are the dominant benchmarks. Lending and financing sector, including banks and large corporates, use certain interest rate benchmarks, such as Interbank Offered Rates (IBOR), be it the London Interbank Offered Rate (LIBOR), European Interbank Offered Rate (EURIBOR), Tokyo Interbank Offered Rate (TIBOR), as well as Sterling Overnight Index Average (SONIA), Secured Overnight Finance Rate (SOFR) and so on.

It is clear that benchmarks are widely used in the financial industry including the Islamic financial industry. Moreover, their significance and importance emanate from wide usage as well as accessibility and benefits for all market players and regulators.

Usually, benchmarks are circulated daily. In some instances, they are published more frequently. There are at least three main reasons why benchmarks are used: (i) for the settlement of contracts, like options or forwards, where the settlement formulaically depends on the benchmark price of the referenced asset; (ii) the ex-post oversight by non-dealer market participants of the quality of trade deals concluded on their behalf; and (iii) price transparency in comparison to shopping, in other words, in order to compare a quoted price to the benchmark price, for the purpose of making a decision on whether to accept the quoted price or to search for another better quotation (Duffie et al., 2017). Regarding other benefits of benchmarks, the Bank of England (2020) mentions the transparency of pricing for the investments that are determined on the basis of a certain benchmark. What then is the mechanism for the conventional benchmark?

For the purposes of this chapter, the focus is on the interest or profit rate benchmarks and mainly the LIBOR, as other IBORs are determined in a similar manner. So, what actually is the LIBOR? The LIBOR is a measure of the average rate at which banks are willing to borrow wholesale unsecured funds for five currencies (USD, EUR, GBP, CHF, and JPY) and for seven tenors in respect of each currency (overnight/spot next, one week, one month, two months, three months, six months, and 12 months). This results in the publication of 35 individual rates (one for each currency and tenor combination) every applicable London business day (Intercontinental Exchange, 2020). It is administered by ICE Benchmark Administration (The Working Group on Sterling Risk-Free Reference Rates, 2020).

Previously, the LIBOR was calculated based on submissions from a selected panel of banks, each of which was asked to make a judgment-based estimate of the rate at which it could borrow answering the following "LIBOR Submission Question": "At what rate could you borrow funds, were you to do so by asking for and then accepting interbank offers in a reasonable market size just prior to 11 am?" (Intercontinental Exchange, 2020).

It means that the benchmark was not based on actual transactions between banks (Duffie and Stein, 2015). However, in April 2019, ICE Benchmark Administration completed the transition of all LIBOR Contributor Banks to the Waterfall Methodology. "The Waterfall Methodology requires LIBOR Contributor Banks to base their submissions in eligible wholesale, unsecured funding transactions to the extent available" (Intercontinental Exchange, 2020)

Despite a move towards a data driven-benchmark, to date the determination of the LIBOR is left, to a certain extent, to the subjectivity of judgment-based estimates of contributor banks. Hence, regulators in several countries set up working groups to develop Risk-Free Reference Rates, namely SONIA, SOFR, SARON (Swiss Average Rate Overnight), TONAR (Tokyo Overnight Average Rate) and ESTER (European Short Term Euro Rate).[3] All these new benchmark rates are determined based on actual transactions data as opposed to IBORs.

Currently, Islamic financial institutions (IFIs) use the interest rate benchmarks like the LIBOR for pricing their products on the liability side of the balance sheet.

This has raised several contentions. In theory, IFIs have distinct features, though they have some similarities with their interest-based conventional financial institutions. The operations of IFIs should be free from negative elements such as ribā, gharar, and maysir. Similarly, IFIs should not deal purely in money as a commodity. They should deal in money as a medium of exchange connected with the real assets, to justify their profits. The use of a conventional interest rate benchmark by IFIs raises several pertinent questions. To what extent is the use of a conventional benchmark ideal?

Are there specific pricing models for the products of Islamic financial institutions? Have there been attempts to develop pricing model for the products and services of Islamic financial institutions? What are the fiqhi issues that arise in the absence of a proper pricing model for the products and services of Islamic financial institutions?

Several studies have tried to respond to some of these issues. However, discussion on the fiqhi issues are still wanting. The present chapter tries to fill in this gap. It has adopted a qualitative method in the form of bibliographic survey, meta-analysis, and thematic analysis of the fiqhi issues that arise in the use of a conventional benchmark by the Islamic financial institutions. Based on the findings, the chapter provides recommendations and suggestions for future research. The chapter is structured into four sections including the introduction. The second section reviews related works on efforts that have so far been done to develop alternative pricing benchmark for IFIs. The third section discusses the fiqh response to the use of the conventional interest rate benchmark. The fourth section concludes the study and suggests the way forward.

Efforts towards alternative pricing models for IFIs

Back in 1996, Mirakhor (1996) proposed a benchmark to measure cost of capital in reference to which investment decisions can be made. It is based on "Tobin's Q" and can be used by both private and public sectors. Nonetheless, since this benchmark is based on "Tobin's Q", it can be used in an economy where debt instruments do not exist and projects must be equity financed, which may not be the case in the present practice of the IFIs, especially banks.

Umar and Shahatah (2000) proposed creating a benchmark based on the profits distributed by Islamic banks to their depositors. Yet another study focused on an alternative or an Islamic finance approach for capital asset pricing model (CAPM) (Selim, 2008). Selim (2008), using theoretical methodology, took direct mushārakah (partnership) financing as the baseline of analysis. He found mushārakah financing to yield a lower beta-risk of investments compared to other financing modes in the market. This might hold true only under certain assumptions, but in most cases, they are very much theoretical in nature and far from reality. Today, the reality is that Islamic banks rarely or not at all use profit and loss sharing (PLS) contracts to finance their customers.

Shubber and Alzafiri (2008) explored the difference of computing the cost of capital for Islamic and conventional banks. In their study, they found that deposit accounts based on PLS contracts in Islamic banks are not liability per se; hence, Islamic banks can acquire as much finance as needed by way of deposits, without incurring any extra risk. They also concluded that there is no interest rate risk for Islamic banks. Although the latter statement is formally correct, being in the same market with conventional banks, Islamic banks are affected by fluctuations of interest rates as the displaced commercial risk is inherent to Islamic banks (International Shariah Research Academy for Islamic Finance (ISRA), 2012).

Another approach that is near to the real situation in practice has been suggested by Hasan (2009). He used Malaysia as an example, where both conventional and Islamic financial institutions operate in the same market and determine their own interest rates and profit rates respectively based on an Overnight Policy Rate (OPR) issued by the Central Bank of Malaysia (CBM). This is the case in the vast majority of jurisdictions where Islamic institutions operate. The author examined the proposal to have two different rates issued by CBM – one for conventional and another for Islamic banks – and concluded that it would be difficult to implement because it would be subject to arbitrage as there are two alternative price mechanisms. The arbitrage would adversely influence Islamic banks, as they are still smaller in size than conventional banks. Hence, the author recommended for the monetary authorities to review and determine a common OPR for both Islamic and conventional banks that is free from interest elements. However, this in itself would require a shift in the mindsets of all market participants, which has not occurred yet.

In 2011, Thomson Reuters, together with the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) and a panel of contributor Islamic banks, introduced the Islamic Interbank Benchmark Rate (IIBR) (Thomson Reuters, 2020). The way the IIBR would be determined is similar to the way LIBOR used to be determined prior to the adoption of the Waterfall Methodology. The main differences are that in the case of the IIBR, the contributor banks are all Islamic banks and the IIBR measures profit, not interest. Nevertheless, again the IIBR benchmark is determined based on subjective opinion upon the submissions of the rates by Islamic banks. Hence, such a benchmark is also subject to manipulation in the same way the LIBOR is.

Since Islamic banks use different types of contracts in deposit taking and financing, there are researchers who suggest using specific benchmarks for pricing different banking products. For example, Redzuan and Kassim (2018) propose the use of the Housing Price Index (HPI), i.e. the equilibrium property rental values, as an alternative to the interest rate in pricing house financing products. Besides, Ahroum et al. (2020) proposed new valuation methodology for murabahah and mushārakah mutanāqisah products with parameters related to the real economy.

Even though the use of separate benchmarks to price specific products might seem to be precise, and as a separate benchmark would cater for the pricing mechanics and the specifics of that certain financial product, it is not a viable

option in a dual financial system where both Islamic and conventional financial institutions share the same market.

Last, but not least, Omar et al. (2010) undertook a project of developing an Islamic pricing benchmark model for the Islamic banking industry in Malaysia. The authors emphasize that an Islamic benchmark should be on the basis of profit rates that originate from the real sector as the profit is tied to real economic activity and is subject to risk taking. They also state the following:

> Different sectors face different circumstances and different risk profiles. The estimate of expected returns based on such risk profiles would form the base benchmark cost of capital for the respective sectors, while risks unique to a firm or venture would constitute the additional costs imposed on it.
>
> (Omar et al., 2010)

Hence, the authors used the following four macroeconomic variables: the Kuala Lumpur Composite Index returns, to reflect the overall market condition; the money supply changes (M2), to capture the monetary liquidity; industry production growth, to capture the overall economic growth; the Malaysian ringgit exchange rate, to reflect the relative global competitiveness, and as these were having good return predictability for all the sectors of the economy. Finally, the unified Islamic pricing benchmark rate was determined using the arbitrage price theory based on weighted average of the sectoral returns. The model was tested for predictive capability, reliability, and robustness. The tests showed good results. This model seems promising and a foundation for a viable alternative to the conventional interest rate benchmark.

As we can see in this section, many studies suggest one alternative or another to eliminate dependence or reliance of Islamic financial institutions on the interest rate as a benchmark for pricing Islamic financial products. However, all the aforementioned works until now are still theoretical, meaning that none of the suggested alternatives have so far been implemented by any IFIs, especially Islamic banks, around the world. Islamic banks still use interest rates such as the LIBOR or the SONIA, etc., as a benchmark for pricing Islamic financial products. Although this section has provided some conventional answers to some of the pertinent questions raised in section one above, the question on the fiqhi issues that arise in the absence of a proper pricing model for Islamic financial products is yet to be answered.

Fiqh responses to the use of the conventional benchmark by IFIs

It is obvious that benchmarking is linked to the profit rate in IFIs. One may think that, in a way, a benchmark provides certain boundaries on the minimum and maximum amount of profit that IFIs can earn or generate. Therefore, it is worth exploring the notion of profit and whether it is permissible to set limits on the amounts of profit from an Islamic perspective.

Islam encourages making profits from fair and just trades in order to grow capital and protect it from loss, and to settle dues such as zakah, taxes, and other expenditures,[4] and discourages trading without profits.[5] Moreover, Islam in general does not set any limits on the amounts of profits that can be made and there is evidence from the Sunnah as well as acts of the companions of the Prophet (peace be upon him) supporting this (Omar et al., 2010). At the same time, some contemporary scholars, like Sheikh Wahbah al-Zuhayli, have suggested that the net profit margin should be fixed by the authorities in order to observe justice in the market and to get blessings (Al-Zuhayli, 2002). They (Omar et al., 2010) advocate that the profit rate should not exceed one-third, based on the famous ḥadīth "Al-thuluth kathir", which means, "One-third is a lot". It is worth mentioning that many Sharīʿah scholars, based on the same ḥadīth, use the concept of istina' to determine financial ratios in Sharīʿah stock screening as well as tangibility ratios. Hence, an idea of "one-third" is widespread and accepted in the Islamic finance industry. However, the views of early Islamic scholars on price control are briefly explored below.

The scholarly discussion on price control in an Islamic economy started as early as the 7th century. Later on, the subject was critically addressed and developed by the Islamic jurists (faqihs) between the 11th and 16th centuries (Bashar, 1997). It is important to know that many of those scholars were also merchants; therefore, they laid out the rules pertaining to the financial transactions, fully grasping the realities and dynamics of the markets of those days as well as taking into consideration the possibilities of changes of practices in the future.

The origin of price control was traced back to the Prophet (peace be upon him), who refrained from interfering in the market when he was asked to reduce prices of certain goods. He described such an act as injustice towards the sellers if price fluctuations in the market were due to natural market forces.[6] In addition to that, a government's intervention to determine the market price can be considered as an impediment to the seller, involving an element of tyranny. As a result, the right of mutual consent between the seller and the buyer in a business transaction is violated under a system of price controls, which runs contrary to the command of the Qurʾānic verse (Gadhoum and Mohamad, 2017).[7]

Therefore, many scholars opined that in normal circumstances, government and its representatives should not intervene to fix prices, as such practice would involve an element of tyranny. This is the prevailing opinion of the Ḥanafī, Maliki, Shafi'I, and Ḥanbalī schools of Islamic law (Ibn Qudamah, 1983). It is based on the above-stated ḥadīths of the Prophet (peace be upon him) and chapters of the Qurʾān. In an Islamic economy, everyone has a right to own a property and sell at whatever price they wish, as long as the other party (buyer) agrees on such price. Hence, government intervention in the market would prejudice freedom and the rights of parties in a sale contract to determine prices based on mutual consent. Moreover, the government should look after the public interest of all citizens, irrespective of their backgrounds. Thus, in cases when a price is set lower than the market price, it means that the interests of buyers are prioritized, or alternatively,

in cases when a price is set higher than the market price, the interests of sellers are prioritized.

Moreover, a decrease in price due to natural forces of the market, such as a decrease in demand or an increase in supply, should be seen as an opportunity for the buyer to save some money due to the current market conditions. Obliging the buyer to buy at a certain price would prevent him or her from enjoying the discount sanctioned by God. The same applies to circumstances where prices increase due to the natural forces of the market, such as a decrease in supply or an increase in demand. In such situations, sellers should have the right to enjoy the rewards offered to them by God. Thus, it would not be against the Sharīʿah principles or the principles of the Islamic economy for market players to benefit from the fall or the rise in prices for the goods offered in the market as the case may be following the demand-and-supply forces.

Now, it is important to note that scholars have disallowed government interventions in terms of price fixing in normal circumstances when the prices are determined by forces of the market and not by any act of manipulation. However, what is their position on the same subject in situations of market disruption or market manipulation? To explain, by market disruption different situations may be understood. In general, market disruption would mean any case that hinders the normal functioning of market forces under normal conditions. In this case, the Ḥanafī and Maliki schools of Islamic law express the opinion that price fixing should be allowed in the interest of the people (Marghinani, 1993). Some scholars even propose the methodology for fixing prices in such situations:

> The Imam should summon to a meeting all parties to price negotiation, i.e. the big traders, buyers, and other experts. Their opinions will be sought, and assessment made on the rates at which they buy and sell in the market. An agreement will be reached on prices that are beneficial to the sellers and socially acceptable without coercion. Whosoever permitted price control would use this method.
>
> (Bashar, 1997)

Ibn Taimiyah (1976), in his analysis, stated that price control is not only allowed but is required when it supports dispensing of justice amongst people: “When people’s needs and necessities cannot be safeguarded without a fair price control, then a price control based on justice will be implemented for them – no more, no less” (Ibn Taimiyah, 1976).

In other words, generally, the governing authorities shall not intervene in pricing mechanics, as they should remain in the “hands” of supply and demand. Nevertheless, when there is an instability in the market and it is open to oppression, manipulation, or excess speculation, then in such cases the authorities are permitted to intervene.

It is important to note that those who support the legitimacy of price control by the government argue that such price control provides protection of the public

interest (maslahah ‘ammah) for all consumers. Hence, the government will control prices if there is a need for such, for example, during war or famine and in any event of emergency. However, in these cases government should not only fix the prices by merely putting a price tag on certain goods, but also provide subsidies and other measures to help businesses as well as customers of these businesses.

With that said, government should control prices to take care of public interest against monopolistic and monopsonistic practices. Enforcing controls in these cases is necessary to support the well-being of the whole economy even when a monopoly or a monopsony is deemed natural.

To continue the review of fiqhi opinions on benchmarking, there is a need to revisit a concept that is widely used in the Islamic law of transactions (fiqh al-mu’amalat) – market price. Market price (thaman mithl or ujrah mithl) is a common term used to determine a fair price in all circumstances that can be used as a means of settlement to resolve disputes either through courts of law or by arbitration.

For instance, an istijrar agreement is based on the concept of market price. Istijrar means purchasing goods in different quantities from time to time. In Islamic jurisprudence, istijrar is an agreement where a buyer purchases certain particular goods from time to time. There is only one master agreement that denotes all terms and conditions of sale and purchase of such goods. In other words, there is no bargaining, or offer and acceptance each time a buyer buys the stated goods (Usmani, 2020). Such agreement is allowed by Ḥanafī school of Islamic law and it is valid in certain cases. In one of them, where the price is not disclosed to the buyer each time, the price is determined after all sale and purchase transactions are completed based on market value. It is important to note that the market value is known to the parties, therefore, it will not lead to dispute between the parties.

Additionally, Ibn Taymiyyah allows a sale agreement where the price is not set by the parties as it should be according to the majority of Islamic law scholars. Rather the price is tagged to the market price. His opinion is that this will lead to mutual consent as the seller and the buyer will definitely agree on the price of the good that is already established in the market, and they will not bargain or argue over the price (Al-Misri, 2005).

Moreover, the Sharīʿah Standards issued by AAOIFI mention market price in many instances (The Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI), 2015). AAOIFI allows promise to buy (purchase undertaking) to be given by a partner in musharaka, or entrepreneur in muḍārabah, or agent in wakala, or issuer in sukuk at a market price, meaning that the promisor promises upfront to buy the subject asset (depending on the contract) at a market price at the time of sale. Consequently, the one who is promised has the right to trigger such promise to buy (purchase undertaking), and the promisor will buy the subject asset on that date at a market price. There are other instances when market price is used in the evaluation of zakatable assets. These assets need to be valued at market price in order to determine the amount of zakat to be paid on such assets.

It is obvious from the discussion above that the notion of market price has been widely used since old times and it can be considered a custom to use a market price. This goes in line with the prominent legal maxim, "Custom is an arbitrator".

In order for a customary practice (ʻurf) to be considered as valid, Islamic jurists prescribed certain requirements and conditions that have to be fulfilled (Laldin, 2006). The custom should denote collective and persistent phenomena. In addition, it should be authoritative, dominant, and in existence, meaning that it should be witnessed in most or all of the circumstances to which it can apply, and it should prevail over other practices. Obviously, a valid custom should not contravene a clear text (nass) of the Qurʾān and the Sunnah. Furthermore, it should not be in breach of a clear stipulation of an agreement. In other words, if there is a certain stipulation made by the parties to an agreement that is contrary to the custom, this stated stipulation will be upheld, even though it is contrary to the custom. The custom will not be applied in such cases because a custom is only equivalent to an implied condition.

Last but not least, the concept that should be discussed in view of the discussion on benchmarking is the concept of revocability of a contract due to ghubn (loss due to deception). Ghubn literally means shortfall. In Islamic jurisprudence, ghubn means a sale of goods for a higher price than the market price. There are two kinds of ghubn: ghubn yasir (slight) and ghubn fahish (exorbitant) (Al-Misri, 2005). Different schools of Islamic law provide different definition for both kinds of ghubn. What is important to note is that ghubn yasir, according to the opinion of majority scholars, does not affect the validity of a transaction. Whereas regarding ghubn fahish there are several differing opinions: starting with the notion that it is a fault of a buyer that he did not consult specialists in a matter of valuing an asset, hence the buyer has no right to return the goods; ending with the opinion that the buyer has a right to return the goods to the seller, even if the latter did not do anything to deceive the buyer.

In light of the above, comprehending the concept of ghubn is appropriate in this case for the reason that having a pricing benchmark can assist in avoiding any deceptions and possible uncertainties. Moreover, it is a widespread custom nowadays to have specific benchmarks for various products or activities, and financial products and activities are no exception. A pricing benchmark can be considered as a market price to a certain extent, which is a recognized and practiced term in Islamic law. Additionally, having a benchmark will make it easier for clients to compare the prices, for investors to identify the performance of their investments, for regulatory and supervisory authorities to supervise the market players, among others. Nonetheless, it is crucial to keep in mind that a benchmark acceptable in Sharīʿah should not be decisive and binding in determining prices. It should be only a reference or a guide to all players in the market including regulatory and supervisory authorities, while a real price shall be the price to be agreed upon by both parties at the moment of executing a transaction. In addition to that, a benchmark should be determined in a Sharīʿah compliant way, especially in case of indexes that are used as a benchmark, where all the components of the index

should be Sharīʿah-compliant and based on Sharīʿah-compliant assets. The discussion on market price leads to the central question raised in the previous section: "If IFIs in theory are not supposed to deal in interest, what then is the issue with using interest rate as a benchmark?"

There have been differing responses from specialists in Islamic economics, especially from academia, as well as from internationally known Sharīʿah advisors. While the majority of those from the former category condemn the use of interest rate benchmarks by Islamic financial institutions, representatives of the latter group provide different view on the topic. According to the latter group, it is permissible to use interest rate-based benchmarks such as the LIBOR or the SONIA for pricing Islamic banking products and services. Their views are evident in the current practices of almost all Islamic financial institutions around the world as well as in AAOIFI Sharīʿah Standards (The Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI), 2015). However, many of the Sharīʿah advisors emphasize that the use of conventional benchmarks is not desirable. For example, Taqi Usmani (2007) mentions the following:

> No doubt, the use of the rate of interest for determining a halal profit cannot be considered desirable. It certainly makes the transaction resemble an interest-based financing, at least in appearance, and keeping in view the severity of prohibition of interest, even this apparent resemblance should be avoided as far as possible.
>
> (Usmani, 2007)

Hence, the question raised above would remain a debatable issue until a viable solution is found. Sharīʿah advisors hold the view that the mere use of conventional benchmarks does not render Islamic financial transactions invalid, and that Islamic financial institutions should move away from such benchmarks as soon as practically possible. However, with increasing research particularly on the detail components of the benchmark such as present value, future value, and the annuity factor, then the validity of Islamic banking transactions will be put into question. It is of immense importance to note that there is a dire need for an alternative practical pricing model. The next section concludes the discussion and provides suggestions for the way forward.

Conclusion and suggestions for the way forward

As mentioned in the previous sections, there are varying fiqh opinions on the validity of IFIs using the conventional interest rate pricing benchmark. The proponents argue that such benchmark works as a guide or indicator for the parties to price their products and services. Besides, the enforcement of price control by the relevant authorities in normal circumstances may not be allowed. Other benefits that accrue from the use of this pricing benchmark include price transparency, ease of price comparison between various offers, and validation of fiduciary

performance by investors, among others. Furthermore, there are also benefits for the regulatory and supervisory authorities to regulate and supervise the markets and help prevent or, at least, identify cases of market manipulation or other illegal behavior of market participants, which eventually creates market stability and continuity.

Nevertheless, there have been many suggestions by Islamic economists as well as Sharīʿah advisors for developing a separate pricing benchmark for Islamic financial institutions and to move away from the interest-based benchmarks. One of the works on the Islamic pricing benchmark (Omar et al., 2010) looks promising. Despite this wonderful research about a pricing benchmark for Islamic financial institutions and the proposed new benchmark model almost ten years ago, it has hitherto still not received acceptability by the IFI practitioners.

The authors see two main obstacles for this model or any other alternative model to be accepted and used in the Islamic finance market. The first one is the existence of the dual financial system, where both conventional and Islamic financial institutions share the same market. Since conventional financial institutions use interest-based benchmarks, Islamic financial institutions who compete with them are also in a way forced to use the same benchmarks (Sabirzyanov and Hashim, 2015). Furthermore, not all employees of Islamic financial institutions, especially decision makers, have an Islamic finance background or aspire to ideas of Islamic economics. The mindset of Islamic financial institutions is still conventional. The second stumbling block, which can be considered as a consequence of the first one, is the regulatory and supervisory authorities who do not enforce a new Islamic benchmark model.

Perhaps the first obstacle is here to stay. As for the second one, there might be a way to resolve it. It is a viable option to form working groups in each jurisdiction where Islamic financial institutions have a market share. Such working groups shall consist of representatives of regulatory and supervisory authorities, academicians (particularly Islamic economists), Sharīʿah advisors, and representatives of Islamic financial institutions. Obviously, the work should be led from the regulatory and supervisory authorities' side, otherwise, any decision made by a working group will not be followed by Islamic financial institutions as it will not be considered binding, like what happened with previously proposed Islamic benchmark models. The working group should see the proposed models and choose the one that is the most viable.

Until any such work is concluded, the LIBOR, the SONIA and other interest-based rates will remain the only option for all market players, including Islamic financial institutions. Nevertheless, it is highly recommended that an Islamic pricing benchmark be developed, which will be relevant to Islamic financing transactions considering the specifics of contracts on which such transactions are based. This long-anticipated benchmark should push Islamic financial institutions, Sharīʿah scholars, regulators, and other stakeholders to effectively price their services and products and rectify the problems and difficulties that have hampered the progress of the industry.

Notes

1 The London Bullion Market Association provides benchmarks for gold and silver. Platts provides benchmarks for refined fuels, oil, and iron ore (IODEX). ICIS Heren provides a price benchmark for natural gas. ICE Brent is a widely used oil price benchmark.
2 The Kelly Blue Book produces the "Fair Purchase Price" of automobiles, based on the average deal price by location and model.
3 More information on each rate can be accessed in the respective website of each regulator.
4 Refer to Holy Qur'ān, 4:5 and 4:29.
5 Refer to Holy Qur'ān, 2:16.
6 Anas Ibn Malik narrated: "The people said: 'O, Messenger of Allah, prices has shot up, so fix prices for us.' Thereupon the Messenger of Allah (peace be upon him) said: 'Verily Allah SWT determines the climate of economic affluence and gloom. I do not want to take any action to fix the prices because I do not want, to meet Allah with anyone among you demanding redress for wrong done to them regarding property or blood.'"
Abu Hurayrah narrated: "A man came and said, 'Messenger of Allah, fix prices.' He said, '(No), but I shall pray.' Another man came and said, 'Messenger of Allah, fix prices.' He said, 'In fact, it is Allah Who makes [prices] low and high. I hope that when I meet Allah none of you will have any claim against me for any injustice.'"
Ali ibn Abu Talib narrated: "People came to the Prophet (peace be upon him) and said, 'Messenger of Allah, fix prices for us.' He said, 'Indeed, the rise and decline of prices is in Allah's hand. I want to meet my Lord with none of you having any claim against me for any injustice.'"
7 Refer to Holy Qur'ān, 4:29.

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9

FIQH ANALYSIS OF BENCHMARKING IN THE ISLAMIC FINANCIAL PRODUCTS AND SERVICES

Rusni Hassan and Muhamed Benaicha

Introduction

A previous chapter briefly introduced the concept of fiqh, but it is necessary here to elaborate on what fiqh is since it differs fundamentally from the Sharīʿah, the latter being the primary source of Islamic law. Fiqh is the body of literature based on Islamic legal experts' (commonly referred to as jurists – fuqahāʾ) understanding of the Sharīʿah. Since the Sharīʿah texts (the Qurʾān and the Sunnah) contain expressions that are subject to different interpretations, the jurists have come up with different opinions regarding a vast number of legal cases. When a jurist interprets a verse in the Qurʾān or a report in the Sunnah, his understanding is not the only understanding that is valid.

The companion of the Prophet, Muʿādh, who was sent to Yemen as his representative, was asked by the Prophet, "With what will you judge if a matter is brought before you?" His abbreviated response was, "I will judge by the Qurʾān. If I don't find an answer there, then I will judge by the Sunnah. If I don't find the answer there, I will exercise my reasoning." To that the Prophet responded in approval (Ahmad, 2001, v. 36 p. 333, ḥadīth no. 22007). This account is acknowledged by a variety of jurists from different schools of fiqh, making it authoritative. On this basis, the jurists have been able to exercise their reason (ijtihād) to interpret the Sharīʿah texts and give new incidents rules such as prohibition (ḥarām) or permission (halal).

Table 9.1 summarizes the differences between Sharīʿah and fiqh, while Figure 9.1 demonstrates some of the fiqh cases and rules for further clarification.

Note that in Figure 9.1, the difference of opinion is justified since both cases discussed are not conclusive issues in Sharīʿah; their arguments are based on evidence that is not conclusive, which will naturally lead to differences of opinion. Considering fiqh was created through a process of mental reasoning, there are several implications for this on contemporary fiqh cases, such as those that relate to Islamic finance.

Table 9.1 A Comparison of Sharīʿah and Fiqh

Sharīʿah	*Fiqh*
The Sharīʿah texts contain rules that are general, encompassing all aspects of life including doctrine, etiquette, and practical law.	The fiqh literature is composed of rules that are specific to the practical law relating to the sayings and actions of Muslims, such as ritual worship and transactional dealings.
The Sharīʿah is revelation from a divine source (Allah). Disagreement over authority of the Sharīʿah texts of the Qurʾān and historically decisive Sunnah is unacceptable.	The fiqh literature represents the interpretation based on discrete judgment of the scholars. This allows for disagreements over their different interpretations and for other opinions to emerge.
The Sharīʿah is composed of the Qurʾān and the Sunnah.	The fiqh literature is all inference, such as through abstraction and deduction from the Qurʾān and the Sunnah.
Contravention of the Sharīʿah is impermissible since it is Divine revelation.	Contravention of a fiqh opinion or rule is acceptable if based on superior evidence, since fiqh is human reasoning.
The principles of Sharīʿah are fixed since they are based in the Qurʾān and the Sunnah, which are not subject to change but rather subject to different interpretation.	Fiqh opinions/rules change according to changes in time, location, customs, and individuals.
The rules of the Sharīʿah texts are binding on everyone.	Fiqh opinions and rules are binding on those who are convinced by their evidence.

(Source: Authors' own)

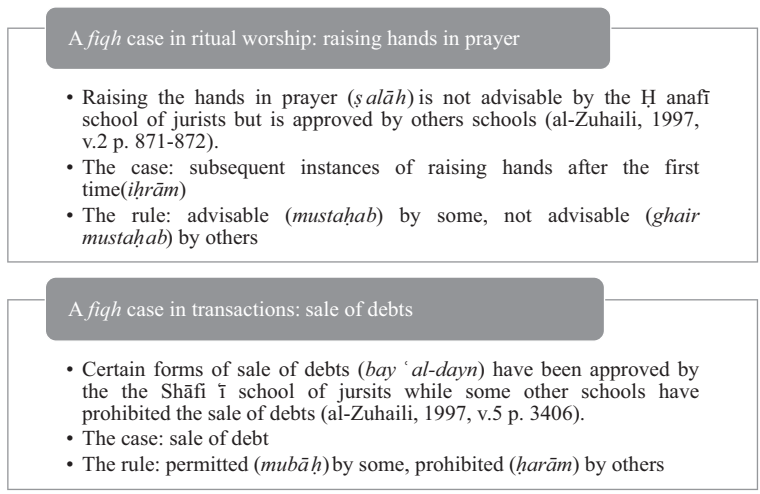

Figure 9.1 Examples of Fiqh Cases and Their Rulings. *Source: Authors' own*

The first implication of this is that fiqh only represents the collection of cases over which there was disagreement, not cases that are a subject of unanimity. The major principles of Sharīʿah such as justice, freedom, righteousness, requirement to conduct prayer and give alms, etc., do not fall within the domain of fiqh. The second implication is that the opinion of a jurist is not binding on another jurist. This means that Sharīʿah texts are open to interpretation to anyone who is well-versed in the Sharīʿah. Hence, no one fiqh opinion or school can claim to have the dominant opinion, nor is fiqh a frozen body of literature but instead expands to include new interpretations of contemporary issues that arise and to which the jurists respond in hopes of providing the right Sharīʿah stance towards such issues. The third implication is that fiqh, being based on evidence that is open to different interpretations, is not fixed in nature but evolves. Even previous cases that were seen in a certain way by medieval jurists may be seen differently by jurists today. In fact, Islamic finance differs quite vastly from fiqh that concerned medieval trade-style transactions while still featuring the same principles and contractual system. The implications of this on Islamic finance benchmarking are as follows:

- Islamic finance benchmarking can benefit from the methodology of reasoning and principles of the jurists, but not strictly adhere to their judgments and conclusions.
- Islamic finance benchmarking should follow the methodology of the jurists in approaching the Qurʾān and Sunnah for guidance on benchmarking, and then to mental reasoning if no direct evidence is found in the Qurʾān and Sunnah. This has been the general approach of the previous two chapters and will also be the case with this one.

The following part of the chapter will consider these implications and will represent the core fiqh analysis of Islamic finance benchmarking. First, the most relevant fiqh concepts to Islamic finance benchmarking are presented. Then, a variety of fiqh maxims relevant to Islamic finance benchmarking are discussed.

Fiqh principles relevant to Islamic finance benchmarking

Considering that fiqh is an extension of the Sharīʿah texts of the Qurʾān and Sunnah, the principles of the Sharīʿah that pertain to Islamic finance resurface as prevalent themes in fiqh literature. The most prevalent of such themes is the idea of standard compensation (ʿiwaḍ al-mithl), which is a practice attributed to the Prophet himself in a case where he assigned a woman certain dowry, which had not been specified prior to the conclusion of the marriage contract. The jurists extend such a concept beyond the dowry of a woman to include standard wages and standard indemnity. An extension of the principle of ʿurf found in the Qurʾān is the fiqh concept of traders' convention (ʿurf al-tujjār). Furthermore, a concept that is rooted in the spirit of the Sunnah is upholding free and fair markets over which the jurists have pondered and derived the idea of market price, often alluding to

it as an admissible idea. The final concept that will be of concern and which is prevalent in the fiqh literature is public interest (maṣlaḥah). Although maṣlaḥah is a Qur'ānic and Sunnatic concept, it is not directly and explicitly stated as an independent concept. Reference to public reform (iṣlāḥ) and Sharī'ah injunctions that contain consideration for public interests are prevalent in the Qur'ān and Sunnah. However, maṣlaḥah as a term was only developed by the jurists, who had to infer it from the Qur'ān and Sunnah and define the parameters for its application. These fiqh concepts will form the basis of the remaining discussion of this section of the chapter.

Standard compensation (ʿiwaḍ al-mithl)

The idea of standard compensation is actually found in the Qur'ān, where during Muslim pilgrimage (ḥajj), pilgrims are not allowed to hunt animals in the sacred areas (Mecca and the greater area where the pilgrimage rites are located) due to the sacred nature of the pilgrimage. In the case that a pilgrim does hunt an animal to eat, essentially committing a contravention, an expatiation is made by that pilgrim, where he or she must sacrifice and donate a similar kind of animal to the one he had killed. In this regard, the Qur'ānic verse states: "Oh believers! Do not hunt game while you are in a state of pilgrimage (iḥrām/ḥurum), and who ever does hunt game intentionally, they must offer (an animal) the like (mithl) of which he has killed" (5:95). Although this verse concerns Islamic worship rituals and not financial transactions, the injunction is based on the idea of standard compensation. This concept is further evident in the Sunnah, as discussed in the previous chapter.

The most extensive discussion of standard compensation takes place in the fiqh literature. Al-Quradaghi (1988, pp. 398–399) admits that the term ʿiwaḍ al-mithl was used in specific contexts, specifically:

- A dowry that is not specified at the consummation of a marriage contract (Al-Rafi'i, 2002, pp. 467–469).
- Exchange contracts (such as a sale or lease) but for which the price/rate is not defined (Wizarah al-Awqaf wa al-Shu'un al-Islamiyah al-Kuwaitiyah, 1983, v.1 pp. 282–283; Qutah, 2007, p. 99).
- Appropriation of private property by the government that is in the public interest (Al-Quradaghi, 1988, pp. 398–399).
- Indemnity for damage or destruction of property (fixed or cash assets) (Al-Zuhaili, 1998, pp. 87–88).

One can relatively safely conclude that the jurists applied this concept on a wide scale, and if an exhaustive survey of the fiqh literature was feasible, one would expect to find applications for standard compensation in almost all the domains of fiqh including ritual worship, civil, criminal, political, and judicial matters. The implication of this on Islamic finance benchmarking are important since it opens

the way for extensive mental reasoning to be used when building the benchmark. In fact, Al-Quradaghi (1988, pp. 400–401) holds that standard compensation is mainly based on the following objectives and parameters:

- An important objective of standard compensation is to realize fairness in financial dealings.
- Another important objective is to satisfy the needs of people. Since people differ in their needs and tastes, a common standard valuation is required.
- The most important parameter of standard compensation is that all relevant factors that influence the value of compensation are considered.
- Another important parameter is to consider the custom of the people and what factors they normally include in arriving at the standard value.

The consideration of these parameters and objectives would suffice for the proper application of the juristic concept of standard compensation. Since this is a discussion of fiqh discourse as it relates to Islamic finance benchmarking, the important considerations that the jurists have made for gauging the standard values are presented as follows:

- The valuation should be done in the prevalent currency.
- The valuation should be done by honest and trustworthy experts.
- The valuation assessment should be based on likely value, not necessarily the exact value.
- If multiple valuations exist, the valuation that is based on the strongest evidence is considered.
- If a fixed valuation is determined, but the factors contributing to the valuation change, the valuation must then change (Al-Quradaghi, 1988, pp. 401–407).

Using the parameters and objectives of standard compensation as well as factoring the important considerations for gauging the value of standard compensation in the fiqh tradition, the following are the implications of the concept of standard compensations on Islamic finance benchmarking:

- The standardization of pricing through benchmarking is generally permitted, but it may become necessary (obligation) with complexity of the industry and products. This is based on the concept of public interest (maṣlaḥah), which will be deferred to a later discussion.
- Since the Islamic finance benchmark represents a valuation standard, it must be fair. It should genuinely fulfill the pricing needs of the Islamic finance industry. It should consider all relevant factors that influence the reference rate. This is done by considering Islamic finance industry conventions regarding what is factored into pricing of Islamic finance products and instruments.
- Islamic finance benchmark development should be done by qualified individuals of integrity. It should further be adaptive and self-scaling in order to

reflect upturns or downturns in the reference rate or assets without exaggeration, and to ensure that changes in the environment surrounding the reference assets are factored into the benchmarking methodology.

- The valuation of reference assets should consider the best possible rate that reflects the reference assets and not necessarily the exact value. When conflicting factors exist, the factor that more preponderantly reflects the value of the underlying reference takes precedence.

This is the gist of what can be inferred from the fiqh proposition of standard compensation and which compliments well the principles of the Qur ʾān and Sunnah discussed in the previous chapters. Directly related to the concept of standard compensation is the fiqh concept of traders' convention, which is discussed next.

Traders' convention (ʿurf al-tujjār)

The jurists have long held that traders' convention (ʿurf al-tujjār) is a valid basis for considering something in compliance with Sharīʿah or not. The concept of traders' convention finds its roots in the Qur ʾānic and Sunnatic concepts of mutual consent and freedom to dictate the terms and conditions of contracts, both of which have been detailed extensively in previous chapters. The jurists have extended its application in their fiqh discourse to cover various aspects of trade and commerce. An established fiqh maxim states: traders' custom is like something that is explicitly stipulated by them (Al-Borno, 1997, v. 11 p. 752). In other words, as long as something is customarily practiced, there is no need to state it since it is binding practice on the transactors and is legally enforceable in the case that a dispute arises. The exception is if there is a mutual agreement by both parties to transact according to another practice, then it is not problematic since the Sunnatic principle "transactors are bound by their conditions" takes precedence (Al-Tirmidhi, 1975, v. 3 p. 626, ḥadīth no. 1352).

In the medieval context in which the jurists existed, commerce took the form of trade such as selling and buying, leasing, capital ventures, etc. This environment in which fiqh developed did not know financial intermediation (Kahf, 2006, p. 8). Hence, the convention of the traders was largely related to individual merchant trade practices. While trade still exists today, it has become inextricable from financial intermediation. Islamic financial institutions utilize commercial fiqh contracts, but integrate them with other contracts and conditions to tailor them to the complex transactions of financial intermediation today.

The prices of financing offered by financial institutions should reflect the costs of funds and should at the same time generate profit for the Islamic financial institutions. As a temporary fix, Islamic financial institutions' pricing practice reflects the cost of money and not necessarily the nature of the assets or activities being financed. With renewed calls to appropriately reflect the nature of the assets and activities being financed by Islamic financial institutions, Islamic finance benchmarking resurfaces as an important tool in achieving this end.

The concept of traders' convention in fiqh suits the financial sector today, which has become highly standardized and intricately structured. Standardized pricing is one of the most prominent features of the financial sector, thus rendering benchmarking a fundamental element of the practice. There have been previous attempts, some of which succeeded, like the Islamic Interbank Benchmark Rate, in developing standard Islamic finance benchmarks, but standardization as a whole remains a major impediment to the growth of Islamic finance. An attempt to standardize Islamic finance industry practice is not complete without the development of benchmarks that represent the nature of financing products, among other things. The question that arises is: how could the concept of traders' convention in the fiqh literature guide the development of an Islamic finance benchmark?

Due to its relevance, the Ḥanbalī (fiqh school) stance in this regard is the most liberal and flexible, essentially allowing the adoption of any commercial practice as long as it does not contradict a definitive Sharīʿah principle (Qutah, 2007, p.66). Furthermore, the other fiqh schools have directly and indirectly referred to this concept of the general permissibility of conditions and stipulation based on the traders' convention. In fact, some opinions within the fiqh schools require that a convention be established – akin to calls for standardization – and that the traders abide by that convention (Qutah, 2007, p. 45–47).

It can be concluded that the jurists have expanded the application of mutual consent and freedom to stipulate terms and conditions of contracts to any extent required by people in their transactions. However, the jurists have set up parameters to consider something as valid convention or not. These parameters are expected to guide Islamic finance benchmarking and are as follows.

Firstly, the convention under consideration has to be widely practiced. For Islamic finance benchmarking, consideration should always be made for accommodating the widest set of possible factors that influence reference rates such as the variety and quality of localities representing a rental rate benchmark.

Secondly, the convention under consideration has to be currently practiced (and not something obsolete). Islamic finance benchmarks should apply the latest weighing and sampling techniques to ensure a sophisticated benchmark that reflects the state of the art. Outdated statistical methods should be abandoned for more sophisticated methods used by the finance industry for benchmarking.

Thirdly, there should be no express statement contradicting the convention under consideration. In other words, if the traders opt for an alternative practice, it is accepted as long as it is mutually recognized by the parties and doesn't negatively affect other interested parties. While an Islamic finance benchmark may be used as a basis for pricing Islamic finance products, there can be express statements to price the products differently (such as an Islamic bank's discretionary amendment of the benchmark or in referring to a different benchmark altogether).

Fourthly, the convention must not contradict a definitive principle of the Sharīʿah. Benchmarking must check that reference rates and assets are not related to Sharīʿah non-compliant activity including conventional money market instruments. The benchmarking methodology should also not contradict the principles of fairness, transparency, etc., as these are also definitive principles of the Sharīʿah.

Market price (siʿr al-sūq)

Another prominent fiqh concept is market price (siʿr al-sūq). In the previous chapter, there was a discussion on the emphasis of the Sunnah on free markets and the relevance of the natural law of supply and demand in determining prices. The jurists have long established that the market price is a fair determinant of prices. Ḥanbalī and Ḥanafī scholars Ibn Taymīyah and al-Taftāzānī, for example, explicitly emphasized that prevalent market prices are naturally determined and aim to achieve fairness (Muhammad, 1997, p. 254–255, 270). Ibn Taymīyah and Ibn Qayīm (Ḥanbalī jurists) are known to have allowed a transaction without defining the price specifically, but merely by inserting a clause that sets the price as "the market price" – which is indicative of their serious regard for market prices (Al-Zuhaili, 1997, v.4 p. 4061).

This position of the jurists is well-grounded in the Sunnatic principle discussed in the previous chapter of free and fair markets, in which the Prophet refused to fix prices out of fear that such a move would be unfair to some market participants. Al-Zuhaili (1997, v. 4 p. 2697) shows that the purpose of refusing to fix prices is to uphold the law of supply and demand. What is clear is that having a benchmark that represents this supply and demand is essential for upholding fairness in the market. Some important parameters are inferred from the preceding discussion of the jurists' stance regarding market prices:

- The underlying reference rate of the Islamic finance benchmark should be reflected as accurately as possible, or else there would not be much meaning behind the idea of trying to capture a standard price that is determined by the forces of free markets.
- Prices represent the majority of goods and services, not necessarily all of the goods and services; alternatively, they cannot represent a minority portion of the goods and services. Therefore, Islamic finance benchmarks need a reference that is representative of the majority of the assets that are concerned, whether it is money market instruments, property rental rates, or otherwise.
- Since the jurists establish that supply and demand reflect underlying economic conditions and the prevalent prices that result from that, Islamic finance benchmarking needs to reflect the economic conditions of its reference market. Hence, the Islamic finance benchmark should be relevant to the products or activities it represents. A rental rate benchmark should reflect the overall rental market fairly while a credit spread could be added by the

Islamic bank during risky periods of high volatility. A profit-sharing ratio benchmark should reflect investment and business conditions. An added spread by the Islamic bank may reflect the economic sector performance specific to the financee's business.

Public Interest (maṣlaḥah)

Maṣlaḥah literally means benefit or utility. Technically it means the benefit that the Sharīʿah aims to realize for humans through the preservation of religion, life, progeny, intellect, and wealth (Al-Ghazālī, 1993, p. 174). This is a technical definition presented by al-Ghazālī, but a simpler and easier definition is that maṣlaḥah refers to the Sharīʿah's consideration for public benefit. Maṣlaḥah has far-reaching implications on treating new incidents that Muslims face and that need a religious verdict. The concept of maṣlaḥah is based on the Qurʾān and Sunnah, but is only explicitly defined as a concept by the jurists, which is why its discussion is deferred to this chapter.

The jurists have not left the determination of what is in the interest of the public and what is not to the arbitrary conjecture of the human mind. They have categorized the general public benefits into:

(i) Those that are expressly approved by the Sharīʿah and have been explicitly mentioned in the Qurʾān and Sunnah such as capital punishment for murder.
(ii) Those public interests that may seem beneficial but are expressly approved by the Sharīʿah and have been explicitly mentioned in the Qurʾān and Sunnah such as the proliferation of gambling and liquor.
(iii) Those public interests that are unqualified, which means that they are not explicitly approved or prohibited by the Sharīʿah.

Of most concern to the jurists is the last category, which includes all public benefits that could ever exist in human society for centuries on end. An example is that the Second Islamic Caliph ʿUmar Ibn al-Kattab had ordered that the lands in the Levant and Iraq would not be divided as spoils among the liberation armies of Islam since they belonged to poor farmers who could not afford other means of sustenance. Another public harm that would result was that if such large plots of land were divided among the Islamic soldiers who fought off Persian and Roman troops, the large plots of land could turn into feudal estates and become a means to further oppression, as was the case when Romans and Persians ruled those lands (Abadi, 1995, v. 8 p. 194–195).

This category of public benefit is relevant all the time and changes based on developments in the time, location, and cultures of people. Specifically, the public benefit that concerns the preservation of wealth, mentioned in al-Ghazālī's definition, has been discussed with a very broad scope. Wealth is preserved through various forms, including preventing loss or wastage of wealth and preserving wealth by growing it by way of investment. It is this medium of wealth preservation

that ties maṣlaḥah to Islamic finance. It was mentioned previously that Ibn ʿĀshūr (2004, v. 3, p. 470) inferred this objective of wealth preservation from the Qurʾān. Maṣlaḥah provides flexibility in determining how wealth is preserved. Since the relevance of preservation of wealth to Islamic finance benchmarking has been discussed in a previous chapter, it will not be repeated here. Instead, the implications of maṣlaḥah on Islamic finance benchmarking are generalized here. But to be able to do that, one must observe the parameters for applying maṣlaḥah as defined by the jurists.

Islamic finance benchmarking is a contemporary issue that is unprecedented in the fiqh tradition. Public interest is the primary consideration in justifying the development of such a benchmark. Furthermore, the benchmarking methodology will be based on what attains the optimal public benefit. The public referred to here is not necessarily every person present in society, but could refer to the participants of the Islamic financial system, for example. To guide the proper application of maṣlaḥah, the jurists have listed several parameters in applying maṣlaḥah:

- The public interest under consideration must be real (haqīqī) and not something imaginary (wahmī). Islamic finance benchmarking should be expected to add value to the Islamic financial system, such as through increased uniformity and standardization. In that regard, adherence to the benchmark must be emphasized by industry regulators. This further implies that the benchmark has to be practical enough to be adopted.
- The public interest under consideration should not contradict a definitive Sharīʿah text or principle. This means benchmarking of prohibited activities or markets is not permitted unless due to necessity. Reference to conventional money market benchmarks should not persist if an alternative is developed. It can even be argued that all of what has been established in the previous two chapters should not be contradicted when applying maṣlaḥah.
- The public interest under consideration must indeed have a general (ʿām) implication and not claim to be a public benefit while only benefiting a specific group. Maṣlaḥah may be used for specific groups or individuals, in which case it must not harm the general public. To demonstrate this in Islamic finance benchmarking, it is acceptable to allow individual banks to discretely set the spread they wish to add or reduce on the prevalent benchmark rate based on their own judgment, but what is not accepted is to allow only Islamic banking institutions exclusive access to a benchmark rate, which concerns the generality of the financial system, including the customers of Islamic banks. The latter case would go against the transparency objective of Islamic finance and render a harm to some players in the Islamic financial system. Although it may benefit a small group (Islamic banks), it is at the detriment of the greater participant base of the Islamic financial system. A scenario that is just as bad is if only Islamic banks are allowed to participate in the formulation of a benchmark that concerns the entirety of the Islamic finance system.

The Islamic finance benchmarking methodology may take whatever form is deemed suitable as long as abovementioned three requirements are carefully considered. The examples given are simply for demonstrational purposes, but in reality, the public benefit under consideration must be effective and given due thought. This is especially true for the benchmarking methodology which is adopted, namely it should consider the interests of Islamic financial institutions, their customers, and other players in the Islamic financial system.

Fiqh maxims relevant to Islamic finance benchmarking

Fiqh maxims (qawā ʿid fiqhīyah) refer to principles that act like aggregators of common sets of similar fiqh cases. Thus, each fiqh maxim aggregates a common set of fiqh cases and assigns to them a single common rule. Put another way, a fiqh maxim is a principle that can be applied to a variety of cases due to a commonality among such cases. The domain of fiqh maxims came to prominence as a result of the growth of the volume of fiqh cases developed by the jurists. This collection of fiqh cases, such as the different rules concerning ritual acts of worship, family matters, and financial matters, formed precedents for the laying down of fiqh maxims. As a result of this, fiqh maxims have grown to be a major component of fiqh itself. The benefit of fiqh maxims is that the rule related to a maxim extends to all cases that apply. Hence, if a fiqh maxim states, "the general rule in transactional dealings is permissibility", it means that anything related to transactions is by default permitted and open to reason, unless there is a clear contravention of the Sharīʿah.

The first fiqh maxim that is of direct relevance to benchmarking states: *when people use something as evidence, such evidence becomes legally binding* (Al-Zuhaili, 2006, p. 321). This relates directly to the concept of ʿurf in the Qurʾān since the common usage of something is akin to ʿurf. Islamic finance benchmarking serves the purpose of standardizing industry pricing practice and should hence factor in the pricing practice of Islamic financial institutions for the benchmark to be effective and widely accepted.

Another important fiqh maxim states: *consideration is given to convention which is widely adopted, not rare cases* (Al-Zuhaili, 2006, p. 323). This fiqh maxim also directly ties into ʿurf and is evident of the jurists' strong consider for ʿurf. This fiqh maxim further supports the claim that fair representation in the Sharīʿah needs only to consider the interest of the majority if consideration for the interest of all cannot possibly be attained. This is a general statement, which applies to a variety of fiqh domains of transactions including financial transactions. To demonstrate its application in Islamic finance benchmarking, the representation of the underlying index is not always exhaustive. While a money market index may be able to capture the latest prices or rates on money market instruments, a rental rate benchmark may not be able to capture the entire rental market, in which case only a statistically significant sample suffices.

A fiqh maxim that is often overlooked in Islamic finance literature states: *ending disagreement takes priority* (Zaydan, 2001, p. 184). What this maxim is essentially

referring to is that it is better to have consensus than disagree, even when disagreements are based on strong evidence. The benefit of consensus is far more beneficial to society at large. Zaydan (2001, p. 184) views that this maxim refers specifically to avoiding issues over which there is disagreement among the scholars. This fiqh maxim, however, can easily and justifiably be generalized to entail that consensus serves society better than disagreement does, simply because the opinion of the majority is stronger than the opinion of a certain group or single person. This has been witnessed in general Islamic finance fatwa (resolutions of the Sharīʿah committees of Islamic financial institutions) since in jurisdictions such as Malaysia, the resolutions of the Shariah Advisory Council of the Malaysian Central Bank override individual Islamic bank and takāful operator Shariah committee fatwa when there is a conflict. This is a good move towards standardization and harmonization. This fiqh maxim is a strong basis for developing Islamic finance benchmarking and deciding on the relevant factors to be included in the benchmarking methodology. In other words, if issues or differences of opinion arise as to the Shariah compliance requirements of the benchmark, the majority opinion needs to be given consideration, even if the minority opinions are valid. This ties into the next fiqh maxim that is essential to Islamic finance in general and benchmarking specifically.

The final fiqh maxim, which will prove as a good note on which to end, states: *when matters become constrained, then such a circumstance requires relaxation (of the Sharīʿah requirements).* Zaydan (2001, p. 65) explains that this fiqh maxim concerns concessions (licenses) that are provided by the Sharīʿah in facilitating ease during times of hardship. This fiqh maxim is based on the Qurʾānic verse that states: "Allah wants for you ease and does not want hardship" (2:185). This verse of the Qurʾān was only formulated into a principle that guides reasoning (ijtihād) later by the j/.]'p\p=00000000rists although it has certainly been a principle based on which the Prophet and his companions, as well as their followers, used in their religious guidance.

Relating this back to Islamic finance benchmarking, there will be instances where it will be very difficult to reconcile all of the scholarly opinion and Sharīʿah evidence on what constitutes an ideal benchmark, and what parameters the benchmarking methodology may observe. In the case of the variables and considerations becoming too numerous or impractical, a line has to be drawn between what to accept and what to put aside in terms of considerations. For example, in determining what variables should ideally be factored into a profit-sharing ratio for pricing equity-based Islamic bank financing products, the question of what is fair and what is not will arise. Questions of what reflects the real economy and what does not will arise. As an experimental step, the initial development of such a benchmark may limit the factors to a certain number in order of practicality. For example, should the benchmark consider the latest equity-based money market instrument rates, or should other factors such as inflation be factored into the determination of the ratio? Higher inflation may benefit the customer more if his profit share is greater, since it entails greater demand and hence greater profits. In such a case, should an Islamic bank not have the right to benefit from this positive

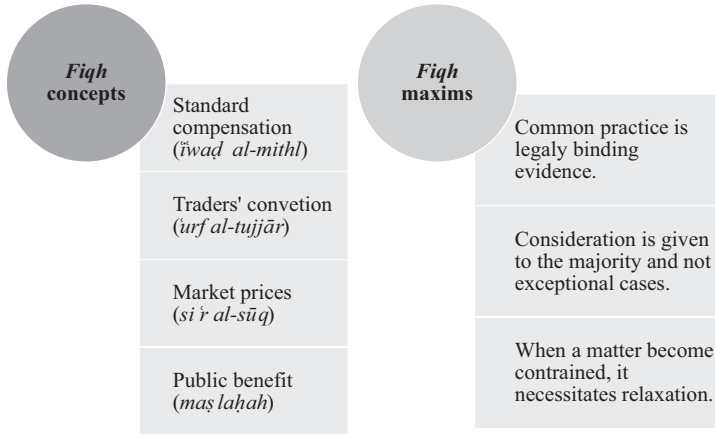

Figure 9.2 Guiding Fiqh Concepts and Maxims for Islamic Finance Benchmarking. Source: Authors' own

economic atmosphere? This is one demonstration of the many considerations that arise. Looking at all of the Qurʾānic, Sunnatic, and fiqh concepts presented, the ultimate arbitration will be based on the facility and practicality of accommodating the different factors into the Islamic finance benchmarking methodology.

Conclusion

This chapter discussed a variety of fiqh concepts and maxims, which find their roots and substance in the Sharīʿah texts of the Qurʾān and Sunnah, but which took form after the laborious efforts of the jurists to formulate them into scientific principles that are applied systematically with parameters and conditions.

The jurists had always viewed standard compensation as something necessitated by fairness. This serves as an important guide for Islamic finance benchmarking, since standardization of pricing may become a necessity in order to achieve fairness, stability, and accuracy in pricing practice in the Islamic finance industry. Another common concept among the jurists is the consideration of traders' convention. Based on the Qurʾānic principle of ʿurf, the jurists have accorded authoritativeness to the prevalent industry convention when judging the validity of transactions. The implications of this on Islamic finance benchmarks are that the benchmark should consider a wide variety of factors that affect the reference rate, that the benchmark be sophisticated and reflect the state-ofhe-art, that the benchmark not necessarily be imposed on institutions who cannot accommodate for it and that the benchmark be in conformity with other Qurʾānic and Sunnatic principles previously discussed. The jurists further discussed market price and the importance of free markets in determining fair prices of goods and services. Islamic finance benchmarks should accurately reflect the underlying reference

as closely as possible, by taking into account the major factors that contribute to the change in the underlying rate and reflecting the economic conditions that influence the reference rate. Maṣlaḥah is the final fiqh principle discussed, which permits practices that realize the interests of the public. Benchmarking that realizes benefits for the Islamic finance industry must actually add value, should not feature elements prohibited by the Sharīʿah, and should consider the general interests of the industry and not only those of a select group of Islamic financial institutions.

Fiqh maxims are also a large domain of fiqh. Those relevant to Islamic finance benchmarking entail that consideration in the development of an Islamic finance benchmark consider the majority of factors that influence the benchmark, and the majority of participants of the Islamic financial system concerned. Furthermore, the relevant fiqh maxims allow for facilitation in Islamic finance benchmark development when the factors under consideration become too numerous or are impractical.

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10

ANALYZING FATWAS ON BENCHMARKING ISLAMIC FINANCIAL PRODUCTS AND SERVICES

Ahmed Abdullah, Ahmed Abdul Rehman, and Muhammad Umar Farooq

Introduction

Robert Demilio states that "benchmarking is an improvement process used to discover and incorporate best practice into your operation. Benchmarking is the preferred process used to identify and understand the elements (causes) of a superior or world-class performance in a particular work process" (Demillio, 1995). The Xerox corporation, which is the pioneer of the techniques applied in management practice, describes it as "The search for industry best practices which lead to superior performance" (Codling, 1995).

We can get the key points from the above mentioned descriptions, which are best practices and superior performance. For instance, almighty Allah says in the Qur ̓ān, "Indeed in the (life of) Messenger of Allah you have an excellent model (best practice) to follow for whoever hopes in Allah and the Last Day and remembers Allah much (best performance)" (33:21). Any Muslim who wants to worship Allah in the best possible manner should follow the Sunnah of the Prophet (peace be upon him). For instance, if you want to be a good husband, you need to look and follow the way the Prophet (peace be upon him) behaved with his wives. A Muslim is expected to benchmark the Sunnah of the Prophet (peace be upon him) in each and every sphere of life to get the best performance in both worlds, in this world and in the hereafter.

Current practices

Currently Islamic banks and Islamic financial institutes use interest rate benchmarking, which is not preferable according to Islamic scholars and muftis. We

have to define our own benchmark rate, which would be suitable for our financial institutions and banks.

Islamic banks are not obliged to maintain a minimum deposit rate. Mostly, the movement of average Islamic bank customers to other banks for better rates is inelastic (barring large corporate clients). One can contend that Islamic banks should use their own benchmarks in the wake of excess liquid assets. Critics of Islamic banking argue that the benchmarking of returns to conventional interest rates makes it synonymous with ribā (interest). Islamic banks insist that the similar pricing of products doesn't make them non-compliant with Sharīʿah.

Arguments on interest-based benchmarking

We all know that Allah (SWT) has prohibited ribā (interest) and trade is allowed (Al-Quran 2: 275). There are basically two types of trade; sale of products and services, and investment. As well as this, sale can be on the spot (mua'jal) and sometimes can be on a deferred payment basis (mui'jal). We can bargain in some types of sale like in musawama sales, but in murabahah sales or in ijārah, there is no scope for bargaining, So, Islamic financial institutions need to fix profit rate for all beforehand. On the other hand, in the second type of trade (investment-based trade) like muḍārabah sales or mushārakah sales, in which the investor gets to know the profit rate later on, the bank still needs to declare a rear expected rate of profit beforehand to attract depositors to invest in accounts. To standardize this mark-up or profit rate, banks use benchmarks of interest rate like the LIBOR (London Interbank Offered Rate). Sharīʿah scholars of Islamic finance are of the opinion that benchmarking on interest rate (ribā) is not forbidden (ḥarām) but it is not desired. Islamic banks can use the LIBOR as a benchmark of profit rate until any alternative Islamic benchmark has been established.

According to Justice Muhammad Taqi Usmani, a renowned Sharīʿah scholar, "If all the pillars of sale are valid from the Sharīʿah point of view, just mere use of interest rate as a benchmark cannot invalidate the whole sale" (Usmani, Buhoth fi Qazaya Fiqhiya Muasirah, 1998). On the other hand, if conventional banks use an Islamic benchmark to fix their interest rate, their usage of an Islamic benchmark alone cannot Islamize their ḥarām transaction.

At a discussion board at Opalesque Islamic Finance Intelligence, Sheikh Yusuf DeLorenzo states:

> A benchmark is no more than a number, and therefore non-objectionable from a Sharīʿah perspective. If it is used to determine the rate of repayment on a loan, then it is the interest-bearing loan that will be ḥarām. The LIBOR, as a mere benchmark, has nothing to do with actual transaction or, more specifically with the creation of revenue or return.

The Islamic banking industry is still a niche market and needs to co-exist with conventional banking. So, a comparison of the profit margin with the prevailing

interest rate would be difficult to avoid (Homoud, 1994). Therefore, because of the competition with conventional banks to attract deposits from customers, Islamic banks are forced to benchmark interest rates. This argument is supported by some surveys in Iran and Malaysia. Seyed-Nezamaddin Makiyan from Iran has found that changes in the rate of return and the rate of inflation generate changes in the levels of the supply of loans and of total deposits. Another study in Malaysia (Haron and Ahmad n.d.) provides evidence regarding the relationship between the number of deposits placed in the Islamic banking system in Malaysia and returns given to these deposits. The findings confirmed that customers who place their deposits at saving and investment account facilities are guided by the profit motive. The existence of the utility maximization theory among Muslim customers is further confirmed by the negative relationship between the interest rate of conventional banks and the amount deposited in interest-free deposit facilities. Therefore, if the profit rate of Islamic banks is lower than conventional interest rate, then Islamic banks will lose depositors. On the other hand, if the profit rate is higher than the interest rate, then Islamic banks will lose clients/entrepreneurs who will refuse to take investment from Islamic banks.

Arguments against interest-based benchmarking

The Holy Prophet (peace be upon him) prohibited Muslims from imitating those who are against Sharīʿah principles – non-Muslims. He said whoever assimilates the practices of someone else shall be determined from them. He also suggested fasting for two days on the day of Ashura in opposition to the Jewish practice of fasting for only one day, to differentiate the practice of Muslims from non-Muslims. This was narrated by al-Bukhaari (1865) from Ibn Abbaas, who said:

> The Prophet (saws) came to Medina and saw the Jews fasting on the day of Ashoora. He said, "What is this?" They said, "This is a good day, this is the day when Allah saved the Children of Israel from their enemy and Moosa fasted on this day." He (the Prophet Muhammad) said, "We are closer to Moosa than you."

So the Holy Prophet (peace be upon him) fasted on this day and told the people to fast. The Prophet observed the fast on Ashuraa (the tenth of Muharram), and ordered Muslims to fast on that day (Bukhari and Muslim). This is the Sunnah that is proven from the Prophet (peace be upon him), as he said, "If I am still alive next year, I will certainly fast the ninth" (narrated by Muslim, 1134). So, while Jews fast only on the tenth of Muharram, the Prophet (peace be upon him) recommended Muslims to fast on both the ninth and tenth of Muharram. Ribā is a practice of non-Muslims, so it should not be benchmarked. Every kind of transaction in Islamic finance should be able to differentiate from the practice of conventional finance.

The postgraduate students of the International Islamic University of Malaysia recently did a new study which shows that using rental rates is better than using interest rates because it is stable and linked with the real economy. They also suggested that the rental index for different areas should be different for fixing rental rates to implement ijārah contracts for home financing based on a mushārakah mutanāqisah partnership (MMP).

A proposed alternative Islamic benchmark

However, some efforts have been made to develop a benchmark for the Islamic financial industry. Prominent academicians from the International Islamic University of Malaysia made a fine effort under the supervision of Islamic Sharia Research Academy for Islamic Finance, and in a research paper named "Islamic Pricing Benchmarking", the authors compiled all the previous proposals on Islamic benchmarking (ISRA, 2010). They found five predominant proposals:

- The Rate of Dividend of Islamic Bank Deposits and Investment Accounts Model suggestion by Muhammad Abdul Halim Umar (2000). According to him, a benchmark can be created from the dividends distributed by Islamic banks to their depositors. It will remove uncertainty and doubt by replacing the interest rate with a rate of profit. It will provide a mathematical index as compared to its conventional counterpart.
- The Rate of Profit Mechanism Model proposed by Abd al Hamed al-Ghazalie (1414 AH). According to him, this can be achieved by analyzing the rate of profits in the money market. He proposes that it is a more rational method that promotes justice for all and fits the nature of economics.
- Tobin's Q Theory proposed by Abbas Mirakhor (Mirakhor, 1996). He proposes a method by which the cost of capital can be measured without resort to a fixed and predetermined interest rate. The suggested procedure is simple. It is based on the well-known "Tobin's Q", and can be used in the private as well as the public sector to obtain a benchmark in reference to which investment decisions can be made.
- The creation of an inter-Islamic banks market based on Islamic principles suggested by Shaykh Muhammad Taqi Usmani (Usmani, 2007). According to him, the purpose can be achieved by creating a common pool which invests in asset-backed instruments like mushārakah, ijārah, etc. If the majority of the asset pool is in tangible form, like leased property or equipment, shares in business concerns, etc., its units can be sold and purchased on the basis of their net asset value determined on a periodic basis. These units may be negotiable and may be used for overnight financing as well. Banks with surplus liquidity can purchase these units, and when they need liquidity they can sell them. This arrangement may create an interbank market, and the value of the units may serve as an indicator for determining the profit in murabahah and leasing also.

- A benchmark that fits both Islamic and conventional banks by Aznan Hasan (Hassan, 2009). According to him, in Malaysia there are various ways to determine the interest rate based on different sectors; for instance, KLIBOR, Interbank Money Market, BLR, BFR, and Overnight Policy Rate (OPR). It is possible to use the rate of OPR in line with Sharīʿah principles that suit both Islamic banks as well as conventional banks. It is usually determined by BNM in order to strengthen the monetary policy as well as to control the supply and demand and fair circulation of funds in the money market. Then, based on that rate, the banks will determine their own respective interest rates that will be used to price all loans and financing. Indeed, all the previously mentioned pricing rates are affected directly by OPR, which is determined by BNM.

After analyzing all previously offered models for Islamic benchmark, the ISRA research team tested two models based on CAPM (Capital Asset Pricing Model) and APT (the Arbitrage Pricing Theory). After examining both models with different theories of economics, they found some limitations of the CAPM model. With the objective of linking benchmarks with real economic performances, they proposed an APT model for Islamic benchmarking. Their study recognized four macroeconomic variables as having good return predictability for all the sectors: industry production growth, to capture the overall economic growth; the money supply changes (M2), to capture the monetary liquidity; the ringgit exchange rate, to reflect the relative global competitiveness; and the Kuala Lumpur Composite Index returns, to reflect the overall market condition. A weighted average of the sector's returns determined through the APT is suggested here as a viable Islamic pricing benchmark rate for the market as a whole (Jaman, 2011).

From the above discussion, it is seen that criticizing Islamic finance for benchmarking interest rates is easy but, in practice, there are many limitations in finding an alternative to it. Much research has been done on this issue, but still Islamic finance is waiting for a viable solution. There is no do doubt that Islamic finance should get rid of this criticism as early as possible.

Proposed Sharīʿah standards for benchmarking in the Islamic financial system

- For financing activities, the benchmarks may vary according to the real sectors and products concerned.
- The pricing benchmark must be disclosed and displayed to all contracting parties. However, the factors to be taken into consideration for the pricing benchmark, such as the cost of the fund, expected risks, etc., can be taken into account without necessarily having to be disclosed and displayed.
- Unlike borrowing and lending in conventional practice, Islamic banking activities are more comprehensive. They include being a trader, partner and

wakeel (agent). As such, the pricing benchmark should not be based solely on financial intermediary functions.

- A benchmark is not meant to fix a price, but rather to serve as an indicator and a guide to pricing.
- The computed pricing benchmarks should be from permissible activities with valid contracts that fulfill all the conditions and tenets of Islamic principles.
- Risk impairment (potential loss) may be included in the up-front computation of the pricing benchmark, but it cannot be imposed on the customer after the event of default.
- The factors for computing the pricing benchmark should be free from non-halal activities, interest rates, and unreal economic activities such as indices of financial derivative products.
- The time-value of money can be used as a guide for the pricing of a deferred sale but cannot be used to calculate late payment charges.
- The pricing benchmark should be free from the activities of hoarding, speculation on price hiking, and monopolization of consumer products.
- The inflation index can be used as an indicator to trace price movements.
- Developments and trends of real economic conditions need to be taken into consideration in determining a benchmark that can forecast the future situations of the market and discover the patterns of changes that the market may undergo. Therefore, using indices for guidance in operations that relate to real transactions is permissible in Sharīʿah.
- The profit margin for the pricing benchmark should be free from elements of ghabn fahish (exorbitant profit-taking), corruption, and fraud (al-Qurah-Daghi, 2009).
- The indices must be accurate, objective, and transparent.[1]

Solutions

Since 2011, the Islamic Interbank Benchmark Rate (IIBR) has provided an indicator of the average expected return on Sharīʿah-compliant short term interbank market funding for the Islamic finance industry. Utilizing the contributed rates of 18 major Islamic banks and Islamic banking windows, the IIBR is calculated for every business day. Established in cooperation with the Islamic Development Bank (IDB), the Accounting and Auditing Organization of Islamic Financial Institutions (AAOIFI), the Bahrain Association of Banks (BAB), the Hawkamah Institute for Corporate Governance, and a number of major Islamic banks, the IIBR harnesses Thomson Reuters' global benchmark fixings infrastructure, responsible for calculating and distributing some of the world's famous benchmarks including the LIBOR and EURIBOR (European Interbank Offered Rate) suite of fixings.

The IIBR is applicable in the pricing of Shariah-compliant contracts such as: overnight to short term treasury investment such as murabahah, wakala, and muḍārabah, retail financing such as real estate ijārah, corporate finance, sukuk, and other Sharīʿah-compliant fixed income instruments.

Pros:

An alternative benchmark based on Sharī ʿah-compliant interbank funding only. Based on real Sharī ʿah-compliant investment on assets. Daily available by the absence of at least 16 Islamic banks or windows. Guided by a panel of Islamic banks and approved by Sharī ʿah committee of internationally renowned scholars.

Cons:

All the contributor banks are in within GCC (Gulf Cooperation Council) countries only, which limits its usage. It is difficult to apply, as an alternative for local currencies, a benchmark such as the Emirates Interbank Offered Rate (EIBOR) or the Saudi Arabian Interbank Offered Rate (SAIBOR), which are affected by the local monetary supply. There is a lack of transparency for public and scholars in the methods and offered rates.

Conclusion

The IIBR, after five years in action, provides the first benchmark based on Islamic banks and windows offered interbank rates, but this rate is restricted in GCC countries; this benchmark can be an alternative of the LIBOR or the EURIBOR but needs a special model to be applied as alternative for local currencies benchmark, unfortunately lack of transparency of this benchmark rates and ways of calculation prevents scholars form more studies and analysis of this benchmark

Note

1 Accuracy refers to proper specification of the components of the index, sources of its data input, time of obtaining the data, method of calculating the weights, and basis of rounding off the numbers. Objectivity entails presentation of the detailed circulations of the index to leave no room for difference of opinion with regard to determination of the value of the index on a specified date or at specified place. Transparency entails pre-specification of the time, place, and method of announcing readings of the index so that the process does not involve jahÉlah (ignorance or uncertainty) (AAOIFI, Indices 3/2, p. 496).

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11

FATWA ANALYSIS OF BENCHMARKING IN THE ISLAMIC FINANCIAL SYSTEM

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Introduction

Over the last two decades, Islamic banking and finance has gradually positioned itself as a viable alternative vehicle for investment in the global market (Ahmed et al., 2018). The continuous growth and expansion of Islamic banking and finance indicates a very promising future for the industry. A few studies have discussed its prospects as a solution to overcome financial crises, for example Beck et al. (2013). In contrast to the conventional financial system, Islamic finance has several unique features enshrined in its Sharīʿah principles. For example, Islamic finance prohibits ribā, including interest in all forms. It forbids speculation, gambling, and all forms of transactions that result in unfair market practices. Rather, Islamic finance operates on the principles of a free and fair market. These principles were established from the time of Prophet Muhammad (peace be upon him) in the Islamic market in Medina, where prices are determined by the free market that is just and fair. However, in extreme circumstances resulting from market failures, price control or government intervention is allowed as a corrective measure to restore market equilibrium.

Market determined prices and price control were among the pertinent issues that the jurists and scholars have dealt with throughout the decades. Islamic jurists have conducted extensive discussions on these subjects, including the determination of fair prices and the circumstances that deem price control lawful and/or necessary. Discussion on these issues has extended to the pricing of Islamic banking and finance products and services. Scholars find themselves once again faced with the issues of fair price and price control but in different contexts, circumstances, and forms.

In the modern financial era, pricing or price determination is done through benchmarks. Financial institutions, either Islamic or conventional, must use a

benchmark in order to determine the cost of funds (COFs) and the revenues from their investments. Currently, the most used benchmarks in the market are those that are linked to interest rates. This has led prominent scholars to revisit the issues of pricing once more to discuss its ruling from the Sharīʿah perspective (Bashar, 1997). Scholars and researchers have various opinions regarding the issue of pricing. Some of them find pricing based on the interest rate benchmark not to be a serious issue, while others have leveled too much criticism against it. Therefore, the use of conventional finance benchmarks in Islamic finance is still the subject of debate among scholars (Omar et al., 2010).

An interest rate benchmark is a reference rate or base rate that is calculated by an independent body, or through central banks such as the Federal Reserve in the case of the United States of America. The importance of the interest rate benchmark arises because (a) it is used by almost all financial institutions as a standardized reference to price financial products, (b) it is instrumental in setting the revenue rate from the investments, (c) it is utilized to value the balance sheet items, and (d) it is helpful in setting the derivatives to exchange such as swaps, futures, and options (Holston et al., 2017).

Islamic financial institutions (IFIs) have been using conventional finance benchmarks, such as the London Interbank Offered Rate (LIBOR), the Kuala Lumpur Interbank Offered Rate (KLIBOR), the Federal Cost of Funds Index (COFI), etc. (Omar et al., 2010). Although researchers have been trying to establish independent benchmark pricing for Islamic financial institutions, none of them have so far succeeded. This failure is mainly due to the reliance of Islamic financial institutions on debt instruments, rather than equity instruments, which makes the return and risk structure of the instruments applied in Islamic banks similar to their conventional counterparts (Al-Suhaibani, 2008).

The conflict among scholars on the use of conventional finance benchmarks continues due to the various mindsets and various schools of thought (Ahmed et al., 2018). Although the fatwas on the matter of pricing and the use of the conventional finance benchmarks are significant to the Islamic banking and finance industry, only a few studies have compiled the related fatwas providing adequate and concrete justifications. It is therefore significant to identify who among the jurists have approved the pricing of Islamic banking and finance products and services based on the conventional finance benchmarks, and those who have not approved such a benchmark.

This study is conducted to analyze the fatwas on the matter of pricing Islamic banking and finance products and services based on conventional finance benchmarks. In the beginning the study aspires to discuss pricing, price control, and related issues from a Sharīʿah perspective. The study also discusses pricing from the traditional fiqh (Islamic jurisprudence) perspective. Thus, the objectives of this study are as follows: (a) to review the existing classical and contemporary literature on pricing from a Sharīʿah perspective, (b) to review the existing fatwas on pricing based on the conventional finance benchmarks such as the KLIBOR and the LIBOR used by Islamic banks, and (c) to provide some suggestions for the

way forward. The study has adopted an exploratory research design. It has used a qualitative method in the literature survey and analysis based on the following steps: firstly, it has used a survey of the literature for works on fatwas and benchmarking. Secondly, it has conducted a meta-analysis to identify issues and trends on fatwas and benchmarking. Thirdly, it has used a thematic analysis to identify gaps for future research.

This chapter is divided into six sections. After the introduction, the second section consists of a literature review. The third section discusses pricing and price control in the traditional fiqh, and the fourth section discusses the various juristic opinions on the use of conventional finance benchmarks by Islamic banks. The fifth section focuses on pricing and its validity from the perspective of Maqasid al-Sharīʿah. The sixth section concludes the study and provides suggestions for the way forward.

Literature review

There is a dearth of literature about pricing, particularly benchmarks, from an Islamic perspective. The few works available can be classified into three categories. First, works from past Islamic heritage that discuss pricing and price control. These are largely descriptive. Secondly, modern literature that has also discussed pricing, but with some analysis, though still largely descriptive. The third group of studies relate to the use of conventional finance benchmarks by Islamic banks. The number of literatures in this group is negligible, although they include works that have attempted to develop alternative benchmarks for Islamic banking and finance products and services.

Most of the early works in the first group of literature regarding pricing were published in Arabic. The prominent studies include the book titled *Adab al-Hisbah* by Imam al-Saqati (1931). Nasir (1946) also wrote a book titled *Nihayat al-Rutbah fi Talab al-Hisbah*. Another prominent scholar who wrote on pricing is Ibn Taymiyyah (1996), in his book entitled *al-Hisbah fi Islam*. Those books focused on the issue of pricing and the extent to which it is acceptable from the Sharīʿah viewpoint for the government to intervene in the market to determine administrative pricing. The second category of works on pricing by modern scholars includes the book by Muhammad Abu al Huda al Yaʻkubi (2000) entitled *Ahkam al Tas'ir fi al-Fiqhi al-Islami*. Another modern writer on this topic is Muhammad bin Ahmad bin Salih (2001) with his book titled *Al-Ru'ya al-Islamiyyah li tasʻir al-silaʻ wa al-khadamat*. These modern works, similar to the related past literature, were also descriptive. They explained the viewpoint of Sharīʿah regarding pricing and price control, as well as discussing the relevance of pricing to their contemporary time, and the justifications for controlling the prices. These works could not discuss the idea of benchmarking for pricing, partly because it was not needed at that time.

To the best knowledge of the authors, there have been no specific studies of fatwas related to the use of conventional benchmarks for pricing Islamic banking

and finance products and services. Nevertheless, those fatwas were explained briefly and in passing in the studies that have tried to propose Islamic pricing benchmarks. This third group of studies includes research done by Omar et al. (2010) with a title of "An Islamic pricing benchmark"; also, Ahmed et al. (2018) with the title "Proposed the pricing model as an alternative Islamic benchmark". Another study on "Benchmarking in Islamic finance" by Jaman (2011) also covered the opinion of scholars briefly.

Based on the review of the extant literature, it is apparent that there is a research gap as hardly any studies have discussed fatwas related to the use of conventional interest-based benchmarks for pricing the products and services of Islamic banking and finance. Therefore, the present chapter aspires to fill in this research gap. It will identify the issues, discuss them, and analyze them in the context of those who support the use of conventional finance benchmarks and those who are against their use for pricing Islamic banking and finance products and services.

Pricing and price control in traditional fiqh

The subject of governmental intervention in the free market was revisited for discussion among Muslim economists. The aim was to redefine the boundaries of governmental intervention by exploring the situations where the intervention is acceptable. Thus, several Qur ̄anic verses and authentic ḥadīths are mentioned in this section to understand the situations where government intervention is acceptable.

Allah (SWT) says, "O you who believe, do not eat up your property among yourselves falsely (unjustly) except that it be trading by your mutual consent" (An-Nisa': 29). This verse indicates that the deal must be concluded with mutual consent. It decentralizes the decision of what and how to produce to the sellers and buyers. Any government intervention in determining or fixing the prices under normal circumstances contravenes the spirit of this verse, which implies prices must be determined in the market based on mutual consent. Otherwise, the sellers or the buyers may find themselves selling or buying at an unjust price (Bashar, 1997).

The well-known ḥadīth narrated by al-Bukhari and other narrations tells that the Prophet (peace be upon him) gave his companion Urwah one dinar to purchase a goat. Urwah purchased two goats with that one dinar. Subsequently, he sold one of the goats for one dinar and returned to the Prophet (peace be upon him) with one goat and one dinar. The Prophet (peace be upon him) then supplicated for Urwah that he be blessed in his trading. This incident shows that the price of commodities should be determined by the market forces of demand and supply rather than administrative pricing (Jamaludin, 2019).

Furthermore, a ḥadīth narrated by Abu Hurairah is as follows:

> A man came and said: "Messenger of Allah, fix prices." He said: "(No), but I shall pray." Again, the man came and said: "Messenger of Allah, fix

> prices." He said: "It is but Allah Who makes the prices low and high. I hope that when I meet Allah, none of you has any claim on me for doing wrong regarding blood or property."

This ḥadīth indicated that the Prophet (peace be upon him) did not fix the prices, although the prices were increasing, and people were facing difficulties (Jamaludin, 2019).

Another ḥadīth was narrated by Anas bin Malik (RA):

> When prices were high in al-Madinah in the time of Allah's Messenger (ﷺ), the people said, "O Allah's Messenger, prices have become high, so fix them for us." Allah's Messenger (ﷺ) replied, "Allah is the One Who fixes prices, Who withholds, gives lavishly and provides. And I hope that when I meet Allah, the Most High, none of you will have any claim on me for an injustice regarding blood or property."[1]

This ḥadīth indicates that the increase and the decrease in the prices are in the hands of Allah Almighty, and one of his attributes is that he fixes prices, withholds sustenance, and gives it out without limits (Jamaludin, 2019).

During the period of Caliph Umar bin Khattab, some incidents were reported where the Caliph permitted price control to maintain a fair business environment in the market. It is reported that Caliph Umar objected to the action of Hatib ibn Abi Balta'ah, who was offering raisins at a price lower than the market rate. The Caliph told him: "Either you increase your price, or you leave our market." The price of goods is determined by several factors such as production costs, storage, transportation, skills, and efforts of producers, estimated profits, and other costs if any. Although, some sellers may – out of piety and philanthropy – begin to sell their products at a rate less than the market rate, they may end up creating problem for others, since this action may affect the supply and demand of that specific product in the market. Therefore, Caliph Umar insisted that the products were sold at the market rate. Islam encourages philanthropy but requires that it does not create problems or distort fair businesses and markets (Ayub, 2007).

Earlier scholars, such as Ibn Qayyim (1977) and Ibn Taymiyyah (1996), have permitted state intervention in fixing the price if there are unjust practices in the market. This issue has also been discussed by a group of prominent academicians from the International Islamic University of Malaysia under the supervision of ISRA (Omar et al., 2010). They have two opinions on administrative pricing. First opinion: the government is not allowed to interfere in the market and control prices, neither by lowering nor by increasing the prices more than the market rate, as long as the market is stable and not under any speculations. This opinion was supported by the jurists of the four schools of fiqh, namely Ḥanafī, Maliki, Shafi′i, and Ḥanbalī . They have supported this view based on several authentic ḥadīths (Omar et al., 2010). Second opinion: control of prices is permitted to promote justice and to avoid injustice among members of society. As per the Maliki, and

groups of Ḥanafī and Shafi′i jurists, the government is allowed to interfere in the market and control prices in case the market is unstable or facing speculations (Omar et al., 2010).

However, it has been said that the incident of price increase during the era of the Prophet (peace be upon him) was due to natural causes (drought because of the absence of rain), and the market was free from speculation. Therefore, the Prophet (peace be upon him) feared to interfere and fix prices lest it impact unfairly on the traders (Bashar, 1997).

Based on the discussion of the various views above, it can be concluded that government intervention in the market is not recommended as long as the market is stable, and the prices are determined based on the forces of demand and supply. Nevertheless, government intervention is welcomed if the market is distorted by speculation (Omar et al., 2010) or other forms of market failures. After discussing the issue of price control from the traditional fiqh perspective, the following section will focus on the issue of pricing in Islamic banks based on conventional benchmarks.

Juristic opinions on the use of conventional benchmarks by Islamic banks

It is common knowledge that Islamic banking and finance use interest rate benchmarks such as the LIBOR to price their products and services. This has remained contentious to Muslims, the thought that the use of interest rate benchmark is associated with dealing in ribā. There are varying opinions among jurists regarding pricing based on conventional benchmarks in Islamic banks. It is said that the contention arises because of the various perspectives of the benchmark itself (Al-Suhaibani, 2008). A group of jurists observe the benchmark as a mere number and find it non-objectionable from a Sharīʿah perspective. In contrast, other groups prohibit pricing based on a conventional benchmark, since it is linked to the interest rate, which is a form of ribā. In this section, the arguments of both groups are highlighted and discussed to identify the gap and suggest the way forward.

Opinions supporting the use of conventional benchmarks

The prominent scholar in Islamic finance and the chairman of the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI), Justice Taqi Usmani (Usmani, 1998), when explaining the determination of profit in murabahah, said that:

> If a murabahah transaction fulfills all the conditions, merely using the interest rate as a benchmark for determining the profit of murabahah does not render the transaction as invalid, ḥarām or prohibited, because the deal itself does not contain interest. The rate of interest has been used only as an indicator or as a benchmark.

He argues in another place in his book (Usmani, 1998) that "mere use of interest rate as a benchmark does not render the contract invalid, but it is not desirable".

Interestingly, Usmani (1998) in his book provided a hypothetical case for the use of conventional benchmarks by Islamic banks. He assumed that the trader (A) is selling soft drinks while trader (B) is selling alcohol. Furthermore, the seller of soft drinks benchmarked his rate of profit with the rate charged by the seller of alcohol. Usmani stated that there is no way to deem the profit earned by the trader of soft drinks as illicit profit, even though he used the rate of return that is charged by the liquor trader as a reference rate. Yet Usmani stated that the use of conventional benchmarks is undesirable. He encouraged the development of an Islamic benchmark for Islamic financial transactions (Usmani, 1998).

Jaman (2011) cited Sheikh Yusuf DeLorenzo, who stated that

> A benchmark is no more than a number, and therefore non-objectionable from a Sharīʿah perspective. If it is used to determine the rate of repayment on a loan, then it is the interest-bearing loan that will be ḥarām. LIBOR as a mere benchmark has nothing to do with an actual transaction or, more specifically with the creation of revenue or return.

Homoud (1994) stated that the "Islamic bank is still a small market and has a need to co-exist and compete with conventional banking. So, the comparison of the profit margin with the prevailing interest rate would be difficult to avoid". Islamic and conventional banks play on the same platform and compete with each other. Islamic banks have no solution other than using interest rates as a benchmark to attract depositors and survive in the market. Both types of banks act as intermediary service providers, and they collect funds from depositors and invest in various businesses although the terms and contract structures are different in both banks. Therefore, if the profit rate of deposits in Islamic banks is higher than the interest rate, the demand also will be higher but, on the other hand, it weakens the investment side of the bank. Thus, some researchers opine that pulling out from the interest rate benchmark can be practically problematic (Jaman, 2011).

Al-Baraka banking group in its resolution No. 1/22 mentioned that the reliance of Islamic banks on the interest rate benchmark such as the LIBOR and the like to price the products involving deferred payment such as murabahah, leasing, and istisna, and to evaluate efficiency and measure performance, contradict the foundation and objectives of Islamic banking. Islamic banks are forced to rely on conventional benchmarks because of the absence of an alternative Islamic benchmark. However, there is no objection in Sharīʿah to using the interest rate benchmark in the pricing of Islamic products with a condition that the Sharīʿah requirements of those products are satisfied. The symposium recommended that institutions concerned with issues of Islamic banks, such as the OIC Fiqh Academy and AAOIFI, in cooperation with Islamic economic research institutes and centers, should find an alternative Islamic benchmark (Dallah al-Baraka, 2002).

Another positive viewpoint illustrated by the ISRA team (Omar et al., 2010) examining the use of interest rate benchmarks by Islamic banks opine that such practice has become customary. According to the team, the market price is a common term in muamalat, which is widely used by scholars to denote market price, and it had been practiced at the time of the Prophet (peace be upon him) as well. To substantiate their argument, the team cited a ḥadīth narrated by Ibn Umar: "If anyone emancipates his share in slave, a fair price for the slave should be fixed, give his partners their shares, and the slave be thus emancipated. Otherwise he is emancipated to the extent of the share which he emancipated" (Sunan Abi Dawud 3940). Ibn Taymiyyah said fair price means market price, which is called "thaman al-mithl" (price of the equivalent good).

The common opinion among jurists is that it is not acceptable to sell a product at an unknown price. Ibn Taymiyyah, however, permits determining the price according to the market price. He claims that this would lead to mutual consent. The usual practice is that a baker or a butcher may sell the products he has without mentioning the price. The transaction is concluded by the price they are accustomed to, as the buyer will agree on a price in which the same commodity is sold to other customers. This is the custom of people who prefer to be charged with the same price charged to others instead of bargaining with the seller (Omar et al., 2010).

Jaman (2011) cited the opinion of Aznan Hassan, wherein it was stated:

> If you were to have in one country, two benchmarks – Islamic and conventional – together, it won't be easy for the country to manage the situation. People will arbitrage. If they see conventional financing offering a better price, they will go for the conventional banks. On the other hand, if they see the price of Islamic banking is better, they will go for Islamic banks. Such a situation would create market fluctuations and result in big turbulence to a country.

Opinions against the use of conventional benchmarks

The OIC Fiqh Academy, in its eighth conference, held in Brunei Darussalam in 1993, focused on currency issues. The committee unanimously passed a resolution that called for an immediate development of a new benchmark in accordance with Sharīʿah standards as an alternative to interest-based rates for determining profit rates (OIC Fiqh Academy, 2000).

AAOIFI, in its standards (No. 27 on indices, clause 7), has articulated the same issue. Two points stated were to be taken into consideration in developing an Islamic index. Firstly, it must comply with Sharīʿah principles, in addition to the practical controls relating to the elements of the index, and its applications. Secondly, a Sharīʿah supervisory board is required to supervise the operation of the index, to ensure that Sharīʿah principles are observed in the elements and applications of the index, and to conduct a periodical review and reporting relating thereto (AAOIFI, 2017).

There are several criticisms raised by several research and scholars against pricing based on interest rate benchmarks in Islamic banks. Most of them argue that, while Islamic finance has been introduced as an alternative banking system based on the Sharīʿah, it is contradictory to have an interest rate as a benchmark. Jaman (2011) stated that interest rate benchmarks are against the practice of Muslims ever since the Prophet (peace be upon him). Muslims preferred to avoid negative practices and customs of non-Muslims and adopt positions that are distinct from such practices and customs. Thus, interest is prohibited in Sharīʿah, which is also the practice of non-Muslims, and therefore it should not be used as a benchmark in the Islamic finance industry. Meera and Razak (2009) found pricing based on interest rate benchmarks an issue in mushārakah mutanāqisah home financing; they stated that such benchmarking would lead to having uncertainty in the transaction.

Ghauri (2015) has emphasized the development of an independent benchmark as an alternative to the conventional interest rate benchmarks because using such a conventional benchmark is unethical and is not desirable. It also goes against the basic philosophy of the Islamic financial model. Moreover, Ghauri (2015) has found in his study that interest-based benchmarks do not represent real economic activities.

Jaman (2011) further cited Dr Zakir Naik, the famous researcher in comparative religion, who argued that the profit rate of Islamic banking products cannot be the same for all the products in conventional banks. He made an analogy with the sale prices in the market, that the profit rate for the sale of computers and vegetables is not the same. Therefore, he concludes that Islamic banks should have a price index or profit index for different types of products.

Since interest rate does not represent the real rate of return in the economy, it cannot be used as a benchmark in Islamic financial institutions to link the return to the real economy, which is one of the fundamental principles in Islamic economics and finance. However, because of the absence of an Islamic pricing benchmark, a practical solution for a benchmark compliant with Islamic principles requires an understanding of the concept of cost of capital in the context of an Islamic financial system (Al-Suhaibani, 2008).

Nevertheless, almost every researcher and scholar who disagrees with the conventional benchmark advises the establishment of a unique and alternative profit rate for Islamic finance. There are many proposals that have already been put forth. Yusof et al. (2011) conducted a study to analyze the possibility of relying on the rental rate to price Islamic home financing products. They found consistent evidence that the rental price (RP) is a better alternative than the lending rate (LR) to price Islamic home financing products. Specifically, it is found that the rental rate is flexible to short-term economic volatility, while in the long run, it is truly reflective of the economic fundamentals. In another study, group work carried out by the International Islamic University of Malaysia, with funding from ISRA (Omar et al., 2010) has widely discussed the issue of benchmarking from Sharīʿah and economic perspectives. The findings of the study recommended the use of the

arbitrage pricing theory (APT) model, which is based on real economic elements for Islamic benchmarking.

The approach of Islamic finance to the capital asset pricing model (CAPM) was established by Selim (2008). The aim was to eliminate ribā (usury). It adopted the principle of universal complimentarily and the principle of justice in *al-Hisbah*. He examined the theoretical application to the method of Islamic financing based on direct mushārakah to the orthodox CAPM. Through his study, he has found that financing based on mushārakah was getting lower beta-risk of financing than that measured with the marketplace.

Abdul Hamid Ghazali (1994) proposed the "Rate of Profit Mechanism Model". He stated that this can be achieved by conducting an analysis for the rate of profits in the money market. He also mentioned that through this proposed model, more justice can be achieved. Muhammad Abdul Halim Umar proposed the "Rate of Dividend of Islamic Bank Deposits and Investment Accounts Model". Muhammad Abdul Halim stated that a benchmark can be constructed from the dividends that are distributed by Islamic financial institutions to their depositors. He also mentioned that such a benchmark will eliminate doubt and uncertainty by replacing the interest rate with a profit rate. A mathematical index will also be provided, compared to its conventional counterpart (Jaman, 2011).

Abbas Mirakhor (1996) proposed "Tobin's Q Theory". He came up with a method where the cost of capital can be determined without resort to a fixed and predetermined interest rate. The suggested procedure is based on the well-known "Tobin's Q". It can be applied in the public sector as well as the private sector in order to obtain a benchmark about which investment decisions can be made.

Pricing from the perspective of Maqasid al-Sharīʿah

Considering the ḥadīth on the matter of fixing prices, it can be said that control of prices may achieve one of the five elements of necessities (Daruriyyat), which is the element of the preservation of wealth. It is obvious that Sharīʿah is always keen to achieve what is good for society. During the Prophet's (peace be upon him) era, he realized that leaving prices to be determined by the market without state intervention is more beneficial, and hence he decided not to interfere in the market to administer prices. There was also a rise in prices during the time of Caliph Umar bin Khattab. However, the factor that triggered price increases was different from the one that happened during the time of Prophet (peace be upon him). This time, the price level rose due to the merchants exploiting the market. Therefore, Caliph Umar found it necessary to intervene in the market to administer the prices.

It is well established in Sharīʿah that the government must ensure the maṣlaḥah (interests) of the society are fulfilled. It means that the government of the country must study the market and decide whether to fix the prices or not. Considering the financial system, it can be said that the central bank of the country has to supervise and monitor the practices of both the Islamic and conventional institutions to

ensure that no violations were done in the market and the prices remain just and fair.

Sheikh al-Islam Ibn Taymiyyah (1996) stated that under certain circumstances, the authorities concerned may intervene in the market and control prices to curb monopolistic practices and speculations. Moreover, the government should also intervene and control prices in case it is found that market players are trying to maximize profit from necessary goods that society is in dire need of.

The OIC Fiqh Academy, in its fifth session in Kuwait (held in December 1988), decided that the government should not interfere in the market to control prices unless there is a clear imbalance in the market or when prices are rising due to artificial factors. In such cases, the government should intervene justly with means that eliminate the causes of the imbalance and unfairness (OIC Fiqh Academy, 2000).

Conclusion and the way forward

This study was conducted to analyze fatwas on the issues of pricing Islamic banking and finance products based on conventional interest rate benchmarks. These issues also entail the extent to which sovereign authority can intervene in the market to control prices. At the outset, the study discussed the issue of price control from a Sharīʿah perspective. The study finds that the majority of the jurists of the Ḥanafī, Maliki, Shafiʹi, and Ḥanbalī schools do not approve of government intervention in the market to control prices in the case that the market is fair and stable. However, a group of Ḥanafī, Maliki, and Shafiʹi jurists allow such intervention and price control in situations where the prices of goods are increased above the normal market rate.

Generally, government intervention is not recommended if the market is in a stable condition, and the prices are determined by the market forces of demand and supply. However, government intervention is welcomed if the market is distorted due to speculative practices (Omar et al., 2010).

The study also reviewed the existing fatwas on the issue of using conventional benchmarks such as the KLIBOR and the LIBOR to price Islamic banking and finance products and services. The variations in the opinions of scholars over the use of conventional benchmarks in Islamic banks stem from the way they look at the benchmark itself. A group of jurists observe that the benchmark is a mere number, and hence deem it non-objectionable from a Sharīʿah perspective. In contrast, other groups of jurists prohibit the use of conventional benchmarks by Islamic banks because it is linked to the interest rate, which is a form of ribā.

Lastly, in view of the current conventional banking and economic setting, Islamic banks are compelled to adopt the conventional interest rate benchmark. Several fatwas on benchmarking have recommended the need for extensive and intensive studies towards developing a viable alternative benchmark for the Islamic banking and finance industry. Such studies on this issue would continue

until an effective model of Islamic price benchmarking is launched, and it gets acceptance from the global finance industries, both Islamic and conventional.

Note

1 Reported by al-Khamsah excluding an-Nasa'i; Ibn Hibban graded it Sahih (authentic).

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12

ANALYZING TRADITIONAL BENCHMARKING EXPERIENCES FROM A MAQASID AL-SHARĪʿAH PERSPECTIVE

Mustafa Omar Mohammed, Mohamed Cherif El Amri, and Suheyib Eldersevi

Introduction

The holy Qurʾān and the traditions of the holy Prophet explicitly provided the rules that need to be followed in order to establish a fair market (Ibn Taymiyyah, 1996). It is noticeable in the instructions of the Prophet Muhammad (peace be upon him) that he called for a free market that promotes growth and sustains social welfare (Ibn Qayyim, 1977). There are instances in which the market prices cannot remain free and fair due to market failures. In such a situation, Islam allows the state to interfere in the market to control prices in order to restore genuine equilibrium of demand and supply, free from any forms of manipulation.

One of the important features of the Medina market was that prices were not fixed or controlled. The market prices were determined through the bargaining of the buyers and the sellers to reach certain acceptable general levels of prices. Bargaining powers would normally be benchmarked against prices of similar or equivalent goods (thaman mithli). It was reported that from time to time somebody would come to the Prophet (peace be upon him) and ask him to fix prices that were getting "too high". But the Prophet (peace be upon him) would offer a counter-argument against such a suggestion and said, "Indeed Allah is al-Musa'ir [the price setter], al-Qabid [one who withholds sustenance], al-Basit [one who expands sustenance], al-Razzaq [the sustainer]. And I wish to meet my Lord without any of you seeking (recompense from) me for an injustice involving blood or wealth" (narrated in Sunan Ibn Majah, Ḥadīth 2200).

The issues of traditional benchmarking therefore hinge on three fundamentals: a free market, bargaining of prices benchmarked on prices of similar goods, and administrative price control. These were among the critical issues that jurists and

scholars dealt with in the past. Islamic jurists were engaged in extensive discussions on the circumstances that justified price control and made it lawful or unlawful and unnecessary. Yet there is another area of traditional benchmarking where there is a dearth of literature, which is Maqasid al-Sharīʿah. This has created a gap for the need to examine the traditional experiences of benchmarking from the Maqasid perspective. This is important, especially in the areas of Maqasid related to the preservation of wealth, whose elements of Maqasid include wealth circulation, stability, and justice, among others. These elements have a strong correlation to pricing and benchmarking.

The subject of Maqasid al-Sharīʿah or the objectives of Sharīʿah have gained increasing importance over the years. Several conferences are being held, and there are now volumes of literature on al-Maqasid related studies. The first discussion on al-Maqasid theorization started with al-Imam al-Juwayni (1997). His crude theory was later refined by his student, al-Ghazali (2004). Later on, the works of Abu Ishaq al-Shatibi (1964) and Tahir Ibn Ashur (2006) elaborated and expanded the Maqasid theory as presented by al-Ghazali. Thereafter, al-Maqasid gradually developed into an independent area of study.

This study is conducted with analyzing the traditional benchmarking based specifically on the Maqasid of preserving wealth (Hifz al-Mal). Several fiqh textbooks on muamalat specify the following as the general objectives (Maqasid ‘ammah) of the preservation of wealth: circulation (rawaj), clarity (wuduh), stability (thabat), and justice (‘adl), to which one may add a fifth, namely, growth and development (tanmiyah) (Kamali, 2017).

To analyze issues of traditional benchmarking experiences from the Maqasid al-Sharīʿah perspective, this study aims to achieve the following objectives: (a) to survey the literature on issues related to traditional benchmarking in relation to al-Maqasid; (b) to analyze the issues and identify the gaps for future research; and (c) to provide recommendations and suggestions for future research.

To achieve these objectives, the study has adopted an exploratory research design. It has used a qualitative method in the form of literature survey and analysis based on the following steps: firstly, it has used a survey of the literature on traditional benchmarking in relation to al-Maqasid. Secondly, it has conducted a meta-analysis to identify issues and trends in traditional benchmarking in relation to al-Maqasid. Thirdly, it has used a thematic analysis to identify gaps for future research.

This study is structured into four sections. After the introduction, the second section reviews the extant literature. The third section analyzes and discusses traditional benchmarking in relation to al-Maqasid. The fourth section concludes the study and suggest the way forward.

Literature review

This section reviews the literature that has been categorized into three main themes. The first category of literature relates to traditional benchmarking experiences.

Works in this category are largely descriptive, with the discussion focusing on the determination of prices in the free market based on the forces of supply and demand; determination of prices based on the bargain of sellers and buyers benchmarking the prices of equivalent goods; and price control, and the circumstances under which states are allowed to intervene in the market and administer prices. This category has not linked the literature to Maqasid al-Sharīʿah. The second category of literature reviewed relates to Maqasid al-Sharīʿah. There are hardly any works that have related traditional benchmarking to al-Maqasid. Nevertheless, the authors have benefited from the literature on the concept and the theory of al-Maqasid to identify the relevant dimensions to traditional benchmarking. Based on these dimensions identified in the second category of literature, the third category tries to review works that might have used these Maqasid dimensions and elements to analyze traditional benchmarking. Again, there are hardly any works in this third category.

Therefore, the primary gap in the literature lies in the absence of any works that have used the relevant Maqasid dimensions to analyze traditional benchmarking, hence setting a direction for future research in the area.

Traditional benchmarking experiences

The subject of traditional benchmarking has been discussed at length by the four schools of fiqh as well as by prominent jurists. The majority of the early works regarding this topic were done in Arabic. Among the prominent studies is the book entitled *Adab al-Hisbah* by al-Imam Abdullah al-Saqati (1931). The author discussed the appointment of an ombudsman, his functions, and responsibilities. The author also discussed the issue of price administration and the situations that render such pricing mechanisms lawful. Abdul Rahman Ibn Nasir (1946) wrote a book entitled *Nihayat al-Rutbah fi Talab al-Hisbah*. The author discussed the free market in Islam, the activities of the Islamic market, and issues that arise. He explained that the Islamic market is concerned with the activities that contribute to the real economy. In the same vein, Ibn Taymiyyah (1996) wrote *al-Hisbah fi Islam*. He discussed prices that are deemed acceptable from the Sharīʿah perspective

Bashar (1997) conducted a study titled “Price control in an Islamic economy”. He discussed the position of the scholars on the issue of price control. He stated that early scholars such as Ibn Khaldun and Ibn Taymiyyah have permitted state intervention in controlling prices if there were unjust practices in the market. On the other hand, Omar et al. (2010) stated that the government is not allowed to interfere in the market and control prices so that they are lower or higher than the market rate as long as the market is stable and is not under any speculative attack. This opinion was supported by the jurists of the four schools of fiqh, namely Ḥanafī, Maliki, Shafiʹi, and Ḥanbalī . They have substantiated their views with several authentic ḥadīths (Omar et al., 2010).

Furthermore, there are modern works that have discussed the viewpoint of Sharīʿah regarding price controls, as well as the current situation under which

price control becomes justified and necessary. Among these modern works are a book titled *Ahkam al Tas'ir fi al-Fiqhi al-Islami* by Muhammad Abu al Huda al Ya'kubi (2000), and another study by Muhammad bin Ahmad bin Salih (2001) titled *Al-Ru'ya al-Islamiyyah li tas'ir al-sila' wa al-khadamat*.

Al-Maqasid: concept and theory

Basic concepts

Maqasid is the plural of "Maqsid". There are several literal meanings of Maqsid, which include purpose, intent, objective, principle, goal, and end. Therefore, Maqasid al-Sharīʿah can be defined as the objectives, purposes, intents, ends, or principles behind Islamic law or Islamic rulings (Ibn 'Ashur, 2006). Al-Raisuni (1995) stated that Maqasid al-Sharīʿah could be explained as the higher objectives of the lawgiver.

Al-Imam al-Ghazali (2004) sees the broad objectives of al-Maqasid as promoting maslahah (welfare) and deterring mafsadah (harm) (Al-Ghazali, 2004). Specifically, he classified maslahah into three levels: daruriyat (necessity), hajiyaat (compliment), and tahsiniyaat (embellishment). He further classified daruriyat into the preservation of five essential elements, namely the preservation [hifz] of deen (religion), nafs (life), aql (intellect), nasl (progeny), and mal (property). Imam al-Tahir Ibn Ashur stated that "the universal Maqasid of the Islamic law is to maintain orderliness, equality, freedom, facilitation, and the preservation of pure natural disposition (*fitrah*)" (Auda, 2007).

Shaikh Yusuf al-Qaradawi derived from the Qurʾān the following principles and concepts, which he considers the universal Maqasid: "Preserving true faith, maintaining human dignity and rights, calling people to worship God, purifying the soul, restoring moral values, building good families, treating women fairly, building a strong Islamic nation and advocating for a cooperative world" (Auda, 2007).

As discussed above, Maqasid al-Sharīʿah is normally classified according to levels of maslahah. Ibn 'Ashur (2006), in his comprehensive book pertaining to Maqasid al-Sharīʿah, classified maslahah into maslahah daruriyyat (maslahah for essentials), which consists of the preservation of the five objectives, namely the protection of religion, life, intellect, lineage, and property. The second type is maslahah hajiyyah (maslahah for complementarities), which is below the daruriyyat level, which is like the supplementary actions that must be taken to protect the daruriyyat. The last type is maslahah tahsiniyaat (maslahah for embellishments), which perfects the life of a Muslim.

Maqasid has also been classified according to their goals, to include definitive goals (al-Maqasid al-Qat'iyyah) and speculative purposes (al-Maqasid al-Dhanniyyah) as well as general purposes (al-Maqasid al-Ammah) and particular purposes (al-Maqasid al-Khassah) (Al-Raisuni, 1995).

Classification of Maqasid al-Sharīʿah

Muslim scholars have classified Maqasid al-Sharīʿah differently. The majority of scholars classify them into three main categories: daruriyyat (essentials), hajiyyat (complements), and tahsiniyaat (embellishments). The daruriyyat are vital elements that people's lives depend on so that if they are absent, the system of life will be chaotic. They are considered as vital for the foundation of welfare or maslahah in this world and the Hereafter. The essential daruriyyat is divided into five: preservation of faith/religion (deen); preservation of life (nafs); preservation of lineage/descendants (nasl); preservation of property (mal); and preservation of intellect/reason (‘Aql) (Al-Ghazali, 2004).

The adoption of daruriyat is obligatory to ensure that the welfare of the society and individuals functions normally and is achieved. The Sharīʿah seeks always to improve the lives of its followers, it seeks to eradicate at the level of daruriyat all forms of mafsadah such as poverty and ot2her forms of hardships on individuals and the community. The aim of achieving daruriyat is to ensure a great life for Muslims (Al-Yusuf, 2007).

Hajiyyat serves as complementary to the necessities. Without the complementary factors, people will face hardship. However, their absence will not create a complete disruption of the normal order of life, as is the case with the necessities (Ibn ‘Ashur, 2006).

Tahsiniyaat relates to matters that grant enhancement in society and guide to an improved life. The rationale for tahsiniyat is the accomplishment of integrity and perfection of the entire character and behavior of a person. However, in the absence of these values, society will still be able to function and lead a normal life without any interruptions. Examples of tahsiniyat are charity (sadaqah) and other ethical and moral acts (Ibn ‘Ashur, 2006).

Apart from these classifications of daruriyat, hajiyat, and tahsiniyat, based on the al-Ghazali’s famous theory of al-Maqasid, there are several other fiqh textbooks on muamalat that have specified the following general objectives (Maqasid ‘ammah) of the preservation of wealth: circulation of wealth (rawaj), clarity (wuduh), stability (thabat), justice (‘adl), and storage (hifz) to which one may add a fifth, namely growth and development (tanmiyah) (Kamali, 2017). These general objectives can be considered important dimensions for the analysis of traditional benchmarking in the subsequent third section of this chapter.

The traditional exercise of benchmarking and al-Maqasid

There are several studies that have investigated the relationship between muamalat (financial transaction) and al-Maqasid. Furthermore, there are equally numerous contemporary studies that have investigated the relationship between the modern Islamic financial system, banking, the capital market and takāful, and al-Maqasid. However, there are hardly any studies that have examined traditional benchmarking in relation to al-Maqasid. Therefore, the present chapter, to the best

knowledge of the authors, is so far the only study that is dedicated to analyzing in-depth traditional benchmarking and al-Maqasid.

Analysis of traditional benchmarking based on al-Maqasid

As mentioned previously, the primary objective of this study is to analyze traditional benchmarking specifically from the perspective of the Maqasid of preserving wealth. The analysis is based on the following dimensions derived from the review of literature of fiqh textbooks on muamalat that have specified the following general objectives (Maqasid ‘ammah) of the preservation of wealth: circulation of wealth (rawaj), clarity (wuduh), stability (thabat), justice (‘adl), and storage (hifz) to which one may add a fifth, namely, growth and development (tanmiyah) (Kamali, 2017). Therefore, traditional benchmarking is going to be analyzed based on these five dimensions shown in Figure 12.1.

Al-rawaj (circulation)

Rawaj, in the context of Maqasid al-Sharīʿah, means the circulation of wealth among as many people as possible, an injunction that is prescribed in the Qurʾān by Allah (SWT), who says, “so that they [wealth] do not circulate among the rich among you” (al-Hashr:7). This is an indication and injunction that money must circulate and must exchange between the hands of as many people as possible. The more the money velocity, the more people can exchange transactions and share income because of expenditure. This Qurʾānic injunction is supported by a ḥadīth narrated by Imam Malik, who says, “Trade with the property of orphans so that it does not deplete/eaten away by zakat [because it remains idle without circulation]” (Zakat, ḥadīth no. 12). This ḥadīth also indicates that the wealth of orphans must be circulated in the economy so that it will grow and develop. This ḥadīth also indicates that the wealth of orphans has to be circulated in the economy for the purpose of growth (Abdul Majeed, n.d.). The ultimate goal is

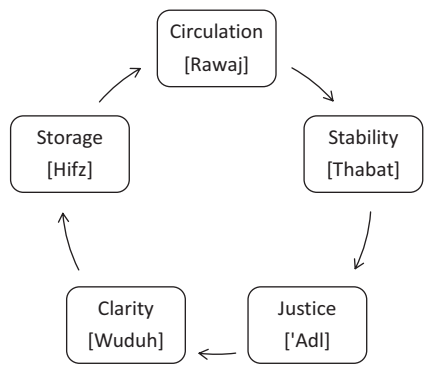

Figure 12.1 The five dimensions of the preservation of wealth

to achieve the rawaj objective, which would have a great positive impact on the economy.

This objective is among the greatest Sharīʿah objectives that encourages participation in an economy. It is noted that the Sharīʿah has facilitated the circulation of wealth in various ways. It has legitimized contracts, transactions, and unilateral acts that regulate the transfer of wealth and services in the community through as many hands as possible (Kamali, 2017). Moreover, to preserve this objective, Sharīʿah forbids ribā (usury) and its means, since it leads to a limited circulation of wealth among one group only, which is the people who deal with ribā. Thus, it affects the entire community.

Considering the rawaj objective, it is obvious that the traditional exercise of benchmarking achieved this objective. This is because the traditional exercise of benchmarking was based on demand and supply of the equivalent products and services. It was directly attached to real economic activities. Therefore, the result was a market with a fair price, which subsequently encouraged sellers and buyers to participate in the market (Husban, 2017). On the other hand, Sharīʿah allowed price control to eradicate monopolistic competition that distorts the market. The basis of allowing such administrative pricing is to push the participants of the market towards the circulation of wealth.

According to Figure 12.2, wealth circulation allowed volumes of transactions in the real economy. The increase in the supply and demand created wider opportunities for price bargains, benchmarked against the prices of equivalent commodities. Such pricing mechanisms in the real economy led to a fair price in a free market.

Al-wuduh (carity)

According to Ibn Ashur (2006), wuduh as a Maqsid of Sharīʿah means transparency. It also means protection of wealth and keeping it far from all harm. Sharīʿah has legalized guarantee, agency, and surety (kafalah, wakalah, damanah), earnest deposit (hamish al-jiddiyyah), and pawnbroking (al-rahn) which all aim at the preservation of wealth with clear ownership rights, clear quantity of goods, clear identity of the contracting parties and right holders, and those who bear obligations

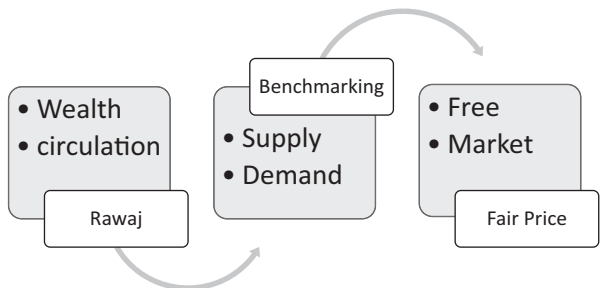

Figure 12.2 Rawaj, fair market price, and benchmark

regarding the assets concerned (Kamali, 2017). Allah (SWT) says, "O you who have faith! When you contract a loan for a specified term, write it down" (al-Baqarah: 282). Writing helps in documenting the rights, reduces the reasons for disputes, and organizes people's transactions. Also, in the same Surah verse, 283, Allah (SWT) says, "If you are on a journey and you do not find a scribe, then let there be a pledge taken (from the debtor)". Similarly, the objective is to protect the rights of both the lender and borrowers as well as to avoid future disputes (Ahmad and Mesawi, 2016).

Considering the wuduh objective, it is obvious that traditional benchmarking achieved this Maqsid. This is because the traditional exercise of benchmarking was based on transparency in the market. This practice helped people in terms of protecting their wealth, and it helped them avoid disputes in the market.

According to Figure 12.3, clarity allowed volumes of transactions in the real economy. The increase in supply and demand created wider opportunities for price bargains, benchmarked against the prices of equivalent commodities. Such pricing mechanisms in the real economy led to transparency in price setting in a free market.

Al-thabat (stability)

Stability in the preservation of wealth is achieved through a jurisdiction, contracts, and transactions that establish a stable environment for the ownership, exchange, and transfer of goods and services among people. Thus, people are free to go about their investments, and transfer and dispose of their wealth for the fulfillment of their needs and interests (Kamali, 2017). Therefore, any form of authority should ensure it provides a regulatory framework that ensures a level playing field for all market players. This ensures safety, stability, and fair competition, among others.

Considering thabat or stability as a Maqsid, it is obvious that traditional exercise of benchmarking achieved this Maqsid. This is so because the traditional exercise of benchmarking operated in a sound regulatory framework – the Sharīʿah – that gave rights to the people to participate in the market as freely as they like, as long as both parties mutually agree on bargaining and benchmarking their products. There is so much stability that little room was given for factors that create instability, especially of prices. Efforts were made to weed out ribā, gharar,

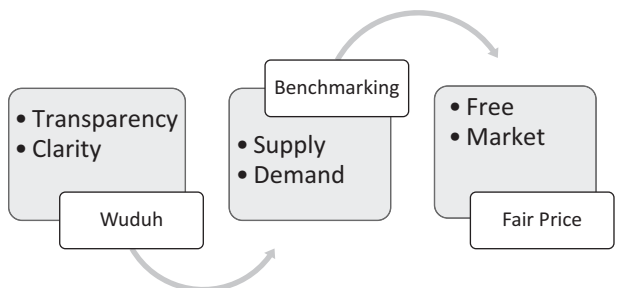

Figure 12.3 Wuduh, fair market price, and benchmark

maysir, exploitation, corruption, manipulation, and speculation, which were the root cause of price distortion in the market.

According to Figure 12.4, stability allowed volumes of transactions in the real economy. The increase in supply and demand created wider opportunities for price bargains, benchmarked against the prices of equivalent commodities. Such pricing mechanisms in the real economy led to price stability in a free market.

Al- ʻadl (justice)

Al-ʻadl or fairness refers to a just way of obtaining wealth. In other words, it means that wealth must be obtained in a just way that is recognized by the Sharīʿah. Allah (SWT) says in the Qurʾān, "Indeed Allah enjoins justice and kindness, and generosity towards relatives, and He forbids indecency, wrongdoing, and aggression. He advises you, so that you may take admonition" (al-Nahl: 99). This verse indicates that Muslims must be fair in assigning rights and ensure fairness in all kinds of activities as well (Ahmad and Mesawi, 2016).

The Sharīʿah has prescribed justice that must be applied in every approach to obtaining wealth, which could be through providing services, exchange with a counterparty, donation, or inheritance. Moreover, the Sharīʿah also urges justice in the distribution of wealth, and production as well as consumption (Ibn ʻAshur, 2006).

This Maqsid of justice has been achieved by traditional benchmarking both directly and indirectly. To ensure a just and fair price, there is bargaining between the buyers and the sellers after benchmarking on the prices of equivalent goods. The bargaining in the real economy, coupled with the forces of supply and demand in a fair market, results in justice for all. Thus, traditional benchmarking acts as an intermediary between seller and buyer to perform a fair transaction where nobody is cheated.

From Figure 12.5, justice allowed volumes of transactions in the real economy. The increase in supply and demand created wider opportunities for price bargains, benchmarked against the prices of equivalent commodities. Such pricing mechanisms in the real economy led to just price in a free market.

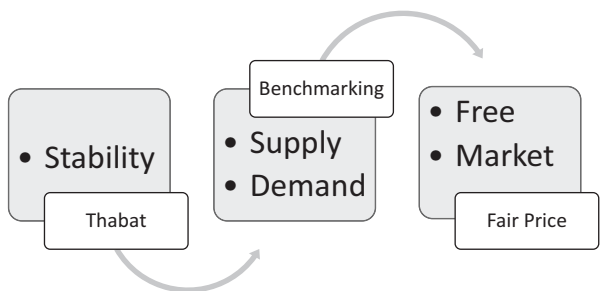

Figure 12.4 Thabat, fair market price, and benchmark

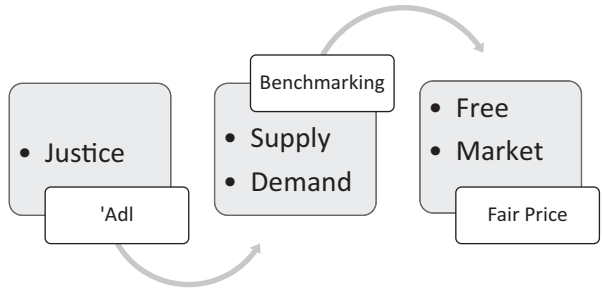

Figure 12.5 'Adl, fair market price, and benchmark

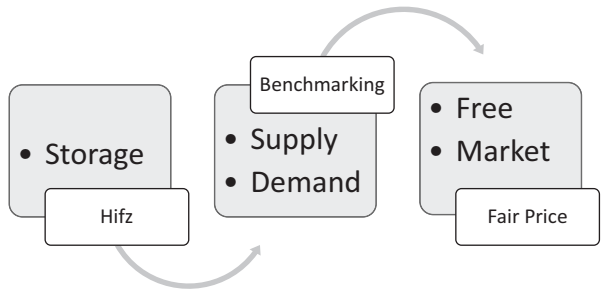

Figure 12.6 Hifz, fair market price, and benchmark

Al-hifz (stored)

According to Ibn Ashur (2006), wealth must have a property and function of being stored (hifz) so that its value can be used in the future. Such a property or function means that it is not acceptable for people to divide their properties among one another in false ways. Hence, all dealings related to the storage of wealth must be based on the mutual consent of the contracting parties. The Sharī ʿah has been keen to protect the wealth and the actions of its followers from any expected harm, by setting a list of preventive terms and provisions (Ibn 'Ashur, 2006).

The storage of wealth has direct implications on traditional benchmarking experiences. As explained earlier, the buyers and sellers bargain over price by benchmarking against prices of equivalent goods. Prices that are determined this way are based on the market forces of supply and demand in the real economy. Such prices are justly determined and ensure the storage of wealth in a fair value to be availed of in the future. In this way traditional benchmarking is able to contribute positively to securing and storing the value of wealth.

According to Figure 12.6, storage of wealth allowed volumes of transactions in the real economy. The increase in supply and demand created wider opportunities

for price bargains, benchmarked against the prices of equivalent commodities. Such pricing mechanisms in the real economy led to the storage of wealth with a fair value to be used later in a free market.

Conclusion

This study has analyzed traditional benchmarking from a Maqasid perspective. The study has established that traditional benchmarking has achieved several dimensions of Maqasid related to the preservation of wealth such as circulation, clarity, stability, justice, and development. The study has also shown that the traditional exercise of benchmarking had a great role to play in terms of establishing fair prices of goods and services in the market, and mutual consent among the contracting parties. Traditional benchmarking was attached to the real economy; thus, it had a great positive impact on the growth and development of the economy.

The study suggests that the responsible authorities of the current benchmarks should consider why the traditional benchmark worked. It is because traditional benchmarking was based on Maqasid al-Sharī ʿah and it led to the prosperity of both the individuals and society in the economy

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Part III

BENCHMARKING ISLAMIC FINANCE

Its law and compliance

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13

LEGAL AND COMPLIANCE REFORM FOR ISLAMIC FINANCIAL BENCHMARKING

Aishath Muneeza and Zakariya Mustapha

Introduction

Islamic financial benchmarking is an area that requires research and needs practical solutions to advance the Islamic finance industry to a greater level. From the inception of contemporary Islamic finance, criticisms have been made about the fact that in Islamic finance, financing rates are benchmarked against conventional interest rates. To respond to these criticisms, Sharīʿah scholars have given justifications from Sharīʿah perspectives and in this regard some scholars ask: "Does consumption of beef suddenly become forbidden if its price were based on the price of pork?" (Alshubaily, 2018).

The use of conventional finance benchmarks in Islamic finance is as old as contemporary Islamic finance practice. Benchmarks such as the London Interbank Offered Rate (LIBOR) have been used to determine Islamic finance's own cost of funds. Thus, even though it is considered Islamic financing, its return on financial investment is arrived at via conventional finance parameters. It has been used as a determinant in both surplus and deficit units in an Islamic financial intermediation (ISRA, 2010; Azad et al., 2018). Various Islamic finance scholars have shared divergent views about the situation. In the view of the renowned scholar Taqi Usmani and several others, using interest rates to benchmark Islamic financial products does not nullify an Islamic financing contract and/or transaction, since the benchmark rate is nothing other than a number which, from a Sharīʿah perspective, is not objectionable. In the same vein, Mohammed El-Gamal is another prominent scholar to whom the use of conventional interest rate benchmarks is not intolerable for Islamic financing. According to this scholar, inventing and using a separate Islamic benchmark is "unnecessary, impractical and dangerous" for, in his view, nascency and immaturity of the market segment in Islamic finance only spell a high liquidity risk (Jaffar, 2018). In contrast, other scholars object to such an opinion and contend that the conventional interest rate is never a reflection of

real economic activity. In essence, a benchmark in Islamic finance needs be determined on the basis of activities that reflect the real economy (Jaffar, 2018), which is in tune with the true nature of Islamic finance.

Accordingly, efforts have been directed at creating and operationalizing an Islamic benchmark, which is to be determined using only Islamic real business parameters. In 2011, such efforts resulted in the production and launching of the first and foremost benchmark for the purpose of Islamic financing. In other words, an Islamic benchmark. This is the Islamic Interbank Benchmark Rate (IIBR). The IIBR is used as a measure of expected profit for a number of identified Islamic banks. Specifically, it is an average of the expected profit on "interbank market funding for Islamic finance industry" (Reuters, 2011). Calculated for each business day, the IIBR uses the contributed rates of no less than 18 key Islamic banking institutions and is obtainable on terminals and enterprise products of Thomson Reuters (Reuters, 2011). The IIBR is, however, criticized as being not actually based on real economic determinants. Consequently, many scholars argued that, to a certain extent, the IIBR calculation resembles that of conventional benchmarks, particularly the LIBOR (Jaffar, 2010). More so, other Islamic scholars in this vein have even stressed that any benchmark calculation not connected to the real economy, in other words not based on real assets' profitability and productivity, is of no benefit to a country's economy (Ghauri, 2013). Although over the years Islamic finance has evolved and reached several milestones, one thing that remains unchanged is the quest for an Islamic financial benchmark (Jaffar, 2018) and the issue continuously generates controversy among Islamic finance scholars.

Literature review

Nature of Islamic financing

Understanding the nature and workings of Islamic banking and/or Islamic finance is important for appreciating the controversy surrounding the use of conventional finance interest rates to determine the cost of funds in Islamic financing businesses. Islamic finance is ethical in nature, based on the principles of Sharīʿah as expounded through Islamic financial jurisprudence (Habib, 2018, p. 3). Popularly known for its prohibition of interest (ribā) in all ramifications and advocating for profit sharing (nisbah) as well as entrepreneurship, Islamic finance is as old as the religion and law of Islam, the Sharīʿah. Additional prohibitions in this regard are transactions involving speculation and gambling (maysir) and excessive uncertainty (gharar) in the quest for a just and distributive social well-being as part of the objective of Sharīʿah or Maqasid al-Sharīʿah (Basov and Bhatti, 2016, pp. 5–6). These are basic tenets of Islamic finance at all times and they determine its compliance with Sharīʿah as well. In its contemporary application and operations, Islamic finance is conceived and implemented as an alternative to conventional finance. This is done through intermediation for financial products and services in

adherence with the dictates of Sharīʿah. Islamic financing and/or Islamic banking is universal, combining both commercial and investment banking and provided to all who are attracted to it by the ethical nature of its products and services as well as return on investment (Archer and Abdel Karim, 2019). In keeping with its tenets and assurance of Sharīʿah compliance and governance, Islamic financial institutions are required to establish an organ for that purpose, which is variously known as a Sharīʿah committee, Sharīʿah board, Sharīʿah advisory committee, etc., located at either or both the institution's level and regulator's level, depending on jurisdiction. This organ statutorily ensures an Islamic financial institution complies with the principles and rules of Sharīʿah in all its transactions and operations as well as the rules of Islamic commercial jurisprudence (Archer and Abdel Karim, 2019). Islamic finance and/or banking provides financial intermediation following Sharīʿah parameters that prohibit interest (receiving and advancing) and other vices while promoting profit and risk sharing in financial transactions. As interest is prohibited and substituted with profit, then profit constitutes a fundamental ideal of Islamic finance that can promote Islamic financing activities.

Conventional financial benchmarks

Since antiquity, conventional finance has mainly revolved around interest (Homer and Sylla, 2005). Based on a determined rate, interest is being used in contemporary world economies to benchmark the cost of financing, otherwise the cost of lending, in financial and money markets (Friedman and Kuttner, 2011). An interest rate is the sum interest accruable over a period of time as a percentage of total sum (principal) deposited, borrowed, or lent, which is an important determinant of national economic decision such as keeping inflation under control (Homer and Sylla, 2005). An interest rate benchmark, as Jaffar (2018) describes it, refers to a "reference rate" or "base rate", determined by national governments through designated monetary authorities (i.e. central banks and other equivalent nomenclature) such as the Federal Reserve in the USA and the Reserve Bank of Australia. There are several interest rate benchmarks in the financial services world today, for instance the Kuala Lumpur Interbank Offered Rate (KLIBOR), the LIBOR, the US Treasury Security benchmark, etc. As benchmarks, individual financial institutions use these interest rates in setting up their own benchmarks and/or interest rates for loan and financing. Financial institutions usually add certain basis points over and above the given benchmark rate. A basis point is a hundredth of a percentage so that a 25-basis point is presented as 0.25%. Accordingly, where an interest rate is 10% and a financial institutions adds 75-basis points to it, the interest rate will be calculated as 10.75% (Jaffar, 2018).

Benchmarking interest rates is considered crucial to the financial (conventional) market for several reasons. First of all, benchmark interest rates are used as a standard reference by practically all financial institutions in pricing their financial products and services including setting interest rates for saving by banks. Secondly, benchmark interest rates are used to determine the worth of

items on balance sheets, including rate of discount for financial valuations and accounting. Thirdly, benchmark interest rates are used likewise and to a great extent in derivatives exchange for futures, options, and swap deals (Jaffar, 2018; Chen, 2012).

The LIBOR is widely used among conventional financial market institutions as a benchmark. Officially launched in 1986 by the British Bankers' Association (BBA), the LIBOR began with three leading currencies of pound sterling, dollar, and yen. Prior to being taken over in January 2014 by Intercontinental Exchange Benchmark Administration, the LIBOR was designated as BBA LIBOR and known as such up to 1 February 2014 (Reddy, 2018). Today, a great number of banks, credit agencies, and other financial institutions worldwide think highly of the LIBOR as a benchmark in setting up interest rates for their own purposes (Reddy, 2018). It is important to understand why the LIBOR has become popular and widely used. Given its lowest borrowing value in comparison to other financial institutions, LIBOR rates have been voluntarily taken up and used primarily by no less than 60 countries around the world. Accordingly, the LIBOR is not limited to only London, England, or Europe (Reddy, 2018). The LIBOR is used as a reference rate for interest to be charged by banks for debt instruments of short-term such as bond (corporate and government) and derivatives including currency and interest swaps. In this regard, the rates offered by the LIBOR serve as a base price for lending institutions to compute interest rates (Reddy, 2018). Therefore, the LIBOR is used in practice as base price plus marginal interest cost in order to enable the institutions involved to hedge exposures to interest rates (Reddy, 2018). Reference and/or base rate in the LIBOR are decided using five major currencies in the world. These currencies are the pound sterling (GBP), US dollar (USD), Euro (EUR), Swiss franc (CHF), and Japanese yen (JPY). In terms of structure, the LIBOR is organized and operated on the quotation rate at which a group of major banks could have a loan of money from other banking institutions before 11 am (GMT) every day. On each working day, almost 35 LIBOR interest rates are published, and the lowest rates are listed for loans involving seven distinct repayment times for the five currencies (Reddy, 2018). The maturity for the LIBOR can extend from a minimum of overnight up to 12 months, even though the three-month USD rate is quoted most. This is computed on a method referred to as "trimmed arithmetic mean", which encompasses extreme values and is stated as "LIBOR+X bps". Bps corresponds to "basis point", while "X" stands for the premium or extra cost levied against the borrower by the lender in addition to the LIBOR rate (Reddy, 2018). On the part of bank customers, the publication of the LIBOR rate among other benchmarks provides an opportunity for them to judge which loan rate is more reasonable in the market. It is noteworthy that the LIBOR is not predetermined; it is rather based on a questionnaire in which designated banks project borrowing rates (Reddy, 2018). Having discussed the interest-based conventional financing benchmark, the next section highlights attempts to develop and/or adopt an equivalent for Islamic financial benchmarking.

An Islamic financial benchmark – and its importance

ISRA (2010) proposed two different models of Islamic financial benchmarks – the Capital Pricing Model (CAPM) and the Arbitrage Asset Pricing Model (APT) or, in other words, Sharīʿah-compliant models of these benchmarks. The CAPM, said to have been originally developed as far back as the 1960s (Barr et al., 2018), links a business or project's market risk to its requisite rate of return. It is, in other words, based on two factors – market risk and rate of return (average) of a particular business (ISRA, 2010). In reality, however, the CAPM was disapproved of for its inadequacies to cater for Islamic finance purposes – being unstable and practically unfeasible (Sadaf and Andleeb, 2014; Jaffar, 2018). Moving ahead in that regard, another model, which is both an extension and alternative to the CAPM, was considered in order to address the inadequacies of the CAPM model. This is the Arbitrage Asset Pricing Model based on an arbitrage pricing theory (APT), developed by Ross Stephen in 1976 (Kisman and Restiyanita, 2015). The APT uses a weighted average of the following four items of macroeconomic significance: money supply, foreign exchange rate, monetary liquidity rate, and composite index return to determine real economic performance as a basis for arriving at its rate (Jaffar, 2018; Azad et al., 2018). In this regard, other factors, which include inflation, exchange rates, industry production, and oil price changes are also considered in this model's computation. As proposed in both models, all non-halal elements are discarded, namely interest rate and any economic activity not based on the real sector like derivate market (Jaffar, 2018; Gharbi, 2016; Hakim et al., 2016). Unfortunately, the ISRA proposal was not welcomed by scholars and practitioners alike, particularly bankers. To these categories of experts, it is anomalous to implement policy rates for Islamic banking different from what is obtained for its conventional counterparts as this would lead to imbalance between the two banking systems, especially in jurisdictions where both obtain (Jaffar, 2018; Hakim et al., 2016). On realistic terms, where, for instance, the Islamic banking profit rate is higher, it would lead customers to incline towards investing there; it would be the other way round if conventional interest rates were higher. The systems are exposed to risk of arbitrage in other word (Azad et al., 2018). It is equally maintained that the task of operating different benchmark price rates for different segments of the financial services industry is a costly one for authorities. Moreover, the proposed benchmark needs be connected with real economic activity or invariably actual production as well as profitability of underlying assets, which in practical terms is not easy to come by (Ghauri, 2013; Jaffar, 2018).

Besides the ISRA proposal, other models have also been suggested for benchmarking Islamic financing by different scholars (Jaffar, 2018). These include Rate of Profit Mechanism Model, a rate calculated through analysis of money markets' profit rate; "Tobin's Q theory", wherein the cost of capital is computed without recourse to any determined interest rate; rate of dividends of Islamic bank deposits and investment accounts, which is obtained through dividends shared by Islamic banking institutions with depositors. Most importantly, there is also

the IIBR, which so far appears to be widely advocated for and popularized as a subject of consideration in several Islamic finance jurisdictions. The IIBR will be examined in subsequent sections of the chapter.

Sharīʿah scholars' views on adopting conventional benchmarks in Islamic finance

There is no unanimous agreement among Sharīʿah scholars on the permissibility of adopting conventional benchmarks in Islamic finance. However, it has been observed that even though doing so is not forbidden, it is at best not desired, and can continue until specific alternative benchmarks are formulated and adopted for Islamic finance (Jaman, 2011). According to Taqi Usmani, the use of interest rates to determine a benchmark profit rate for Islamic finance cannot, from a Sharīʿah viewpoint, render invalid a whole transaction so long as all validity pillars of sale are completed. On the other hand, where a conventional bank uses an Islamic benchmark to determine the interest rate, that cannot be said to Islamize an otherwise forbidden transaction (Usmani, 2002; Jaman, 2011). This is a logical argument put forth in justifying the use of conventional financial benchmarking in Islamic finance. Likewise, Yusuf DeLorenzo asserted that a benchmark is a mere number and its usage from a Sharīʿah perspective is therefore not objectionable (Jaman, 2011). In one extreme end, according to Mahmoud El-Gamal, an Islamic benchmark is not only unnecessary, but dangerous and impracticable. This is because, as the erudite scholar opined, the Islamic finance industry is not deep enough and lacks good enough liquidity to form its own uniform rate (El-Gamal, 2006; Supriyanto, 2016). While advocating for the status quo, some scholars contended that a separate benchmark for Islamic finance is needless as capital market indicators and money can be suitably used to determine a benchmark (Askari et al., 2011). In the words of Aznan Hasan,

> If you were to have in one country two benchmarks – Islamic and conventional – together, it will not be easy for the country to adopt the situation as people will arbitrage. Once they see conventional financing is much better, they will go for conventional. Once they see Islamic is much better, they will go for Islamic. In that situation, it will give a big turbulence to a country.
>
> (Y-Sing, 2009)

In contrast to the foregoing arguments, other scholars firmly hold onto making a case for a distinct benchmark for Islamic finance and continue advocating in that regard. According to Yahia Abdul Rahman, an Islamic benchmark can be determined using the real market index and mark to the market methodology. Accordingly, profit rate and real sector activities, which are in tandem with and represent the true essence of Islamic finance, should be used to set up a benchmark (Rahman, 2010). Similarly, as Masudul Alam Choudhury asserted, the real

sector and profit rate are positively related such that they form an equilibrium factor for a monetary system; in other words, an Islamic benchmark rate can be grounded on them (Choudhury, 1993, Supriyanto, 2016). Zakir Naik is one of the contemporary scholars who are against the use of conventional benchmarks for Islamic finance (Jaman, 2011). The argument is based on a ḥadīth of holy Prophet Muhammad (peace be upon him), which enjoins Muslims to deviate or differentiate their practices from non-Muslims. The ḥadīth was narrated by al-Bukhari (ḥadīth no. 222) from Ibn Abbas, who said:

> The Prophet (saw) came to Medina and saw the Jews fasting on the tenth day of Muharram (Ashura). He said, "What is this?" They said, "This is a good day; this is the day when Allah saved the Children of Israel from their enemy and Moosa fasted on this day." He (the Prophet) said, "We are closer to Moosa than you." So, the Prophet (saw) fasted on this day and told the people to fast. Most importantly, the Prophet (saw) said, "If I am still alive next year, I will certainly fast the ninth day."
>
> Narrated by Muslim (ḥadīth no. 1134)

To differentiate the practice, the Prophet (peace be upon him) recommended Muslims to fast on the ninth and tenth of Muharram while the Jews fast on the tenth alone. As a forbidden non-Muslim practice, interest rates should therefore not be considered in benchmarking for Islamic finance purposes. As much as possible, all types of Islamic finance transactions need be distinct and markedly separated from forbidden conventional finance practices (Jaman, 2011).

Toward Islamic financial benchmarking: the IIBR

The first benchmark to be globally acknowledged with potential application among Islamic finance jurisdictions is the IIBR. This benchmark was launched by Thomson Reuters in 2011 as an outcome of cooperation among various entities including the Islamic Development Bank (IsDB), the Hawkamah Institute for Corporate Governance, Bahrain Association of Banks, Accounting and Auditing Organization of Islamic Financial Institutions (AAOIFI), and several major Islamic banks around the world (Reuters, 2011). The IIBR has been developed with the aim of providing an indicator that determines average expected return on short-term Sharīʿah-compliant funding between banks (Reuters, 2011; Ayub, 2014). For the purpose of pricing Islamic instruments and providing an alternative rate to conventional benchmarks such as the LIBOR, the IIBR uses the rates quoted by 18 Islamic banks and Islamic windows of conventional banks on US dollar funding (Reuters, 2011; Ayub, 2014). The IIBR is defined as

> the profits rate that an individual contributor panel bank would perceive to be reasonable for Sharīʿah complaint funding were it to do so by asking

> for and then accepting inter-bank offers in reasonable market size, just prior to 11.00 am Makkah local time (GMT +3).
>
> (Ayub, 2014, p. 145)

The IIBR uses T+0 (transaction plus 0 days) for overnight funds and T+2 (transaction plus two days) for all other tenors as settlement value dates, which reflects fixed incomes on financing as is the case with interest-based conventional benchmarks (Ayub, 2014; Reuters, 2011). The IIBR operates under the oversight and supervision of two governance committees – the Islamic Benchmark Committee and the Sharīʿah Committee at Thomson Reuters. Calculation of the IIBR is done in consultation with the Islamic Benchmark Committee with approval of the Sharīʿah Committee (Ayub, 2014; Reuters, 2011). The committees are led and guided by distinguished and reputable corporate and multilateral institutions, key Islamic banking industry players, Sharīʿah scholars, experts, and industry specialists among others.

A unique methodology is established for the calculation as follows. Rates in reasonable market size for Sharīʿah-compliant USD funding are provided by a panel of not less than 18 Islamic banks or completely segregated Islamic windows of conventional banks through Thomson Reuters systems between 9.00 am and 10.44 am (Makkah time) each working day. The rates are provided by respective panel banks on the basis of a predetermined question spelled out by the Islamic Benchmark Committee with approval of the Sharīʿah Committee. At 10.45am, Thomson Reuters takes the rates and ensures their genuineness though manual and automated review and audit procedures. The rates are then graded and positioned highest to lowest. In order to make sure outliers do not have an effect on the distribution, the topmost and bottommost quartiles of the rates are left out. Consequently, of the 18 provided rates, eight are left out – four highest and four lowest. From the two remaining mid quartiles' values, an average (arithmetic mean) is then computed and rounded to five decimal places, which gives the IIBR (Reuters, 2011). The following is the question the panel banks are required to provide answers to as part of the criteria for considering their respective rates as contributions towards computing the IIBR: "What is the expected profit rate that you would distribute for an interbank Sharīʿah compliant funding transaction, were you to do so by asking for and then accepting inter-bank offers for a market amount of USD for the tenors specified below?" (Ayub, 2014, p. 146). For this purpose, eight tenors are provided thus: overnight, one week, one month, two months, three months, six months, nine months, and 12 months (Reuters, 2011).

As formally indicated by Thomson Reuters, the IIBR can be used for pricing overnight and short-term treasury operations and financing instruments like muḍārabah, pricing of retail financing instruments as well as other benchmarking. Notwithstanding, it has been criticized over its usage of conventional parameters by other scholars who view it just as a reflection of fixed-income financing akin to the interest-based conventional benchmarks. According to Ayub (2014, pp. 149–150),

> the IIBR is not a step forward in the right direction as this leads to complacency, increasing focus on money placements instead of facilitating the real business, and diverts the attention of the economists and the practitioners from striving for development of effective commodities and real assets related benchmarks; and ultimately Islamic finance might become a part and parcel of the conventional finance markets.

On the contrary, Mohammad Akram Laldin believes that the IIBR is a good starting point towards having a separate and distinct benchmark for Islamic finance (Ayub, 2014). However, he believes that as the contemporary financial system is wholly based on the ribāwi system, it is impossible to escape from it when Islamic finance is done in and subject to the same financial system, whether it is in terms of regulation, risk, or other applicable frameworks to it. If Islamic finance needs to come up with its own benchmarking, then Islamic finance needs its own Islamic monetary system as well. He also observes that the 18 banks that provide the rate for the IIBR rely on conventional benchmarking and as such, the "pureness" of the IIBR is affected. He hopes that the IIBR will be developed further to be a reflection of a real economy indicator. He also warns of the effects of using two benchmarks in a single market, which may lead to consequences like arbitrage in the market. Habib Ahmed believes that though the IIBR is a commendable effort, there could be issues arising from it. One important issue he points out is that, as Mohammad Akram Laldin observes, the Islamic banks and Islamic windows of conventional banks that provide the rates in the IIBR depend on conventional benchmarks. Thus, the IIBR is developed through an average of rates that are based on and emanate from interest-based conventional benchmark and so its value is a direct reflection of that (Ayub, 2014).

More liberally, according to Humayon Dar, there is no issue even if Islamic banks use the conventional benchmarks as long as they are not involved in conventional transactions. He provides an example thus: where a bank transacts a "genuine murabahah", i.e. it purchases some goods then keeps an inventory of them (like all other non-banking trading entities). Thereafter, it sells these on murabaha or other permissible trading mode. Then, from a Sharīʿah point of view, it does not matter if the bank considers an interest-based benchmark or even pork price to determine its return rate (Ayub, 2014; p. 153). As such, he believes the IIBR is a futile exercise as it is not different from conventional benchmarks.

Case study: reference rate framework of Bank Negara Malaysia

Establishing and operationalizing a benchmark framework as exemplified by the Bank Negara Malaysia's initiative represents regulators' efforts in guiding and streamlining practices of benchmarking, at least at a national level. Malaysia's Reference Rate Framework (RRF) is viewed as such. Malaysia's RRF was introduced by Bank Negara Malaysia (BNM) and made effective on 18 August 2016. As the introduction to this framework relates, reference

rates enable financial service providers (FSPs) to adjust floating lending rates to signal changes to costs of funding that may result from variations in central bank policies as well as conditions of market funding. Altogether, reference rates, while ensuring transmission of changes in monetary policy to borrowers, also establish the basis to price floating rate loans and/or financing facilities. Accordingly, how reference rates are developed and utilized would bring about effective financial intermediation and enable effective transmission of monetary policy. The framework is a policy document applicable to all Islamic banks in Malaysia. It provides for the reference rate that can be used to price financing facilities and retail loans as well as all Sharī ʿah-compliant financing (BNM, 2018).

Long before the RRF, there was a base lending rate (BLR) framework in operation since 1983. However, FSPs were allowed greater flexibility over time and set their own BLR based on business strategies and cost structures. Additionally, FSPs can decide a lending rate on their own for all loan-based products and credit services based on considerations of individual FSP peculiarities, as well as trends within the industry. Upon the liberalization of interest rates, the costs of lending on retail scale in the financial system have been found to go jointly with the lending cost and the risk FSPs generally assumed. Nonetheless, whilst the BLRs move due to variations in BNM's Overnight Policy Rate (OPR), rates of retail lending have been adjusted generally to be less. This phenomenon indicates that the relationship between BLR and costs of retail lending has been weakened. Moreover, the growing competition level in the retail section, given surplus liquidity, has stimulated the provision of financing facilities/retail loans at a sizable discount to the BLR in the last few years. This has led to uneven variations in financial policy pertaining to the rates of financing determined between existing and new borrowers. These tendencies are pointers to the fact that the BLR has emerged to be less relevant as a meaningful reference rate to prices of retail financing products. Absence of transparency and measurability in setting BLRs through FSPs has additionally expanded the challenges of evaluating and conveying the efficiency of transmitting financial policy to retail lending rates (BNM, 2018).

As a policy document, the framework aims to provide for and promote a reference rate that is above board and enables consumers make an informed decision through meaningful comparison; a rate that is an enhanced reflection of variation in the cost of funds due to monetary policy or conditions of market funding and a rate that reassures of more controlled and effective practices among FSPs in terms of retail loans and/or financing facilities pricing. The framework defines certain terms relevant for understanding the working of the rate. For instance, marginal cost of funds is defined as the incremental costs that FSPs would bear to get new funding. Lending rates refer to the rates of conventional financing and retail loans as well as rates for Islamic retail financing facilities. Retail loan and financing facilities refer to funding granted to individuals, which is priced against a reference rate. These include but are not limited to vehicle financing, housing loans, business, and personal financing. It is noteworthy that by this framework, BLR

encompasses the base financing rate (BFR) for the purpose of facilities obtainable in Islamic retail financing (BNM, 2018).

By its effective date, the framework requires all FSPs to use base rate (BR) as reference rate to price financing facilities, comprising applications for new facilities, refinancing of existing retail facilities, and renewing existing revolving financing facilities. The BR is computed using FSP's benchmark price for funding and its statutory reserve requirement (SRR). Similarly, it is a requirement upon each FSP to be able to show by its operation that the benchmark cost of funds is a reflection of its own funding strategies. FSP need to ensure changes in the benchmark cost of funds correspond closely to changes in the FSP's costs of funds. The benchmark cost of funds is required to be based upon marginal cost of funds. Again, it is mandatory on FSPs to establish their respective BR methodology in addition to ensuring the methodology receives endorsement of the FSP board and relevant internal committees. The methodology needs be compatible with each FSP's own funding strategies as well as describe how variations in OPR will be reflected in the BR. The benchmark cost of funds is used to price retail financing facilities with a view to ensuring a more efficient monetary policy transmission from OPR adjustments to lending rates on retail financing facilities, among other purposes. The BR is meant to show interest rate risk management, which is influenced directly by changes in monetary policy and conditions of market funding. Marginal cost of funds ensures the BR is responsive to variation in policy rates, which, in sequence, enhances the conveyance of monetary policy from OPR adjustments to lending rates on retail financing facilities. Accordingly, where a change occurs in OPR, FSPs must adjust the BR to show the degree of the change in accordance with an FSP's BR methodology (BNM, 2018).

FSPs are required to establish proper policies and clear governance arrangements of their own to determine the BR in addition to setting up a basis for their choice of benchmark cost of funds. The methodology and process used as well as data utilized to determine the BR shall be properly documented and made accessible for BNM's supervisory review whenever required. Periodically, FSPs can review their BR methodology to make sure it remains consistent with each FSP's strategies of funding. The BR methodology of every FSP shall be subjected to an independent review by or through an external and independent control mechanism like audit function. Revisions to the BR are only allowed quarterly, other than for variations due to OPR change. This is to reduce frequent and excessive adjustments to the BR and ensure the methodology at all times reflects funding strategies of FSP.

Therefore, upon executing contracts for retail financing facilities, no revision will be made of the spread above the BR so long as the retail financing facility subsists but only to reflect changes in creditworthiness or borrower's credit risk profile over the financing facilities' tenor. Aside from changes in the borrower's credit risk profile, FSPs cannot increase the spread on financing facilities that are outstanding to mirror variations in cost of operations, management strategies funding, and experience relating to portfolio default. Thus, the spread cannot be

increased by FSPs to attain a higher margin of profit during the subsistence of a financing facility. In the event of some upward or downward modifications to BLR and BR, FSPs are required to review the monthly installments of the financing facilities priced by default against the BLR and BR. Consequently, FSPs provide borrowers with details of the revised installment(s)' amounts not later than seven calendar days before the date the revised installment(s) take effect. Borrowers may be allowed by the FSPs to retain the sum of monthly installment(s) upon a request to that effect. In this case, the FSPs shall explain to the borrowers the consequence of such action as well as any new term or additional cost of borrowing, if any, incurred due to extension of the tenure of the financing facility (BNM, 2018).

In terms of deposit rate, it is at the disposal of FSPs to determine the payable rates on deposits they accept based upon their funding strategies and requirements. For instance, under paragraph 9 RRF, for "conventional savings accounts for children, the payable deposit rates on accounts that have a balance of up to RM50,000 shall not be lower than the 1-month fixed deposit rate of the respective FSPs". Meanwhile, for "a Housing Development Account, the rate payable shall be computed on the daily balance set at 1-month fixed deposit account rate – 1%" (BNM, 2018, p. 6). Under paragraph 10 RRF, FSPs are required to disclose to their customers, both new and existing, the benchmark cost of funds they utilized in determining the BR. It is also required of them to disclose the last three years' historical series of the benchmark. In this regard, "disclosures to customers shall include the possible scenarios that could result in a change to the BR" (BNM, 2018, p. 7).

Regulatory issues in current Islamic financial benchmarking

Replicating conventional financing

In view of the foregoing discussions and in the light of the scholars and experts' viewpoints highlighted, it may not be entirely wrong to assert that efforts to benchmark Islamic finance are so far largely a reflection of conventional financing practices. While prioritizing national financial stability via monetary policies, regulations are surely instrumental to guiding the efforts and initiatives in this regard. These tasks rest squarely on financial services regulators to be successfully implemented and maintained. Islamic finance should be distinct and separate from ribāwi transactions on the basis of best practice and superior performance, a fact that needs to underpin the quest for Islamic financial benchmarking endeavors. The best practice for anything "Islamic" is to emulate the holy Prophet Muhammad (peace be upon him) and need to differentiate Islamic versions of every financial practice from non-Islamic practices. To maintain and sustain Islamic finance within the confines of Sharīʿah and without needless replications, avoidance of any tendency that would in the long run allow Islamic finance to slide into the aberrations of conventional practice shall be the task of all regulators and concerned stakeholders.

Undermining the value of assets

The Islamic finance system is based on asset value rather than money value (Jaffar, 2018). When conventional financial benchmarks are utilized in Islamic finance, the value of money is emphasized more and, as a result, the true nature of Islamic financial contracts used in Islamic finance that is primarily based on selling or leasing of an asset or profit sharing or providing a service for a consideration is not reflected in pricing of the products. As observed by Jaffar (2018), "rather than making money by offering loans or mortgages and charging interest rate through financial products, a Sharīʿah compliant bank is supposed to use depositor's money to acquire assets and share any profits derived therefrom". This could be illustrated by an example given by Jaffar (2018):

> For example, in a real scenario, take the product of Mushārakah Mutanaqisah Partnership (MMP) which is used in Islamic banking around the world. This financial instrument is also known as diminishing partnership between customer and banker. The customer will pay a monthly rental payment to the bank and will pay some amount for a certain period to redeem the bank's share portion so that the customer can, over time, acquire total ownership of a particular house or real estate. Theoretically, the MMP should be referring to the rental index or house price index. Compared to conventional mortgages, the period of financing and the cost of acquiring the property can be reduced through the MMP contract. However, practically, most Islamic banks still continue to use interest rate and are reluctant to apply the rental rate index for the calculation of MMP monthly payment.

Need for reform in Islamic financial benchmarking

It has always been said that Islamic finance should have its own benchmarking, which ought to be different from conventional financial benchmarking. Several authors and scholars have voiced the view that there is a need to come up with a specific Islamic financial benchmarking that reflects the true nature of Islamic finance, which is premised on sale, lease, or partnership-based transactions. Importantly, the cost of funding can always be considered as part of that benchmark. It is, however, argued that there is no need to consider the cost of fund since there is no debtor–creditor relationship, a debt-based contract, in Islamic finance. Moreover, it suffices to consider key features including existence of underlying assets or the underlying economic activities the transactions involve and the nature of the relationship between the parties (based on a Sharīʿah contract). Instead of benchmarking, the approach shall, as the way forward, be ascertaining the price of the underlying assets involved in the transaction and determining profit-sharing ratios based on projections made on the intended business activity in this regard. This does not mean that a benchmark is not required; it rather means that a benchmark is required to set pricing or lease or to determine the profit-sharing ratio in

Islamic finance. Product pricing is dependent of credit, market, and operational risks (Ghauri, 2013). In line with this, Table 13.1 illustrates how the pricing of Islamic financial products shall be done, moving away from financial benchmarking as such. This approach is in line with the Qur ʾānic verse 2: 275.

The real issue lies with the existing monetary system being practiced. The existing monetary system is based on lending activities and has been evolving since the beginning of human civilization. However, managed money is a new phenomenon that gained popularity following the downfall of the Bretton Woods system in August 1971 (Akther, 2016). From an Islamic perspective, however, it is not possible to find precedence for managed money in the days of the holy Prophet Muhammad (peace be upon him) or in early formative Islamic history. As such, several questions have therefore been continually raised on the most suitable kind of monetary system a Muslim country could choose (Akther, 2016).

According to the seminal work of Khan (1989) on Islamic monetary policy, a theoretical model of an Islamic financial system has been developed by generalizing the standard IS-LM model to study the effects of monetary policy on the macroeconomic variables of an Islamic economy. The erudite scholars maintain that monetary change in money supply and using the flow of muḍārabah financing

Table 13.1 Some parameters to be considered in formulating pricing benchmarks for different types of Sharīʿah contracts

Sharīʿah contract	*Nature*	*Parameters*
Murabahah	Sale-based contract	The nature of a sale-based contract is that there is a sale of an identified asset from buyer to seller. The specific obligations of the parties will depend on the particular Sharīʿah contracts used. As such, this part provides the factors that shall be considered in formulating the pricing benchmarks for different sale-based contracts.
Tawarruq	Sale-based contract	Since Tawarruq involves sale of commodities, the sale of commodities must be based on its market price.
Salam	Sale-based contract	Sale of commodities shall be based on market price.
Istisna'	Sale-based contract	Manufacturing cost shall be determined on the price of raw materials plus the labor cost.
Ijarah	Lease based contract	Rent of the asset shall be determined based on the type of the asset and market rental rate of the asset.
Muḍārabah and mushārakah	Equity based contract	Profit-sharing ratio shall be based on the future projections of the real economic activity.
Wadiah/qardh	Deposit based contracts	Cost of fund cannot be considered. Only the principal amount can be asked to be returned.
Wakalah	Service based contract	Any amount can be charged for the service provided, as long as consent of both parties is present.

Source: Authors' own

as an intermediate objective would work equally and affect economic variables. For instance, an expansionary monetary policy is said to reduce rates of return and increase output.

Recommendation and conclusion

It is evident from the discussion in this chapter that there is a need to formulate a pricing benchmark for Islamic finance considering the nature of specific contracts used in structuring the products and the type, value, and risks of underlying assets or the economic activity involving the transaction. The existing trend of following conventional finance benchmarking shall be deviated from. No matter how many views are found in the industry to support this existing practice, the truth is that now is the time to leave behind the mimicking or replication of conventional finance and create a unique identity for Islamic financing that will reflect its true nature. Doing so will not only help Islamic finance to have a unique identity, but also will ensure that the Islamic finance system will not be creating a balloon effect that will burst in financial crises. The true strength of Islamic finance in a mixed economy and the effect of its risk-sharing nature will only be truly reflected then. As such, purposeful policies need to be developed in order to practically implement this for Islamic finance. An important poser here is this: is it appropriate for Islamic finance that is based on trading activities to use a money loan benchmark as its reference rate? The answer is definitely no. If so, then there is a need to have a specific set of Islamic financial benchmarks. The road towards an Islamic financial benchmark appears long. An initial yet indispensable step is to establish a full-fledged Islamic financial system underpinned by an Islamic monetary system. Establishing and operating an Islamic monetary system requires Sharīʿah scholars, monetary regulators, and relevant policy-makers to collaborate in analyzing and envisaging the costs and benefits it stands to bring to their respective economies and achieving monetary objectives.

Formulating an Islamic monetary system detached from the conventional ribāwi system needs to be considered foremost for a workable Islamic financial benchmarking. This is imperative for the development of a financial benchmarking that is distinctively Islamic. Contemporary Islamic economic and financial systems are dominated by replications of conventional, interest-based activities under different guises. It is evident that among contemporary Islamic economies, financial products and services, banking in particular, cannot uphold most of Maqasid al-Sharīʿah other than the prohibition of ribā because of the nature and the system of their operating environment. In most Islamic economies, interest rates have been an important instrument that plays a role in propelling monetary policy for the purpose of monetary control, inflation rate, and financial stability. Ideally, however, while the Sharīʿah prohibits interest, profit sharing through trade is ordained as substitute. Therefore, as an important cornerstone of Islamic finance, profit sharing should be emphasized in all economic activities. Accordingly, profit rate should be used for benchmarking in Islamic financing. The task of benchmarking

on profit rests with regulators as an integral part of larger Islamic economic and monetary systems. Based on real activities and actual transactions, profit rate can be determined by central banks in gearing up Islamic economies for an optimally operational Islamic monetary system. Thus, cognizant of prevailing real sector economic conditions, the rate and its application shall be guided by the central banks as a matter of policy under their respective economies aimed at facilitating the attainment of macroeconomic objectives. In this regard, purposive strategies are required among Islamic finance jurisdictions to reduce gradually and in time eliminate debt contents in investment activities within their economies with a view to transforming their monetary and financial systems into Sharīʿah-compliant ones.

In view of the foregoing, Islamic monetary policy tools need to be introduced and operationalized in order to establish an Islamic monetary system. In relation to this, profit rate as would be determined by regulators is a matter of monetary policy that will have supervisory implications on Islamic banks and overall financial stability. As Islamic finance is based on real activities, that justifies the prohibition of using a money loan benchmark as its reference rate. Thus, Islamic monetary policy tools that are also based real activities and profit generating are likewise needed. Profit rate benchmarking will be implemented having regard to Islamic monetary policy tools including a Sharīʿah-compliant share of demand deposits from the public, value-based allocation of funds and ratio of qard hasan (benevolent loan) in the economy, among others. These are crucial for the working of the Islamic financing profit rate benchmark. These policy tools need to be introduced for the smooth operation of the Islamic monetary system and its overall goal of profit and people for a just society. It is noteworthy that conventional economic thoughts, as championed by the contemporary capitalist monetary system, have heavily influenced the economies of Muslim countries so much so that some scholars see no benefit in efforts to depart from it and create an Islamic one. Moreover, besides huge commitment in terms of financial resources, the fact that Islamic economies form a negligible segment of the global economy that works on and promotes the interest-based benchmark, a contemporary Islamic economy cannot, though distinct, work in isolation; in other words, the global financial market and Islamic finance are intertwined inevitably. It needs to work seamlessly with the global one for the development of the Islamic economy and involving certain Islamic prohibitions becoming inevitable, a constraint that would at the moment appear insurmountable in many jurisdictions. To address this situation, a dual monetary policy is recommended. Thus, monetary regulators should progressively move their mindsets away from the extant conventional monetary operations while developing an Islamic alternative. Remarkably, given the current system and environment under which Islamic financing operates, the dual monetary policy can only be optimally realized by taking up, as a benchmark, rate of profit. With this, an Islamic financing benchmark will be workable and develop accordingly to facilitate the attainment of distributive societal well-being as a Sharīʿah goal.

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14

IMPLICATIONS OF THE REGULATORY SHIFT FROM THE LIBOR TO THE SONIA BENCHMARK FOR THE ISLAMIC BANKING INDUSTRY IN THE UK

Faizal Ahmad Manjoo and Asif Zaman

Introduction

The London Interbank Offered Rate (LIBOR) is a daily interest rate quotation at which banks lend unsecured loans to other banks in the London wholesale money market. Coyle (2001) defines the LIBOR as "the rate at which an individual contributor panel bank could borrow funds, were it to do so by asking for and then accepting inter-bank offers in reasonable market size, just prior to 11:00 London time". LIBOR benchmarking has been considered as a panacea to address the applicable interest rate for interbank lending for some time. Due to scandals of LIBOR rigging and risk management issues, several central banks have taken the view that the LIBOR benchmark represents a potential systemic risk, and therefore needs to be replaced or reformed. The FCA (Financial Conduct Authority from the Bank of England) opted to revisit this scenario and proposed a fundamental change in the approach towards a risk-free rate called SONIA (Sterling Overnight Index Average), which will be a substitute for the LIBOR. Consequently, at the end of 2021 most UK lenders will switch to this new "risk-free rate" (Bank of England, 28 September 2020). The financial institutions using the LIBOR to price their products will need strategies to protect their business from this financial upheaval. If they do not, they may find themselves in rough seas if the transition is mismanaged. Regulators expect immediate action from firms to deal with this complex transition (Gray et al., 2020). Such a complex transition will not spare the Islamic finance industry because often they use the LIBOR as a benchmark. One of the main problems that Islamic banks will face is that they will have to readjust both their products and the cost of products in line with this new benchmark, which warrants that the risk-free rate to be adopted should be

backward-looking, as compared to the LIBOR, which is forward-looking. This means that the rate to be applied will be determined after a transaction has been entered. This approach has fiqhi ramifications because contractually price stipulation is a pillar in commercial contracts. Hence, this chapter aims to shed some light on the evolution of the LIBOR in order to comprehend the need for having benchmarks in Islamic finance, and also to suggest some solutions for Islamic banks with regard to SONIA. The originality of this chapter is that it brings in a new dimension to address these fiqhi issues. It reassesses the implications of the shift in benchmarking and attempts to suggest some solutions. Despite Islamic banking being different from its conventional counterparts, it nevertheless operates as a financial intermediary for surplus and deficit units (Omar et al., 2010).

A brief discussion on the evolution of the LIBOR

The LIBOR is defined as "the rate at which an individual contributor panel bank could borrow funds, were it to do so by asking for and then accepting inter-bank offers in reasonable market size, just prior to 11:00 London time" (Coyle, 2001). One needs to appreciate this definition because after the transition period, litigations are expected to crop up in interpreting new contracts (Schell, 2018). The LIBOR is thus an interest rate benchmark used to decide the borrowing costs for transactions that involve colossal amounts of loans. These loans are manifested in various on- and off-balance sheet products to provide an estimation. An estimated USD 350 trillion of outstanding contracts in maturities ranging from overnight to more than 30 years is being referenced (ICE, 2016).

The inertia to discover a standard benchmark to computerize the prices for financial products started in the early 1980s by the banking sector. It was on 1 January 1986 that the British Bankers' Association began to publish the LIBOR, which it did until January 2014 (ICE, 2016).

Good standardized and transparent benchmark rates were needed to settle those financial contracts because it also indicates the risk exposure and its mitigation. According to the Bank of International Settlement,

> Interest rate risk in the banking book (IRRBB) refers to the current or prospective risk to the bank's capital and earnings arising from adverse movements in interest rates that affect the bank's banking book positions. When interest rates change, it impacts on the present value and timing of future cash flows change. This then alters the underlying value of a bank's assets, liabilities and off-balance sheet items which result in changes to the economic value which are inevitable. Changes in interest rates also impinge on a bank's earnings by altering interest rate-sensitive income and expenses, affecting its net interest income (NII). Excessive IRRBB can pose a significant threat to a bank's current capital base and/or future earnings if not managed appropriately.
>
> (BIS, 2016, p. 3)

Thus a standardized benchmark rate is important to consider. If it is not, this may lead to gap risk,[1] basis risk,[2] and option risk.[3] Therefore, in search of this standardized and transparent benchmark rate, markets turned to the banking industry trade group and the Bank of England to provide such a rate. The British Bankers' Association (BBA) launched the LIBOR in 1986 – initially with only three currencies – the dollar, the yen, and the pound sterling. Though the BBA promoted the LIBOR as a highly transparent and impartial benchmark, that turned out to be untrue when the LIBOR banking scandals exploded. Due to the rate-manipulation scandal, the FCA had to step in.

The LIBOR: manipulation, scandals, and the adoption of SONIA

Cliff (2012) argues that the LIBOR has long been plagued by perceptions that the method for setting the rates is flawed. It is prone to distorted results during periods of market stress when banks stop lending to each other across the full maturity spectrum, from overnight to one year.

The LIBOR was set by a self-selected, self-policing committee of the world's largest banks. Attempts to manipulate the LIBOR had not escaped the net of the regulator, especially in 2012 (Vaughan and Finch, *The Guardian*, 18 January 2017). Hefty fines were imposed on those big banks. Due to the estimated value of GBP 350 trillion worth of transactions using this benchmark (Wheatley Review of the LIBOR in 2012 gives the figure as USD 300 trillion) the risk was too high and an alternative mechanism was required so that pre-arranged rate scandals did not reoccur. A risk-free rate was proposed, and the UK opted for the SONIA. The SONIA benchmark had existed since 1997 and was administered accordingly. However, in April 2016, the Bank of England decided to administer it. On 23 April 2018, the methodology used to calculate the benchmark was reformed following several rounds of consultation. On 3 August 2020, the Bank of England began publishing the daily SONIA Compounded Index (Bank of England, February 2020).

The definition of the SONIA has two elements:

(i) Statement of underlying interest

The SONIA is a measure of the rate at which interest is paid on sterling short-term wholesale funds in circumstances where credit, liquidity, and other risks are minimal.

(ii) Statement of methodology

On each London business day, the SONIA is measured as the trimmed mean, rounded to four decimal places, of interest rates paid on eligible sterling denominated deposit transactions (Bank of England, 4 August 2020).

The trimmed mean is calculated as the volume-weighted mean rate, based on the central 50% of the volume-weighted distribution of rates.

The question is: will the new SONIA be an effective alternative? Only time can prove this, though in theory it has the potential to be.

Another issue that has come to light from the scandals relates to the precision of calculating the rates for the LIBOR. If it was accurate then how could the manipulated rate manifest? Also, if the application of such a rate is used for long-term financing, then this also brings its own intricacies.

Why does the FCA require a shift?

In addition to the mentioned scandals there are other reasons why a reform of the LIBOR is due to take place. The Wheatley Review Report on the LIBOR issued in 2012 planned a shift from the LIBOR towards a more robust and stable benchmark of interest rate. Consequently, the G20 mandated the Financial Stability Board (FSB) in 2013 to explore the possibility of a fundamental review and reform of key interest rate benchmark rates (Edwards and Malik, 2018). The decline in the liquidity of the underlying interbank markets is one of the key drivers for the reform and the transition away from the LIBOR. The Chief Executive of the FCA has referred to the LIBOR as "measuring the rate at which banks are not borrowing from one another", to highlight the growing risk of it no longer being representative (Wheatley Report, 2012). The permutation of the LIBOR is now based on a reformed methodology, but it still necessitates the support of the submitting panel banks. A drop in the number of underlying transactions in the interbank market has been observed. Nevertheless, the calculation of the LIBOR under the reformed methodology is still reliant on the expert judgment of the panel banks. This process gives rise to certain risks for the panel banks. By analogy with the LIBOR, one can still ask who will be in charge for calculating the proposed SONIA rate? This problem still hovers over the industry. The FCA has received a voluntary agreement from the LIBOR panel banks to continue to submit to the LIBOR until the end of 2021, to enable time for the market to transition away from the LIBOR. Unlike the LIBOR, which is fixed in advance for a set period (e.g. three months), the SONIA is an overnight rate, measured on each day over the interest period to produce a final interest rate at the end. It is a (nearly) risk-free rate as it does not include any term bank credit risk or liquidity premium. These differences between the SONIA and the LIBOR will impact on how interest is calculated.

The FCA study indicates that there is an insufficient volume of transactions in the unsecured wholesale bank borrowing and related market products to enable the determination of LIBOR to be based on actual transactions (Edwards and Malik, 2018). Therefore, the LIBOR panel banks were compelled to have recourse to "expert judgment" in submitting rates. This, however, did not resolve the problem. Given the volume of LIBOR-linked financial products and transactions, this may create financial stability risks. Hence a transition to alternative rates is expected to mitigate the probable market disturbance. Even if some of the panel banks are willing to endorse the LIBOR, it may not be possible to produce

a LIBOR rate that is representative of the relevant underlying market(s) or economic reality. Edwards and Malik (2018) argue that a prohibition on entering new financial products referencing the LIBOR could significantly reduce the liquidity of legacy LIBOR-linked financial products. Furthermore, reducing the number of panel banks may alter the properties of the LIBOR rate more generally, for instance the volatility of the rate. Some of these market dynamics are also present in other regions and in other currencies and they may push for the discontinuation of non-LIBOR standards.

Moreover, the LIBOR entrenches a bank's credit risk premium into its rate. This may not be correct for certain financial products – as liquidity has declined in the interbank market. This bank credit risk premium is being priced by reference to a less active market, and this may make such pricing more volatile, particularly in times of financial distress (Namura, 2020).

What are the replacement interest rate benchmarks?

In March 1997, the Wholesale Market Brokers' Association (WMBA), endorsed by the BBA, introduced the SONIA. This is commonly used as an interest rate benchmark for Sterling Overnight Indexed Swaps (OIS). In April 2016, the British central bank, the Bank of England (BOE), became its administrator and in April 2018 introduced a series of reforms such as Fed's SOFR. The SONIA follows the IOSCO principles for financial benchmarks, with an oversight committee and strict governance on compliance and accountability. The benchmark is published in London at 9.00 am daily, and calculations are volume-weighted and based on the Sterling Money Market Data.

The proposed substitute approach is the new benchmark with a backward-looking rate rather than a forward-looking rate to mitigate these risks identified above. It is expected that the RFR's approach might be a panacea for the LIBOR drawbacks, though it has its own challenges. Some are highlighted here.

- "Backward-looking rate" rather than "forward-looking". This means that the rate applicable will be fixed later rather than fixed at the time of the transaction. This brings a higher element of uncertainty. Consequently borrower and issuer won't know the rate until the end of the interest period (and then an aggregated/compounded interest rate over the period). According to the FCA, unlike the LIBOR, which is fixed in advance for a set period (e.g. three months), the SONIA is an overnight rate, measured on each day over the interest period to produce a final interest rate at the end. It is a nearly risk-free rate as it does not include any term bank credit risk or liquidity premium. These differences between the SONIA and the LIBOR will impact how interest is calculated (Bank of England, January 2020).
- The RFR rate does not seem to include "risk" elements, which the LIBOR does, i.e. both counterparty risk and temporal risk. So RFR rates are historically less than the LIBOR. Banks might need to reconsider their profitability.

With the proposed shift in benchmark, banks will need to re-think the fundamental terms of loan documentation ("cost plus margin" approach). This in turn may open the floodgate of legal risks.

There are some questions that still need to be answered: how to introduce a "term" for RFR and who will calculate it? Will this solution lead to similar concerns that were faced by the LIBOR? What happens to the legacy contracts (i.e. contracts that have used the LIBOR for a longer maturity period than anticipated)? There are issues that will crop up during the transition that may require the need for inter-relationships that work and will most likely deal with market efficiencies if there is widespread use of the same benchmark/reference rate. Trade associations should consider and co-ordinate – ISDA, ICMA, LMA, AFME. There may also be issues with the derivatives solution adopted by the loan/bond market. They might be counterintuitive.

These differences between the SONIA and the LIBOR will impact on how interest is calculated. The SONIA rate is based on actual overnight interest rates in active and liquid wholesale cash and derivative markets – making it more robust and less volatile than the LIBOR. It is also (virtually) risk-free as it does not incorporate any credit risk/liquidity premium, which is inherent in the calculation of LIBOR because LIBOR is predicated on banks lending to each other over longer time periods.

The SONIA is not a like-for-like replacement for the LIBOR and cannot be directly substituted into existing contracts. Given the differences between the two rates, businesses may need to make changes to systems to make use of the SONIA.

What are the key differences between the LIBOR and the SONIA?

As previously discussed, the key difference is that the LIBOR is forward-looking – it is agreed at the start of an interest period whereas the SONIA is backward-looking – it cannot be determined until the end of an agreed interest period. They would in result in borrowers no longer having upfront certainty about the amount of their interest payments and will require relatively last-minute calculations of the interest due.

Market participants have developed several solutions to mitigate the effect of this key difference:

i. Aggregate SONIA rates on a compounded basis over an interest period to produce a term interest rate. Practically this would mean that the interest rate on a SONIA loan would essentially be reset daily, for example a three-month interest period would be made up of three months' worth of daily rates (Dodds et al., 2020).
ii. Use a "lag period" and "observation shift" to reference the SONIA rate because the actual interest rate using compounded SONIA and the related

interest payment amount would only be known at the end of the interest period. What this means is:

a. The period over which the daily SONIA rate is compounded "lags" the interest period by, say, five working days before the start and end of the interest period.
b. The "observation shift" results in interest being calculated from the start of the lag period to the end of the lag period.
c. This allows the compounded rate and related interest payment to be known (in this example) five days before the interest payment date. This will provide borrowers with a working week to move funds (if required) to meet the interest payment (Bank of England, March 2019).

The use of a "lag period" and "observation shift" does reduce the need for last-minute calculations; however, this solution still does not enable rates to be fixed at the start of an interest period, like they are when using the LIBOR. That will only be possible when a forward-looking SONIA term rate is developed (currently a work in progress). A forward-looking SONIA is that it will not include the credit/risk premium as with the forward-looking LIBOR. It might remove the risks that exist with forward-looking rates. The answer is still speculative at this moment as it is still work in progress. This ought to be an important development for Islamic banking products.

Implications of this transition for borrowers

Existing mortgages, loans, deposit facilities, derivatives, and floating rate notes may reference the LIBOR. It can also be found in ancillary contract terms (leasing and servicing contracts), company pension schemes, commercial contracts, and discount rates used in valuations. It is important for borrowers to identify exposures to the LIBOR and to understand the consequences on these contracts if the LIBOR is no longer available (FCA). Some of the implications are discussed here:

1. **Pricing**

SONIA would likely be priced lower than the LIBOR because it does not include the credit/liquidity risk premium as noted above. Lenders will choose the same "all in" interest rate return and are therefore likely to increase the margin or add a "credit adjustment spread" to cover the difference (Dodds et al., 2020).

2. **Reduced certainty over interest rates and payments**

The move from a forward-looking rate to a backward-looking one, even with a lag period and observation shift, is a significant change for borrowers. However, borrowers can draw comfort from SONIA historically being less volatile (and usually

lower) than the LIBOR. Close tracking of the Bank of England base rate will also assist in understanding this change.

Moreover, the impact of the transition may be felt less keenly by real estate finance borrowers who, unlike trading businesses, should have a relatively consistent and stable income deriving from the rent paid by their tenants. Despite this, borrowers may need to manage their cash more actively towards the end of the lag period to ensure they have sufficient funds to meet their interest payments (Dodds et al., 2020).

Implication of abolishment of the LIBOR for Islamic banks

Islamic banking has spearheaded the function of financial intermediation within the Islamic finance industry. The Islamic banking sector operates at multifaceted levels: as a wakil, custodian, partner, entrepreneur, and guarantor. Nonetheless, an alternative Islamic pricing benchmark (IPB) to determine the cost of capital has not been developed by Islamic finance yet. There have been many attempts to address this issue, for instance by Reuters (Omar et al., 2010). However, the market is relatively too small to develop an independent benchmark and hence a conventional benchmark is utilized. The LIBOR has been used predominantly as a benchmark, even though the usage of the LIBOR has its own disadvantages for the Islamic banking industry. The LIBOR has no consideration of the nature of Islamic finance products (Ansari, 2019). It is based on conventional interest rates, which may be acceptable from a fiqhi angle, but from an ethical perspective it needs to have its own modeling to operate and claim its profit. It is also based on a money market rather than economic activity. Islamic finance prefers enhancing the real economy rather than the financial economy. The real economy is where the products produced have intrinsic value within themselves. For instance, a pen will remain a pen in all situations and will be used as such in any country due to its intrinsic value and functions. In consideration of these issues the IFSB has set up governance standards for Islamic financial institutions.

As both Islamic and conventional finance operate in an interest-based fractional reserve fiat banking system, they are interlinked within a similar market environment. Hence, their cost of capital, etc., tends to converge. However, Islamic banking functions are more varied; with most of its financing being asset-based and asset-backed, its cost of capital should be determined not solely by the interest rate, but rather based on returns obtained from the real economy. Nevertheless, due to convergence, Islamic finance is unable to "free" itself from using the LIBOR as its benchmark interest rate (Omar et al., 2010).

Conventional banks can reflect interest rate changes rapidly by using floating rate instruments and interest rate swaps, mitigating their exposure to interest rate risk. The instruments used by Islamic banks are less flexible, making the mitigation of rate of return (RoR) risk more problematic. In the contracts of sale on credit like murabahah, the financier purchases the asset to be financed and sells it to the client on credit with a mark-up on the purchase price, which reflects the cost

of funds and provides the Islamic bank with a commensurate RoR. However, the selling price cannot be modified subsequently to indicate a change in the market cost of funds. Another instrument commonly used by Islamic banks to provide financing to customers is mushārakah mutanāqisah (diminishing mushārakah (DM)). Given that Islamic banks have shorter maturities on the liabilities or funding side, the result may be that customers who have deposited funds with them to earn a return will withdraw them to earn a better return elsewhere. In the case of leasing and DM contracts, there will be some mitigation of RoR risk if the contract allows for periodic changes in the rental, but the periods are typically three or six months (Archer and Karim, 2019).

Difference of opinion among jurists

Using a benchmark acts as a guide for practitioners in determining the profit rate and in turn working out the minimum and maximum price. However, having a benchmark for pricing implicitly comprises an element of price control. Regulatory pricing is an issue that classical jurists discussed extensively.

The consensus relating to pricing control is no government intervention; however, the counterargument is it can be used to prevent zulm (oppression). The ideal is an open market should operate because of the ḥadīths of the Prophet (arguing that Allah is the musa'a'ir, fixer of price) that we should not intervene and allow the natural law of supply and demand. However, contextually, the market is infested with arbitrageurs who often create an imperfect market (Omar et al., 2010).

The Eighth Conference of the Fiqh Academy of the OIC, held in Jeddah 18–19 Shawwal/10–11 April 1993, focused on currency issues. One of the resolutions that was unanimously passed was Resolution No. 7, which urged prompt creation of a new benchmark acceptable from a Sharī ʿah perspective as an alternative to interest-based rates for determining profit margins. This call has also been clearly articulated in AAOFI Standard No. 27 on indices. Clause 7 states that one of the parameters that should guide the development of an Islamic index should be adherence to Sharī ʿah precepts, in addition to the technical control relating to the components of the index and its application (Omar et al., 2010). It is recommended that such an index should be monitored by a Sharī ʿah supervisory board to ensure proper Sharī ʿah audit/review takes place. This exercise is also an important ingredient to create confidence in the market.

The fundamental reason for searching for a new benchmark as an alternative to an interest-based benchmark for borrowing and lending is the prohibition of ribā. Many Sharī ʿah scholars take the view that Islamic banks and financial institutions should get rid of the interest-based benchmark as soon as possible. The main argument is that using an interest rate as a benchmark for a halal business is undesirable and does not advance the basic philosophy of the Islamic economy, thereby making no impact on the system of distribution. However, the fact remains that the banking sector still needs a benchmark to work with. There

are three main reasons why the interest rate benchmark is important in the conventional market. Firstly, it is used by almost all financial institutions as a standardized reference to price the financial contracts, such as to set the profit rate of saving. Secondly, it is used to value balance sheet items such as discount rate for financial valuations and accounting. Thirdly, it is also used extensively in derivatives exchange such as swaps, futures, and options (Syammon Jaffar, n.d.).

Due to their asset-backed financing rather than debt-backed financing approach (Usmani, 1999), Islamic banks need to develop their own benchmarking systems that can evaluate and quantify risks as the link with the underlying asset(s) related to transactions in order not just to provide a Sharī ʿah-compliant product but a more transparent and fair measure that even considers certain customer(s) or asset(s) specifically, not just country(ies) macro financial factors. However, this area is outside the ambit of this research.

Assessing the shift from the LIBOR to the SONIA

While, in the context of conventional debt, the regulators and market stakeholders have settled on the LIBOR being replaced by so-called backward-looking overnight risk-free rates (i.e. the Secured Overnight Financing Rate (SOFR) for USD transactions and the SONIA for GBP transactions), this approach is not a viable solution for the majority of Islamic finance arrangements. The reason for this lies in the differences between how the LIBOR is calculated as compared to how a risk-free rate is determined. The LIBOR is a forward-looking term rate, which can therefore be used to calculate interest at the start of a calculation period, whereas (as mentioned above) the risk-free rates are backward-looking overnight rates that, if applied to a calculation period, can only be determined at the end of that period.

This is problematic for many Islamic financing products given that, for these products to comply with Sharī ʿah law principles, a transaction must be entered into and pricing must be determined at the start of the relevant period. For example, a murabahah structure sees a financier provide credit to a customer as part of an asset sale, which involves the financier buying an asset from a supplier and selling it to the customer on a deferred payment basis, with pricing determined when that asset is sold. The immediate sale and transfer of the asset in question (with a deferred payment obligation) is key to a murabahah product being Sharī ʿah-compliant, so if the pricing was set at a later date, then this would not be acceptable to Sharī ʿah law scholars.

This particular problem was not so long ago acknowledged by the Working Group of the Bank of England, who suggested that in order "to continue with the current market practice, alternate rates should be considered for … Islamic finance which can pay variable rates of return so long as the variable element is pre-determined" (Mcviety et al., 2020).

In this context, it can be argued that now is the appropriate time for the Islamic finance industry to shift away from the use of the LIBOR or conventional benchmark rates and instead create an alternative benchmark rate

Coming up with a new international Islamic rate based on asset transactions may be seen as a long-term (more sustainable) alternative. In addition, cutting ties with a conventional benchmark is likely to be a welcome change from a strict Sharīʿah law perspective. However, whether this is feasible in such a short timeframe is questionable. This is because the establishment of an international Islamic benchmark rate presents several technical and economic challenges. What would the agreed methodology and basis of calculation be? Also, is there currently a sufficient volume of underlying transactions on which an international Islamic rate could be built? Who would be responsible for determining such a rate? Would that rate be sufficiently robust?

Many questions remain unanswered, and the clock is ticking. Institutions such as the International Islamic Financial Market (IIFM) and the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) are actively working in the background to come up with a viable solution. However, Islamic financiers should not simply wait and see, as action needs to be taken now. Islamic banks need to be more proactive in examining their LIBOR exposures, even if that involves breaking away from conventional benchmarks altogether (Mcviety et al., 2020).

A conceptual framework for products

There are several issues relating to the shift in rates that warrant discussion from different perspectives prior to providing product solutions that can be considered. Firstly, there is the issue of who establishes the rate. If it is to be confirmed by a central bank as the regulator, one can argue that it is from the government. However, this is unlikely as there are many players involved such as IOSCO, panels of bankers, etc. Due to this uncertainty it can be questioned whether there is an element of ghabn in such transactions. In addition, a benchmark is not meant to fix a price, but rather to serve as an indicator and a guide to pricing. However, Islamic banks are involved in different products, unlike pure debt financing. This heterogeneity will impact the cost of products. The pricing benchmark must be disclosed and displayed to all contracting parties. However, the factors to be taken into consideration for the pricing benchmark, such as the cost of the fund, expected risks, etc., can be considered without necessarily having to be disclosed and displayed (Omar et al., 2010). Omar et al. (2010) have proposed parameters for Sharīʿah benchmarking but this approach might not be acceptable by the market in the UK for two reasons: the customers will compare prices, and in a competitive environment multi-layered pricing policies might not be a viable as it creates confusion in the market.

Determination of RFR depends on the availability of liquid markets for instruments whose yields are used as a proxy or close estimate of this rate. Maturity matching is essential (short-term rates for short-term instruments, etc.). This begs the question of whether a risk-free rate for pure financing transactions can also be used for sale-based transactions, or other economic activity-based transactions?

The definition of risk in the realm of Islamic finance is unique and hence an Islamic RFR will have to account for the idiosyncratic nature of risk-return trade-off in Islamic finance.

Ansari (2019) argues that there cannot be a risk-free benchmark for Islamic finance as a risk-free rate is at large a legendary creature that does not exist in real life. However, an RFR is typically implied from a short-term government debt rate, such as a 30-day T-bill rate, or a long-term government bond yield to maturity (YTM). Internationally, the most reliable rates are those on debts of creditworthy governments.

In the face of these problems, Ansari (2019) has proposed three futuristic approaches to attend to the new RFR benchmark: (1) a separate rate for each economic resource: e.g. use a rent benchmark for ijārah contracts in the real economy; similarly, Interbank investment rates shall be based on real transactions according to the liquidity in the market; (2) economic basket rate: e.g. different weightages to be provided to different economic resources, as per the relative size of economic activity; (3) a combination of economic basket rate and separate rate for each economic resource: e.g. Separate rates to be used for key economic resources, as may be determined from time to time (only key resources to be selected) or basket rate to be used for interbank transactions and the economic resources having a smaller size in the economy or having a lesser concentration for IFIs (Ansari, 2019). Although these are valid ideas, they will be hard to accommodate for British Islamic banks because the FCA has set the parameters to implement the SONIA. Hence, a better approach would be to explore some of the solutions proposed by the conventional banks as highlighted above.

Proposed products

Due to the practicality of using the SONIA instead of an endogenous Islamic benchmark rate, certain products can be considered for such eventuality. From a fiqhi perspective the main issue is that the backward rate is problematic as it will impact on the Islamic commercial contracts used by Islamic banks, including the tahawwut contract for hedging. As discussed above there is no real risk-free rate as such. However, the SONIA benchmark does help in some ways towards mitigating the risk exposure of the LIBOR. The RFRs are overnight rates and – at this stage – the market consensus is that a term rate can only be produced on a "backward-looking" basis, meaning that an RFR would be determined on the basis of historical data at the end of each calculation period (Qudeer Latif et al., 2020). RFR is an overnight rate, where it is a return on an investment with zero risk of financial loss because the chance of manipulating the rate is almost zero. Also, the data used to calculate the latest rate is historical data and not a pre-agreed rate like in the case of the LIBOR, which is forward-looking.

With RFR for a "cash product" (for example, conventional facilities, certain types of swaps, floating rate notes, structured notes, and securitizations), the floating rate must be calculated daily on the basis of the overnight rate and then averaged over the relevant calculation period in order to determine the applicable floating rate amount. This would mean that the floating rate amount cannot be calculated in advance.

To achieve this certainty, the floating rate must be set at the start of a calculation period for the contracts to be considered as Sharīʿah-compliant. This is possible using a forward-looking rate published at the start of the calculation period but is more challenging to achieve when using a backward-looking rate.

In calculating such a benchmark, various methodologies have been advanced such as the Bloomburg Rulebook (Qudeer Latif et al., 2020). The methodology in the Bloomberg Rulebook is an adjusted RFR, meaning that it is based on daily compounding of the publicly available RFR, which is published by central banks of the relevant currency (such as the SOFR and the SONIA), with rate-setting in arrears for the relevant tenor. The issue is: how can we develop an RFR with a backward-looking rate? The spread adjustment set out in the Bloomberg Rulebook uses the median of the historical differences between the IBOR for each tenor and the compounded RFR for that tenor over a five-year period prior to an announcement triggering a fallback.

There are two concepts that can be considered in the present financial atmosphere in the absence of an aggregate of rates for SONIA. Firstly, a rental index for the case of ijārah (the rate can easily be adjusted as per fiqh rules by varying the time spread). This can also be extended to mushārakah mutanāqisah (diminishing partnership due to the element of ijārah in it). Secondly the use of wa'ad (promise) for a given price in future, which can then be adjusted using the concept of ibra' (Parachai and Barzilai, 2020). The bank can forego any excess in pricing unilaterally. In the case of hedging, one can explore a wa'ad price, which of course might bring an element of risk. However, such practice has been used for other products such as currency swaps. Another approach would be to do transactions in tranches to have a chance to reconsider the price for the next batch. For instance, in the case of issuance of sukuk, various types can be devised and issued at different times with different pricing.

While it is correct to contend that the rate in SONIA is uncertain, it is not uncertainty per se that renders a contract defective, but only that which gives rise to dispute (Butt, 2020). The principle established here is that minor uncertainty, characterized by that which does not give rise to dispute, is tolerated in commutative contracts. Thus, if one is working with a tentative rate, which is to be fixed with a consideration for an unspecified amount that typically does not give rise to dispute, if this is according to market norm for an unspecified consideration that typically does not give rise to dispute, such contract will be valid (Butt, 2020). This is premised on juristic preference (istihsān), which requires that, due to prevalent practice and the absence of dispute amongst the parties, this inherent uncertainty of final rate is tolerated, the contract is not defective and the parties

will not be sinful. The same ruling applies to averages or if an aggregate rate is used as proposed for the conventional banking sector.

One can understand this position from the prohibition of selling non-ripened fruits from a tree due to the element of gharar for delivery. Though according the ḥadīths as reported in Sahih Muslim this is not allowed, but fuqaha have moved the discussions towards istihsān (a deeper analogy or Islamic principle of equity law) on the same basis as above (Rafi Usmani, 2014). Hence, applying this principle to the RFR and the SONIA, it can be argued that in the first year i.e. from year end 2021 to year end 2022 (especially when short-term financing is required), where no data is available to make a precise forecast of the most appropriate rate that can be applied at the end of the transaction, the concept of istihsān can be used to facilitate Islamic banking transactions whereby the price can be adjusted at the end for products like ijārah and mushārakah mutanāqisah. In case there is high disparity between the used rate and the final adjusted rate, the concept of ibra' can be used.

Conclusion

This chapter highlighted the implications of shifting from the LIBOR benchmark towards the RFR and the SONIA rate benchmark for Islamic banking in the UK. Due to the RFR approach, which aims at mitigating the risk associated with the LIBOR, one major implication of this shift is that the rate to be used is backward-looking. This is not in line with Sharīʿah principles as the price should be stipulated upfront in a given transaction. To address this problem, some products have been suggested as it is not practical at this stage to develop an Islamic RFR rate benchmark for the UK Islamic banks.

Notes

1 Gap risk arises from the term structure of banking book instruments, and describes the risk arising from the timing of instruments' rate changes. The extent of gap risk depends on whether changes to the term structure of interest rates occur consistently across the yield curve (parallel risk) or differentially by period (non-parallel risk).
2 Basis risk describes the impact of relative changes in interest rates for financial instruments that have similar tenors but are priced using different interest rate indices.
3 Option risk arises from option derivative positions or from optional elements embedded in a bank's assets, liabilities, and/or off-balance sheet items, where the bank or its customer can alter the level and timing of their cash flows. Option risk can be further characterized into automatic option risk and behavioral option risk.

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Part IV

TESTING AND EXPERIENCES IN BENCHMARKING ISLAMIC FINANCE

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15

HOW DOES BENCHMARKING MATTER IN ISLAMIC MICROFINANCE?

Irfan Syauqi Beik, Tita Nursyamsiah, and Laily Dwi Arsyianti

Introduction

Poverty is a challenging issue suffered by many developing countries. Poverty is conceptually defined as living under a country's minimum standard of living. Lack of proper infrastructure, poor education and health protection, climate change, and inadequate access to clean water and nutritious food have caused global poverty and inequality. According to the World Bank (2016), some programs have been conducted to alleviate poverty in many countries, such as Brazil, Cambodia, Mali, Peru, and Tanzania, mostly focused on reducing inequality. The programs include providing education for early childhood, nutritious food, health protection for all, accessibility of proper education for all communities, cash transfer to the poor, rural infrastructure construction, and progressive tax. In other countries like Indonesia, poverty reduction policies are focused on economic stimulation programs, such as community empowerment, financial access for the poor, job opportunities creation, training, and capacity building, cash transfer, and other transfer payments.

Providing access to capital for low-income, micro, small, and medium enterprises (MSMEs) is one way to reduce the amount of poverty. In several developing countries, micro, small, and medium enterprises significantly contribute to the economy. For instance, in the case of Indonesia, the data of the Ministry of Cooperatives and Small and Medium Enterprises or Kemenkop UKM in 2018 has shown MSMEs' contribution reaching 116,978,631 people or 97% of the total Indonesian workforce. Moreover, MSMEs significantly participate in the country's national income, up to 57.24% of the total gross domestic product (GDP) in 2018.

Hence, microfinance institutions (MFIs) have significant roles in the development of the economy. As an intermediary institution, an MFI helps to support the low- to middle-income group to access capital. However, the conventional MFIs might not meet the Muslim requirement as they violate Sharīʿah (Islamic law). In applying financing activities, a Muslim has several rules that must be obeyed, one

of which is the free element of interest. Therefore, in accessing capital, interest-free microfinance institutions are needed, namely Islamic microfinance institutions (IMFI).

On the other hand, providing valuable education quality has played a significant role in poverty alleviation as it prepares society for better human development. It is acknowledged that economic development cannot be obtained without human and social development (Cremin and Nakabugo, 2012). In the case of Tanzania, the improvement of poverty reduction had a similar trend to the improvement of the human development index (HDI). Besides this, Awan et al. (2011) found that educational level has a negative effect on poverty incidence in Pakistan.

Apart from being a center for preparing quality human resources, educational institutions have a crucial role in community empowerment. Quality human resources are expected to contribute significantly to society, including economic activities. Human resources with ethical and moral values will build ethical business, and ethical business will benefit the community (Gonda, 2014). Educational institutions can also become training centers for students in fostering the spirit of entrepreneurship. One form of this is by establishing microfinance institutions. The microfinance institution itself is one of the institutions that have a role in the community's economic development.

The Islamic boarding school, known as pesantren, is one of the oldest educational institutions in Indonesia. Pesantren has played a crucial role in the education system in Indonesia. Its number reached 28,194 pesantren in 2020 (Ministry of Religion Affairs, 2020). In Indonesia, pesantren is commonly established in rural areas, contributing to Indonesia's poverty rate significantly (Syamsuri and Borhan, 2015).

Pesantren and community development cannot be separated as pesantren has an additional obligation to local empowerment, particularly for the economic sector. Most of the pesantren were established by society, either by individuals or Islamic organizations. Hence, in terms of financial support, most of the pesantren should find their own financial resources and they are not dependent upon the government budget to sustain their operation. Establishing various business units including microfinance institution is one of the ways to ensure the sustainability of the pesantren operation.

Some Islamic microfinance institutions based on community empowerment have been successfully managed by pesantren in Indonesia, such as Pesantren Sidogiri and Pesantren Al-Ittifaq. Both pesantren have specific business activities based on their local potential. Therefore, their integrated education and economic empowerment model must be described in more detail as the Islamic microfinance model's best practices in Indonesia. Besides, this study attempts to formulate a general model of pesantren-based Islamic microfinance that can be used as alternative benchmark of Islamic microfinance. It is expected that this model can be replicated in other countries as well.

The concept of Islamic microfinance

Generally, microfinance is a financial instrument that can reach the lower to the low middle-income group. Practically, microfinance is a useful instrument to reduce poverty and inequality. Microfinance provides financial services in credit to the low and MSMEs categorized as unbanked or unable to access banking services. They cannot access the banking system because of the high cost of financing, the high cost of processing, and collaterals (Obaidullah, 2008). Besides, microfinance is closely related to financial inclusion programs. The World Bank (2018) defines financial inclusion as a condition for individuals and businesses to access beneficial and affordable financial products and services to meet their needs, ranging from payment transactions, savings, credit, and insurance delivered responsibly and sustainable.

The term microfinance became increasingly popular when Muhammad Yunus, the 2006 Nobel laureate, introduced the Grameen Bank in Bangladesh. Grameen Bank is a microfinance institution that provides microcredit to the poor, especially poor women in rural areas. Grameen Bank provides credit in the form of group lending. Yunus (2008) states that microcredit given to poor people can start or run a micro or small business to help them get out of poverty. Currently, the Grameen Bank model has been adopted in various countries, including Indonesia.

In implementing muamalah activities, Muslims must comply with the provisions of Sharīʿah. The transaction in microfinance institutions is not allowed to violate Sharīʿah, such as ribā (usury and interest), maysir (gambling and excessive speculation), and gharar (uncertainty). Therefore, Islamic microfinance is necessary so that Muslims who need microfinance can access capital to improve their living standards. According to Tamanni and Haji Besar (2019), Islamic microfinance has principal characteristics, namely the absence of ribā and the application of different financing contracts, such as equity-based, trade finance-based, and charity-based.

Activities in IMFI are similar to those of other intermediary institutions, namely collecting funds from surplus units and channeling them to deficit units. In IMFI, all transactions must be under Sharīʿah provisions; there are no conflicting elements such as ribā, gharar, and maysir. Besides, IMFI can be a collection of Islamic social funds. The collected social funds can reduce poverty and community empowerment programs, such as providing basic needs and capital for the poorest or providing scholarships for underprivileged students. According to Ahmed (2002), there are several differences between conventional and Islamic microfinance. The differences between Islamic and conventional microfinance institutions can be seen in Table 15.1.

Existing pesantren-based Islamic microfinance: a benchmark

Several pesantren-based IMFI have demonstrated outstanding performance in Indonesia. In this study, BMT UGT Sidogiri and Kopontren Al-Ittifaq are

Table 15.1 Islamic and conventional differences

Indicators	*Conventional microfinance*	*Islamic microfinance*
Source of funds	External funds, savings of clients	External funds, savings of clients, Islamic charitable sources
Assets (mode of financing)	Interest-based	Islamic financial instruments
Financing the poorest	The poorest are left out	Poorest can be included by integrating zakat with microfinancing
Funds transfer	Cash given	Good transferred
Deductions at inception of contract	Part of the funds deducted at inception	No deductions at inception
Target group	Women	Family
Objective of targeting women	Empowerment of women	Ease of availability
Liability of the loan (when given to women)	Recipient	Recipient and spouse
Work incentive of employees	Monetary	Monetary and religious
Dealing with default	Group/center pressure and threats	Group/center/spouse guarantee, and Islamic ethics
Social development program	Secular (or un-Islamic) behavioral, ethical, and social development	Religious (includes behavior, ethics, and social)

Source: Ahmed (2002)

described as the best model of pesantren-based Islamic microfinance institutions, and hence, the two can be used as benchmark. The explanation on BMT UGT Sidogiri and Kopontren Al-Ittifaq will be elaborated in the following section.

BMT UGT Sidogiri: the reputable model of baitul maal wat tamwil in Indonesia

Baitul maal wat tamwil (BMT) is one of Indonesia's most popular forms of IMFI. BMT is mostly formed as an Islamic cooperative that has commercial and social activities. One of the most noticeable BMTs in Indonesia is BMT UGT Sidogiri. Pesantren Sidogiri is one of the oldest boarding schools in East Java. Besides providing religious-related education, Pesantren Sidogiri also trained students to run business activities. Therefore, in 1961 K.H. Sa'doellah Nawawie, who was then the Chairperson of the Pesantren Sidogiri, pioneered Pondok Pesantren cooperative, called Kopontren, as a forum for learning independence, entrepreneurship, and devotion for students (Bakhri, 2019). Its first business activity was to open

grocery stores and stalls within the boarding school environment, which provided students' daily needs.

After successfully developing Kopontren Sidogiri, in mid-1997 the management of Kopontren Sidogiri and several pesantren teachers (called Ustaz) of Miftahul Ulum Madrasah in Pesantren Sidogiri initiated the establishment of a cooperative. Its focus was in Islamic financing, namely Baitul Mal wat Tamwil Maslahah Mursalal lil Ummah (BMT MMU) Sidogiri. BMT MMU Sidogiri was established to purify the usury system in the villages around Sidogiri. The form of usury system was conducted by the moneylenders who charged high interest. Since November 2013, BMT MMU Sidogiri has changed its name to BMT Maslahah.

After successfully developing the BMT Maslahah, alumni of Pesantren Sidogiri initiated an integrated joint venture establishment, which was known as UGT (Usaha Gabungan Terpadu). On 6 June 2000, they established the BMT UGT Sidogiri in Surabaya. The initial capital was collected from alumni, teachers, and leaders of pesantren. The total initial capital was IDR 146 million (USD 9,830). Recently, 280 offices have spread out in ten provinces including East Java, West Java, Jakarta, Lampung, Riau, West Kalimantan, Central Kalimantan, East Kalimantan, South Kalimantan, and Bali (KNKS, 2019).

BMT UGT Sidogiri has denoted exemplary financial performance. Total assets of BMT UGT Sidogiri reached IDR 2.254 trillion (USD 151.77 million) in 2018, almost double compared to 2014, which was IDR 1.3 trillion (USD 87.53 million). In terms of return on assets (RoA) and return on equity (RoE), BMT UGT Sidogiri showed a negative trend in the 2014–2018 period. However, its value is better than the Islamic rural bank (BPRS). Based on the KNKS (2019), RoA of BMT UGT Sidogiri amounted to 3.4% in 2018, while Islamic commercial banks and Islamic rural banks were 1.28% and 1.87%, respectively. The RoE of BMT UGT Sidogiri was 19.1% in 2018, while for Islamic rural banks it was 12.86% (Figure 15.1).

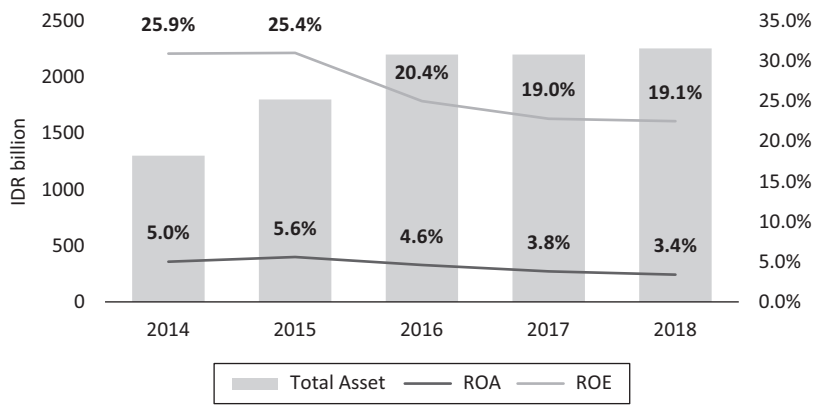

Figure 15.1 Total assets, RoA, and RoE of BMT UGT Sidogiri in the 2014–2018 period. *Source*: KNKS (2019)

Business activities of BMT UGT Sidogiri

As the intermediary institution, products provided by BMT UGT Sidogiri are mainly a range of saving and deposit accounts, financing products, and Islamic social funds management. Islamic social fund refers to zakat, infaq, and sadaqah or charity collected from management and members. The products' target market is mostly micro and small enterprises offered to the member and non-member of BMT UGT Sidogiri.

BMT UGT Sidogiri has two types of saving accounts, namely general savings and time deposit accounts. General savings is a product where deposits and withdrawals can be conducted according to members' needs. Meanwhile, time deposit accounts comprise pilgrim savings, education savings, and others. All saving accounts apply muḍārabah mushārakah, which is based on a profit–loss sharing contract. In this term, both BMT and customers have agreed on the portion of the profit. The requirements to open the accounts are relatively simple, and their initial deposits are comparatively affordable.

BMT UGT Sidogiri provides financing products that commonly offered to micro and small business. Its products are mostly adapted from the local society that requires financing to fulfill its necessity, such as vehicle and electronic financing, agriculture financing, and property financing. BMT UGT Sidogiri has designed several contracts to fulfill the Sharīʿah principles. The financing products consist of muḍārabah (profit sharing), mushārakah (profit and loss sharing), murabaha (buying and selling), qardul hasan (non-interest debt), rahn (Islamic pawn), ijārah (rent), hawala (factoring), and hybrid contract. Besides offering a financial product, BMT UGT Sidogiri provides payment services, such as transfer services or remittances, the management of Hajj and Umrah registration, electricity, telephone, and Islamic insurance family payment. Recently, BMT UGT Sidogiri has extended their business to areas such as insurance brokerage, owning Islamic rural banks or BPRS, ICT, and transportation businesses, tour and travel companies, human resource training, and palm plantations (KNKS, 2019).

BMT UGT Sidogiri serves customers by utilizing existing local wisdom. Many of its employees wear sarongs, making people feel more comfortable than facing bank employees who wear formal clothes. The employees mostly use the local language to explain everything to the customers and members. BMT UGT Sidogiri employees also carry out a "ball pick-up system" that visits customers in their workplace or home. Recently, many BMT UGT Sidogiri customers work in traditional markets. Some BMT employees go directly to the traditional market to conduct transactions, from savings deposits to financing payments. Currently, BMT UGT Sidogiri also provides mobile banking services, called Mobile UGT. Facilities provided by Mobile UGT include payment for electricity, water, telephone, e-money, BPJS, and also payment of Islamic social funds.

Based on the KNKS report (2019), there are four keys to success possessed by BMT UGT Sidogiri. First, Sidogiri has a significant and trusted name as one of the oldest pesantren in East Java. The reputation of the BMT Sidogiri is undoubtedly

connected with the surrounding community, so anything related to the Sidogiri Islamic Boarding School will surely get the community's full support. This support has made BMT UGT Sidogiri able to reduce loan sharks financing. Secondly, there is an influential figure and leadership because of the image of BMT UGT Sidogiri, which is close to Pesantren Sidogiri. The majority of BMT UGT Sidogiri are senior teachers who are very respected by the alumni, students, community, and students' parents. The reputation of management and leadership means that all existing problems can be resolved without causing many disputes. Third, the alumni network's role is relatively stable in developing BMT UGT Sidogiri in various Indonesian regions, including opening new branches of the BMT UGT Sidogiri. The presence of BMT UGT Sidogiri in ten provinces across the country is undeniable evidence of a strong alumni network. When opening a new branch outside the region, BMT UGT Sidogiri finds easily reliable human resources. Finally, the implementation of the Prophet Muhammad's leadership, namely siddiq, tabliq, amanah, and fatanah, in the management of BMG UGT Sidogiri management. These four principles were built and ultimately supported the success of BMG UGT Sidogiri.

Besides having a strong network with alumni, BMT UGT Sidogiri also has collaboration with banking and non-banking institutions. According BMT UGT Sidogiri, in the banking sector, BMT UGT Sidogiri partners with national Islamic commercial banks, such as Bank Syariah Mandiri (BSM), Bank Panin Syariah, Bank BNI Syariah, Bank BRI Syariah, Bank Muamalat Indonesia, Bank Bukopin Syariah, Bank Danamon Syariah, and Bank Syariah Syariah. Meanwhile, non-banking institutional partners include INKOPSYAH BMT Jakarta, PT Capital BMT Ventura, LPDB-KUMKM, PT Indonesian Family Takaful Insurance, PT Value Stream Indonesia, ABSINDO, PT Andelink Duta Indonesia, PT Nurani Travel, and PT Asuransi Syariah Keluarga Indonesia.

Hence, BMT UGT Sidogiri's business pattern can be seen in Figure 15.2. Firstly, the pesantren community, as the center of Islamic microfinance institutions, functions as an initiator and management. Besides, the pesantren community participates as a member of BMT UGT Sidogiri. At BMT UGT Sidogiri, alumni are the initiators and the operational management of BMT UGT Sidogiri. Secondly, community engagement with BMT UGT Sidogiri, both as members and non-members, is high. Most of them are micro and small enterprises that work in traditional markets, farmers, and households since BMT UGT Sidogiri provides many financial products.

Thirdly, the commercial activities of members and non-members. In this case, BMT UGT Sidogiri plays a role as an intermediary institution. The members obtain privilege as a cooperative member, such as the distribution of the final profit. Fourthly, BMT UGT Sidogiri pays attention to the community, especially in terms of distributing the Islamic social funds that have been collected from BMT UGT Sidogiri profit and community. Fifthly, the relationship between BMT UGT Sidogiri and partners, usually with other financial institutions such as Islamic commercial banks. The cooperation carried out is usually in the form of a linkage model, such as joint financing and capital participation assistance. Finally,

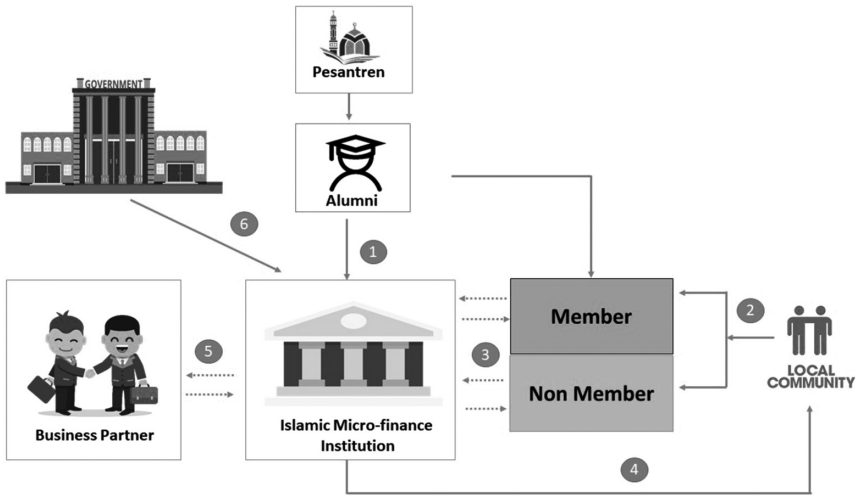

Figure 15.2 BMT UGT Sidogiri model. *Source*: *Authors' own*

the government conducts supervision; in this case, the Ministry of Cooperatives and Small and Medium Enterprises.

Social impact of BMT UGT Sidogiri

Since its inception, BMT UGT Sidogiri has a noble mission and goal, i.e. to release local communities from the interest system and loan sharks that are burdening the community. The existence of BMT UGT Sidogiri has significantly proved to reduce informal moneylenders who provide high interest rates on each loan. This interest system contradicts the Sharīʿah principles adopted by the Pesantren Sidogiri. In this case, the management of BMT UGT Sidogiri can convince society about the adverse effects of the interest system, and they also agree with alternative Islamic financing that is simple and affordable.

BMT UGT Sidogiri has also helped micro, small, and medium (MSM) entrepreneurs access capital. These MSM entrepreneurs were categorized as a "not bankable" group who had difficulty accessing banks due to the low amount of capital required by micro and small entrepreneurs. The bank does not provide this small amount of financing. BMT UGT Sidogiri makes it more accessible for MSM entrepreneurs to obtain business capital following what they need. The payment system for financing is directly arranged. Customers can repay the financing per day so that it will not be burdensome. For each payment, it starts from IDR 5,000 (USD 0.34). BMT UGT Sidogiri employees will also come directly to pay at the workplace and facilitate payments or collect deposit savings.

The existence of BMT UGT Sidogiri effectively helps the community to reduce poverty, as studied by Adnan and Ajija (2015), in which they found that most of

the respondents were able to increase their income after obtaining BMT financing. Providing accessible financing to the poor can help them to generate income for his family.

Lastly, BMT UGT Sidogiri's distribution program of the Islamic social fund also positively affects the community. As a microfinance institution with Islamic values and missions, BMT UGT Sidogiri has distributed its Islamic social fund, such as zakat and charity through LAZ Sidogiri (Sidogiri Private Zakat Institution), Pesantren Sidogiri, and its alumni network. The distributed social fund will be higher when its profit increases. For the last five years, ZIS funds issued by LAZ Sidogiri have increased sharply, around IDR 8 billion (USD 538,655) per year averagely, compared to 2012, which was still around IDR 2.7 billion or USD 181,796 (KNKS, 2019).

Kopontren Al-Ittifaq: the outstanding agribusiness-based cooperative in Indonesia

Pesantren Al-Ittifaq was established on 1 February 1934 by K.H. Mansyur. At first, Pesantren Al-Ittifaq was classified into the traditional type of Islamic boarding school. The education system applied at that time was quite old-fashioned. The students were forbidden to learn Latin words. Besides, they were not allowed to make houses from walls, use electronic devices (mic, radio, TV), or have a house toilet.

From 1970 until now, leadership was held by K.H. Fuad Affandi (grandson of K.H. Mansyur). He considered that the traditional management of education causes its development to be prolonged and even static. So, in 1970 K.H. Fuad Affandi attempted to combine religious activities with agricultural business activities in his boarding school because it had natural potential. Agribusiness activities continue until now, and even become the backbone of pesantren financial matters.

Kopontren Al-Ittifaq was incorporated in 1996. Students are directly involved in cooperative activities to develop and prepare a career in the entrepreneurial field as they have been equipped with skills while working in cooperative. The sources of cooperative funds are 80% of the members; the rest comes from, for example, Bank Indonesia, which appoints Bank BNI to channel funds as reciprocal cooperatives' financial literacy programs to the community (Faiz, 2019). In 2019, the total assets of Kopontren Al-Ittifaq reached IDR 43.5 billion or USD 2.93 million (Walfajri, 2020).

Business activities of Kopontren Al-Ittifaq

Initially, Kopontren Al-Ittifaq developed a retail business in the form of a minimarket named Alif. Besides this, other businesses developed, starting in agribusiness, including agriculture and livestock, and crafts. In livestock, business is carried out in breeding and enlargement of cattle, goats, and rabbits. Meanwhile, organic fertilizer and fish farming are not commercialized because they only meet

the farming needs and daily consumption of pesantren students and family. Also, the handicraft business produces veils and bags.

The most prominent business is agriculture, as it involves students and teachers and the community around and outside the pesantren called partner farmers. Kopontren Al-Ittifaq becomes an intermediary institution between the farmer group and Pesantren Al-Ittifaq, which have formed an agribusiness partnership. Agribusiness development is conducted in pesantren-owned and farmer groups-owned lands. The pesantren and farmer groups become suppliers of vegetables and fruits with a high standard for the modern market's demand through Kopontren Al-Ittifaq. Besides, Pesantren Al-Ittifaq provides some training related to agribusiness products, such as farming, technology, producing seedlings, cultivation, fertilizer, sorting, grading, wrapping, and labeling (Fauroni, 2019).

According to Tarmizi (2017), the working mechanism of Kopontren Al-Ittifaq applies two financing schemes for members of the cooperative, particularly partner farmers (Figure 15.3). The first scheme is qardhul hasan financing, namely the financing of loans without interest. This financing is given to farmers, generally in agricultural production equipment such as fertilizer, seeds, pesticides, and sufficient nominal money for other agriculture needs. The harvest time for vegetables generally takes one to one-and-a-half months. After harvesting, the farmer sells his vegetables to the cooperative with the murabahah scheme or sales contract. Furthermore, the cooperative will count the vegetables sold by farmers and pay the vegetable yield minus the farmer's loan (Tarmizi, 2017).

At present, Kopontren Al-Ittifaq has around 1,300 members who carry out various transactions in financial transactions such as savings and financing activities and payment facilities such as electricity bills, telephone payments, and agricultural businesses' financing (Mastur, 2019). In general, cooperative funds are obtained from five sources (Mastur, 2019). First, the principal savings of INR 150,000 (USD 10.10). Second, savings and loans granted to members or non-members in installments of three months, four months, five months, six months, ten months, or twelve months with a margin of 1.7%. Third, mandatory savings with the amount of money paid by members to the cooperative, INR 5,000 (USD 0.34) every month. Fourth, voluntary savings in the form of the amount of money that customers voluntarily deposit into cooperatives. This deposit is a cooperative reserve fund that is used to develop cooperative capital. Fifth, partner savings is the amount of money handed over by members as their savings for withdrawal at any time.

According to Figure 15.4, the Kopontren Al-Ittifaq business pattern is explained in five points. First, the pesantren community as the center of Islamic microfinance

Figure 15.3 The flow of goods and money for the Al-Ittifaq Cooperative Bandung *Source*: Tarmizi (2017)

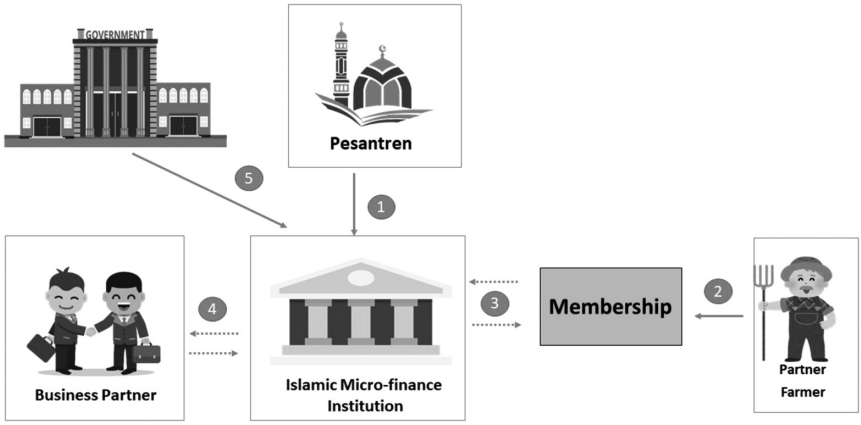

Figure 15.4 Kopontren Al-Ittifaq model. Source: Authors' own

institutions functions as an initiator and supplies human resources. The pesantren community also participates as a member of Kopontren Al-Ittifaq. Second, the partnership between the farmer and Kopontren Al-Ittifaq as a member since most local community work as farmers. Third, the commercial activities between members and Kopontren Al-Ittifaq. In this case, Kopontren Al-Ittifaq plays a role as an intermediary institution in saving and financing activities. Besides, it provides agricultural facilities and infrastructure. Fourth, the relationship between Kopontren Al-Ittifaq and partners, usually with the supermarkets such as Giant and Hero. The agricultural product that is produced from pesantren and farmers are sold to the supermarket. The products sold to the supermarket mostly have high-grade quality as required by the supermarket. Finally, government supervision and coaching are under the Ministry of Cooperatives and Small and Medium Enterprises.

Social impact of Kopontren Al-Ittifaq

The establishment of the Kopontren Al-Ittifaq was initiated to maximize the use of existing resources. According to Muttaqin (2011), the model for fostering economic independence at Pesantren Al-Ittifaq is to involve economic enterprises, especially the agribusiness sector. Before the students become involved in the business, they are first given training on primary agribusiness to become skilled workers. Pesantren Al-Ittifaq has provided a complete training center handled by an organization called Self-Help Agriculture and Rural Training Center or Pusat Pelatihan Pertanian dan Perdesaan Swadaya (P4S). At this point, there has been a transformation of applied knowledge or technical skills to build their independence and entrepreneurship spirit (Muttaqin, 2011).

Al-Ittifaq's economic empowerment model for the pesantren community is carried out in a partnership with farmer groups, and DKM through an

institution called the Al-Ittifaq-Rooted Independent Institution (Muttaqin, 2011). The empowerment pattern with this partnership uses a plasma core partnership pattern, where Al-Ittifaq acts as the core company, and farmer groups act as the plasma. Some of the duties and obligations of Al-Ittifaq as a core company are to accommodate and buy agricultural products from farmer groups, provide technical guidance, production facilities, capital, determine cropping patterns, and apply appropriate technology to farmer groups under their guidance (Muttaqin, 2011). The empowerment model carried out by the Pesantren Al-Ittifaq has succeeded in increasing the community's capacity both in terms of knowledge and skills regarding agribusiness and their income (Muttaqin, 2011).

General model of pesantren-based Islamic microfinance institutions

In the previous section, two examples of Islamic microfinance applications based on pesantren were described. Out of the two Islamic microfinance institutions description, there are several advantages of pesantren-based IMFI. First, the loyalty of human resources, especially from the pesantren community, has been proven. Each of them has a role in the development of Islamic financial institutions. Second, pesantren has a good image for the local community. The local people's trust in pesantren and its leader has made people gradually abandon the practice of usury, such as using moneylenders to borrow money. Pesantren leaders and IMFI also help people become more educated about the Islamic economic and financial system. Third, the two Islamic boarding schools' roles as educational institutions can recruit students to have an entrepreneurial spirit. The students are taught to manage a business and become part of the management of IMFI. Besides, many pesantren alumni, especially the Sidogiri alumni, have opened BMT branches in their home regions. Alumni have expanded the outreach of BMT Sidogiri to have branches in ten provinces in Indonesia.

Because of the considerable potential of Islamic microfinance based on pesantren, it is crucial to formulate a model that can be adapted in general. The formula for pesantren-based IMFI from the two institutions discussed is depicted in Figure 15.5.

Based on Figure 15.5, there are six points to be explained. Firstly, as a leading center of IMFI, pesantren contributes to the initial concept and human resource. Pesantren will establish IMFI. Pesantren students will be involved as part of their internship program. The local community may register themselves as members of IMFI so that they can open savings accounts and propose financing. Most of the IMFI based on pesantren are taking the form of cooperatives or BMT, which promote commercial and social activity.

Secondly, developing partnerships between the local community and IMFI as part of economic empowerment. The presence of IMFI will assist local society to empower their commercial activity, particularly for the micro, small, and medium enterprises, by providing affordable financing. The participation of the local community can be as members or non-members of the IMFI.

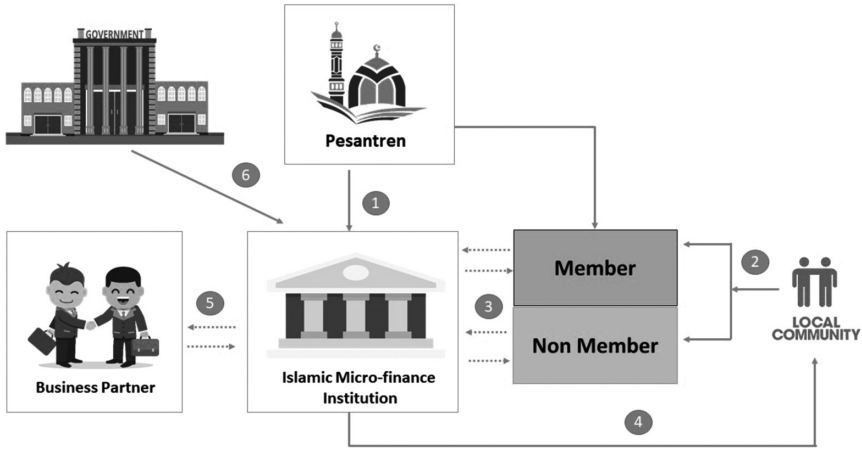

Figure 15.5 General model of pesantren-based Islamic microfinance. *Source*: *Authors' own*

Thirdly, commercial activities among members, non-members, and IMFI. These activities are divided into savings and financing. Saving products commonly apply wadiah and muḍārabah contracts. Financing products mostly use sales contracts *(*murabahah, bay salam, bay istishna, and ijārah) and partnership contracts (muḍārabah, mushārakah). Financing products provide and facilitate the needs of members and non-members. So, as an intermediary institution, IMFI's role is similar to a bank, which collects the funds from the depositor or surplus unit and distributes it to the deficit unit. The IMFI obtain profit from their commercial activities; they distribute it to the members.

Fourthly is the non-commercial activity conducted by IMFI to the local community. As IMFI can collect Islamic social funds, they can distribute it to local society as amil of zakat or nazir of waqf institutions. The distribution of the fund is through consumptive and productive activities. Providing basic needs to the poor, accommodating qard or loans without interest and facilitating training to the ultra-micro enterprises, and giving scholarships to poor students, particularly in pesantren, are examples of the social fund distribution program of the IMFI. This is evidence proving that pesantren-based IMFIs have conducted economic and community empowerment.

Fifthly is the business partnership between IMFIs and their partners, such as other financial institutions or other commercial institutions that support the IMFI members. For example, Kopontren Al-Ittifaq partners with the supermarket to promote its member products, and BMT UGT Sidogiri cooperates with the bank to provide financing to small enterprises. According to Effendi et al. (2018), the form of cooperation implemented is in a linkage business model.

Sixthly, the role of government is to supervise the IMFI so the accountability and transparency aspects can be maintained. The government can also support

the IMFI by providing them training for the financial institution, particularly for standardized financial accounting management and developing applicable technology. In Indonesia, the agencies involved in supervising the IMFI are the Financial Service Authority (OJK) or Ministry of Cooperatives, and Small and Medium Enterprises, depending on the type of legal entity of IMFI.

Conclusion

Pesantren has a significant role in community development. By establishing Islamic microfinance institutions, pesantren are able to provide financial access that can accelerate the development of pesantren business units as well as surrounding environment. The presence of BMT and Kopontren is able to meet the need of pesantren initiatives in developing beneficial economic activities. Their presence has also contributed to the significant reduction of interest-based financial activities practiced by informal moneylenders.

Pesantren Sidogiri and Pesantren Al-Ittifaq have been uses as examples. The two pesantren have provided empirical evidence proving that their Islamic microfinance institutions have demonstrated remarkable performance. BMT UGT Sidogiri, which has total assets of USD 151.77 million, is considered the biggest Islamic microfinance institution in Indonesia, while Kopontren Al-Ittifaq, which has total assets of USD 2.93 million, is considered as the best example of Islamic microfinance focusing on the agriculture sector. The two pesantren have also been able to gradually transform society's financial activities from interest-based to a Sharī ʿah-compliant system. This is a very important achievement at grass-root level, which indicates growing awareness of the people to implement Islamic economic and financial systems in the country. It is suggested that this pesantren-based Islamic microfinance should be made an alternative benchmark that will impact society, not only economically but also its education.

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16

WHICH BENCHMARKING FORMULA TO USE IN ISLAMIC SME FINANCING?

Suhail Ahmad and Sahibzada Ghiasul Haq

Introduction

Benchmarking is used to determine the risk value of financial products and indicate the relative cost or opportunity cost of capital. It plays an important role in the financial markets by providing a standard for the relative performance of the average market assets, business assets, and portfolios. Ideally, benchmark rates should be transparent, observable, easy to calculate, and an efficient and effective function of the financial market.

The London Interbank Offered Rate (LIBOR) is the most widely used standard in the financial markets. It indicates the average rate of interbank transactions offered by select banks. It was first reported by the British Bankers' Association (BBA) and the Intercontinental Exchange (ICE) in 2014 following reports of fake cases. The LIBOR will be phased out in 2021 and new standards are being developed.

In Islamic financial institutions (IFIs), currently, the LIBOR and its country variants are used to determine the expected rate of return on a product according to Sharīʿah. Initially, it was allowed by academics, as a discount, under the law requiring pricing of transactions. Today, this practice is widespread and can affect the purpose of Islamic finance and its purity in terms of adherence to Sharīʿah. This is affecting the reputation, credibility, and authenticity of the industry in the eyes of the general public.

On the topic of benchmarking using the LIBOR, the Chairman of the Accounting and Auditing Organization of Islamic Financial Institutions (AAOIFI) Sharīʿah Board says:

> of course, interest rates cannot be considered desirable for determining halal benefits. This transaction certainly resembles interest-based financing at least in appearance and given the severity of the interest rate restriction this obvious similarity should be avoided as much as possible. But one should not ignore the fact that the most important requirement of

> Mabah's authenticity is that it is a real sale with all its components and its results. If the murabahah transaction meets all the conditions listed. Here, merely using the interest rate as a benchmark to determine the benefit of murabahah does not make the transaction invalid, haram, and prohibited, because the agreement contains the agreement and does not contain the interests. Interest rates are used only as an indicator or as a standard.[1]

Dr Azeemuddin Sobhani, Sharīʿah compliance advisor, notes that if the refund is not self-generated (money for money), it will be allowed despite its equivalence with any other refund (e.g. the LIBOR). If the financial performance is self-generated, it is prohibited even though it is not equivalent to any other financial performance such as the LIBOR (Ansari, 2019).

Why benchmark the Islamic finance industry?

Islamic banking is growing rapidly in Muslim countries and the world's major financial centers (Ulla et al., 2018). There are more than 300 interest-free banking institutions in 80 countries. These institutions provide interest-free financial services to their clients, including not only Muslims but also non-Muslims who are very interested in the financial products of Islamic banks (Awan, 2009).

Despite the impressive growth of Islamic banking around the world, a comprehensive Islamic financial system is still emerging (Ulla et al., 2018). Many more problems and challenges to the Islamic financial system and its various aspects remain to be addressed. Among them is the question of using interest rates for Islamic banks. Although Islamic banks do not charge interest, they still use interest-based benchmarks as a price criterion in the absence of stable and reliable alternatives (Reuters, 2016; Usmani, 2002).

Islamic banks need to establish a pricing system for their products in addition to interest rates. Islamic banks needed to better understand the exact needs, preferences, behavior, demands, and requirements of their customers due to the increase in competitors in the Pakistan market. People are willing to buy products from Islamic banks but they have serious concerns about pricing procedures (Saba, 2010).

Islamic banking and finance have been widely criticized for relying on traditional benchmarks. Many modern Muslim scholars are calling for the introduction of free reference rates for Islamic banks. The eighth conference of OIC Fiqh Academy, which was held in Jeddah from 18–19 Shawwal/10–11 April 1993, focused on financial matters. One of the resolutions they passed unanimously among others was resolution no. 7, which called for the immediate formulation of a new standard that would be enabled from the point of view of the Sharīʿah. Interest rates are acceptable as an alternative to interest rates of profit.[2]

This is also clearly stated in AAOFI Standard No. 27 on the index. Article 7 proves that in addition to the technical controls regarding the components of the

index and its application, one of the parameters guiding the development of the Islamic index must also comply with the provisions of Sharīʿah. In addition, there should be a commentary supervisory board for the index to ensure that Sharīʿah principles are observed in the components and application of the index and that the index is periodically reviewed and reported (Omar et al., 2010).

The rationale for introducing a new benchmark as an alternative to interest-bearing benchmarks on loans is ribā restriction. Sheikh Muhammad Taqi Usmani has advocated that Islamic banks and financial institutions should get rid of interest-based standards as soon as possible. He argues that the use of interest rates as a standard for Israeli business is undesirable and does not promote the basic philosophy of Islamic economics, so it has no effect on the distribution system.[3]

The benchmark is used as a guide and indicator for pricing; it also includes some element of market price control. Having a standard for pricing is in line with the goal of fairness in financial matters. Having a benchmark will also achieve other Sharīʿah objectives in financial transactions such as transparency, protection of wealth, and its proper circulation in the hands of as many people as possible. Setting a benchmark can help regulators ensure that the market is free from fraud and manipulation, thus creating a healthy market in accordance with the principles laid down in the Sharīʿah (Ibn Ashur, 2006).

Opponents of market price intervention argue based on concerns about individual rights to Sharīʿah property. The government is responsible for the protection of the public interest (goods) of all sectors of society, buyers and sellers, while government prices would violate the rights of sellers.[4] However, it is claimed that the government can set the price on the basis of reasonable justification based on the principles of Sharīʿah politics. In this regard, Shaykh-ul-Islam Ibn Taymiyyah stated that, in certain circumstances, the government should intervene to set prices in the market in order to avoid the monopoly and speculation of traders in the market or if the market players are more determined to some extent. This can cause maximum profit when the people are in dire straits. Some equipment is needed. In this case, the authorities' intervention is justified, provided that the goods or services are the basic needs of the people and the increase in prices is not the result of a natural shortage of supply or an increase in the number of consumers. This is an important mechanism for correcting markets that is distorted by monopolies, unfair advantage, and collusion among certain market players.[5]

Ibn Taymiyyah has mentioned two conditions, i.e. (i) that goods or services are the basic needs of the people and (ii) an increase in prices is not the result of shortage of supply or increase in population. They are about Islamic banking products and services, which people cannot avoid in modern life. Having a standard for pricing also supports the fact that Islam respects individual property and the freedom to use it without infringing on the rights of others. If the exercise of property rights can cause harm to others, then the ruler needs to intervene to maintain the public interest and maintain a balance in the market price in accordance with the Sharīʿah principle to maintain the damage should be avoided public interest.[6] It has the following legal maxims: "No harm or reparation shall be given. When

there is a conflict between the private interest and the public interest, the public interest takes precedence"; and "the worst problems must be eliminated by the lightest means".[7]

We use traditional bank benchmarking rates as well as work on building a specific Islamic reference rate. Almost half a century has passed in which the world has discovered more things than ever before. We justify it by claiming that the use of common benchmarks does not eliminate our transactions, but for the last five years, the Sharī ʿah-compliant banking system alone has billions of dollars in assets and this is seen as an alternative to the traditional banking system to a large extent. We are still working on our separate benchmark rate, which can be presented as an unauthentic argument.

In Table 16.1, it shows that the prominent countries that are pioneers and practicing Islamic finance in their respective regions around the world use their own benchmarking rates based on interest both for the conventional and the Islamic financial industry. Whereas Malaysia uses separate benchmarking rates for the conventional financial sector of the country along with a separate Islamic benchmark rate for dealings in the Islamic financial sector.

What is fundamentally wrong with the LIBOR from the point of view of Islamic finance?

There are various reasons why it is suggested that the LIBOR should not be used by the Islamic financial industry anymore and that a separate Islamic benchmarking rate should be set up that is free from interest and any other speculative factors, which the LIBOR possesses. In Table 16.2, a short summary presents and

Table 16.1 Country practices of benchmarking rates for Islamic and conventional finance industry

S.No.	*Country*	*Islamic finance benchmarking*	*Conventional finance*
1.	Bahrain	Daily Central Bank of Bahrain's Rates	Daily Central Bank of Bahrain's Rates
2.	Jordan	Jordan Interbank Offered Rate (JIOR)	Jordan Interbank Offered Rate (JIOR)
3.	Malaysia	Kuala Lumpur Islamic Reference Prices (KLIRR)	Kuala Lumpur Interbank Offered Rate (KLIOR)
4.	Oman	No benchmarking	No benchmarking
5.	Pakistan	Karachi Interbank Offered Rate (KIBOR)	Karachi Interbank Offered Rate (KIBOR)
6.	Qatar	Qatar Central Bank Rate	Qatar Central Bank Rate
7.	Saudi Arabia	Saudi Interbank Offer Rate (SIOR)	Saudi Interbank Offer Rate (SIOR)
8.	UAE	Emirates Interbank Offered Rate (EIBOR)	Emirates Interbank Offered Rate (EIBOR)

Source: Mohsin Rehman, 13, February 2016.

Table 16.2 Reasons to quit the LIBOR

S.No.	*Reasons*
1.	Based on traditional interest rates.
2.	Based on money market rather than economic activity.
3.	Governance issues.
4.	The nature of Islamic financial products is not considered.
5.	Chances of fraud and other misleading issues.

indicates the basic reasons why the Islamic financial industry around the world has decided to have a separate benchmarking known as an Islamic benchmarking rate.

Alternatives to the LIBOR

Table 16.3 indicates the Islamic benchmarking rates used by different countries across the globe and how their central banks regulate and manage the rate as per their respective guidelines and policies. We will discuss the details of these benchmarking rates used as alternatives to the LIBOR rate of conventional financing across the different regions.

Benchmarking in Islamic SME financing

Benchmarking is considered a vital tool for businesses and entrepreneurial opportunities to enhance and get the maximum benefits comparative to the existing practicing. The State Bank of Pakistan (SBP) recently issued guidelines on the muḍārabah-based Islamic refinancing scheme, which provides financial assistance to small and medium enterprises. The discount rate will be about 6% of the regular rate of 18%. In a rapidly declining production curve market, financial institutions face the risk of further defaults. Islamic banks could face even more difficulties. They have large portfolios of home financing and auto financing. Islamic banks are not required to maintain a minimum deposit rate. Most of the time, the average bank client goes to other banks for better banking except for large corporate clients. It can be argued that Islamic banks want to set their own standards in terms of excess liquidity. Critics of Islamic banking say that benchmarking traditional interest rate profits is tantamount to ribā. Islamic banks insist that similar product prices do not make them illegal.

After 60 years, the LIBOR will be phased out by 2021. The LIBOR has been criticized by banks for being subjective and manipulative. According to the Financial Times, USD 300 billion worth of deals are linked to the LIBOR. Indeed, it is not easy to change. But caregivers take the exit strategy seriously. Other jurisdictions are also dropping the ban on equivalent benchmark rates, such as

Table 16.3 Different benchmarking rates used as alternatives to the LIBOR

S.No.	*Islamic benchmark rate*	*Explanation*	*Institutions*	*Country*
1.	Secure Overnight Funding Rate (SOFR)	In June 2017, ARRC announced a comprehensive SOFR repository funding rate as a proposed alternative to the USD LIBOR. In its belief about this choice, SOFR is a full transaction-based rate that will have broad coverage of any available Treasury purchase rate. It has been published daily by the Federal Reserve Bank of New York since 3 April 2018. Coverage is a good representation of its coverage range, SOFR Treasury repo market general financing overnight, and it will reflect the financial cost of loans and borrowings associated with a wide range of active market participants in these markets, including stockbrokers, money market funds, asset managers, insurance companies, securities lenders, and pension funds.	Federal Reserve Bank of New York	USA
2.	Bank of England's Sterling Overnight Index Average (SONIA)	In March 1997, the BBA-backed Wholesale Market Brokers Association (WMBA) introduced the SONIA, commonly used for the Sterling Overnight Index Swaps (OIS) used as interest rate exchange. In April 2016, the Bank of England (BOE) became its administrator and in April 2018 introduced a series of reforms. Like the Fed's SOFR, SONIA also adheres to IOSCO's principles for financial standards; it has a strict monitoring committee and a strict government on compliance and accountability. The Benchmark Index is published in London at 9.00 am daily, and calculations are based on weight and sterling money market data. So far, the SONIA daily benchmark only provides guidance on overnight interest rates in GBP.	Bank of England	UK
3.	Bank of Japan's Tokyo Overnight Average Rate (TONAR)	In March 2016, the Bank of Japan (BOJ) published a document identifying and using the risk-free rate of the Japanese Yen. BOJ calculated the TONAR, which is a benchmark based on the rate of unsecured calls made overnight using information provided by money market brokers and Japan's response was adopted by the UK LIBOR. The BOJ formally announced TONAR and implemented "Call Money Market Data" in an effort to "release additional data on its website in addition to the rate of unsaved calls overnight".	Bank of Japan	Japan
4	Swiss Average Rate (SAR)	The Swiss National Bank (SNB) publishes the SAR, which publishes a "volume-weighted reading" based on full transaction and reference prices published on a trading day.	Swiss National Bank	Switzerland
5.	European Short Term Rate (ESTR)	The ECB is already in the second phase of the roundtable to develop a short-term alternative European rate known as European Short Term Rate (ESTR) from the Euro to the LIBOR. In its April 2018 issue, it said, the Euro system is already available based on the data; it has announced its decision to publish "Unsecured Euro Interest" overnight. The ECB has provided further guidance for the completion of the benchmark by 2020 and will be completely removed from the Euro transactions reported by data banks as per their Statistical Money Market Report (MMSR).	European Central Bank	European Union

Table 16.4 Approaches to an Islamic benchmark rate

S.No.	*Approaches to IBR*	*Explanation*
1.	Murabaha rate of return is offered daily by major Islamic banks and financial institutions and similarly depends on the expected exchange rate for each contributing bank's funds.	For example, the local market benchmark rate for Islamic financial institutions operating in Malaysia is the KLIBOR rate (short for Kuala Lumpur Islamic Benchmark Rate). By definition, the KLIBOR is an adjusted average of rates for individual Islamic banks in the country and for all players. It is formed by averaging the rates offered by 12 banks daily at 11.12 am local time. KLIBOR rates are mature overnight to one year.
2.	Another alternative to the LIBOR could be the Asset Return (ROA) for Islamic banks.	ROAs, by nature, depend on the expected or expected cost of financing a given bank. As a result, the cost of financing depends on a combination of short-term interbank financing, medium-term financing, and depositor financing. Such profits are usually driven by market-based performance expectations and are consequently affected by the ratio of local interest-based financing costs.
3.	The retail deposit rate can at least provide an alternative to the LIBOR in theory.	In a sense, they can be very useful, as they are cost-effective for IFI loans (traditionally). Such rates are often cost-sensitive, and since the cost of short-term retail financing is lower than that of its traditional counterpart, this alternative is not worthwhile and is of little use in practice.

Table 16.5 From a Sharīʿah point of view, who should set the rates?

S.No.	*Rate setter from a Sharīʿah point of view*	*Why this setter*
1.	Government	Historically, in the Ottoman Empire there have been instances where the government acted as an independent protector of the interests of the wider community and has set limits on credit transactions.
2.	Banks	The party is directly affected and is concerned with the use of appropriate benchmarks. Apparently, a select number of Islamic financial institutions can contribute to the standard and in that capacity, such entities can be held responsible for determining the rate of representation.
3.	Independent body	An impartial and independent state can provide credibility.

the European Interbank Offered Rate (EURIBOR). Islamic banks must have a significant stake before they can experiment in order to influence the financial system. To fill this gap, alternatives are being tested at benchmark rates, such as the Secured Overnight Financing Rate (SOFR). US Treasury Refinance is based on market transactions in America where banks and investors ask for loans or lend overnight. The British Sterling Overnight Index Average (SONIA) and Swiss SARON are other such examples. In this context, the discussion of benchmarking for Islamic financial institutions is timely. Internationally, Islamic financial institutions have their own standards based on the dollar. Thomson Reuters launched the Islamic Interbank Bank Rate (IIBR) in 2011 in collaboration with the Islamic Development Bank (IDB), the AAOIFI, and the Bahrain Association of Banks (BAB). The rate is not very popular and it also has a gap relative to the LIBOR: subjectivity.[8]

The investigation shows that Islamic banks hold a portfolio of real estate through home portfolios. Risk margins will be added to cover residential vs. commercial risk and high end vs. suburban risk. It will also strengthen its credibility with the help of skeptics, which is a major obstacle to its widespread adoption. The current portfolio of Islamic banking is 15% of the total assets of the banking sector. SBP wants to increase it to 25% by 2023. The availability of reliable data is indeed a challenge for the development of a real estate index. However, one of our neighbors has developed such an index in consultation with international experts. The index can eliminate external objects and as a result become the best fit model with a limited fit data points. We may need to find our own solution. Real estate investment rates are companies that sometimes own immovable property and are another source that can benefit from such research and development.[9]

According to a leading banker, the most practical solution is for Islamic banks to base their rates on interbank markets based on participatory/muḍārabah agreements. Recently, the Pakistani government auctioned the fixed price of sukuk. Similar and recurring autonomous issues can be used by financial institutions as a benchmark for long-term financing. Gold benchmarking has a special place in academic circles. In light of the dynamics of change in the financial sector, the discussion ensures coordinated collaboration between academics, practitioners, regulators, and digitization experts to create innovative and innovative solutions.[10]

Conclusions

The Islamic financial industry has grown rapidly over the past decade; however, the success of the industry has been widely criticized, especially in regard to its similarity to traditional finance. While Islam forbids all transactions related to interest, the Islamic financial industry is struggling to separate itself from the interest rate. More Islamic financial products are designed to have a prohibited interest component removed from the principal debt with an asset. The price of these Islamic instruments, however, is linked to traditional interest rate standards. The price correlation threatens the religious legitimacy of the industry as it draws

attention to it. The Islamic customer is moving away from its individuality to its resemblance to traditional banking. Earlier it was thought that the challenge of similar prices would end with an increase in the size of the industry and the development of its quality. However, the stability of this spread means that the first experiment has been carried out to implement a single Islamic historical benchmarking rate, which cannot succeed without conflict.

This study aims to find a viable Islamic price benchmark instead of the market interest rate currently used as a benchmark in Islamic finance. From the outset, the study recognized that the Islamic price benchmark should be based on the risk profiles of real financial companies. Sharī ʿah encourages profiteering, but hates usury. Profit is linked to real economic activity and is risky. Therefore, the Islamic benchmarking should be based on the rates of return from the real sector. Therefore, it has to be linked to the real economy and be based on asset production and profitability; that is, it has to be fixed, as opposed to market interest rates that are externally fixed and not are concerning the confiscation of assets. We suggest that before starting their benchmark rates, Islamic banks should change the way they do business. These changes reflect benchmark rates, which make them different from traditional banks.

Notes

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17

FOREIGN CURRENCY AND RATE DERIVATIVES ON FIRM VALUE

A Sharīʿah Experience

Zaminor Zamzamir Zamzamin, Razali Haron, Anwar Hasan Abdullah Othman, and Rusni Hassan

Introduction

Risk management practices undertaken by firms are meant to reduce risk. Understanding the most critical risks facing the firms enables stakeholders, especially managers, to carry out necessary measures to mitigate the adverse consequence of risk on firm value. Recently, a massive growth in derivatives usage is reported among firms around the world (Bartram, 2019). Thus, risk management is essential to firm operation and any failures of a firm in managing risk will impact its performance. Good risk management practice therefore becomes the priority of shareholders. Bouwman (2014) stated that firms use derivatives as an effective tool for managing risk. In line with this argument, Antônio et al. (2019) confirmed that firms used derivatives for risk protection. In addition, Barton (2001) stated that firms used derivatives to minimize the impact of earnings volatility and interest rate risk, while Dewally and Shao (2013) reported that derivatives are used to reduce risk exposure. Derivatives, therefore, are hedging instruments for risk management during crises (Bartram, 2019).

Recently, most non-financial firms used derivatives for risk management and they became the most effective and efficient tool for corporate hedging (Bartram, 2019). Based on the available data from the Bank of International Settlements, the market for the over-the-counter (OTC) instruments and exchange-traded derivatives (ETD) on foreign exchange rates and interest rates have exhibited exponential growth over the past 14 years, as shown in Figure 17.1. The notional amount outstanding on foreign currency derivatives shows an upward trend starting from 2010 and that keeps increasing over the years, reaching USD 99 trillion in 2019 while interest rate derivatives rose significantly between 2017 and 2019. In addition, the OTC notional amount outstanding at the end of 2019 stood at around USD 60 trillion. This situation is also similar to the derivatives market in Malaysia. The total notional amount outstanding on OTC derivatives, comprising foreign currency derivatives and interest rate derivatives, grew to RM 171 billion

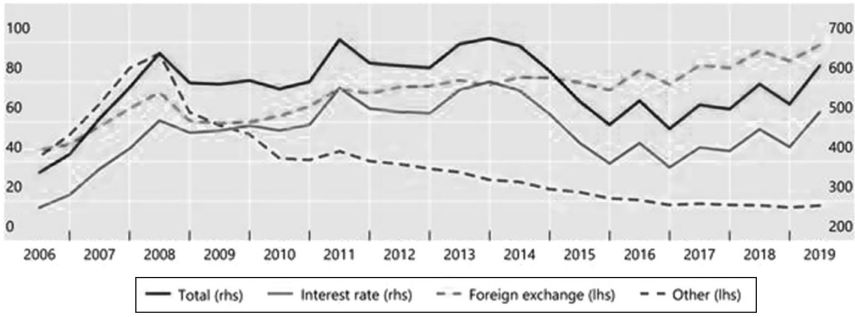

Figure 17.1 The notional outstanding amount of derivatives from 2006 to 2019 (trillion USD). *Source: Bank of International Settlements*

in 2003. Meanwhile, derivatives trading, which includes both OTC and ETD, is expected to account for the major part of this growth, with the notional amount projected to increase from RM 171 billion to RM 1.4 trillion by 2020. This upward trend shows the increasing use of derivatives over the years, indicating its importance as risk management instruments. In relation to Malaysia, Hong et al. (2018) and Bank Negara Malaysia (2017) stated that foreign currency derivatives are the most used derivatives instrument among the Malaysian listed firms.

With regard to crisis, many firms and financial institutions collapsed during the East Asian Financial crisis of 1997 and subsequently during the 2007/2008 global financial crisis due to poor risk management (Siddika and Haron, 2020). Following this, the crisis had shaped the scope of derivative instruments in most of the countries. The collapse of some established and prominent US banks and financial institutions such as Lehman Brothers, Merrill Lynch, and National City Bank (Siddika and Haron, 2020) and firms in Brazil (Zeidan and Rodrigues, 2013) raised many questions on the effectiveness of risk management using derivatives. On the same ground, Dodd (2009) reported 12 countries in emerging markets incurred losses in exotic derivatives due to poor risk management. Following this, the huge losses related to derivatives have increased the demand for standard reporting on derivatives activities (Blankley et al., 2002). Despite this, derivatives continue to become a popular hedging instrument among firms for risk management (Ayturk et al., 2016; Seng and Thaker, 2018).

Chong et al. (2014) nevertheless reported that the volume of financial derivatives trading in Malaysia is relatively low compared to neighboring countries such as Singapore, Hong Kong, and South Korea. Due to this, they argued that market players in Malaysia need to be educated on the use of derivative instruments for risk management. Ameer et al. (2011, 2012) also reported that awareness of derivatives among firms in Malaysia is still low and most managers do not realize the function and importance of derivatives as a hedging instrument especially during the period of uncertainties. They also added that the practice of derivatives

among Malaysian firms is not as extensive as those in developed countries due to their lack of exposures, which are generally considered to be costly and complex products. This is proven by Lau (2016) who reported merely 26.8% of Malaysian firms have derivative contracts in their operation, while the rest of them did not use any derivatives. Besides, Abdullah and Ismail (2017) also found that only 29.6% (48 firms) of the Malaysian listed firms chose to provide information on their derivatives positions while the rest of the firms failed to do so. This phenomenon is also reported by Ameer (2009), who notes that 298 firms in Malaysia did not participate in any form of hedging instruments during the period under study.

Recently Islamic finance has grown very rapidly all around the world. The Islamic financial asset was worth around USD 1.66 trillion in 2014 and continued to grow to USD 3.4 trillion in 2018. In 2015, the overall total value of Islamic financial assets was about USD 1.87 trillion despite the slowness and various challenges in the global economy (Ahmed, n.d.). In line with the rapid growth in Islamic finance, derivatives are becoming a popular hedging instrument among Islamic financial institutions (IFIs) and this includes the Sharīʿah compliant firms. Islamic finance according to Baber (2018) and Nafis and Mohammad Shadique (2016) becomes an alternative due to the weaknesses of the conventional financial system. Furthermore, researchers have documented that IFIs are better equipped to cope with economic downturns during financial crises compared to their counterparts (Baber, 2018; Nafis and Mohammad Shadique, 2016). Despite this, the Sharīʿah-compliant firms as part of the Islamic capital market (ICM) also experience the same risk such as currency risk, interest rates risk, commodity risk, and operational risk. The future sustainability of ICM thus depends on its capacity to deal with the rapidly changing financial landscape. Firms in the ICM need to be well positioned to overcome the challenges posed by the financial landscape in terms of the latest risk management techniques and operational system.

Based on this scenario and with limited empirical evidence on hedging and firm performance on Malaysian firms (Seng and Thaker, 2018), this study aims to examine the impact of foreign currency and interest rate derivatives on firm value of Sharīʿah-compliant firms. The findings of this study therefore will fill the gap in the literature pertaining to the risk management strategies of Malaysian Sharīʿah-compliant companies and impact on firm performance.

Literature review

Studies on hedging are voluminous. Before the development of hedging theory, most scholars referred to and relied on the classical Modigliani and Miller paradigm. This classical paradigm of Modigliani and Miller (MM) states that financial policy decisions have no impact on firm value (Modigliani and Miller, 1958). However, some researchers have challenged the MM theory due to its contradiction with the risk management practices. Some researchers (Belghitar et al., 2013; Bouwman, 2014; Antônio et al., 2019) recommend that hedging that uses derivatives is a value-increasing strategy for the firm. Hedging refers to activities

undertaken by a firm to mitigate the impact of uncertainties on the value of the firm (Mian, 1996). Hedging theory is first discussed by Stulz (1984), who stated that if external financing is more costly than internal financing, hedging is a value-enhancing activity. This is if it closely matches fund inflows with outflows and decreases the probability that a firm needs to access the capital market. Hedging ensures that a firm has sufficient internal funds to avoid unnecessary fluctuations of risk, and thus increases firm value. Demarzo and Duffie (1995) and Froot et al. (1993) specified that tax incentives, underinvestment cost, financial distress, and managerial compensation could increase firm value through hedging. Allayannis and Ofek (2001) reported that the inaccessibility of data on hedging activities, however, causes a lack of empirical investigation on hedging. Furthermore, in the early 1990s, information on derivatives in firms was confidential as it was considered a strategic competitiveness component. Firms nowadays are required to disclose all information (risk management and financial derivatives) in the footnote of their annual reports in an off-balance sheet section. Researchers have to use data reported in the off-balance sheet of financial statements to examine the value relevance and the usage of derivatives for hedging. Geczy et al. (1997) analyzed the use of currency derivatives and found that firms that are exposed to risk tend to use currency derivatives to increase firm value.

From the Islamic finance perspective, hedging is a method of precaution or minimizing loss from the risk that persistently exists in the financial market. Many Qur ̄anic verses offer guidelines and suggest men should have risk management in their life. There is a section in the Qur ̄an that discusses the financial context of risk management, implying that risk management and hedging activity are significantly important, as mentioned in Surah Yusuf (12: 47–48).

Yusuf conveyed,

> You will plant for seven years consecutively; and what you harvest leave in its spikes, except a little from which you will eat. Then after that seven difficult (years), which will consume what, you save for them, except a little from which you will store. Then will come after that a year in which the people will be given rain and in which they will press (olive and grapes).

Prophet Yusuf translated the dream of the King based on the verse. Subsequent to the seven years of prosperity in Egypt, the Kingdom would experience seven years of dry season, and to overcome the upcoming disaster, the Prophet recommended the King to strategize the economy of the country. Specifically, Egyptians should prepare the activity of planting the crops and store as much as possible for the preparation of the long seven-year drought. As a result, the people were able to survive when the dry season hit for seven years (Ibn Kathir, 1988). Therefore, it is evidence that managing risk is vital, for risk, if not well managed, can bring destruction.

Recent empirical studies link firm value to hedging with the evidence available for both ends of the debate. Bhagawan and Lukose (2017) reported that to hedge currency exposure, firms are more likely to use derivatives. This is in line with

Chong et al. (2014) who found that the use of derivatives is to minimize risk, hence increasing firm value. Besides, Allayannis and Weston (2001) claimed that foreign currency derivatives and firm value is positively significant. They also recorded that firms are exposed to currency risk and the use of derivatives for hedging is to create higher firm value. In contrast, firms that do not hedge will be affected and drop in firm value. Tanha and Dempsey (2017) also found that financial risk (such as interest rates, foreign exchange, equity) and commodity risk have influence on firms to hedge. Besides, Bartram et al. (2011) also found a positive relationship between the use of derivatives and firm value. They examined the effect of hedging on risk and value on non-financial firms from 47 countries and found evidence on the value relevance issue. Conversely, Bae et al. (2017) in their study on firms in the manufacturing and services industries in Korea, found that foreign currency derivatives fail to increase firm value. In another study by Bae and Kim (2016), it was reported that the heavy usage of foreign currency derivatives by Korean firms led to lower firm risk. However it failed to increase firm value due to inefficient hedging practices of the firms. Magee (2013) found no relationship between foreign currency derivatives and firm value. Belghitar et al. (2013) also found no significant influence of foreign currency derivatives on firm value in the sample of French non-financial firms.

Meanwhile, Bartram et al. (2009) investigated interest rate hedging in a large sample of multi-industry firms and found a positive correlation between hedging activities and firm value. In contrast, Ayturk et al. (2016) reported that the majority of financial derivatives (currency, interest rate, and commodity) do not influence firm value in the Turkish market based on Tobin's Q. Meanwhile, Panaretou (2013) investigated the effect of hedging on large UK firms and found that only currency hedgers showed significant hedging benefit. There is, however, weak evidence on interest rates with no evidence to support the value relevance on commodity. Their findings are also similar to those reported by Jin and Jorion (2006) who found that interest rate derivatives do not have any effect on firm value for the oil and gas industry but hedging reduces firm stock price sensitivity to oil and gas prices. Following such varied findings on empirical evidence of foreign currency and interest rate derivatives among the non-financial firms, this study hypothesizes the following:

H1. A significant positive relationship is expected between foreign currency derivatives and firm value of Sharīʿah-compliant firms.
H2. A significant positive relationship is expected between interest rate derivatives and firm value of Sharīʿah-compliant firms.

Data and research methodology

Sample selection

The sample data of this study involves the non-financial firms that engaged in derivatives from 2000 to 2017. Firms' engagement in derivatives is found by referring to their annual reports at the off-balance sheet section in accordance with

the standard of reporting of financial instruments and disclosure of the MFRS 7 (Financial Instrument Disclosure). The MFRS 7 is in line with the International Financial Reporting Standard (IFRS) 7 Financial Instrument: Disclosure, issued by the International Accounting Standard Board (IASB). It is compulsory for firms in the US, the UK, Australia, Canada, and New Zealand as well as firms in other countries that comply with the International Accounting Standard (IAS) to reveal information on their derivatives position (Bartram, 2019). Malaysia is also no exception to disclosing the information on derivatives positions.

The number of firms listed in the main market in Bursa Malaysia keeps changing over the years. There are 905 firms listed in the main market of Bursa Malaysia as at December 2017. Out of these, only firms that are consistently engaged in derivatives are chosen and the engagement in derivatives is irrespective of any years during the study period. Therefore, after the filtering process, only 59 Sharīʿah-compliant firms that are consistently engaged in derivatives are selected in this study. The financial reports were downloaded from Bursa Malaysia's website in an electronic format. The information on firms with derivatives positions is scanned using the following keywords: risk management, derivatives, foreign exchange forward, forward foreign exchange, forward contract, forward exchange contract, interest rate derivatives, and interest rate swap.

The sample firms in this study involve the Sharīʿah-compliant firms. Following Ramli and Haron (2017), the Sharīʿah-compliant firms need to fulfill certain criteria i.e., the firm must consistently be Sharīʿah-compliant every year starting from 2000 until 2017 and in accordance with the Securities Commission Malaysia (SC) Sharīʿah-compliant yearly listing. This is in contrast to the selection of Sharīʿah-compliant according to only a specific cut-off year; say, for example, only based on November 2017 as per SC Sharīʿah-compliant listing. Ramli and Haron (2017) argued that the consistency in Sharīʿah-compliant listings reflects the real Sharīʿah-compliant status of the firms.

Dependent variable

Tobin's Q acts as a proxy for the dependent variable representing firm value. The measurement of the value of the firm is defined as equity market capitalization (market value) plus total liabilities (book value) over total assets (book value) following the study of Allayannis et al. (2011), Ayturk et al. (2016) and Haron et al. (2020). For a robustness check, the study also uses ROA and ROE as alternative measurements for firm value. Data on firms are collected from the DataStream database.

Explanatory variable

Financial derivatives are represented by foreign currency derivatives and interest rate derivatives with expected influence on firm value. The value of foreign currency derivatives and interest rate derivatives is according to the notional value of the derivatives contracts divided by total assets, in line with past studies (e.g.,

Allayannis and Weston, 2001; Ayturk et al., 2016; Bae et al., 2018; Bartram et al., 2011; Jin and Jorion, 2006; Magee, 2013). Data on foreign currency and interest rate derivatives are manually collected from the annual reports of the firms.

Control variables

Ten control variables are included to explain firm performance.

Managerial ownership

Adam and Fernando (2006) found managerial ownership influences risk management decision and firm value, further supported by Fahlenbrach and Stulz (2009), and Coles et al. (2012). Ameer (2010) recorded a significant relationship between managerial ownership and firm value of Malaysian firms. Seng and Thaker (2018) found managers took fewer hedging positions when they owned more shares, hence confirming a significant negative relationship between managerial ownership and corporate hedging, and firm value of Malaysian firms. Supanvanij and Strauss (2010) reported that managerial ownership is negatively related to firm hedging position. Managerial ownership is measured based on total shareholding (direct) owned by directors over the total common shares outstanding at the end of each year in the firm (Ahmad and Haris, 2012; Ameer, 2010; Haron et al., 2020).

Access to financial market

If firms forgo projects because they are unable to obtain the necessary financing, their firm value remains high because only positive net present value (NPV) projects are being pursued. Allayannis and Weston (2001) and Magee (2013) stated that firms paying dividends are less likely to face capital constraints and can reduce their dividend to increase investment. Following Law (2016) and Allayannis and Weston (2001), the proxy for access to the financial market means a firm that pays dividends in the present year equals "1" and "0" otherwise.

Firm risk

Past studies reported that heavy use of foreign currency derivatives by Korean firms leads to lower firm risk and higher firm value (Bae et al., 2017). Choi et al. (2013) also found that firms engaged in derivatives have lower firm risk and higher firm value. Following these studies, the measurement of firm risk is based on the average standard deviation of daily stock returns and then annualized to yearly return.

Firm size

Firm size is reported to have influence on firm value. Past studies reported that firm size has a significant positive relationship with hedging decision, hence increases

firm value (Allayannis et al., 2011; Lau, 2016; Magee, 2013). However, Allayannis and Weston (2001) and Ayturk et al. (2016) found that firm size negatively related to firm value. The proxy for the firm size is the natural logarithm of total assets.

Industrial diversification

Industrial diversification similarly influences firm performance. Highly diversified industries have a higher value compared to low diversified industries (Allayannis and Weston, 2001; Ayturk et al., 2016; Bae et al., 2017; Bartram et al., 2011; Nguyen and Faff, 2010b). This study uses the 1-Herfindahl-Hirschman Index (HH Index) to control the effect of industrial diversification as adopted by Berger and Ofek (1995), Lang and Stulz (1994), and Servaes (1996). The estimation of the HH Index is calculated from firms' sales by segment. The HH Index is calculated based on the total of the squared sales value for each segment as a fraction of total firm sales.

Industry effect

This study also controls for industry effect. The decision to engage in derivatives by a firm is also influenced by the industry to which they belong (Allayannis and Ofek, 2001). If a firm that uses derivatives belongs to a high-Q industry, for example the technology-intensive industry, the firm is expected to generate more profit due to the industry itself (Lau, 2016). Therefore, to control for industry effect, this study first constructs the industry-adjusted Tobin's Q, then computes the log difference between the weight-adjusted industry Q and multi-segment for each firm (Allayannis and Weston, 2001; Ayturk et al., 2016; Lang and Stulz, 1994).

Investment growth

Firms tend to have large investments and depend on future investment opportunities to grow. The growth eventually influences firm value. This study follows Yermack (1996) and Allayannis and Weston (2001) by using the ratio of capital expenditure to sales as a measurement for investment growth.

Leverage

The capital structure of the firms affects firm value. Thus to control for capital structure, this study uses long-term debt divided by total shareholder equity (Allayannis et al., 2011; Allayannis and Weston, 2001; Ayturk et al., 2016; Jin and Jorion, 2006; Panaretou, 2013).

Time

Regarding the MFRS, it is compulsory for Malaysian listed to disclose the exposure in derivatives in their annual reports starting from the year 2012 onwards.

Following the MFRS guideline, therefore, from 2000 to 2011 equals "0" and 2012 to 2017 equals "1". Allayannis and Weston (2001) and Lau (2016) used time effect as control variable since time is a proxy for economic and business condition. This study expects that the time effect is positively significant due to the importance of MFRS disclosure requirement.

Year crisis

This study also controls for year crisis (dummy) in which the crisis years (2007 and 2008) are categorized as "1" while the non-crisis year (other years) as "0". The consideration of crisis year is important since the economic trend might have a structural break where the economic condition is getting better after the global financial crisis (Abdul Bahri et al., 2018; Zeidan and Rodrigues, 2013).

Regression model

This study first examines the relationship between foreign currency derivatives and firm value of Sharīʿah-compliant firms in a panel data form as follows:

$$Q_{it} = \beta_0 + \gamma Q_{it-1} + \beta_1 FCD_{it} + \beta_2 MO_{it} + \beta_3 ACCES_{it} + \beta_4 RISK_{it} + \beta_5 SIZE_{it} + \beta_6 DIV_{it} + \beta_7 INDUSTRY_{it} + \beta_8 GROWTH_{it} + \beta_9 LEV_{it} + \beta_{10} TIME_{it} + \beta_{11} CRISIS_{it} + \eta_i + \varepsilon_{it}$$

Model 1

Where Q_{it} is firm value, measured by Tobin's Q for firm i in period t. To capture the persistence in firm value, the lagged value of Tobin's Q is included as an independent variable whereas $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \beta_8, \beta_9, \beta_{10}, \beta_{11}$ are the slopes parameter to be estimated. The explanatory variable is FCD_{it} (foreign currency derivatives) while the control variables consist of MO_{it} (managerial ownership), $ACCES_{it}$ (access to financial market), $RISK_{it}$ (firm risk), $SIZE_{it}$ (firm size), DIV_{it} (industrial diversification), $INDUSTRY_{it}$ (industry effect), $GROWTH_{it}$ (investment growth), LEV_{it} (leverage), $TIME_{it}$ (dummy time), and $CRISIS_{it}$ (dummy crisis). While η_i is an unobserved firm-specific term and ε_{it} is an error term. H_1 states that a significant positive relationship is expected between foreign currency derivatives and firm value.

This study employed the system-GMM (Generalized Method of Moments) for dynamic panel data as proposed by Arellano and Bover (1995) and Blundell and Bond (1998) to estimate the regression in Model (1) and Model (2). GMM is effective when the moment conditions are exercised in the model framework and the data with a certain number of moment conditions are specified for the model. Therefore panel GMM provides a solution for the endogeneity issues by substituting the endogenous variables with instrumental variables. System-GMM offers

better elasticity to the variance-covariance framework and has greater effectiveness, improves accuracy and addresses endogenous issues in the model (Baltagi, 2005). This study also performs several diagnostic tests that include the validity test of the instruments and serial correlation test as recommended by Arellano and Bover (1995) and Blundell and Bond (1998). The Hansen test is employed to check the validity of the instruments used, while AR (1) and AR (2) are for the serial correlation tests. Hansen test has null of valid instruments while AR (1) and AR (2) have nulls of the absence of first-order and second-order serial correlation in the residuals, respectively. For AR (1) the null hypothesis should be rejected and the failure to reject the null hypothesis for AR (2) tests indicates that the regression model is robust.

The second objective is to examine the relationship between interest rate derivatives and firm value of Sharī'ah-compliant firms in a panel data form as follows:

$$Q_{it} = \beta_0 + \gamma_1 IRD_t + \gamma_2 MO_{it} + \gamma_3 ACCES_{it} + \gamma_4 RISK_{it} + \gamma_5 SIZE_{it} + \gamma_6 DIV_{it} + \gamma_7 INDUSTRY_{it} + \gamma_8 GROWTH_{it} + \gamma_9 LEV_{it} + \gamma_{10} TIME_t + \gamma_{11} CRISIS_t + \eta_i + u_{21it}$$

Model 2

Where Q_{it} is firm value, measured by Tobin's Q for firm i in period t. To capture the persistence in firm value, the lagged value of Tobin's Q is included as an independent variable. The explanatory variable is IRD_{it} (interest rate derivatives) while the control variables consist of MO_{it} (managerial ownership), $ACCES_{it}$ (access to financial market), $RISK_{it}$ (firm risk), $SIZE_{it}$ (firm size), DIV_{it} (industrial diversification), $INDUSTRY_{it}$ (industry effect), $GROWTH_{it}$ (investment growth), LEV_{it} (leverage), $TIME_{it}$ (dummy time), and $CRISIS_{it}$ (dummy crisis). While η_i is an unobserved firm-specific term and ε_{it} is an error term. H_2 states that a significant positive relationship is expected between interest rate derivatives and firm value.

This study employs the Two-Stage Least Square (2SLS) approach to investigate the relationship between interest rate derivatives and firm value. The 2SLS approach is used to cater to small samples when T is bigger. The 2SLS regression is employed in this study because of the small number of observations and limited availability of interest rate derivatives data after filtering the derivatives process. The uses of the GMM estimator in small samples presented many problems in estimating and diagnostic testing (Abdul Bahri et al., 2018). Baum (2006) states that 2SLS is no more than the estimator with a decision rule that reduces the number of instruments to the exact number needed to estimate the equation. He also mentioned that this estimator is an unbiased estimator in small samples. To address the endogeneity issue in small samples, especially interest rate derivatives, 2SLS regression was used to solve this problem. This study performs several diagnostics to test the validity, consistency, biasness and efficiency that

consists of Anderson Canonical Correlation LM Statistic, Cragg-Donald, Stock Yogo critical issue, the Sargan test, and the Wu-Hausman Test. The Anderson Canonical Correlation LM Statistic is a test of under-identification in the matrix rank. The null hypothesis of this test is that the instruments are valid in the sense of the matrix to reduce the form coefficient has on rank (under-identified). The second diagnostic test of 2SLS is the Cragg-Donald test. This test is to test the weak identification test. If Cragg and Donald (1993) static (multivariate version of the Wald F-statistic) is larger than Stock and Yogo's (2005) critical value, it means that the null hypothesis is weakly identified and it is rejected. Stock and Yogo (2005) stated that the critical value depends on the number of endogenous regressors, the number of instruments, the maximum bias, and the estimation procedure. The third diagnostic test for 2SLS is Sargan test. This test is for over-identification test of all instruments whether there is an existence of exogenous instrument or not. The null hypothesis for this test is that the instruments are valid if over-identification for all instruments is rejected and lastly Wu-Hausman test for endogeneity test. The null hypothesis is rejected if the over-identification for all instruments are valid. Therefore, all tests (Anderson Canonical Correlation LM Statistic, Cragg-Donald, the Sargan test, and the Wu-Hausman Test) are to confirm the validity of instrumental variables.

Empirical analysis and discussions

Table 17.1 presents the descriptive statistics of the variables used in this study. The sample comprises 59 non-financial Sharīʿah-compliant firms from the main market of Bursa Malaysia. First, the mean for Tobin's Q is 1.0851 (SD 0.8989) implying that the firms are profitable, on average. The mean of foreign currency

Table 17.1 Summary of descriptive statistics

Variables	*Obs.*	*Mean*	*Std. Dev.*	*Min*	*Max*
Tobin's Q	1,043	1.0851	0.8989	0.0000	9.6898
FCD	477	35.4748	84.6637	0.0009	953.4154
IRD	111	13.0232	48.3115	0.0128	466.8995
MO	1,052	0.0811	0.1384	0.0000	0.8194
ACCESS	1,062	0.8386	0.3770	0.0000	1.0000
RISK	1,054	0.3653	0.2257	0.0731	3.5968
SIZE	1,044	13.5857	1.7561	6.8690	18.7867
DIV	1,042	0.1452	0.1036	0.0054	0.7336
INDUSTRY	1,045	3.1477	0.8378	-0.0700	14.4083
GROWTH	1,035	0.0947	0.1889	0.0005	3.6880
LEV	830	0.2783	0.3874	3.4200	4.6432
DUMMY_TIME	1,062	0.3333	0.4716	0.0000	1.0000
DUMMY_CRISIS	1,062	0.1111	0.3144	0.0000	1.0000

Notes: Tobin's Q is a measurement for firm value; FCD is foreign currency derivatives (notional value/total asset); IRD is interest rate derivatives (notional value/total asset); MO is managerial ownership (total shareholding (direct) owned by managers.

derivatives is 35.4748 with SD of 84.6637. The mean of interest rate derivatives is 13.0232 with SD of 48.3115 and the mean for managerial ownership is 8.11% (SD 13.84%). The mean (SD) of access to financial market is 0.8386% (37.70%). The mean for firm risk shows 36.53% (SD 22.57% denoting lower risk for the firms. The mean reported for firm size is 13.5857 with SD of 1.7561, whereas the mean for industrial diversification is 0.1452 (SD 0.1036). The mean for industry effect is 3.1477 with the SD of 0.8378 and the mean for investment growth is 9.47 percent (SD 18.89%). Next, the mean for leverage is 27.83% (SD of 38.74%). Lastly, the mean for dummy time is 0.3333 (SD 0.4716) and the mean for dummy crisis is 0.111 with SD of 0.3144. This study also reports the correlation coefficient between the independent variables as in Table 17.2, indicating that the multicollinearity problem is not a concern due to low correlation coefficients between the independent variables; thus the model is not biased.

This study first presents Model (1) that examines the foreign currency derivatives and firm value through the two-step system GMM estimator. Model (2) presents the impact of interest rate derivatives and firm value by using 2SLS technique. At the bottom of Table 17.3, the diagnostic tests are reported; there is no issue of the validity of the instruments and autocorrelation in the residuals. Based on the Hansen test, the null hypothesis is not rejected; hence, the instruments are valid. Furthermore, the AR (1) and AR (2) tests expose the absence of autocorrelation in the model. Meanwhile, at the bottom of Table 17.4, the diagnostic tests are reported to confirm the validity, consistency, bias, and efficiency based on the Anderson Canonical Correlation LM Statistic, Cragg-Donald, Stock Yogo critical issue, the Sargan test, and the Wu-Hausman test. The Sargan test does not reject the over-identification restriction, recommending that this study has valid instruments. The Anderson LM statistic is tested for validity instruments; then for the regression model, the hypothesis that the instruments are not valid is rejected at the 5% level. The weak identification test, measured by Cragg-Donald Wald F-Statistic and the endogeneity test, as measured by the Durbin-Wu-Hausman test, also confirm the validity of the variables.

The result from Table 17.3 provides evidence on the positive relationship between foreign currency derivatives and firm value. As seen in Table 17.3, the coefficient of foreign currency derivatives is 0.0483 and is positively significant ($p<0.05$). This finding therefore provides evidence that a positively significant relationship exists between foreign currency derivatives and firm value of Sharī ʿah-compliant firms, consistent with the findings of Allayannis and Ofek, 2001; Bartram et al., 2011; Chong et al., 2014; Bhagawan and Lukose, 2017; and Tanha and Dempsey, 2017. This positive relationship suggests that Sharī ʿah-compliant firms in Malaysia involved in hedging used foreign currency derivatives, resulting in higher performance of the firm. This finding provides evidence on the effective risk management via derivatives adopted by the firm; hence, increasing firm value. The positive relationship could be due to several reasons; firstly, firms use derivatives to hedge risk exposure and financial volatility (Lau, 2016); secondly, firms with higher risk use more derivatives instruments to hedge risk since the

Table 17.2 Correlation coefficients among independent variables

	Tobin's Q	*FC*	*IR*	*ACCESS*	*MO*	*RISK*	*SIZE*	*DIV*	*INDUSTRY*	*GROWTH*	*LEV*	*TIME*	*CRISIS*
Tobin's Q	1.0000												
FCD	–0.0653	1.0000											
IRD	0.1455	0.2154	1.000										
ACCESS	0.1837*	–0.0643	0.0618	1.000									
MO	–0.1636*	0.0319	–0.0327	–0.0728*	1.0000								
RISK	–0.2980*	0.1605*	–0.0564	–0.4380*	0.1914*	1.0000							
SIZE	0.2579*	–0.1974*	–0.1741	0.2586*	–0.2349*	–0.4380*	1.0000						
DIV	–0.0233	0.0239	0.2748*	0.1433*	–0.0043	–0.0776*	0.1771*	1.0000					
INDUSTRY	0.3669*	0.0976*	–0.1597	0.0700*	0.0561	0.2486*	–0.3707*	0.1637*	1.0000				
GROWTH	0.0252	–0.0666	0.0764	0.0875*	–0.0927*	–0.0154	0.0982*	0.1087*	–0.0429	1.0000			
LEV	0.0103	0.0387	–0.1629	–0.0747*	–0.0694*	–0.0095	0.2479*	0.1374*	–0.0412	0.1050*	1.0000		
TIME	0.0724*	0.0534	–0.0583	–0.0124	–0.0062	–0.2045	0.1877*	–0.2058*	–0.4226*	–0.0276	–0.0503	1.0000	
CRISIS	–0.0086	–0.0590	–0.0736	0.0097	–0.0200	0.1504	0.0029	–0.0159	0.0211	–0.0161	–0.0008	–0.2500*	1.0000

Note: * represents the significant at level $p<0.05$

Table 17.3 Regression results of foreign currency derivatives (two-step system GMM)

	Model 1
Tobin's Q (-1)	0.566***
	(28.79)
FCD	0.0483***
	(2.65)
MO	-0.0380***
	(-4.53)
ACCESS	0.0956
	(1.36)
RISK	-0.710***
	(-5.90)
SIZE	-0.0719***
	(-2.69)
DIV	-0.987***
	(-6.15)
INDUSTRY	-0.0760*
	(-1.66)
GROWTH	-0.196
	(-0.65)
LEV	0.641***
	(7.55)
DUMMY_TIME	-0.270***
	(-6.90)
DUMMY_CRISIS	-0.108***
	(-3.71)
Constant	1.824***
	(3.52)
No. of observations	303
No. of instruments	42
No. of Groups	47
AR (1)	0.016
AR (2)	0.480
Hansen Test	0.610

Notes: *, **, *** represent the significance at level $p<0.1$, $p<0.05$, $p<0.01$; *t*-statistic is in bracket; Tobin's Q is a measurement for firm value; FCD is foreign currency derivatives (notional value/total asset); MO is managerial ownership (total shareholding (direct) owned by managers over the total common shares outstanding), ACCESS is access to financial market (firm that pays dividend in the present year equals to "1" and "0" otherwise); RISK is firm risk (average standard deviation of daily stock returns on the previous year and then annualized to yearly return); SIZE is firm size (natural logarithm of total assets); DIV is industrial diversification (HH Index); INDUSTRY is industry effect (constructs the industry-adjusted Tobin's Q, then computes the log difference between the weight-adjusted industry Q and multi-segment for each firm); GROWTH is investment growth (ratio of capital expenditure to sales) and LEV is leverage (long-term debt divided by total shareholder's equity); DUMMY_TIME is following the MFRS guideline, from year 2000 to 2011 equals "0" and 2012 to 2017 equals "1"; DUMMY_CRISIS is in which the crisis years (2007 and 2008) are categorized as "1" while the non-crisis year (other years) as "0".

Table 17.4 Regression results of interest rate derivatives – Two-Stage Least Square (2SLS)

	Model 2	
	2SLS-FE	*2SLS-FD*
Tobin's Q (-1)	0.156***	-0.0978*
	(3.08)	(-1.70)
IRD	-0.0186	0.0119
	(-0.75)	(0.37)
MO	-0.0195	-0.0474*
	(-1.10)	(-1.88)
ACCESS	-0.00161	0.0753
	(-0.02)	(1.06)
RISK	0.206	0.315**
	(1.46)	(2.31)
SIZE	-1.071***	-1.459***
	(-13.41)	(-14.67)
DIV	0.469**	0.135
	(1.99)	(0.37)
INDUSTRY	-1.116***	-1.214***
	(-14.52)	(-14.20)
GROWTH	0.339	-0.894***
	(1.33)	(-2.96)
LEV	0.0001	0.0165
	(0.00)	(0.11)
DUMMY_TIME	-0.0177	0.0272
	(-0.65)	(0.78)
DUMMY_CRISIS	-0.0848	-0.114*
	(-1.69)	(-1.86)
No. of observations	68	54
R-squared	0.8852	0.8747
Anderson LM statistic	0.0005	0.0004
Cragg-Donald Wald F-Statistic	6.443	6.747
Durbin-Wu-Hausman Test	0.1332	0.8722
Sargan Test	0.1156	0.1355

Notes: *, **, *** represent the significance at level $p<0.1$, $p<0.05$, $p<0.01$; *t*-statistic is in bracket; Tobin's Q is a measurement for firm value; IRD is interest rate derivatives (notional value/total asset); MO is managerial ownership (total shareholding (direct) owned by managers over the total common shares outstanding), ACCESS is access to financial market (firm that pays dividend in the present year equals to "1" and "0" otherwise); RISK is firm risk (average standard deviation of daily stock returns on the previous year and then annualized to yearly return); SIZE is firm size (natural logarithm of total assets); DIV is industrial diversification (HH Index); INDUSTRY is industry effect (constructs the industry-adjusted Tobin's Q, then computes the log difference between the weight-adjusted industry Q and multi-segment for each firm); GROWTH is investment growth (ratio of capital expenditure to sales) and LEV is leverage (long-term debt divided by total shareholder's equity); DUMMY_TIME is following the MFRS guideline, from year 2000 to 2011 equals "0" and 2012 to 2017 equals "1"; DUMMY_CRISIS is in which the crisis years (2007 and 2008) are categorized as "1" while the non-crisis year (other years) as "0".

firm tends to generate profit and having economies of scale also encourages firm to exercise foreign currency derivatives. Chong et al. (2014) mentioned that no firm can avoid encountering risk and hedging is a complementary strategy to mitigate risk facing the firms. This finding is in support of the hedging theory, stating that firms that expose to risk are more likely to use derivatives to increase firm performance. This supports the argument that Sharīʿah-compliant firms are equipped in risk management (Baber, 2018; Mitchell, 2010; Nafis and Mohammad Shadique, 2016). Furthermore, during the financial crisis, Islamic finance is more resilient to face economic uncertainties compared to conventional finance (Nafis and Mohammad Shadique, 2016; Baber, 2018). Based on this supportive argument it also supports the hedging theory from an Islamic perspective. Thus, the finding confirms that foreign currency derivatives have a positive relationship with firm value and H_1 is supported. Meanwhile, all the control variables include managerial ownership, access to financial markets, firm risk, firm size, industrial diversification, industry effect, investment growth, leverage, time, and year crisis are statistically significant.

Table 17.4 for Model (2), which focuses on interest rate derivatives, shows that interest rate derivatives are statistically insignificant to firm value (Tobin's Q) for both 2SLS-FE and 2SLS-FD. Besides, most of the control variables are insignificant to Tobin's Q. This finding hence does not confirm the expected hypothesis. This finding also contradicts Bartram et al.'s (2009) finding, but is consistent with the findings on interest rate derivatives by Ayturk et al. (2016) and Jin and Jorion (2006). The possible reason could be due to (i) 23.6% Malaysian listed firms have significant foreign currency exposures from 2014 to 2016; thus, foreign currency derivatives is mostly used to hedge firms' risk exposure compared to interest rate derivatives and commodity derivatives (Hong et al., 2018) and (ii) Bank Negara also reported that the foreign currency market keeps on growing over the years with foreign currency derivatives being the most used instruments in the Malaysian market. Thus, interest rate derivatives are insignificant to firm performance of Sharīʿah-compliant firms, as they are less engaging in derivatives.

Robustness test

This study performs a robustness test to check for the consistency of the result (Tobin's Q) with alternative measurements of firm value (ROA and ROE). Table 17.5 reports the results for alternative measurements of foreign currency derivatives (ROA and ROE). Model 3 and Model 4 for foreign currency derivatives show significant positives with ROA and ROE ($p<0.01$), consistent with Tobin's Q. Table 17.6 reports the results for alternative measurements of interest rate derivatives (ROA and ROE). Model 5 and Model 6 for interest rate derivatives show insignificant ROA and ROE ($p<0.01$), consistent with Tobin's Q. The results based on ROA and ROE therefore are consistent with Tobin's Q, both for the foreign currency and interest rate derivatives.

Table 17.5 Robustness test for foreign currency derivatives (ROA and ROE)

	ROA	*ROE*
	Model 3	*Model 4*
Tobin's Q (-1)	0.544***	0.675***
	(9.88)	(20.84)
FCD	0.0013***	0.0209***
	(2.92)	(3.41)
MO	-0.0023**	-0.00464***
	(-2.46)	(-2.59)
ACCESS	0.0133***	-0.0184
	(3.15)	(-1.23)
RISK	0.0190 ***	0.0753***
	(2.71)	(5.51)
SIZE	-0.0026	-0.000167
	(-1.07)	(-0.02)
DIV	0.110***	0.195***
	(7.25)	(4.96)
INDUSTRY	-0.0202 ***	-0.00870
	(-4.47)	(-0.79)
GROWTH	0.0438	0.0837
	(0.90)	(1.18)
LEV	-0.0455***	0.0491***
	(-3.10)	(2.69)
DUMMY_TIME	-0.0038	0.0118
	(-0.80)	(1.08)
DUMMY_CRISIS	0.0083***	0.0143
	(3.36)	(1.38)
Constant	0.0881**	-0.0283
	(2.23)	(-0.24)
No. of observations	312	312
No. of instruments	43	42
No. of Groups	47	47
AR (1)	0.024	0.036
AR (2)	0.781	0.310
Hansen Test	0.800	0.813

Notes: *, **, *** represent the significance at levels p<0.1, p<0.05, p<0.01; *z*-statistic is in parenthesis; ROA is Return on Total Asset (Net Profit over Total Asset); ROE is Return on Total Equity (Net Profit over Total Equity).

Conclusion, limitations, and future research

This study examines the relationship of foreign currency and interest rate derivatives on firm value of Sharīʿah-compliant firms, controlling for managerial ownership, access to financial market, firm size, leverage, firm risk, industrial diversification, industry effect, investment growth, time, and year crisis. The results of the study are robust, based on first, the various measurements of firm value (Tobin's Q, ROA and ROE), second, the use of system-GMM estimator and third, 2SLS technique. This study concludes that foreign currency derivative

Table 17.6 Robustness test for interest rate derivatives (ROA and ROE)

	ROA		*ROE*	
	Model 5		*Model 6*	
	2SLS-FE	*2SLS-FD*	*2SLS-FE*	*2SLS-FD*
Tobin's Q (-1)	-0.200*	-0.462***	-0.286*	-0.697***
	(-1.79)	(-4.01)	(-1.85)	(-4.06)
IRD	-0.00872	-0.000335	0.0300	-0.00220
	(-0.55)	(-0.02)	(1.33)	(-0.04)
MO	0.0223	0.0185	-0.0244	0.0176
	(1.57)	(1.11)	(-1.42)	(0.55)
ACCESS	-0.103*	0.0461	0.192***	0.379***
	(-1.85)	(1.07)	(2.97)	(4.53)
RISK	-0.692***	-0.0667	-0.115	0.0931
	(-4.46)	(-0.83)	(-0.94)	(0.42)
SIZE	-0.257***	-0.145**	-0.246***	-0.151
	(-4.63)	(-2.33)	(-4.13)	(-1.28)
DIV	0.165	-0.185	-0.164	-0.107
	(0.70)	(-0.86)	(-0.75)	(-0.22)
INDUSTRY	-0.179***	-0.0594	-0.138**	-0.251***
	(-3.34)	(-1.15)	(-2.06)	(-2.98)
GROWTH	0.427**	0.0557	-0.280	-0.725**
	(2.12)	(0.31)	(-1.22)	(-2.38)
LEV	-0.145**	-0.163*	-0.0849	0.0844
	(-2.23)	(-1.68)	(-0.90)	(0.54)
DUMMY_TIME	-0.0275	0.00450	0.0387	0.0393
	(-1.20)	(0.22)	(1.64)	(0.93)
DUMMY_CRISIS	0.139**	0.0203	-0.0862	0.173
	(2.53)	(0.42)	(-1.62)	(1.54)
No of observations	45	52	65	30
R-squared	0.6526	0.4649	0.5402	0.7816
Anderson LM statistic	0.0000	0.0015	0.0000	0.0014
Cragg-Donald Wald F-Statistic	15.805	5.665	10.425	6.352
Durbin-Wu-Hausman Test	0.2827	0.1208	0.3531	0.7688
Sargan Test	0.3305	0.8845	0.1815	0.1909

Notes: *, **, *** represent the significance at levels p<0.1, p<0.05, p<0.01; *z*-statistic is in parenthesis; ROA is Return on Total Asset (Net Profit over Total Asset); ROE is Return on Total Equity (Net Profit over Total Equity).

significantly contributes to firm value of Sharīʿah-compliant firms. However, interest rate derivatives report insignificant influence to firm value.

The current study is not exhaustive in the sense that its sample is limited to only 59 Sharīʿah-compliant firms engaging in derivatives during the study period. Due to this constraint, it may cause limitations on generalization of the results and representation of the whole population. The result also shows that managerial ownership is statistically significant with firm performance for

firms that engaged in derivatives for risk management. Hence, in addition to that, future research could also investigate the role of managerial ownership on hedging decisions and its implication on firm performance. The context of the study can be extended to the effect of derivatives on performance between the Sharīʿah and non-Sharīʿah-compliant firms in Malaysia. Besides, this study may be extended to other countries around the world that offer both Sharīʿah and non-Sharīʿah-compliant investments. Overall, this study has important implications for managers, investors, and policy makers. First, the importance of risk management via derivatives is to increase firm value. Second, the quality reporting on derivatives engagement by firms is in line with the required accounting standard.

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