ISLAMIC ECONOMIC STUDIES



Advisory Board

Khurshid Ahmad Mohamed Ariff M. Umer Chapra Seif I. Tag el-Din Mohamed Ali Elgari Tariqullah Khan Abbas Mirakhor John R. Presley M. Nejatullah Siddiqi Rodney Wilson Abdel-Rahman Yousri M. Anas Zarqa M. Umar Zubair



e-ISSN 2411-3395 p-ISSN 1319-1616 Vol. **27** No. **2** Jamada Al-Awwal 1441H (January **2020**)

Number 2

Editorial advisory board

Reflection of Maqāsid al-Sharī'ah in the classical Fiqh al-Awqāf

Mohammad Abdullah

A systematic literature review on Sharī'ah governance mechanism and firm performance in Islamic banking

Naji Mansour Nomran and Razali Haron

What influences bank lending in Saudi Arabia?

Ken Miyajima





Islamic Economic Studies (IES) is a quality journal founded by the Islamic Research and Training Institute. The journal publishes leading research across all fields of Islamic economics and finance. Established in 1414 Hijri (1993), the journal is one of the oldest and most respected scholarly journals in the Islamic economics and finance fields. IES is targeted at professional and academic economists and students.

IES aims to publish research contributing to the development of theory, practice, and policy making in Islamic economics and finance. It therefore intends to create an interface between academic research and its practical application. The journal welcomes theoretical, technical, and applied articles that draw on all areas of Islamic economics and finance.

EDITOR-IN-CHIEF

Salman Syed Ali

Islamic Research and Training Institute (IRTI), Saudi Arabia E-mail ssyedali@isdb.org

EDITOR

Turkhan Ali Abdulmanap

Islamic Research and Training Institute (IRTI), Saudi Arabia E-mail Turkhanali@isdb.org

e-ISSN 2411-3395 p-ISSN 1319-1616

© Islamic Research and Training Institute

Guidelines for authors can be found at: www.emeraldgrouppublishing.com/services/publishing/ies/authors.htm

Islamic Economic Studies
Indexed and abstracted by:
EconLit, Journal of Economic Literature published by the
American Economic Association
RePEc
Google Scholar

Emerald Publishing Limited

Howard House, Wagon Lane, Bingley BD16 1WA, United Kingdom Tel +44 (0) 1274 777700;

Fax +44 (0) 1274 785201

E-mail emerald@emeraldinsight.com

For more information about Emerald's regional offices please go to http://www.emeraldgrouppublishing.com/offices

Customer helpdesk:

Tel +44 (0) 1274 785278;

Fax +44 (0) 1274 785201

E-mail support@emeraldinsight.com

The Publisher and Editors cannot be held responsible for errors or any consequences arising from the use of information contained in this journal; the views and opinions expressed do not necessarily reflect those of the Publisher and Editors, neither does the publication of advertisements constitute any endorsement by the Publisher and Editors of the products advertised.

Emerald is a trading name of Emerald Publishing Limited

Printed by CPI Group (UK) Ltd, Croydon, CR0 4YY

Islamic Economics Studies (IES) is published by Emerald Publishing Services on behalf of The Islamic Research and Training Institute, a Member of the Islamic Development Bank Group.

8111 King Khalid St. A1 Nuzlah A1 Yamania Dist. Unit No. 1, Jeddah 22332-2444, Kingdom of Saudi Arabia Tel: (00966-2) 636 1400 Fax: (00966-2) 637 8927 Home page: http://www.irtl.org. Email: irtl@isdb.org

The views expressed in this publication are those of the authors and do not necessarily reflect the views of the Islamic Research and Training Institute of the Islamic Development Bank.

E-version is open-source and free of cost. Subscription to printed copies of IES by First class mail is US \$35.00 for one year (two issues). The price of a single issue is US \$20.00. Subscriptions for print-version should be mailed to IRTI at the above IRTI address.



The Islamic Research and Training Institute (IRTI)

is a member of the Islamic Development Bank (IsDB) Group responsible for knowledge creation and dissemination in Islamic economics and finance, and fostering the use of Islamic finance to contribute to the sustainable development of IsDB member countries and Muslim communities worldwide. More information about IRTI is available on www.irti.org



EDITORIAL ADVISORY BOARD

Habib Ahmed

Durham University Business School, Durham University, UK

Sami Al-Suwailem

Islamic Research and Training Institute (IRTI), Saudi Arabia

Mohammad Kabir Hassan

Department of Economics and Finance, University of New Orleans, USA

Mansor H. Ibrahim

International Centre for Education in Islamic Finance (INCEIF), Malaysia

Mervyn Lewis

University of South Australia Business School, University of South Australia, Australia

Philip Molyneux

College of Business Administration, University of Sharjah, UAE

Volker Nienhaus

University of Marburg (retired), Germany

Savvid Tahir

International Institute of Islamic Economics, International Islamic University Islamabad, Pakistan

ADVISORY BOARD

Khurshid Ahmad

Ex-Senator, Islamic Republic of Pakistan, Pakistan

Mohamed Ariff

Distinguished Fellow of the Malaysian Institute of Economic Research (MIER), Malaysia

M. Umer Chapra

Ex-Advisor, IRTI, Saudi Arabia

Seif I. Tag el-Din

Al Imam Muhammad Ibn Saud University, Saudi Arabia

Mohamed Ali Elgari

Consultant, National Management Consultancy, Saudi Arabia

Tarigullah Khan

Professor, Qatar Faculty of Islamic Studies, Qatar

Abbas Mirakhor

International Centre for Education in Islamic Finance (INCEIF), Malaysia

John R. Presley

Emeritus Professor, Loughborough University, UK

M. Nejatullah Siddiqi

Emeritus Professor, King Abdul Aziz University, Saudi Arabia

Rodney Wilson

Emeritus Professor, Durham University, UK

Abdel-Rahman Yousri

Qatar Faculty of Islamic Studies, Qatar

M. Anas Zarqa

Ex-Professor, King Abdul Aziz University, Shariah Advisor, Kuwait

M. Umar Zubair

Ex-Rector, King Abdul Aziz University, Saudi Arabia



77



Reflection of Maqāṣid al-Sharī'ah in the classical *Figh al-Awqāf*

Mohammad Abdullah

Islamic Economics and Finance, Markfield Institute of Higher Education, Markfield, UK Sharī'ah premises of classical waqf doctrines

79

Received 13 June 2019 Revised 5 November 2019 Accepted 22 November 2019

Abstract

Purpose – This paper aims to analyse the Sharī'ah premises of classical waqf doctrines followed by critically analysing the framework of waqf jurisprudence (fiqh al-awqāf) from a Maqāṣid al-Sharī'ah (the higher objectives of Islamic law) perspective. The objective of examining the jurisprudential framework of waqf from a maqāṣid perspective is to contextualise the scope of dynamism and innovation in the modern waqf structure.

Design/methodology/approach – For examining the jurisprudential aspects of classical fiqh al-awqāf with a special reference to Maqāṣid al-Sharī'ah, the paper analyses the classical waqf books and treatises from the four Sumi schools of jurisprudence by employing a textual analysis method.

Findings – The paper finds that the key constituents of $maq\bar{a}sid$ are interwoven in the classical discourse of waqf rulings. It finds that in deriving the principles of waqf, the jurists ensured that the essentialities of $Maq\bar{a}sid$ al-Sharī'ah are subtly intermingled with the necessary components of $fiqh\bar{a}$ principles. Deconstructing the applied analogical reasoning of the classical jurists in deriving the waqf rulings, this paper provides recommendations for $maq\bar{a}sid$ -oriented application of waqf in the modern context.

Research limitations/implications – This study does not cover either the historical contribution of waqf among the Muslim societies nor does it touch on the empirical aspects of modern waqf. Rather, the focus of the study is limited to analysing the classical jurisprudential rulings of waqf and their distillation process from a $Maq\bar{a}sid$ al-Sharī'ah perspective. The study has good implication for modern $awq\bar{a}f$, which need to be created, managed and directed in the spirit of $Maq\bar{a}sid$ al-Sharī'ah.

Practical implications – The key objective of adopting the *maqāṣid* framework for the analysis of *fiqh alawqāf* in its classical permutations is to learn how to utilise the *maqāṣid* approach as a baseline for the deduction of new *waqf* rulings in a contextualised term.

Originality/value – The novelty of the paper lies in its examination of the classical *waqf* rulings distillation process, and the cogent intersection of *Maqāṣid* al-Sharī'ah with the principles of *fiqh*. By delving into the Sharī'ah premises of classical *waqf* jurisprudence through the lens of *maqāṣid*, the paper adds an original value and fills an existing gap in the available literature.

Keywords *Waqf*, *Fiqh al-awqāf*, *Maqāṣid* al-Sharī'ah, Endowment, Islamic jurisprudence **Paper type** Research paper

1. Introduction

In its original construct, waqf is a perpetual philanthropic institution that combines the perpetuity of spiritual and material reward for the benefactor and the beneficiary respectively. The epistemological premises of waqf lie in the precept of ongoing charity. Broadly, the feature of conferring the underlying benefits or revenues (al-manfa'ah) of an endowed asset on the beneficiaries, rather than giving away the asset itself, distinguishes a waqf from other forms of charities (Ghanim, 2009). From an Islamic jurisprudential perspective, this salient feature of waqf is affected by alienating the ownership rights and interests of a waqf asset during the tenor of the endowment.

JEL Classification — P48, K30, K36, I39. KAUJIE Classification — E21, B3, B5, C56

© Mohammad Abdullah. Published in *Islamic Economic Studies*. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at http://creativecommons.org/licences/by/4.0/legalcode



Islamic Economic Studies
Vol. 27 No. 2, 2020
pp. 79-90
Emerald Publishing Limited
e-ISSN: 2411-3395
p-ISSN: 1319-1616
DOI 10.1108/IES-06-2019-0011

Waqf entails a number of well-defined jurisprudential principles. Adherence to these principles (known as fiqh al-awqāf) is essential to achieve the objectives of the practice (Othman, 1983). It is fiqh of awqāf that lays down the basic conditions and qualifying criteria for a waqf (endowment), wāqif (endower), mawquf alayh (beneficiaries), mawquf bihi (subject matter of waqf) and nazir (waqf manager). Thus, the fiqh al-awqāf refers to the set of Islamic jurisprudential rules and principles that govern the terms and conditions of a valid waqf and facilitate the accomplishment of its objectives (Ghanim, 2009). From a jurisprudential perspective, perhaps, it is impossible to draw a complete picture of fiqh al-awqāf without putting into perspective the rules of other relevant Islamic institutions of property conveyance which were in existence prior to the emergence of waqf.

Waqf is distinguished in the sense that it provides an interface between the rules of mawarith (inheritance) and waṣ̄yah (bequeath) on the one hand, and between the jurisprudence of atiyah (gift) and ṣadaqah (charity) on the other (Al-Shafi'i 1990; Al-Khassaf, 1904; Al-Hilal, 1355 AH). Also, the principles of waqf equally intersect with the rules of ariyah (loan of an asset to avail its usufruct), manihah (loan of usufruct in animals etc.), qarḍ (loan) and amānah (trust). In short, waqf in its technical setting absorbs features and elements from all these institutions while maintaining its own legal and doctrinal distinction over them all (Sahnun bin Saeed, 1324 AH; Al-Shaybani, 1997).

The mechanism of *waqf* is distinctively flexible compared to the restrictive rules of *mawarith*. However, the rules of *waqf* are comparatively restrictor than the principles of *atiyah*. The structure of classical *waqf* displays a unique interaction between the pre-Islamic institutions of mutual benevolence and Islamic concept of volunteerism. For instance, the salient features of pre-Islamic institutions such as *umra* (life estate), *ruqba* (conditional gift of residence) and the defining characteristics of pure Islamic concepts such as *infaq fi sabilillah* (spending in the pious cause of *Allah*) and *sadaqah jariyah* (perpetual charity) are ubiquitous in the clauses of classical *fiqh al-awqāf* (Oberauer, 2013; Coulson, 1964; Schacht, 1953).

The corpus of *waqf* jurisprudence contains indications that the early jurists did not always insist on governing the institution of *waqf* in line with the strict rules of *uṣūl al-fiqh* (principles of Islamic jurisprudence). Rather, the classical Islamic jurists accorded much focus on the *kulliyat* (the universal aspects) of Sharī'ah. Thus, in the jurisprudential framework of *waqf*, the jurists seem more inclined to apply the purpose of the law than the tools of the law.

Through the application of *maslahah* (public interest), *istihsān* (juristic preference), *sadd* al-dharay (prevention of excuses) and urf (local custom), the corpus of classical wagf jurisprudence displays a coherent synthesis of Maqāsid al-Sharī'ah-oriented approach in the resultant rulings of waqf. In other words, in deriving essential principles of waqf, the jurists ensured that the essentialities of *Magāsid* al-Sharī'ah are subtly intermingled with the necessary components of $fiqh\bar{u}$ principles. Arguably, it is due to this simple reason that in various classical *waaf* treatises, the fusion of higher objectives of Sharī'ah is vividly palpable in some waqf principles while it is minutely discernible in some other. Probably, fiqh al-awqāf includes among the primary examples where sources of figh interspersed with Magāsid al-Sharī'ah on almost equal grounding. On the surface, the rationale for blending maqāsid approach in *figh* structure is characterised by two main reasons. Firstly, there is a relative scarcity of sufficient nass (an explicit textual ruling) that can comprehensively govern the institution of waaf on its own. Secondly, in the rigid application of usul al-figh for deriving waqf rulings, the jurists might have anticipated a great deal of conflict with the maṣāliḥ mursala (public interest). Thus, the insufficiency of nass coupled with the relatively rigid framework of usul al-figh could have been compensated only by deploying the magasid approach towards the governance of waqf. In the hindsight, an immaculate distillation of nass, masālih and istihsān, combined with the composite of qiyās and urf, is reflected in the classical corpuses of figh al-awqāf (Al-Khassaf, 1904; Al-Hilal, 1355 AH).

Sharī'ah premises of classical waqf doctrines

This paper analyses the Sharī'ah premises of classical waqf doctrines followed by conducting a critical analysis of the framework of waqf jurisprudence $(fiqh \ al-awq\bar{a}f)$ from a $Maq\bar{a}sid$ al-Sharī'ah perspective. By delving into the Sharī'ah premises of classical waqf jurisprudence through the lens of $maq\bar{a}sid$, this study fills an existing gap in the available literature. The objective of examining the jurisprudential framework of waqf from the $maq\bar{a}sid$ perspective is to contextualise the scope of dynamism and innovation in the modern waqf structure.

2. Evolution of waqf: the background

The motivation for the first few *awqāf* of early Islamic history was mainly sourced from two factors. Fulfilling the urgently surfaced socio-religious needs of the community and responding to the general Quranic exhortation to voluntary spending for the pious causes are the two key factors spurring the early *waqf* endowments. Whereas, the establishment of mosque of Quba[1] as well as *Byr al*-Rumah[2] (the well) embodies the prototypes of the first outlined factor, the endowment of Bayruha (the orchard) by Abu Talha (R.A), and the land of Khayber by Omar (R.A) reflect the embodiment of the other (Samhudi, 2001; Saleh, 2000; Badr, 1993).

In the classical waqf treatises, out of the four given examples of the early $awq\bar{a}f$, there exists absolutely no clue whatsoever in relation to the legal status of the first three, simply because the Prophet (pbuh) did not explicitly prescribe it then and there. The distinct nature, essential characteristics and necessary conditions of a valid waqf were inferred by implication from the case of the fourth instance which was related to Omar (R.A). However, even the episode of Omar which happened in the seventh year of Hijrah too lacked a categorical elaboration on the nature of the ultimate ownership of the endowed property. What other possible explanation could have been given to the legal status of these endowed properties until the seventh year of Hijrah except the presumption that during this period it was understood by the endowers that the fate and functions of their endowed properties would be decided by the collective discretion of the community itself.

In deciding the Sharī'ah-permissibility of waaf, the deed of Omar (R.A), the second caliph of Islam, worked as the primary and most authentic source for the classical jurists (Al-Khassaf, 1904). After narrating the story of Omar, Ibn al-Hajar (2001, p. 565) observes 'the hadith of Omar lays the basis for the Shari'ah-legitimacy of waqf'[3]. However, in view of the fact that the waqf of Omar (R.A) was made only after six years of Hijrah, this assertion of al-Asqalani entails two possible implications. Either waqf was not known in Medina prior to the waqf of Omar (R.A), or there were instances of waqf but their legal status and distinctive nature were unspecified. In some references, the story of Abu Talha (R.A) and his endowed orchard[4] finds mentioning in the list of early awqāf (Gil, 1998). However, the fact that, later on, one of the beneficiaries of his deed, Hassan bin Thabit (R.A), the companion of the Prophet (pbuh), proceeded to sell off his share with Ameer Muawiah (R.A) poses two further questions. Either the endowment made by Abu Talha (R.A) was not intended to be a waaf, or till that time the perpetual nature of waaf was not established in the jurisprudence. By narrating this story, Ibn al-Hajar (2001, p. 546) tends to infer that the endowment of Abu Talha (R.A) was a general charity and not a waqf; as 'if he had made the orchard a waaf, Hassan would not have dared to sell it off'. However, *imam* al-Bukhari in his Sahih has repeatedly resorted to the content of this story to derive certain waaf-related fighī rulings.

The rulings inferred from the story of Abu Talha (R.A) by al-Bukhari include permissibility of making a *waqf* in favour of one's relatives, legitimacy of *waqf* even prior to transferring the corpus to another party/entity and validity of a *waqf* prior to designating its beneficiaries. Additionally, the permissibility of making a *waqf* prior to demarcating or

properly determining its boundaries has been deduced in the light of the story of Abu Talha (R.A) (Ibn al-Hajar, 2001, p. 566).

Despite this, what is clear from the earlier discussion is the fact that in early Islamic society there was no lucid specification between the cases of general *sadaqah* and *waqf*. In the literature of *hadith*, *waqf* has been represented by the terms *'habs'* or *'sadaqah jariyah'*. In other words, the *hadith* literature does not contain the term *'waqf'*; instead, two terms namely *habs* and *sadaqah jariyah* denote what later evolved as *waqf* in the discourse of Islamic jurisprudence (Oberauer, 2013).

3. Methodology

This paper aims at analysing the Sharī'ah-basis of *waqf* both as a concept and as a legal institution. For the purpose of analysing the representative opinions of *Hanafi*, *Maliki*, *Shafi'i* and *Hanbali* schools of *fiqh*, the paper refers to the *fiqh* literature of these schools. To this end, the books which are repeatedly referred to are (1) *Sharh Kitab al-Siyar al-Kabir* by Muhammad bin Hasan al-Shaybani (Circa 189 AH), (2) *al-Mudawwanah al-Kubra* by Sahnun bin Saeed al-Tanukhi (d. 240 AH), (3) *Kitab al-Umm* by al-Shafi'i Muhammad bin Idris (d. 204 AH) and (4) *al-Mughni* by Ibn Qudamah (d.620H/1223CE).

For examining the jurisprudential aspects of classical *fiqh al-awqāf* with a special reference to *Maqāṣid* al-Sharī'ah, a greater focus is assigned to analyse the related areas of Islamic jurisprudence by employing textual analysis. This is followed by a critical appraisal of analogical reasoning applied by later jurists to elaborate the domain of the related rulings. To this end, a critical evaluation of the two of the earliest jurisprudential treatises on *waqf* doctrines both known as *Ahkam al-awqāf* by al-Hilal al-Rai (d. 245 AH) and *imam* al-Khassaf (d. 261 AH) has been of paramount significance.

The choice of $maq\bar{a}sid$ approach for the analysis of waqf discourse has been selectively made in view of the fact that direct application of $us\bar{u}l$ al-fiqh (theory of Islamic jurisprudence) for the purpose may not be sufficiently enough to respond to the flux of modern changes which need re-interpretation of several waqf principles (Auda, 2008). $Us\bar{u}l$ al-fiqh as a theory and methodology of Islamic jurisprudential rulings has a more systematic but restrictive framework and approach in comparison to $maq\bar{u}sid$ -based reasoning. While the underlying propositions of $us\bar{u}l$ al-fiqh have noted divergence of opinions among the jurists due to differences in their methodological frameworks, the $maq\bar{u}sid$ in a broader context provides a convergent path for all (Auda, 2008; Ibn Ashur, 2006).

4. Maqāṣid paradigm in the classical figh al-awqāf

Maqāṣid al-Sharī'ah represents the intent and the higher objectives of the Lawgiver in the textual injunctions (Hallaq, 1997), which are extracted from the texts through induction (Nyazee, 2002). The development of maqāṣid into a theory was a later phenomenon which emerged after tenth century CE through the work of al-Ghazali (Nyazee, 2002). Prior to al-Ghazali, imam al-Harmayn Abdul Malik al-Juwaini (the teacher of al-Ghazali) is the first who started discussing Maqāṣid al-Sharī'ah as a distinctive discipline under the qiyās discussion (Atiyah, 2011; Qasmi, 2010). Later on, the works of Abu Ishaq al-Shatibi (circa 790 AH) and Tahir ibn Ashur (196 – CE) elaborated, expanded and systematised the maqāṣid theory as presented by al-Ghazali (Rahmani, 2010; Masud, 1995). Thus, it is evident that at the time when waqf evolved into an institution in the eighth century CE, maqāṣid had not been developed into a theory. However, though unsystematically, the elements and the approach of maqāṣid are deeply involved in the distillation process of waqf fiqh.

Broadly, the levels of *Maqāṣid* al-Sharī'ah can be categorised into three: macro, micro and nano (Awa, 2006). The macro framework of *maqāṣid* covers the primary objectives of Sharī'ah as a whole, while the micro and nano levels cover the objectives of specific institutions and their different rulings respectively. For example, one of the key objectives of Sharī'ah is to facilitate

Sharī'ah

premises of

classical wagf

creation of a society which is built on the values of altruism and cooperation rather than opportunism and exploitation. For this purpose, at macro level, Sharī'ah aims to proscribe and block all means and mechanism of usurpation, misappropriation and unfair enrichment (Kamali, 2008; Atiyah, 2007). To this end, at micro level, for instance, Sharī'ah prescribes a complete ban on $rib\bar{a}$ (interest, usury) from the economy (Saleem, 2010). To further compliment the implementation of this injunction, at nano level, Sharī'ah prohibits individuals from involving in $rib\bar{a}$ -based transactions in any capacity. Thus, charging $rib\bar{a}$ or paying it is equally forbidden. Similarly, documenting a $rib\bar{a}$ -based transaction or becoming a witness to it is prohibited with equal emphasis.

At macro level, the higher objectives of Sharī'ah are derived by examination of the primary sources of Sharī'ah. Subsequently, the realisation of a particular Sharī'ah objective is facilitated by either prescription or prohibition of an institution or mechanism at micro level (Ibn Ashur, 2006). Within the same context, several injunctions are prescribed at nano level in the form of different ancillary Sharī'ah rulings to support the accomplishment of the underlying objective at the grass-root level.

In this context, it is argued that at a macro level since Sharī'ah holds as one of its objectives to foster a society in which the economic agents are equally inspired by spiritual considerations along with their material and mundane attachments, it employs subtle methods to achieve this objective. For this, the followers of Sharī'ah are exhorted to develop and nurture an altruistic, benevolent, cooperative, socially responsible and benign approach towards their dealings and practices (Abdullah, 2015). As an instrument to accomplish this objective and to eliminate the elements of selfishness, worldly greed and materialism from its followers, Sharī'ah prescribes a list of various obligatory and non-obligatory charities and charitable practices. The relevance of waqf institution in this discussion automatically assumes a special status. Waqf has its own set of objectives, at micro level, which complement the fulfilment of the above-described macro objective of Sharī'ah. Similarly, each and every $fiqh\bar{u}$ principle of waqf has its own purpose at nano level which is meant to support accomplishing the objectives of waqf institution at micro level.

The classical discourse on figh al-awqāf contains strong indications that in the formative period of waaf-jurisprudence, the essential features and governing criteria of the institution were principally derived in the light of the higher objectives of Sharī'ah. This contention is substantiated by referring back to the applied methodologies of the classical jurists as they frequently resorted to the application of maqāsid-oriented approach in suggesting, supporting and substantiating their respective opinions on wagf. Although maqāsid in itself constitutes a multi-dimensional discipline, however, in propounding the ancillary jurisprudential principles of waaf, it appears that the jurists assigned noted significance to daf' al-darar (removal of harm) and jalb al-manfa'a (procurement of benefit). For instance, as the rules of inheritance are potentially pitched in contradictory position with the mechanism of waqf, the jurists contemplated the principles of waqf in view of this lacuna. In the jurisprudential discourse on waqf, the jurists seemed critically concerned on how to contain any resulting harm on the legal heir through, potentially, a manipulative application of wagf mechanism by an endower. Classical jurists, for this purpose, exerted their wits to obstruct all possible scope for the circumvention of inheritance law through the usage of a waaf deed.

To this end, the reflection of *maqāṣid* approach can be easily captured in the opinion of Ibrahim al-Nakh'i with relation to a *waqf* in which the legal heirs of the endower were nominated as beneficiaries. He asserts, 'all (permissible) *habs* require being in line with the prescribed inheritance-rules (of Sharī'ah) except the *habs* of horses and weapons' (Al-Shaybani, 1403 AH, p. 65). Similarly, in the same context, al-Shaybani quotes the story of Saib who narrated that 'we sought the opinion of Shurayh about a person who

made his house *habs* for (some of) his children'. On this, Shurayh declared that 'la habsa an faraidi Allah' (there is no habs (against) the rules of inheritance) (1403 AH, p. 60). The context in which the opinions of Ibrahim al-Nakh'i and Shurayh were given reveals that in view of these jurists a habs cannot be used as a tool to circumvent the rules of inheritance.

Thus, according to classical Hanafi jurists, a waqf deed which causes harm to the interest of the legal heirs is impermissible (Al-Shaybani, 1997, p. 268). In the same vein, imam Malik does not permit a waqf in which equality between the male and female heirs of the $w\bar{a}qif$ is not maintained (Sahnun bin Saeed, 1324 A.H). In this context, what is important to note is the fact that there is no specific nass for this opinion of either imam Malik or Hanafi jurists. In other words, there is no nass which can explicitly restrict the provisions of inequality in allocation of waqf-benefits among the legal heirs of a $w\bar{a}qif$. Nonetheless, with reference to this opinion, the jurists applied a $maq\bar{a}sid$ -oriented approach which meticulously incorporate the daf aldarar (removal of harm) dimension in it. Thus, it becomes clear that this ruling is inferred by application of the higher objectives approach which entails removal of injustice or harm to one's legal heirs.

The *maqāṣid*-orientation of *fiqh al-awqāf* is also palpable in the flexible approach which early jurists adopted in prescribing the jurisprudential principles of *waqf*. Evidently, the *maqāṣid* approach extends to cover both aspects of *waqf* jurisprudence, i.e. spiritual and material (Nyazee, 2002). The spiritual aspect of *maqāṣid* is aimed at securing the sanctity, acceptability and reward-worthiness of a *waqf* deed in Hereafter. In comparison, the material aspect of *maqāṣid* assigns, inter alia, special consideration to the protection and proper functioning of a given *waqf*. Additionally, protecting the interest of the potential beneficiaries of *waqf* also constitutes the essentials of *maqāṣid* approach in *waqf* jurisprudence. In this regard, the following statement of Zaid bin Thabit could be regarded as axiomatic. He holds: 'we do not find a parallel to *habs*; as it ensures a perpetual reward for the endower, and protects the property for the beneficiaries forever' (Al-Khassaf, 1904, p. 15).

The significance of safeguarding the spiritual aspect of *waqf* is apparent in various *waqf*-doctrines solicited by the early jurists. One such example pertains to the hypothetical case of a horse which is endowed for the purpose of *jihād*. When posed with the question of renting such a horse during the period of peace and truce in order to benefit from its rentals, Al-Shaybani (1997) did not see it permissible. The underlying reasoning of his opinion rested on the overall spiritual objective of *waqf*. Al-Shaybani argues that 'through the *waqf*, the endower intends spiritual sanctity and reward, and hence, employing the subject matter for mundane objectives (such as leasing it for rental) would defy the intended objective of the endower' (1997: 278–281). In contrast, if the *mawquf alayh* lends it out as *ariyah* (free of charge) to a needy, al-Shaybani deems it acceptable.

Compared to the spiritual aspect, the material aspect of $maq\bar{a}sid$ covers multidimensional facets of waqf rulings. For this, the jurists strived to ensure maintenance of coherence between the form and substance of a waqf deed; or simply, between the visible and non-visible objectives of Sharī'ah. It is in this context that the validity of many potentially sham waqf deeds were rejected by the jurists. Imam Malik, for instance, does not validate a waqf until the same is delivered to a nominated trustee (nazir). The $maq\bar{a}sid$ orientation of this opinion of Malik is apparent in his underlying reasoning. For him, permitting a waqf which has not been delivered to the nazir may potentially open up the avenues for misuse of the institution, and eventually to harm the interest of the legal heirs. For example, a sham $w\bar{a}qif$ could continue benefitting from his property; and right before his death may claim that he had already endowed this as a waqf. Thus, in this way, the interest of his legal heirs would be severely hurt[5] if such a waqf is

Sharī'ah

premises of

classical wagf

permitted (Sahnun bin Saeed, 1324 A.H, p. 419). In this respect, Malik argues, if X makes a *habs* for his children and then to their children and does not put the provision that the poor would be the final beneficiary; the *wāqif* might have intended that the property would return to the full ownership of his grandchildren in the end. In this way, he would have bypassed the other legal heirs such as *dhawi al arham*' (blood relatives) (Sahnun bin Saeed, 1324 A.H, p. 419). Perhaps it was due to similar concerns that *Malikis* disallow a *waqf* which is exclusively for the male heirs of *wāqif*, and excludes the female heirs from the list of the beneficiaries.

Furthermore, for the purpose of preserving the permanence of waqf (hifz al-waqf), the jurists have inclined to permit the application of measures which are otherwise prohibited in Shari'ah. For instance, putting a seal of fire on horses of waaf or carving out the name of their designated beneficiaries was allowed by the jurists merely for the purpose of identification. This, in turn, may ensure the safety of waaf-horses against theft, sale or embezzlement (Al-Shaybani, 1997, p. 255). In this regard, al-Shaybani explicates: though, it would hurt the involved animal, which is forbidden in Sharī'ah, the permissibility in this effect is acquired with the reasoning that this would ensure overall benefit of the community (Al-Shaybani, 1997, p. 255). Additionally, with a similar view, it has been solicited by the jurists that the very first beneficiary of a waqf is the waqf itself, irrespective of whether or not it is stipulated in the waqf deed (Makdisi, 1981, p. 65). To this effect, ensuring the protection and timely maintenance of the corpus of the waqf becomes the primary duty of its *nazir*. Thus, though, the *qiyās*-based analogy disallows the employment of wagf in ways which are in contradiction to the stipulations of the $w\bar{a}qif$, this analogy is shunned and replaced by istihsan if a rigid application of givas exposes the waaf to harm or decline. For instance, al-Shaybani contends that if a waaif endows a horse for the purpose of *jihād*, from the *qiyās* perspective, it would be impermissible for the mawquf alayh to ride the horse for his own needs. However, since the strict application of qiyās in this case would hurt the interest[6] of waqf itself, the jurists resorted to istihsān and permitted ride so far as the horse is not exposed to the danger of injury or exhaustion (Al-Shavbani, 1997, p. 280).

On a similar basis, the classical jurists opined that a waqf must be protected from loss or injury not only from the outsiders but from the internal stakeholders as well. The implication of this position is evident from the ruling which holds that if the $w\bar{a}qif$ himself happens to damage his own endowed property, he would be held liable to compensate for this (Al-Shafi'i, 1990). This opinion was reached by establishing that the subject matter of waqf alienates from the ownership of $w\bar{a}qif$ and falls under the ambit of huquq Allah (rights of Allah). For this ruling, apparently, application of the material aspect of $maq\bar{a}sid$ prepared the background.

Under the discussion of *maqāṣid*, Malik's opinion with reference to the permissibility of endowing a shared property as *waqf* is also significant. Remarkably, Malik has disputed to allow the *waqf* of a shared property without the consensus of all shareholders. The basis for this opinion of Malik is the *maṣlaḥah* of other partners. According to him, if *waqf* of such a property is allowed without the consent of other shareholders, this may cause harm to the dissenting or unwilling party (Ibn al-Hajar, 2001, p. 560).

Similarly, it was through the application of *maqāṣid* approach that the jurists opined that a property put on *ijārah* (leasing) or *rahn* (pawn) cannot be subject to *waqf* by the legal owner of the given property (Al-Khassaf, 1904, p. 304–305). The underlying reasoning of this opinion is that the rights of individuals cannot be breached in the name of *waqf*. In other words, if a deed of *waqf* results into violation of individual's rights, such a deed would turn into impermissible (Al-Khassaf, 1904, p. 304–305).

Figure 1 further illustrates the key elements of higher objectives which underpin the derivation of *waqf* rulings by the classical jurists:



86





As explained in Figure 1, the derivation process of classical *fiqh al-awqāf* appears to have been dictated by certain key objectives. For example, the objective of *hifz al-waqf* (preservation of *waqf* corpus) is captured by the jurisprudential dictum which holds that the first beneficiary of a *waqf* is 'the *waqf*' itself. In other words, as per the classical jurists' opinion, the revenues of a *waqf* must be first directed to preserving the *waqf* corpus against the risk of damage or diminution in it (Abdullah, 2018). Similarly, a loss suffered by a *waqf* due to negligence or wishful misconduct of any stakeholder must be duly indemnified by the transgressor, even if the endower (*wāqif*) himself happens to be the one (al-Mawsuah, 2006). In the same vein, that the jurists considered the objective of *hifz al-manfa'a lil waqf* (protecting the benefits of *waqf*) while expressing their opinion on related cases is explained in the rulings that a *waqf* cannot be swapped for a significantly below the market rate (Mahdi, 2010).

Additionally, to maintain the objective of *jalb al-manafi' lil mawquf alayh* (safeguarding the interest of the beneficiaries), the jurists did not allow leasing the *waqf* property against a considerably discounted rental amount. In addition, administrating a *waqf* in a way that it restricts or causes to diminish the benefits for the beneficiaries is disapproved by the jurists (Al-Khassaf, 1904).

For the jurists, the basis for not allowing endowment of a shared property without consent of the shareholders, as well as the impermissibility of endowing a disputed property lies, in general, in *daf al-niza* 'objective (Ibn al-Qudamah, 1997). Compared to this, the objective of *hifz huquq al-fuqara* (safeguarding the interest of the poor) dictates the jurisprudential ruling which holds that the benefits of each perpetual *waqf* must return to the poor at the end irrespective of whether it is a family *waqf* or a charitable *waqf* (Al-Hilal, 1355 AH). In a similar manner, for the purpose of *hifz al-manfa* 'al-ammah (safeguarding the interest of the community), the jurists did not allow a private or family *waqf* made by a ruler from the state property (al-Mawsuah, 2006). Similarly, a purpose of *waqf* which conflicts with the interest of the wider society does not find acceptability among the classical jurists (Al-Hilal, 1355 AH). Finally, the permissibility of a *waqf* has been declined by the jurists where the legal heirs are intentionally deprived of their rights. For this, the objective of *daf al-darar anil waratha* (removing the harm from legal heirs) dictates the related *waqf* rulings (al-Mawsuah, 2006).

Sharī'ah

doctrines

premises of

classical wanf

5. Recommendations

The premises of $fiqh\ al$ - $awq\bar{a}f\ (waqf\ jurisprudence)$ exhibit huge latitude of flexibility which can be skilfully exploited to condition the usage of specific $awq\bar{a}f$ in line with the requisites of $Maq\bar{a}sid$ al-Shari'ah. For the purpose of harmonisation of juristic opinions in newly arisen intricate matters, $maq\bar{a}sid$ approach is placed in an ideal position to drive the modernisation process in the corpus $fiqh\ al$ - $awq\bar{a}f\ (Auda,\ 2008)$.

Importantly, waqf is a device which can be used to promote or discourage a trend, practice, belief or exercise in a given society. To this end, leveraging its $maq\bar{a}sid$ -orientation, it shall be ensured that a waqf is employed properly in line with $maq\bar{a}sid$ and is not misused to harm any internal or external stakeholders.

Finally, the early $awq\bar{a}f$ were successful in playing the effective role they played only due to their proper and efficient application in line with $maq\bar{a}sid$ paradigm. The effectiveness of a waqf, be it for public or private purpose, depends on the appropriate employment of its concept, mechanism, objectives and vision. Thus, these aspects of $awq\bar{a}f$ need to be revisited by the stakeholders of $awq\bar{a}f$ in the current dynamic context.

6. Conclusion

Waaf emerged and evolved in the early Islamic society within a specific context of religious motivation for charitable behaviour and altruism. There is no dispute of opinion that the institution of waaf acquired its Sharī'ah legitimacy among the early jurists in gradual but in a well-grounded manner. For jurisprudential purpose, waaf has been equated with a variety of legal devices. In the hindsight, the evolution of jurisprudence of waaf largely depended on extraction of features from the pre-established legal institutions. The features of sadaqat, mawarith, wasiyyah and hadiyyah collectively provided the building blocks for fiqh al-awqāf. The legal basis for jurisprudence of waaf is essentially reliant on the secondary sources of Sharī'ah in general and on the rules of analogy in particular.

In the classical *fiqh* literature, the concept of *waqf*, with all its technical-flexibility, has been treated by Sharī'ah jurists with an extra pinch of delicacy and caution. For the jurists, one obvious reason to hold this cautious approach in treating *waqf* was informed by their fear of leaving a loophole which may be exploited to circumvent the established rules of *mawarith* and *sadaqah*. Since the jurisprudence of *waqf* evolved in the aftermath of the aforementioned institutions, avoiding a mutual contradiction with their rules apparently dictated the derivation of *waqf* rulings in the main.

The jurisprudential rulings of waqf are derivatives of the common theme flowing through all Sharī'ah-regulated voluntary dispositions. This common theme is to maximise the coverage of benevolence, equity, justice and removal of hardship for all involved parties. This theory is further consolidated by the contention that in deducing waqf principles, the rules of maṣlaḥah and istiḥsān find repeated application; as by applying istiḥsān the objective of realising equity and fairness could be better served compared to the application of qiyās-based strict textual principles.

The early discussion on *waqf* is interesting in the sense that it dissects the principles of various institutions to distil a synergetic body of *waqf*-related *fiqh* rulings. In this process, elements of *Maqāṣid* al-Sharī'ah corroborated the *fiqh* methodologies of different jurists.

The $maq\bar{a}sid$ potentially covers a diverse variety of areas in defining and determining the proper framework of Sharī'ah-rulings. With relation to jurisprudence of $awq\bar{a}f$, the incorporation of $maq\bar{a}sid$ -oriented approach is vividly reflected in the corpus of fiqh of $awq\bar{a}f$. In other words, in waqf principles, a sum of $maq\bar{a}sid$ is cogently weaved together with other Sharī'ah sources.

For this paper, the key objective of adopting the *maqāṣid* framework for analysis of *fiqh al-awqāf* in its classical permutations is to learn how to utilise the *maqāṣid* approach as a baseline for the deduction of new *waqf* rulings in a contextualised term. The application of *maqāṣid*-based mechanism of analysis is vital in the modern context in order to develop a pragmatic pitch for the interpretation of the classical *waqf* jurisprudence in such a way that it effectively responds to the newly developed relevant areas and issues of *waqf* coverage.

Notes

- 1. Quba is located in the outskirts of Medina. On the eve of his emigration to Medina, the Prophet (pbuh) stayed there for few days and built there the very first mosque of Islamic history.
- Rumah was a famous well owned by a Jew in Medina. He used to charge individuals for supplying water from the well. The Prophet (pbuh) asked his companions to buy and donate the well for the sake of Allah. Othman, the third caliph of Islam, responded to the call and after paying the price of well, endowed it for free public utility.
- 3. The original wordings of Ibn al-Hajar go as 'wa hadith Omar hadha aslan fi mashruiah tul waqfi'.
- 4. It has been narrated in several references that when the Quranic verse no. 92/3 revealed with the injunction that 'you can never achieve piety until you spent (for the sake of Allah) what is most beloved to you', Abu Talha came to the prophet and pledged to endow his famous orchard known as Bayruha (Al-Qurtubi, 2003, p. 132/4).
- 5. In general, neither the classical nor the modern books on figh of awqāf have comprehensively delved upon the maqāṣid-orientation of the waqf doctrines. If looked from the maqāṣid paradigm, it would be clear that the jurisprudence of awqāf, as available in the early treatises of the great jurists, was structured in line with the essence of the higher objectives of shariah.
- 6. It is argued that there are two potential problems in not permitting the employment of such a horse other than employing it in *jihad*. These problems include (1) with such a restrictive ruling, the beneficiary may lose interest in keeping such horses (2) and in not riding the given horse for a long period of time, the health of the horse may get affected (Al-Shaybani, 1997).

References

- Abdullah, M. (2015), "Analysing the Moral Aspect of Qard: a Shariah Perspective", *International Journal of Islamic and Middle Eastern Finance and Management*, Vol. 8 No. 2, pp. 171-184.
- Abdullah, M. (2018), "Waqf, Sustainable Development Goals (SDGs) and Maqasid al-shariah", International Journal of Social Economics, Vol. 45 No. 1, pp. 158-172, doi: 10.1108/IJSE-10-2016-0295.
- Al-Hilal, Y.M. (1355 AH), Ahkam al-Waqf, Dar al-Ma'arif, Hyderabad (India).
- Al-Khassaf, A.B. (1904), *Ahkam al-Awqāf*, Dewan Umum *al-Awqāf* al-Misriyah, Egypt. (Original, C.A. before 874AD).
- Al-Qurtubi, A. (2003), al-Jame li Ahkam al-Quran, (Verse 92: chapter 3), Dar Alam al-Kutub, KSA. (Original, C.A. 1214-1273AD).
- Al-Shafi'i, M. (1990), Al-Umm, Vol. 4, Darul Ma'rafah (Original, C.A. 767-820AD).
- Al-Shaybani, M. (1403 AH), al-Hujjah ala Ahl al-Medina, Alam al-Kutub, Beirut, Vol. 3, pp. 46-67. (Original, C.A. 750-805).
- Al-Shaybani, M. (1997), Sharah Kitab al-Siyar al-Kabir, Darul Kutub al-Ilmiyah, Beirut, Vol. 5, pp. 249-283. (Original, C.A. 750-805).
- Atiyah, J. (2007), Towards Realization of the Higher Intents of Islamic Law: Maqāṣid al-Sharī'ah: A Functional Approach, The International Institute of Islamic Thought, London.

Sharī'ah

doctrines

premises of

classical wagf

- Atiyah, J. (2011), Fiqh e Islamic ki Nazarya Sazi. New Delhi: Islamic Fiqh Academy, (Translated by Ateeq Ahmad Qasmi).
- Auda, J. (2008), Maqāṣid al-Shaṛī'ah as Philosophy of Islamic Law: A Systems Approach, The International Institute of Islamic Thought, London.
- Awa, S. (2006), Maqāṣid al-Sharī'ah al-Islamiyah, Dirasat fi Qadaya al-Manhaj wa Majalat al-Tatbiq, Al-Furqan Islamic Heritage Foundation, London.
- Badr, A.B. (1993), al-Tarikh al-Shamil lil-Madinah. al-Medina al-Munawarah, Dar Al-Salam, Jeddah.
- Coulson, N.J. (1964), A History of Islamic Law, Edinburgh University Press, Edinburgh, pp. 32-33.
- Ghanim, I.B. (2009), "Historical formation of the waqf function in the Arab society", Awqāf, Vol. 16, pp. 13-42.
- Gil, M. (1998), "The earliest waqf foundations", Journal of Near Eastern Studies, Vol. 57 No. 2, pp. 125-140.
- Hallaq, W. (1997), A History of Islamic Legal Theories, Cambridge University Press, Cambridge.
- Ibn Ashur, M. (2006), *Ibn Ashur Treatise on Maqāṣid al-Sharī'ah*, The International Institute of Islamic Thought (Trans by Mesawi, M.), London.
- Ibn al-Hajar, A. (2001), Fath bari fi sharah al-Bukhari, Kitab al-Wasayah, Maktaba Misr, Egypt, Vol. 5, pp. 541-571. (Original work, 1414AD).
- Ibn al-Qudamah, M.A. (1997), al-Mughni, Dar Qalam al-Kutub, Riyadh, Vol. 8, pp. 231-232.
- Kamali, H.M. (2008), *Maqāṣid al-Sharī'ah Made Simple*, The International Institute of Islamic Thought, London, (Occasional Paper Series 22).
- Mahdi, M. (2010), Nizam un Nazarati Alal Awqāf, Awqāf Public Foundation, Kuwait.
- Makdisi, G. (1981), The Rise of Colleges: Institutions of Learning in Islam and the West, Edinburgh University Press, Edinburgh.
- Masud, K. (1995), Shatibi's Philosophy of Islamic Law, The Islamic Research Institute, Islamabad.
- Ministry of Waqf and Religious Affairs Kuwait (2006), al-Mawsuah al-Fiqhūyah, Waqf, Wazaratul awqāf wal shuwon al Islami, Kuwait, Vol. 44, pp. 107-116.
- Nyazee, I. (2002), Theories of Islamic Law, The Other Press, Kuala Lumpur.
- Oberauer, N. (2013), Early Doctrines on Waqf Revisited: The Evolution of Islamic Endowment Law in the 2nd Century AH, Islamic Law and Society, Vol. 20, pp. 1-47.
- Othman, M.Z. (1983), "Origin of the institution of waqf", Hamdard Islamicus, Vol. 6 No. 2, pp. 3-23.
- Qasmi, A. (2010), "Maqāṣid-e-Shariat Asri Tanazur me", in Rahmani, K. (Ed), Maqāṣid Shariat: Ta'aruf aur Tatbiq, Islamic Academy India, New Delhi.
- Rahmani, K. (2010), "Muqaddamah", in Rahmani, K. (Ed), *Maqāṣid Shariat: Ta'aruf aur Tatbiq*, Islamic Academy India, New Delhi.
- Sahnun bin Saeed, T. (1324 AH), *Kitab al-Habs al-Mudawwanah al-Kubra*, Wazarat al-*Awqāf* al-Saudiah, Vol. 15, KSA, pp. 98-112. (Original, C.A. 776-854AD).
- Saleh, A.M. (2000), al-Masjid Jami wa Jamiah, Maktaba Malik Fahad, Riyadh.
- Saleem, M. (2010), "Methods and methodologies in *fiqh* and Islamic economics", *Review of Islamic Economics*, Vol. 14 No. 1, pp. 103-123.
- Samhudi, N.A. (2001), Wafa al-Wafa fi Akhbar Dar al-Musaffa, Muassasah al-Furqan lil-Turas, Medina. (Original, C.A. 1466-1506AD).
- Schacht, J. (1953), Early Doctrines on Waqf, Koprulu, A. F, Istanbul, pp. 444-452, available at: http://www.uniset.ca/islamicland/schacht_waqf.html.

About the author

Dr Mohammad Abdullah is an expert in the theory and practices of *Waqf* and Islamic finance. Abdullah is a well-trained and highly experienced Shariah Scholar, providing Shariah consultancy and advisory services to various Islamic financial institutions in Europe, South America and the UAE.

IES 27,2

He is a reputed researcher and has produced a number of research papers and book chapters on the comparative study of *Waqf* and English trust, *Shariah* governance, Islamic finance and development studies. Abdullah received his PhD at the University of Gloucestershire (UK) and he is a frequent presenter of research papers at different Universities and International conferences. Dr Abdullah is currently based in Dubai and can be contacted at nadwi.ab@gmail.com

90

A systematic literature review on Sharī'ah governance mechanism and firm performance in Islamic banking

Review on Sharī'ah governance mechanism

91

Received 27 June 2019 Revised 8 October 2019 Accepted 10 December 2019

Naji Mansour Nomran

Department of Finance and Banking, Faculty of Administrative Sciences, Thamar University, Thamar, Yemen, and

Razali Haron

Institute of Islamic Banking and Finance, International Islamic University Malaysia, Kuala Lumpur, Malaysia

Abstract

Purpose – This paper aims to systematically review the existing studies on the relationship of Sharī'ah governance (SG), as represented by the Sharī'ah supervisory board (SSB), with firm performance of Islamic banks (IBs), to suggest opportunities for future research in this field.

Design/methodology/approach – By adopting a systematic literature review, 21 empirical and theoretical papers published in Scopus concerning the relationship between SSB and performance of IBs were selected for review and analysis.

Findings – In light of the existing research studies' limitations, this paper suggests that the effect of SSB on IBs' performance still requires more empirical analyses using alternative analytical methods, alternative measures, and different periods (during crisis and non-crisis). Besides that, these studies should take into account the differences across jurisdictions in their SG models, the degree of agencies' intervention in SG practices, the control over cross-memberships of scholars, and the differences across IBs in the position of SSB in the organization structure.

Practical implications — The analysis undertaken in this paper would address the literature gaps on the effect of SSB on IBs' performance as this study serves as a guide for the researchers, academicians, and interested researchers from Islamic international autonomous non-for-profit organizations, e.g. AAOIFI and IFSB in research related to this important area. Importantly, the findings of this study would support regulators and related authorities across jurisdictions with suggestions on improving the current SG practices. Originality/value — This paper presents a critical review of the existing research on SSB and IB performance and suggests new variables, measurements, analytical methods, and new issues for researchers in this area. Thus, it identifies the literature gap that still needs further empirical investigation and a suitable way to close it.

Keywords Sharī'ah governance, Sharī'ah supervisory board, Performance, Islamic banks, Systematic literature review

Paper type Literature review

1. Introduction

The Islamic banking industry has grown rapidly since the early 2000s (Safiullah and Shamsuddin, 2018). Islamic banks (IBs) differ from their conventional counterparts in their functions, structure, and objectives (Mohammed and Muhammed, 2017a). The main difference distinguishing the IBs from conventional banks (CBs) is the absolute prohibition of

JEL Classification — G2, G21. KAUJIE Classification — L34, L5, I4

© Naji Mansour Nomran and Razali Haron. Published in *Islamic Economic Studies*. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at http://creativecommons.org/licences/by/4.0/legalcode



Islamic Economic Studies
Vol. 27 No. 2, 2020
pp. 91-123
Emerald Publishing Limited
e-ISSN: 2411-3395
p-ISSN: 1319-1616
DOI 10.1108/IES-06-2019-0013

interest (*riba*) (Ghayad, 2008) and business relating to alcohol, gambling, and excessive speculation (Zirek *et al.*, 2016). Basically, IBs must guarantee that all of their products and operations are compliant with the Sharī'ah rules and principles (Grais and Pellegrini, 2006a). Thus, the governance structure of IBs requires them to establish Sharī'ah supervisory boards (SSBs) besides the usual boards of directors (BoDs) (Alnasser and Muhammed, 2012; Nomran *et al.*, 2018). This extra layer of governance, as represented by the SSB, aims to monitor, approve, and report on IBs' compliance with moral values (Abdelsalam *et al.*, 2016; Shibani and De Fuentes, 2017).

It is the main responsibility of the SSB to closely supervise the implementation of the Sharī'ah principles throughout the operations of IBs (Nomran *et al.*, 2017). As a result of noncompliance with Sharī'ah rules, depositors may withdraw their deposits and investors may cancel their investment agreements, which would decrease the IBs' profitability and increase bank risk[1] (Hamza, 2013; Grassa, 2015). In brief, if the IBs become non-Sharī'ah compliant, their position in the market will be negatively affected due to lack of customers' confidence (Alnasser and Muhammed, 2012; Hamza, 2013; Grassa, 2015) and consequently decreasing these banks' profitability and increasing their risks (Hamza, 2013; Grassa, 2015). Given that SSB supervises bank investment, banks cannot invest beyond the SSB-approved investments even if they can earn a higher rate of returns (Ullah and Khanam, 2018).

Generally speaking, the importance of corporate governance (CG) implementations has increased in the business environment especially after the financial crises, i.e. the Asian financial crisis of 1997 and the global financial crisis of 2008. There is no doubt that good CG has a positive impact on performance, where most of the studies confirm that good governance improves firms' profitability, productivity, and competitiveness and decreases risk (Claessens, 2006; Todorovic, 2013; Riwayati *et al.*, 2016; Ciftci *et al.*, 2019).

In the Islamic banking context, IBs have "multi-layer" governance[2], i.e. SSBs besides the BoDs, which acts as dual internal governance mechanisms affecting IB performance[3]. As the BoD is a powerful internal governance mechanism affecting IB performance, the SSB is also an important stakeholder that affects their performance (Mohammed and Muhammed, 2017a). The decision-making of management in the IBs is indeed constrained by an SSB that rejects any proposals in light of the Sharī'ah principles (Ghayad, 2008); therefore, BoD is obliged to obey the SSB decision (Alnasser and Muhammed, 2012). The nature of the SSB decision may influence the acceptance of one product over another, hence; the SSB certification of approval could increase or decrease the volume of banking business, especially when no rights are given for the management to involve in the SSB decision (Mohammed and Muhammed, 2017a). In addition, the SSB role means that products are likely to be Sharī'ah compliant and less risky, and then, it ameliorates the negative effects of excessive risk-taking, thus contributing to better performance of IBs (Mollah and Zaman, 2015; Nomran and Haron, 2020).

However, as most studies on Islamic banking are normative and/or theoretical in nature, thus the need for more empirical studies, especially on the CG of IBs, is imperative (Mollah and Zaman, 2015; Ajili and Bouri, 2018). More precisely, there is a lack of studies on the impact of Shari'ah governance (SG), as represented by SSB, on IB performance across jurisdictions (Hasan, 2011; Musibah and Alfattani, 2014; Grassa, 2016). The majority of these studies are theoretical, and they have been carried out to examine the function of SSB and the issues surrounding its function. In contrast, the empirical studies on the SG issues are limited in general and focus on the relationship between SSB and performance of IBs in particular. Therefore, the main objective of this paper is to review the existing studies on the relationship of SG mechanism, as represented by SSB, with firm performance of IBs, to suggest opportunities for future research in this field. A systematic literature review is used to achieve this objective.

The paper is organized into eight sections. The second section deals with the theoretical background of this paper. The third section explains the methodology employed, followed by the fourth section which presents the main findings from the systematic literature review.

Review on

governance mechanism

Shari'ah

The fifth section suggests some recommendations for future research developments, while the sixth one concludes the paper. Lastly, the seventh section discusses implications for research and practice.

2. Theoretical background

This section summarizes the theoretical predictions on the effects of SSB on IB performance. Agency theory (AGT) and stakeholder theory (SKT) are the two popular CG-related theories of boards and governance mechanisms that can justify the impact of SSB on IB performance. From the AGT perspective, governance mechanisms aim to guarantee agent–principal benefits alignment, safeguard shareholder benefits, mitigate agency costs (Davis *et al.*, 1997), and hence improve the companies' performance (Demsetz and Lehn, 1985).

As mentioned above, IBs are subject to two internal mechanisms of CG, the BoD and the SSB, as a necessary alteration has been made by adding into another layer to the governance from "single layer" as in the conventional ones into "multi-layer" governance (Mollah and Zaman, 2015; Abdelsalam *et al.*, 2016; Almutairi and Quttainah, 2017; Shibani and De Fuentes, 2017; Safiullah and Shamsuddin, 2018). While BoD represents the first layer of governance mechanism that provides legal oversight, SSB represents the second layer of governance mechanism that provides moral oversight (see, e.g., Abdelsalam *et al.*, 2016; Shibani and De Fuentes, 2017). Indeed, BoD gives more attention to the conventional legal liability compared to the moral liability[4]. It has been found that SSBs of IBs affect and shape managerial behavior and mitigate agency problems (Quttainah and Almutairi, 2017). SSB plays an important role in mitigating agency problems by acting as an additional monitoring mechanism (see, e.g., Abdelsalam *et al.*, 2016; Shibani and De Fuentes, 2017; Quttainah and Almutairi, 2017).

From the SKT perspective, Mohammed and Muhammed (2017b) argue that the SSB plays an important role in influencing the performance of IBs as it has been selected among the four key stakeholders that affect the financial performance of IBs besides the management (BoD and CEO), the ownership, and the external auditor based on the Islamic stakeholder model. SSB is an important stakeholder in Islamic banking due to its role of ensuring that the operations of IBs are Sharī'ah compliant through approving their transactions and activities (Mohammed and Muhammed, 2017b). However, it is important to mention that the stakeholders of IBs are not restricted to these key groups. As Dusuki (2008) indicates, the stakeholders' groups for IBs involve clients, depositors, employees, IB managers, Sharī'ah scholars, local communities, as well as the regulatory authorities.

3. Methodology

Given the objective of this paper, the matter that has been taken into consideration for the subsequent systematic literature review is the relationship between SG mechanism, SSB, and performance of IBs. The adopted methodology in this paper, i.e. a systematic literature review, is inspired by the previous studies (see, e.g., E-Vahdati *et al.*, 2019; Le *et al.*, 2019).

3.1 Information sources and period

The systematic literature review was conducted for the relevant papers on Scopus published during the period 1999–2018 in English. The rationale for the year 1999 selection to start the review is to ensure reviewing most of the related literature. This is due to the increased importance of CG implementations, in general, in the business environment, especially after the Asian financial crisis of 1997.

3.2 Search strategy

To conduct the search, related key terms were used as shown in Appendix 1. The authors combined each of the two keywords representing dependent (performance) and independent

(SG mechanism) variables in the search field using Boolean search AND, and then they selected papers with these keywords in at least one of the following fields, namely, title, abstract, and keywords.

However, the data collection and analysis process is made up of five steps as implemented by E-Vahdati *et al.* (2019). Following E-Vahdati *et al.* (2019) first, 278 papers on Scopus were selected after filtering the results via a Boolean search AND based on the basis of their relevance to the purpose of this work using the related keywords[5]. Second, the duplicates were eliminated and store literature as per their respective keywords (see Appendix 1) in titles and abstracts besides introducing restrictions that would limit the search to only the relevant fields such as years and language, and this resulted in a total of 30 papers. Third, the collected papers' contents also were fully reviewed, and only the papers that highlighted the relationship between SG mechanism and performance of IBs were selected for the final analysis. Based on the additional filtering in this step, 21 papers were selected. Step four is related to the results as will be shown later, while the final step is related to the recommendations for future research and conclusion. Figure 1 provides a summary of the five steps mentioned that explain data collection and analysis process.

4. Results

Table I summarized the final collection of papers based on authors, date of publication, nature of studies, and journals' names. As Table I shows, there are 17 refereed journals that

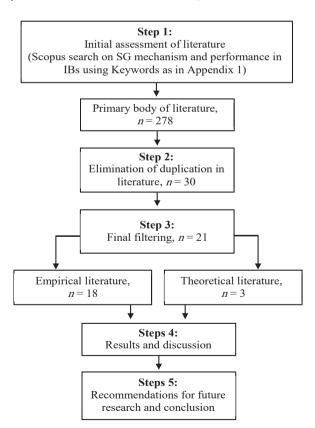


Figure 1. Data collection and analysis process

Authors and year of publication	Nature of Empirical	f the study Theoretical	No.	Journal Journal name	Review on Sharī'ah
Musibah and Alfattani (2014)	~	-	1	Asian Social Science	governance mechanism
Nawaz (2017a)	✓	_	2	Corporate Governance (Bingley)	
Nomran et al. (2018)	1	_	3	International Journal of Bank Marketing	
Nawaz (2017b)		_	4	International Journal of Business and Society	95
Grassa and Matoussi (2014a)		=	5	International Journal of Business Governance and Ethics	
Quttainah et al. (2017)		_			
Ajili and Bouri (2018)		_	6	International Journal of Islamic and Middle Eastern Finance and Management	
Mollah and Zaman (2015)		_	7	Journal of Banking and Finance	
Nawaz (2017c)		_	8	Journal of Business Ethics	
Mollah <i>et al.</i> (2017)		_	9	Journal of Financial Services Research	
Farag <i>et al.</i> (2018)		_	10	Journal of International Financial Markets, Institutions and Money	
Hakimi <i>et al.</i> (2018)		_	11	Journal of Islamic Accounting and Business Research	
Ullah and Khanam (2018)	_				
Zeineb and Mensi (2018)		_	12	Managerial Finance	
Mezzi (2018)		_			
Kusuma and Ayumardani (2016)		-	13	Polish Journal of Management Studies	
Abdel-Baki and Leone Sciabolazza (2014)		_	14	Qualitative Research in Financial Markets	
Rahim and Mahat (2015)	~	_	15	Risk Governance and Control: Financial Markets and Institutions	
Almutairi and Quttainah (2017)	~	_	16	Social Responsibility Journal	Table I. Summary of the final
Mohammed and Muhammed (2017b)	_	~	17	Humanomics: The International Journal of Systems and Ethics	papers collection based on authors, nature of
Ghayad (2008)	_	~		Systems and Banco	studies, and journals

published 21 papers on the relationship between SG mechanism, as represented by the SSB, and IB performance. Out of the 21 papers, 18 papers are empirical while three are theoretical and/or qualitative studies. These studies were published during the period (2014–2018) with the exception of one study which was published in 2008.

4.1 Empirical studies on the impact of SSBs on IBs' performance

Research on SG in Islamic banking is not only limited, but there is a lack of studies that investigate the impact of SSB on the performance of IBs (Nathan, 2010; Mollah and Zaman, 2015; Hakimi *et al.*, 2018). Most of the empirical studies on SG examined the impact of SSB characteristics on disclosure (see, e.g., Farook and Lanis, 2007; Farook *et al.*, 2011; Rahman and Bukair, 2013; Abdullah *et al.*, 2014), on earnings management (see, e.g., Quttainah *et al.*, 2013; Quttainah and Almutairi, 2017) and on credit ratings of IBs (Grassa, 2016). Nevertheless, literature shows that some empirical studies have been conducted to examine the impact of SSB characteristics on financial performance as presented in Table I. In order to provide a wide view regarding the impact of SSB on the IBs' performance, this section discusses these studies in the following part.

Abdel-Baki and Leone Sciabolazza (2014) examined CG on performance of IBs using CG index which was built based on a cross-country survey of 72 IBs in 14 Middle East and Asian

countries while the financial data were collected from the website of the Thomson Reuters Eikon. The CG index consists of six core CG themes and 40 sub-themes. Among these 40 sub-themes, there are six sub-themes items related to SSB which are whether remuneration of SSB members solely decided by a BoD and approved by shareholders, and SSB size, SSB cross-membership, disclosure about the decisions of SSB, and whether Sharī'ah auditors countercheck decisions of SSB.

A study was conducted by Grassa and Matoussi (2014a) examining the impact of CG characteristics of IBs, including SSB characteristics, on the financial performance of 77 IBs and 85 CBs in GCC countries and Southeast Asian countries for the period 2000–2009. After controlling for bank age and size, the study examined many explanatory variables which can be divided into three groups. The first and second groups are related to the characteristics of the BoD and CEO. The third group shows the SSB characteristics which are SSB size, SSB cross-membership, SSB scholars with accounting/finance knowledge and the number of women on SSB. They found that BoD' fees and CEO duality and age positively affect the performance of IBs. SSB with accounting/finance knowledge have a positive and significant impact on the performance of IBs. Results indicated that SSB size and cross-membership negatively affect the performance of IBs in Southeast Asian countries. It has been found that there is no impact for SSB gender (women) on IBs performance. The study concluded that CG characteristics of IBs in GCC countries and Southeast Asian countries are different.

Musibah and Alfattani (2014) examined the impact of SSB effectiveness and intellectual capital on corporate social responsibility (CSR) of 36 IBs from GCC countries for the period 2007–2011. They also investigated the mediating impact of IB performance in the above relationship. The education level of SSB scholars (*shaikh*, doctor, doctor *shaikh*) was used as a measurement for SSB effectiveness, while ROA and ROE were employed as measurements for IB performance. The study found a positive impact for SSB effectiveness, capital employee, and structure capital on the CSR of IBs. It was found that the SSB education level affects IB performance positively. The study concluded that IB performance mediates the relationship between SSB effectiveness, capital employee, structure capital, and the CSR of IBs.

Another study on the same context is conducted by Mollah and Zaman (2015). This study investigated the impact of SSB size, BoD structure, and CEO power on financial performance of 86 IBs and 86 CBs across 25 countries for the period of 2005–2011 including the 2008 crisis. The study aims to investigate if Sharī'ah supervisory functions, as measured by SSB size, improves IB performance and then enhances shareholders' value. The regression was conducted by employing random-effect GLS method based on secondary data collected from Bankscope and annual report of the banks. The researchers supported the results of Sharī'ah supervision from the regression tests by using a survey with response rate of almost 15% from 11 responses across six countries. The performance was measured by using five measurements, namely, ROIAE (operating profit divided by average equity), ROIAA (operating profit divided by total assets), ROAE (net income divided by average total equity), ROAA, and Tobin's Q. The study concluded that IB performance is affected by SSB, BoD, and CEO power. It is found that the impact of SSB on IB performance is positive, especially when SSBs have a supervisory role. The findings also revealed that SSB size influences IB performance positively during the crisis period. The study concluded that the "multi-layer" CG approach, as applied in IBs, helps them to have a better performance compared to the CBs.

Rahim and Mahat (2015) investigated the effects of risk management (RM) and CG on IB performance. Then they investigated the mediating effects of risk governance (RG) on the relationship between RG and CG and IB performance. They employed cross-sectional sample of 200 IBs across 21 countries for the year 2014. To measure RM, CG, and RG, they used many variables, namely, RM: loan loss provision (LLP), capital adequacy ratio (CAR), total deposit ratio (TDP), GDP, central bank lending rate (CBLR), and inflation (INF); CG: CEO, BoD size,

Review on

governance

Sharī'ah

remuneration meeting (REM), external audit (EA), accounting standard (AS), and credit rating agency (CRA); and RG: chief risk officer (CRO), risk committee member (RCM), and SSB member. They found that RM and RG affect performance, and RG has a mediating effect as expected.

Kusuma and Ayumardani (2016) analyzed the efficiency of the CG and its impacts on Indonesian IBs using quarterly data for the period between 2010 and 2014. They used a measurement of CG efficiency consisting of three variables, namely, BoD size, board commissioner size, and SSB size. The Data Envelopment Analysis (DEA) was employed to measure CG efficiency, while regression analysis was used to analyze the relationship between CG and IB performance. The study found that the efficiency level of CG of Indonesian IBs improved significantly during the study period. Additionally, it was found that CG efficiency significantly affects IB performance.

Almutairi and Quttainah (2017) conducted a study to investigate the effects of SSB characteristics on IB performance based on a sample of 82 banks from 15 countries over the period 1993–2014. They found that IBs with SSBs outperform IBs without SSBs and performed better in monitoring management behavior. It was also found that integrating SSBs into IB governance structures improves strategic design and implementation and offers more guidance to directors, managers, and employees. Furthermore, SSB characteristics (size, membership of AAOIFI, cross-membership, and education) are associated with better financial performance.

Mollah *et al.* (2017) conducted a study to examine whether the differences in CG structures of IBs and CBs have any impact on the risk-taking and performance of the banks by selecting 52 IBs and 104 CBs from 14 countries for the period between 2005 and 2013. Given that an SG system does not exist in the CBs, therefore, the authors developed CG index by combining the BoD and CEO characteristics that exist in the IBs and CBs. They assumed that IBs reflect the Sharī'ah-supervised governance structure as these banks have an SG system. The study found that CG structure in IBs enables them to take higher risks and have better performance compared to the CBs. The authors justified this result by arguing that IBs have different financial contracts than the SSBs and also a different CG structure which influences the risk-taking and performance of IBs. The study suggested that researchers should give more attention on the role of the SSB.

Nawaz (2017a) examined the impact of investments in human capital (HCI) and investments in structural capital (SCI) and CG attributes on market-based performance of 67 IBs during the period 2006–2009. Four CG attributes were investigated, namely, BoD size, BoD composition, the role of duality (CEO power), and SSB size. The findings indicated that HCI have a significantly positive impact on the market value of IBs. The results further reveal that IBs' strategy to rely on long-term human capital accumulation can be seen as idiosyncratic problem-solving knowledge capital. The paper found that both BoD size and role duality have significant positive impact on bank performance. In contrast, it is found that SSB has a negative impact on market value, indicating that the market does not favour larger SSB in the presence of a large-sized governing board.

Nawaz (2017b) also examined the effect of intellectual coefficient of IC (VAIC), human capital efficiency (HCE), structural capital efficiency (SCE), capital employed efficiency (CEE), and SG, as measured by SSB size, on performance of 47 IBs in the GCC region over the period 2006–2010. The study took into consideration the pre-crisis period (2006–2007) and post-crisis period (2009–2010). The findings indicated that higher IC efficiency helps IBs to improve their performance (ROA and Tobin's Q) both before- and after-crisis periods. The study concluded that knowledge resource, i.e. IC, is the main line of defense for IBs against negative shocks. Finally, the study asserted that SG alone may fall short in explaining the growth trends in the Islamic finance industry.

Similarly, Nawaz (2017c) examined the effect of HCI and CG features on the market performance of 47 IBs during the period 2005–2010. Five CG attributes were investigated,

namely, BoD size, BoD independence, SSB size, CEO power, and audit committee size. The study found that HCI has a positive effect on the market performance in the pre- and post-financial crisis period. Further, it was found that BoD size and CEO power have a significant positive impact, while the SSB size has the opposite effect on market performance. Overall, the analysis suggested that the financial crisis may have further spurred the impact of investments in human capital on the market performance.

Quttainah *et al.* (2017) investigated the impact of CG on the financial performance of 34 IBs and 607 IB-year observations across 15 countries, with a specific focus on their SSB. They found that IBs with SSBs embedded into their governance structures outperform those without such integrated boards. Additionally, it was found that SSB characteristics, including size, interlocks, and education affect the financial performance of IBs with such boards. The study concluded that SSBs provide tighter monitoring and control, as well as more advising and counselling, compared with IBs without dedicated SSBs. In short, the study confirmed that SSBs benefit IBs' shareholders by complementing corporate boards and thus mitigating agency problems and agency costs.

Recently, Ajili and Bouri (2018) examined the impact of CG on the performance of 44 IBs from GCC countries for the period 2010–2014. The findings indicated that IBs in GCC countries give more attention to the effectiveness of SSB as compared to the other CG mechanisms. The study shows that there is no significant impact of CG on IB performance in GCC countries. As the authors argue, the potential reason is that good CG of IBs in the GCC countries was not oriented to maximize the performance of shareholders. Furthermore, they concluded that the role of most SSBs in GCC IBs is advisory as compared to those boards that have a supervisory role. However, the study suggested that regulatory authorities in the GCC countries should improve CG practices.

Farag et al. (2018) examined the impact of dual board structure (BoD and SSB) on the performance of 90 IBs from 13 countries. They also examined how BoD size and SSB size are determined. The authors employed a fixed effects model and GMM estimation to analyze the data. The findings indicated that SSB size is related positively to the performance of IBs. In addition, a weak positive impact for the BoD size on performance is recorded. On the other hand, the study concluded that IBs' size and age affect boards' size (BoD and SSB) positively.

Hakimi *et al.* (2018) examined the effects of BoD and SSB on the performance of 13 IBs from Bahrain for the period of 2005–2011. Based on panel data analysis and the GMM technique, they found that BoD duality, BoD size, and SSB size are the corporate boards' characteristics affecting the performance of Bahrain IBs positively. In contrast, the BoD independence and SSB expertise in finance and accounting do not have any significant impact on the performance.

Mezzi (2018) examined the impact of CG mechanisms on the performance of IBs by employing efficiency as the performance measurement. The study found a positive and significant impact of BoD size, BoD independence, and the existence of centralized SG model (CSGM) on the efficiency of IBs. A positive and significant relationship was also found between concentration of ownership and the efficiency of IBs although it is a weak relationship.

Nomran *et al.* (2018) examined the effects of SSB characteristics on IBs' performance in Malaysia being a country that applies the most extreme intervention of regulatory agencies (pro-active model). The study employed a sample of 15 Malaysian IBs for the period 2008–2015 using the GMM as estimator. The results revealed strong support for a significant association between SSB size, doctoral qualification, change in the SSB composition and performance. In addition, the study supports the view that SSB with cross-membership and reputation are crucial in improving the performance of IBs.

Lastly, Zeineb and Mensi (2018) examined the effect of CG on efficiency and risk of 56 GCC IBs during the period 2004–2013. They included five CG variables, namely, SSB size, CEO

Review on

governance

mechanism

Shari'ah

duality, institutional, private, and foreign ownership. The findings indicated that implementing rigorous CG structures correlate with higher efficiency levels. Moreover, it was found that the governance structure of IBs allows them to take higher risk to achieve a high efficiency level. Furthermore, the findings show that IB efficiency and risk are positively related.

4.1.1 Critical analysis of the above empirical studies. Table II provides a summary for the above-mentioned empirical studies that investigated the impact of SSB on IBs' performance. As Table II presents, most of these studies suffer from some limitations that suggest a need for more empirical analysis. Empirical studies in the field of SSB and performance of IBs is important as it would support regulators and related authorities across jurisdictions with suggestions on improving the current SG practices.

4.2 Theoretical studies on the impact of SSBs on IBs' performance

There are, however, at least two theoretical studies that provide a theoretical justification for the relationship between the SSB and IB performance (see, Ghayad, 2008; Mohammed and Muhammed, 2017b), while the third study is conducted based on qualitative method (see, Ullah and Khanam, 2018).

Ghayad (2008) conducted a study to explore how CG can influence IB performance based on case studies from one country only (Bahrain) without providing any empirical evidence. The results revealed that managerial factors play an important role in affecting the performance of IBs besides internal factor such as the financial ratios. Moreover, IB directors are subjected to the governance of the BoD and additional crucial governance of the SSB. The study confirmed that it is necessary for the SSB members to be qualified in finance and economic fields. The study suggested that Investment Account Holder (IAH) should be given seats in the board of IBs in order to enhance the CG. The main limitation of the study is the absence of empirical evidence to support the argument.

Mohammed and Muhammed (2017b) also conducted a study to examine the AGT and the SKT from the perspective of the Islamic principles. To do so, they adopted a critical review method which takes into consideration presenting important theories and comparing those theories with an Islamic perspective. The paper highlighted the important discussion on the difference between ordinary theories to explaining CG and Islamic perspective. The paper browsed into whether the SSB fits with the AGT by explaining the AGT and how it differs from the Islamic banking concepts. The paper involved an analytical review on SKT and presented a critique and the rationale as to why there is ample room for the SSB to be considered fit with the SKT, as the SSB is an independent body influencing the IBs.

Finally, the study of Ullah and Khanam (2018) linked the SSB to the performance of IBs but based on qualitative method. They investigated the impact of Sharī'ah compliance on the financial performance of a bank, i.e. Islamic Bank Bangladesh Limited, as a case study. To address this question, the authors conducted interviews with related parties such as financial analysts and executives of regulatory bodies. The findings of the study asserted that the Sharī'ah compliance processing in the banks positively related to the outstanding financial performance as the level of Sharī'ah compliance is the dominant instinct in acquiring a leading position. However, the limitation of the study is that it focused only on one bank coupled with the absence of quantitative evidence.

However, the main limitation of the above theoretical studies is the absence of empirical evidence to support the argument.

4.3 General studies of Sharī'ah supervisory function, issues, and practices

The above section discussed the existing empirical and theoretical studies that linked SSB to IB performance based on the study objective. As explained above, the majority of these studies have some limitations that suggest a need for more empirical analysis and then can be recommended for future research. However, before suggesting the research areas for future

Authors	Independent variables	Dependent variables	Analytical Approach	Findings	Critical review
Abdel-Baki and Leone Sciabolazza (2014)	CG index: Consists of six core CG themes and 40 sub-themes which cover selection of BoD, ownership, disclkosure, and transparency, compensation schemes, and auditors and supervisors including SSB	Efficiency of IBs: Proxy measures of bank efficiency, which cover: Growth and sustainability; intermediation efficiency; profit maximization; and reduction of risks	Multiple regression analysis	(+) CG index They also detected misaligned compensation structures for BoD Further, poor CG leads to higher risk exposures	They neglected to examine the impact of SSB as a separate mechanism or at a least as a core CG theme. Instead of that, they used a general CG index, and then they only provided a general conclusion about CG. It was supposed to examine the impact of each separate CG mechanism, e.g. BoD, SSB, and ownership on IB performance to get a meaningful conclusion. Furthermore, out of 40 items, the CG index

attributes and issues related to SSB, while many other important ones were ignored, e.g. education, reputation, remuneration

Finally, the authors measured IB efforts in enhancing CG using a questionnaire,

amount, etc.

while the annual reports which may

provide more accurate information about the quality of CG, especially across the time they were neglected

(continued)

consists of six sub-themes items related to

SSB. These six items only cover some

Table II. Summary and critical analysis of empirical literature on SSB effects on Performance of IBs

	ariod the sis of a si	(continued)
	ed the programmer of the progr	(cont
	y covered 2009, it the finan the finan aracteris ion, and mine the ore/inder not cont at all F easturing; the Shr measury and 2009.	
view	ulthough the study covered the Jetween 2000 and 2009, it neglec ofential effect of the financial cr 008 The study neglected many other important SSB characteristics suducation, reputation, and remuralso did not examine the total in SB using SSB score/index The addition, it did not control for addition, it did not control for indogeneity issue at all. Further, tudy neglected measuring IB erformance using the Sharī'ah and market-based measurement	
Critical review	Although the study covered the period between 2000 and 2009, it neglected the potential effect of the financial crisis of 2008. The study neglected many other important SSB characteristics such as education, reputation, and remuneration. It also did not examine the total impact of SSB using SSB score/index. In addition, it did not control for endogeneity issue at all. Further, the study neglected measuring IB performance using the Shari'ah approach and market-based measurement	
)	Ψ	
sgu	(+) Director fees (+) CEO duality (+) CEO age (+) SSB expertise For IBs in Southeast Asian countries: () SSB size (-) SSB cross- membership	
Findings	(+) D (+) C (+) C (+) S (+) S (+) S (+) S (+) S (-) S	
	ılysis	
tical ach	Regression analysis t-test	
Analytical Approach	Regre-	
səles		
nt variak		
Dependent variables	ROA ROE	
Independent variables	BoD meeting BoD size Non-executive Outside director Woman director Old director Director fees CEO tenure CEO duality CEO duality CEO que Number of BoD committees SSB size SSB size SSB size SSB women	
pendent	meeting) resize resize director and director eign director eign director eign director fees ctor fees ctor fees ctor fees ctor fees ctor fees munitees size ctorsen corposan	
Inde	Boff Boff Non Outst Wor Outst Wor Old CEC CEC CEC CEC CEC CEC CEC CEC CEC CE	
ors	rassa and Matoussi 2014a)	
Authors	Grassa an Matoussi (2014a)	

 Critical review	The study employed the SSB education level to measure the Sharfah supervision. This single proxy was not accurate to reflect the total impact of SG as there is a multitude of other variables relating to the SSB characteristics that may determine how effective the SSB conducts its task as discussed earlier. Also, the applied methods in analyzing the mediating effect were not appropriate as SEM can provide most commonly used method in analyzing mediating relationships. Further, the study did not control for endogeneity issue. Finally, the study neglected measuring IB performance using the Sharfah approach and marketbased measurement	(continued)
Findings	(+) SSBE on CSR (+) CEE on CSR (+) SCE on CSR (+) SSBE on performance Also, performance has a mediating impact Between (SSBE, CEE, SCE) and CSR	
Analytical Approach	Fixed effects models Hierarchical regression	
Dependent variables	CSR Mediators: Performance (ROA and ROE)	
Independent variables	Musibah and SSBE (education level) Alfattani (2014) Capital employee Structure capital Human capital	
Authors	Musibah and Affattani (2014)	

Critical review	Although the study examined many important issues related to the SSB in Bs and takes the financial crisis of 2008 into account, it employed the SSB size to measure the SSB impact as a single proxy which is not enough. Therefore, it did not give a meaningful interpretation. The study neglected many other important SSB characteristics that should be investigated such as the crossmembership, education, reputation, etc. Although the study emphasized the need for a regulatory mechanism for SSBs to be more effective, it ignored highlighting and examining such regulatory mechanisms that differ across jurisdictions as will be shown later in this study. In addition, the study employed conventional and market-based measuring. B performance using the Shari'ah approach. It only employed conventional and market-based measurements of IB performance which are common for measuring the CBs' performance	(continued)
Findings	(-) BoD size (-) BoD independence (-) CEO chair Duality (-) CEO internal (+) SSB size	
Analytical Approach	Random effect (GLS) Two-step system (GMM)	
Dependent variables	ROIAE ROIAA ROAE ROAA Tobin's Q	
Independent variables	BoD size BoD independence CEO chair duality CEO internal SSB size	
Authors	Mollah and Zaman (2015)	

_					
Authors	Independent variables	Dependent variables	Analytical Approach	Findings	Critical review
Rahim and Mahat (2015)	RM: (LLP, CAR, TDP, GDP, CBLR, and INF) CG: (CEO, BoD size, REM, EA, AS, and CRA) RG: (CRO, RCM, and SSB member)	ROA ROE Profit margin Mediator: RG	Structural Equation Modelling (SEM)	RM and RG affect performance RG has a mediating effect	The study was conducted based on data for only one year (2014) which is not enough to reflect the change of CG, RM, and performance practices in IBs across time. SSB mechanism was measured using a single proxy which is not enough as well that the study neglected many other important SSB characteristics. In addition, the proxy is not clear if it implies SSB size or another thing. Importantly, SSB mechanism was supposed to come under the CG variable beside BoD mechanism, not under RG as the study did. Finally, the study neglected measuring IB performance using the Sharī'ah approach and market-based measurement
					(continued)

Authors	Independent variables	Dependent variables	Analytical Approach	Findings	Critical review
Kusuma and Ayumardani (2016)	CG efficiency Bank size	ROA	DEA to calculate the CG (+) CG efficiency efficiency Paired samples test Regression analysis	(+) CG efficiency	They neglected to examine the impact of SSB as a separate mechanism. Also, the study only focused on SSB size and neglected the other important SSB characteristics. Furthermore, the study did not control for endogeneity issue at all. Additionally, the study only employed bank size as a control variable while there are more variables that should be controlled such as bank age. Besides that, the study only used ROA to measure IB performance and neglected measuring IB performance using the Sharī'ah approach and market-based measurement. Finally, the study only focused on IBs in Indonesia, and then the findings cannot be generalized to the other banks across
Almutairi and Quttainah (2017)	SSB size Outside members on SSB SSB cross-membership SSB membership in international financial services board (IFSB) SSB expertise SSB education	ROA ROE Tobin's Q	f-test Multivariate data Analysis Clustered regression Two-stage least- squares regression	(+) SSB size (+) Outside members on SSB (+) SSB cross- membership (+) SSB membership in international financial services board (IFSB) (+) SSB education	different countries The study did not use a measurement to examine the total impact of SSB mechanism on performance of IBs Also, the study did not control for endogeneity issue. Instead, they used a panel regression model with fixed effects for robustness test. The study also neglected measuring IB performance using the Shari'ah approach and marketbased measurement
					(continued)

106

Authors	Independent variables	Dependent variables	Analytical Approach	Findings	Critical review
Mollah et al. (2017)	CG index (CGI): BoD size Independent directors Female director BoD meeting BoD attendance BoD committees Chair independence Chair/CEO split Internal CEO CEO qualification CEO experience CEO experience	Z-score ROA	Random effect (GLS) Two-step system (GMM)	(–) CGI on IB Z. score (+) CGI on IBs ROA	The study did not measure the SSB impact directly. Instead, it only assumed that IBs have SG structure while CBs do not have such a structure. There is no investigation of SSB mechanism effect on IB performance. Finally, the study neglected measuring IB performance using the Shari'ah approach and marketbased measurement
					(continued)

Authors	Independent variables	Dependent variables	Analytical Approach	Findings	Critical review
Nawaz (2017a)	HCI SCI BoD size BoD composition Role duality SSB size	Tobin's Q	OLS regression	(+) HCI (+) SCI (+) BoD size (+) Role duality (-) SSB size	For all the three studies, Nawaz (2017a, 2017b & 2017c), they did not use a measurement to examine the total impact of SSB mechanism on the performance of IBs They also employed OLS regression which is not enough of an analysis method, especially when the endogeneity issue was ignored. The three studies neglected many other important SSB characteristics as they only focused on SSB size All the three studies almost examined the same issues Regarding the performance measurements, the three studies neglected measuring IB performance using the Sharī'ah approach. Furthermore, for the studies of Nawaz (2017a & 2017c), the performance of IBs was measured using market-based measurement, while the other financial and accounting ratios were neglected
					(continued)

IES 27,2				(continued)
108	V			
	Critical review			
	Findings	Pre-crisis & post-crisis on ROA: (+) VAIC (+) HCE (+) CEE Pre-crisis on Tobin's Q: (+) VAIC (+) HCE (+) SCE (+) SCE (+) SCE (+) SCE (+) SCE (+) CEE (+) CEE (+) VAIC (+) VAIC (+) HCE (+) VAIC (+) HCE (+) CEE	(-) SSB-size Pre-crisis and post-crisis: (+) HCI Pre-crisis and during and post- crisis: (+) BoD size During crisis: (-) SSB size Pre-crisis and during crisis: (-) CEO power (+) CEO power	
	Analytical Approach	OLS regression	OLS regression	
	Dependent variables	ROA Tobin's Q	Tobin's Q	
	Independent variables	VAIC HCE SCE CEE SSB size	HCI BoD size SSB size CEO power BoD independence Audit committee size	
Table II.	Authors	Nawaz (2017b)	Nawaz (2017c)	

Quttainah et al. SSB size Quttainah et al. SSB size Quttainah et al. SSB size ROB SSB interlocks ROB BoD independence Asset growth BoD interlocks SSB education BoD interlocks SSB education BoD interlocks SSB education Rob interlocks SSB education Asset growth Two-stage-least (+) BoD characteristic (-) SSB education (-) SSB education (-) SSB education (-) SSB education (-) SSB size (-) SSB interlocks (-) BoD characteristic (-) SSB education (-) SSB education (-) SSB education (-) SSB education (-) SSB interlocks, an interlocks, and interlocks, and interlocks, an interlocks, and interlocks	Authors	Independent variables	Dependent variables	Analytical Approach	Findings	Critical review
CG score BOD score ROA ROB BOD score ROE BOD score ROE ROE BOTHOIN-Wu-Hausman impact has test to check been found endogeneity SSB+SSB size, SSB Expertise, SSB education)		SSB size SSB interlocks BoD independence BoD interlocks SSB education	ROE ROE Asset growth	OLS cluster robust standard-error estimation Two-stage-least squares regression (including instrumental variable) To address endogeneity	(+) SSB size (+) SSB interlocks (+) BoD independence (+) BoD interlocks (+) SSB education	The study examined three SSB characteristics, namely, SSB size, interlocks, and education, and hence, neglected many other important SSB characteristics such as reputation and remuneration. Also, it did not combine the SSB characteristics together in a measurement to reflect the total impact of SG/SSB. Further, the study neglected measuring IB performance using the Sharī'ah approach and market-based
measuremen	Ajili and Bouri (2018)	CG score BOD score AC score SSB score (existence of SSB+SSB size, SSB Expertise, SSB education)	ROA ROE	Random effect (GLS) Durbin-Wu-Hausman test to check endogeneity	No significant impact has been found	measurement The study was limited to IBs in GCC countries. Also, it only takes into account three SSB characteristics in developing the SSB score and neglected some other important ones such as cross-membership and reputation. The study also neglected measuring IB performance using the Shari'ah approach and market-based measurement (continued)

Authors	Independent variables	Dependent variables	Analytical Approach	Findings	Critical review
Farag <i>et al</i> , (2018)	BoD size BoD independence SSB size	ROA ROE ROOA (return on operating assets) ROOE (return on operating equity)	Fixed effects model GMM	(+) BoD size (+) SSB size	The study used only SSB size to measure the SSB impact and hence, neglected many other important SSB characteristics as discussed earlier. Further, the study did not use a measurement to examine the total impact of SSB mechanism on performance of IBs. Finally, the study neglected measuring IB performance using the Shari'ah approach
Hakimi <i>et al.</i> (2018)	BoD size BoD duality Independent BoD Institutional administrators in BoD SSB size	ROA ROE	GLS RE GWM	(+) BoD size (+) BoD duality (+) SSB size	and marker-based measurement. The study only focused on IBs in Bahrain. It also examined two SSB characteristics (size and expertise) and neglected many other important board characteristics. As the above studies, the study neglected measuring IB performance using the
Mezzi (2018)	SSB expertise BoD size BoD independence Concentration of ownership SSB size Existence of a central SSB (CSGM)	Efficiency	DEA Regression analysis	(+) BoD size (+) BoD independence (+) Concentration of ownership (+) existence of a central SSB (CSGM)	The study only focused on efficiency to measure performance. It neglected measuring IB performance using the Sharī'ah approach, accounting profitability ratios and market-based measurement. Also, it only examined SSB size and neglected many other SSB characteristics and adopting SSB score to measure the total impact. The study also focused on CSGM and neglected the opposite model, namely, decentralised SG model (DSGM)
					(continued)

Authors	Independent variables	Dependent variables	Analytical Approach	Findings	Critical review
Nomran et al. (2018)	SSB size SSB cross-membership SSB educational qualification SSB reputation SSB experience SSB change in the composition	ROA ROE ROIAE	GMM	(+) SSB size (+) SSB cross- membership (-) SSB educational qualification (+) SSB (+) SSB (+) SSB (-) S	The study focused only on Malaysia with adopting a pro-active model, and therefore, extending the investigation to include countries that adopt the different models may provide a better view of the best SG practices for IBs Investigating the SSB characteristics is not enough as the evaluation should be done using SSB score or proxy that can measure the total effect of SSB. Thus, the SSB proxy will reflect the overall effect of SSB, while the SSB characteristics will show why the overall effect is strong or weak. The study also neglected measuring IB performance using the
Zeineb and Mensi (2018)	SSB size CEO duality Institutional ownership Private ownership Foreign ownership	Efficiency Z-score	(DEA)/stochastic frontier analysis (SFA) Seemingly unrelated regressions	() SSB size () CEO duality () Institutional ownership	Investigating the SSB size is not enough as there are many important characteristics which should be examined. Further, the evaluation of SG on efficiency should be done using SSB score or proxy that can measure the total effect of SSB. Also, no attempt has been done to control the endogeneity issue in this study. Finally, the study neglected measuring IB performance using the Sharī'ah approach, accounting profitability ratios, and market-based measurement.
Notes: The studies were or Source: Own interpretation	Notes: The studies were ordered according to the publication date and alphabetically when the date is the same Source: Own interpretation.	o the publication date and alp	ohabetically when the date i	is the same	

studies in light of the above-mentioned critical review, it seems important to explore any other important related issues on SSB by reviewing the existing theoretical studies of Sharī'ah supervision in IBs as a whole. This would help in identifying important issues that require more empirical support for future research besides the weaknesses that have been discovered in the above-reviewed literature as explained in Table II. These studies are related to the Sharī'ah supervisory function, issues, and practices.

Several studies have discussed the CG from an Islamic perspective, current SG practices and issues, challenges of good SG, different SG models and systems across jurisdictions (see, e.g., Grais and Pellegrini, 2006a; Grais and Pellegrini, 2006b; Hasan, 2009; Nathan Garas and Pierce, 2010; Nathan, 2010; Hasan, 2011; Abdullah Saif Alnasser and Muhammed, 2012; Nathan Garas, 2012a, 2012b; Grassa, 2013; Hamza, 2013; Grassa and Matoussi, 2014b; Ayedh and Echchabi, 2015; Sulaiman *et al.*, 2015; Grassa, 2015).

However, some of these studies are descriptive (see, e.g., Hasan, 2011; Grassa and Matoussi, 2014b), while some other studies are empirical (see, e.g., Nathan, 2010; Nathan Garas, 2012a). Despite the last two studies being empirical, they only focused on the SSB performance and function, and they did not link the SSB to the bank performance. The following part discusses some of these studies, highlighting the most important issues on the SG practices.

Grais and Pellegrini (2006a) examined the challenges facing SG regulations in ensuring Sharī'ah compliance activities in IFIs across 11 countries. Particularly, the study focused on the challenges facing SSBs at institutional and national levels in conducting their roles. The findings revealed that SSBs are the most important CG instruments in ensuring Sharī'ah compliance in IFIs and enhance their stakeholders' confidence. In addition, SSBs suffer from many challenges that affect their performance such as the members' independence and the confidentiality of banks' information. Furthermore, there is a lack of qualified scholars who have enough knowledge in finance besides the Sharī'ah. The study suggested that it is better for the SSBs in IFIs to have consistent opinions.

Moreover, Grais and Pellegrini (2006b) provided another analytical study on the CG practices for 13 IFIs in 16 countries. By comparing the SSB disclosure score across the IFIs, the study concluded that IFIs have weak disclosure pertaining to SSB background, SSB fatwas, and responsibilities. The study also found that there is a need for more competent and independent SSBs in IFIs.

In an attempt to explore the differences in the SG regulatory systems across jurisdictions, Hasan (2009) examined the SG systems in Malaysia, GCC countries, and the UK as these countries reflect different legal environments (mixed, Islamic, and the Western). By comparing the different frameworks of SG in different environments, Hasan (2009) found that countries can be classified from SG regulatory perspective into regulated and unregulated. More specifically, countries can be classified based on the degree of intervention of regulatory agencies into five groups, namely, reactive, passive, minimalist, pro-active, and interventionist. The findings of the study revealed that the regulatory SG of Malaysia is very strong as compared to the other systems in the UK and GCC countries. It was recommended that countries should have a clear legal framework and a sound SG system.

Another study on SSB function of IFIs is by Nathan Garas and Pierce (2010). This study investigated the significance, objectives, and roles of SSB in IFIs by reviewing many theoretical studies. The findings revealed that SSB is the most important instrument to ensure Sharī'ah compliance in IFIs. The study provided some suggestions which could improve the performance of Sharī'ah supervision. These suggestions include the issuance of specific regulations about the selection of SSB scholars and controlling the SSB cross-memberships by the regulatory authorities. Adding to that, the IFIs should apply the AAOIFI standards in their practice and operation. To ensure a more independent SSB, the authors suggested that the position of SSB should be located under the shareholders and not under

Review on

the BoD. They confirmed that SSB should have more knowledge in financial, economic, and commercial fields.

Nathan (2010) empirically evaluated the function and performance of SSB in IFIs of the GCC countries. In undertaking his study, data were collected from 219 IFIs in 2009 through a questionnaire as his research tool. The study examined the impact of five explanatory variables on SSB performance. These five factors are the number of SSB meetings, the SSB qualification, the evaluation of SSB scholars, the performance of the Sharī'ah control department, and the position of SSB in the institution. The findings indicated that the first three variables affect the SSB performance positively, while the fourth variable affects it negatively. For the last variable, the study did not find any significant impact.

By using a survey as his research instrument, Hasan (2011) conducted a descriptive study in 2009 to investigate SG practices in the UK, Malaysia, and the GCC countries by taking into consideration the features of good CG that consist of independence, competency, transparency, disclosure, and consistency. The survey findings indicated that there are many differences in the SG practices across the countries such as only few IFIs adopt the AAOIFI standards. Most IFIs have male scholars in their SSBs. The findings revealed that Malaysia has a strong SG framework compared to the UK and the GCC countries. The study concluded that the current SG practices should be enhanced and improved in terms of the regulatory framework, independence, and competence of SSBs and disclosure practices.

Another empirical study on SSB function in IFIs is conducted by Nathan Garas (2012a). This study examined the relationship between six explanatory variables and the conflicts of interest inside the SSB. These variables are the SSB executive position, the SSB reward, the relationship between the BoD and the SSB, and the SSB membership in Islamic funds, in issuers of *Sukuk*, and in capital markets. The researcher used a mail questionnaire which was distributed to 219 IFIs in the GCC countries in 2009. The study found that there is no significant impact of reward and SSB membership in capital markets on the conflicts of interest while the other variables have significant impact.

Grassa (2013) examined the SG systems in IFIs and attempted to explore the challenges affecting the implementation of sound SG practices. The study found many differences in the SG practices and models across jurisdictions. Furthermore, the degree of regulatory authorities' intervention differs from one jurisdiction to another. The study revealed that the current SG practices should be improved for a sound SG is important to enhance the credibility of the IFIs. The author concluded that the growth of the Islamic finance industry can be negatively affected if IFIs fail to apply strong SG.

By conducting qualitative analyses, Hamza (2013) examined how the differences in the SG models [Centralized (CSGM) and Decentralized (DSGM)] in Malaysia and the GCC countries can influence the effectiveness of SG. After comparing the CSGM and DSGM models, the study revealed that the CSGM is better for the IBs compared to the DSGM. The CSGM provides uniformity, consistency, and harmonization of the Sharī'ah opinions (*fatwas*) across IBs; therefore, it can enhance the independence of SSB and decrease the potential conflicts between scholars. In contrast, the study revealed that obtaining consensus in the Sharī'ah opinions and then controlling the conflict of interest is difficult with the DSGM for IBs. However, the study does not provide any empirical evidence to support the discussion.

Grassa and Matoussi (2014b) compared the CG characteristics and governance structure of IBs in the GCC and Southeast Asia countries by using descriptive analysis for 83 IBs for the period 2002–2011. They found several differences in the CG structure between the IBs in the GCC and the Southeast Asian countries. For example, blockholders dominate IBs in the GCC countries, and their number seems to be higher in the IBs of the GCC compared to those in Southeast Asia. IBs in Southeast Asian countries have higher SSB size and SSB women members as compared with the IBs in GCC countries. On the other hand, IBs in the GCC countries have higher SSB cross-membership and SSB members with experience in finance

and economic fields than that of the IBs in Southeast Asia. The study concluded that such differences belong to the differences between the GCC and the Southeast Asian countries in their economies, cultures, legal, and regulatory frameworks. The findings of the study indicated that the current CG of IBs still needs more development and standardization.

More recently, Grassa (2015) conducted a critical analysis to examine the SG systems of IFIs across 25 Organization of Islamic Cooperation (OIC) countries. The study found that the majority of the OIC countries still have weak SG systems and regulatory frameworks. These weaknesses lie in the functions and the responsibilities of the SSBs at the national and institutional levels. To enhance the SG practices, the author suggested that it is very necessary for the central authorities to play a more important role in providing good SG practices.

The above section has thoroughly highlighted previous studies on the current SG practices, challenges of good SG, different SG models and systems across jurisdictions. Table III depicts the essence of each study and highlights the important issues on SG and the limitations of the studies. Since the most common and prominent setbacks of the studies reviewed is the absence of empirical investigations, future research should provide empirical evidence to examine the aforementioned issues.

5. Recommendations for future research

In light of the above discussion, there are some important points that can be recommended for future research on SSB and IB performance studies. These points are related to the SSB characteristics' variables, issues, analytical methods, and measurements of variables.

5.1 SSB characteristics' variables

The body of knowledge is in dire need for empirical evidence on how SSB independence can affect the performance of IBs. Adding to that, the question of how SSB remuneration[6] can affect the performance of IBs needs to be addressed together with its effect on that of the BoD (see Bakar, 2016).

5.2 Issues

There is a need for more empirical studies to examine whether the effect of SSB and its characteristics on IB performance vary between IBs that operate:

- (1) Under the two different SG models (CSGM and DSGM).
- (2) In regulated and unregulated jurisdictions.
- (3) In jurisdictions that adopt extreme or slight degree of agencies intervention in SG practices.
- (4) In jurisdictions that control the cross-memberships for Sharī'ah scholars versus those that do not control it.
- (5) When the SSB position in the organization structure of a bank is located under the shareholders as compared to its position under the BoD or executive management.

There is also a need for more empirical studies to examine whether the effect of SSB and its characteristics on IB performance differ during crisis and non-crisis periods, especially the financial crisis of 2008. This would help IBs to adopt an appropriate SSB structure that will enhance their performance. Furthermore, there is a need for more empirical studies to examine the relationship between the BoD and the SSB in IBs and how such a relationship can affect the performance, risk-taking, and disclosure practices of the IBs. Highlighting this

Review on

Limitation Studies Issue Grais and Pellegrini SSBs suffer from many challenges that (2006a): affect their performance such as the Grais and Pellegrini boards' independence and the lack of (2006b) qualified scholars who have enough knowledge in finance and economic Grais and Pellegrini There are some differences in the SG practices across jurisdictions which can (2006a): Grais and Pellegrini affect the effectiveness of SSBs in IBs (2006b); such as the difference in the SG models Hamza (2013) (CSGM and DSGM)^a as no specific model can be preferred by all iurisdictions Nathan Garas and The majority of countries still have Pierce (2010); weak SG systems and regulatory Hasan (2011); frameworks. Thus, the current SG Grassa (2013); practices should be improved, especially Grassa (2015) in terms of the regulatory framework, independence, and competence of SSBs.

frameworks. Thus, the current SG practices should be improved, especially in terms of the regulatory framework, independence, and competence of SSBs. The regulatory authorities should issue specific regulations about the selection of SSB scholars and control the SSB cross-memberships

Nathan Garas and

Pierce (2010)

For ensuring more independent SSB, the authors suggested that the position of SSB should be located under the shareholders

There is no empirical evidence on how SSB independence can influence the performance of IBs. Further, there is a lack of studies that have improved a suitable measurement for SSB independence

There is a lack of empirical evidence that have examined such argument. especially in the IBs' performance context; thereby it is important to investigate whether the impact of SSB on IB performance can vary between IBs that operate under the two different SG models (CSGM and DSGM), so as to find the best SG model for IBs There is a lack of empirical evidence that examined this issue in the IB performance context. The exception seems to be the study of Nomran et al. (2018) which still suffers from some limitations as mentioned in Table II. Future studies should examine whether the effect of SSB can vary between IBs operating under different regulatory frameworks. Also, whether this effect can vary between countries that control the cross-memberships for Shari'ah scholars vs those that do not control it There is a need for empirical evidence on this issue by examining how the effect of SSB on performance of IBs can differ when the SSB position in the organization structure of a bank is located under the shareholders as compared to its position under the BoD or executive management^b

Notes: aMany studies classified SG models into two, namely, centralized (CSGM) and decentralized (DSGM) models (see, e.g., Grais and Pellegrini, 2006a; Grais and Pellegrini, 2006b; Hamza, 2013). DSGM reflects the Sharī'ah supervision at the institutional level where each IB should establish its SSB; while in contrast, CSGM reflects Sharī'ah supervision at both the institutional and the national levels by having a national SSB at the Central Bank or the securities commission besides the SSBs of IBs (Grassa, 2015; Hakimi et al., 2018). There is no specific model preferred by all jurisdictions (Oseni et al., 2016). Even among researchers, some of them believe that the CSGM approach is better for IBs than the DSGM (see, e.g., Hamza, 2013; Oseni et al., 2016), while there are some others who believe that DSGM is better than CSGM (see, e.g., Grais and Pellegrini, 2006a; Quttainah et al., 2013) as each model has its advantages and disadvantages. Generally, SSB is one of the most important mechanisms to deal with SG both within an institution (SSB at bank level) and within a jurisdiction (SSB at national level). However, there are other mechanisms that deal with SG issues, e.g., Sharī'ah audit at bank level and Shari'ah Federal Court at national level as in Pakistan. At bank level, Shari'ah audit can be defined as an independent assessment that is periodically conducted to improve compliance level and ensure the effectiveness of the Sharī'ah control system (Shafii et al., 2013). At national level as in Pakistan, the Sharī'ah Federal Court is the highest authority to take decision on Shari'ah issues although there is a national SSB at the State Bank of Pakistan level (Hasan, 2009); bPlacing the SSB under the BoD can influence SSB performance as the BoD imposes some restrictions on the SSB. For that reason, when the SSB position comes at the same level as the BoD which is located under the shareholders, the SSB would be free from any restrictions that may be forced by the BoD or the managers (Nathan, 2010)

Source: Own interpretation

Table III. Summary and critical review of the important related studies on SG practices issue is very important as the relationship between the BoD and the SSB is still ambiguous[7], requiring an in-depth analysis.

5.3 Analytical methods

- (1) Future studies should control for endogeneity issue. One of the recommended methods to solve this issue is using GMM estimator (see, e.g., Nomran *et al.*, 2018).
- (2) Future studies may employ Structural Equation Modeling (SEM) in the governance and performance studies in general. This method allows the inclusion of unobserved influence in the model through latent/unobservable variables which can be measured using many observed variables. In the SSB context, it would help in measuring the SSB influence, as unobserved variable, using the SSB characteristics that may determine how effective the SSB conducts its task, as observed variables. Roemer (2016) highlighted in details why SEM can be suitable for panel data studies.

5.4 Measurements of variables

- (1) The performance of IBs should be measured using the Sharī'ah approach, and Zakat ratios have been suggested as alternative measurements of performance, e.g. Zakat on assets and Zakat on equity (see, e.g., Mohammed and Muhammed, 2017a; Nomran and Haron, 2019).
- (2) There is a need to create a suitable measurement for SSB independence as there is a lack of studies that have provided such measurement besides ignoring the impact of this variable on performance, risk, and CSR of IBs as a whole. Recently, however, Musleh Alsartawi (2019) measured SSB independence using a single proxy as binary variable: "zero" if the SSB member has direct or indirect relationship with the IB; "one" indicates otherwise. Despite this, it is believed that such measurement alone is not enough to measure the SSB independence, therefore this study suggests using a new score to measure SSB independence involving some important items that may reflect the independence of SSB[8].
- (3) SSB total effect should be measured using an SSB measurement that can reflect the total effect of SSB based on the most important characteristics that affect SSB performance. This measure can be either a score/proxy[9] that can be used for studies which employ GMM and other panel data methods. Otherwise, a construct (latent variable) for studies which employ SEM model as discussed above can be employed. In both cases, the validity and consistency of the measurements have to be examined.

6. Conclusion

The purpose of this paper is to identify the literature gap in the study of SG, as represented by the SSB, and its impact on IB performance. Through a systematic literature review, 21 papers were selected and analyzed. It was found that although many studies have been conducted on the SG in IFIs, a majority of these studies are theoretical, and they have been carried out to examine the function of SSB. In contrast, the empirical studies on the SG are limited in general as well as on the relationship between the SSB and the performance of IBs in particular.

However, the existing research studies suffer from some limitations, suggesting an urgent need for more empirical analyses. Because of these limitations, the literature cannot provide meaningful and relevant suggestions to the related parties for the development of the SG practices.

Hence, this paper suggests that future research should empirically examine how the SSB independence and remuneration can affect the performance of IBs. There is a need for more empirical studies to examine whether the effect of SSB and its characteristics on IB performance can be moderated by the differences across jurisdiction in their SG models (CSGM and DSGM), the degree of agencies intervention in SG practices, controlling the cross-memberships of scholars, and SSB position in the organizational structure of IBs. Further, future research should examine whether the effect of SSB and its characteristics on IB performance differ during crisis and non-crisis periods, especially the financial crisis of 2008. This would help IBs to adopt the appropriate SSB structure that help in enhancing their performance, hence value creation.

In terms of the analytical methods, future studies should control for endogeneity issue by using a GMM estimator. In addition, they may employ SEM in the governance and performance studies in general due to its advantages. Finally, the performance of IBs should be measured by using a Sharī'ah approach such as Zakat ratios. SSB total effect should also be measured using SSB measurement that can reflect the total effect of SSB based on the most important characteristics affecting the SSB performance either using a score or proxy for studies that employ panel data methods or a construct (latent variable) for studies that employ the SEM model. Regarding the available databases, there are at least two important databases that can be used by researchers in this research area, i.e. Orbis Bank Focus (Orbis) database and Zawya database. Orbis database provides data about banking activities, while Zawya database provides data about firms including governance and Sharī'ah scholars in IFIs.

This study, however, has its limitation. First, it was restricted in the common features of Scopus search, e.g. the choice of number and type of keywords and the resulting selection of studies. Second, the review was limited to the peer-reviewed papers, meaning other materials such as books, magazines and working papers were excluded.

7. Implications for research and practice

The study has some implications for research and practice as the following.

- (1) Although many studies exist on CG in IBs, research on Sharī'ah supervision is still very limited, especially in investigating the impact of SG mechanism on IB performance. Thus, the analysis undertaken in this paper aims to address the literature gaps on the effect of SSB on IBs' performance and the important practical issues on SG practices. This study therefore serves as a guide for researchers and academicians in research related to this important area besides other research and regulatory authorities, e.g. Central banks and Islamic international autonomous non-for-profit organizations, e.g. AAOIFI and the Islamic Financial Services Board (IFSB).
- (2) Researchers and academicians may benefit from the attempt to prove that AGT can be used in analyzing how SG mechanism (SSB) mitigates agency problems through moral monitoring and then enhance IBs' performance. Additionally, they may benefit from the attempt to prove that many CG theories, e.g. AGT and SKT, can be used in analyzing how SSB characteristics can improve SSB effectiveness and then enhance IBs' performance.
- (3) This study reviews the existing literature on the relationship between SSB and IB performance. The authors suggested the important literature gap that still needs to be empirically examined in different themes of the topic. Thus, it is expected for academic research to benefit from the attempt to explore new related variables to SSB and its characteristics, e.g. SSB independence and remuneration which can enhance IBs' performance besides taking into account the differences in regulatory

- environments across countries. This would help in developing a SG framework based on the fact that SG practices differ across countries, and then, the strength of SSB performance relationship is affected by such differences.
- (4) Regarding the methodology, this study also encourages researchers to adopt more appropriate and robust analytical methods in analyzing the relationship between SSB and IBs' performance, e.g. controlling for endogeneity issue using GMM and employing SEM to construct latent variables. Furthermore, the study suggests using suitable measurements to measure the related variables such as Sharī'ah approach to measure IBs' performance and using score/proxy to measure the total effect of SSB, rather than the selective SSB variables as currently practice in SSB research. In addition, this study suggests a new score to measure SSB independence. Finally, the study suggests employing a new measurement for SSB remuneration which takes into account consumer price index (CPI) to reflect the differences in prices across countries.
- (5) In terms of practical implication, this study provides an important summary for shareholders of IBs, policy makers, regulators, and related authorities across countries, to understand how to enhance the performance of IBs with enhancement on SG. In addition, reviewing empirical studies in the field of SSB and performance of IBs are very important to these parties as it would provide them with suggestions on improving the current SG practices for the betterment of the IB industry worldwide.

Notes

- 1. Risk means a probability or threat of loss.
- 2. The duality of governance of firms is common in some countries, e.g. non-executive directors in Germany, the Netherlands, China, and Indonesia supervise executive directors in two-tier boards as mentioned by Bezemer et al. (2014). However, there are different views regarding the effectiveness of this model. While some believe that such a model is good, some others such as Bezemer et al. (2014) argue that under this board model, challenges might be particularly difficult to address due to the formal separation of management boards' decision management from supervisory boards' decision control roles.
- 3. Performance of banks means a capacity to generate sustainable profit (Ishtiaq, 2015).
- 4. According to Abdelsalam et al. (2016), religiously oriented organizations apply strict moral constraints. They assert that the opportunistic behavior of managers may be suppressed within an environment that incorporates organizational moral values; hence the religious adherence of IBs implies a possible reduction in agency costs through organizational moral accountability constraints. As they mentioned, the concept of Islamic accountability extends the moral responsibility of the managers and board members of IBs beyond conventional legal liability.
- 5. Most papers were excluded in this stage as they are irrelevant.
- 6. It can be measured as log of annual SSB remuneration (see, e.g., Grassa and Matoussi, 2014b). For robust check, especially if the study covers IBs across countries, SSB remuneration can be adjusted to reflect the differences across countries in prices and amenities by dividing total remuneration by the consumer price index in each country following literature (see, e.g., Winters, 2009).
- 7. To the best of our knowledge, to date, there are still no studies attempted to address this empirically.
- 8. In light of the related literature, the suggested SSB independence score sums the value of the dichotomous characteristics of four items, which takes a score bounded by 0–1 as the following:
 - (1) "1" if the shareholders only appoint SSB scholars; "0" otherwise.
 - (2) "1" if remuneration of SSB scholars is solely decided by shareholders; "0" otherwise.

- (3) "1" if the SSB position in the organization structure of a bank is located under the shareholders; "0" otherwise.
- (4) "1" if the SSB attends the BoD meetings to discuss the religious aspects of their decisions; "0" otherwise.
- 9. For example, the SSB score was used by many studies (Farook et al., 2011; Rahman and Bukair, 2013; Nomran and Haron, 2019). This score sums the value of the dichotomous characteristics of the SSB, which takes a score bounded by 0–1 (SSB size: "1" for banks with 5 or more members and "0" otherwise), (SSB cross-membership: "1" if at least one SSB scholar with cross-membership and "0" otherwise), (SSB educational qualification: "1" if at least one SSB scholar with PhD and "0" otherwise), (SSB reputation: "1" if at least one SSB scholar sits on the SSB of AAOIFI and at least two Sharī'ah board memberships and "0" otherwise) and (SSB expertise: "1" if at least one SSB scholar with experience and knowledge in the field of accounting/economic/finance and "0" otherwise).

References

- Abdel-Baki, M. and Leone Sciabolazza, V. (2014), "A consensus-based corporate governance paradigm for Islamic banks", *Qualitative Research in Financial Markets*, Vol. 6 No. 1, pp. 93-108.
- Abdelsalam, O., Dimitropoulos, P., Elnahass, M. and Leventis, S. (2016), "Earnings management behaviors under different monitoring mechanisms: the case of Islamic and conventional banks", *Journal of Economic Behavior and Organization*, Vol. 132 No.1, pp. 155-173.
- Abdullah Saif Alnasser, S. and Muhammed, J. (2012), "Introduction to corporate governance from Islamic perspective", *Humanomics*, Vol. 28 No. 3, pp. 220-231.
- Abdullah, W.A.W., Percy, M. and Stewart, J. (2014), "Corporate governance disclosure practices of Islamic banks: the case of Islamic banks in the Southeast Asian and the Gulf cooperation council region", in *Journal of International Accounting Research (JIAR) Conference 2014 Proceedings in Hong Kong*, The Hong Kong Polytechnic University, pp. 1-14.
- Ajili, H. and Bouri, A. (2018), "Corporate governance quality of Islamic banks: measurement and effect on financial performance", *International Journal of Islamic and Middle Eastern Finance and Management*, Vol. 11 No. 3, pp. 470-487.
- Almutairi, A.R. and Quttainah, M.A. (2017), "Corporate governance: evidence from Islamic banks", Social Responsibility Journal, Vol. 13 No. 3, pp. 601-624.
- Alnasser, A.S. and Muhammed, J. (2012), "Introduction to corporate governance from Islamic perspective", *Humanomics*, Vol. 28 No. 3, pp. 220-231.
- Ayedh, A.M. and Echchabi, A. (2015), "Shari'ah supervision in the Yemeni Islamic banks: a qualitative survey", *Qualitative Research in Financial Markets*, Vol. 7 No. 2, pp. 159-172.
- Bakar, M.D. (2016), Shariah Minds in Islamic Finance, Amanie Media, Kuala Lumpur.
- Bezemer, P.J., Peij, S., de Kruijs, L. and Maassen, G. (2014), "How two-tier boards can be more effective", *Corporate Governance: The International Journal of Business in Society*, Vol. 14 No. 1, pp.15-31.
- Ciftci, I., Tatoglu, E., Wood, G., Demirbag, M. and Zaim, S. (2019), "Corporate governance and firm performance in emerging markets: evidence from Turkey", *International Business Review*, Vol. 28 No.1, pp. 90-103.
- Claessens, S. (2006), "Corporate governance and development", The World Bank Research Observer, Vol. 21 No. 1, pp. 91-122.
- Davis, J.H., Schoorman, F.D. and Donaldson, L. (1997), "Toward a stewardship theory of management", Academy of Management Review, Vol. 22 No. 1, pp. 20-47.
- Demsetz, H. and Lehn, K. (1985), "The structure of corporate ownership: causes and consequences", *Journal of Political Economy*, Vol. 93 No. 6, pp. 1155-1177.

- Dusuki, A.W. (2008), "Understanding the objectives of Islamic banking: a survey of stakeholders' perspectives", International Journal of Islamic and Middle Eastern Finance and Management, Vol. 1 No. 2, pp. 132-148.
- E-Vahdati, S., Zulkifli, N. and Zakaria, Z. (2019), "Corporate governance integration with sustainability: a systematic literature review", Corporate Governance: The International Journal of Business in Society, Vol. 19 No. 2, pp. 255-269.
- Farag, H., Mallin, C. and Ow-Yong, K. (2018), "Corporate governance in Islamic banks: new insights for dual board structure and agency relationships", *Journal of International Financial Markets*, *Institutions and Money*, Vol. 54 No. 1, pp. 59-77.
- Farook, S. and Lanis, R. (2007), "Banking on Islam? Determinants of corporate social responsibility disclosure", in Munawar, I., Salman, L.M. and Dadang, M. (Eds), Advances in Islamic Economics and Finance: Proceedings of 6th International Conference on Islamic Economics and Finance, Islamic Research and Training Institute, Islamic Development Bank Group, Jeddah, pp. 217-247.
- Farook, S., Hassan, K. and Lanis, R. (2011), "Determinants of corporate social responsibility disclosure: the case of Islamic banks", *Journal of Islamic Accounting and Business Research*, Vol. 2 No. 2, pp. 114-141.
- Ghayad, R. (2008), "Corporate governance and the global performance of Islamic banks", Humanomics: The International Journal of Systems and Ethics, Vol. 24 No. 3, pp. 207-216.
- Grais, W. and Pellegrini, M. (2006), "Corporate governance and Shari'ah compliance in institutions offering Islamic financial services", World Bank Policy Research working paper No. 4054, November.
- Grais, W. and Pellegrini, M. (2006), "Corporate governance in institutions offering Islamic financial services: issues and options", World Bank Policy Research working paper No. 4052, November.
- Grassa, R. (2013), "Shari'ah governance system in Islamic financial institutions: new issues and challenges", Arab Law Quarterly, Vol. 27 No. 2, pp. 171-187.
- Grassa, R. (2015), "Shari'ah supervisory systems in Islamic finance institutions across the OIC member countries: an investigation of regulatory frameworks", *Journal of Financial Regulation* and Compliance, Vol. 23 No. 2, pp. 135-160.
- Grassa, R. (2016), "Corporate governance and credit rating in Islamic banks: does Shariah governance matters?", Journal of Management and Governance, Vol. 20 No. 4, pp. 875-906.
- Grassa, R. and Matoussi, H. (2014a), "Is corporate governance different for Islamic banks? A comparative analysis between the Gulf Cooperation Council and Southeast Asian countries", International Journal of Business Governance and Ethics, Vol. 9 No. 1, pp. 27-51.
- Grassa, R. and Matoussi, H. (2014b), "Corporate governance of Islamic banks: a comparative study between GCC and Southeast Asia countries", *International Journal of Islamic and Middle Eastern Finance and Management*, Vol. 7 No. 3, pp. 346-362.
- Hakimi, A., Rachdi, H., Ben Selma Mokni, R. and Hssini, H. (2018), "Do board characteristics affect bank performance? Evidence from the Bahrain Islamic banks", *Journal of Islamic Accounting* and Business Research, Vol. 9 No. 2, pp. 251-272.
- Hamza, H. (2013), "Sharia governance in Islamic banks: effectiveness and supervision model", International Journal of Islamic and Middle Eastern Finance and Management, Vol. 6 No. 3, pp. 226-237.
- Hasan, Z. (2009), "Regulatory framework of Shari'ah governance system in Malaysia, GCC Countries and the UK", Kyoto Bulletin of Islamic Area Studies, Vol. 3 No. 2, pp. 82-115.
- Hasan, Z. (2011), "A survey on Shari'ah governance practices in Malaysia, GCC countries and the UK: critical appraisal", International Journal of Islamic and Middle Eastern Finance and Management, Vol. 4 No. 1, pp. 30-51.
- Ishtiaq, M. (2015), Risk Management in Banks: Determination of Practices and Relationship with Performance, PhD dissertation, University of Bedfordshire, Bedfordshire.

Review on

governance

mechanism

Shari'ah

- Kusuma, H. and Ayumardani, A. (2016), "The corporate governance efficiency and Islamic bank performance: an Indonesian evidence", *Polish Journal of Management Studies*, Vol. 13 No. 1, pp. 111-120.
- Le, N., Groot, W., Tomini, S.M. and Tomini, F. (2019), "Effects of health insurance on labour supply: a systematic review", *International Journal of Manpower*, Vol. 40 No. 4, pp. 717-767.
- Mezzi, N. (2018), "Efficiency of Islamic banks and role of governance: empirical evidence", *Managerial Finance*, Vol. 44 No. 5, pp. 590-603.
- Mohammed, S.A.S.A. and Muhammed, D.J. (2017a), "Financial crisis, legal origin, economic status and multi-bank performance indicators: evidence from Islamic banks in developing countries", *Journal of Applied Accounting Research*, Vol. 18 No. 2, pp. 208-222.
- Mohammed, S.A.S.A.N., and Muhammed, J. (2017b), "The relationship between agency theory, stakeholder theory and Shariah supervisory board in Islamic banking: an attempt towards discussion", *Humanomics: The International Journal of Systems and Ethics*, Vol. 33 No. 1, pp. 75-83.
- Mollah, S. and Zaman, M. (2015), "Shari'ah supervision, corporate governance and performance: conventional vs. Islamic banks", *Journal of Banking and Finance*, Vol. 58 No. 1, pp. 418-435.
- Mollah, S., Hassan, M.K., Al Farooque, O. and Mobarek, A. (2017), "The governance, risk-taking, and performance of Islamic banks", *Journal of Financial Services Research*, Vol. 51 No. 2, pp. 195-219.
- Musibah, A.S. and Alfattani, W.S.W.Y. (2014), "The mediating effect of financial performance on the relationship between Shariah supervisory board effectiveness, intellectual capital and corporate social responsibility, of Islamic banks in Gulf Cooperation Council countries", Asian Social Science, Vol. 10 No. 17, pp. 139-164.
- Musleh Alsartawi, A. (2019), "Performance of Islamic banks Do the frequency of Shari'ah supervisory board meetings and independence matter?", ISRA International Journal of Islamic Finance, Vol. 11 No. 2, pp. 303-321.
- Nathan Garas, S. (2012a), "The conflicts of interest inside the Shari'a supervisory board", *International Journal of Islamic and Middle Eastern Finance and Management*, Vol. 5 No. 2, pp. 88-105.
- Nathan Garas, S. (2012b), "The control of the Shari'a supervisory board in the Islamic financial institutions", *International Journal of Islamic and Middle Eastern Finance and Management*, Vol. 5 No. 1, pp. 8-24.
- Nathan Garas, S. and Pierce, C. (2010), "Shari'a supervision of Islamic financial institutions", *Journal of Financial Regulation and Compliance*, Vol. 18 No. 4, pp. 386-407.
- Nathan, S. (2010), "The performance of Shari'ah supervisory boards within Islamic financial institutions in the Gulf cooperation council countries", Corporate Ownership and Control, Vol. 8 No. 1, pp. 247-266.
- Nawaz, T. (2017a), "Momentum investment strategies, corporate governance and firm performance: an analysis of Islamic banks", Corporate Governance: The international journal of business in society, Vol. 17 No. 2, pp. 192-211.
- Nawaz, T. (2017b), "Intellectual capital, financial crisis and performance of Islamic banks: does Shariah governance matter?", International Journal of Business and Society, Vol. 18 No. 1, pp. 211-226.
- Nawaz, T. (2017c), "Exploring the nexus between human capital, corporate governance and performance: evidence from Islamic Banks", *Journal of Business Ethics*, pp. 1-21.
- Nomran, N.M. and Haron, R. (2020), "Shari'ah supervisory board's size impact on performance in the Islamic banking industry: an empirical investigation of the optimal board size across jurisdictions", Journal of Islamic Accounting and Business Research, Vol. 11 No. 1, pp. 110-129.
- Nomran, M.N., Haron, R. and Hassan, R. (2018), "Shari'ah supervisory board characteristics effects on Islamic banks' performance: evidence from Malaysia, *International Journal of Bank Marketing*, Vol. 36 No. 2, pp. 290-304.

- Nomran, N.M, Haron, R and Hassan, R. (2017), "Bank performance and Shari'ah supervisory board attributes by Islamic banks: does bank size matter?", *Journal of Islamic Finance*, No. (Special Issue), pp. 173-186.
- Nomran, N.M. and Haron, R. (2019), "Dual board governance structure and multi-bank performance: a comparative analysis between Islamic banks in Southeast Asia and GCC countries", *Corporate Governance: The International Journal of Business in Society*, Vol. 19 No. 6, pp. 1377-1402.
- Oseni, U.A., Ahmad, A.U.F. and Hassan, M.K. (2016), "The legal implications of 'Fatwa shopping' in the Islamic finance industry: problems, perceptions and prospects", Arab Law Quarterly, Vol. 30 No. 2, pp. 107-137.
- Quttainah, M.A. and Almutairi, A.R. (2017), "Corporate ethics: evidence from Islamic banks", Journal of Management and Governance, Vol. 21 No. 4, pp. 815-840.
- Quttainah, M.A., Cocco, J. and Al-Zufairi, A. (2017), "The determinants of the effectiveness of corporate governance at Islamic banks", *International Journal of Business Governance and Ethics*, Vol. 12 No. 2, pp. 174-196.
- Quttainah, M.A., Song, L. and Wu, Q. (2013), "Do Islamic banks employ less earnings management?", Journal of International Financial Management and Accounting, Vol. 24 No. 3, pp. 203-233.
- Rahim, S.R.M. and Mahat, F. (2015), "Risk governance: experience of Islamic banks", Risk Governance and Control: Financial Markets and institutions, Vol. 5 No. 2, pp. 31-40.
- Rahman, A.A. and Bukair, A.A. (2013), "The influence of the Shariah supervision board on corporate social responsibility disclosure by Islamic banks of Gulf co-operation council countries", Asian Journal of Business and Accounting, Vol. 6 No. 2, pp. 65-104.
- Riwayati, H.E., Markonah and Siladjaja, M. (2016), "Implementation of corporate governance influence to earnings management", Procedia-Social and Behavioral Sciences, Vol. 219, pp. 632-638.
- Roemer, E. (2016), "A tutorial on the use of PLS path modeling in longitudinal studies", *Industrial Management and Data Systems*, Vol. 116 No. 9, pp. 1901-1921.
- Safiullah, M. and Shamsuddin, A. (2018), "Risk in Islamic banking and corporate governance", Pacific-Basin Finance Journal, Vol. 47 No. 1, pp. 129-149.
- Shafii, Z., Abidin, A.Z., Salleh, S., Jusoff, K. and Kasim, N. (2013), "Post implementation of shariah governance framework: the impact of shariah audit function towards the role of shariah committee", Middle-East Journal of Scientific Research, Vol. 13, pp. 7-11.
- Shibani, O. and De Fuentes, C. (2017), "Differences and similaritites between corporate governance principles in Islamic banks and Conventional banks", Research in International Business and Finance, Vol. 42 No. 1, pp. 1005-1010.
- Sulaiman, M., Majid, N.A. and Ariffin, N.M. (2015), "Corporate governance of Islamic financial institutions in Malaysia", Asian Journal of Business and Accounting, Vol. 8 No. 1, pp. 65-93.
- Todorovic, I. (2013), "Impact of corporate governance on performance of companies", *Montenegrin Journal of Economics*, Vol. 9 No. 2, pp. 47-53.
- Ullah, M.H. and Khanam, R. (2018), "Whether Shariah compliance efficiency a matter for the financial performance: the case of Islami Bank Bangladesh Limited", *Journal of Islamic Accounting and Business Research*, Vol. 9 No. 2, pp. 183-200.
- Winters, J.V. (2009), "Wages and prices: are workers fully compensated for cost of living differences?", Regional Science and Urban Economics, Vol. 39 No. 5, pp. 632-643.
- Zeineb, G. and Mensi, S. (2018), "Corporate governance, risk and efficiency: evidence from GCC Islamic banks", Managerial Finance, Vol. 44 No. 5, pp. 551-569.
- Zirek, D., Celebi, F. and Hassan, M.K. (2016), "The Islamic banking and economic growth nexus: a panel VAR analysis for Organization of Islamic Cooperation (OIC) countries", *Journal of Economic Cooperation and Development*, Vol. 37 No. 1, pp. 69-100.

Appendix 1

No.	Dependent variable	No.	Independent variable
Firm perforn	nance terms:	Sharī'ah gov	ernance mechanism terms:
1	Performance	1	Sharī'ah governance
2	Profitability	2	Sharī'ah supervision
3	Efficiency	3	Islamic governance
4	Zakat	4	Sharī'ah board
5	Zakah	5	Sharī'ah committee

Notes: Based on the literature, the most common terms of each variable (dependent and independent) were used. Zakat terms also were used to measure IB performance based on the Sharī'ah approach (see Mohammed and Muhammed, 2017a; Nomran and Haron, 2019); therefore two separate terms (Zakat and Zakah) were used as the literature uses both terms

Review on Sharī'ah governance mechanism

123

Table A1. Key terms used in the search

About the authors

Dr. Naji Mansour Nomran is a Lecturer at the Department of Finance and Banking, Faculty of Administrative Sciences, Thamar University, Yemen, since 2006. He obtained his PhD in Islamic Banking and Finance from the International Islamic University Malaysia (IIUM) in 2019 with Best Student Award for PhD (IIUM) besides Achievement Award for Excellence in PhD (IIiBF), and he holds a Master of Science in Finance from the same university in 2014. In 2005, he received his bachelor's in Finance and Banking from Thamar University, Yemen, with excellent grade and was ranked as the first student of the batch. His research interests include Islamic banking and finance, corporate governance, risk management and performance. He has published several papers in international peer-reviewed journals. Naji Mansour Nomran is the corresponding author and can be contacted at: naji_nomran@yahoo.com

Dr. Razali Haron is currently an Associate Professor at the International Islamic University Malaysia (IIUM) Institute of Islamic Banking and Finance, Director of IIUM Sharī'ah Advisory Services Sdn. Bhd., member of investment sub-committee at IIUM and former Deputy Dean (Research and Publication) of the Institute. Prior to joining the academic, he has acquired vast experience in the corporate sector for more than 13 years. His extensive experience in the corporate sector covered brokerage dealings, fund management, unit trust and capital market. His research areas mainly cover corporate governance, Islamic banking and finance and firm performance. He has published extensively in international peer referred journals and edited several books. His latest edited book on banking and finance is expected to be published in 2020. Currently he is the chief editor for Journal of Islamic Finance and associate editor for Capital Market Review. He was the guest editor for Al-Shajarah (WoS-indexed) Special Issue in Islamic banking and finance for 2017, 2018 and 2019.

What influences bank lending in Saudi Arabia?

Bank lending in Saudi Arabia?

Received 30 July 2019

Revised 29 October 2019

Accepted 20 February 2020

Ken Miyajima

International Monetary Fund, Washington, District of Columbia, USA

125

Abstract

Purpose – Determinants of credit growth in Saudi Arabia are investigated.

Design/methodology/approach – A panel approach is applied to macroeconomic and bank-level data spanning 2000 -15.

Findings – Bank lending is supported by strong bank balance sheet conditions (high capital ratio, and growth of NPL provisioning and deposits), and higher growth of both oil prices and non-oil private sector GDP. Lower bank concentration also helps, likely through greater competition, so does stronger institution. Consistent with the literature, lending by Islamic banks may be more responsive to economic activity. Lending remained robust in 2015 despite oil prices having declined, helped by strong bank balance sheets and as banks reduced their holdings of "excess liquidity". To support bank lending in the period ahead, bank balance sheets need to remain strong. Fiscal adjustment and a reduced reliance on banks to finance the budget deficit would support credit provision to the private sector.

Originality/value – The paper is first to analyze in detail determinants of bank lending in Saudi Arabia applying a panel approach to bank level data, and draws critical policy implications.

Keywords Bank credit, Macro-financial linkages, Fixed-effects panel model

Paper type Research paper

1. Introduction

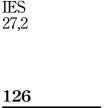
As oil prices fell since mid-2014, inflows of oil receipts declined and fiscal spending was scaled back, weakening economic activity. Funding conditions in the banking system tightened, evidenced by the increase in the 3-month Interbank Offered Rate (SIBOR) to the highest level in many years (Figure 1, upper right panel). Lower oil prices also dampened confidence (Husain *et al.* (2015)). Deposit growth fell and remained mostly in negative territory on a year-on-year basis during 2016, but growth of credit to the private sector remained robust, particularly to the construction sector, partly reflecting efforts by businesses to manage their cash positions as government payments were delayed (Figure 1, lower left panel). Banks reduced their holdings of both excess reserves at the Saudi Arabian Monetary Authority (SAMA) and SAMA bills to help fund private sector credit and purchases of bonds, which the government restarted issuing in 2015 (Figure 1, lower right panel).

In response, SAMA undertook measures to help ease funding conditions. The central bank placed more than SAR 20 billion (\$5.3 billion) of government entity deposits with the domestic commercial banks in September. It also announced the introduction of 7-, 28- and 90-day repos, which had only been overnight previously. As bank funding conditions eased, the 3-month SIBOR declined to the lowest level in six months in mid-December [1]. Deposit growth rebounded to marginally above 0 percent and bank holdings of excess liquidity rose in November. The issuance of \$17.5 billion international bonds by the government in October, which was the largest by an emerging market and heavily oversubscribed, also helped ease

JEL Classification — C33, E44, G21. KAUJIE Classification — L27, L40

© Ken Miyajima. Published in *Islamic Economic Studies*. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and noncommercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at http://creativecommons.org/licences/by/4.0/legalcode

Islamic Economic Studies
Vol. 27 No. 2, 2020
pp. 125-155
Emerald Publishing Limited
e-ISSN: 2411-3395
p-ISSN: 1319-1616
DOI 10.1108/IES-07-2019-0018



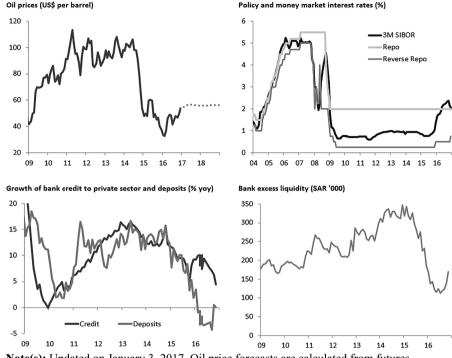


Figure 1. Oil prices and bank funding conditions

Note(s): Updated on January 3, 2017. Oil price forecasts are calculated from futures contracts maturing in 1 months to 6 months, 1 year, and 2 years. Excess liquidity includes bank holdings of current and other deposits at the central bank, and central bank bills **Source(s):** Haver and IMF staff calculations

funding conditions. Earlier, SAMA also relaxed the loan to deposit ratio, allowing the ratio to exceed the 85 percent limit.

As banks face funding pressure, one key question is prospects for bank lending in Saudi Arabia. Bank credit represents a key channel of transmission from oil prices to the real economy in Saudi Arabia and an important driver of economic growth more generally. Crosscountry data for the past several years presented in Figure A1 in the Appendix suggest that the nation's credit deepening (bank credit to the nonfinancial private sector relative to Gross Domestic Product (GDP)) was broadly consistent with the stage of economic development (GDP per capita in US dollars during 2010–2015). However, low oil prices could adversely affect bank credit extension and economic activity. Indeed, weak bank balance sheet conditions (e.g. higher non-performing loan (NPL) ratios and lower deposit growth) can spillback to further weaken macroeconomic conditions (Miyajima (2017)).

Against this backdrop, this paper analyzes determinants of bank credit in Saudi Arabia. It complements the literature, which primarily relies on cross-country panel data by single-country estimations that account for country-specific characteristics. The paper applies a panel econometric approach to bank-level balance sheet and macrolevel data for Saudi Arabia spanning 2000–2015. It finds that bank lending is supported by strong balance sheet conditions (high capital ratio and growth of provisioning and deposits), higher growth of both oil prices and nonoil private sector GDP. Lower bank concentration helps, likely through greater competition, so does stronger institution.

The rest of the paper is organized as follows. Section II reviews the literature and Section III describes the methodology and data. Section IV discusses results. Section V extends the baseline model to address several questions key to Saudi Arabia. Section VI concludes.

2. Literature

Bank credit is one important element of financial development, which enhances economic growth. A vast literature finds that greater financial development helps spur economic growth (see, e.g. Levine (1997, 2005) and Demirguc-Kunt and Levine (2008), for an extensive survey of the literature). However, more recent studies provide nuanced messages. Sahay et al. (2015) argue that many benefits in terms of growth and stability can be reaped from further financial development in most emerging market economies but that the effect of financial development on economic growth is bell-shaped and weakens at higher levels of financial development.

Some studies, however, have suggested the effects of financial development on growth are weak in oil exporting countries. For example, Naceur and Ghazouani (2007) analyze the Middle East and North Africa (MENA) countries, including Bahrain, Kuwait, Oman and Saudi Arabia and find no significant relationship between the development of the banking sector or the stock market and economic growth [2]. Barajas *et al.* (2013) argue that the beneficial effect of financial deepening (including private credit) on economic growth is generally smaller in oil exporting countries and lower-income countries due to weaker regulatory and supervisory characteristics and more limited access to financial services. Hakura (2004) argues that, in the MENA, where oil revenues are significant (including the GCC countries), large governments have likely limited private sector growth and diversification. However, such cross-country, panel data analyses may fail to capture Saudi Arabia's country-specific characteristics and can be usefully complemented by single-country estimations. Indeed, Miyajima (2017) finds that higher bank lending strengthens real GDP growth in Saudi Arabia.

Given the importance of bank credit, a large volume of literature focuses on its determinants. One strand of literature studies the issue in the context of monetary policy transmission or the bank lending channel, which has attracted particular attention after the global financial crisis. These studies find that bank-specific characteristics, such as size, liquidity, capitalization and lenders' default probabilities, have a large impact on the provision of credit (for instance, Altunbasa *et al.* (2010); Gambacorta and Marques-Ibanez (2011); Guizani (2015); Gambacorta and Shin (2016)). For emerging markets, global factors increased in importance in affecting the bank lending channel as capital flows became larger and more volatile against the backdrop of very easy global monetary conditions (Kohlscheen and Miyajima (2015)).

Another strand of literature more directly focuses on determinants of bank credit in emerging markets, including the GCC countries. Focusing on a sample of emerging economies, Chen and Wu (2014) confirm the importance of strong balance sheet conditions and banking regulation in supporting robust credit growth. Moreover, state-owned banks played a counter cyclical role during the global financial crisis in 2008–2009, particularly in Latin America and emerging Europe. That is, credit by state-owned banks grew faster than credit by private banks. More generally, emerging economies displayed remarkable resilience during the global financial crisis in 2008–2009 compared with their experience in previous crises, such as those in the late 1990s, partly as bank balance sheet conditions were stronger (BIS, 2010). Saudi Arabia was not materially affected either owing to a range of buffers, including the conservative supervisory framework and a strong banking system (Al-Hamidy, 2010). Guo and Stepanyan (2011) examine a large number of emerging economies for a decade and identify several key determinants of bank credit: domestic economic activity, bank

balance sheet conditions, domestic and external monetary conditions, and foreign funding. Amidu (2014) analyses determinants of bank lending in 24 countries in Sub-Saharan Africa using both bank and country-level data and finds linkages between bank balance sheet health and lending. Barajas *et al.* (2010) find that bank characteristics (capitalization and loan quality) help explain bank credit slowdown among MENA countries in the aftermath of the global financial crisis in 2008. Studies zooming in on the Gulf Cooperation Council (GCC) banks identify a range of determinants affecting bank credit (Ghosh (2013); Gani and AlMuharramil (2016)): bank capital, concentration, financial deepening (credit to GDP), economic growth, and institutional quality (enforcement, regulatory quality and rule of law).

Islamic banks tend to increase credit more rapidly than non-Islamic banks, according to results based on a larger sample of GCC banks and the classification of banks by type provided by Bankscope. Barajas *et al.* (2010) conjecture that Islamic banks' business models are geared more toward investments and lending in high growth areas such as real estate.

3. Methodology and data

3.1 Methodology

As commonly done in the literature, determinants of real growth of bank-level credit are modeled using the following multivariate panel data specification for bank i in year t [3].

$$rcg_{i,t} = \sum_{j} \alpha_{1,j} Bank_{j,i,t-1} + \sum_{k} \alpha_{2,k} Macro_{k,t} + \sum_{k} \alpha_{3,l} Macro_{l,t-1} + \sum_{l} \alpha_{4,m} time_{m} + \theta_{i} + \varepsilon_{i,t}$$
(1)

where $\operatorname{rcg}_{i,t}$ is real growth of bank credit to the private sector and $\operatorname{Bank}_{j,i,t-1}$ is bank level variables $(j=1,2,\ldots)$ lagged by one period to reduce potential endogeneity issues. That is, banks may adjust balance sheet composition in response to lending activity. $\operatorname{Macro}_{k,t}$ represents macro level variables $(k=1,2,\ldots)$, which are contemporaneous on the premise that these variables are exogenous to balance sheet conditions of individual banks. $\operatorname{Macro}_{l,t-1}$ also represents macro level variables $(l=1,2,\ldots)$ and are lagged by one period to reduce potential endogeneity issues. Time dummies for 2008 and 2009, $\operatorname{time}_m(m=1,2)$ help capture the potential effects of defaults of two large family-owned domestic conglomerates on loans [4]. Finally, θ_i is bank fixed effects and $\varepsilon_{i,t}$ is random errors.

3.2 Data

A range of bank-level and macrolevel explanatory variables are considered to explain bank-by-bank real credit growth guided by the literature [5]. All data are annual and span 2000–2015. Bank-level balance sheet data from Bankscope are available for longer history, back to 1987 but with limited data availability. There are 12 domestic Saudi banks, but the analysis focuses on 10 of them dictated by data availability (Table 1). The 10 banks together represent more than 90% of the size of the banking system. All variables are expressed in real terms except for ratios. Figure 2 visually summarizes the data, while Table 2 presents summary statistics. Table A1 in the Appendix reports detailed description of the data.

Four bank level balance sheet variables, standard in the literature, capture bank characteristics (which perhaps represent supply factors): the capital ratio, growth of NPL provisions, deposit growth and net income growth [6]. Higher capital allows bank to lend more while maintaining the same level of capital ratio. Higher NPL provisions would negatively affect capital and could reduce lending but would also improve the bank's credit risk, lower funding cost and allow the bank to lend more. Higher deposits increase resources to lend. Finally, higher profitability could encourage the bank to lend more. A lagged

Name	Percent share of total banking system assets 2015	Bank lending in Saudi
1. National Commercial Bank	20.7	Arabia?
2. AI Rajhi Bank	14.5	masia.
3. Samba	10.8	
4. Riyad Bank	10.3	
5. Banque Saudi Fransi	8.5	
6. Saudi British Bank	8.7	129
7. Arab National Bank	7.9	
8. Saudi Hollandi Bank	5.0	
9. Saudi Investment Bank	4.3	Table 1.
10. Bank Aljazira	2.9	Saudi Arabian
Sum of above	93.6	domestic banks
Source(s): Bankscope and author's calculations		analyzed

dependent variable, bank-level credit growth, is often included in the literature but not in this paper's analysis because its coefficient is generally statistically insignificant. Therefore, the rest of the paper considers a standard panel fixed-effects model [7]. However, to help account for remaining potential endogeneity issues, the models are also estimated using a system generalized method of moments (GMM) approach as robustness checks.

Five macrolevel variables control for key global and domestic developments (which could perhaps represent a combination of supply and demand factors.) Oil price growth captures an important external shock given the nation's large reliance on oil exports. Oil revenues affect the nonoil sector through government spending on domestic goods and services and payment of government wages. The US Fed funds rate aims at controlling for changes in global monetary conditions which, given the Saudi riyal's peg to the US dollar, are expected to impact domestic monetary conditions. Nonoil private sector GDP growth captures domestic economic activity not directly affected by oil price movements. Domestic money market interest rates (3-month SIBOR) are expected to capture domestic monetary conditions and bank profitability [8]. Bank holdings of excess liquidity (sum of bank holdings of excess reserves at the central bank and those of central bank bills) represent banks' liquidity conditions.

Figure 2 summarizes the behavior of the explanatory variables. As far as bank-level variables, real growth of bank credit rose in the early 2000s but declined to negative territory in the late 2000s, primarily due to defaults of two large domestic conglomerates, rather than spillovers of international financial shocks. Saudi banks have been very well capitalized, with the Tier 1 ratio remaining at around 15%. NPLs was very well provisioned, by about 1.6 times in Q4 2015 [9]. Banks increased the pace of NPL provisioning as NPLs rose in the late 2000s. It fell as NPLs have fallen and remained very low. Deposit growth has behaved broadly in line with credit growth, as banks rely primarily on customer deposits to fund their assets (the size of balance sheets has grown in line with deposits). Saudi banks are profitable, but net income growth started to moderate on low oil prices, tightening funding conditions and weaker economic activity.

Turning to macrolevel variables, oil prices registered the worst performance in at least 3 decades, which in turn dampened nonoil private sector GDP growth. It fell to the lowest level since the early 2000s. As the US Federal Reserve started to gradually normalize its policy rate from very low levels and as domestic liquidity conditions have tightened, the 3-month money market rate has surged. Bank holdings of excess liquidity (in percentage point change of bank assets) declined notably. The US and domestic interest rates are both detrended using liner time trend to help reduce issues of spurious coefficients.

Results from a correlation analysis suggest both bank-level and macrolevel variables affect bank credit growth. Table 3 reports correlation coefficients which are statistically significant at the 5% level. Credit growth increases when bank funding (deposit growth) and profitability (net

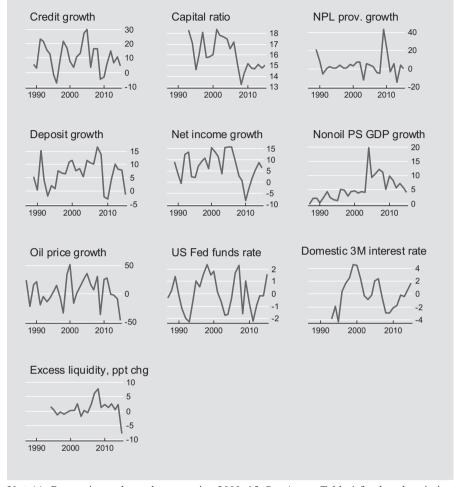


Figure 2. Saudi Arabia: Macroeconomic and bank-level variables

Note(s): Regressions rely on data spanning 2000–15. See Annex Table 1 for data description. The US Fed funds rate and 3-month SIBOR are detrended

Source(s): IMF staff calculations

income growth) improve. It also strengthens with economic activity (nonoil private sector GDP growth). Bank profitability improves as short-term interest rates increase. Deposit growth is positively correlated with economy activity, bank profitability and liquidity conditions (bank holdings of excess liquidity). Domestic money market rates rise with the US Fed funds rate and as liquidity conditions tighten (lower excess liquidity and oil prices).

4. Results

4.1 Bivariate regressions

To start the analysis, bivariate panel fixed-effects regressions of bank credit growth are estimated on each one of the independent variables (see Table 4). Bank-level data are lagged

Variable	Obs	Mean	Std. Dev.	Min	Max	Bank lending in Saudi
Bank-level data						Arabia?
Credit growth	244	10.4	12.2	-10.8	35.3	mana.
Capital ratio	163	16.2	3.2	11.8	23.6	
NPL provision growth	225	3.7	17.3	-26.6	43.3	
Deposit growth	245	8.2	8.8	-5.7	27.8	
Net income growth	237	7.3	10.2	-10.4	28.3	131
Macro-level data					!	
Oil price growth	29	7.5	42.2	-61.8	130.3	
Nonoil private sector GDP growth	29	5.2	4.2	-0.4	19.6	
US Fed funds rate, detrended	29	0.0	1.4	-2.3	2.3	
Saudi 3M interest rate, detrended	23	0.0	2.4	-4.4	4.6	
Excess liquidity, ppt chg.	22	0.9	2.9	-7.7	7.6	
Note(s): Data for 2000–2015. See App	endix Table	A1 for data de	scription			Table 2.
Source(s): Author's calculation						Data summary

by one period to reduce issues of reverse causality. Macrolevel data are introduced contemporaneously, except for nonoil private sector GDP growth, which can be contemporaneously affected by bank lending and therefore is lagged by one period. All models control for time effects for 2008 and 2009.

Results confirm the importance of bank balance sheet and macroeconomic conditions. A rise in the capital ratio increases the bank's capacity to lend. A higher growth rate of NPL provisioning reduces resources for additional lending and leads to a decline in credit growth. Higher deposit growth increases resources to fund bank lending. Higher growth of oil prices and nonoil private sector GDP creates tailwinds for lending. Interest rates, net income growth and bank holdings of excess liquidity do not systematically affect lending growth [10].

4.2 Multivariate regressions

We subsequently proceed to the multivariate panel fixed effects models of bank credit growth by combining all variables [11].

Empirical evidence confirms that bank credit is affected by bank characteristics and macroeconomic conditions (Table 5). Starting from bank characteristics, the supply of bank credit improves as the capital ratio increases and deposit growth strengthens. An increase in Tier 1 capital by 1% point of risk-weighted assets leads to 0.5%-1.0% increase in credit growth. Around 0.2-0.4 of a rise in deposit growth in real terms is transmitted to credit growth [12]. Credit supply weakens as banks provision for NPLs. Every 1% growth in NPL provisions in real terms reduces credit growth by 0.1%-0.2%. Net income growth does not systematically affect credit growth as it may capture offsetting factors, both funding cost and profitability.

Turning to macrolevel variables, bank lending increases as oil price growth accelerates and activity in the nonoil private sector strengthens (Table 5). A 10% increase in oil price growth leads to 0.8%–1.0% increase in credit growth. A 1% rise in nonoil private sector economic growth leads to 0.8%–1.2% increase in credit growth. Lower bank holdings of excess liquidity support credit extension. In some specifications, a 1% point reduction in the variable accelerates credit growth by 0.4%–0.6%. Interest rates do not systematically affect credit growth either probably as the variables are capturing a combination of both profitability and cost of capital.

The results are broadly unchanged when the model is estimated using system GMM. In the ordinary least squares (OLS) regression discussed above, bank-level variables and nonoil private sector GDP growth are all lagged by one period in a bid to reduce endogeneity issues. To check whether coefficients are biased due to remaining endogeneity issues, we apply

		1. Credit growth	2. Capital ratio	3. NPL provision growth	4. Deposit growth	5. Net income growth	6. Oil price growth	7. Nonoil private sector GDP growth	8. US fed funds rate, detrended	9. Saudi 3M interest rate,detrended	10. Excess liquidity,change
3 %	Credit growth Capital ratio NPL provisions	1.00	1.00	1.00							
4. 7.	growth Deposit growth Net income	0.65	: :	: :	1.00	1.00					
6.	growth Oil price growth Nonoil private sector GDP	0.37	: :	0.28	0.28	: :	1.00	1.00			
∞:	growth US Fed funds	÷	:	÷	÷	0.28	:	÷	1.00		
6	Saudi 3M interest	÷	:	÷	:	0.54	-0.28	:	0.51	1.00	
10.	Excess liquidity, change	÷	÷	÷	0.27	÷	:	0.37	÷	-0.41	1.00
Not Sou	Note(s): "" when estimated correlation coefficients are not statistically significant at the 5 percent level. See Appendix Table A1 for data description. Source(s): IMF staff calculations	mated correi lculations	lation coeffi	cients are not s	statistically s	ignificant at	t the 5 perce	nt level. See £	Appendix Table	Al for data descri	ption.

Laple 3.

Coredit Capital provisions growth ratio growth 1.00

Capital ratio ... 1.00

Srowth 0.65 ... 1.00

Toposit growth 0.65 ... 1.00

Net income 0.39 ... 1.00

Model number	1	2	က	4	2	9	7	8	6	Lagged
Bank characteristics Capital ratio	0.881**	÷	:	:	÷	÷	÷	÷	÷	Y
NPL provisions, real growth		-0.162***	÷	:	:	:	÷	:	÷	Y
Deposits, real growth	÷		0.271*	:	:	:	:	:	:	Y
Net income, real growth	÷	:	:	0.092 0.433	:	:	:	:	:	\
Macro variables Oil prices, real growth	÷	÷	:	:	0.128***	:	ŧ	÷	÷	Z
Nonoil PS GDP.real, growth	÷	:	:	:	:	0.863 0.002	÷	:	:	Y
Domestic mm rate, real, detrended	:	÷	:	:	:	<u>:</u>	-0.332 0.579	:	:	Z
Fed funds effective, real, detrended	:	:	:	:	:	:	:	-0.829 0.239	:	Z
Excess liquidity, ppt change _cons	-2.560 0.614	12.242***	%**900.0 000.0	10.993***	10.471***	4.656** 0.010	* 11.390***	11.328***	$0.140\ 0.490$ $11.138***$ 0.000	ZZ
Bank fixed effects		Υ.		Ϋ́	Ϋ́	> ;	Υ μ	Υ Έ	Y	Z
10 12_a		145 0.202		142 0.143	0.219	155 0.211	155 0.125	155 0.131	155 0.124	: :
Moto(e). Denondent marieble is	È		* O I C *	: *** T\$5 ** * O 1O 8 \$151	odionto ototio	tion laimit	indicate statistical significance at the 10/	5% and 10% 1	50/ and 100/ lorgel & realises inclosured th	Jornonth

Note(s): Dependent variable is real bank credit growth. Using OLS. *, ** and *** indicate statistical significance at the 1%, 5% and 10% level. p-values underneath coefficients. See Table A1 for variable definition

Source(s): Author's calculation

Table 4.
Determinants of real
bank credit real
growth-bivariate
regressions

Lagged ** and *** indicate statistical significance at the 1%, 5% and 10% level. p-values underneath Z 0.586*** 0.181*** 0.000 0.135 - 0.9550.544* 0.190* 0 053 0.023 -4.616 0.001 0.494 0.071 0.086 9.380 18 0.151*** -0.423* 0.053 0.877*** 311*** 0.002 0.000 -0.1010.442 -0.997-7.5 0.218 0.004 *970.0 0.098 0.293 17 0.059 0.151***-0.431* 0.058 0.755** .297*** -0.1380.002 0.000 0.012 -5.8650.230 0.030 0.339 16 0.179*** 0.500*** 2.124** .167*** 0.001 0.233*** 0.001 0.000 0.033 0.044 15 0.139*** -1.983** -0.218 0.171 .071*** -11.683* .333*** 0.019 0.002 0.000 -0.0540.700 0.000 0.045 0.063 14 0.127*** -0.045 0.793 0.900*** 0.314*** 0.004 0000 -0.120.001 0.311 Ξ Note(s): Dependent variable is real bank credit growth. Using OLS. *, 0.161***).834*** 0.006 0.002 0.287** 0.039 -0.0110.943 -0.7710.379 -3.4970.469 $\overline{2}$ 0.131*** 0.395*** -0.052-0.812-6.0540.005 0.072 0.683 0.425 0.6710.00 \Box 0.126*** 382*** -0.082**696.0 0.00 0.005 0.000 0.440 0.129 0.470-6.097 0.283 $\frac{138}{0.302}$ 10 Excess liquidity, ppt change Nonoil PS GDP. real, growth NPL provisions, real growth Domestic mm rate, real, det. Net income, real growth Oil prices, real growth Deposits, real growth Bank characteristics Fed funds, real, det. Sank fixed effects 2008, 09 dummies Macro variables Model number Capital ratio

coefficients. See Table A1 for variable definition

Source(s): Author's calculation

Table 5.Determinants of bank credit real growth

system GMM approach proposed by Arellano and Bover (1995) and Blundell and Bond (1998). Estimated results summarized in Table 6 shows that the coefficients are similar to those summarized in Table 5 in terms of sign, size and statistical significance. Therefore, in the rest of the paper, we proceed with OLS estimations [13].

4.3 Model predictions

Model predictions help understand why credit growth remained robust through 2015, despite oil prices having fallen. Figure 3 plots the actual average credit growth and the model prediction (using Model 16). It also shows contributions to the change in the predicted credit growth

The result plotted in Figure 3 suggests that the sharp decline in credit growth around the global financial crisis was due to a combination of bank specific factors (a lower capital ratio, weaker deposit growth) and macroeconomic factors (lower growth of oil prices and nonoil private sector GDP). In addition, time dummy variables are required to fully capture the magnitude of the fall in credit growth, consistent with the view that defaults of two large domestic conglomerates dented market confidence around the global financial crisis [14]. Credit growth held up well in 2015 despite a large fall in oil prices, supported by resilient bank balance sheet conditions and economic activity but also by a reduction in bank holdings of excess liquidity. Looking ahead, credit growth could slow further, reflecting lagged effects of slower deposit growth, and if the capital ratio declines, provisioning for NPLs accelerates and economic activity slows further.

5. Considering additional factors

Additional factors are considered to account for a range of characteristics. These are bank holdings of government bonds, lending by specialized credit institutions (SCIs), banking system concentration, state ownership, regulation and governance, and Islamic versus other banks.

First, bank lending can slow as domestic banks continue absorbing bonds after the Saudi government restarted issuing debt securities. The government used to issue domestic bonds actively during previous periods of low oil prices (see Figure 4). For instance, Bloomberg reports that during 1997–2007, the Saudi government issued 17–18 bonds per year on average. The maturity ranged from one year to 10 years [15]. As a result, the amount outstanding of Saudi government bonds peaked at close to SAR 700 billion in the early 2000s. Domestic banks held 10%–20% of the total amount outstanding during the 1990s and early 2000s. Bank holdings of government bonds as a share of total bank assets peaked at close to 30%. From the early 2000s, the share continued to decline until the Saudi government restarted domestic bond issuance in mid-2015 (Figure 5, first panel).

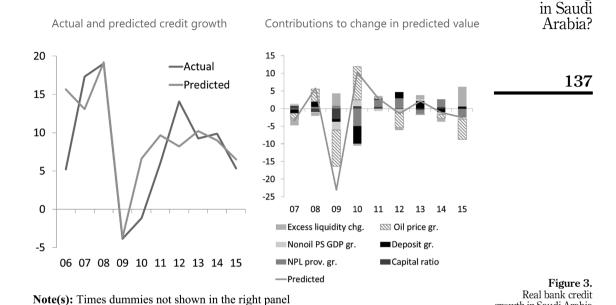
Second, lending by SCIs may affect bank lending [16]. SCIs lend to some of the same sectors as banks do, which may increase or reduce bank lending. SCI lending growth accelerated during the 2000s and has remained relatively high (Figure 5, second panel). The stock of lending by SCIs represents some one-fourth of that of by banks [17].

Third, greater banking system concentration may limit competition and reduce credit growth. An indicator of banking system concentration suggests that, among the GCC banking systems, Saudi Arabia's is the least concentrated (Figure A2). Moreover, concentration has been declining in recent years in Saudi Arabia (Figure 5, third panel).

Fourth, greater state ownership can affect bank lending behavior. One view is that banks with greater state ownership may lend more counter cyclically to fill the gaps left by other commercial banks as the latter reduce lending in response to a negative macroeconomic shock (Chen and Wu, 2014). Another view is that if state ownership comes with greater prudence or reduced risk taking, lending behavior may appear pro-cyclical. State ownership

Lagged \mathbf{z} 0.206*** .350*** ***200 0.005 0.085 0.197 -1.616 0.298 0.000 0.048 -9.3340.056 0.000 9.156 Y Y 0.004 000. 0.778 138 27 0.181*** .914**).351*** 0.028 -0.101**860.0 -8.8250.149 0000 0.001 0.414 0.001 0.023 0.281138 0.003 0.649 26 0.194*** 11.923* .848** 324** -0.052-0.534*).102**0.013 0.000 0.000 690.0 0.007 0.0590.781 1.0000.044 0.64 38 0.004 25 0.232***2.750*** **006.0 248*** 0.000).328*** 0.372 0.011 0.000 1.000 0.001 0.001 0.006 0.556141 42 0.163** 304*** .442*** 0.000 0.000 0.000 -7.447 0.103 0.059 -0.2210.136 0.765 0.236 1.000 0.004 0.895 138 \approx 0.166*** 0.253** 10.215** 474** 0.303*** 0.000 0.036 0000 0000 900.0 0.571 23 ***218.0 0.209*** 0.286 0.000 .274** -0.8312.332 9.862 0.035 0.001 0.378 0.015 0.999 0.507 141 21 0.156*** -0.921*3.298** 3.466*** -4.6040.000 -0.0280.868 0.098 0.542 0.044 1.000 0.001 0.931 20 0.151*** 3.432*** -0.104 0.383-0.0230.062 0.000 0000 0.959 -6.9170.420 0.005 0.453 0.985 138 19 NPL provisions, real growth Nonoil PS GDP, real growth Domestic mm rate, real, det. Excess liquidity, ppt chg. Net income, real growth Oil prices, real growth Deposits, real growth Bank characteristics Fed funds, real, det. Bank fixed effects 2008, 09 dummies Macro variables Model number Capital ratio Hansen AR(1)AR(2)

Note(s): Dependent variable is real bank credit growth. Using System GMM approach by Arellano and Bover (1995) and Blundell and Bond (1998). *, ** and *** indicate private sector GDP growth as endogenous. To help reduce the number of instruments and avoid over-fitting the model, we follow Roodman (2009) and limit lag depth and statistical significance at the 1%, 5% and 10% level. p-values underneath coefficients. See Table A1 for variable definition. Treating bank-level variables and nonoil 'collapse" the matrix, or drop zeros from the instrument matrix. AR(1) and AR(2) signify p-values associated with the null hypothesis of lack of first and second order serial correlation. Hansen signifies p-value associated with the null hypothesis that the instruments are exogenous Source(s): Author's calculation



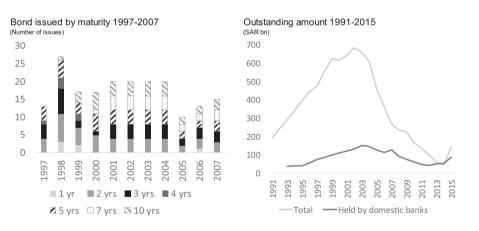
(% yoy)

Bank lending

growth in Saudi Arabia

Figure 4. Saudi government

bond issuance and stock outstanding



Source(s): Bloomberg, IMF WEO April 2015, and author's calculations

Source(s): Bankscope, Haver, and IMF staff calculations

in 2015 is estimated based on two definitions (Table 7). Under the "wide" definition, which accounts for ownership by the Saudi government, the Public Investment Fund (PIF) and two domestic pension funds (General Organization for Social Insurance (GOSI) and Public Pension Agency (PPA)), state ownership is considered to be high when it is 50% or above [18]. Under the "narrow" definition, which accounts only for the ownership by the Saudi government and PIF, the threshold above which state ownership is considered to be high is

138



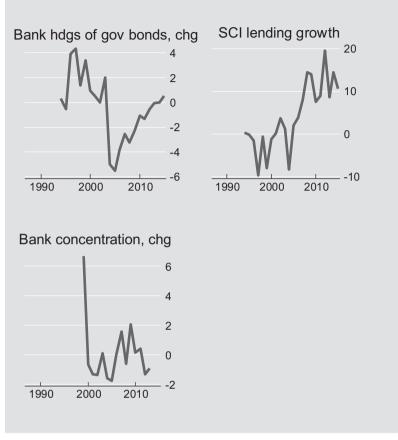


Figure 5. Saudi Arabia: Additional factors(percent)

Note(s): See Appendix Table 1 for data description. Regressions rely on date for 2000–15

Source(s): IMF staff calculations

lowered to 30%. Econometrically, a dummy variable representing high state ownership is interacted with several variables.

Fifth, the stronger institution could lead to stronger credit extension. Gani and Al-Muharrami (2016) argue and find that conventional institutional quality measured by the time taken to enforce a contract, regulatory quality, the rule of law and government effectiveness are inversely correlated with the lending by the banks. We use the six components of the World Governance Indicators in a bid to capture different aspects of institutional strength [19].

Sixth, lending by Islamic banks could be more affected by economic activity relative to lending by other banks. As mentioned earlier, Barajas *et al.* (2010) conjecture that Islamic banks' business models are geared more towards investments and lending in high growth areas such as real estate. These areas may be "cyclical" sectors and more sensitive to economic activity.

	Wide	Narrow
National Commercial Bank	74	54
Samba	65	38
Riyad Bank	57	31
Saudi Investment Bank	52	17
Banque Saudi Fransi	15	15
Arab National Bank	11	0
Saudi Hollandi Bank	11	0
Al Rajhi Bank	10	0
Saudi British Bank	10	0
Bank AlJazira	0	0

Note(s): "Narrow" accounts for ownership by the Saudi government and Public Investment Fund. "Wide" additionally accounts for ownership by two domestic pension funds (GOSI and PPA)

Source(s): Bankscope, and IMF staff calculations

Bank lending in Saudi Arabia?

139

Table 7. State ownership of domestic banks (2015) (percent of total)

Results from econometric models including those variables indicate that bank characteristics and most of macro variables remain key determinants of bank credit growth (Tables 8–11). A higher capital ratio, lower provisioning growth and higher deposit growth all lead to higher bank credit growth. Similarly, higher oil price growth, which can represent higher demand, supply or confidence, support bank credit growth. A reduction in bank holdings of excess liquidity also helps.

Results also show that most of the additional macroeconomic factors affect bank credit growth. First, bank credit growth declines as banks increase their holdings of government bonds (suggesting "crowding out"). As shown in Table 8, a 1% point of bank balance sheet increase in the holdings of government bonds reduces credit growth by 1%–1.5%. However, the coefficient loses statistical significance when combined with nonoil private sector GDP growth [20].

Second, lending by SCIs does not appear to systematically complement commercial bank lending (Table 8). The estimated negative coefficients in most models allude to the existence of competition rather than complementarity between these institutions and banks in the segments of the market they work in. In one specification, the estimated coefficient is not statistically significant. More research is needed to understand the role of SCI lending.

Third, higher banking system concentration leads to lower bank lending growth (Table 9) [21]. The recent decline in concentration in domestic banking system should have helped improve credit growth. When the index of concentration is interacted with bank-level and macrolevel variables, results suggest that the negative impact of excess liquidity holdings on lending declines with concentration, probably as banks have more leeway to mitigate the impact.

State ownership does not appear to systematically affect bank lending growth (Table 10). However, tentative evidence, which is statistically significant at the 10% level, suggests that lending by banks with greater state ownership appears procyclical with respect to oil price

Model number	28	Government l 29	Government bond holdings 29 30	31	32	SCI lending 33	nding 34	35	Lagged
Bank characteristics Capital ratio	1.145**	0.839**	0.689*	*889.0	0.708**	0.554**	0.5	0.503	Y
Provisions growth	0.014 $-0.128***$	0.037 $-0.151***$	0.081 $-0.148***$	0.058 $-0.151***$	0.027 $-0.124***$	0.047 $-0.148***$	0.158 $-0.135***$	0.148 $-0.136***$	Y
Deposit growth	0.007	0.363***	0.002	0.003	0.005	0.002	0.003	0.004	Y
Net income growth	0.000 -0.041 0.711	0.000 -0.08 0.469	0.000 -0.139 0.253	0.000 -0.132 0.279	-0.001 -0.135 0.175	0.001 -0.143 0.154	$-0.197* \\ 0.091$	0.001 -0.194 0.102	Y
Macro variables Bank holdings of gov. bonds, ppt chg.	-1.532**	-1.180*	-0.013 0.985	-0.171	÷	÷	÷	:	Z
SCI credit growth	:	<u>:</u>		:	-0.402**	-0.25	-0.446**	-0.425**	Z
Oil prices growth	:	0.091**	0.079*	0.101**		0.087**	0.034	0.042	Z
Nonoil PS GDP growth	:		0.741**	0.706**	:		0.943***	0.936***	Y
Excess liquidity, ppt chg.	:	:		0.021 -0.443* 0.063	÷	:	0.00	0.008 -0.098 0.653	Z
Dummy variables Bank	Y	Y	> >	\ \ \	\ \ \	X	\ \ \	X >	ZZ
2009 2009	Υ	Ι Χ ·	- X ;	1 X	т Х ,	Y X	I X	Y X ,	zz;
Constant	-8.695 0.221	-4.02 0.519	-6.481 0.334	-5.895 0.344	1.502 0.613	2.525 0.877	-0.969 0.859	-1.087	Z
N $r2_{-a}$	138 0.348	138 0.386	138 0.412	138 0.418	138 0.343	138 0.373	$\frac{138}{0.453}$	138 0.449	: :
Note(s): Dependent variable is real bank credit growth. Using OLS. *, ** and *** indicate statistical significance at the 1%, 5% and 10% level. p-values underneath coefficients. See Table A1 for variable definition. Source(s): Author's calculation	ık credit growt efinition.	h. Using OLS.	*, ** and *** i	ndicate statisti	ical significano	e at the 1%, 5 ⁹	% and 10% lex	rel. <i>p</i> -values ur	ıderneath

Table 8.Determinants of bank credit growth-additional factors

$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Model number	36	37	38	Conc 39	Concertation 9 40	41	42	43	44	45	46	Lagged
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		0.910***	0.706***	0.752**	0.654**	0.950***	0.712***	0.886**	0.649*	0.751**	0.576*	0.559**	Y
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		0.006 -0.107**	0.006 $-0.112***$	0.027 $-0.112**$	0.025	$0.007 \\ -0.091*$	0.006 $-0.109***$	0.026 $-0.102**$	0.057	0.028 $-0.112**$	0.055	0.047	Y
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		0.344***	0.007	0.011	0.275***	0.067	0.007	0.035 0.276***	0.007	0.02	0.006 $0.221***$	0.028	Y
hg. $-2.831**$ $-2.974**$ $-2.912**$ -1.724 -5.737 -3.825 -4.489 $-7.409***$ -2.852 $-5.074*$ $-8.114*$ 0.04 0.03 0.035 0.254 0.223 0.149 0.294 0.006 0.477 0.07 0.069 0.137 0.015 0.124 0.022 0.026 0.007 0.032 0.026 0.007	hig. -2.831^{***} -2.974^{***} -2.912^{***} -1.724 -5.737 -3.825 -4.489 -7.409^{****} -2.852 -5.074^{*} -8.11 0.04 0.035 0.035 0.234 0.223 0.149 0.294 0.006 0.477 0.07 0.09 0.137^{***} 0.096 0.146^{***} 0.025 0.026 0.047 0.096 0.097 0.015 0.015 0.006 0.016 0.021 0.006		0.004 -0.054 0.576	0.001 -0.124 0.158	0.001 -0.14 0.146	0.001 -0.135 0.184	0.005 -0.045 0.661	0.001 -0.126 0.163	0.002 -0.101 0.33	0.01 -0.165 0.139	0.001 -0.14 0.148	0.003 -0.179 0.108	0.004 -0.165 0.166	Y
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	opt chg.	-2.831**	-2.974**	-2.912**	-1.724	-5.737	-3.825	-4.489	-7.409***	-2.852	-5.074*	-8.114*	Z
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		0.04	0.03	0.035 0.096	0.754	0.223	0.149 $0.150**$	0.294	900.0	0.096*	0.097	0.069	Z
tion index (CI) $\begin{array}{cccccccccccccccccccccccccccccccccccc$	tion index (CI) 0.034 0.034 0.034 0.034 0.034 0.037 0.035 0.064 0.017 0.097 0.070 0.070 0.070 0.070 0.070 0.070 0.070 0.025 0.02	ų	:		0.721**	0.685**	:	070.70	1.071*	:	0.712	0.428	1.015*	Y
n index (CI) 0.115	n index (CI) 0.115	hg.	÷	÷		-1.186** 0.034	:	:		-0.951* 0.064	077.0	-1.312** 0.017	0.081 0.081	z
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	ıtration i	ndex (CI)	:	:	:	0.115	:	:	:	÷	:	:	Y
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0.479 0.070 0.025 0.02	I	:	:	:	:	0.037	:	:	:	:	:	:	Y
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0.407 0.025 0.025 0.025 0.025 0.082 0.082 0.082 0.082 0.082 0.082 0.082 0.082 0.082 0.082 0.082 0.082 0.082 0.082 0.082 0.082 0.082 0.082		:	:	÷	:	0.070	÷	:	:	:	÷	:	Y
0.0172 0.006 0.034 0.985	0.029 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.000		:	÷	÷	:		0.025	:	÷	:	÷	0.028	Z
	(continued)	h * CI	÷	÷	÷	÷	:	0.013	0.172 0.634	:	0.985	÷	0.384 0.359	Y

Table 9.
Determinants of bank credit growth-additional factors

				Conc	ertation							
Model number	36	37	38	39	40	41	42	43	44	45	46	Lagged
Excess liquidity, ppt chg. * CI	:	:	÷	÷	:	÷	÷	2.264*** 0.001	:	1.433**	1.038	Z
Dummy variables												
Bank	Y	Y	Υ	Y	Υ	Υ	Y	Υ	Y	Υ	Υ	Z
2008	Y	Y	Υ	Y	Υ	Υ	Y	Υ	Y	Υ	Υ	Z
2009	Y	Y	Λ	Y	Υ	Υ	Y	Υ	Y	Υ	Υ	Z
Constant	-5.533	-4.197	-9.117	-5.651	-6.82	-4.751	-12.663	-1.2	-9.045	-2.878	-6.619	Z
	0.254	0.303	0.108	0.232	0.222	0.249	0.144	0.816	0.242	0.555	0.334	:
N	118	118	118	118	118	118	118	118	118	118	118	:
<i>r</i> 2_a	0.362	0.405		0.471	0.349		0.429	0.35	0.452	0.46	0.472	:
Note(s): Dependent variable is coefficients. See Table A1 for va Source(s): Author's calculation	is real bank variable defii on	credit growt nition	th Using OI	JLS. *, ** and *** indica	d *** indic	ate statistic	al significar	ice at the 1%	%, 5% and 10	10% level. <i>f</i>	-values un	derneath

Model number	47	48	State ownership 49	ership 50	51	52	Lagged
	;	2	2	- 1	-		2000
Bank characteristics							
Capital ratio	**066:0	0.924**	1.145***	1.034***	1.091**	**966.0	Y
	0.033	0.027	0.007	0.007	0.012	0.011	
Provisions growth	-0.114**	-0.142***	-0.109**	-0.139***	-0.113**	-0.143***	Y
	0.022	0.004	0.03	900.0	0.026	0.002	
Deposit growth	0.471***	0.402***	0.419***	0.362***	0.400***	0.343***	Y
Net income oroxyth	0.002 -0.141	0.002 -0.152	$0.002 \\ -0.168*$	0.003 _0.192**	$0.004 \\ -0.168*$	$0.006 \\ -0.192*$	>
	0.159	0.143	0.078	0.05	0.075	0.051	•
Macro variables							
Concentration index, ppt chg.			: 1		: I		Z;
Oil prices growth	0.085**	0.093***	0.054	0.064**	0.074*	0.083**	Z
Nonoil PS GDP growth			0.814***	0.694***	0.801***	0.697***	Y
)			0.002	900.0	0.002	0.005	
Excess liquidity, ppt chg.	:	:	:	:	-0.28	-0.328	Z
					0.570	0.230	
Interaction with state ownership							
Capital ratio * SO_broad	-0.743	:	-1.053*	:	-0.953	:	Y
Provisions growth * SO broad	0.23 <i>9</i> -0.117		0.080 -0113		0.122		>
	0.115		0.163		0.176		
Deposit growth * SO_broad	-0.170	:	-0.165	:	-0.144	:	Y
	0.359		0.327		0.396		;
Oil prices growth * SO_broad	0.062*	:	0.061*	:	0.061*	:	Z
	0.057		0.076		0.08		Þ
IVORIOII FS GLDF growur ** SO_broad	:	:	-0.049 0.905	:	0.013	:	I
			2000				
							(continued)

Table 10.
Determinants of bank credit growth-additional factors

ΙE	S
27	,2

144

Table 10.

			State own	ership			
Model number	47	48	49	50	51	52	Lagged
Excess liquidity, ppt chg. *SO_broad	:	:	:	÷	-0.223	:	Z
Capital ratio * SO_narrow	÷	-0.865	:	-1.210*) : :	-1.135*	Y
Provisions growth * SO_narrow	÷	0.226 -0.052	÷	0.06 -0.038	÷	0.073 -0.031	Y
Deposit growth * SO_narrow	:	0.00 -0.096	:	-0.123	÷	-0.05 -0.05	Y
Oil prices growth * SO_narrow	:	0.045	:	0.039	:	0.039	Z
Nonoil PS GDP growth * SO_narrow	÷		÷	0.267	÷	0.289	Y
Excess liquidity, ppt chg. * SO_narrow	:	:	:	210.0	:	0.483 -0.214 0.590	z
Dunumy variables Bank 2008	× × ×	>>>	≯≯ >	× × ×	> >>	>>>	ZZZ
Constant	$-6.495\ 0.394$	-4.254	-13.834*	-9.959 -0.135	-12.601*		ZZ
$N = r_2 - a$	138 0.348	0.332 0.332	0.031 138 0.406	0.391 0.391	0.035 138 0.405	0.39 0.39	: :
Motolal Description transplain is well beat an	Oscill drawns	NAME OF STREET	in director atomic	1 at an and Binney	010/ 00/ 10/	0/ 1 mm 1 4 mm 1 mm	the alama and

Note(s): Dependent variable is real bank credit growth. Using OLS. *, ** and *** indicate statistical significance at the 1%, 5% and 10% level. p-values underneath coefficients. See Table A1 for variable definition

Source(s): Author's calculation

Bank characteristics 0.664* 0.618* 0.560* Capital ratio 0.059 0.066 0.061 Provisions growth -0.151**** -0.116*** -0.139**** Deposit growth 0.200 0.003 0.004 Net income growth 0.200 0.001 0.000 Macro variables 0.138 -0.037 -0.105 Nonoil PS GDP growth 0.753** 0.068 0.086* Nonoil PS GDP growth 0.753** 0.063 0.065 Nonoil PS GDP growth 0.753** 0.005 0.005 Bistitution variables -0.431* -0.071 -1.027**** Voice and accountability 0.058 0.003 Political stability 0.004 0.015*** Regulatory quality Regulatory quality		0.381 0.254 0.026 0.200** 0.001 0.011 0.022 0.022 0.017 0.017 0.017	0.667* 0.067* 0.061 0.004 0.298*** 0.000 -0.131 0.324 0.105**	0.691* 0.06 -0.152*** 0.002 0.305***	0.680* 0.068 -0.153***	Þ
0.059 0.059 0.059 0.066 0.002 0.003 0.297**** 0.000 0.001 0.001 0.101** 0.101** 0.101** 0.002 0.101** 0.002 0.103 0.103 0.101** 0.002 0.002 0.002 0.004 0.005 0.004		0.254 0.054 0.006 0.200** 0.011 0.022 0.022 0.017 0.017 0.017	0.067 0.004 0.298*** 0.000 0.298*** 0.000 0.131 0.324 0.105**	0.06 0.06 0.002 0.002 0.305***	0.068 -0.153***	_
-0.151*** -0.116** -0.002 0.033 0.0297*** 0.0033 0.0297*** 0.0031 -0.138 -0.037 0.230 0.020 0.101** 0.068 0.030 0.755** 1.021*** 0.012 0.002 -0.431* -0.071 0.058 0.722 0.002		-0.101*** 0.006 0.200** 0.011 0.022 0.122** 0.017 0.919***	0.149*** 0.004 0.298*** 0.000 0.000 0.324 0.105** 0.020 0.020	-0.152*** 0.002 0.305***	-0.153***	4
0.297*** 0.301*** 0.000 0.001 -0.138 -0.037 0.230 0.820 0.101** 0.068 0.030 0.133 0.755** 1.021*** 0.012 0.002 -0.431* -0.071 0.058 0.722 0.004		0.200** 0.011 0.022 0.022 0.022 0.022 0.017 0.019***	0.298*** 0.000 0.000 0.324 0.105** 0.020 0.790**	0.002 0.305***	0000	Y
0.000 0.001 -0.138 -0.037 0.230 0.820 0.101** 0.068 0.030 0.133 0.755** 1.021*** 0.012 0.002 -0.431* 0.022 -0.431* 0.022 0.004	- 1	0.011 -0.264** 0.022 0.122** 0.017 0.919***	0.000 -0.131 0.324 0.105** 0.020 0.020	0.000	0.301***	Y
0.230 0.820 0.101** 0.068 0.030 0.133 0.755** 1.021*** 0.012 0.002 -0.431* -0.071 0.058 0.722 0.004	- 1	0.022 0.122** 0.017 0.004	0.324 0.105** 0.020 0.790**	0.000 - 0.122	0.000 -0.13	Y
0.101** 0.068 0.030 0.133 0.755** 1.021*** 0.012 0.002 -0.431* 0.722 0.058 0.722 0.004	- 1	0.122** 0.017 0.919***	0.105** 0.020 0.790**	0.351	0.283	
0.030 0.133 0.755** 1.021*** 0.012 0.002 -0.431* -0.071 0.058 0.722 0.022*** 0.004	'	0.017 0.919*** 0.004	0.020 0.790**	*860.0	0.109**	Z
0.012 0.002 -0.431* -0.071 0.058 0.722 0.022****	'	0.004		0.789**	0.028	Y
0.022***		-0.351" 0.088	0.022 -0.479** 0.028	0.023 $-0.463**$	$0.018 \\ -0.457** \\ 0.093$	Z
0.022***			0			
		:	:	÷	:	Y
i i	C	:	÷	÷	÷	Y
:		0.022**	:	:	:	Y
			0.001	÷	:	Z
Rule of law		:	: :	-0.003	:	Y
Control of corruption		÷	:		-0.001 0.768	Z
					0)	(continued)

Bank lending in Saudi Arabia?

145

Table 11.
Determinants of bank
credit growth—
additional factors

Гable 11.							146	IES 27,2
Model number	53	54	Institution 55	56	57	28	59	Lagged
Dummy variables								
Sank	Y	Y	Y	Y	Y	Y	Y	Z
2008	Y	Y	Y	Y	Y	Y	Y	Z
600	Y	Y	Y	Y	Y	Y	Y	Z
Constant	-5.865	-8.758	-1.933	0.335	-6.343	-7.051	-6.011	Z
	0.339	0.188	0.72	0.957	0.353	0.336	0.348	:
>	138	138	138	138	138	138	138	:
<i>r</i> 2_a	0.423	0.479	0.448	0.467	0.418	0.419	0.418	:
Note(s): Dependent variable is real bank credit growth. Using OLS. *, ** and *** indicate statistical significance at the 1%, 5% and 10% level. p-values underneath coefficients. See Table A1 for variable definition Source(s): Author's calculation	e is real bank credit r variable definition tion	t growth. Using C	LS. *, ** and *** i	ndicate statistica	ıl significance at tl	he 1%, 5% and 16)% level. <i>p</i> -values	underneath

performance. As oil prices increase, lending by banks with high state ownerships tend to rise more than lending by other banks. One interpretation is that when oil prices decline and the fiscal balance becomes strained, banks with high state ownership tend to purchase government bonds and reduce lending more than other banks do.

Another tentative finding relates to the capital ratio (Table 10). For banks with high state ownership, credit growth is little affected by the capital ratio. The coefficient on the interaction term between the capital ratio and the high state ownership dummy broadly cancels the coefficient on the capital ratio. One interpretation is that banks with larger state ownership are less constrained by capital. For instance, in 2015, banks with high state ownership had a higher average capital ratio compared to other banks by 1%–1.5% points.

We find evidence that stronger institution facilitates bank lending (Table 11). Results suggest that improvements in the indicators of voice and accountability, political stability and government effectiveness all contribute to greater credit extension. Some of the indicators of institution, such as regulatory quality, may be already captured by bank balance sheet conditions [22].

Finally, tentative evidence suggests that lending by Islamic banks may be more responsive to economic activity compared to other banks (Table 12). However, those analyses whereby banks are separated into Islamic and non-Islamic following the classification presented by data provider Bankscope yielded few statistically significant coefficients for Islamic banks due probably to the relatively small number of observations used in this paper. Results were weaker when all banks were included in a panel and the key variables were interacted with Islamic bank dummies.

		Islamic abnl	KS				
Model number	60	61	62	63	64	65	Lagged
Bank Characteristics							
Capital ratio	0.598	0.353	0.5	0.651*	0.674**	0.650**	Y
•	0.508	0.679	0.566	0.061	0.04	0.046	
Provisions growth	-0.158	-0.174	-0.151	-0.155***	-0.149***	-0.152***	Y
	0.13	0.168	0.24	0	0.001	0.001	
Deposit growth	0.193	0.265	0.322	0.365***	0.319***	0.303***	Y
	0.525	0.276	0.141	0.001	0.002	0.003	
Net income growth	-0.273	-0.51	-0.512	-0.097	-0.119	-0.119	Y
	0.400	0.168	0.150	0.334	0.219	0.214	
Macro variables							
Oil prices growth	0.053	0.011	-0.048	0.109***	0.080***	0.104***	N
1 0	0.588	0.891	0.626	0.000	0.005	0.002	
Nonoil PS GDP growth		2.071**	2.051**		0.730***	0.741***	Y
3		0.015	0.017		0.001	0	
Excess liquidity, ppt chg.			0.908*			-0.457*	N
			0.077			0.084	
Dummy variables							
Bank	Y	Y	Y	Y	Y	Y	N
2008	Ÿ	Ÿ	Ÿ	Ÿ	Ÿ	Y	N
2009	Y	Y	Y	Y	Y	Y	N
Constant	5.639	-3.411	-6.398	-1.789	-6.66	-5.956	N
	0.731	0.827	0.64	0.772	0.253	0.317	
N	21	21	21	138	138	138	
r2_a	0.044	0.453	0.476	0.334	0.386	0.393	

Note(s): Dependent variable is real bank credit growth. Using OLS. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% level. *p*-values underneath coefficients. See Table A1 for variable definition.

Source(s): Author's calculation.

Table 12.
Determinants of bank
credit growth additional factors

6. Concluding discussion

This paper investigated determinants of bank credit growth in Saudi Arabia. The results, relying on bank level balance sheet data, suggest that, consistent with the literature, bank lending is influenced importantly by bank balance sheet conditions and macroeconomic developments. A rise in the capital ratio and deposit growthand a reduction in bank holdings of "excess liquidity" all lead to higher credit growth. But greater NPL provisioning reduces it. Bank lending growth rises with stronger oil prices and domestic economic activity. Interest rates, either domestic or foreign, do not systematically affect bank lending. In 2015, bank credit growth remained robust despite oil prices having declined as banks maintained strong balance sheet conditions and reduced holdings of excess liquidity.

The benchmark model was extended to assess the impacts of Saudi Arabia–specific characteristics on bank lending. A rise in bank holdings of government bonds diversifies bank asset portfolios but also crowds out bank lending. Lending by SCIs does not lead to higher bank lending. The recent decline in bank concentration should have helped strengthen bank lending. Tentative results suggested that banks with relatively large state ownership may have been lending procyclically with respect to oil price performance (the higher is oil price growth, the higher is lending growth) and that their lending is less sensitive to the capital ratio. This is likely because when oil prices are low, those banks may be buying government bonds than other banks do. Also, lending by banks with higher state ownership may be less constrained by the capital ratio, which is on average higher than that of other banks. Stronger institution appears to support credit extension. Finally, consistent with the literature, lending by Islamic banks may be more responsive to economic activity compared to lending by other banks.

These results suggest that to support bank credit provision in the period ahead, bank balance sheets need to remain strong. This is particularly the case as the commitment to increase the role of the private sector in the economy under the National Transformation Program and Vision 2030 would present many opportunities for lenders. Generally, banks in Saudi Arabia are profitable, liquid and well-capitalized. SAMA's regulation and supervision of the banking system continued to strengthen in recent years, including through the early adoption of Basel III capital and liquidity standards. Looking ahead, banks need to maintain sufficient capital even as low oil prices start putting bank balance sheets under pressure. Provisioning for NPLs reduces credit extension but is essential for safeguarding financial stability. Greater confidence in the banking system also helps attract customer deposits and support credit supply. A reduced reliance on the banking system to finance the budget deficit would also support credit provision to the private sector.

First, one could analyze the composition of lending and its implications for growth. The impact of lending on growth would differ by borrower (retail or corporate; wealthier or not) or use of funds (consumption or investment). Second, the impact of bank lending on financial inclusion and stability is another useful area of research. This involves the role of formal banking system in facilitating financial inclusion, while paying due attention to financial stability risk. The role of informal lending could be also assessed if data are available.

Notes

- The 3-months SIBOR ended 2016 at 2.035%, marginally up from its low registered in mid-December
- The authors argue that underdeveloped financial systems in the MENA region hamper economic growth and that more needs to be done to improve the institutional environment and functioning of the banking sector.

Bank lending

in Saudi

- 3. We also considered specifications with time dummies for each year in which case all variables were statistically insignificant, likely reflecting the importance of common shock related to global oil price movements. In order to generate policy-relevant results, where bank-level and macro variables capture transmission of shocks, the paper limited time dummies to those in 2008 and 2009 to capture identifiable potential shocks (defaults of a large domestic conglomerate).
- Data on the international investment position and the BIS banking statistics suggest that the Saudi banking system' cross-border exposures are small.
- 5. Bank credit, deposits, NPL provisions, net income, are deflated by domestic inflation. Oil prices (in dollar terms) are deflated by US inflation. Non-oil private sector GDP is available in real terms. Capital and excess liquidity are expressed in terms of ratios.
- 6. Growth of NPL provisions is a more direct and likely a better measure of banks' capacity to extend credit than NPLs in Saudi Arabia. This is because in Saudi Arabia, banks have been provisioning for NPLs counter-cyclically, weakening the linkage between NPL ratios and credit growth. Indeed, the author did not find plausible results using NPL ratios instead of growth of NPL provisions.
- 7. A panel fixed-effects approach suffers from a downward Nickell bias when a lagged dependent variable is included in the right-hand side of the regression equation. In such circumstances, a system Generalized Method of Moments (GMM) approach proposed by Arellano and Bover (1995) and Blundell and Bond (1998) is used commonly.
- Given the Saudi riyal's peg to the US dollar, we do not include the US Fed funds rate and the 3-months SIBOR together in regression models. Some of the deposit base in Saudi Arabia is interest free.
- More than 100% is considered as very prudent. When 160% of NPLs are provisioned, when all NPLs default, the bank can fully write of the loans and still maintain another 60% of NPLs worth of reserves.
- The 3-month SIBOR spread to US dollar 3-months LIBOR is not significant in bivariate nor multivariate specifications.
- 11. Key messages in sections III and IV were generally unchanged when a dummy variable for 2006 was introduced to capture a large decline in domestic stock prices.
- 12. The estimated coefficient appears low despite bank credit in Saudi Arabia being primarily funded by deposits. However, the value of the estimated coefficient (i) doubles when real credit growth is regressed on contemporaneous real deposit growth and (ii) increases to around unity when median values of bank-level data (as shown in Figure 3) are used to regress real credit growth on contemporaneous real deposit growth.
- 13. Treating bank-level variables and nonoil private sector GDP growth as endogenous. To help reduce the number of instruments and avoid over-fitting the model, we follow Roodman (2009) and limit lag depth and "collapse" the matrix, or drop zeros from the instrument matrix. Nonetheless, the Hansen statistics of 1 could indicate over-fitting as warned by Roodman (2009).
- 14. Predicted credit growth using regression results without 2008 and 2009 time dummies is not shown.
- Information from Bloomberg on the amounts issued is scant. In 2007, the Saudi government issued two 10 years bonds for SAR 200 million each and one 10-years bond for SAR 2 billion.
- 16. SCIs are unlevered nondeposit taking entities that rely mainly on budgetary support by the MoF. They target lending to, for instance, housing, critical industrial projects, and SMEs, some of which do not have access to bank lending. The Saudi Industrial Development Fund (SIDF) finances industrial projects, the Public Investment Fund (PIF) large scale government and private industrial projects, the Real Estate Development Fund (REDF) individual/corporate residential and commercial real estate, and the Saudi Agricultural Development Fund (SADF) farmers and agricultural projects. The Saudi Credit and Saving Bank (SCSB) provides interest-free loans to small and emerging businesses and professions. Al-sadig (2013) finds that private domestic investment is positively associated with SCI lending.

- 17. Banks offer bridge financing to construction projects financed by SCIs. One SCI provides SME credit guarantees in collaboration with banks (kafala). Another SCI offers top-up financing for mortgage borrowers to meet the recent 70% LTV limit.
- 18. Bankscope's classification of state ownership include "General Investment Funds" and "Government of Saudi Arabia via various funds" which are interpreted as the PIF and remaining ownership by the government.
- 19. Voice and accountability, political stability, government effectiveness, regulatory quality, rule of law and control of corruption. The point estimates are subject to uncertainty.
- 20. This is consistent with the result from Alhumaidah et al. (2016). The chapter uses an asset-liability management framework to discuss the benefits and risks as well as the macroeconomic implications of different financing strategies for the fiscal deficit, and illustrates some of these aspects through a simulation analysis. It also reviews a number of policies that will help expand the investor base and reduce financing costs, while having broader positive implications for the economy.
- 21. The author is grateful to an anonymous reviewer for the suggestion on the specification following Brambor *et al.* (2006).
- 22. The indicators are expressed in terms of the distance from historical average in the number of standard deviation (so-called *Z* score), and introduced in the model in percent change.

References

- Al-Hamidy, A. (2010), "The global financial crisis: impact on Saudi Arabia", BIS Papers, Vol. 54, pp. 347-357.
- Alhumaidah, F., Alkhareif, R., AlSaeed, K., Ltaifa, N.B., Miyajima, K. and Pedra, G. (2016), "Financing the fiscal deficits—possible options and their potential implications", IMF Country Report No. 16-327.
- Al-sadig, A. (2013), "Government specialized credit institutions and private domestic investment: the case of Saudi Arabia", Review of Middle East Economics and Finance, Vol. 9 No. 1, pp. 51-64.
- Altunbasa, Y., Gambacorta, L. and Marques-Ibanez, D. (2010), "Bank risk and monetary policy", Journal of Financial Stability, Vol. 6, pp. 121-129.
- Amidu, M. (2014), "What Influences Bank lending in sub-saharan Africa?", Journal of Emerging Market Finance, Vol. 13 No. 1, pp. 1-42.
- Arellano, M. and Bover, O. (1995), "Another look at the instrumental variable estimation of errorcomponents models", *Journal of Econometrics*, Vol. 68 No. 1, pp. 29-51.
- Bank for International Settlements (2010), "The global crisis and financial intermediation in emerging market economies", BIS Papers, Vol. 54, pp. 1-10.
- Barajas, A., Chami, R., Espinoza, R.A. and Hesse, H. (2010), "Recent credit stagnation in the MENA Region: what to expect? what can be done?", IMF Working Paper No. 10/219.
- Barajas, A., Chami, R. and Yousefi, S.R. (2013), "The finance and growth nexus Re-examined: do all countries benefit equally?", IMF Working Paper 13-130.
- Blundell, R. and Bond, S. (1998), "Initial conditions and moment restrictions in dynamic panel data models", *Journal of Econometrics*, Vol. 87, pp. 115-143.
- Brambor, T., Clark, W.R. and Golder, M. (2006), "Understanding interaction models: improving empirical analysis", *Political Analysis*, Vol. 14 No. 1, pp. 63-82.
- Chen, G. and Wu, Y. (2014), "Bank ownership and credit growth in emerging markets during and after the 2008–09 financial crisis—a cross-regional comparison", IMF Working Paper 14-171.
- Demirguc-Kunt, A. and Levine, R. (2008), "Finance, financial sector policies, and long-run growth", Commission on Growth and Development Working Paper 11.

Bank lending

in Saudi

- Gambacorta, L. and Marques-Ibanez, D. (2011), "The bank lending channel: lessons from the crisis", Economic Policy, April, pp. 135-182.
- Gambacorta, L. and Shin, H.S. (2016), "Why bank capital matters for monetary policy", BIS Working Papers 558.
- Gani, A. and Al-Muharrami, S. (2016), "The effect of institutional quality on bank lending in the gulf cooperation council countries", Review of Middle East Economics and Finance, Vol. 12 No. 1, pp. 55-63.
- Ghosh, S. (2013), "Funding structure, procyclicality and lending: evidence from GCC banks," MPRA Paper 51225.
- Guizani, B. (2015), "Capital requirements, banking supervision and lending behavior: evidence from Tunisia", Middle East Development Journal, Vol. 7 No. 1, pp. 175-194.
- Guo, K. and Stepanyan, V. (2011), "Determinants of bank credit in emerging market economies," IMF Working Paper 11-51.
- Hakura, D. (2004), "Growth in the Middle East and North Africa", IMF Working Paper 4-56.
- Husain, A.M., Arezki, R., Breuer, P., Haksar, V., Helbling, T., Medas, P., Sommer, M. and an IMF Staff Team (2015), "Global implications of lower oil prices", IMF Staff Discussion Note 15-15.
- Kohlscheen, E. and Miyajima, K. (2015), "The transmission of monetary policy in EMEs in a changing financial environment: a longitudinal analysis", BIS Working Papers 495.
- Levine, R. (1997), "Financial development and economic growth: views and agenda", *Journal of Economic Literature*, Vol. 35, pp. 688-726.
- Levine, R. (2005), "Finance and growth: theory and evidence," in Aghion, P. and Durlaff, S. (Eds), Handbook of Economic Growth, Elsevier Science, The Netherlands.
- Miyajima, K. (2017), "An empirical investigation of oil-macro-financial linkages in Saudi Arabia", Review of Middle East Economics and Finance, Vol. 13 No. 2, pp. 1-15.
- Naceur, S.B. and Ghazouani, S. (2007), "Stock markets, banks, and economic growth: empirical evidence from the MENA region", *Research in International Business and Finance*, Vol. 21, pp. 297-315.
- Roodman, D. (2009), "A note on the theme of too many instruments", Oxford Bulletin of Economics and Statistics, Vol. 71 No. 1, pp. 135-158.
- Sahay, R., Cihak, M., N'Diaye, P., Barajas, A., Pena, D., Bi, R., Gao, Y., Kyobe, A., Nguyen, L., Saborowski, C., Svirydzenka, K. and Yousefi, R. (2015), "Rethinking financial deepening: stability and growth in emerging markets", IMF Staff Discussion Note 15-08.

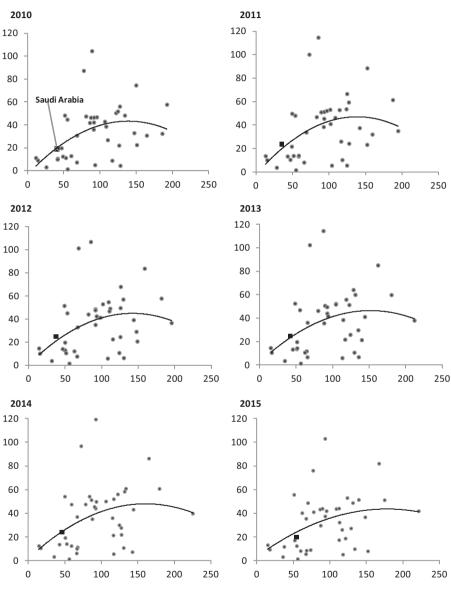
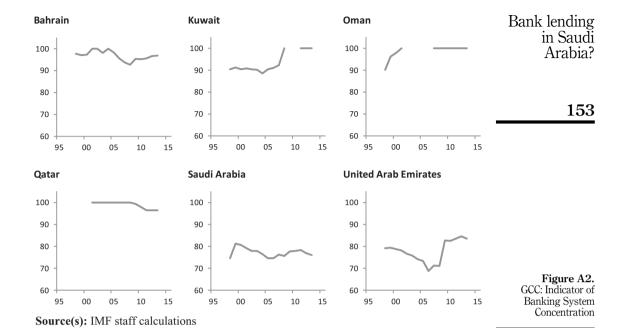


Figure A1. Financial Deepening and Economic Development

Note(s): The *x*-axis represents bank credit to the nonfinancial private sector as a share of GDP, the *y*-axis represents GDP per capita in current US\$ thousand

Source(s): BIS Table F2.4, IMF WEO, and IMF staff calculations



IES 27,2

154

Table A1.
Data description

				Sources				Aggregation level	
Variable name	Description	Unit	Bank scope	Haver	SAMA	Wolrd bank	Bank level	Macro level	
Credit growth	Year on year growth of gross loans deflated by Saudi CPI index	Percent	X	X			Х		
Capital ratio, Tier1	Tier 1 capital to risk weighted assets	Percent	X				X		
NPL provisions growth	Year on year growth of NPL provisions deflated by Saudi CPI index	Percent	X	X			Х		
Deposit growth	Year on year growth of total customer deposits deflated by Saudi CPI index	Percent	X	X			X		
Net income growth	Year on year growth of net interest income deflated by Saudi CPI index	Percent	X	X			X		
Nonoil private sector GDP growth	Year on year growth of non oil private sector real GDP	Percent		X				Х	
Oil price growth	Year on year growth of Brent oil prices deflated by US CPI index	Percent		X				X	
US Fed funds rate	US Fed funds interest rate effective minus US CPI inflation detrended by linear trend	Percent		X				X	
Domestic 3 months interest rate	Saudi 3 months SIBOR minus Saudi CPI inflation detrended by linear trend	Percent		X				X	
Excess liquidity	Sum of bank holdings of (1) current and other deposits at SAMA and (2) SAMA bills. Year on year differences divided by bank assets in the base year	Percent		x				x	
							(con	ntinued)	

	Bank	,		Sources			Aggregation level		Bank lending in Saudi Arabia?
Variable name		Haver	SAMA	Wolrd bank	Bank level	Macro level			
Bank holdings of government bonds, change	Year on year difference in bank holdings of government bonds scaled by bank total assets	Percent	X	X				X	155
SCI lending growth	Year on year growth of lending by Specialized Credit Institutions deflated by Saudi CPI index	Percent	X					x	
Bank concentration index, change	Assets of five largest banks as a share of total commercial banking assets, year on year percentage point change	Percent				X		X	
Note(s): SAMA Source(s): Auth	= Saudi Arabian Monor or	etary Autho	ority						Table A1.

Corresponding author Ken Miyajima can be contacted at: kmiyajima@imf.org



Bringing Research to Life.

For over 50 years, championing fresh thinking has been at the heart of the Emerald business. Our core ethos, is to help make a difference so that little by little those in academia or in practice can work together to make a positive change in the real world.

Join us in making a difference.

emeraldrealimpact.com #RealImpact

Connect with us through social media











CORPORATE PROFILE THE ISLAMIC DEVELOPMENT BANK



ESTABLISHMENT

The Islamic Development Bank (IsDB) is an international financial institution established pursuant to Articles of Agreement signed at the city of Jeddah, Kingdom of Saudi Arabia, on 21st Rajab 1394H, corresponding to 12 August 1974. The Inaugural Meeting of the Board of Governors took place in Rajab 1395H (July 1975) and the IsDB formally began operations on 15 Shawwal 1395H (20 October 1975).

VISION

By the year 1440H, the Islamic Development Bank will have become a world-class development bank, inspired by Islamic principles, that has helped to significantly transform the landscape of comprehensive human development in the Muslim world and to restore its dignity.

MISSION

To promote comprehensive human development, with a focus on the priority areas of alleviating poverty, improving health, promoting education, improving governance and bringing prosperity to the people.

MEMBERSHIP

The IsDB has 57-member countries across various regions. The prime conditions for membership are that the prospective country should be a member of the Organization of the Islamic Cooperation (OIC), that it pays the first instalment of its minimum subscription to the Capital Stock of the IsDB, and that it accepts any terms and conditions that may be decided upon by the Board of Governors.

CAPITAL

At its 38th Annual Meeting, the IsDB's Board of Governors approved the 5th General Capital Increase whereby the Authorized Capital was increased to ID100 billion and the Subscribed Capital (available for subscription) was increased to ID50 billion. By the same Resolution, the Board of Governors agreed to the calling in of the callable (in cash) portion of the 4th General Capital Increase. As at the end of 2018, the subscribed capital of the IsDB stood at ID50.2 billion.

ISLAMIC DEVELOPMENT BANK GROUP

The IsDB Group comprises five entities. The Islamic Development Bank (IsDB), the Islamic Research and Training Institute (IRTI), the Islamic Corporation for the Development of the Private Sector (ICD), the Islamic Corporation for the Insurance of Investment and Export Credit (ICIEC), and the International Islamic Trade Finance Corporation (ITFC).

HEAD OFFICE AND REGIONAL HUBS

Headquartered in Jeddah, the Kingdom of Saudi Arabia, the IsDB has eleven regional hubs in Abuja, Nigeria; Almaty, Kazakhstan; Ankara, Turkey; Cairo, Egypt; Dakar, Senegal; Dhaka, Bangladesh; Dubai, United Arab Emirates; Jakarta, Indonesia; Kampala, Uganda; Paramaribo, Suriname; and Rabat, Morocco.

FINANCIAL YEAR

The IsDB's financial year used to be the lunar Hijra Year (H). However, starting from 1 January 2016, the financial year was changed to the Solar Hijra year starting from 11th of Capricorn, (corresponding to 1 January) and ending on the 10th Capricorn (corresponding to 31 December of every year).

ACCOUNTING UNIT

The accounting unit of the IsDB is the Islamic Dinar (ID), which is equivalent to one Special Drawing Right (SDR) of the International Monetary Fund.

LANGUAGE

The official language of the IsDB is Arabic, but English and French are also used as working languages.





ISLAMIC RESEARCH AND TRAINING INSTITUTE A MEMBER OF THE ISLAMIC DEVELOPMENT BANK GROUP



8111 King Khalid Street Al Nuzlah Al Yamania Dist. Jeddah 22332-2444 Kingdom of Saudi Arabia Tel: (00966-12) 636 1400 Fax: (00966-12) 637 8927 Email: irti@isdb.org www.irti.org

