

March 2016





# **IFSB WORKING PAPER SERIES**

WP-06/03/2016

STRENGTHENING THE FINANCIAL SAFETY NET: THE ROLE AND MECHANISMS OF SHARĪ'AH-COMPLIANT DEPOSIT INSURANCE SCHEMES (SCDIS)

Syed Faiq Najeeb Madaa Munjid Mustafa

Consultant: Peter Casey

# March 2016

Disclaimer: This Working Paper should not be reported as representing the views of the Islamic Financial Services Board (IFSB). The views expressed are those of the authors and do not necessarily reflect those of the IFSB.

#### Published by: Islamic Financial Services Board

Level 5, Sasana Kijang, Bank Negara Malaysia 2, Jalan Dato' Onn, 50480 Kuala Lumpur, Malaysia

Email: ifsb\_sec@ifsb.org

ISBN 9789675687563

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, or stored in any retrieval system of any nature without prior written permission, except for permitted fair dealing under the Copyright, Designs and Patents Act 1988, or in accordance with the terms of a license issued by the Copyright, Designs and Patents Act 1988, or in accordance with the terms of a license issued by the Copyright Licensing Agency in respect of photocopying and/or reprographic reproduction.

Application for permission for other use of copyright material, including permission to reproduce extracts in other published works, shall be made to the publisher(s). Full acknowledgement of the author, publisher(s) and source must be given.

© 2015 Islamic Financial Services Board

#### ABOUT THE ISLAMIC FINANCIAL SERVICES BOARD (IFSB)

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

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

# **TABLE OF CONTENTS**

ABBF	REVIATIONS	iii
GLOS	SSARY	٧
ABST	RACT	vii
EXEC	CUTIVE SUMMARY	viii
SECT	ION 1: INTRODUCTION	1
1.1	Background	1
1.2	Objectives and Scope	4
1.3	Structure of the Working Paper	4
SECTI	ON 2: CONCEPTUAL FRAMEWORK OF DEPOSIT INSURANCE	7
2.1	Deposit Insurance in the Financial Stability Framework	7
2.2	Effectiveness of DIS and Evolution of Structure Designs	8
2.3	Post-Financial Crisis Developments	14
SECTI	ON 3: SHARΑAH-COMPLIANT DEPOSIT INSURANCE	21
3.1	Systemic Importance in IFSI	21
3.2	Sharīʻah Perspectives on DIS	23
SECTI	ON 4: CURRENT STATUS AND SUPERVISORY ASSESSMENT OF SCDIS	27
4.1	Current DIS for IIFS	27
4.4.1	Availability of DIS	27
4.1.2	Availability of SCDIS	27
4.1.3	Various Types of Accounts and their Protection through SCDIS	29
4.2	MODALITIES OF SCDIS	32
4.2.1	Sudan – Takāful Model	33
4.2.2	Jordan – <i>Takāful</i> Model	35
4.2.3	Bahrain – Takāful Model	36
4.2.4	Malaysia – <i>Kafālah</i> Bi Al-Ajr Model	39
4.2.5	Summary of SCDIS Modalities	41
4.3	Governance Structures and Design Features	44
4.3.1	Governing Body Structure	44
4.3.2	Sharīʿah Compliance Arrangements	45
4.3.3	Nature of the SCDIS Scheme and Investment Strategy	46
4.3.4	Accumulated Contributions at SCDIS	47
4.3.5	Contributions and Risk Assessment at SCDIS	47
4.3.6	Triggers for Payments, and Responsibility for Activating Triggers	48
4.3.7	Timetable and Priorities for Payments to Eligible Clients	48
4.3.8	Use of SCDIS in the Past and its Testing Simulation	48
4.4	Key Challenges in Operationalisation	49
4.5	Summary of Key Considerations in SCDIS	54

SECTION 5: CONCLUSION	58
APPENDIX 1: POST-CRISIS DEPOSIT INSURANCE COVERAGE*	62
APPENDIX 2: IADI CORE PRINCIPLES FOR EFFECTIVE DIS	63
APPENDIX 3: IFSB MEMBER RSAs WITH SUBSTANTIVE SURVEY RESPONSES	66
REFERENCES	68

# **ABBREVIATIONS**

BCBS	Basel Committee on Banking Supervision
BDSF	Bank Deposit Security Fund
CAR	Capital adequacy ratio
CBB	Central Bank of Bahrain
CDIS	Conventional deposit insurance system
DIC	Deposit Insurance Corporation
DIS	Deposit insurance scheme/system
D-SIB	Domestic-systemically important bank
ERM	Enterprise risk management
FDIC	Federal Deposit Insurance Corporation
FSB	Financial Stability Board
GCC	Gulf Cooperation Council
GFC	Global Financial Crisis
H.E.	His Excellency/Her Excellency
HSSB	Higher Sharī'ah Supervisory Board
IADI	International Association of Deposit Insurers
IAH	Investment account holders
IDB	Islamic Development Bank
IDIC	Indonesia Deposit Insurance Corporation
IDIG	Islamic Deposit Insurance Group
IFSB	Islamic Financial Services Board
IFSF	Islamic Financial Stability Forum
IFSI	Islamic financial services industry
IIFS	Institutions offering Islamic financial services
IMF	International Monetary Fund
IRD	Islamic Research and Development
IRTI	Islamic Research and Training Institute
LOLR	Lender-of-last-resort
MDIC	Malaysia Deposit Insurance Corporation
OECD	Organisation for Economic Co-operation and Development
PSIA	Profit-sharing investment account
ROSC	Reports on Observance of Standards and Codes
RPSIA	Restricted profit-sharing investment account
RSAs	Regulatory and supervisory authorities
SAC	Sharī'ah Advisory Council

SCDIS	Sharī'ah-compliant deposit insurance scheme
SLOLR	Sharīʻah-compliant lender-of-last-resort
SPP	Strategic Performance Plan
SSB	Sharīʻah Supervisory Board
UAE	United Arab Emirates
UIA	Unrestricted investment account
UIAH	Unrestricted investment account holders
UPSIA	Unrestricted profit-sharing investment account

# **GLOSSARY**

Kafālah	A guarantee – for example, when a person guarantees a liability or duty (especially debt) of another person.
Maqāṣid al- Sharīʻah	The fundamental objective of Sharī'ah, which is to promote and protect the interests of all human beings and avert any harm that may affect their well-being.
Muḍārabah	A partnership contract between the capital provider (rabb al-māl) and an entrepreneur (muḍārib) whereby the capital provider would contribute capital to an enterprise or activity that is to be managed by the entrepreneur. Profits generated by that enterprise or activity are shared in accordance with the percentage specified in the contract, while losses are to be borne solely by the capital provider unless the losses are due to misconduct, negligence or breach of contracted terms.
Murābaḥahl Murābaḥah for the purchase orderer	A sale contract whereby the institution sells to a customer a specified asset whereby the selling price is the sum of the cost price and an agreed profit margin. The <i>murābaḥah</i> contract can be preceded by a promise to purchase from the customer.
Mushārakah (Sharikat Al- 'Aqd)	A partnership contract in which the partners agree to contribute capital to an enterprise, whether existing or new. Profits generated by that enterprise are shared in accordance with the percentage specified in the <i>mushārakah</i> contract, while losses are shared in proportion to each partner's share of capital.
Qarḍ	The payment of money to someone who will benefit from it provided that its equivalent is repaid. The repayment of the money is due at any point in time, even if it is deferred.
Al-Qawāʻid al-Fiqhiyyah	Brief theoretical statements that aim to consolidate the vast juris corpus of Islamic law into concise entries that help to facilitate the task of practitioners of Islamic law.
Şukūk	Certificates that represent a proportional undivided ownership right in tangible assets, or a pool of tangible assets and other types of assets. These assets could be in a specific project or a specific investment activity that is Sharī'ah-compliant.
Tabarru' commitment	The amount of contribution that the <i>takāfullretakāful</i> participant commits to donate in order to fulfil the obligation of mutual help in bearing the risks and paying the claims of eligible claimants.

Takāful	A mutual guarantee in return for the commitment to donate an amount in the form of a specified contribution to the Participants' Risk Fund, whereby a group of participants agree among themselves to support one another jointly for the losses arising from specified risks.
Wadīʻah	A contract for the safekeeping of assets on a trust basis and their return upon the demand of their owners. The contract can be for a fee or without a fee. The assets are held on a trust basis by the safekeeper and are not guaranteed by the safekeeper, except in the case of misconduct, negligence or breach of the conditions.
Wakālah	An agency contract where the customer (principal) appoints an institution as agent ( <i>wakīl</i> ) to carry out the business on his behalf. The contract can be for a fee or without a fee.
Waqf	A <i>waqf</i> (plural <i>awqāf</i> ) is the product of a voluntary endowment of assets or funds to a trust, whose usufruct is earmarked for purposes specified by the founder.

#### ABSTRACT1

The role of financial safety nets in the banking sector – that is, deposit insurance schemes (DIS) and lender-of-last-resort liquidity facilities – has gained widespread acceptance in the new global financial stability framework post-financial crisis. Recent reports indicate that explicit DIS have been instituted in at least 113 jurisdictions worldwide, while another 40 jurisdictions are studying or considering their implementation. The need for financial safety nets is critical in the global Islamic financial services industry (IFSI) as it evolves into a multi-trillion dollar industry with the Islamic banking sector beginning to achieve domestic systemic importance in several jurisdictions. The implementation of Sharī'ah-compliant DIS (SCDIS) in the Islamic banking sector, however, remains sparse, with the survey conducted in this working paper identifying only four jurisdictions (Bahrain, Malaysia, Nigeria and Sudan) where an SCDIS was already implemented and in effect. Additionally, a fifth jurisdiction (Jordan) has drafted its modality and corresponding law for an SCDIS and this is expected to be in operation in the very near future.

This working paper discusses the importance of developing Sharīʻah-compliant deposit insurance schemes, as DIS are considered an indispensable component of financial stability regimes in the post-crisis world. Drawing upon the results of a survey conducted across 27 IFSB member regulatory and supervisory authorities, the working paper highlights the current Sharīʻah-compliant models of DIS that are being implemented in different jurisdictions and the operational and Sharīʻah challenges that need to be considered in the implementation of these schemes. The paper also considers the Sharīʻah perspectives that support according protection to depositors, in the interest of achieving financial stability and resilience in the IFSI. Overall, the working paper raises awareness of the importance of having SCDIS, highlights the existing modalities and practices of SCDIS in different jurisdictions, and identifies key design challenges from both Sharīʻah and operational perspectives for developing SCDIS.

<sup>&</sup>lt;sup>1</sup> This working paper is a substantially revised version of an earlier draft. The authors would like to acknowledge ex-staff of the IFSB, Mr Jamshaid Anwar Chattha and Mr Saad Bakkali who prepared the earlier draft, for their contributions in drafting and conducting the IFSB members' survey included in the current draft. The working paper also greatly benefited from the feedback and coordination of a core team of the IFSB Secretariat, led by Assistant Secretary-General, Mr Zahid ur Rehman Khokher. Mrs Siham Ismail and Ms Rosmawatie Abdul Halim provided assistance in the formatting and publication of the paper. We are also grateful to the regulatory and supervisory authorities, multilateral bodies, and other institutions that are members of the IFSB for their participation in the survey and useful comments on the draft paper.

# **EXECUTIVE SUMMARY**

The Global Financial Crisis (GFC) of 2008–9 and the following European sovereign debt crisis of 2010–11 have reignited policymakers' interest in financial safety-net arrangements – that is, deposit insurance frameworks that provide protection to depositors in the interest of preventing panic runs on banks, and lender-of-last-resort liquidity facilities for these institutions during times of liquidity stress. The turmoil in financial markets demonstrated not only that financial crises in advanced countries were still possible, but – more importantly – that the degree of interconnectedness and globalisation in financial markets and banking systems elevated the risk of contagion. As a result, the demand for insurance against these shocks has grown, as is commonly the case whenever a crisis hits the financial sector.

The common policy response to mitigate the adversities of the GFC in most of the affected jurisdictions overwhelmingly included government provision of a financial safety net for banks and other financial institutions. In jurisdictions with existing arrangements, the design of many safety-net elements, such as deposit insurance, was redrawn as a short-term emergency measure to extend coverage of existing guarantees while introducing new ones. While these measures did not address the root causes of the lack of confidence, they were nevertheless helpful in avoiding a further accelerated loss of confidence.

As such, in the new global financial stability framework post-financial crisis, deposit insurance schemes (DIS) are in widespread use by regulatory and supervisory authorities across jurisdictions. As of 31 October 2014, the International Association of Deposit Insurers reports that 113 jurisdictions have instituted some form of explicit deposit insurance and another 40 jurisdictions are studying or considering the implementation of an explicit DIS.

The role of financial safety nets is also critical in the global Islamic financial services industry (IFSI) as it evolves into a multi-trillion dollar industry. The Islamic Financial Services Board's (IFSB) *IFSI Stability Report 2015* notes that as of 1H2014, the IFSI is estimated to be worth USD1.87 trillion of which approximately 80% is concentrated in the Islamic banking sector. In addition, the Islamic banking sector is attributed with having achieved domestic systemic importance in at least 10 jurisdictions.<sup>2</sup>

The need for financial safety-net arrangements in the IFSI was also stressed in April 2010 by the joint report by the IFSB, the Islamic Research and Training Institute and the Islamic Development Bank entitled *Islamic Finance and Global* 

<sup>&</sup>lt;sup>2</sup> The criterion for Islamic banking systemic importance is when the total Islamic banking assets in a country comprise more than 15% of its total domestic banking sector assets.

Financial Stability. This report identified eight building blocks aimed at further strengthening the Islamic financial infrastructure at the national and international levels to promote a resilient and efficient Islamic financial system. The third building block relates to the strengthening of the financial safety-net mechanism comprising a Sharī'ah-compliant lender-of-last-resort facility and Sharī'ah-compliant deposit insurance scheme (SCDIS). These, together with prudential supervision, present key components of the financial safety-net arrangements for sustaining financial stability, especially when confronted with a financial shock.

The implementation of a well-designed SCDIS<sup>3</sup> for the IFSI, however, is particularly challenging given the specificities of the Sharī'ah contracts and funding structures of institutions offering Islamic financial services (IIFS). The principles of Sharī'ah which govern the IFSI mandate that the necessary provisions of financial safety nets for Islamic banks must be Sharī'ah-compliant.

Extending conventional DIS protection to Islamic banks presents several challenges, which include: (1) issues in the underlying principles of conventional deposit insurance (excessive *gharar*, *ribā* and so on); (2) the treatment and insurability of deposits accepted under profit-sharing contracts; (3) the priority of claims on the DIS of different types of deposits collected by Islamic banks; and (4) the role of the deposit insurance fund in resolution.

Nonetheless, an SCDIS has the potential to promote stability and resilience in the IFSI as it enhances depositor confidence during times of economic shocks and general market stress. *Maqāṣid al-Sharī'ah*, or the fundamental objective of Sharī'ah, is to promote and protect the interests of all human beings and avert any harm that may affect their well-being. Financial safety nets, including DIS, aim to promote financial stability and prevent bank failures, and are therefore essentially tools used to protect an economy from output losses and depositors from losing their funds. Thus, the underlying objective of such schemes is in compliance with *Sharī'ah* and can be categorised under the "protection of wealth" among the five essential necessities of *Maqāṣid al-Sharī'ah*.

The IFSB Secretariat conducted a survey of member RSAs in July and August 2014 to: (1) determine the current status of SCDIS; (2) identify countries' experiences in developing and implementing SCDIS; and (3) ascertain the key issues and challenges faced by central banks/monetary authorities in the development and implementation of SCDIS. The results from the survey identified four jurisdictions (Bahrain, Malaysia, Nigeria and Sudan) where an SCDIS was already

<sup>&</sup>lt;sup>3</sup> The term "deposit" in this section has been used in a general sense, where it encompasses all types of funds collected by Islamic banks from the individual and business customer, including those generated on the basis of partnership contracts (e.g. muḍārabah) such as unrestricted and restricted profit-sharing investment accounts (PSIAs). hen the total Islamic banking assets in a country comprise more than 15% of its total domestic banking sector assets.

implemented and in effect. Additionally, a fifth jurisdiction (Jordan) has drafted its modality and corresponding law for an SCDIS, and this is expected to be in operation in the very near future.

Among the five jurisdictions that operate/are in process to operate an SCDIS, three have based their SCDIS structure on the Sharī'ah-compliant contract of *takāful* (Sudan, Bahrain and Jordan), while the other two have based it on the *kafālah bi al-ajr* contract (Malaysia and Nigeria).

- In the *kafālah bi al-ajr* model, the IIFS pay a fee to the deposit insurer in exchange for protection of deposits; this fee is owned by the deposit insurer. In the event of failure of a member IIFS, the deposit insurer is responsible for making reimbursements from its own funds to cover eligible deposits.
- In contrast, in the takāful model, the deposit insurer is only an agent that
  operates and manages pool(s) of funds that are collected as contributions by
  participating IIFS (and investment account holders, or IAHs) in the SCDIS.
  In the event of a member failure, the reimbursements for insured deposits
  are made from the respective takāful funds that are managed by the deposit
  insurer.

The IFSB survey and further follow-up communications with these five jurisdictions have indicated some variations in the operational practices of these SCDIS. The respective treatment in terms of SCDIS coverage of PSIAs is particularly noteworthy:

- In Jordan, UPSIAs (unrestricted PSIAs) are split into uninvested portions and invested portions, with the SCDIS protection of the former being paid for by contributions by IIFS and the latter paid for by contributions by IAHs. In addition, RPSIAs (restricted PSIAs) are not protected by the SCDIS.
- In Sudan, all investment accounts are eligible for SCDIS protection and the contributions are paid for by IAHs only; the IIFS is not involved.
- In contrast to both Sudan and Jordan, the Bahraini model does not require IAHs to make contributions for according protection on investment accounts; the contributions to SCDIS for protection of both Islamic deposits and UPSIAs are by IIFS only. On the other hand, and consistent with Jordan, the Bahraini SCDIS does not accord protection to RPSIAs.
- Among the two jurisdictions with the *kafālah bi al-ajr* based SCDIS, investment accounts are not protected in Malaysia, while they are protected in Nigeria.

Among all five SCDIS models, there also exist some differences in the governance structures, investment strategies, risk assessment frameworks, coverage limits of the deposits protected, and so on.

The discussion above highlights the differing operational models of SCDIS, resulting in variations in models and approaches for the implementation of SCDIS. Aside from the Sharī'ah considerations above, due care needs to be given to ensure that SCDIS comply with international principles for effective deposit insurance systems, with such modifications as are necessary to deal with the specificities of Islamic finance.

The form and parameters of an SCDIS will depend on the circumstances of individual jurisdictions, but the experience of the jurisdictions, which have already adopted an SCDIS, indicates that there are no insuperable Sharī'ah issues, in terms of coverage, contributions or operation. There are, however, some Sharī'ah and operational issues to be dealt with and, since most of the existing SCDIS have not yet been tested in a real failure, it is likely that new lessons will emerge when cases arise.

# **SECTION 1: INTRODUCTION**

# 1.1 Background

The collapse of the Bretton Woods system in the early 1970s and the subsequent rise of financial globalisation is often considered to have increased volatility in the global economic and financial system (Rhee et al., 2013). The ensuing period in the 1980s and 1990s has been associated with a number of banking and financial crises in diverse regions globally, including, for instance, the Latin American debt crisis (early 1980s), Mexico (1994), the Asian financial crisis (1997–8), Russia (1998) and Argentina (1998–2002). The aftermath of these crises in the form of banking sector failures has led to increased interest by policymakers in studying the prospect of establishing "financial safety nets" – that is, deposit insurance frameworks to provide protection to depositors in the interest of preventing panic runs on banks, and lender-of-last-resort (LOLR) liquidity facilities for financial institutions during times of liquidity stress. Bank runs and liquidity shortfalls have the potential to trigger the failure of otherwise profitable banking institutions.

However, a key dilemma faced by policymakers in evaluating such financial safetynet arrangements is the risk of triggering imprudent lending behaviour by the covered banks. Financial safety nets are a source of moral hazard, as the ability of protected banks to attract deposits no longer depends upon the risk of their asset portfolio and these institutions are encouraged to finance high-risk, highreturn projects (Demirguc-Kunt and Detragiache, 2002). Thus, financial safetynet arrangements may lead unintentionally to more bank failures and, if banks take on risks that are correlated, systemic banking crises may become more frequent (Demirguc-Kunt and Detragiache, 2002). Therefore, a key challenge in the design of financial safety nets is mitigating the risk of moral hazard.

Nonetheless, the recent episodes of the Global Financial Crisis (GFC) of 2008–9 and the following European sovereign debt crisis of 2010–11 have reignited interest in financial safety-net arrangements. These financial turmoil events demonstrated not only that financial crises in advanced countries were still possible, but – more importantly – that the degree of interconnectedness and globalisation in financial markets and banking systems elevated the risk of contagion (Hawkins et al, 2014). As a result, the demand for insurance against these shocks has grown, as is commonly the case whenever a crisis hits the financial sector.

The common policy response to mitigate the adversities of the GFC in most of the affected jurisdictions overwhelmingly included government provision of a financial safety net for banks and other financial institutions. In jurisdictions with existing arrangements, the design of many safety-net elements, such as deposit insurance, was redrawn as a short-term emergency measure to extend coverage of existing guarantees while introducing new ones (see Appendix 1). While these measures did not address the root causes of the lack of confidence, they were nevertheless helpful in avoiding a further accelerated loss of confidence (Schich, 2008). With an appropriate financial safety net in place, confidence tends to be greater and the onset of financial crises less likely than otherwise. (See Section 2 for further discussion on this point.)

The role of financial safety nets is also critical in the global Islamic financial services industry (IFSI) as it evolves into a multi-trillion dollar industry. As of 1H2014, the IFSI is estimated to be worth USD1.87 trillion of which approximately 80% is concentrated in the Islamic banking sector.<sup>4</sup> In addition, the Islamic banking sector is attributed with having achieved systemic importance in at least 10 jurisdictions.<sup>5</sup>

The need for financial safety-net arrangements in the IFSI was stressed by the Islamic Financial Services Board (IFSB) in April 2010 when, in partnership with the Islamic Research and Training Institute (IRTI) and the Islamic Development Bank (IDB), a report was released entitled Islamic Finance and Global Financial Stability. This report, which was prepared under the guidance of the Task Force on Islamic Finance and Global Financial Stability, headed by H.E. Dr Zeti Akhtar Aziz (Governor, Bank Negara Malaysia), identified eight building blocks aimed at further strengthening the Islamic financial infrastructure at the national and international levels to promote a resilient and efficient Islamic financial system. Among these eight building blocks, the third relates to the strengthening of the financial safety-net mechanism comprising a Sharī'ah-compliant lender-of-lastresort facility (SLOLR) as well as a Sharī'ah-compliant deposit insurance scheme (SCDIS). These, together with prudential supervision, present key components of the financial safety-net arrangements for sustaining financial stability, especially when confronted with a financial shock. The principles of Sharī'ah, which govern the IFSI, mandate that the necessary provisions of financial safety nets for Islamic banks must be Sharī'ah-compliant.

Subsequently, in the third meeting of the Islamic Financial Stability Forum, <sup>6</sup> the Council of the IFSB resolved that for the fourth IFSF, which was then held on 17 November 2011 in Kuala Lumpur, Malaysia, the appropriate theme would be "Strengthening financial safety nets: Sharī'ah-compliant lender of last resort facilities and emergency financing mechanisms as well as deposit insurance". The proceedings of the fourth IFSF highlighted the need to study SLOLR and SCDIS in detail.

<sup>&</sup>lt;sup>4</sup> IFSB, IFSI Stability Report 2015.

<sup>&</sup>lt;sup>5</sup> The criterion for Islamic banking systemic importance is when the total Islamic banking assets in a country comprise more than 15% of its total domestic banking sector assets.

In its 20th meeting, held on 29 March 2012 in Manama, Bahrain, the Council of the IFSB approved the IFSB Strategic Performance Plan 2012–2015 (SPP 2012–2015), which included conducting various cross-border studies on the roles of SLOLR and SCDIS in the IFSI. Since then, the subject has been highlighted in various IFSB publications and initiatives – for instance, *Islamic Financial Services Industry Stability Report* (May 2013); IFSB-12: *Guiding Principles on Liquidity Risk Management* (March 2012); and IFSB-16: *Revised Supervisory Review Process* (March 2014).

In April 2014, the IFSB completed the first part of its financial safety net research mandate when it published *Working Paper on Strengthening the Financial Safety Net: The Role of SLOLR Facilities as an Emergency Financing Mechanism*, aimed at further strengthening the IFSI infrastructure. This working paper intends to cover another part of the financial safety-net research mandate, focusing on the role and mechanisms of SCDIS as a financial safety-net arrangement in the IFSI.

The implementation of a well-designed SCDIS for the IFSI is particularly challenging given the specificities of the Sharī'ah contracts and funding structures of institutions offering Islamic financial services (IIFS). as briefly highlighted earlier, SCDIS has potential to promote stability and resilience in the IFSI, as it enhances depositor8 confidence during times of economic shocks and general market stress. Such confidence is critical in preventing panic-induced bank runs that may lead to failures of otherwise profitable IIFS. The objectives and scope of this working paper are now highlighted in the following subsection.

\_

<sup>&</sup>lt;sup>6</sup> In its 15th meeting, held on 23 November 2009 in Kuala Lumpur, Malaysia, the Council of the IFSB resolved to establish the Islamic Financial Stability Forum (IFSF) as a platform for regulatory and supervisory authorities (RSAs) to discuss issues relating to the financial stability of the IFSI.

<sup>&</sup>lt;sup>7</sup> IFSB WP-01 (April 2014): Working Paper on Strengthening the Financial Safety Net: The Role of Sharī'ah-compliant Lender-of-Last-Resort (SLOLR) Facilities as an Emergency Financing Mechanism, www.ifsb.org/docs/WP-01\_(2014%20April)%20Working%20Paper%20on%20SLOLR. pdf.

<sup>&</sup>lt;sup>8</sup> The term "depositor" in this working paper has been used in a general sense where it encompasses all types of funds collected by Islamic banks from individual and business customers, including those generated on the basis of partnership contracts (e.g. *muḍārabah*) such as unrestricted profit-sharing investment accounts (PSIA). However, as will be seen later in this working paper, the type of deposit products covered by SCDIS varies between jurisdictions, and not all types of depositors are necessarily accorded coverage by the SCDIS.

# 1.2 Objectives and Scope

Taking into consideration the above background, this working paper examines the role and significance of SCDIS for the resilience and stability of the IFSI and the various mechanisms that can be adopted by RSAs to operationalise an SCDIS. The key objectives of the working paper are as follows:

- to establish the significance of SCDIS in enhancing the confidence of fund providers in the Islamic banking sector, leading to strengthened resilience and overall stability in the IFSI;
- ii. to review the existing models and practices of SCDIS in different jurisdictions; and
- iii. to identify key design challenges from both Sharī'ah and operational perspectives for developing SCDIS.

The scope of the working paper is limited to Islamic banking, and references to IIFS should be understood to be to firms operating in that sector. The working paper can serve as initial guidance material for RSAs to assist their evaluations and assessments on the roles and mechanisms of SCDIS. By conducting an extensive literature review on the pros and cons of deposit insurance schemes in general with a focus on the latest approaches taken by the global standard-setting and supervisory community on these schemes, as well as analysing design-related challenges from both Sharīʻah and operational perspectives in existing SCDIS models, the working paper endeavours to enhance knowledge in this subject area. The following subsection provides the structural breakdown of the paper.

# 1.3 Structure of the Working Paper

Having framed the background to this study and set out the working paper's objectives and scope, we now consider its structure, as follows:

 Section 2 provides a literature review on the conceptual evolution and historical chronology of deposit insurance schemes (DIS), including arguments for and against their effectiveness as financial safety nets based on findings in different jurisdictions. The same section also considers the approach taken by RSAs in terms of introducing/enhancing DIS to instil depositor confidence following the recent GFC, and analyses the design specifics of DIS in different jurisdictions.

<sup>&</sup>lt;sup>9</sup> It is pertinent to note that the results and findings in this working paper are based on a survey of 27 sample countries, among which five currently offer SCDIS. Hence, the results should be interpreted accordingly.

- Section 3 then justifies the need for developing SCDIS based on two
  arguments: (1) growth in market share of IFSI in various markets warranting
  a consideration of financial safety-net arrangements; and (2) Sharī'ah
  perspectives that support according funds protection to the IFSI in general,
  and to depositors in particular, in the interest of achieving financial stability
  and resilience in the system.
- Section 4 then highlights the DIS available to IIFS in different jurisdictions and outlines the modalities and design features of SCDIS as currently implemented in various countries, as well as the key challenges in its development, mainly drawing upon the results of an IFSB survey of member RSAs conducted in 2014. The section also adds relevant literature from studies on SCDIS conducted by the International Association of Deposit Insurers (IADI).
- Section 5 provides the concluding remarks of this study and highlights some challenges that need to be considered by RSAs in the implementation of SCDIS.

# SECTION 2: CONCEPTUAL FRAMEWORK OF DEPOSIT INSURANCE

#### 2.1 Deposit Insurance in the Financial Stability Framework

Establishing financial safety nets<sup>10</sup> is of critical policy importance to RSAs and governmental agencies as a means to mitigate events of systemic bank insolvencies that involve huge costs to the banks themselves, their customers and to governments. Bank failures lead to destruction of banks' information capital, due to the breakdown of trust in bank—customer relationships leading to reduction in investment and other economic activities; bank depositors potentially lose heavily because of bank failures; and the governments tend to incur large costs in remedying a banking crisis (Demirguc-Kunt and Huizinga, 2004). Deposit insurance schemes are one essential component of broader financial safety nets established with the objective of promoting financial stability and protecting small savers from loss in the case of a troubled or failing bank (IADI, 2015). By virtue of providing protection or guarantee to deposits, DIS have the potential to prevent bank runs from developing, particularly when DIS rules and coverage are explicit and transparent, adding certainty to the resolution process for failed banks.

The origins of a national DIS can be traced to Czechoslovakia, which, in 1924, was the first country to establish a nationwide deposit scheme in order to revitalise the country's banking system after the ravages of World War I. In addition, the scheme served to encourage saving, by increasing the safety of deposits and ensuring better development of banking practice in that country. The United States was the second country when, under the Banking Act of 1933, the US government created the Federal Deposit Insurance Corporation (FDIC) on 16 June 1933 to act as an independent agency preserving and promoting public confidence in the US financial system by: (a) insuring deposits in banks and thrift institutions; (b) identifying, monitoring and addressing risks to the deposit insurance funds; and (c) limiting the effect on the economy and the financial system when a bank or thrift institution fails (FDIC, 2014). The establishment of the FDIC was a direct consequence of the extensive bank runs, and thousands of bank failures, in the 1920s and early 1930s that contributed to the Great Depression in the US (Demirgüc-Kunt and Detragiache, 2002). The FDIC currently insures deposits in banks and thrift institutions for at least US\$250,000 per account, and approximately US\$9 trillion in total. The FDIC is funded by premiums that banks and thrift institutions pay for deposit insurance coverage and from earnings on investments in US Treasury securities (FDIC, 2014).

<sup>&</sup>lt;sup>10</sup> These safety nets are amalgams of policies including explicit or implicit deposit insurance, the central bank's lending of last resort, bank insolvency resolution procedures, and bank regulation and supervision (Demirgüc-Kunt and Huizinga, 2004).

<sup>&</sup>lt;sup>11</sup> This Directive was revised following the GFC; amended by 2009/14/EC of the European Parliament and of the Council of 11 March 2009.

Following the US's FDIC initiative in the 1930s, the adoption of DIS by other jurisdictions, however, remained limited and it was not until the 1980s when DIS saw an acceleration in interest from policymakers globally, followed by DIS implementation by most Organisation for Economic Co-operation and Development (OECD) countries as well as an increasing number of developing countries. In 1994, DIS became the standard for the newly created single banking market of the European Union, governed by Directive 94/19/EC<sup>11</sup> (Demirgüc-Kunt and Sobaci, 2001). This acceleration was partly in response to the collapse of the Bretton Woods system in the early 1970s, and to the rise of financial globalisation since then, which is held to have caused increased volatilities in the global economic and financial architecture (Rhee et al., 2013). The ensuing period in the 1980s and 1990s witnessed occurrences of a number of systemic banking and financial crises in diverse regions globally that led to increased demands from stakeholders for insurance protection against systemic events and the resulting bank runs (Demirgüc-Kunt and Detragiache, 2002).

By 1995, a total of 49 countries offered explicit DIS;<sup>12</sup> and this number increased to 87 countries by 2003 (Demirgüc-Kunt et al., 2008). Most recently, the International Association of Deposit Insurers reports that, as of 31 October 2014, 113 jurisdictions have instituted some form of explicit deposit insurance, and another 40 jurisdictions are studying or considering the implementation of an explicit DIS (IADI, 2014a).

## 2.2 Effectiveness of DIS and Evolution of Structure Designs

DIS has previously attracted some controversy among economists in terms of its effectiveness in preventing bank failures and systemic events. There are two opposing views in economic theory concerning the effectiveness of DIS:

- One view is broadly supportive of DIS as policy tools to reduce the likelihood of bank runs (Hoggarth et al., 2005).
- A second view, however, argues that DIS induces moral hazard incentives that encourage banks to increase the risk of default due to their limited liabilities or the assurance that depositors' funds are guaranteed (Angkinand, 2009).

<sup>&</sup>lt;sup>12</sup> DIS, as implemented in different jurisdictions, are of various structural designs in the sense that the protection they accord may be explicitly stated along with its rules; or the DIS may be implicit and the level of protection decided by the RSAs on a case-by-case basis. The design choice is made by RSAs depending on their underlying objectives. (This issue is discussed further in section 2.3.) Current regulatory thinking strongly favours explicit schemes.

From the perspective of the first view, deposit insurance is attributed to play an important role in reducing the likelihood that one bank's distress can cause a full-fledged banking crisis. One of the influential classical works favouring DIS was by Diamond and Dybvig (1983), who argued theoretically that bank runs can be self-fulfilling particularly when depositors, who have incomplete information on whether financial problems are bank-specific or systemic, panic and withdraw their funds simply because other depositors are withdrawing theirs. Such types of panic-induced bank runs can spread contagiously throughout the financial system as a whole. Under such conditions, DIS is an optimal policy compared to introducing other measures such as regulatory suspensions (or moratoriums) on bank withdrawals, for example, which can leave some depositors in need of liquidity and thus create other potential economic and social problems (Chari and Jagannathan, 1988). Similar views are expressed by Bhattacharya et al. (1998), who state that DIS financed through taxation are preferred over suspensions provided the distortionary effects of taxation are small.

Premised on the above arguments, DIS are widely adopted by policymakers as financial safety-net arrangements to prevent widespread bank runs that may lead to illiquidity in otherwise solvent banks, forcing them into eventual insolvency (Barth et al., 2004). As a result, in the interest of protecting national payment and credit systems from contagious bank runs, policymakers favour deposit insurance as a means to reduce the likelihood that one bank's distress can cause a full-fledged banking crisis (Angkinand, 2009). The increased uptake in DIS during the 1980s and 1990s, as established in section 2.1, was a consequence of several banking crises in this period, which led a large number of countries to rethink their safety-net arrangements and consider, for example, introducing explicit deposit protection schemes (Garcia, 1999).

Nonetheless, the increased utilisation of DIS by various jurisdictions has attracted a great deal of expert and academic interest in evaluating the extent of benefits that stem from this component of financial safety nets. Practically all experts acknowledge that DIS is a source of moral hazard, as the protected banks' ability to attract deposits no longer reflects the risk of their asset portfolio (Demirgüc-Kunt and Detragiache, 2002). Proponents of the view doubting the effectiveness of DIS argue theoretically that when banks are subject to the threat of a bank run, they may behave more prudently as compared to when this threat is removed by a comprehensive DIS (Hoggarth et al., 2005). In other words, DIS may reduce the link between a bank's risk of default and its funding cost, creating an incentive for the bank to increase default risk at the expense of depositors or the deposit insurance fund (Merton, 1977).

As a result, DIS encourages banks to finance high-risk, high-return projects and this may lead to more bank failures. Kane (1989), for instance, suggested that the US Savings and Loan crisis of the 1980s was due to the moral hazard created by a combination of generous deposit insurance, financial liberalisation and regulatory failure.

In view of the opposing theoretical underpinnings, the logical course should be to review empirical studies that attempt to validate either of the theories and assess the contributions of DIS. However, empirical studies have only recently begun to be conducted on the effectiveness of DIS, largely due to a lack of the necessary data.

Demirgüc-Kunt and Detragiache (2002) use a database assembled at the World Bank, <sup>13</sup> which records the characteristics of DIS around the world. The database at the time comprised 61 sample countries that had experienced 40 systemic banking crises over the period 1980–97. The authors conduct empirical studies using panel regression analysis and find that explicit deposit insurance tends to be detrimental to bank stability; the more so where bank interest rates have been deregulated and the institutional environment is weak. The latter result is explained to mean that, where institutions are good, opportunities for moral hazard are more limited, and more effective prudential regulation and supervision better offset the adverse incentives created by deposit insurance. Also, the impact of deposit insurance on bank stability tends to be stronger the more extensive is the coverage offered to depositors, where the scheme is funded, and where the scheme is run by the government rather than by the private sector. Controlling for the possible endogeneity of deposit insurance does not change these results significantly.

Müslümov (2005), after analysing the impact of the full deposit insurance system introduced in 1994 on the financial performance of Turkish commercial banks, stated that his research findings support the moral hazard hypothesis. He finds that banks show significant increases in foreign exchange position risk and deterioration in capital adequacy relative to their benchmark after the introduction of the full deposit insurance system. This increased risk-taking is seen as a manifestation of moral hazard behaviour by commercial banks. The research results indicate that the complete DIS distorts the incentive structure of commercial banks and thus prevents the proper functioning of the market discipline mechanism and leads to excessive risk-taking.

<sup>&</sup>lt;sup>13</sup> The World Bank Policy Research Working Paper 3628, June 2005, updates this original dataset and extends it in several important dimensions. The new dataset identifies both recent adopters and the ones that were not covered earlier due to a lack of data. Moreover, for the first time, it provides historical time series for several variables and adds new ones.

More recently, Angkinand (2009) uses a cross-sectional time-series analysis to assess the influence of banking regulation on the output cost of banking crises in 35 industrial and emerging market countries during the period of the 1970s to 2003. The results in this study indicate that a high coverage by DIS is associated with relatively small output losses of crises, presumably due to DIS preventing bank runs once a crisis occurs.

Corresponding to the above mixed empirical results, the World Bank (2005) database on DIS significantly revealed at that time a considerable cross-country variation in the presence and design features of DIS. A number of authors are now stating that these structural differences have potential to impact the effectiveness of DIS, and could be socially counterproductive if the system is not appropriately structured (Cull et al., 2005).

For instance, Kahn and Santos (2005) state that it is useful to reinforce the deposit insurance function with supervisory powers, or at least to grant the deposit insurance authority powers to withdraw insurance coverage from a bank that acts imprudently and undertakes excessive forbearance. These punitive measures can mitigate banks' incentives to undertake excessive risk while still according the benefits of DIS in the form of upholding depositor confidence and preventing bank runs. As such, the design features of DIS are crucial in providing the right mix of market and regulatory discipline of banks.<sup>14</sup>

Financial safety nets need to strike a balance between the conflicting objectives of protecting bank customers and reducing banks' incentives to engage in risky activities. This renders designing bank safety nets a challenging prospect for policymakers, as they need to ensure that the framework enables market discipline and prevents bank runs from the depositors' side, while also avoiding the danger of overly generous DIS increasing incentives for excessive bank risk-taking, which has been the root cause of many bank failures (Demirgüc-Kunt and Huizinga, 2004).

In establishing a DIS, policymakers need to consider carefully the underlying objectives that they intend to achieve and appropriately structure a system that is internally consistent with those objectives. In the literature, DIS structures are generally classified into three types (Hoggarth et al., 2005): (a) an explicit DIS with unlimited coverage; (b) an explicit DIS with limited coverage (and possibly including an element of coinsurance where even within the limit the depositors do not receive a 100% payout); and (c) no explicit DIS (but possibly an implicit scheme).

<sup>&</sup>lt;sup>14</sup> The IADI's revised *Core Principles on Effective Deposit Insurance*, issued in November 2014, under Section III, "Moral Hazard, Operating Environment and Other Considerations", highlight the importance of well-designed deposit insurance structures to minimise moral hazard problems.

One of the initial studies to consider DIS design features is Demirgüc-Kunt and Huizinga (2004), who, using cross-country information on DIS, investigate whether specific deposit insurance design features matter, since the various countries with explicit deposit insurance operate systems with vastly different coverage, funding and management. Among other findings, the study indicates that higher coverage, coverage of interbank funds, existence of ex-ante funding, government provision of funds, and public management reduce market discipline on banks by depositors. Their conclusions are based on evidence which suggests that the former design features of DIS lead to depositors requiring lower rates of return on their deposits, presumably due to a perceived increase in safety. On the other hand, their empirical results indicate that private/public joint management of the fund, coinsurance<sup>15</sup> and coverage of foreign currency deposits are desirable since they lead to stronger market discipline with a negative or insignificant impact on interest rates.

Hoggarth et al. (2005) specifically assess how different types of DIS have an impact on the likelihood of banking crises. Their results indicate that explicit DIS with unlimited coverage increase the likelihood of banking crises. However, interestingly, the next group most likely to have a crisis is where there is no DIS exante and the protection (if any) is implicit. The authors justify the finding based on the assumption that most countries without an ex-ante deposit protection scheme introduce blanket government guarantees during a crisis to limit the political and social cost, and that this is therefore likely to be built into market expectations and to create moral hazard. Finally, jurisdictions with explicit DIS but limited coverage are least likely to experience a crisis and more so those countries that require depositors to coinsure. As such, this empirical study concludes that DIS with limited coverage appears effective in limiting moral hazard.

As a succinct overview, most explicit DIS are in the form of insurance funds that may be managed by the government or the private sector (World Bank, 2005). Membership of DIS is generally mandatory for banks, and the payments into the deposit insurance fund come from banks, or jointly from banks and the government. The deposit insurer invests the collected contributions into low-risk investments to further enhance its capital pool. In terms of contributions payable by banks, among the 61 sample countries in the World Bank (2005) DIS database, only four countries at that time appeared to have mandated risk-based bank contributions into the DIS; this is a strategy to deter excessive risk-taking by banks and to reward those who maintain high-quality portfolios. However, the 2013 IADI Annual Survey Results (responses as of end-2012) indicated significantly more countries mandating risk-based contributions.

<sup>&</sup>lt;sup>15</sup> It is pertinent to note that as per the IADI's revised Core Principles on Effective Deposit Insurance issued in November 2014, under Core Principle 8 – Coverage – Essential Criteria No. 4, it is stated that: "The deposit insurer does not incorporate co-insurance." This issue is discussed further in section 2.3.

<sup>&</sup>lt;sup>16</sup> Finland, Peru, Sweden and the US<sup>-</sup>

<sup>&</sup>lt;sup>17</sup> The survey results are available at www.iadi.org/di.aspx?id=173.

Based on various studies done on the topic, Demirgüc-Kunt et al. (2008) summarise that the effectiveness of DIS in preventing bank failures and systemic crises may be improved by incorporating one or more of the following design features:<sup>18</sup>

- limiting protection coverage;
- excluding particular types of deposits (such as foreign-currency or interbank deposits) from the system;
- setting coverage limits per depositor rather than per account, so that depositors cannot simply increase coverage by spreading deposit balances across multiple accounts;
- introducing coinsurance<sup>19</sup> by depositors;
- improving shareholder discipline by introducing risk-sensitive premia, so that banks that take more risk are "penalised" by higher premiums; and
- improving regulatory discipline by private-sector involvement in the management of the DIS, because private parties are generally considered to be better at monitoring banks and banks are apt to solicit better information with which to monitor one another than government officials can.

In addition, the authors contend that compulsory membership reduces adverse selection among banks and forces strong banks to lobby for effective risk-shifting control. In the same study, the authors analyse data covering the experience of up to 180 countries over the past four decades, and conclude that interplay of private and public interests influences the adoption and design of DIS. They conclude their study with three principal findings:

- Countries with more democratic environments and those with a larger proportion of risky banks are more likely both to adopt deposit insurance and to design it with fewer risk controls.
- Deposit insurance is more likely to be adopted during financial crises, presumably because representatives for sectoral interests find it easier to negotiate regulatory reform in distressed circumstances.
- External pressures from institutions such as the International Monetary Fund (IMF), the World Bank and the European Union influence the domestic decision-making process.

More recently, Laeven and Levine (2009) introduce the dimension of bank ownership structure to evaluate the extent of moral hazard created by DIS. In this study, the authors empirically test and conclude that deposit insurance is associated with an increase in risk only when the bank has a large equity holder with sufficient power to act on the additional risk-taking incentives created by deposit insurance. The ability of shareholders to act on DIS-induced moral hazard

<sup>&</sup>lt;sup>18</sup> Following the GFC, a number of these traditional design features were in fact found to be increasing depositors' fears. This is further discussed in section 2.3.

<sup>&</sup>lt;sup>19</sup> See footnote 15.

incentives depends on the bank ownership structure. The authors find that bank risk does not increase in response to deposit insurance when the bank ownership is widely held. Therefore, this study concludes that the impetus for greater risk-taking generated by deposit insurance operates on owners, not necessarily on non-shareholder managers.

Not with standing the above, the GFC of 2008–9 has reshaped the assumptions on financial safety nets, including DIS, while reaffirming their important role in maintaining financial stability. Experiences across jurisdictions during the crisis suggest that DIS needed to be fully integrated into the financial stability framework as critical components of the financial safety nets. The recommended structural designs of DIS have also undergone evolutionary rethinking based on depositors' reactions observed during the crisis. In the following subsection, regulatory initiatives and developments concerning DIS in the post-financial crisis period are discussed.

#### 2.3 Post-Financial Crisis Developments

The GFC of 2008–9 saw an overwhelming adoption of extraordinary financial safety net arrangements by many jurisdictions to enhance depositors' confidence (see Box 1). Existing DIS in most jurisdictions were substantially enhanced (e.g. in terms of increased coverage – see Appendix 1), while those jurisdictions with no explicit DIS provided blanket guarantees on deposits. A number of key lessons were learned as a result of the crisis:

- 1. In general, depositors were found to be more risk-sensitive than expected, with any threat of deposit losses leading to destabilising bankruns.
- 2. The importance of having an integrated policy response comprising adequate regulations, financial safety nets and resolutionframeworks for the protection of depositors was reinforced.
- 3. Thoughts on optimal design features concerning effective DIS were reshaped and further clarified, particularly in respect to the role of deposit insurance, the scope for depositor protections, optimal coverage levels, funding limitations and payout functions (Hoelscher, 2011).

The last point has had important implications in the structure and design features of DIS as implemented in the post-financial crisis period.

# Box 1. Selected Short-term Emergency Policy Measures\* Related to Guarantees of Bank Deposits\*\* (between September and early December 2008)

#### **United States**

The US Treasury established a two-year guarantee programme for money market fund investors, effective as of 29 September 2008, to cover fund levels as of 19 September 2008.

- The new legislation also temporarily allowed the FDIC to borrow unlimited funds from the Treasury.
- On 3 October, the House of Representatives voted for the Emergency Economic Stabilization Act of 2008, which included the raising of the ceiling on the FDIC deposit insurance by US\$100,000 to US\$250,000 per depositor per bank on a temporary basis until end 2009.
- In mid-October, the FDIC temporarily guaranteed senior unsecured debt of all FDIC-insured institutions and their holding companies (as long as issued on or before 30 June 2009; the guarantee being valid through 30 June 2012), as well as deposits in non-interest bearing deposit transaction accounts.
- On 23 November, the US government injected US\$20 billion of cash into Citigroup in exchange for a US\$27 billion preferred equity stake, and agreed to guarantee loans and securities on that company's books worth US\$306 billion.

### **Europe**

- On 30 September, the Irish government temporarily guaranteed all deposits, covered bonds, senior and dated subordinated debt held in the six biggest banks, with the guarantee scheduled to terminate in September 2010.
- Several countries, including Belgium, Greece, Luxembourg, Netherlands, Portugal and Spain, each raised deposit insurance to 100,000 euros.
- On 3 October, the Financial Stability Authority announced that (with effect from 7 October) the deposit protection limit would change to GBP50,000 from GBP35,000 per person per authorised bank. The Chancellor of the Exchequer was reported by newspapers to have made statements suggesting that the government might be offering an implicit 100% guarantee on all deposits in a failing bank, although he did not make a legally binding pledge.
- On 5 October, the German government issued a guarantee on every private deposit account. "The state guarantees private deposits in Germany," said a spokesman.
- On 6 October, the Government of Iceland stated that a blanket guarantee had been extended covering all deposits in domestic commercial and savings

- banks and their branches in Iceland.
- On 20 October, the Austrian National Council put forward a 100-billion-euro bank rescue package, which included temporarily providing unlimited deposit insurance to savers and undertaking legal guarantees on loans between banks. From 2010, insurance on deposit would have a limit of 100,000 euros.
- On 5 November, the Swiss government announced it was raising its bank deposit guarantee to 100,000 from 30,000 Swiss francs.
- On 8 December, the European Parliament's Economic and Monetary Affairs Committee endorsed a proposal to raise the deposit guarantee level to 50,000 euros, rather than the present 20,000 euros, from 30 June 2009 and to harmonise the level at 100,000 euros from 31 December 2011.

#### Asia

- On 12 October, the Australian government announced that it would guarantee all deposits in the country's banks for the next three years, as well as term wholesale funding to local banks until further notice.
- On 12 October, the New Zealand government announced that it was introducing an opt-in deposit guarantee scheme, covering deposits for banks and eligible non-bank deposit-takers.
- On 14 October, the Hong Kong Monetary Authority announced that all bank deposits would be fully guaranteed.
- On 16 October, the Singapore government announced a guarantee of all Singapore dollar and foreign currency deposits of individual and non-bank customers in banks, finance companies and merchant banks licensed by the Monetary Authority of Singapore, valid until 31 December 2010.

<sup>\*</sup> These measures were short-term emergency responses by authorities to mitigate panic-events in the market following the GFC, and there have been important changes in policies and coverage limits since then.

<sup>\*\*</sup> Taken from Schich in Financial Market Trends (2008). © OECD 2008.

A number of DIS design features that had previously been advocated in literature (e.g. low coverage levels, coinsurance, offset requirements, etc. — as were highlighted in section 2.2) were found to be in fact detrimental to financial stability and were root causes of depositors' panic bank runs. One such example is that of coinsurance, which was integrated in many DIS (including that of the United Kingdom) and that was to result in all depositors facing some loss in proportion to the sum of insured deposits. The original concept behind coinsurance was to ensure that all depositors were exposed to some level of risk (hence, they will exert market discipline). However, during the financial crisis, depositors were found to be more risk-sensitive than expected and depositors of Northern Rock in the United Kingdom, for example, indicated coinsurance as one of the reasons for their pre-emptive run.

Consequently, many DIS have already dropped coinsurance; while in the IADI's revised *Core Principles on Effective Deposit Insurance*, issued in November 2014,<sup>20</sup> under Core Principle 8 – Coverage – Essential Criteria No. 4, it is stated: "The deposit insurer does not incorporate co-insurance" (IADI, 2014d). The IADI's Core Principles now advocate a more analytical approach where the appropriateness of coverage levels can be determined within the context of the overall safety-net framework (Hoelscher, 2011). Therefore, high coverage by DIS may be acceptable if, for instance, it is combined with strong supervision and effective resolution systems for problem banks.

In terms of the role of global standard-setting bodies, during the build-up of the crisis in April 2008, the Financial Stability Board (FSB) released its *Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience*, which stressed the need for authorities to agree on an international set of principles for effective deposit insurance systems, and asked for national deposit insurance arrangements to be reviewed against these principles and for authorities to strengthen arrangements where necessary (FSB, 2008). In response, the Basel Committee on Banking Supervision (BCBS) and the International Association of Deposit Insurers jointly issued in June 2009 the previous version of the *Core Principles for Effective Deposit Insurance Systems* (Core Principles) for the benefit of countries considering the adoption or the reform of a deposit insurance system (BCBS and IADI, 2009). This was followed up with a methodology for compliance assessment with these Core Principles in 2010. The Core Principles

<sup>&</sup>lt;sup>20</sup> The Core Principles as they now stand are a set of 16 principles supported by 96 assessment criteria, against which national DIS can be reviewed. They address a range of issues, including: public policy objectives, mandate and powers, governance, relationships with other safety net participants, cross-border issues, the deposit insurer's role in contingency planning and crisis management, membership in the deposit insurance system, coverage, sources and uses of funds, public awareness, legal protection, dealing with parties at fault in a bank failure, early detection and timely intervention, failure resolution, reimbursing depositors, and recoveries. Their text is given in Appendix 2.

and methodology were revised in 2014 and these were discussed earlier. As part of the recently completed *Review of the Standards and Codes Initiative*, the IMF and the World Bank have also confirmed their intention to assess compliance with this standard under their *Reports on Observance of Standards and Codes (ROSC)* programme (FSB, 2012).

In February 2011, the FSB agreed to include the Core Principles in the list of *Key Standards for Sound Financial Systems* that deserve priority implementation depending on country circumstances (FSB, 2012). The FSB also agreed to undertake a peer review of deposit insurance systems in 2011. The objectives of the review were to take stock of member jurisdictions' deposit insurance systems and of any planned changes using the *Core Principles* as a benchmark, and to draw lessons from experience on the effectiveness of reforms implemented in response to the crisis.

In February 2012, the FSB released the *Thematic Review on Deposit Insurance Systems – Peer Review Report*, which identified that explicit limited deposit insurance has become the preferred choice among FSB member jurisdictions. In particular, 21 out of 24 FSB members (the latest being Australia during the financial crisis) had established an explicit DIS with objectives specified in law or regulations and publicly disclosed. Of the remaining jurisdictions, China and South Africa confirmed their plans to introduce a DIS and were actively considering its design features. The report also provided four recommendations for implementation by the FSB itself or relevant member jurisdictions based on the findings of the peer review. They involve:

- i. the adoption of an explicit DIS for those jurisdictions that do not currently have one:
- ii. revisions in the design of existing DIS to fully align them to the Core Principles;
- iii. additional analysis and guidance by relevant international bodies (primarily IADI); and
- iv. the follow-up of peer review recommendations.

The above discussions have indicated the overwhelming preference by most RSAs, international organisations and standard-setting bodies for explicit DIS in the interest of preserving depositor confidence in national jurisdictions and mitigating chances of bank failures that may lead to systemic crisis. In addition, the literature has established that appropriate design features can potentially mitigate any moral hazard and risk-taking incentives for banks created by DIS. As such, DIS are in widespread use by RSAs across jurisdictions; as of 31 October

2014, IADI reports that 113 jurisdictions have instituted some form of explicit deposit insurance and another 40 jurisdictions are studying or considering the implementation of an explicit DIS (IADI, 2014a).

In the IFSI, the rationale for developing Sharī'ah-compliant deposit insurance schemes is supported by two key factors: (1) the rapid growth in market share of the IFSI in various markets, which warrants a consideration of financial safetynet arrangement for this sector; and (2) the precepts of Sharī'ah that govern the IFSI and support the objectives of preserving financial stability and preventing systemic crises that can cause devastating losses to small depositors. The role and rationale for developing SCDIS, along with insights into current developments and progress regarding SCDIS in various markets, is now covered in the following section.

## SECTION 3: SHARĪ'AH-COMPLIANT DEPOSIT INSURANCE

## 3.1 Systemic Importance in IFSI 21

The global IFSI has achieved measured progress over the last several years. The IFSI Financial Stability Report 2015 by the IFSB notes that as of 1H2014, the IFSI is estimated to be worth USD1.87 trillion with its asset base between 2008 and 2013 expanding at a double-digit compound annual growth rate of almost 17%. The sector is deepening its significance in key traditional markets, mainly concentrated in the Gulf Cooperation Council (GCC) region and select countries in Asia. The future growth prospects in other regions are promising on the back of recent developments and initiatives in several new and niche Islamic finance markets. In 2014, regulatory developments concerning the Islamic banking sector were witnessed in Afghanistan, Azerbaijan, Morocco, Tajikistan and Uganda, among other jurisdictions, each at a different stage of enacting its regulatory regime.

The global IFSI continues to be heavily concentrated in the Islamic banking sector, which accounts for almost 80% of the industry; as of 1H2014, assets in full-fledged Islamic banks, subsidiaries and windows amounted to approximately USD1.48 trillion. The Islamic banking sector is attributed to have achieved systemic importance in at least 10 jurisdictions. Aside from Iran and Sudan, which operate fully Sharī ah-compliant banking systems, Islamic banking has also now achieved systemic importance in eight other countries as of 1H2014 – namely, Brunei, Bangladesh, Kuwait, Malaysia, Qatar, Saudi Arabia, the United Arab Emirates (UAE) and Yemen (see Figure 1). These markets operate an Islamic finance sector alongside the conventional finance sector within a dual financial system, and have achieved at least 15% market share of total banking assets for their Islamic banking.

Alongside jurisdictions having systemic Islamic banking importance, a number of Islamic banking institutions themselves are gradually achieving domestic systemically important bank (D-SIB) status. Based on the 59 sample Islamic banks analysed in the *IFSI Financial Stability Report 2015*, at least 31 of these banks account for either 3% of the domestic banking sector or 10% of the domestic Islamic banking sector, and would thus be candidates for evaluation as potential D-SIBs.

<sup>&</sup>lt;sup>21</sup> The statistics on IFSI reported in this section are adopted from the IFSB's *IFSI Financial Stability Report 2015*, unless otherwise stated.

<sup>&</sup>lt;sup>22</sup> The criterion for Islamic banking systemic importance is when the total Islamic banking assets in a country comprise more than 15% of its total domestic banking sector assets.

Based on the above analysis, at least 10 jurisdictions and 31 Islamic banks now hold potential relevance for the systemic stability of the global Islamic banking industry, as well as for the overall banking sector resilience in the respective country. Premised on this, the need for Sharī'ah-compliant financial safety nets is profound in the interest of preventing an Islamic bank's failure potentially leading to a systemic crisis. The merits of effective financial safety nets, including DIS, have already been established in Section 2 of this working paper. These are extendable into the realm of SCDIS.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% Iran Sudan Saudi. Brunei Kuwait Yemen Qatar Malaysia ŮΑΕ Banglad. Bahrain Jordan Pakistan Egypt Turkey Indonesia Oman Tunisia Kenya Algeria Azerbaijan South. Thailand Lebanon UK Nigeria Singapore Mauritius

Figure 1: Islamic Banking Share in Total Banking Assets by Jurisdiction (1H2014)

Source: IFSB IFSI Financial Stability Report 2015

The need for financial safety net arrangements in the IFSI was stressed in April 2010 by the joint IFSB–IRTI–IDB report entitled *Islamic Finance and Global Financial Stability*. This report identified eight building blocks aimed at further strengthening the Islamic financial infrastructure at the national and international levels to promote a resilient and efficient Islamic financial system. The third building block relates to the strengthening of the financial safety-net mechanism comprising SLOLR and SCDIS. These, together with prudential supervision, present key components of the financial safety-net arrangements for sustaining financial stability, especially when confronted with a financial shock.

<sup>&</sup>lt;sup>23</sup> For a more detailed analysis of the challenges of deposit insurance for Islamic banks, please see Box 4 on p. 24 of the IMF (2015) Staff Discussion Note, "Islamic Finance: Opportunities, Challenges, and Policy Options".

The principles of Sharī'ah, which govern the IFSI, mandate that the necessary provisions of financial safety nets for Islamic banks must be Sharī'ah-compliant. The IFSB in its various standards (e.g. see IFSB-1, IFSB-3 and IFSB-10) states that an IIFS must ensure that its aims and operations are consistent with Sharī'ah rules and principles not only in their forms and legal procedures but also in their economic substance, which should be premised on the objectives outlined by the Sharī'ah.

Most recently, the IMF Staff Discussion Note on Islamic finance released in April 2015 highlights that safety nets and resolution frameworks for Islamic banks remain underdeveloped and very few countries with Islamic banks have a full-fledged SCDIS with contributions invested in Sharī'ah-compliant instruments. The IMF notes that developing such facilities, together with Sharī'ah-consistent resolution frameworks, will be essential as Islamic banks grow in systemic importance. The article further contends that extending deposit insurance protection to Islamic banks in dual systems presents several challenges. Some of the challenges include the treatment and insurability of deposits accepted under profit-sharing contracts; the priority of claims of different types of deposits with Islamic banks; and the role of the deposit insurance fund in resolution. A further issue is that funded SCDIS also need to be Sharī'ah compliant in their investment policies, but may face difficulties in meeting this objective given the limited depthof markets for Islamic financial instruments.

Based on the above discussion, it may be summarised that Islamic banks in several jurisdictions have achieved domestic systemic importance that warrants a consideration of establishing SCDIS to accord protection to depositors and prevent any untoward withdrawal incidents that may lead to institutional failure at first, and subsequently to a potential systemic banking crisis. In addition, extending protection to Islamic banks through conventional DIS has its various operational challenges<sup>23</sup> aside from a Sharī'ah governance issue due to the provision of non-Sharī'ah-compliant facilities. The following subsection evaluates the feasibility of SCDIS from Sharī'ah perspectives.

#### 3.2 Sharī'ah Perspectives on DIS<sup>24</sup>

Abū Ḥāmid al-Ghazālī, an 11th-century Islamic jurist, broadly classified the objectives of Sharīʻah as the protection of five essential necessities – namely, faith  $(d\bar{n}n)$ , life (nafs), intellect ('aql), progeny (nasl) and wealth  $(m\bar{a}l)$ . Thus, anything that ensures the protection of these five necessities is considered beneficial, and anything that affects them is considered harmful, and the removal of such harm is beneficial (al-Ghazālī, 1993, p. 174). The protection of these five necessities is commonly known as  $Maq\bar{a}sid\ al-Shar\bar{i}$  ah.

<sup>&</sup>lt;sup>24</sup> This section presents a simple overview and analysis of Sharī'ah perspectives on DIS. In strict terms, resolutions on Sharī'ah matters of the IFSI in general, and IIFS in particular, are beyond the mandate of the IFSB.

Maqāṣid al-Sharī'ah, or the fundamental objective of Sharī'ah, is to promote and protect the interests of all human beings and avert any harm that may affect their well-being. Ibn al-Qayyim, a classical Islamic jurist from the early 14th century, elaborated on this point by stating:

Sharī'ah is founded upon wisdom and the realisation of people's interests in this life and the hereafter. Sharī'ah is the embodiment of justice, mercy, benefit and wisdom. Thus, any issue that deviates from justice to injustice, from mercy to its opposite, from benefit to harm and from wisdom to folly is not part of the Sharī'ah even if it is inserted in it based on some interpretations. (Ibn Al-Qayyim, 1991, 3:11)

Financial safety nets, including DIS, aim to promote financial stability and prevent bank failures, and are therefore essentially tools to protect an economy from output losses and depositors from losing their funds. Thus, the underlying objective of such schemes is in compliance with Sharī'ah and these can be categorised under "protection of wealth" among the five essential necessities of *Magāsid al-Sharī'ah*.

Protection of wealth as an objective has been emphasised by numerous classical and contemporary Islamic jurists, deriving their conclusions based on many Quranic verses and <code>hadīth</code> (quotes) of the Prophet. For instance, the Quran says in Chapter 2, Verse 188: "Do not consume one another's wealth wrongfully." The verse categorically prohibits the unjust consumption of the wealth of others and bans any form of misappropriation and misuse of people's wealth.

In an authentic <code>hadīth</code> narrated in Muslim, the Prophet said: "Everything pertaining to a Muslim is inviolate to another Muslim: his blood, his property and his honour" (Muslim, n.d., 4:1986, <code>hadīth</code> no. 2564). The <code>hadīth</code> of the Prophet particularly prohibits any form of transgression or harm to be inflicted upon the private property of an individual.

Al-Shāţibī, a Malikī jurist who can be considered as one of the pioneers of the subject of *Maqāṣid al-*Sharī'ah, further states that the protection of wealth can be observed from two perspectives: (a) protecting wealth through means of growing it; and (b) preventing anything that can harm it. These two perspectives together comprise the philosophy of the Sharī'ah rules and principles that govern issues related to wealth (Al-Shāţibī, 1997, 2:18).

Ibn 'Āshūr, a contemporary Islamic jurist, writes in his book *Maqāṣid al-Sharīʿah Al-Islāmiyyah*:

A Sharī'ah whose aim is to preserve the human social order could only be considered to have the highest regard for economic wealth. If we thoroughly examine the Quranic verses and Prophetic traditions dealing with property and wealth, believing them to be the mainstay of human society's activities and the solution to its problems, we find ample supporting evidence that property and wealth have an important status according to the Sharī'ah. (Ibn 'Āshūr, 2001, p. 450)

The availability of SCDIS is intended to discourage panic-induced withdrawals by depositors, which has the potential to cause bank failure(s) and lead to a systemic crisis. Thus, this measure can be considered as protecting society's wealth from risks that can harm it. This analogy is further supported by one of the core Islamic legal maxims ( $qaw\bar{a}'id\ fiqhiyyah$ ), which reads: "Harm is to be eliminated" (Ibn Nujaym, 1999, p. 72). This maxim is derived from an authentic hadith as narrated by al-Dāruquṭnī on the authority of 'Āishah, may peace be upon her, who mentioned that the Prophet said: "Harm shall neither be inflicted nor reciprocated" (Al-Dāruquṭnī, 2004, 5:407, hadith no. 4539). The maxim requires the prevention of any form of harm that might afflict an essential aspect of people's lives. As established earlier, protection of wealth is one of the five essential aspects of  $Maq\bar{a}sid\ al-Shar\bar{t}'ah$  and this maxim can also be extended to preventing harm to people's wealth.

Based on the above deliberations, it may be reasonably concluded that Sharī'ah requires wealth to be protected, and that appropriate and permissible<sup>25</sup> risk-mitigating techniques may be adopted by the concerned parties to achieve this and thus prevent economic harm that might paralyse the economy and adversely affect people's lives. In this regard, having an SCDIS is in line with the overall Sharī'ah objective of protecting wealth since it enables the protection of the private wealth of individuals who deposit<sup>26</sup> their funds in an IIFS. The failure of an IIFS, potentially leading to a systemic crisis, could be catastrophic, since it would affect not only the contracting parties of the failed bank, but also other larger segments of society. Thus, this is a harm that is detrimental to society and should be avoided in line with the above-mentioned legal maxim.

<sup>&</sup>lt;sup>25</sup> Risk management techniques must comply both with Sharī'ah – that is, be free from elements of interest ( $rib\bar{a}$ ), uncertainty (gharar) and gambling (maysir) – and with the Islamic law of contracts.

<sup>&</sup>lt;sup>26</sup> A distinction needs to be made between depositors who place funds with Islamic banks for safekeeping purposes and those who place funds as investments (known as investment account holders, or IAHs). There are differences in regulatory opinion on whether or not IAHs are eligible for deposit protection. This factor is discussed further in Section 4.

As stressed earlier, RSAs should ensure, however, that the operations and design features of the DIS for IIFS are Sharī'ah-compliant, along with any means used to achieve the goal of protection of wealth. In this regard, al-Ghazālī states that there is a balancing act between achieving the general objective of wealth protection and at the same time not violating Sharī'ah rules and principles (al-Ghazālī, 1993, p. 174). Therefore, the means proposed to contribute to the preservation of wealth – that is, SCDIS – should not be in conflict with the specific rules of the Sharī'ah.

The last point, however, requires further research and elaboration in terms of details of the existing DIS (if any) available to IIFS in various jurisdictions and the modalities being used to offer protection to the IIFS depositors. In order to understand these issues, the IFSB Secretariat conducted a survey of 33 banking RSAs, including central banks and monetary authorities that are members of the IFSB. The survey results and findings are discussed in the following subsection.

# SECTION 4: CURRENT STATUS AND SUPERVISORY ASSESSMENT OF SCDIS

#### 4.1 Current DIS for IIFS

The IFSB Secretariat conducted a survey of member RSAs in July and August 2014 to: (a) determine the current status of SCDIS; (b) identify countries' experiences in developing and implementing SCDIS; and (c) ascertain the key issues and challenges faced by central banks/monetary authorities in the development and implementation of SCDIS. The questionnaire was comprised primarily of closed-ended questions. Since not all situations fit neatly into precoded questions, the survey also included some open-ended questions so that respondents could elaborate freely. The number of responses received was satisfactory and covered all the major regions and countries with a significant level of Islamic finance and some countries with a low level. The following discussion covers the key findings of the survey, based on responses<sup>27</sup> received from 27<sup>28</sup> RSAs who are members of the IFSB.

## 4.1.1 Availability of DIS

Some 67% of the RSAs (18 out of 27) indicated that a conventional deposit insurance scheme (CDIS) facility exists in their jurisdiction and is granted universally to conventional commercial banks and Islamic commercial banks licensed by a central bank/monetary authority. Of the remaining nine RSAs, five reported that a CDIS was either under development or under consideration, while one reported a purely Islamic banking system in which a CDIS would be inappropriate.

# 4.1.2 Availability of SCDIS

Specifically on the development of SCDIS, in general, there are three broad approaches adopted by the RSAs: (a) protecting Islamic deposits under a CDIS; (b) developing an SCDIS alongside a conventional system; and (c) developing an SCDIS in a fully Islamic banking environment. However, the survey shows that only four RSAs (out of 24) – Bahrain, Malaysia, Nigeria and Sudan – have developed and implemented special SCDIS facilities for IIFS in their jurisdiction (see Figure 2). Five RSAs (out of 24) indicated that SCDIS

<sup>&</sup>lt;sup>27</sup> Some of these responses have been updated in 2015 by the respective RSAs to accommodate major regulatory amendments and legislative developments that had taken place in their jurisdictions since the survey was conducted.

<sup>&</sup>lt;sup>28</sup> The IFSB received in total 29 responses out of the total of 33 RSAs, a response rate of 88%. Two of these respondents indicated that they have no valuable information to contribute on this subject. Thus, there were 27 substantive responses in total. The survey was also sent to the Indonesian Deposit Insurance Corporation (IDIC) and the Malaysia Deposit Insurance Corporation (MDIC), and their responses have been consolidated with their respective RSAs, therefore creating one response per jurisdiction. A full list of these 27 RSAs with substantive responses is provided in Appendix 3 of this paper.

facilities have not been developed and implemented in their jurisdiction, as they have a CDIS available and, for prudential reasons, do not differentiate between conventional institutions and IIFS when it comes to providing deposit insurance.

The small market share of Islamic banking assets, the identical regulatory framework for conventional and Islamic banks, and the absence of laws governing Sharī'ah compliance for the financial sector, are considered key reasons for not having an SCDIS.

The remaining 15 RSAs (out of 24) that do not have an SCDIS consider it of high importance to develop and implement such a scheme in the future, with the approximate time frame for developing SCDIS facilities ranging from one to five years. In this respect, five of these 15 RSAs indicated that they have assessed and studied the necessary legal, tax and regulatory changes to accommodate the development of SCDIS in their jurisdiction. Furthermore, two of these five jurisdictions have already created the necessary legal, tax and regulatory framework, although they are yet to be put into operation.

In summary, out of 24 jurisdictions, an SCDIS has been developed and implemented in four jurisdictions (17%); an SCDIS has not been developed and implemented, but it is considered important to develop and implement in 15 jurisdictions (62%); and an SCDIS has not been developed and implemented and is not considered important in five jurisdictions (21%).

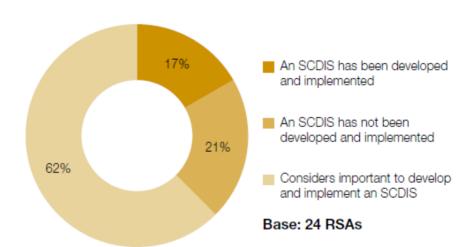


Figure 2: Current Status of SCDIS Development

<sup>&</sup>lt;sup>29</sup> These may, for example, include chequing accounts offered under contracts such as *wadī'ah* or *kafālah*, as well as restricted or unrestricted investment accounts, typically offered under contracts such as *mudārabah* or *wakālah*.

# 4.1.3 Various Types of Accounts and their Protection through SCDIS

On the liability side of an IIFS's balance sheet, certain categories of investment accounts, such as profit-sharing investment accounts (PSIA), are usually operated under a *muḍārabah* or *wakālah* contract, which, in principle, does not allow the guarantee of either capital (principal) or a fixed return on that capital by the *muḍārib/wakīl* (the IIFS). Thus, PSIAs are based on participatory modes (sharing the profit/bearing the loss), and consideration needs to be given as to whether they should, or can, be eligible for depositor protection. PSIAs are usually of two types: (a) restricted PSIA (RPSIA), and (b) unrestricted PSIA (UPSIA).

RPSIAs, where monies are invested in specified assets or types of assets agreed in advance, function similarly to collective investment schemes or discretionary asset portfolios and, as such, are not usually considered for depositor protection. However, the more widely used structure in Islamic banking is the UPSIA, where a bank invests the funds in an asset pool, together with funds from (unremunerated) current accounts and shareholders' funds – which makes the IAH effectively a participant in the IIFS's general banking business – and the IAH is entitled to the profits, and liable for the losses, arising from the investments.

For capital adequacy purposes, some supervisors treat PSIAs as if they were deposits, while some others treat them as only partly risk-bearing. This raises important questions and issues for SCDIS on recognising the distinctive characteristics of PSIAs, the protection mechanism (i.e. the contribution mechanism to the scheme), and how to reflect the interests of IAHs during liquidation or insolvency. However, leaving the IAHs without Sharīʿah-compliant protection may endanger the financial system, because the existence of maturity transformation means that IIFS may be exposed to the risks of a run by IAHs. In addition, the absence of protection may not provide a level playing field for the customers of Islamic, as compared with conventional, banks.

The survey results demonstrate that only two jurisdictions (see Table 1) regard the status of unrestricted investment account holders (UIAHs) as fully like investors, who bear all the earnings volatility and risks of losses on their investment (absent misconduct or negligence on the part of the IIFS). In such cases, the (credit and market risks-weighted) assets financed by the funds of the IAHs are excluded from the denominator of the capital adequacy formula. Forty-four per cent (44%; 12 out of 27) of the RSAs said that, in their jurisdiction, UIAHs are treated like a liability of the IIFS, which bears the risk of the assets funded by UIAHs. Twenty-six per cent (26%; 7 out of 27) of the RSAs indicated that UIAHs are only partially risk

absorbent, so that the IIFS bears part of the earnings volatility on their investment. Therefore, IIFS include a proportion of credit and market risks (known as Alpha ( $\alpha$ )) related to the assets financed by PSIAs, in the denominator of the capital adequacy ratio (CAR) formula. Under option (d), the responses varied between jurisdictions. They generally reflected either a very limited development of Islamic finance in the jurisdiction or a developing regulatory regime, or both.

Table 1: How IAHs are Treated for Calculation of CAR

		No.	%
a.	IAHs are treated like investors who bear all the earnings	2	7
	volatility and risks of losses on their investment (absent		
	misconduct or negligence on the part of the IIFS).		
	Therefore, the (credit and market risks-weighted)		
	assets financed by the funds of the IAHs are excluded		
	from the denominator of the capital adequacy formula.		
b.	IAHs are treated like a liability of the IIFS, which	12	44
	therefore bears the risk of the assets funded by IAH.		
C.	IAHs are only partially risk absorbent, so that the IIFS	7	26
	bears part of the earnings volatility on their investment.		
	Therefore, IIFS include a proportion of credit and		
	market risks (known as Alpha (α)) related to the assets		
	financed by PSIA, in the denominator of the capital		
	adequacy formula.		
d.	Other (please specify below)	6	22
Base/Total		27	

The types of accounts that are accorded protection through SCDIS<sup>29</sup> by the four jurisdictions with SCDIS are summarised in Table 2. A fifth jurisdiction, Jordan, is also included in the table that has designed its SCDIS but at the time of writing this paper has not yet implemented the scheme (See section 4.2.2 for more details.)

Table 2: Various Types of Accounts and their Protection through SCDIS

	Aspect A		Aspect B		
	Type of account	Underlying contract	Whether the account is protected under the SCDIS		
			Yes or No		
Sudan	Current account	Qarḍ	Yes		
	Investment account	Muḍārabah	Yes		
Malaysia	Savings account	Wadī ah, Qarḍ	Yes		
	Current account	Wadī ah, Qarḍ	Yes		
	Commodity  Murābaḥah account	Murābaḥah	Yes		
	Unrestricted investment account	Muḍārabah, Wakālah bil Istithmār	No		
	Restricted investment account	Muḍārabah, Wakālah bil Istithmār	No		
Bahrain	Current accounts	Any	Yes		
	Unrestricted investment account	Any	Yes		
	Restricted investment account	Any	No		
Nigeria	Demand deposit	Qarḍ	Yes		
	Savings	Wadīah	Yes		
	Investment account	Muḍārabah	Yes		
Jordan	Deposit accounts	Any	Yes		
	Unrestricted investment account	Any	Yes		
	Restricted investment account	Any	No		

More recently, in November 2014, the Islamic Deposit Insurance Group (IDIG) of IADI released a discussion paper entitled *Insurability of Islamic Deposits and Investment Accounts*. In this paper, the IDIG looked to classical and contemporary Islamic literature to provide justification with regard to the insurability of Islamic deposits and investment accounts by a deposit insurer.<sup>30</sup> The paper drew two conclusions:

- 1. For Islamic deposits, Sharī'ah requires an IIFS to guarantee the deposits and allows the deposits to be guaranteed by a third party<sup>31</sup> such as a deposit insurer.
- 2. For investment accounts, Sharī'ah prohibits an IIFS from guaranteeing the accounts but allows the accounts to be guaranteed by a deposit insurer, on the strict condition that it fulfils the criteria of independence.

Aside from exploring the availability of DIS for IIFS and the types of accounts accorded protection (as done in this subsection), due analysis should also be done on the underlying principles, concepts and operational procedures of existing SCDIS. It has been aptly established in section 2.2 that the design features and structures of a DIS are critically important in determining its effectiveness as a financial safety net and its ability to mitigate some associated challenges – for instance, moral hazard. In the same spirit, the following subsection looks into the design features and structures of existing SCDIS based on another recent discussion paper released by the IADI and on the IFSB's own follow-up communications with the concerned RSAs.

#### 4.2 Modalities of SCDIS

In addition to the discussion paper on insurability of Islamic deposits, the IDIG of IADI released a discussion paper in November 2014 entitled *Sharī'ah Approaches* for the Implementation of Islamic Deposit Insurance Systems. In this paper, three structures of SCDIS are identified as operationalised<sup>32</sup> in three different jurisdictions – namely, Sudan, Jordan and Malaysia. Malaysia's SCDIS structure has recently undergone a revision where, effective 1 July 2015, the SCDIS no longer offers protection to investment accounts (i.e. all products that adopt

<sup>&</sup>lt;sup>30</sup> The paper clarifies its position that it terms "Islamic deposits" as those funds placed with IIFS on the basis of Sharī'ah contracts of *wadī'ah*, *qar* and *murābaḥah*, while funds placed on the basis of *wakālah* and *mudārabah* are referred to as "investment accounts".

<sup>&</sup>lt;sup>31</sup> As in IADI (2014b, p. 4), "A third-party guarantee is a contract separate from the principal contract created between depositors/investment account holders and the IIFS. The third-party guarantor is not and should not be a party to the principal contract. The third-party guarantor may or may not have an interest in the principal contract. The third-party guarantee contract may be entered into between the depositor/investment account holder and the third-party guarantor or between the IIFS and the third-party guarantor. A third-party guarantee contract is made to express the commitment or promise by a third-party guarantor to make good the depositors'/investment account holders' deposits in the event of an IIFS failure. A consideration may be given to the third-party guarantor in return for the guarantee promised."

<sup>&</sup>lt;sup>32</sup> In the case of Jordan, in the process of operationalisation.

muḍārabah, wakālah bil istithmār or mushārakah contracts) since, following the implementation of the Islamic Financial Services Act 2013, which differentiatebetween Islamic deposits and investment accounts, the latter do not satisfy the insurability criteria as set out by the SCDIS in its guidelines. Bahrain also adopts a slightly different variant of a takāful-based SCDIS structure. These four modalities are now considered individually below.

#### 4.2.1 Sudan – Takāful Model

Sudan introduced an SCDIS in 1996 with the aim of contributing to the stability of the financial system as well as protecting depositors and IAHs. The SCDIS was endorsed by the Central Bank of Sudan's Higher Sharī'ah Supervisory Board (HSSB), which ruled in resolution (13/92) that the system be implemented based on the *takāful* (joint guarantee or solidarity) concept. Under this concept, the participants in the SCDIS include IIFS, IAHs of IIFS, the Ministry of Finance and the Central Bank. The participants commit to make contributions to enable mutual protection and do not expect any financial compensation. The contributions are maintained in two *takāful* funds – one for the guarantee of deposits, and another for the guarantee of investment accounts. This separation of funds is attributed to the HSSB's resolution that IIFS shall not participate in guaranteeing the capital of IAHs (see Figure 3).

For the establishment of the *takāful* funds, initial capital was contributed by the IIFS, the Ministry of Finance and the Central Bank. Subsequent contributions to the funds in the form of annual deposit insurance contributions are made by the respective participants in the funds. The subsequent contributions to the *takāful* fund for the guarantee of deposits – that is, current account and savings deposits – are made by the IIFS, the Ministry of Finance and the Central Bank. For the guarantee of investment accounts, the subsequent contributions to the fund are made by the IAHs, the Ministry of Finance and the Central Bank.

The annual contributions are calculated as a flat rate based on the average total insured Islamic deposits and investment accounts held as at 31 December of the preceding year. The Ministry of Finance and the Central Bank each pay 15% of the total amount of the annual IIFS premiums.

The *takāful* funds are owned by the respective participants, and both funds have a separate legal and financial status. They are only managed by the Bank Deposit Security Fund (BDSF), which is mandated to utilise the *takāful* funds to reimburse insured deposits and investment accounts in the event of an IIFS failure. For reimbursements arising due to the failure of a member IIFS, the BDSF is allowed by the HSSB to prescribe the coverage limit with the recommendation

that the entire amount of deposits be covered provided that the fund has sufficient resources to do that. For investment accounts, investment losses are deducted when calculating the amount payable.

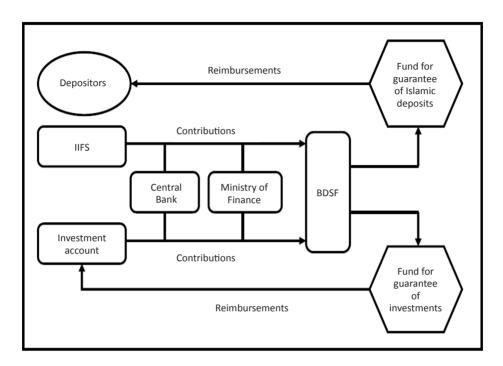


Figure 3: SCDIS Based on Takāful - Sudan

BDSF = Bank Deposit Security Fund

Source: IADI (2014c).

The surplus funds are invested solely in Sharī'ah-compliant instruments. In return for managing the funds, the BDSF receives a fee based on the Sharī'ah concept of wakālah bi al-ajr (agency with fee). In the event of a member bank's failure, the BDSF is required by law to reimburse the insured depositors and IAHs no later than three months from the date of a winding-up order. The priority of payments set out in the Banking Business (Organization) Act 2003 provides a basis for the reimbursement of depositors. Should there be a shortfall where a *takāful* fund is in deficit, the BDSF may withdraw funds from the other *takāful* fund in the form of an Islamic loan. It is also permitted to source additional funds from the government or market based on Sharī'ah principles.

Once the BDSF has reimbursed insured deposits and investment accounts, the *takāful* funds are subrogated to the extent of the amount of the payment made,

to all the rights and interests of the depositors and IAHs. This allows the BDSF to recover the losses incurred and restore the depleted *takāful* funds for future reimbursements.

#### 4.2.2 Jordan – Takāful Model

This *takāful* model is slightly different from the model in Sudan and is yet to be operationalised. Currently, Jordan runs a CDIS, which is compulsory for the commercial banks and optional for IIFS. However, the Jordanian government has approved the proposed amended version of the relevant law in June 2013 that will enable the SCDIS to come into existence, and this scheme will be compulsory for IIFS. The Fatwa Council of Islamic Studies and Research has issued the requisite Fatwa for establishing the SCDIS based on the Sharī'ah principles of *takāful*.

The SCDIS will be a legal entity that will be segregated and administered separately and independently from the country's CDIS, thus preventing any co-mingling of funds or cross-subsidisation. The fund will be managed by Jordan's deposit insurance corporation under the *wakālah bi al-ajr* (agency with fee) arrangement. The fund will receive contributions as a donation (*tabarru*') from IIFS and IAHs, whereas the Ministry of Finance contributes to the capital on a pro rata basis, by analogy with the conventional system.

The SCDIS insures Islamic deposits and UPSIAs; RPSIAs for which an IIFS acts as agent are not insured, as the investors are more sophisticated and are assumed to evaluate the risks of the projects in which they choose to invest. The UPSIA is split into two portions: an invested portion and an uninvested portion; the percentage of each portion is designated in a separate contract with the capital provider.

Based on the above protection coverage, the fund has been divided into two separate portfolios: (a) a *takāful* portfolio for credit accounts (including deposits and the uninvested portion of investment accounts), and (b) a *takāful* portfolio for the invested portion of UPSIA (see Figure 4). The contributions paid to the SCDIS against insuring credit accounts are to be borne by the IIFS, whereas the annual contributions for the invested portion of investment accounts are to be borne by the investors themselves and paid by the IIFS on their behalf.

In the event of an IIFS failure the insured credit accounts and invested portion of the unrestricted investment account (UIA) will be covered to the maximum coverage limit of 50,000 Jordanian dinars for each depositor at each IIFS. All Islamic deposits and investment accounts are ranked pari passu with regards

to priority of payments. Relevant  $tak\bar{a}ful$  portfolios are to be drawn upon when reimbursing credit accounts and UPSIAs. In the case of a shortfall in any portfolio, the fund may borrow in the form of a benevolent loan  $(qard \ hasan)$  from the conventional fund or from any third party in case of the fund's deficiency. The surplus of funds must be invested in Sharī'ah-compliant and risk-free instruments, such as  $suk\bar{u}k$  issued by the government. In the event of the fund's liquidation, the remaining balance will be transferred to the Zakat fund, after covering all losses and expenses incurred by the Islamic fund.

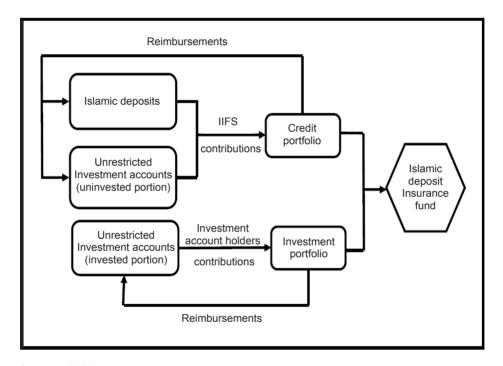


Figure 4: SCDIS Based on Takāful - Jordan

Source: IADI (2014c).

One key difference between Sudan's and Jordan's *takāful* SCDIS is that in Jordan, the UPSIAs are split into uninvested portions and invested portions, with the former being covered by contributions by IIFS and the latter by IAHs. In addition, RPSIAs are not covered by the SCDIS. In Sudan, all investment accounts are to be covered from contributions by IAHs, and IIFS are not involved.

#### 4.2.3 Bahrain – Takāful Model

On 13 January 2011, the Central Bank of Bahrain (CBB) issued its Resolution No. 34 of 2010 with respect to promulgating a "Regulation Protecting Deposits and Unrestricted Investment Accounts" in accordance with the provisions of Article

177 of the CBB and Financial Institutions Law No. (64) of 2006. This resolution is considered an amendment to Bahrain's earlier CDIS/SCDIS, which was in accordance with Resolution No. (3) of 1993. The previously post-funded scheme has been switched to a new pre-funded scheme in order to align Bahrain's CDIS/SCDIS more closely with international best practices, where most DIS have turned to operationalising pre-funded schemes. This ensures availably of sufficient funds in the deposit insurance fund to cover eligible claims in the unlikely event of a member bank's failure.

The new scheme requires the establishment of two separate funds (conventional fund and Islamic fund), which shall be maintained and administered by one board in which the funds are accumulated separately in advance based on regular contributions by the member banks (See Figure 5). Each fund shall constitute a separate legal entity and shall have an independent balance sheet from the CBB. Therefore, the protection is accorded by a third-party legal entity and not by the CBB itself.

The contribution of each member conventional bank or Islamic bank in the total amount of the respective funds shall be determined on an annual pro-rata basis of the total eligible accounts. The CBB shall provide the board with the necessary data to allow it to determine the amounts of contributions each conventional bank or Islamic bank shall make. The board is required to periodically assess the size of the conventional fund and Islamic fund in relation to liabilities to be covered and, where appropriate, make recommendations to the CBB for increasing or decreasing the amounts of the conventional fund and Islamic fund.

The board may allow member banks to make their contribution in the form of monthly instalments, which shall be charged against the profit and loss account of these member banks. Furthermore, and as per Article (15) of the regulation, monies once contributed shall legally belong to the fund and are non-refundable in any circumstance to the contributing members.

Under the new regulation, the SCDIS in Bahrain extends coverage also to UIAs in Islamic banks. Under the old scheme, only Islamic deposits, and therefore only current accounts in Islamic banks (being the only type of deposit accounts offered by Islamic banks), were covered. This amendment was introduced to maintain a level playing field and to encourage a healthy competitive environment between conventional and Islamic banks in Bahrain.

The proposed new regulation for the protection of deposits and UIAs was approved by the Sharī'ah Supervisory Board (SSB) of the CBB, based on the

<sup>&</sup>lt;sup>33</sup> Translated into English from the original Arabic opinion expressed by the SSB of the CBB.

following: "After hearing an explanation about the general framework of the regulation proposed by the CBB for the protection of deposits and unrestricted investment accounts that aims to protect small depositors and investors in these accounts; and after hearing the clarifications provided by the CBB, and based on incorporating the proposed amendments by the SSB into the text of the proposed regulation; [the SSB of the CBB] is of the opinion that the essence of the issue and the parameters included within the scheme to ensure its independence is in compliance with Sharī'ah rules and principles. The basis of approval stems from considering the scheme a form of takāful built on providing donated contributions that are allocated for the coverage of risks, which the holders of unrestricted investment accounts and current accounts in retail Islamic banks may be exposed to." 33

The trigger for the compensation from the Islamic fund will be based on one of these two events:

- i. any bank being put under administration by the CBB; or
- ii. any bank being put into liquidation

In each case, such a bank is hereinafter referred to as a "defaulting bank".

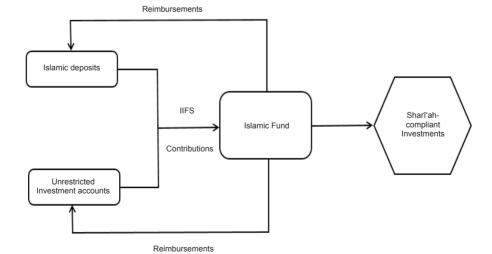


Figure 5: SCDIS Based on Takāful - Bahrain

Source: IFSB Secretariat - based on CBB's Resolution No. (34) for 2010.

The compensation to each eligible depositor and/or investor is up to a maximum coverage of BD20,000 (twenty thousand Bahraini dinars) from the total amount of his/her eligible accounts held with the defaulting bank regardless of the number of accounts and their currency. Other currencies shall be converted into Bahraini dinars at the exchange rate on the date on which the CBB determines a bank is a defaulting bank.

In the event of the amounts of the Islamic fund being insufficient to cover the total compensation payable, the SCDIS may cover the shortfall by arranging Sharī'ah-compliant financing, and such financing facilities shall be reimbursed by future contributions from the Islamic banks. Investments made from the Islamic fund must comply with Sharī'ah principles and be under the supervision of the CBB's SSB.

In contrast to the *takāful*-based SCDIS in both Sudan and Jordan, the Bahraini model does not specify IAHs to make contributions for according protection on investment accounts. Furthermore, the ownership of the Islamic fund is given to the SCDIS, which itself is a separate legal entity. On the other hand, consistent with Jordan and unlike Sudan, the Bahraini SCDIS does not accord protection to RPSIAs.

## 4.2.4 Malaysia – Kafālah Bi Al-Ajr Model

This model of SCDIS was introduced by Malaysia on 1 September 2005. The system is administered by the country's deposit insurance corporation to provide protection for Islamic deposits, to provide incentives for sound risk management among IIFS, and to promote or contribute to the stability of the country's Islamic financial system. Membership of the SCDIS is compulsory for all Islamic commercial banks licensed under the country's Islamic Financial Services Act 2013.

The SCDIS model was endorsed by the Sharī'ah Advisory Council (SAC) of Bank Negara Malaysia, which is the highest Sharī'ah authority on Islamic finance matters. In view of the importance of an SCDIS in building public confidence and promoting the country's financial system stability, the SAC resolved that the system could be implemented based on the concept of guarantee with fee (kafālah bi al-ajr). Under this concept, the SCDIS guarantees all insured Islamic deposits of a member IIFS, in exchange for a fee (see Figure 6). This fee belongs to the SCDIS, and the SAC recognises such a fee as income for the deposit insurance corporation. The SCDIS has set a coverage limit of 250,000 Malaysian ringgits per depositor per bank that it will reimburse to insured depositors in the event of a member bank failure.

The fee for the guarantee is collected by the SCDIS as a proportionate value to the total amount of Islamic insured deposits as of 31 December of the preceding assessment year. Until assessment year 2007, this fee was a flat rate; however, since assessment year 2008, a differential premium system for the calculation of fees was implemented, so as to provide financial incentives for IIFS with sound risk management practices. The fees collected by the deposit insurer from IIFS are segregated from the premiums paid by conventional banks and are not comingled; hence, the SCDIS is administered separately from the CDIS.

In the event of a member IIFS failure, the SCDIS will make reimbursements for insured deposits in a prompt manner from its own fund. However, in case of any funds shortfall, the SCDIS is not allowed to source additional funds from the CDIS. Instead, it must seek external funding from the government or market on a Sharī'ah-compliant basis. The priority of payments will be based on the SAC's resolution. The SCDIS also has legal power to recover the amounts it has paid out for deposits in the event of a member IIFS failure; such a measure is to ensure that the depleted funds in the SCDIS are restored for future reimbursements. The recovery of amounts will be from the IIFS itself following the liquidation of its assets, subject to the necessary laws on priority of payments and distribution to the IIFS's creditors, including the SCDIS.

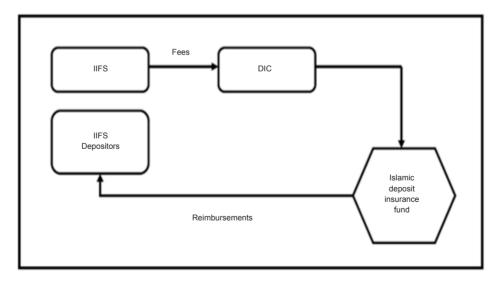


Figure 6: SCDIS Based on Kafālah Bi Al-Ajr - Malaysia

#### DIC = Deposit Insurance Corporation

Source: IADI (2014c), with slight modifications by the authors to reflect Malaysia's current SCDIS post-30 June 2015.

#### 4.2.5 Summary of SCDIS Modalities

In summary, the *kafālah bi al-ajr* mechanism has a number of differences as compared to the *takāful* models described earlier:

- 1. In the kafālah bi al-ajr model, the IIFS pay a fee to the deposit insurer in exchange for protection of deposits in the event of an IIFS failure; this fee is owned by the deposit insurer. In contrast, in the takāful model, the deposit insurer is only an agent that operates and manages pool(s) of funds that are collected as contributions by participating IIFS in the SCDIS (with the exception of the SCDIS in Bahrain, where the Islamic fund owns the contributions).
- 2. In the kafālah bi al-ajr model, the fee for deposit protection is paid by the IIFS; whereas in the takāful model of Sudan, the contribution for the protection of deposits is paid by the IIFS, while that for the protection of investment accounts is paid by the account holders. As for the takāful model of Jordan, the contribution for the protection of deposits and the uninvested portion of UPSIA is paid by the IIFS, whereas the contribution for the protection of the invested portion of UPSIA is paid by the account holders. On the other hand, the Bahraini regulation of SCDIS does not specify that contributions for investment accounts are to be specifically made by the IAHs.
- 3. In the *kafālah bi al-ajr* model, the reimbursements are made from the deposit insurer's fund; whereas in the *takāful* model, the reimbursements for insured deposits are made from the respective *takāful* funds.

The analyses above highlight the differing Sharī'ah views and operational models of SCDIS, resulting in variations in models and approaches for the implementation of SCDIS. Table 3 summarises the selected features of SCDIS as operationalised in the five jurisdictions that currently operate, or are in process to operate, the scheme.

Apart from the Sharī'ah and operational models, differences in the governance structures of SCDIS were also identified. The following subsection highlights the different governance structures of SCDIS based on responses received to the IFSB members' survey.

Table 3: Selected Features of Sharīʻah-Compliant Deposit Insurance Schemes

	Bahrain	Malaysia	Nigeria	Sudan	Jordan	
Year established	2011	2005	2011	1996	In process	
Rationale for establishment	To develop the current post-funded scheme and replace it with a new prefunded scheme to bring deposit protection more closely in line with international best practices	To allow the depositors of Islamic member banks to enjoy the same protection accorded to the depositors of conventional member banks	To cater for the (potential) depositors of IIFS that were about to be licensed at that point of time by the central bank	To participate in the stability and soundness of the banking system by protecting depositors	Currently, Jordan runs a CDIS, which is compulsory for the commercial banks and optional for IIFS. The SCDIS will be com- pulsory for IIFS	
Categories of IIFS covered	Full-fledged Islamic commercial banks	Full-fledged Islamic commercial banks and Islamic windows	Full-fledged Islamic commercial banks, Islamic windows, and Islamic microfinance banks	Full-fledged Islamic commercial banks and Islamic investment banks	Full-fledged Islamic commercial banks	
Types of accounts protected	Islamic deposits and unrestricted investment accounts	<ul> <li>Savings account (wadī'ah, qarḍ)</li> <li>Current account (wadī'ah, qarḍ)</li> <li>Commodity murābaḥah account (murābaḥah)</li> </ul>	<ul> <li>Demand deposit (qarq)</li> <li>Savings (wadī ah)</li> <li>Investment account (muḍārabah)</li> </ul>	<ul> <li>Current         account         (qard)</li> <li>Investment         account         (mudārabah)</li> </ul>	Islamic deposits and unrestricted investment account	

	Bahrain	Malaysia	Nigeria	Sudan	Jordan	
Who is covered	Individuals (local customers) and foreign customers	Individuals (local customers), corporates (businesses), foreign customers and others	Individuals (local customers), corporates (businesses), foreign customers and others	Individuals (local customers), corporates (businesses) and foreign customers	Residents and non-residents (individuals and corporates)	
Underlying principle	<i>Takāful</i> mechanism	Kafālah bi al-ajr (guarantee with fee)	Kafālah bi al-ajr (guarantee with fee)	Takāful mechanism	Takāful mechanism	
Contributors	IIFS	IIFS	IIFS	IIFS, IAHs, Central Bank and Ministry of Finance	IIFS, IAH and Ministry of Finance	
Nature of the scheme (pre- funded or post-funded)	Pre-funded	Pre-funded	Pre-funded	Pre-funded	Pre-funded	
Coverage limit	BHD20,000	MYR250,000	NGN500,000	Not specified; recommended that the entire amount of deposits is covered provided that the fund has sufficient resources to do that	JOD50,000	

## 4.3 Governance Structures and Design Features

In the IFSB survey referred to in section 4.1, four RSAs were identified to be operating SCDIS. Among these, the operational modality of two RSAs (Sudan and Bahrain) was based on the *takāful* structure, while the other two RSAs (Malaysia and Nigeria) operated a *kafālah bi al-ajr* SCDIS. The IFSB survey further identified differences in the governance structures of these four SCDIS, which are described below.

## 4.3.1 Governing Body Structure

Sudan indicated that its SCDIS had a fully separate own board of directors or a similar governing body. The other three RSAs (Bahrain, Malaysia and Nigeria) indicated that the SCDIS shares the governing body with a CDIS in their jurisdiction. The RSAs were further asked to describe how members of the governing body are appointed (e.g. nominated by the Ministry of Finance, nominated by industry, etc.). Box 2 summarises the RSAs' responses.

## Box 2: Responses by RSAs on how Members are Appointed

- Malaysia: The board of directors comprises nine members as follows:

   (a) two of these directors are ex officio members of the board i.e. Central Bank Governor and the Secretary General of Treasury of the Ministry of Finance; and (b) the remaining seven directors are non-ex officio directors which are appointed by the Minister of Finance: (i) two of these non-ex officio directors are from or have experience in the public sector, and (ii) five of these non-ex officio directors are from or have experience in the private sector.
- Sudan: According to the legislation, the board shall be constituted as follows: (a) the Governor or Deputy Governor as Chairman; (b) the General Manager, Member and Rapporteur; (c) the First Under-Secretary, Ministry of Finance; (d) the General Manager, Banking Control and Financial Institutions General Administration of the Central Bank; (e) three members from persons of competence and expertise in the banking to be appointed by the Union of local Banks and approved by the Central Bank; and (f) two persons, of competence and expertise, to be appointed by the Minister of Finance in consultation with the Governor.
- Bahrain: The board consists of 11 persons appointed by the Central Bank's Governor, whose membership shall be for a three-year renewable period: (a) two representatives of the Central Bank, one of whom shall be

Chairman and the other the Deputy Chairman of the Board; (b) four representatives of retail banks in the jurisdiction who shall be appointed by the Governor; (c) two representatives of Government, the first representing the Ministry of Finance, the second representing the Ministry of Industry & Commerce, both of whom shall be nominated by their respective Ministers; and (d) three independent persons, not from the above categories, appointed by the Governor.

Nigeria: The members are nominated by the government (presidency).

### 4.3.2 Sharī'ah Compliance Arrangements

When asked whether the SCDIS has Sharī'ah advisors,<sup>34</sup> Sudan indicated that the SCDIS has an internal Sharī'ah committee or equivalent. Malaysia and Bahrain commented that the Central Bank's Sharī'ah board also advises the SCDIS. Bahrain, Malaysia and Sudan further confirmed that the underlying structure of the scheme was approved by Sharī'ah advisors.

Sudan and Malaysia also responded that their SCDIS have internal Sharī'ah compliance arrangements (i.e. staff who ensure Sharī'ah compliance on a day-to-day basis). Malaysia responded that, as part of the control function, the Audit and Consulting Services Division of the SCDIS carries out a financial audit on an annual basis that covers the financial aspect of the SCDIS operations to ensure compliance with the Sharī'ah requirements. The Enterprise Risk Management (ERM) division of the SCDIS implements the ERM framework and procedures, which include the management of Sharī'ah non-compliance risk. Sharī'ah non-compliance risk is owned by respective divisions where their operations involve Islamic matters.

Furthermore, Malaysia also indicated that the Islamic Research and Development (IRD) Department of the SCDIS is responsible for conducting research and studies pertaining to SCDIS operations to assist the management in developing and implementing an effective SCDIS. For such purpose, the Department, among other things, identifies Sharī'ah issues, conducts research and studies on those issues, and makes recommendations on those issues to the management. In certain instances, the IRD Department helps to refer the issues to the Sharī'ah Advisory Council for resolutions and formulates relevant policies on SCDIS for board approval.

Bahrain, which previously did not have internal Sharī'ah compliance arrangements, indicated that investments made from the Islamic fund must comply with Islamic Sharī'ah principles and be under the supervision of the Central Bank's Sharī'ah

<sup>&</sup>lt;sup>34</sup> "Sharī'ah advisors" in this context refers to the SCDIS's internal Sharī'ah committee or other body, which oversees compliance with Sharī'ah principles within the organisation, whether or not a national framework also exists for Sharī'ah governance.

board. However, recently, the CBB has issued Resolution No. (20) for the Year 2015 in Respect of the Establishment of a Centralized Sharī'ah Supervisory Board under which there will be an internal Sharī'ah review function within the CBB. Part of the internal Sharī'ah review function's responsibilities will be the internal Sharī'ah compliance review of the SCDIS in Bahrain.

## 4.3.3 Nature of the SCDIS Scheme and Investment Strategy

The respondents were asked to indicate whether the scheme is pre-funded, post-funded or mixed. In this context, "pre-funded" refers to a system in which the SCDIS builds up a fund, from premiums or other contributions, considered sufficient to respond to any foreseeable failure; whereas "post-funded" refers to a system in which the SCDIS responds to failures – for example, using funds loaned by the government – and recovers the cost by levying contributions after the event. In a mixed system, a fund would be built up in advance, but there would be provision to levy additional contributions should it prove insufficient.

The results indicate that all the respondents have a pre-funded system. They were further asked to describe any statutory restrictions on how the accumulated contributions are to be invested. Box 3 summarises the RSAs' responses on the scheme's actual investment strategy.

## Box 3: Responses by RSAs on Scheme's Investment Strategy

- Sudan: The SCDIS's investment policy depends on minimising risks as much as possible and engaging in secure, highly profitable investments that can be liquidated easily. Government securities constitute the major part of the fund's investment, beside any new investment opportunities proposed by the management and approved by the board
- Malaysia: The objectives of our SCDIS investment are for capital preservation and maintenance of liquid assets. The SCDIS's investments are held to maturity.
- Bahrain: Investments made from the Islamic fund must comply with Islamic Sharī'ah principles and be under the supervision of the Central Bank's Shari'ah board. As per the decision of the board, investment should be done only in liquid safe financial instruments such as the country sovereign (bonds/ṣukūk) or GCC sovereign or bonds/ṣukūk issued by government-owned bodies.

Nigeria: The investment strategy is to invest in near-liquid and Sharī`ah compliant investments (e.g. şukūk issued by the International Islamic Liquidity Management Corporation).

When asked whether the investment strategy, or individual investments, have to be approved by Sharī'ah advisors, Sudan responded that Sharī'ah advisors approve individual investments, while Bahrain indicated that they approve strategy in general terms. Nigeria responded that advisors approve neither individual investments nor investment strategy. In Malaysia, the SAC resolved that investments must be Sharī'ah-compliant, and this resolution is incorporated in the investment policy approved by the board of directors and in the law

#### 4.3.4 Accumulated Contributions at SCDIS

With respect to whom the accumulated contributions are considered to belong, Nigeria specified that accumulated contributions belong to the clients of those banks, while Sudan and Malaysia indicated that they belong to the body administering the SCDIS. Bahrain stated that the contributions of the conventional and Islamic banks belong to the conventional and Islamic funds, respectively. Each of these funds constitutes a separate legal entity whose balance sheet is independent from the Central Bank.

When asked whether there are any back-up guarantees from government should the fund be insufficient, Sudan, Malaysia and Nigeria responded affirmatively. Only Bahrain indicated otherwise, explaining that in the event of the amounts of the concerned fund being insufficient to cover the total compensation payable in accordance with the Regulation, the board may cover the shortfall by borrowing or arranging Sharī'ah-compliant financing in the case of the Islamic fund (upon such terms and conditions as it considers appropriate) and such borrowings and financing facilities shall be reimbursed by future contributions. Of the three RSAs reporting government guarantees, only Sudan and Malaysia have devised a Sharī'ah-compliant way of deploying those guarantees.

#### 4.3.5 Contributions and Risk Assessment at SCDIS

Malaysia and Nigeria confirmed that contributions to the scheme are based on the assessed risk of each contributing bank. In the written comments, Nigeria mentioned that they use a Differential Premium Assessment System at the SCDIS, while Bahrain indicated that the contribution of each conventional bank or Islamic bank in the total amount of the respective funds shall be determined on an annual pro-rata basis, based on the total eligible accounts of all conventional banks and Islamic banks in the jurisdiction. Bahrain further stated that no contribution (or part thereof) shall be refundable to a conventional bank or Islamic

bank in any circumstance.

Risk assessment is carried out, in Nigeria, by the body administering the SCDIS, and in Malaysia by both the body administering the SCDIS and the Central Bank. Sixty-five per cent (65%) of the risk score is attributed to the risk assessed by the SCDIS, while the remaining 35% is attributed to that assessed by the Central Bank. The score of a member bank will then be translated into contribution rates to determine the contribution payable by the member bank.

Malaysia, Bahrain and Nigeria confirmed that deposit insurance premium/ contribution rates are set in the same way for Islamic and conventional banks in their jurisdiction. Sudan does not have conventional banking in the jurisdiction.

# 4.3.6 Triggers for Payments, and Responsibility for Activating Triggers

When RSAs were asked what triggered payments to be made to clients of a failed bank, Nigeria indicated that one such trigger was revocation of the banking licence of the failed bank. Sudan responded that a decision by the Central Bank to liquidate the bank in question was the trigger, while Malaysia indicated it was a winding-up order issued by the court in respect of an Islamic member bank. Bahrain responded that the trigger was the bank being put either under administration by the Central Bank or into liquidation. In all four jurisdictions, it is the SCDIS that is responsible for determining that the trigger has been activated.

A further question asked whether payments made to the clients of a failed bank are considered to have a contractual basis and, if so, what is considered to be the relevant contract. Malaysia and Nigeria responded that payments of insured deposits to depositors are made based on the contract of *kafālah bi al-ajr* between Islamic member banks and SCDIS.

## 4.3.7 Timetable and Priorities for Payments to Eligible Clients

With respect to payments to eligible clients, Sudan and Nigeria indicated that they have a timetable for payments, and that those payments are prioritised.

When asked to explain those priorities, Nigeria responded that it prioritises insured non-interest deposits over uninsured non-interest deposits. Malaysia indicated that, under its new law, assets of investment accounts are liquidated separately. Hence, priority of payments for these is separated from that for deposits.

Fifty per cent (50%) of the RSAs (Malaysia and Nigeria) indicated that the scheme can contribute financially to the resolution of a failing bank (e.g. by takeover). These two RSAs also responded on how participation (and trigger) would be determined. Nigeria said that it can be determined based on early warning assessment and a written request from the failing bank, while Malaysia said that the SCDIS is provided with relevant powers under the SCDIS Act to implement resolution actions promptly at minimum cost to the financial system. The SCDIS may exercise such powers upon obtaining a written non-viability notice of an Islamic member bank from the Central Bank.

### 4.3.8 Use of SCDIS in the Past and its Testing in Simulation

When the RSAs were asked whether the SCDIS has been used in the past (in response to an actual banking failure), only Sudan responded affirmatively. Similarly, only Malaysia indicated that the SCDIS has been tested in a simulation of a banking failure. Following those simulations, some policies and procedures in relation to the operations of SCDIS had been improved and the roles and responsibilities of relevant divisions within SCDIS had been enhanced.

So far, sections 4.2 and 4.3 of this paper have established the modalities, governance structures and design features of SCDIS in practice. The following subsection analyses the efforts currently under way in various jurisdictions to establish SCDIS and the key challenges being faced in operationalising the same.

## 4.4 Key Challenges in Operationalisation

In the IFSB members' survey, 15 RSAs (out of 24) that do not have an SCDIS considered it of high importance to develop and implement such a scheme in the future, with the approximate time frame for developing SCDIS facilities ranging from one to five years (see sub-section 4.1.2 for details). These RSAs were asked to identify the current status of the development and implementation of SCDIS in their jurisdiction. Of the 15, five indicated that they have assessed and studied the necessary legal, tax and regulatory aspects to accommodate the development of SCDIS in their jurisdiction; in only two cases have the necessary legal, tax and regulatory frameworks been created, but not yet put into operation (see Table 4).

However, none of the 15 RSAs had assessed the operational procedures and processes under which the SCDIS would function. The lack of response on this aspect appears significant – in particular, for those RSAs that do not have sufficient experience in regulating and dealing with Islamic finance activities and thus may find the development of an SCDIS facility a more challenging task. With respect to the issues relating to Sharī'ah constraints on and other challenges in

introducing an SCDIS, an assessment has been conducted only by four RSAs (out of 15). Overall, the responses indicate that a significant number of jurisdictions are reviewing issues relevant to developing an SCDIS in their jurisdiction.

Table 4: Assessment of the Existing Arrangements for the Development of SCDIS Facilities

		Yes		No		Total	
		No.	%	No.	%	No.	%
1	The necessary legal, tax and regulatory aspects have been studied to accommodate the development of SCDIS in your jurisdiction	5	33	10	67	15	100
2	The necessary legal, tax and regulatory framework has been created, but has not yet been put into operation	2	13	13	87	15	100
3	The operational <b>procedures and processes</b> have been set out under which the SCDIS would function.	10/	1 0 1	 15	100	) 15	100
4	Sharī'ah constraints and other challenges on the introduction of SCDIS have been assessed by the authorities in your jurisdiction.	4	27	11	73	15	100

To understand the key challenges encountered in developing and implementing an SCDIS, the survey asked the 20 RSAs that do not have SCDIS (including 15 that consider it important to have one) to rank a list of six challenges in order of their significance to them on a scale of 1 (the most significant) to 6 (the least significant). The results (see Table 5) indicated that the development of SCDIS is not without significant challenges, although the challenges varied between jurisdictions. Legal issues (such as formulating the necessary changes to existing laws, regulations, etc.), Sharī'ah issues (such as differing interpretations of Sharī'ah rulings, or  $fatāw\bar{a}$ , on financial matters across the jurisdiction), and legislative issues (such as securing the necessary approvals from the legislative body, Ministers, etc.) are considered to be the most significant challenges.

A lack of supporting infrastructure (such as human resources, including skills and expertise) is also perceived as somewhat significant. On the other hand, investment tools or schemes (i.e. limitations on appropriate Sharī'ah-compliant instruments for SCDIS to invest in) and setting procedures and guidelines on SCDIS (including developing a process ensuring Sharī'ah compliance of SCDIS operations) are perceived as the least significant challenges. However, once a SCDIS is to be introduced in any jurisdiction, all of the identified challenges would need to be considered at the appropriate stage of policy decision. Other

than the challenges listed in Table 4, RSAs were further asked whether there is any specific issue or challenge that they are currently facing in developing the SCDIS in their central bank/monetary authority. Almost 60% (16 out of 27) RSAs responded that they do not have any further specific issue or challenge.

Table 5: Key Challenges in the Development of SCDIS (Base = 20 RSAs)

	TOTAL			
CHALLENGES	WEIGHTED MEAN	RANK		
Legal issues – formulating the necessary changes to existing laws, regulations, etc.	2.40	1		
Sharīʻah issues – such as differing interpretations of Sharīʻah rulings, or <i>fatāwā</i> , on financial matters across the jurisdiction	3.25	2		
Legislative issues – securing the necessary approvals from your legislative body, Ministers, etc.	3.50	3		
Supporting infrastructure (such as human resources including skills and expertise, etc.)	3.80	4		
Investment tools or schemes – limitations on appropriate Sharīʻah -compliant instruments for SCDIS to invest in	3.95	5		
Setting procedures and guidelines on SCDIS (including developing a process ensuring Sharī'ah compliance of SCDIS operations)	4.10	6		

Note: The ranking is based on average score presented in ascending order, with a lower score representing higher significance. In Table 5, the weighted mean of 2.40 is calculated using the weighted score. The average score of other factors is obtained in a similar manner.

Of the remainder, one RSA mentioned that the additional challenges include:

- a. lack of guiding principles and different Sharī'ah views on "deposit" insurance:
- b. achieving the correct balance between objectives of Sharī'ah compliance and effective safety net functions; and

c. development of risk premium assessment methodology, while considering PSIAs as risk absorbent or as potentially covered accounts.

Another RSA indicated that additional specific issues or challenges that are currently faced by them include:

- a. public awareness of SCDIS and understanding of coverage under SCDIS; and
- b. intervention and failure resolution readiness to deal with unlikely failures of Islamic member banks.

A further RSA commented that specific issues include:

- a. availability of a range of eligible Sharī'ah-compliant instruments and a shortage of high-quality (highly rated) Sharī'ah-compliant liquid assets;
   and
- b. setting procedures and guidelines for the scheme (including developing a process to ensure Sharī'ah compliance of Islamic fund operations).

Overall, the IFSB survey indicates that, in the opinion of RSAs, an SCDIS not only contributes to systemic stability and to consumer protection, but also helps to create a level playing field for Islamic and conventional banks. It has provided a broad review of major issues relating to implementation of the SCDIS, including compliance with Sharī'ah rules, and the adoption of best practices for implementing the SCDIS.

Unsurprisingly, given that Islamic deposit insurance is relatively new, the results highlighted that currently only a few jurisdictions have set up an SCDIS, while some other countries provide protection for Islamic deposits under their conventional systems. Furthermore, those who have an SCDIS in place follow very different operational models due to their IIFS's specificities. The results demonstrated that treatment of PSIAs for the calculation of capital adequacy in respondent RSAs varied from jurisdiction to jurisdiction; thus, the debate on the treatment of PSIAs as deposits or investments continues to prevail internationally, and this and Sharī'ah issues impact on whether they should be protected under the deposit insurance system. Determining the insurability of deposit products of an IIFS and the priority of payments for each product is considered an important challenge for supervisory authorities. Also, jurisdictions face difficulties in investing surplus deposit insurance funds, as there are limited Islamic instruments.

In the light of the survey results, the question for Islamic finance is not whether

a deposit insurance scheme should be implemented, but how it should be structured to be Sharī'ah-compliant. It is noted that out of the 15 RSAs surveyed that consider it of high importance to develop and implement a SCDIS in future, none has set out the operational procedures and processes under which the SCDIS would function. In current practice, existing SCDIS have been based on two modalities: takāful-based SCDIS and kafālah bi al-ajr-based SCDIS.

## 4.5 Summary of Key Considerations in SCDIS

The working paper so far has discussed several aspects of SCDIS, including the scheme's various design features, governance structures and modalities as practised in some jurisdictions. These structural considerations are a key dimension that has the potential to impact the effectiveness of SCDIS.<sup>35</sup> Specifically, Sharī'ah considerations and the operational models of SCDIS are identified as varying slightly among the jurisdictions that have already implemented such a scheme.

The existing SCDIS in practice are broadly found to be utilising two Sharī'ah-compliant concepts: *takāful and kafālah bi al-ajr*. In these, there have been some Sharī'ah concerns identified. For instance, within the *takāful*-based SCDIS, some of the concerns include:

• Ownership of the Takāful Fund(s): The concept of takāful is based on the idea of mutual cooperation and solidarity among the participants, who commit to contribute a certain amount of money into the takāful fund in the form of a donation (tabarru'). This raises the issue of who actually owns the takāful fund. Hence, on a possible liquidation of the SCDIS, how should the funds be treated? In this regard, there are various Sharī'ah positions on who has an ownership claim on the fund's residual value. It can be noted that for the takāful-based SCDIS, which is applied in Jordan, the Fatwa Council of Islamic Studies and Research resolved that the takāful fund is not owned by any single entity participating in the scheme and therefore, upon its liquidation, the funds should be transferred into the national zakāh fund under the Ministry of Endowment and Islamic Affairs. Another view centres on the idea that the ownership of the *takāful* fund belongs to the participants who are, in the case of the takāful-based SCDIS, the IIFS participating in the scheme. This implies that the fund's residual value can be distributed to the participating IIFS on the basis of hibah. An exception is when the takāful is structured as a waaf under which the funds are not owned by

<sup>&</sup>lt;sup>35</sup> See section 2.2 of this working paper.

the participants, but instead are endowed into the wagf fund perpetually.

- Protection Given to IAHs by the SCDIS: Can an IIFS provide contributions to SCDIS in order to extend protection coverage to placements by IAHs? According to the majority of Sharī'ah scholars, based on Sharī'ah requirements for profit- and loss-sharing contracts, a *mudārib* (entrepreneur) may not provide any sort of direct or indirect guarantee to the rabb al-māl (capital providers). Doing so will be in violation of the legal maxim "liability accompanies gain" (ISRA, 2013). Therefore, an IIFS is not permitted to quarantee its own investment accounts by paying contributions to a deposit insurance scheme, since the IIFS in its capacity as the *mudārib* is only liable to indemnify the IAHs for any losses that affect their capital if these losses can be proven to be the result of its negligence or misconduct. Both the HSSB of Sudan and the FCISR of Jordan have indicated their objection to the IIFS paying contributions to the takāful-based SCDIS for the protection of IAHs. However, both resolutions permitted the establishment of a separate takāful fund to which the IAHs themselves can contribute for the purpose of receiving protection for their accounts.
- Recoveries/Subrogation in Takāful-Based SCDIS: Can an SCDIS have recourse to the IIFS to recover funds that have been disbursed to depositors. following an event that triggered the protection from the SCDIS to come into effect? From a Sharī'ah perspective, the beneficiaries in such a scheme are the IIFS participating in the takāful-based SCDIS. The basis for such a claim lies in the fact that there is no contractual relationship between the takāful fund and the depositors. Rather, the contractual relationship is between the takāful fund and the participating IIFS. Moreover, the relationship between the depositors and the IIFS is that of a lender and borrower, and the latter is liable to return the entire deposited amount under all circumstances. This means that, regardless of whether or not there is a deposit insurance scheme, the depositors are entitled to receive their deposits. Having said that, the concept of takāful, which is based on mutual cooperation and providing protection to participants, does not require the beneficiary IIFS to pay back the assistance received if the failure of the IIFS was not caused by the negligence or misconduct of the management. Hence, applying the concept of subrogation in a takāful-based SCDIS will create a complication in terms of the ability of the takāful fund to recover the losses incurred by paying the depositors of the failed IIFS.

In the kafālah bi al-ajr-based SCDIS, the deposit insurer provides a guarantee commitment to an IIFS whereby if the institution becomes insolvent, all of its

insured deposits will be reimbursed up to the prescribed limit. In return for this quarantee the IIFS pays a fee to the deposit insurer. However, the main issue in this model is that the majority of scholars<sup>36</sup> prohibit taking a fee for a quarantee contract. This is because such a quarantee does not have a monetary value and is given on a voluntary basis. Moreover, taking a fee will transform the contract into an exchange contract. In effect, this transaction would involve the exchange of money for money (when the SCDIS pays out to depositors on behalf of the IIFS and then later claims this money back from the failed IIFS) and the fee paid initially will involve an additional benefit for the SCDIS for providing this service. which is prohibited in Sharī'ah. Thus, according to the majority of scholars, the possibility that such an arrangement may result in the exchange of money for money is sufficient ground to prohibit such a transaction. On this basis, the International Islamic Figh Academy in its Resolution No. 12 (12/2) resolved that it is prohibited to charge a fee for a guarantee and that the guarantor can only charge the guaranteed the actual expenses that are directly linked with the issuance of the guarantee (OIC Figh Academy, 1985).

On the other hand, some contemporary scholars rule its permissibility based on necessity and public interest, since it is impractical to obtain a free-of-charge guarantee in the current context (Al-Zuḥailī, n.d., 6:4178). Moreover, a contemporary scholar has expressed his view that *Ajr* (service fee) charged on *ḍamān* (guarantee) is permissible even though the original contract of *ḍamān* is a type of *tabarru* (donation). He further explained that the *ḍamān* contract is not considered as a *qarḍ* (loan), as it is a form of obligation undertaken by the guarantor and, as such, receiving a fee for such an obligation is permissible and will not come under the prohibition of receiving an additional benefit out of a loan (Abdullah, 1985, 2:1146–7).

The *kafālah bi al-ajr* model, however, addresses the issue of ownership of funds and subrogation as, by the nature of this scheme, the funds belong to the deposit insurer and the SCDIS can pursue the IIFS to recover funds disbursed to depositors if an event triggers the guarantee to come into effect.

Aside from the Sharī'ah considerations above, due care needs to be given to ensure that SCDIS comply with international principles for effective deposit insurance systems with such modifications as are necessary to deal with the specificities of Islamic finance. As already noted, the latest standard in this regard is the recently revised *Core Principles for Effective Deposit Insurance Systems* 

<sup>&</sup>lt;sup>36</sup> See, for instance: Al-Kāsānī, 1986, 6:11; Al-Ḥaṭṭāb, 1992, 4:391; Al-Māwardī, 1999, 6:443; and Ibn Qudāmah, 1968, 4:244.

released by the IADI on 1 November 2014, which consists of 16 principles.<sup>37</sup> These principles address a range of issues, including: public policy objectives, mandate and powers, governance, relationships with other safety-net participants, cross-border issues, a deposit insurer's role in contingency planning and crisis management, membership of the deposit insurance system, coverage, sources and uses of funds, public awareness, legal protection, dealing with parties at fault in a bank failure, early detection and timely intervention, failure resolution, reimbursing depositors, and recoveries.

<sup>&</sup>lt;sup>37</sup> Regarding SCDIS, IADI (2014c, p. 16) states, "Although the Core Principles set out in this document are generally applicable to guide the establishment of an effective IDIS [SCDIS], they do not specifically take into account Islamic requirements and the unique design features of an IDIS [SCDIS]. For this reason, a set of IADI Core Principles for Effective Islamic Deposit Insurance Systems will be developed in a separate document by IADI, in collaboration with the relevant Islamic standard-setting bodies or organisations with similar mandates."

#### **SECTION 5: CONCLUSION**

Financial safety nets are designed to provide assurance to depositors in banks that have become non-viable and to encourage overall prudent risk-taking in the system. Financial safety nets do not comprise only financial aids; they consist of the entire institutional and financial regulations that are involved to prevent, or at least limit, depositors' losses. They are also meant for the restoration of depositors' confidence in the financial system in the case of a banking failure. Primarily, financial safety nets are intended to preserve the soundness of and confidence in the financial sector and the financial system as a whole.

In many cases, governments get involved in providing insurance and other assistance to their country's financial system. These initiatives are usually promoted by policymakers as policies for financial stability insurance and depositors' confidence enhancement. In addition, without these initiatives, the disintermediation of the banking system would be a threat. In fact, the dysfunction of a country's bank, particularly a systemically important bank, can potentially create social costs outside the banking system. Deposit insurance is one of the essential elements of the financial safety nets that are designed to prevent such problems occurring.

The role of a DIS is relevant in the global IFSI, which has achieved rapid growth, transforming into a multi-trillion dollar industry. This working paper identifies at least 11 jurisdictions of relevance for the systemic stability of the global Islamic banking industry, as well as for the overall banking sector in their respective country. The fact that Islamic banks are the key providers of Sharī'ah-compliant financial services makes financial stability of the industry heavily dependent on the performance of this sector. The underlying objective of such schemes is also in compliance with Sharī'ah under the "protection of wealth", among the five essential necessities of *maqāsid al-Sharī'ah*.

However, existing adoption of SCDIS remains limited. Results from the IFSB survey conducted in 2014 show that only four RSAs (out of 24) have developed and implemented special SCDIS facilities for IIFS in their jurisdiction. (One more, Jordan, has been identified subsequently.) The principles of Sharī'ah, which govern the IFSI, mandate that the necessary provisions of financial safety nets for Islamic banks must be Sharī'ah-compliant. In addition, the IMF in its Staff Discussion Note on Islamic finance (April 2015) contends that extending conventional DIS protection to Islamic banks presents several challenges which include: (a) the treatment and insurability of deposits accepted under profit-sharing contracts; (b) the priority of claims of different types of deposits with

Islamic banks; and (c) the role of the deposit insurance fund in resolution.

The IFSB survey further identified that at least 15 RSAs that do not have an SCDIS consider it of high importance to develop and implement such a scheme in the future, with the approximate time frame for developing SCDIS facilities ranging from one to five years. However, none of these RSAs has yet assessed the operational procedures and processes under which the SCDIS would function. The lack of response on this aspect appears significant – in particular, for those RSAs that do not have sufficient experience in regulating and dealing with Islamic finance activities and thus may find the development of an SCDIS facility a more challenging task.

The existing SCDIS are broadly found to be utilising two Sharīʻah-compliant concepts: *takāful* and *kafālah bi al-ajr*. In these, there have been some Sharīʻah and operational concerns identified. For instance, charging a fee in the *kafālah bi al-ajr* model is not acceptable to most Sharīʻah scholars. The issue of according protection to investment accounts is another important consideration. Treatment of PSIAs for the calculation of CAR varies from jurisdiction to jurisdiction; thus, the debate on the treatment of PSIAs as deposits or investments continues to prevail internationally, and this and Sharīʻah issues impact on whether they should be protected under the SCDIS, as of course does the desirability of achieving sufficient coverage materially to reduce the probability of a run.

Another issue relevant for SCDIS is who should pay for the contributions. In principle, the type of deposit and the underlying contract will determine from where the payment should be obtained. For example, *wadī'ah*-based deposits that are treated as the IIFS's liability should be covered by the IIFS, not by depositors, whereas the investment accounts are not the liability of the IIFS; therefore, theoretically, the contribution should be paid by the IAHs, not the IIFS.

In addition, a critical issue for an SCDIS will be how the accumulated funds should be invested. Investments need to have a very high level of security, even in a financial crisis, and to be Sharī'ah-compliant. They also need to generate a return that will at least protect their value in real terms. It is inadvisable, for obvious reasons, for an SCDIS to place substantial funds with those institutions whose accounts it is covering. As a result, a DIS tends to place most of its funds with government, usually by buying government or quasi-government bonds. Since, for an SCDIS, interest-based instruments are not acceptable, operation of a pre-funded SCDIS implies having available a sufficient supply of Sharī'ah-compliant government instruments, typically  $suk\bar{u}k$ , in which it can invest. These instruments also need to be capable of being liquidated rapidly in a crisis, when

payments need to be made to depositors. Thus the operation of an SCDIS implies a wider strategy for the development of Islamic finance, and specifically for the provision of a supply of liquid Sharī'ah-compliant assets.

While some DIS are simple "pay box" systems, which merely pay those depositors or other investors the insured losses they have sustained, the imperatives of avoiding a full bank insolvency favour a wider range of powers to support resolution and recovery. Typically, these would involve making a contribution to some recovery process – for example, a payment to a solvent institution willing to take over the failing one, provided this is less than the cost of paying insured depositors in an insolvency. Some existing SCDIS have such powers, and there appear to be no fundamental Sharī'ah objections to their having them. However, the mechanisms of any such intervention need to be Sharī'ah-compliant. They will need to have been considered in advance and, ideally, tested through simulation. However, it is almost inevitable that a real crisis will play out in a different way from expectations, and new mechanisms of intervention may need to be improvised. This may require their Sharī'ah compliance to be assessed at short notice.

In conclusion, the form and parameters of an SCDIS will depend on the circumstances of individual jurisdictions, but the experience of those jurisdictions that have already adopted an SCDIS indicates that there are no insuperable Sharī'ah issues, in terms of coverage, contributions or operation. There are, however, some Sharī'ah and operational issues to be dealt with and, since most of the existing SCDIS have not yet been tested in a real failure, it is likely that new lessons will emerge when cases arise.

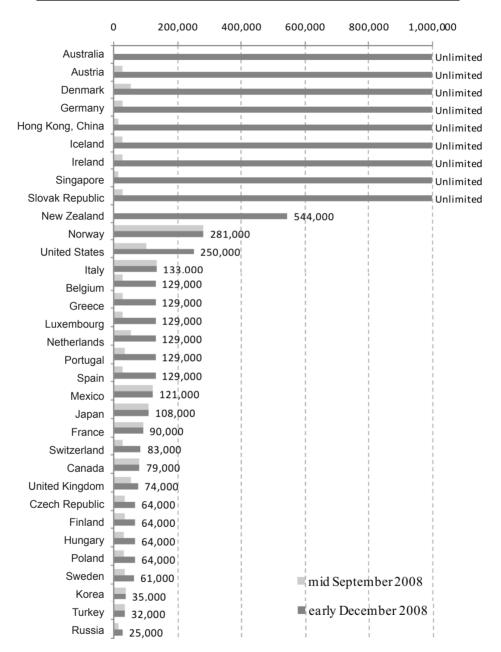
It should also be noted that, where an SCDIS operates in a mixed banking environment and covers either windows or subsidiaries of conventional institutions, it may find itself operating in a crisis alongside its conventional counterpart. It will need to have developed cooperation procedures for such a situation. These would need to cover not only mechanisms of intervention in a resolution situation, where both DIS may be called on to contribute, but also the public handling of the situation. For example, if the coverage of the two schemes is different, one DIS should not make public statements about coverage in language that could mislead depositors covered by the other.

There are somewhat different issues and challenges affecting Islamic windows (i.e. parts of conventional institutions, which provide Islamic financial services without having separate legal personality). Where Islamic windows are relatively large, it is possible for them to be covered by an SCDIS, and the arguments around doing so are broadly similar to those for freestanding Islamic institutions.

However, Islamic windows in many jurisdictions are small, and may represent that jurisdiction's first steps in Islamic finance. They may not be separately regulated from a prudential standpoint (though IFSB standards suggest that they should be, once Islamic finance in the jurisdiction becomes material). Apart from its impact on depositors, leaving the Islamic deposits in these windows uncovered and unprotected may lead to the closure of these accounts, and hence the end of these windows. This would adversely affect the prospects of establishing Islamic finance in the jurisdiction. Under these circumstances, and in the absence of an SCDIS, Islamic windows may be given permission by their respective Sharī'ah advisors to obtain insurance for their deposits under the conventional scheme, even where this is not compulsory (as it may well be in many jurisdictions that do not have separate regimes for Islamic finance).

Finally, the development of an SCDIS needs to sit within a coherent strategy for the development of Islamic finance in the jurisdiction, most obviously because of the need for a supply of secure, liquid Sharī'ah-compliant investments for an SCDIS, but also because of the need for coherent institutional approaches to resolution and recovery, especially in a mixed banking environment.

### **APPENDIX 1: POST-CRISIS DEPOSIT INSURANCE COVERAGE\***



<sup>\*</sup> These measures were short-term emergency responses by authorities to mitigate panic events in the market following the Global Financial Crisis, and there have been important changes in policies and coverage limits since then.

Source: Preliminary OECD Secretariat estimates, in USD equivalents with exchange rates as of 8 December 2008.

#### APPENDIX 2: IADI CORE PRINCIPLES<sup>38</sup> FOR EFFECTIVE DIS

#### Principle 1 – PUBLIC POLICY OBJECTIVES

The principal public policy objectives for deposit insurance systems are to protect depositors and contribute to financial stability. These objectives should be formally specified and publicly disclosed. The design of the deposit insurance system should reflect the system's public policy objectives.

#### Principle 2 - MANDATE AND POWERS

The mandate and powers of the deposit insurer should support the public policy objectives and be clearly defined and formally specified in legislation.

#### Principle 3 - GOVERNANCE

The deposit insurer should be operationally independent, well-governed, transparent, accountable, and insulated from external interference.

#### Principle 4 – RELATIONSHIPS WITH OTHER SAFETY-NET PARTICIPANTS

In order to protect depositors and contribute to financial stability, there should be a formal and comprehensive framework in place for the close coordination of activities and information sharing, on an ongoing basis, between the deposit insurer and other financial safety-net participants.

#### Principle 5 – CROSS-BORDER ISSUES

Where there is a material presence of foreign banks in a jurisdiction, formal information sharing and coordination arrangements should be in place among deposit insurers in relevant jurisdictions.

## Principle 6 – DEPOSIT INSURER'S ROLE IN CONTINGENCY PLANNING AND CRISIS MANAGEMENT

The deposit insurer should have in place effective contingency planning and crisis management policies and procedures, to ensure that it is able to effectively respond to the risk of, and actual, bank failures and other events. The development of system-wide crisis preparedness strategies and management policies should be the joint responsibility of all safety-net participants. The deposit insurer should be a member of any institutional framework for ongoing communication and coordination involving financial safety-net participants related to system-wide crisis preparedness and management.

#### Principle 7 – MEMBERSHIP

Membership in a deposit insurance system should be compulsory for all banks.

<sup>&</sup>lt;sup>38</sup> Revised 1/11/2014.

#### Principle 8 – COVERAGE

Policymakers should define clearly the level and scope of deposit coverage. Coverage should be limited, credible and cover the large majority of depositors but leave a substantial amount of deposits exposed to market discipline. Deposit insurance coverage should be consistent with the deposit insurance system's public policy objectives and related design features.

#### Principle 9 - SOURCES AND USES OF FUNDS

The deposit insurer should have readily available funds and all funding mechanisms necessary to ensure prompt reimbursement of depositors' claims, including assured liquidity funding arrangements. Responsibility for paying the cost of deposit insurance should be borne by banks.

#### Principle 10 - PUBLIC AWARENESS

In order to protect depositors and contribute to financial stability, it is essential that the public be informed on an ongoing basis about the benefits and limitations of the deposit insurance system.

#### Principle 11 – LEGAL PROTECTION

The deposit insurer and individuals working both currently and formerly for the deposit insurer in the discharge of its mandate must be protected from liability arising from actions, claims, lawsuits or other proceedings for their decisions, actions or omissions taken in good faith in the normal course of their duties. Legal protection should be defined in legislation.

#### Principle 12 - DEALING WITH PARTIES AT FAULT IN A BANK FAILURE

The deposit insurer, or other relevant authority, should be provided with the power to seek legal redress against those parties at fault in a bank failure.

#### Principle 13 – EARLY DETECTION AND TIMELY INTERVENTION

The deposit insurer should be part of a framework within the financial safety net that provides for the early detection of, and timely intervention in, troubled banks. The framework should provide for intervention before the bank becomes non-viable. Such actions should protect depositors and contribute to financial stability.

#### Principle 14 – FAILURE RESOLUTION

An effective failure resolution regime should enable the deposit insurer to provide for protection of depositors and contribute to financial stability. The legal framework should include a special resolution regime.

## **Principle 15 – REIMBURSING DEPOSITORS**

The deposit insurance system should reimburse depositors' insured funds promptly, in order to contribute to financial stability. There should be a clear and unequivocal trigger for insured depositor reimbursement.

## Principle 16 – RECOVERIES

The deposit insurer should have, by law, the right to recover its claims in accordance with the statutory creditor hierarchy.

# APPENDIX 3: IFSB MEMBER RSAs WITH SUBSTANTIVE SURVEY RESPONSES

- 1. Da Afghanistan Bank
- 2. Central Bank of Bahrain
- 3. Bangladesh Bank
- 4. Autoriti Monetari Brunei Darussalam
- 5. Dubai Financial Services Authority (Dubai UAE)
- 6. Central Bank of Egypt
- 7. Indonesia Financial Services Authority (OJK)/Indonesia Deposit Insurance Corporation
- 8. Central Bank of Jordan/Jordan Deposit Insurance Corporation
- 9. National Bank of the Kyrgyz Republic
- 10. Central Bank of Kuwait
- 11. Bank Negara Malaysia/Malaysia Deposit Insurance Corporation
- 12. Maldives Monetary Authority
- 13. Bank of Mauritius
- 14. Central Bank of Nigeria
- 15. Central Bank of Oman
- 16. State Bank of Pakistan
- 17. Palestine Monetary Authority
- 18. Bangko Sentral ng Pilipinas (Philippines)
- 19. Qatar Central Bank
- 20. Saudi Arabian Monetary Agency
- 21. Monetary Authority of Singapore
- 22. Central Bank of Sudan/Bank Deposit Security Fund

- 23. Central Bank of Tunisia
- 24. Banking Regulation and Supervision Agency/Savings Deposit Insurance Fund (Turkey)
- 25. Central Bank of the Turkish Republic of Northern Cyprus
- 26. Central Bank of the United Arab Emirates
- 27. Central Bank of West African States (BECAO)

<sup>\*</sup>Names arranged in alphabetical order of the host jurisdiction.

#### **REFERENCES**

Abdullah, A. (1985). Jawāz Akhdh al-'Ajr 'aw al-'Umūlah fī Muqābil Khiṭāb al-Þamān, paper presented at the second session of the International Islamic Fiqh Academy of the OIC, Jeddah.

Al-Dāraquţnī, A. (2004). Sunan al-Dārāquţnī, Beirut: Mu'sasat al-Risālah.

Al-Ghazālī, M. (1993). al-Mustașfā, Beirut: Dār al-Kutub al-'Ilmiyyah.

Al-Ḥaṭṭāb, S. (1992). *Mawāhib al-Jalīl fī Sharḥ Mukhtaṣar Khalīl,* Damascus: Dār al-Fikr.

Al-Kāsānī, A. (1986). *Badā'i al-Şanā'i fī Tartīb al-Sharā'i*, Beirut: Dār al-Kutub al-'Ilmiyyah.

Al-Māwardī, A. (1999). *al-Ḥawī al-Kabīr,* Beirut: Dār al-Kutub al-'llmiyyah.

Al-Shāṭibī, I. (1997). al-Muwāfaqāt, Cairo: Dār Ibn 'Afān.

Al-Zuḥailī, W. (n.d.). *al-Fiqh al-Islāmī wa Adilatuhu*, Damascus: Dār al-Fikr.

Angkinand, A. (2009). "Banking regulation and the output cost of banking crises", *International Financial Markets, Institutions and Money*, Vol. 19, pp. 240–57.

Barth, J., Caprio, G. and Levine, R. (2004). "Bank regulation and supervision: What works best?", *Journal of Financial Intermediation*, Vol. 13, pp. 205–48.

BCBS and IADI (2009). *Core Principles for Effective Deposit Insurance Systems*, Basel: Basel Committee on Banking Supervision and International Association of Deposit Insurers.

BCBS and IADI (2010), *Core Principles for Effective Deposit Insurance Systems: A Methodology for Compliance Assessment*, Basel: Basel Committee on Banking Supervision and International Association of Deposit Insurers.

Bhattacharya, S., Boot, A. and Thakor, A. (1998). "The economics of bank regulation", *Journal of Money, Credit and Banking*, Vol. 30, pp. 745–70.

Chari, V. and Jagannathan, R. (1988). "Banking panics, information, and rational expectations equilibrium", *Journal of Finance*, Vol. 43, pp. 749–61.

Cull, R., Senbet, L. and Sorge, M. (2005). "Deposit insurance and financial development", *Journal of Money, Credit and Banking*, Vol. 37, No. 1, pp. 43–82.

Demirgüç-Kunt, A. and Huizinga, H. (2004). "Market discipline and deposit insurance", *Journal of Monetary Economics*, Vol. 51, pp. 375–99.

Demirgüç-Kunt, A., Kane, E. and Laeven, L. (2008). "Determinants of depositinsurance adoption and design", *Journal of Financial Intermediation*, Vol. 17, pp. 407–38.

Demirgüç-Kunt, A. and Sobaci, T. (2001). "Deposit insurance around the world", *The World Bank Economic Review*, Vol. 15, No. 3, pp. 481–90.

Demirgüç-Kunt, A., and Detragiache, E. (2002), "Does Deposit Insurance Increase Banking System Stability? An Empirical Investigation," *Journal of Monetary Economics*, Vol. 49, No. 7, pp. 1373-1406.

Diamond, D. and Dybvig, P. (1983). "Bank runs, deposit insurance and liquidity", *Journal of Political Economy*, Vol. 91, No. 3, pp. 401–19.

FDIC (2014). "Who is the FDIC?", Federal Deposit Insurance Corporation, https://www.fdic.gov/about/learn/symbol/index.html, last accessed 27 November 2015.

FSB (2008). "Report of the Financial Stability Forum on enhancing market and institutional resilience", Financial Stability Forum, 7 April.

FSB (2012). "Thematic review on deposit insurance systems: Peer Review Report", Financial Stability Board, 8 February.

Garcia, G. (1999). "Deposit insurance: A survey of actual and best practice". *Working Paper 99/54*, Washington, D.C.: International Monetary Fund.

Hawkins, A., Rahman, J. and Williamson, T. (2014). "Is the global financial safety net at a tipping point to fragmentation?", *Economic Roundup: Issue 1*, Canberra: The Treasury, Government of Australia.

Hoelscher, D. (2011). "Deposit insurance policies and the financial crisis", International Association of Deposit Insurers, www.iadi.org/docs/David%20 Hoelscher%20%20Paper%20Deposit%20Insurance%20Policies%20and%20 the%20Financial%20Crisis%205%2020%2011.pdf, last accessed 1 March 2016.

Hoggarth, G., Jackson, P. and Nier, E. (2005). "Banking crises and the design of safety nets", *Journal of Banking and Finance*, Vol. 29, pp. 143–59.

IADI (2014a). "Deposit insurance systems worldwide", International Association of Deposit Insurers, www.iadi.org/di.aspx?id=67, last accessed 27 November 2015.

IADI (2014b). "Insurability of Islamic deposits and investment accounts", *Discussion Paper*, Basel: International Association of Deposit Insurers.

IADI (2014c). "Sharī'ah approaches for the implementation of Islamic deposit insurance systems", Discussion Paper, Basel: International Association of Deposit Insurers.

IADI (2014d). "Core principles for effective deposit insurance systems", International Association of Deposit Insurers, November 2014.

IADI (2015). "Deposit insurance systems governing statutes: Facts and figures", International Association of Deposit Insurers, www.iadi.org/di.aspx?id=66, last accessed 27 November 2015.

Ibn Al-Qayyim, M. (1991). '*I'lām al-Muwaqi*'īn 'an Rab al-'Ālamīn, Beirut: Dār al-Kutub al-'Ilmiyyah.

Ibn 'Āshur, T. (2001). Magāṣid al-Sharī'ah al-Islāmiyyah, Amman: Dār al-Nafā'is.

Ibn Nujaym, Z. (1999). *al-Ashbāh wa al-Naẓā'ir*, Beirut: Dār al-Kutub al-'Ilmiyyah.

Ibn Qudāmah, M. (1968). *al-Mughn*ī, Cairo: Maktabat al-Qāhirah.

IFSB (December 2005). *IFSB-1: Guiding Principles of Risk Management for IIFS (other than Insurance Institutions)*, Kuala Lumpur: Islamic Financial Services Board, http://ifsb.org/standard/ifsb1.pdf.

IFSB (December 2006). *IFSB-3: Guiding Principles on Corporate Governance for Institutions offering only Islamic Financial Services (Excluding Islamic Insurance (Takāful) Institutions and Islamic Mutual Funds)*, Kuala Lumpur: Islamic Financial Services Board, http://ifsb.org/standard/ifsb3.pdf.

IFSB (December 2009). *IFSB-10: Guiding Principles on Sharī'ah Governance Systems for Institutions offering Islamic Financial Services*, Kuala Lumpur: Islamic Financial Services Board, http://ifsb.org/standard/IFSB-10%20Shariah%20 Governance.pdf.

IFSB (April 2010). *IFSB–IRTI–IDB Islamic Finance and Global Financial Stability Report*, Kuala Lumpur: Islamic Financial Services Board, http://ifsb.org/docs/IFSB-IRTI-IDB2010.pdf.

IFSB (March 2012). *IFSB-12: Guiding Principles on Liquidity Risk Management for Institutions offering Islamic Financial Services*, Kuala Lumpur: Islamic Financial Services Board, http://ifsb.org/standard/eng\_IFSB-12%20Guiding%20 Principles%20 on%20Liquidity%20Risk%20Mgmt%20 (March2012).pdf.

IFSB (May 2013). *Islamic Financial Services Industry Stability Report 2013*, Kuala Lumpur: Islamic Financial Services Board, http://ifsb.org/docs/IFSB%20-20IFSI%20Stability%20Report%202013%20(Final).pdf.

IFSB (March 2014). *IFSB-16: Revised Guidance on Key Elements in the Supervisory Review Process of Institutions Offering Islamic Financial Services (Excluding Islamic Insurance (Takāful) Institutions and Islamic Collective Investment Schemes)*, Kuala Lumpur: Islamic Financial Services Board, http://ifsb.org/standard/IFSB-16%20Revised%20Supervisory%20Review%20 Process\_March%202014%20(final-clean).pdf.

IFSB (April 2014). WP-01: Working Paper on Strengthening the Financial Safety Net: The Role of Sharī'ah-compliant Lender-of-Last-Resort (SLOLR) Facilities as an Emergency Financing Mechanism, Kuala Lumpur: Islamic Financial Services Board, http://ifsb.org/docs/WP01\_(2014%20April)%20Working%20Paper%20on%20 SLOLR.pdf.

IFSB (May 2015). *Islamic Financial Services Industry Stability Report 2015*. Islamic Financial Services Board, Kuala Lumpur, Malaysia. Available online: http://ifsb.org/docs/2015-05-20\_IFSB%20Islamic%20Financial%20Services%20Industry%20Stability%20Report%202015\_final.pdf.

IMF (2015). "Islamic finance: Opportunities, challenges, and policy options", *Staff Discussion Note SDN/15/05*, Washington, D.C.: International Monetary Fund.

ISRA (2013). Islamic Legal Maxims and Their Application in Islamic Finance. Kuala Lumpur: International Shari'ah Research Academy for Islamic Finance. Kahn, C. and Santos, J. (2005). "Allocating bank regulatory powers: Lender of last resort, deposit insurance and supervision", *European Economic Review*, Vol. 49, pp. 2107–36.

Kane, E. (1989). *The S&L Insurance Mess: How did it Happen?*, Washington, D.C.: Urban Institute Press.

Kane, E. (2000). "Designing financial safety nets to fit country circumstances: A progress report", *World Bank Policy Research Working Paper 2453*, Washington, D.C.: World Bank.

Laeven, L. and Levine, R. (2009). "Bank governance, regulation and risk taking", *Journal of Financial Economics*, Vol. 93, pp. 259–75.

Merton, R. (1977). "An analytical derivation of the cost of deposit insurance loan quarantees", *Journal of Banking and Finance*, Vol. 1, pp. 3–11.

Müslümov, A. (2005). "Full deposit insurance and the moral hazard problem: the case of the Turkish banking system", *Review of Social, Economic and Administrative Studies*, Vol. 19, pp. 127-144

Muslim, H. (n.d.). Şaḥīḥ Muslim, Beirut: Dār Ihyā' al-Turāth al-Arabī. OIC Fiqh Academy (1985). *Resolution No. 12*, www.fiqhacademy.org.sa, last accessed 20 May 2015.

Rhee, C., Sumulong, L. and Vallee, S. (2013). "Global and regional financial safety nets: Lesson from Europe and Asia", *Working Paper 2013/06*, Brussels: Bruegel.

Rose, A. (2006). "A stable international monetary system emerges: Inflation targeting is Bretton Woods, reversed", *NBER Working Paper Series*, *No. 12711*, Cambridge: National Bureau of Economic Research.

Schich, S. (2008). "Financial crisis: Deposit insurance and related financial safety net aspects", *Financial Market Trends*, OECD.

World Bank (2005). "Deposit insurance around the world: A comprehensive database", World Bank Policy Research Working Paper 3628, Washington, D.C.: World Bank.



## **ISLAMIC FINANCIAL SERVICES BOARD**

Level 5, Sasana Kijang, Bank Negara Malaysia No. 2, Jalan Dato' Onn, 50480 Kuala Lumpur, Malaysia www.ifsb.org

