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Islamic banks and central banking



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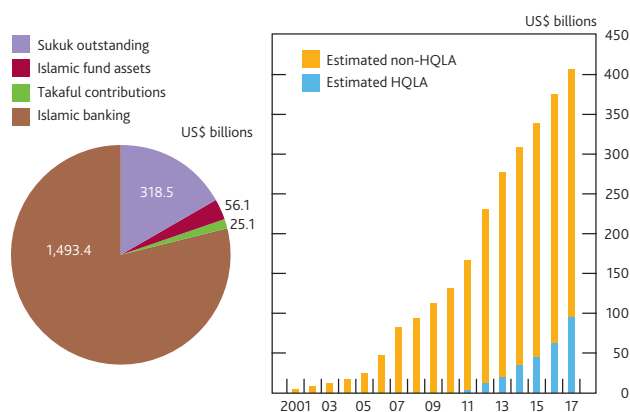
By Arshadur Rahman of the Bank's Sterling Markets Division.⁽¹⁾

- Islamic banking is a relatively young but growing sector of the broader financial services industry. Numerous banks around the world offer Islamic, or Shari'ah compliant, financial products.
- Some central banks offer Shari'ah compliant liquidity facilities to Islamic banks, affording them similar flexibility to other firms in managing their liquidity. Such facilities avoid the payment or receipt of interest, which is otherwise the most common basis for operating a liquidity facility.
- The Bank is establishing a Shari'ah compliant facility, specifically a deposit facility to allow UK Islamic banks to hold central bank assets as part of their liquid assets buffer. This article explores the various ways in which this can be done, along with the model the Bank has chosen to adopt.

Overview

Islamic finance is activity conducted in accordance with Islamic commercial jurisprudence, which is in turn informed by the high-level principles of Islamic law, or Shari'ah. Among other things, this emphasises real-economy activity and a prohibition on paying/receiving interest. The global Islamic finance market has grown over recent decades, and by some estimates currently stands at approximately US\$1.9 trillion, though this is still less than 1% of the global financial services sector overall.

Summary chart Size of global Islamic finance industry, and growth of sukuk market over time



Sources: *Islamic Financial Services Industry Stability Report 2017* and Bloomberg. US foreign exchange conversion date for latter 7 June 2017.

Within the broader Islamic finance industry, the Islamic banking sector has also grown, and in the United Kingdom

there are currently five standalone Islamic banks. These are firms which only conduct activity on a Shari'ah compliant basis (unlike some conventional banks, which offer Islamic finance products as part of a broader service offering). Like their conventional counterparts, Islamic banks must effectively manage their liquidity (that is, the ability to meet their financial obligations as they fall due), which includes adhering to the Basel III liquidity rules. Among other things, the rules require firms to hold a buffer of high-quality liquid assets (HQLA) which they can run down if they experience a sudden financial stress. This buffer will typically be in the form of assets known as sukuk, instruments providing a beneficial interest in an underlying Shari'ah compliant asset or activity. However, the supply of HQLA-eligible sukuk is limited (see **summary chart**). Islamic banks therefore do not have the same flexibility as conventional banks in managing their liquidity. Aside from holding HQLA in the form of sukuk, another way to meet the requirement is to hold deposits at the central bank; these can be quickly withdrawn to meet a sudden liquidity stress. However, the Bank of England's current facilities are all interest bearing, and so inaccessible to Islamic banks.

To afford UK Islamic banks similar flexibility in managing their liquidity, the Bank therefore began work in 2015 to first assess the feasibility of, and then establish, a Shari'ah compliant deposit facility. This article sets out the results of the Bank's analysis.

(1) The author would like to thank James Southgate for his feedback, and also UK Islamic finance market participants and colleagues from central banks around the world, whose input helped to inform this article.

Central banks around the world use a range of tools to ensure monetary and financial stability. These include providing access to the central bank balance sheet by accepting deposits from commercial banks, which are remunerated at the prevailing central bank interest rate. Such deposits can be used as a liquidity buffer asset and be promptly liquidated by a firm experiencing a sudden financial stress. However, because such arrangements typically involve the payment and receipt of interest, they cannot be used by Islamic banks, which are prohibited from engaging in interest-based activity under Shari'ah principles.

This article explains how central banks around the world structure liquidity facilities in a Shari'ah compliant manner (that is, avoiding the payment or receipt of interest), to provide Islamic banks with similar flexibility to conventional banks in managing their liquidity. This is relevant because the Islamic banking sector globally is growing. With that growth the financial stability risks associated with the sector are increasing, and so is demand for compatible central bank liquidity facilities to help manage those risks. Yet the means by which such facilities are or can be structured is not commonly understood.

The Bank of England ('the Bank') is itself in the process of establishing a Shari'ah compliant liquidity facility (SCF), as part of its strategy to broaden access to liquidity provision. The first stage of this work involved a survey of Shari'ah compliant central bank liquidity facilities already available around the world. The second stage entailed selecting the most appropriate model for the United Kingdom, bearing in mind the Bank's specific objectives and the nature of the local market.

The SCF will enable the five UK Islamic banks, which conduct business on a purely Shari'ah compliant basis, to place deposits at the central bank, as conventional banks are already able to do. The structure the Bank has selected, based on internal analysis and market feedback, is called a wakalah (agency-based) fund model, which will be adjusted to meet the specific regulatory and legal requirements of the United Kingdom.

What is Islamic finance?

Islamic finance refers to commercial activity conducted in accordance with Islamic jurisprudence, or 'fiqh'. This in turn is informed by the high-level principles of Islamic law, or 'Shari'ah'. Products and services in Islamic finance are therefore sometimes referred to as 'Shari'ah compliant'. Shari'ah principles include the views that:

- (i) Money has no intrinsic value. It can serve only as a medium of exchange.

- (ii) The payment or receipt of interest is prohibited. Trading or investment income is however permissible. Debt is also allowed, though it can only be transferred at par value.
- (iii) There should be a focus on real-economy activity, and an emphasis on fair apportionment of risk and reward. Both speculation on the one hand, and rent-seeking on the other, should be avoided.
- (iv) Investment in activities considered to be socially detrimental should be prohibited. This includes investment in sectors such as tobacco, alcohol and pornography.

Islamic finance therefore shares a number of common characteristics with the broader ethical/sustainable finance sector.

Due to the prohibition on interest, firms which offer Shari'ah compliant products, either exclusively (that is, as 'standalone' Islamic finance firms), or as part of a broader product range (normally offered through separate business units known as 'windows') must structure their products differently to generate a return. This typically involves the use of an underlying asset in some way. For example, a profit can be made from trading in assets (such as commodities), or leasing or selling an asset in instalments (such as property, plant or equipment).⁽¹⁾ **Table A** provides a simplified breakdown of Islamic finance products across different financial sectors.

The Islamic finance market and the UK regulatory approach

The global Islamic finance industry

The global Islamic finance industry has grown rapidly over the past fifteen years. While reliable figures are difficult to obtain, some estimates put the size of the market at approximately £1.9 trillion as of end-2016. Approximately three quarters of this is constituted of banking assets, with most of the remainder capital markets and a small proportion of Shari'ah compliant insurance. Much of the activity is concentrated in countries with significant Muslim populations, especially in the Middle East and Asia.⁽²⁾

The Islamic finance industry in the United Kingdom

In the United Kingdom, there are currently five standalone Islamic banks (**Table B**). These firms have an aggregate balance sheet of approximately £3.5 billion. There are also over 20 conventional banks in the United Kingdom operating Shari'ah compliant windows, and numerous investment management, advisory and insurance sector firms.

(1) For more detail on transaction types, see Glossary, page 7; www.imf.org/~media/files/publications/cr/2017/cr17145.ashx.

(2) See www.ifsb.org/docs/IFSB%20IFS1%20Stability%20Report%202017.pdf.

Table A Common forms of Islamic finance activity

Banking Activity will be conducted via existing conventional banking entities as 'windows', through a separate Islamic banking branch network, or through a separate standalone legal entity.		Investments Activity will be conducted through a separate legal entity, or through a conventional firm managing a fund under a Shari'ah compliant mandate.	Insurance (takaful) Activity will be conducted under a Shari'ah compliant mutual structure, or through a limited company with own share capital and reserves. If the latter, takaful operator can provide an interest-free loan ('qard') to top up the underwriting fund in case of deficit, repaid from any subsequent underwriting surpluses.
Current accounts, deposit and investment accounts.	Mortgages/home purchase plans and other financing.	Funds and sukuk.	General insurance, family/life insurance, pensions.
How is income generated?	How is the cost of financing covered?	How is return generated?	How can the insurance be used?
Wakalah (agency based) — in which deposits are used by the bank under a delegated authority to invest in Shari'ah compliant activity.	Ijarah (leasing) — in which the customer leases the property for the contract term, with monthly payments comprised of a charge for the lease and also a rental component, as they are living in the property at the same time.	By investing in: equities of firms which are (a) engaged in Shari'ah compliant activity and (b) not excessively leveraged (indebted); cash at zero return as a 'safe' diversification asset; sukuk , which are instruments representing a beneficial interest in a Shari'ah compliant asset or activity, but excluding shares (so without voting rights); tangible assets such as property and machinery.	By underwriting: only Shari'ah compliant risks; premiums can be invested, but only in Shari'ah compliant assets as per investment principles.
Murabaha (cost plus mark-up) — in which the bank trades in commodities to generate a return, which is passed back to the customer in lieu of interest.	Diminishing musharaka (partnership) — in which the customer and bank become 'co-owners' of the property in proportion to their initial deposit vs financing amount. Monthly payments are used to gradually increase the customer's ownership stake in the property, and title transfers upon conclusion of the contract.	Cannot invest in: bonds bearing interest (including zero-coupon bonds in which the interest is embedded), or in derivatives used for speculative purposes.	Cannot underwrite: non-Shari'ah compliant risks such as pubs or distilleries. Also, some insurance products cannot be offered via takaful due to entailing excessive uncertainty ('gharar'), such as whole of life policies or defined benefit pensions.
Mudarabah (silent partnership) — one partner provides capital (depositor), the other provides expertise (firm), with profit shared proportionately.			

The UK regulatory approach to Islamic finance

In the United Kingdom, all financial firms are supervised under the same unitary and principles-based regulatory framework; firms engaging in Islamic finance are not subject to separate rules, as this might give rise to regulatory arbitrage, that is, the risk of parallel regulatory regimes in which one set of requirements is considered to be more favourable or less onerous than the other. The UK authorities emphasise a non-discriminatory approach, endeavouring to ensure a level playing field for all financial firms, to the greatest extent possible.

Supervision of financial firms is divided between the Prudential Regulation Authority (PRA), which is part of the Bank of England, and the Financial Conduct Authority (FCA). The PRA is responsible for the prudential regulation of approximately 1,500 banks, building societies, credit unions, insurers and the largest investment firms. The FCA is responsible for regulating the conduct of all financial firms in the United Kingdom — this

covers protection of consumers and financial markets, and promotion of effective competition. It is also responsible for the prudential regulation of approximately 18,000 generally smaller firms.

Compliance with Shari'ah principles

Islamic finance firms will normally appoint a Shari'ah Supervisory Board (SSB) of Islamic scholars, to certify and evidence the fact that their activities and products are compliant with Shari'ah principles. These scholars are trained in the specialised religious jurisprudence relating to commercial activity ('fiqh al mu'amalat'), in addition to having a general grounding in both jurisprudence and conventional finance; not all religious scholars will be qualified to sit on SSBs. In some jurisdictions, SSB scholars are approved centrally by the regulator, while in others — such as the United Kingdom — they are not, having instead similar status to a firm's external legal counsel or auditors.

Table B Islamic finance in the United Kingdom — timeline of selected events

1970s	Shari'ah compliant aviation leasing contracts offered in London.
	London market brokers offer wholesale liquidity management using commodities.
1980s	Earliest Islamic mortgages offered in the United Kingdom by Albaraka Bank.
1997	Islamic mortgages offered in the United Kingdom by United Bank of Kuwait (now Ahli United Bank).
2003	HSBC Amanah launches Islamic mortgages and bank accounts in the United Kingdom.
2004	Al Rayan Bank plc authorised (formerly Islamic Bank of Britain).
	Court case of Beximco vs Shamil Bank of Bahrain establishes principle that secular authorities cannot opine on Shari'ah compliance.
	ABC International Bank offers Islamic mortgages under Al Buraq brand.
2005	Children's Mutual launches Shari'ah compliant Child Trust Fund.
	Lloyds TSB offers Shari'ah compliant current account.
2006	European Islamic Investment Bank plc authorised (converted to investment firm in 2014 — Rasmala plc, no longer authorised).
2007	Bank of London and the Middle East plc authorised.
	Investment firm Amiri Capital authorised.
	FSA outlines regulatory approach to Islamic finance in: 'Islamic finance in the United Kingdom: regulation and challenges'.
2008	QIB (UK) Ltd authorised (formerly European Finance House).
	Gatehouse Bank plc authorised.
	British Islamic Insurance Holdings/Principle Insurance authorised (dissolved in 2015).
	Consultation paper CP08/22 outlines the liquid asset buffer requirement for all banks.
2012	ADIB (UK) Ltd authorised.
	HSBC Amanah exits UK market.
2013	Cobalt Underwriting authorised.
2014	UK Government issues its first sovereign sukuk.
	Investment firm Arabesque Asset Management authorised.
2015	Islamic Insurance Association of London established.
	Bank of England commences Shari'ah compliant facilities (SCF) project.
2017	Shari'ah compliant crowd funding firm Yielders authorised.

In the United Kingdom, the authorities cannot opine on whether a particular Islamic finance activity or product is Shari'ah compliant or not. This is because as secular institutions, they cannot take a view on religious standards. And it would be difficult to do so even if they could, because opinions on what is permissible under Shari'ah differ, both between and within jurisdictions where this aspect is regulated: the high-level principles can be interpreted in different ways. However, in the United Kingdom, the basis upon which a given product is promoted as being Shari'ah compliant must always be communicated to the customer in a manner which is clear, fair, and not misleading, in accordance with the approach of treating customers fairly. Financial disclosure rules apply to all firms, and customers must be in possession of all the facts required to make an informed purchasing decision.

Although the UK authorities do not regulate Shari'ah compliance, the Bank nonetheless recognises the importance of dialogue with other authorities on the effective supervision of what is a young but growing industry. To this end, the Bank became an associate member of the Islamic Financial Services Board (IFSB) in November 2015. The IFSB is an international body which aims, among other things, to promote the development of a prudent and transparent Islamic financial services industry, and to provide guidance on the effective supervision and regulation of Islamic finance firms.

The liquidity rules

The liquid asset buffer (LAB) requirement

Basel III liquidity rules (which are implemented in the European Union (EU) through the Capital Requirements Directive and Capital Requirements Regulation (together, CRD IV) and related subordinate measures) require banks to hold a liquid asset buffer (LAB) of unencumbered and high-quality liquid assets (HQLA) at all times. The assets in this buffer should be readily accessible and easy to convert into cash in private markets, to meet any sudden demands for liquidity the firm may face. This should hold true especially during periods of firm-specific stress, or more general market disruption.⁽¹⁾

All banks, including standalone Islamic banks, must comply with the requirement to hold an LAB. However, Islamic banks are unable to hold assets that earn interest, or are based on activity which is otherwise prohibited under Shari'ah principles. In the United Kingdom, the pool of assets that are both suitable for use by Islamic banks and of sufficiently high quality is limited: one such asset, the UK Government's 2014 £200 million sovereign sukuk, was heavily oversubscribed on issue.⁽²⁾

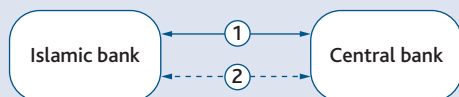
(1) See page 7; www.bis.org/publ/bcb238.pdf.

(2) See www.gov.uk/government/news/government-issues-first-islamic-bond.

Shari'ah compliant open market operations (OMOs)

Open market operations (OMOs) are a tool which central banks use to either inject or drain liquidity from the market. The Bank of England provides OMOs, currently through the Indexed Long-Term Repo (ILTR).⁽¹⁾ Shari'ah compliant OMOs normally entail using a wa'ad (promise) based model. Under this arrangement, the Islamic bank facing a liquidity stress would sell a (Shari'ah compliant) asset, such as a sukuk, to the central bank, who would subsequently sell the asset back at a mark-up (Figure A). This transaction is similar to a conventional collateralised loan arrangement called a repurchase agreement ('repo'), and the mark-up on the sale charged by the central bank on the second transaction may be based on the conventional repo rate to make it economically equivalent.

Figure A The wa'ad based liquidity support model



- 1 The Islamic bank sells security to central bank.
- 2 On maturity, the central bank sells security back to the Islamic bank, at a mark-up that may be based on the equivalent conventional repo rate.

Where the wa'ad model differs from a conventional repo is in the second leg of the transaction, which is treated in Shari'ah compliance terms as a discretionary promise rather than a contractual obligation: the central bank will either promise to sell the security back to the Islamic bank, or the Islamic bank will promise to buy the security from the central bank. Having this separation technically avoids what is called 'bai al inah' (sale with immediate repurchase), which is not allowed under Shari'ah principles because it is considered to be overly synthetic by some Shari'ah scholars. However, opinions still do vary between jurisdictions on the overall permissibility under Shari'ah of this transactional model, which is why it is not used in some countries. Regardless of whether it is the central bank or the Islamic bank which is acting as the promisor, the underlying commercial documentation is normally structured as a deed to be contractually binding — imposing in legal terms an obligation in the absence of 'consideration', or payment. This provides comfort to both counterparties that the second transaction leg will be completed.

(1) For more information on the ILTR, see the Bank of England's 'Red Book', available at www.bankofengland.co.uk/markets/Pages/sterlingoperations/redbook.aspx.

A number of jurisdictions (Bahrain, Qatar, Turkey and Malaysia for example) have also issued sovereign sukuk, which can be used by their respective Islamic banks for locally implemented buffer requirements.⁽¹⁾ However, as illustrated in the **summary chart**, the general and global scarcity of high quality, liquid and Shari'ah compliant assets continues to pose a challenge for the industry.

Basel III recognises the challenge for Islamic banks in meeting their LAB requirements. The rules allow them to use a wider range of assets for their buffer, which are subject to haircutting to avoid favourable treatment over conventional firms.⁽²⁾ This recognition is also reflected in relevant EU-level legislation.⁽³⁾ The underlying scarcity of the supply of suitable assets means that banks frequently hold them to maturity, resulting in limited secondary market liquidity. Nevertheless, the assets represent a store of value as they can be readily sold, although they do not provide a means of managing liquidity on a day-to-day basis as they may be difficult to replace.

The role of central bank facilities in meeting liquidity requirements

There are two main ways in which central banks can provide liquidity facilities for use by commercial banks to manage their liquidity and meet the Basel III requirements. The first is by accepting deposits, which can be withdrawn at any time to meet a liquidity stress. In the United Kingdom, the Bank offers

reserves accounts which can be used in this way. The second is by providing a liquidity upgrade, by giving HQLA to commercial banks in the form of central bank funds or government securities, in exchange for a range of less liquid assets such as corporate bonds and loan portfolios. A few jurisdictions, such as Turkey, Indonesia and Pakistan, allow the use of sukuk in their open market operations (OMOs) under a form of Shari'ah compliant repo, to provide Islamic banks with further flexibility in their liquidity management. The box above shows how this works in practice. The Bank provides this upgrade through the Indexed Long-Term Repo (ILTR) operations and Discount Window Facility (DWF). All these arrangements are offered via the Bank's Sterling Monetary Framework (SMF), and can help to contribute towards commercial banks' LAB requirements.

The Bank remunerates reserves account balances, typically at the rate set by the Monetary Policy Committee — Bank Rate. In so doing, the Bank establishes a short-term risk-free rate. This rate influences the rates conventional banks are willing to charge or pay on short-term loans or borrowings in the

(1) Malaysia stopped issuing short-dated sovereign sukuk in 2015; www.sukuk.com/sukuk-profile/.

(2) See paragraph 68: www.bis.org/publ/bcbs238.pdf.

(3) See in particular Article 12 of the Commission Delegated Regulation (EU) 2015/61, available at <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015R0061&from=EN>.

market.⁽¹⁾ Remuneration of reserves is therefore fundamental to the Bank's framework for implementing monetary policy.⁽²⁾ The rates charged on the ILTR and DWF are at a mark-up to Bank Rate, and are therefore also interest-based. As Islamic banks are prohibited from receiving interest under Shari'ah principles, the Bank's existing facilities under the SMF are inaccessible to them.

The Bank therefore commenced work in the second half of 2015, to assess the feasibility of establishing a Shari'ah compliant liquidity facility for UK Islamic banks. This would provide them with greater flexibility in managing their liquidity and meeting the Basel III liquidity rules (as implemented in the EU).

Overview of Shari'ah compliant deposit facility models

The Bank's preliminary survey

The Bank commenced work in 2015 on assessing the feasibility of establishing a Shari'ah compliant facility. The first stage of this consisted of a survey of SCF models used around the world by other central banks,⁽³⁾ to provide both deposit and liquidity support facilities.⁽⁴⁾ The survey found that central banks used a diverse range of models to underpin their facilities, and there was no universally preferred structure.

The purpose of the survey was not to provide an exhaustive list of all the facilities used in all jurisdictions, but to gain a sense of the options the Bank might be able to draw upon in developing its own facility. In considering the various models in use, the Bank has not taken a view on whether some models are inherently better or worse than others, since suitability will depend on the specific objectives and requirements of each individual central bank, as well as the nature of their local market and regulatory framework.

Of the nine central banks which confirmed they provided some form of facility, at least one offered to accept deposits at zero return, and some offered (or were planning to offer) emergency liquidity support without charging interest (known as a 'qard hasan').⁽⁵⁾

However, the most common method used to underpin facilities was the commodity murabaha model (CM), used for both deposits and liquidity support in Kuwait, Malaysia, Saudi Arabia and the United Arab Emirates.⁽⁶⁾ Murabaha simply means to purchase an asset, and then sell it on at a disclosed mark-up. In addition, several other models were found to be in use specifically for deposit facilities:

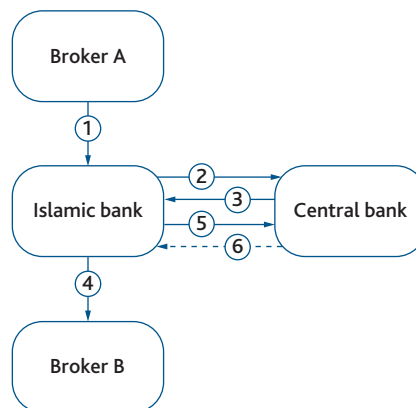
- Wakalah (agency-based) fund model — used in Bahrain.
- Wadiah (safe custody) model — currently used in Malaysia; previously also used in Indonesia.
- Ju'alah (remuneration for a specified task) model — used in Indonesia.

These models are discussed in more detail in the next section.

The commodity murabaha model

In the CM model (Figure 1), the central bank uses deposits from Islamic banks to undertake a series of trades in an underlying commodity.⁽⁷⁾ The return from this trading, minus costs and fees, is returned to the Islamic banks in lieu of interest.

Figure 1 The commodity murabaha deposit model



- 1 The Islamic bank purchases £1 million of commodities from Broker A.
- 2 The Islamic bank sells the commodities to central bank at the original £1 million price, plus a mark-up (eg £2,000), on a deferred payment basis (eg one week).
- 3 The central bank appoints the Islamic bank as agent to sell the commodities back into market.
- 4 The Islamic bank sells the commodities to Broker B at the original price of £1 million on behalf of central bank, for immediate payment.
- 5 The Islamic bank credits the £1 million proceeds from the sale to Broker B to the central bank.
- 6 On maturity (after one week), the central bank makes the deferred payment of £1,002,000 to the Islamic bank.

(1) For more information, see the Bank's 'Red Book', available at www.bankofengland.co.uk/markets/Pages/sterlingoperations/redbook.aspx.

(2) For further information on the Bank's Sterling Monetary Framework, see www.bankofengland.co.uk/publications/Documents/quarterlybulletin/2014/qb14q210.pdf.

(3) The Bank's survey focused on central banks in jurisdictions in which both Islamic and conventional banks operate, similar to the UK market.

(4) Based on market feedback, the area of most pressing need for UK Islamic banks is in the provision of deposit facilities, so this has been prioritised. The Bank intends to consider the feasibility of establishing liquidity support facilities at a later date.

(5) Some central banks used more than one transactional model.

(6) The Central Bank of the United Arab Emirates uses the murabaha structure to underpin certificates of deposit.

(7) These would typically include non-precious metals such as steel, tin or zinc, but can also potentially cover other sufficiently standardised 'soft' commodities such as palm oil, sugar or rice — the scope of acceptable commodities would be subject to agreement by the counterparties to the trade and their respective Shari'ah scholars. Shari'ah principles exclude the use of gold or silver for this transactional model as these commodities are considered to be too 'money-like' — that is, they fall into the category of assets which should be treated only as a medium of exchange.

The central bank based CM arrangement detailed in **Figure 1** has been simplified — variations will exist between different jurisdictions. Two brokers are required for this model to be Shari’ah compliant: using only one broker to both source and dispose of the asset would make the transaction resemble too closely a ‘bai al inah’ (sale with immediate purchase). It is however possible for the two brokers to net off exposures to each other bilaterally, so that the first broker obtains the underlying commodity again at the end of the transaction, allowing it to use this for the next CM transaction.

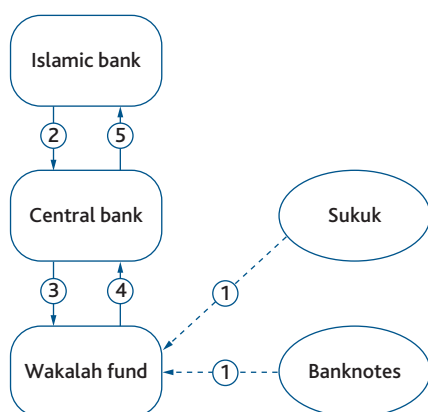
The CM transaction is normally very short in duration — all the steps in the model typically complete within an hour, apart from the deferred payment leg in step six. As a consequence, the commodity is not left on the balance sheet of either the central bank or the Islamic bank for any significant period of time.

As the purpose of the transaction is to facilitate liquidity management rather than to become actively involved in a particular commodity market, the price and mark-up will be fixed at the outset. This mitigates the risk of adverse movements in the market price of the underlying commodity affecting the return.

The wakalah model

Wakalah (agency-based) models are frequently used in the interbank market for both deposit-taking and investment activity, as well as in the provision of central bank deposits. Under this model, one institution acts as agent (‘wakil’) in managing the deposit or investment of a principal (‘muwakkil’) in a fund of Shari’ah compliant assets (**Figure 2**).

Figure 2 The wakalah deposit model



1 The central bank establishes a fund constituted of suitable sukuk, and banknotes if required.

2 and 3

The Islamic bank places a deposit with the central bank, which is either invested directly in the wakalah fund, or held separately and backed by the wakalah fund (Bank proposed model).

4 and 5

The central bank returns the principal, plus any profit on the fund, to the Islamic bank upon maturity.

In one variant of the central bank wakalah model, the central bank places the deposits of Islamic banks into a fund of sukuk (**Figure 2**). Banknotes can also be included in the fund as non-interest/return generating assets, thereby balancing the overall portfolio return to target an expected profit rate (EPR). The EPR might match, sit within a corridor of, or indeed be completely unrelated to, the equivalent central bank interest rate offered to conventional banks, depending on the objectives of the central bank.

If the rate of return on a wakalah deposit facility is arranged to be similar to the central bank policy rate, this may be lower than the return an Islamic bank would otherwise earn from holding the sukuk directly. However, Islamic banks may swap the higher return on the sukuk for greater liquidity from a callable central bank deposit, and also to reduce their concentration risk by diversifying their counterparty exposures to include exposure to a central bank.

The wadiah and ju’alah based models

In the wadiah model, the central bank holds the Islamic bank’s deposit in custody. Although the principal must remain certain, the Islamic bank may permit the central bank to use the funds to engage in Shari’ah compliant activity to generate a return. This return is used to cover the cost of operating the facility, and part of it may be returned to the depositing Islamic bank in the form of a ‘hiba’ (discretionary gift). If the central bank is not permitted to use the deposits to generate a return, it would need to charge the Islamic bank a fee for holding the deposit to make the arrangement economically viable.

The ju’alah based model is a structure in which the central bank accepts deposits from the Islamic banks, and provides a unilateral promise to pay a certain return upon completion of a specified (Shari’ah compliant) task or achieving a specific outcome. The structure of this arrangement is only specified at high level, leaving considerable flexibility in the implementation.

The Bank’s preferred deposit model

Further internal analysis and public consultation

Upon completing the preliminary survey, the Bank determined that the two deposit models most likely to be viable in the United Kingdom were the CM model and the wakalah fund based model. These were originally included in a public consultation in February 2016, while at the same time being subject to further internal analysis on the financial, operational and legal risks.⁽¹⁾ Both models were broken down into their constituent steps, and examined in further detail, to understand precisely how they would work in the context of

(1) See www.bankofengland.co.uk/markets/documents/scfgreenpaper.pdf.

Evaluation criteria used by the Bank to assess deposit models

- The model is transparent and simple to explain and understand, maximising the possibility of it being recognised as meeting the needs of current and potential users. While the Bank would aim to ensure that any selected SCF model is sufficiently transparent, the onus would fall on the Islamic banks to satisfy themselves on Shari'ah compliance. This is because the Bank as a secular body would be unable to provide this assurance.
- The model helps Islamic banks to better meet their LAB requirements under the liquidity rules, or provides effective liquidity support to Islamic banks in the event of a firm-specific or market-wide stress.
- The risks arising from the model fit within the Bank's tolerance thresholds, including with respect to credit, market, liquidity, operational, counterparty and legal risk.
- The model is compatible with the Sterling Monetary Framework (SMF) — any SCF should not conflict with monetary policy, nor undermine the Bank's existing liquidity facilities.
- The model is accessible specifically to institutions which, in their articles of incorporation/association, are prohibited from engaging in interest-based activity. This is necessary to ensure that the existing SMF facilities remain the primary tool in the United Kingdom for monetary policy implementation and liquidity provision.
- The pricing of the model is sufficiently consistent with equivalent conventional facilities for it to be regarded as attractive and fair for Islamic banks.
- Bank resources required to operate any SCF in steady-state are proportionate to the size of the facility.
- The model can be applied without being contingent on future market developments.

the UK legal and regulatory environment, and particularly within the framework of the Bank's existing processes and infrastructure. Each model was assessed against a common set of evaluative criteria (see the box above).

Responses to the first consultation exercise, from the core stakeholder population of UK Islamic banks and their respective SSB scholars, suggested that the wakalah model would be considered more Shari'ah compliant overall (though respondents also indicated that both models would have been acceptable structures to underpin a central bank deposit facility). From the Bank's perspective, the wakalah model was considered to be more operationally straightforward, requiring fewer changes to internal systems, and with fewer dependencies on external third parties. The Bank issued a follow-up consultation paper in April 2017, announcing its intention to establish an SCF using the wakalah fund based model. The Bank's decision was informed by a combination of internal analysis and market feedback from the consultation exercise.

The preferred wakalah fund based model is detailed in this section (Figure 3), and the alternative CM model is detailed in the annex. The diagrams provided are intended to illustrate how these deposit models could work within a UK central banking context; there will be variations in the detail from how the models are currently implemented by central banks in other jurisdictions, and also in how they are implemented in a purely commercial setting.

In the United Kingdom, a wakalah based central bank deposit facility would entail deposits placed by Islamic banks with the

central bank being backed by a fund containing Shari'ah compliant assets such as sukuk. The Islamic bank deposit would be held by the central bank separately from other assets on its balance sheet (to prevent it becoming mixed with non-Shari'ah compliant assets or activity), and the Islamic bank would receive a return from the wakalah fund in lieu of interest earned on a conventional deposit.

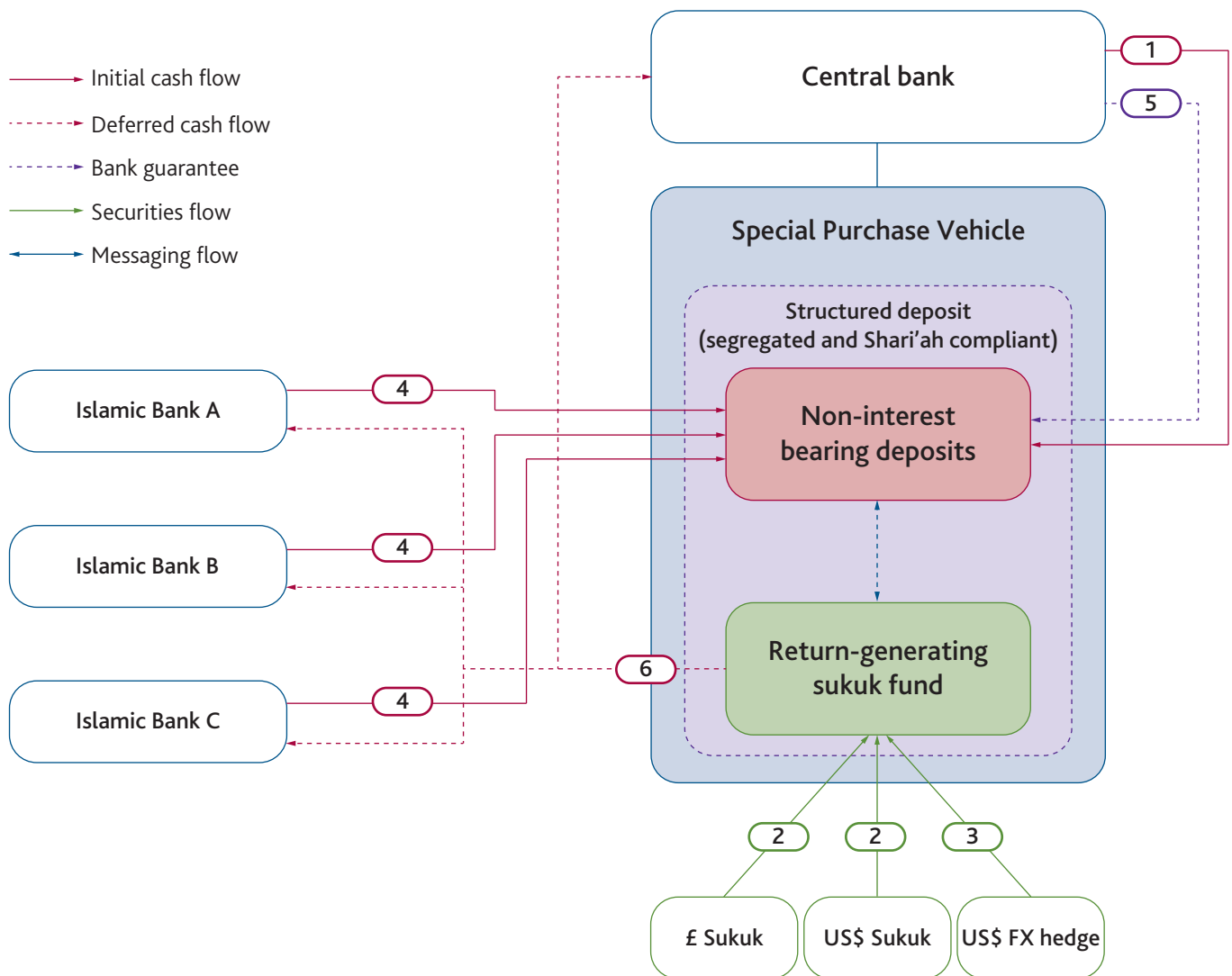
The rate of return on the facility

Rather than including cash in the fund at zero return to adjust the overall return on the facility, in the Bank's proposed arrangement the fund would likely be made up entirely of sukuk. If, as is likely in most scenarios, the overall fund return exceeds the stated EPR, any surplus after administrative costs would be used to gradually build up a reserve. This would then act as a cushion during periods in which the fund is not able to generate a sufficient return. Bearing in mind the original assessment principles, in setting the EPR the Bank would need to ensure the facility pays a return which is sufficiently consistent with that paid to conventional SMF participants, while at the same time not simply replicating Bank Rate.

Pre-establishing the fund and hedging risk

Establishing the fund in advance of accepting deposits is necessary, because in the United Kingdom there is a scarcity of readily available and suitable high-quality liquid assets to put into it. In other jurisdictions operating central bank deposit facilities on this model, pre-establishment might not be necessary if the central bank also regularly issues its own sukuk for use in the fund.

Figure 3 Detailed analysis of the wakalah fund based deposit facility at the Bank



1 The Bank establishes the facility in the first instance, by placing a deposit with the SPV which is equal to the aggregate value (at cost) of sukuk to be purchased for the backing fund.

2 and 3

The SPV purchases sukuk for the fund. At the same time, where sukuk are denominated in a non-sterling currency (most likely US dollars), an accompanying FX hedge is purchased from one of the Bank's existing counterparties. As Shari'ah compliant hedging instruments are available in the market, the use of conventional hedges can be avoided.

4 Islamic banks are invited to participate in the facility, paying an annual access fee commensurate with that for an equivalent conventional firm accessing the SMF. Islamic banks place deposits with the SPV, on a term basis and for an expected profit rate (EPR) which would be set at the start of the transaction. The term will be set at one week, but will be breakable by Islamic banks at any time. The Bank reduces its own deposit in the facility by an amount corresponding to the aggregate deposits placed by the Islamic banks, to ensure the facility remains fully utilised — it will remain a co-depositor for any residual amount. The Bank will receive the same EPR on its deposits as the Islamic banks, meaning the SPV will not engage in any interest-based activity.

5 The Bank guarantees to each Islamic bank the principal amount of the deposits placed by it into the SPV. This would be an overarching or 'master' guarantee to cover the aggregate principal deposit, so as to avoid the need for a new guarantee to be entered into each time a firm increases or reduces its deposit. The Bank would not be remunerated for the guarantee, nor would the guarantee impose any financial or commercial obligation upon the depositor Islamic banks.

6 On maturity of the deposit, a return is paid to all depositors in the facility in proportion to their holdings. This will depend on the performance of the sukuk portfolio, and may or may not be equal to the EPR. This profit rate references the return on the fund, net of any hedging or other operational costs, and contributions to a reserve fund.

The sukuk fund for this deposit facility will incur two main forms of financial risk. The first, and most substantive, is foreign exchange (FX) risk, given that a large proportion of HQLA-eligible sukuk are likely to be US dollar-denominated, while the obligations under the SCF will be in sterling. It would be possible to hedge FX risk in the portfolio using Shari'ah compliant hedging instruments, the contractual terms of which have become increasingly more standardised over

recent years. The second financial risk is profit rate risk, the risk that the rate of return on the constituent sukuk in the portfolio falls short of the stated EPR. This is analogous to interest rate risk for equivalent conventional fixed-income instruments. However, this risk can be mitigated by reducing the actual profit rate paid out to avoid a shortfall; the EPR is only an indicative rate, not a fixed obligation. In addition, the facility can be carefully managed by ensuring that only

high-quality instruments using structures which enable predictable cash flows are included in the fund. These would include instruments issued by highly rated sovereigns and multilateral development banks.

Guaranteeing the principal of deposits

A key criterion for the SCF is that the funds held in the SPV can be treated as 'Level 1' HQLA for the Liquidity Coverage Ratio (LCR) under CRD IV. To achieve this, the Bank will undertake to the participating Islamic banks to guarantee the principal — but not the return — of funds they place in the facility. This will be done in order to establish a claim guaranteed by the central bank. In other jurisdictions offering wakalah deposits, this guarantee may be implicit. In the United Kingdom, the guarantee will be provided in line with the market standard for Islamic banks, that is, it will grant the Islamic banks, as depositors, a discretionary right to a claim against the central bank for any loss of principal value.

Under a pure risk-sharing arrangement, where the Islamic banks did not have a right to call upon the guarantee, the consequent loss would automatically pass through to Islamic banks in the form of a reduction in the principal amount returned. However, this would not be sufficient to constitute a claim upon the central bank. While the Bank recognises the tension which exists between regulatory and Shari'ah compliance requirements on the issue of the principal guarantee, it also notes that the only scenario envisaged in which this undertaking could be called upon by the Islamic

banks would be the default of a sukuk in the backing fund. Given that only high-quality instruments would be eligible for the fund, the probability of such a default would be very low.

Conclusion

Following the closure of the second consultation exercise in May 2017, the Bank has begun to implement the wakalah fund based model. Among other things this involves work to integrate the facility into the Bank's existing internal systems and processes, and create a set of standardised terms and contractual documentation, similar to those used by participants of the Bank's existing SMF. The documentation will include details on the term of deposits and frequency of access.

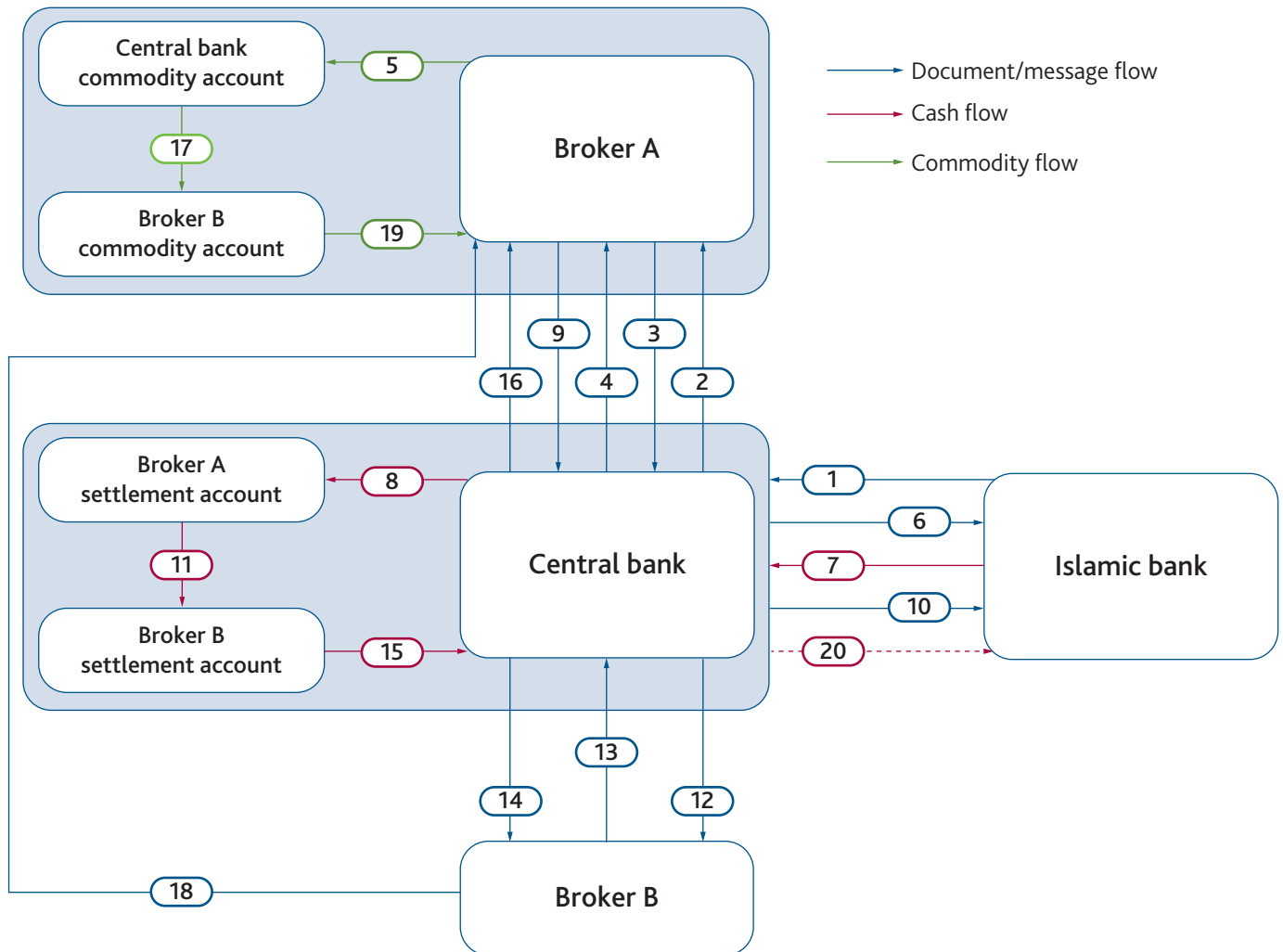
While the facility will be structured to be acceptable for use by UK Islamic banks, consistent with Basel III and EU liquidity rules, it will also be available to any other banks which are prevented from engaging in interest-bearing activity in their articles of association or incorporation. This will mean that commercial banks in the United Kingdom will be able to access either the Bank's conventional SMF facilities, or the SCF — but not both. The SCF project requires a substantial expenditure of resource, and the facility is therefore unlikely to be ready before Spring 2018. Further details on implementation, including timeline, will be posted on the Bank's website in due course.

Annex

Detailed analysis of the alternative commodity murabaha based deposit facility

As part of its analysis, the Bank also considered the implementation of a deposit facility using the commodity murabaha model. This annex outlines how such a deposit facility would have worked in practice, if the Bank had chosen to implement it.

Figure A1 Detailed analysis of the alternative commodity murabaha based deposit facility



- 1 Islamic bank makes request to central bank to make Shari'ah compliant deposit, instructs central bank as agent to purchase the commodities.
- 2 Central bank notifies Broker A of Islamic bank's request to make deposit.
- 3 Broker A issues combined Seller's Offer and Purchaser's Acceptance to central bank.
- 4 Central bank signs and returns Purchaser's Acceptance to Broker A.
- 5 Broker A, acting as custodian, transfers specified commodity from own inventory to commodity account of central bank.
- 6 Central bank issues Purchase Confirmation to Islamic bank with details of commodity purchased by central bank as agent for Islamic bank.
- 7 Islamic bank pays agreed spot purchase price for commodity.
- 8 Central bank credits Broker A's settlement account with spot purchase price.
- 9 Broker A issues commodity certificate and warrant listing to central bank.
- 10 Central bank issues Sale Confirmation to sign and return by Islamic bank.
- 11 Central bank debits Broker A's settlement account, credits Broker B's settlement account with purchase price.
- 12 Central bank sends request to Broker B to issue combined Purchaser's Offer and Seller's Acceptance.
- 13 Broker B issues combined Purchaser's Offer and Seller's Acceptance to central bank.
- 14 Central bank signs and returns Seller's Acceptance to Broker B.
- 15 Central bank debits Broker B's settlement account with sale price (same as original spot purchase price) and credits its own account.
- 16 Central bank issues Delivery Notice to Broker A confirming commodity sold to Broker B.
- 17 Broker A acting as custodian transfers commodity from central bank commodity account to Broker B's commodity account.
- 18 Broker B sells back commodity to Broker A.
- 19 Broker A acting as custodian transfers commodity from Broker B's commodity account to its own general inventory.
- 20 Upon maturity, central bank makes deferred payment (including mark-up) to Islamic bank.

Although there are a number of notification steps in the process, these are typically automated, through the use of Broker A's web-based CM system. This is important, because if any of the steps are missed or fall out of sequence, the overall transaction may be deemed non-Shari'ah compliant. This also highlights the importance of Broker A to the CM arrangement more generally. If their system suffers an outage, or if the broker is otherwise unavailable, the transaction cannot proceed and the policy objective of the SCF cannot be fulfilled. Selection of the CM model would therefore entail careful due diligence of Broker A's trading systems as well as their general capability as a trading intermediary.

Similarly, this model would require the Bank to open settlement accounts in respect of Brokers A and B, to net off exposures with the commodity brokers. This way, the only actual cash flows are between the Bank and the participating Islamic banks. For the Bank, a minimum of four accounts would likely be required, if two brokers are used on a regular basis, with two additional brokers as a contingency. Selection of a range of brokers to diversify counterparty risk could however be challenging, since only a small number of firms are active in this highly specialised market. It might be possible to mitigate this risk by transacting via commodity exchanges rather than directly with brokers, but ultimately oversight of this form of central banking activity could not be outsourced — responsibility would have to remain with the Bank.

Under the murabaha model, if an Islamic bank wished to break their deposit it would require them to initiate a countervailing trade with the Bank, running through all the process steps in **Figure A1**, but with the flows reversed. As noted previously, there would be a number of steps involved, but system automation would reduce the operational burden.

Use of commodities and commodity accounts

Selection of the specific commodity to be traded is an important consideration. The Bank would have to give due regard to market preference on the list of permitted commodities for CM transactions, since this is primarily a question of Shari'ah compliance, and the commodities in question will be held by the broker rather than the Bank itself. The Bank might though find certain commodities to be less suitable for operational reasons: soft commodities such as cocoa and coffee would need to be transacted in greater quantities to reach the same transactional values, and some which are liquid, such as palm oil, might be problematic due to Shari'ah concerns over commingling in storage. A balance would need to be struck between having a suitable range of commodities to transact with, and ensuring each eligible commodity has a sufficiently high unit value and liquid market.

Broker A needs to open commodity accounts in respect of the central bank, and Broker B. This means that commodities are actually held by the broker; they are not held directly by either the central bank or the Islamic bank. This is sufficient to constitute constructive possession under Shari'ah standards, and reduces the need for the Bank to change/adjust its systems to be able to hold commodities, which central banks do not normally do. In commercial terms, it also makes it easier for Broker A to net off their commodity holdings with those of Broker B, especially if/when Broker B sells the commodity back to them. However, it is commonly understood that even if constructive possession is sufficient, physical delivery must be at least possible, even if seldom effected in practice. In terms of current market practice, where physical delivery is required by broker clients (which is rare), this must be requested prior to the initiation of a CM transaction.

Glossary of selected Islamic finance terms

'Aqd — A contract.

Bai — A sale.

Bai al inah — A sale with immediate repurchase — normally deemed impermissible as it can be used to replicate a conventional interest-bearing transaction.

Fiqh — Islamic jurisprudence, the interpretation of the high-level principles of Islamic law. Commonly divided into 'fiqh al mu'amalat' (jurisprudence pertaining to activities between people) and 'fiqh al ibadah' (jurisprudence pertaining to acts of worship).

Gharar — Excessive uncertainty in a contract, which may give rise to dispute.

Halal — Permissible under Shari'ah.

Haraam — Impermissible under Shari'ah.

Ijarah — A lease-based contract.

Islamic — Adhering to, or consistent with, the values system of Islam.

Ju'alah — A contract in which one party offers specified remuneration to another in return for the completion of a specific piece of work.

Mudarabah — A silent partnership arrangement in which one party (the 'rabb al maal') provides capital and the other ('mudarib' or entrepreneur) provides time/expertise to an enterprise.

Murabaha — A sale of a particular asset at a disclosed mark-up. Often used in conjunction with commodities to generate a return for Shari'ah compliant deposits.

Musharakah — A partnership arrangement between two or more parties, in which risks and reward are shared proportionately.

Qard hasan — An interest-free loan, often used for charitable purposes.

Riba — Technically, 'excess' or excessive compensation; the Arabic term for interest or usury.

Shari'ah — The high-level principles of Islamic law, commonly derived from (in order of hierarchy): the Qur'an, Sunnah (the recorded acts, sayings and tacit approvals of the Prophet Muhammad), ijma' (consensus of the early Muslim community) and 'qiyaas' (reasoning by analogy).

Sukuk — Technically, plural of 'sakk'. A certificate entitling the holder to a beneficial interest in a Shari'ah compliant activity or underlying asset, but excluding shares. In the United Kingdom, sukuk are often designated under the applicable legislation as Alternative Finance Investment Bonds (AFIBs). The economic and risk profile of sukuk will vary depending on the underlying structure — some behave like conventional fixed-income instruments, while others will resemble equities but without the voting rights.

Takaful — Technically meaning 'to mutually guarantee', a form of Shari'ah compliant insurance.

Wa'ad — A promise, normally provided in the form of an undertaking to carry out a specified action at some point in the future. Commonly enacted as either unilateral (in which a promisor provides an undertaking to a promisee, where the latter is under no obligation), or bilateral (known as 'muwa'ada' in which two parties provide respectively binding undertakings to each other). Can be used to underpin open market operations or financial risk hedging activity.

Wadiah — A safe custody arrangement. In some instances, a bank holding deposits under wadiah may be permitted to use the funds to generate a profit, in which case they can offer a discretionary return ('hiba', or gift) to the customer.

Wakalah — An agency-based arrangement, in which a party ('wakeel') acts as agent for a principal ('muwakkil'). Commonly used as the basis for banking, investment and insurance activity.

References

Accounting and Auditing Organization for Islamic Financial Institutions (2015), Shari'ah Standards.

Ainley, M, Mashayekhi, A, Hicks, R, Rahman, A and Ravalia, A (2007), 'Islamic finance in the UK: regulation and challenges', November, available at www.fsa.gov.uk/pubs/other/islamic_finance.pdf.

Bank of England (2014), *Sterling Monetary Framework Annual Report 2013–14*, available at www.bankofengland.co.uk/publications/Documents/quarterlybulletin/2014/qb14q2prereleasesmfar201314.pdf.

Bank of England (2015), *The Bank of England's Sterling Monetary Framework*, available at www.bankofengland.co.uk/markets/Pages/sterlingoperations/redbook.aspx.

Bank of England (2016), 'Establishing Shari'ah compliant central bank liquidity facilities', February, available at www.bankofengland.co.uk/markets/documents/scfgreenpaper.pdf.

Bank of England (2017), 'Shari'ah compliant liquidity facilities: establishing a fund based deposit facility', April, available at www.bankofengland.co.uk/markets/Documents/sclf_consultationpaper2017.pdf.

Financial Services Authority (2008), Consultation Paper 08/22: 'Strengthening liquidity standards', December, available at www.fsa.gov.uk/pubs/cp/cp08_22.pdf.

HM Treasury (2014), UK Sovereign Sukuk PLC's Offering Circular, available at www.gov.uk/government/uploads/system/uploads/attachment_data/file/343686/UK_Sovereign_Sukuk_PLC_Offering_Circular.pdf.

International Islamic Financial Market and International Swaps and Derivatives Association, Inc (2010), ISDA/IIFM Tahawwut (Hedging) Master Agreement, available at www.iifm.net/published-standards.

International Monetary Fund (2017), *Multi-Country Report: ensuring financial stability in countries with Islamic banking: Staff Report*, available at www.imf.org/~e/media/files/publications/cr/2017/cr17145.ashx.

Islamic Financial Services Board (2017), *Islamic Financial Services Industry Stability Report 2017*, available at www.ifsb.org/docs/IFSB_IFSI_Stability_Report_2017.pdf.

Kahf, M and Hamadi, C (2014), 'An attempt to develop Shari'ah compliant liquidity management instruments for the financier of last resort: the case of Qatar', *Islamic Economic Studies*, Vol. 22, No. 1, pages 109–38.

Shafiq, M (2015), 'Goodbye ambiguity, hello clarity: the Bank of England's relationship with financial markets', available at www.bankofengland.co.uk/publications/Documents/speeches/2015/speech801.pdf.

Usmani, M T (2005), 'An introduction to Islamic finance', *Maktaba Ma'ariful Qur'an*, Karachi, Pakistan, pages 95–154.