

LEGAL REQUIREMENTS FOR DIGITAL ISLAMIC BANKS

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* Disclaimer: The views expressed in this chapter are those of the author and do not necessarily reflect the views or policies of any organisation the author is currently serving or served before in whatever capacity.



Abstract

The aftermath of the 2008 global financial crisis led to the emergence of various technological-driven financial intermediation solutions. One of such fintech solutions disrupted the banking industry, and it is now commonly known as digital banking. This study examines the legal and regulatory requirements for digital Islamic banks, which are considered unique when compared to the traditional digital banks. While analysing the legal and regulatory framework with particular reference to licensing of digital banks in Europe and Bahrain, this study identifies areas where digital Islamic banks may require additional regulatory requirements. This study argues that there is a need for a uniquely different legal and regulatory framework for digital Islamic banks to enhance their efficiency in an increasingly competitive industry where well-established big players have the unquestionable potential to overshadow them. Though non-exhaustive, some of the key aspects identified, which may be implemented through legal and regulatory provisions include: determining the nature of digital banking license; Shari'ah advisory requirements and the limited potentials of Shari'ah robo advisory services; bionic digital banking; mandatory requirement for online dispute resolution; and prudential standards for cross-border transactions. The study concludes that from the regulatory perspective, the bionic banking model may best suit the inherent nature of digital Islamic banking.

Key words: digital banks, Islamic banks, fintech, Islamic finance, bionic banking.

1. Introduction

After the 2008 global financial meltdown, different technological-driven financial intermediation models emerged. This period saw the emergence of what is now known as financial technology or fintech (Oseni & Ali, 2019). In fact, based on the data extracted from U.S. Federal Deposit Insurance Corporation (FDIC), since the collapse of Lehman Brothers on 15 September 2008 up to 21 January 2019, 27,278 bank branches have closed their offices. As a consequence of fintech revolution, digital banks emerged to disrupt the then ailing banking industry. Undoubtedly, banking in a digital world is picking up tremendous steam and regulators have continued to be reactive to the technological revolution experienced in the financial industry in the past decade. The promise of digital banking can be viewed from two different prisms: convenient and seamless customer banking experience on one hand and efficiency in its model on the other hand. While people are increasingly on the move in a fast-paced world, the banks have also been recently reconfigured their businesses to reflect



“banks on the move” enabled by the digitisation wave. According to a recent Forbes report, the two leading digital banks in Europe are planning to enter the United States market in the year 2019 (Mouratidis, 2018). The two banks established in 2015 are N26 in Germany and Revolut in the United Kingdom and they have more than 2 million and 3.3 million users respectively (Mouratidis, 2018). Other digital banks include Tandem Bank in the UK and Atom.

The first digital Islamic bank called “meem” was established in January 2015 by the Gulf International Bank in Bahrain. Also, Insha GmbH⁽¹⁾ was established by Al Baraka Banking Group in Germany in September 2018. While a handful of Islamic banks have introduced some aspects of digital banking with massive investments in financial technology, most Islamic banks are still struggling to catch up with the astronomical pace of digital revolution and disruption of traditional brick-and-mortar banking model. Time is definitely of essence, as one may argue that time is running out for many Islamic banks in an increasingly competitive financial environment where conventional digital banks may ultimately dominate the digital Islamic banking market.

Just like other human endeavours, people want ease of doing things in a seamless manner with utmost efficiency. After all, the Islamic hermeneutic principles promote ease of doing things, including commercial transactions based on the principle of *maslahah* (public good) where emphasis is placed on benefit (*manfa'a*). Therefore, the Islamic banks and regulatory bodies in jurisdictions where such banks operate should embrace this new wave in financial technology to explore areas where some of the current challenges in product development in Islamic finance could be addressed through the seamless digital banking experience.

Against the above backdrop, this study is organised into five major sections. After this introductory section, section 2 provides a conceptual analysis of what constitutes digital banking and what is not. Such clarification is necessary to identify what needs to be regulated as the focus of this study is the legal requirements for digital Islamic banks. Section 3 attempts to answer a nagging question whether there is a need for a bespoke legal and regulatory framework different from the prevailing legal and regulatory requirements for Islamic banks operating in different jurisdictions. In addition, section 4 briefly establishes the key regulatory requirements for digital Islamic banks. Finally, section 5 provides the conclusion and policy recommendations, which may be useful for other jurisdictions that seek to regulate such specialised fintech-based banks.

(1) Gesellschaft mit beschränkter Haftung. This is a legal entity for companies which are registered as private entities in Germany. The letters “GmbH” signifies a company with limited liability.



2. Digital Banking: What is it – and what is not

Though some may still believe the use of mobile banking apps and web-based platforms for banking amounts to digital banking, a closer look at such practice reveals that digital banking transcends such practice. A fully digital bank does not provide any opportunity for its financial consumers to visit a physical location for banking transactions; rather all transactions are fully automated and conducted online. Digital banking represents an end-to-end banking transactional spectrum which begins with the opening of account, KYC process, through conducting transactions using current and savings account to investments, money transfer, and ultimately the closure of a bank account. This involves “the full management of credit and debit cards, the insurance simulators available, the possibility to obtain a line of credit online, and portfolio management and investment possibilities with an intuitively designed platform.” (Deloitte, 2017). The digital bank may be a fully automated subsidiary of a traditional bank but established with its own unique market and customer base and specialised services.

Therefore, digital banking is “a new concept in the area of electronic banking, which aims to enrich standard online and mobile banking services by integrating digital technologies, for example strategic analytics tools, social media interactions, innovative payment solutions, mobile technology and a focus on user experience.” (Moeckel, 2013). Digital banks are sometimes called “challenger banks” in the United Kingdom. Therefore, to qualify as “banks”, such legal entities do obtain applicable license to accept retail deposits from the Prudential Regulation Authority. From both the technical and regulatory perspectives, digital banks or challenger banks are enabled by open banking initiatives. McKinsey has described “open banking” as “a collaborative model in which banking data is shared through APIs [application programming interfaces] between two or more unaffiliated parties to deliver enhanced capabilities to the marketplace.” (Brodsky & Oakes, 2017).

It is pertinent to note that the digital banks across the world are either pure digital-only banks or digital banks established by commercial banks, i.e. having commercial banks behind their operations (Weng, 2018). Figure 1 presents a map of some digital banks across the world which have emerged in the past few years.

Figure 1: Emerging digital-only banks

Most digital-only banks have emerged in a relatively short period of time

Figure 1. Emerging digital-only bank initiatives that are leading the race in their markets



Source: (Weng, 2018)

2.1. From Brick-and-mortar Banking to Digital Banking

The traditional brick-and-mortar banking have continued to face serious challenges occasioned by the recent disruption of banking business with the increasing prominence of fintech. While fintech offers huge opportunities for brick-and-mortar banks, including Islamic banks in particular, failure of such banks to embrace the rising tide could drive such banks out of business. One would ask how the brick-and-mortar banks could thrive in the age of fintech where digitisation is taking over the lives of many. This question has been boldly answered by Gartner thus:

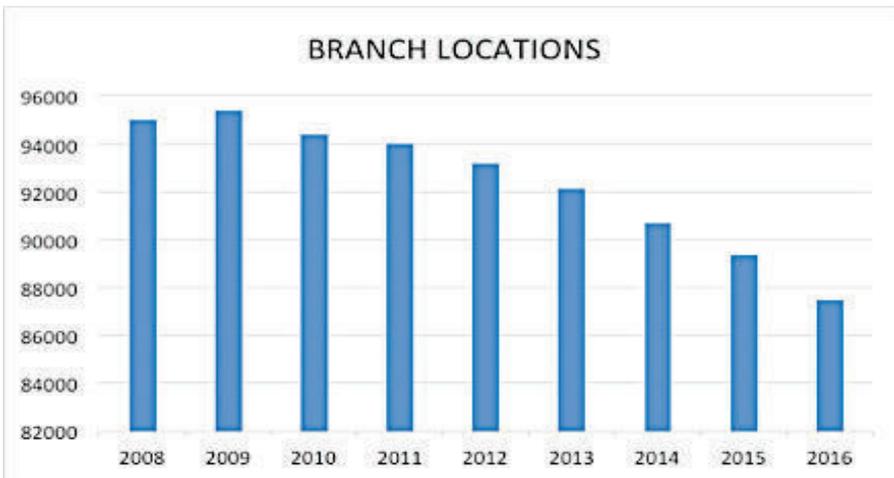
By 2030, 80 percent of heritage financial services firms will go out of business, become commoditized or exist only formally but not competing effectively, according to Gartner, Inc. These firms will struggle for relevance as global digital platforms, fintech companies and other nontraditional players gain greater market share, using technology to change the economics and business models of the industry (Gartner, 2018).

Rather than pretending as if the level of disruption is not significant, banks may need to move faster in overhauling their business through digital transformation. It thus appears that for banks to remain competitive in an increasingly digitalised world, they need

to deploy fintech solutions in order to offer certain niche products and services. “By having a truly digital business, banks can move away from reactive, transaction-based customer relationships, toward a more intimate, proactive and personalized experience across multiple channels, products and services.” (Accenture Interactive, 2013).

The increasing importance of digital banking has led to the closure of many bank branches across the world. In the United States, as part of the aftermath of the 2008 global financial crisis, 4,821 bank branches were completely shut down between 2009 and 2014 according to New York Federal Reserve. Figure 2 below presents data on branch closures between 2008 and 2016 based on Federal Deposit Insurance Corporation (FDIC) data where 6,008 out of 95,018 branches were closed during the period. It can be seen that from 2009 onwards, there has been a progressive decrease in the bank branches which is a result of the consistent closure of bank branches. It is projected that considering the current trends in banking technology, particularly digital banking and the proliferation of digital banks, it is estimated that up to 20% of bank branches are expected to close between 2014 and 2020 (NCRC, 2017).

Figure 2: United States Bank Branch Locations



Source: (NCRC, 2017)

It must be acknowledged that digital banking could either adopt the B2B or B2C models. The former involves bank-to-bank transactions which includes interbank settlements, wire transfer among others while the latter involves bank-to-consumer transactions. Automation and digitisation have been the key factors that spurred the rapid development of digital banking. It thus appears that the digital Islamic banks



emerging across the world are core initiatives of existing brick-and-mortar banks. This is contrary to some of the pioneer digital banks, N26 and Revolut which both started as fintech interface start-ups that later obtained banking licences. Other digital banks like Tandem Bank and Atom had to obtain banking licences from the initial stage of operations in order to operate banking activities.

2.2. Comparing Digital Banking with Brick-and-Mortar Banking

While the foregoing discussion might have shed some light on the inherent differences between digital banking and the traditional brick-and-mortar banking, it is pertinent to provide a cursory look on the major differences between the two forms of banking. In analysing the differences between these two types of banking, it is important to specifically compare traditional online banking with digital banking in order to clearly differentiate between what constitute “online” and “digital” banking. Hence, for the purpose of this section, brick-and-mortar banking will be considered as “online” banking. Having considered different studies relating to this issue, one may prefer Frank Schwab’s comparison between traditional online banking and digital banking as depicted in Table 1.

Table 1: Traditional Online Banking versus Digital Banking

Online Banking versus Digital Banking		
	Online Banking	Digital Banking
Customer	Product Push, TV, Email, Radio, ...	UX, Social media, Digital Eco-Systems
Products	Account, Money transfer, Loans, Securities, HBCL, ...	New Services: Crowd, Peer-to-Peer, Crypto, Identity, Mobile, real time, API
Processes	Legacy, paper-based products, services and processes brought to the web	100% straight through, no queues, automated, artificial intelligence
Development	Waterfall model, quarterly releases	Agile, Design Thinking, daily deployments
Technology	Many technologies, mainly legacy	Reduced stack, right tool for respective job
Legal	Legal and compliance as limitation	Legal and compliance as an opportunity
People	Bank-Specialists trained on IT, Social Media and Mobile Immigrants.	Digital experts, successful & proven web entrepreneurs
Leadership	Hierarchic	On eye level, have own coding experience

Source: (Schwab, 2015)

In addition to the above comparisons, there are other aspects that are equally important such as dispute resolution and regulatory technology (RegTech). Dispute resolution for most online banking platforms utilise the traditional forms of dispute resolution in spite of the fact that they are online platforms. On the other hand, for digital banking,



there is the possibility to introduce additional procedures for dispute resolution such as the adoption of online dispute resolution (ODR) protocols (Oseni, Adewale, & Omoola, 2018). In addition, traditional regulatory and supervisory authorities adopt similar regulatory framework for online banking while the emerging RegTech with its unique risk mitigation is more suited for digital banking.

2.3. The Nature of digital Islamic banking

Having analysed the nature of digital banking, one would therefore ask whether there is anything called “digital Islamic banking”. What is so unique about digital Islamic banking? Just like the traditional brick-and-mortar Islamic banking, digital Islamic banking can be defined as an electronic platform which integrates digital technologies to enhance user banking experience by offering numerous innovative Shari‘ah compliant products and services. The ultimate aim of digital Islamic banking transcends imitating the traditional brick-and-mortar model but projects a full integration of strategic analytic tools, Artificial Intelligence, and innovative Shari‘ah compliant payment and trade solutions. These are all deployed to enhance financial consumers’ experience by not only giving Shari‘ah assurance of the compliance of the products or solutions but also to project transparency and unambiguous contractual terms to ensure fundamental Islamic commercial law principles in Islamic law are upheld.

The nature of digital Islamic banking will not be drastically different from the prevailing digital banking model. It is noted that the inherent features of digital banking reflect core Islamic principles such as efficiency, transparency, and improved customer experience. For the digital Islamic banking mode, there is an unusual opportunity to offer Shari‘ah compliant partnership and profit and loss (PLS) products such as musharakah and mudarabah based products, which may be based on crowdfunding on the platform. In essence, the main difference between digital Islamic banking and the conventional digital banking will be in the products, services and solutions offered in addition to the Shari‘ah governance requirement for the former. Digital Islamic banking solutions must be Shari‘ah compliant from their structuring up to their offering to consumers. Besides, such products, services and solutions must obtain the necessary Shari‘ah approval before being marketed as Shari‘ah products.

3. A Bespoke Legal and Regulatory Framework?

It is therefore necessary to plumb further into the necessity of a legal and regulatory framework for digital Islamic banking. Is a bespoke legal and regulatory framework well suited for digital Islamic banking? Can digital Islamic banks be licensed and regulated under the conventional legal framework? What are the desired legal requirements



for digital Islamic banks? Generally, digital Islamic banks in most jurisdictions are authorised or licensed under the existing laws regulating the traditional banks. It is only in some specific situations, such as the bold moves of the European Union, that unique policies are introduced to regulate digital banks.

3.1. A Review of the Regulatory Approaches

Given that the pioneering digital banks sprung up in Continental Europe and the United Kingdom, it is appropriate to examine the regulatory approaches for digital banks in those jurisdictions and surmise on the best approach or framework for digital Islamic banks. Also, it is important to briefly examine the legal requirements and regulatory framework under which the two prominent digital Islamic banks in Germany and Bahrain operate.

3.1.1. The EU's Revised Payment Services Directive (PSD2)

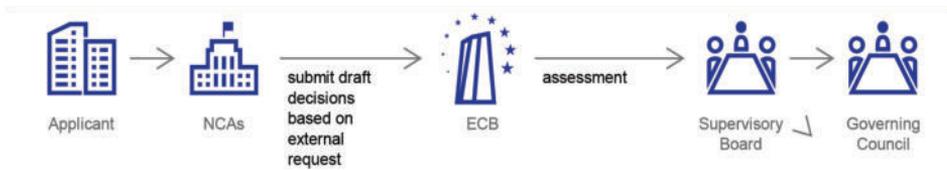
In the European Union, the main legal framework for digital banks is the revised Payment Services Directive (PSD2)(2) which is an enhancement of the earlier Payment Services Directive adopted in 2007. The latest revision, PSD2 came into force on 12 January 2016 while the EU member states are expected to have transposed it into law by 13 January 2018. The main objective of PSD2 is to provide a regulatory framework that “supports innovation and competition in retail payments and enhances the security of payment transactions and the protection of consumer data.” (European Central Bank, 2018). It can be seen from this objective that the core focus of PSD2 is to deregulate payment system with enhanced security and consumer protection measures. This is why PSD2 is further supplemented by regulatory technical standards which were published on 13 March 2018 but will become operative by 14 September 2019. The three regulatory technical standards are on: (i) strong customer authentication and common and secure open standards of communication, (ii) incident reporting, and (iii) security measures for operational and security risks.

Legal entities seeking to operate as digital banks in Europe are granted banking license by the European Central Bank (ECB). A Single Supervisory Mechanism (SSM) is adopted for licensing such banks which is also used for the normal banks. Therefore, digital banks are held of the same standard as other banks to ensure a level playing field. Each country within the EU has what is called the National Competent Authority (NCAs), which are usually the central banks or monetary authorities (Bockel, 2017). In the SSM, the ECB and the NCAs are both involved in the granting and extension

(2) Directive (EU) 2015/2366 of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market, amending Directives 2002/65/EC, 2009/110/EC and 2013/36/EU and Regulation (EU) No 1093/2010, and repealing Directive 2007/64/EC.

of banking licences. As depicted in Figure 3, the authorisation process for digital bank licensing in EU begins with the submission of the application to the NCA of the country within which the bank intends to be incorporated. The NCA then submits its draft decision after its assessment to ECB who also conducts its assessment (European Central Bank, September 2017). The final decision is made by the ECB after due recommendation is made to the ECB Supervisory Board for its consideration, and an ultimate recommendation made to the ECB Governing Council for its approval.

Figure 3: The authorisation process for digital bank licensing



Source: (European Central Bank, September 2017)

Though as depicted above, the same licensing process is used for all types of banks, there are some unique policies applicable to digital banks apart from the general fit and proper assessments. The general criteria that are assessed in the licensing process include the following non-exclusive areas:

- i. Governance. This includes suitability of the members of the management body and suitability of its shareholders. For the members of the management body, besides having sufficient knowledge and experience in banking and financial business, they must also have sufficient professional experience, qualifications and skills relating to IT. This requires the appointment of a Chief Information Technology Officer to serve on the executive board. Apart from the financial soundness to ensure prudent operations for the initial period, shareholders are expected to have management and technical competence. Since the approach to Shari‘ah compliance in the United Kingdom and continental Europe is more to providing a level playing field for all types of banks, digital Islamic banks applying to operate in these jurisdictions may have to adopt self-regulatory measures such as Shari‘ah governance policies. Though this may not be required by NCA and ECB, once such digital Islamic banks hold themselves out as Shari‘ah compliant banks, they may be morally obliged from the consumer protection perspective, to have in place necessary Shari‘ah governance and compliance policies.
- ii. Internal organisation. The structural organisation of digital banks includes necessary risk management, compliance and audit frameworks like traditional



banks. However, there is an additional layer of internal controls where emphasis is laid on three factors while assessing the customers' repayment capability. These three factors are identity (targeted at preventing fraud), ability to repay (assessed based on current income and debt), and willingness to repay (based on past credit performance). For some of these factors, such as identity, outsourced data or alternative credit-scoring methods may be relied on since data on past credit performance might not be readily available, particularly for customers applying to open accounts via the digital platform. The digital Islamic banks do not need bank-specific procedures for this, but it is important that a proper assessment of all IT-related risks is carried out, as this will be considered by NCA and ECB to ensure minimal impact of cyber risk. In addition, proper outsourcing (including cloud services) policy, and data governance must be put in place.

- iii. Program of operations. There should be an assessment of the programme of operations, which should include execution risks arising from the business model and exit plan. It is always difficult to make business projections and assess the resulting capital requirements. A clearly defined business model which includes the exit plan is traditionally a Shari'ah requirements for any business, particularly in joint venture partnership arrangements such as musharakah and mudarabah. With regards to the NCA and ECB assessment of the programme of operations, three key aspects considered are: the cost required to operate the digital bank's business for a period of 3 years, triggers in the exit plan in the business model that will activate the exit plan, and a follow-up inspection one year after licensing the bank.
- iv. Capital, liquidity and solvency. In assessing capital, liquidity and solvency of the digital bank, two key aspects are considered: initial capital and liquidity. For digital Islamic banks, they will be entering developed markets where there are several well-established digital banks. Therefore, this will require a business model that is not only Shari'ah compliant but also conventionally viable and profitable. In order to gain significant market share, offering high profit from some innovative Shari'ah compliant products and solutions may give digital Islamic banks an edge in a market characterised by several hi-tech and sophisticated participants. On the second aspect relating to liquidity, there is a need to come up with liquidity risk mitigants to ensure they have enough sticky deposits by offering high profit rates. Similarly, this will require innovative product development utilising some of the classical modes of financing in Islamic commercial law.

3.1.2. United Kingdom

Similar to the licensing requirements in EU, the UK as part of the EU (before the



eventual Brexit), has largely adopted the EU Directives, including PSD2. Digital banks in the UK are also called challenger banks. They are regulated under the Financial Services (Payment Services) Regulations 2018 which is based on the transposition of PSD2. This allows for greater access to banks accounts and account information of customers, ban on surcharges, reduced customer liability, and reporting obligations among others. This legal framework in the UK has advanced the work of the Open Banking Implementation Entity (OBIE) which is tasked with the responsibility of implementing the Open Banking Standard. The “Open Banking was created to enable innovation, transparency and competition in UK financial services. It is tasked with delivering the Application Programming Interfaces (APIs), data structures and security architectures that will enable developers to harness technology, making it easy and safe for individuals and SMEs to share the financial information held by their banks with third parties.” (Open Banking, 2018).

Meanwhile, the banking authorisation process is supervised by the Financial Conduct Authority and the Prudential Regulation Authority (PRA). While the digital banks are licensed just like the normal banks, there are some legal restrictions introduced for digital banks. In some cases, an initial permit with restrictions is granted. There are a number of phases in the banking authorisation process in the UK. Some of the recent digital banks operating in the UK were initially granted “mobilisation” which is an authorised banking license with restrictions. There are basically three phases in the licensing process. It begins with the pre-application phase and go through the assessment and authorisation phase, then finally it ends at the mobilisation phase. It is at the mobilisation phase the digital bank raises its capital, ensure it has in place necessary IT platform which should have been tested. At this final phase, all governance policies and procedures and staff hiring should be finalised. There is a 12-month timeframe for this final phase; and once all requirements are met, the restriction on the license will be lifted. This authorisation process is adopted for all types of banks.

3.1.2. Germany

Furthermore, in Germany, the Federal Financial Supervisory Authority known in Germany as BaFin regulates the licensing of banks, including digital banks in the country. Being part of the EU, BaFin is the NCA for Germany and their licensing process generally follows the above ECB procedure. Any digital bank, including digital Islamic banks such as Insha GmbH (already authorised) and future applicants, must apply to BaFin for a written authorisation as the NCA. The final authorisation will be granted by the ECB after due consultation with BaFin as explained above. This is pursuant to sections 32 and 33 of the German Banking Act (Kreditwesengesetz – KWG) which must be read with Article 4(1) of the SSM Regulation. Section 32(1) of the German Banking Act specifically provides: “Anyone wishing to conduct banking business or



to provide financial services in Germany commercially or on a scale which requires commercially organised business operations needs written authorisation from BaFin.”

3.1.3. Bahrain

Traditional banks as well as digital banks are licensed by the Central Bank of Bahrain (CBB) under Article 40 of the Central Bank of Bahrain and Financial Institutions Law 2006, which provides:

- a. No person shall carry out a Regulated Service in the Kingdom unless licensed by the Central Bank.
- b. With due regard to the provisions of the Commercial Companies Law, no financial institution shall be established in the Kingdom without the approval of the Central Bank.

Hence, digital banks are required to obtain license from the CBB prior to undertaking banking business. Since digital Islamic banks are fully Shari’ah compliant entities, if they are to operate as fully digital banks that are not backed by existing banks, they have to be licensed like other Islamic banks under the CBB Rulebook Volume 2 on Licensing Requirements for Islamic Banks. These requirements include legal status, mind and management, controllers, board and employees, financial resources, systems and controls, external audit, and other requirements. While these are the usual requirements for banks, the additional requirements on Shari’ah governance in the CCB Rulebook is quite helpful and would help ensure the products, services and solutions offered through the digital Islamic banks are truly Shari’ah compliant. The objective of the law is to “establish best practice Shari’a governance principles in Bahrain, and to provide protection for investors and other Islamic bank licensees’ stakeholders through compliance with these principles.”

For already licensed banks, it is believed a fresh license may not be required to operate a digital bank platform but prior approval from CBB may be required to operate a new regulated Islamic banking service. This is why it is possible meem, being the retail banking arm of Gulf International Bank did not have to apply for its own unique license to operate. However, when such digital banks would like to extend their operations to neighbouring jurisdictions, there would be need for a banking license in such new jurisdictions. For instance, meem is licensed to operate in Saudi Arabia by the Saudi Arabian Monetary Authority.

3.2. Finding the right regulatory approach

Finding the best regulatory approach for digital Islamic banks in an increasingly



globalised world where customers in such banks may reside in different jurisdictions seems to be a Utopia. However, it is pertinent to observe that digital Islamic banks' legal requirements should not be in any way different from the conventional digital banks in terms of prudential requirements, risk and governance policies, internal controls, and consumer protection. Nevertheless, additional governance requirements may be imposed on digital Islamic banks, including those operating in fairly neutral regulatory environments such as the EU. While these additional requirements include Shari'ah governance and compliance requirements, there are other important requirements where digital Islamic banks may adopt to be one step ahead of conventional digital banks. Such requirements are considered in a more detailed manner in section 4 of this paper where the benchmark for regulation of Islamic digital banks are set.

4. Setting the Benchmark for the Regulation of Digital Islamic Banking

Digital Islamic banks remain new entrants in the Islamic financial services industry. This makes a case for the need to set clear benchmarks for regulating these specialised Islamic banks. In setting the benchmarks, this study focuses on six aspects which are meant to enhance the current digital banking frameworks. The purpose of these aspects is to present a uniquely different legal and regulatory framework for digital Islamic banks and enhance their efficiency in an increasingly competitive industry where well-established big players have the unquestionable potential to overshadow digital Islamic banks. Though non-exhaustive, some of the key aspects identified, which may be implemented through legal and regulatory stipulations, include (i) determining the nature of license (ii) Shari'ah advisory requirements and the limited potentials of Shari'ah robo advisory services (iii) bionic digital banking (iv) mandatory requirement for ODR, and (v) prudential standards for cross-border transactions.

4.1. Determining the Nature of License

There is a need for regulators to determine the process of licensing digital Islamic banks whether such banks are subsidiaries of existing banks or stand-alone entities. In most cases, most of the digital banks rely on existing licenses of established banks to deliver their products and services through a digital channel. There has been an attempt to distinguish between completely new digital banks, called "new banks" and other banks that rely on an existing banking license, known as "Neobanks" (Greenberg, 2018). While "new banks" do apply for their own banking licenses, "Neobanks" rely on the existing banking license of their holding banking entity. For instance, Australia



has gone beyond these two licensing models for digital banks where digital banks can now be licensed under Restricted Authorised Deposit-taking Institution (ADI).

While barriers to entry are currently high for new start-ups planning to join the digital banking market, the need for a restricted ADI is more germane. For instance, in Australia, the Restricted ADI rules have lowered the entry barriers by reducing the capital requirements from \$50 million to \$3 million (APRA, 2018). For digital Islamic banks, it is important to have some specific regulatory guidelines, and this is the reason why the restricted ADI might be the most appropriate regulatory approach. However, the best model of ADI for digital Islamic banks should include additional Sharī'ah governance and compliance requirements.

4.2. Sharī'ah Advisory Requirement: Whither Sharī'ah Robo Advisors?

As mentioned above, Sharī'ah governance and compliance requirement is key to the offering of Islamic financial services, products and solutions. Hence, digital Islamic banks have the legal duty to ensure all their business operations and activities are in compliance with the Sharī'ah. This should be part of the legal requirements for granting any license to operate as a digital Islamic bank. In addition, one would wonder how relevant is the emerging Sharī'ah robo advisory services. Sharī'ah robo advisory should be considered differently from digital financial advice otherwise known as Robo-advice, as the latter only provides financial advice to customers. Sharī'ah robo advisors provide Sharī'ah advice on the compliance of products with the principles of Islamic commercial law. Hence, there is an additional responsibility on Sharī'ah robo advisory services in terms of accuracy, efficiency, and transparency. One fundamental question to be asked, which requires legal clarification, is whether Sharī'ah robo advisors can replace human Sharī'ah advisors. It may be argued that Artificial Intelligence and algorithms can only facilitate and complement the work of Sharī'ah scholars. From the classical principles of Islamic jurisprudence, it is not possible for Sharī'ah robo advisors to replace human beings. There is the possibility of bias in the predictive role of algorithm systems. The process of Sharī'ah legal reasoning (ijtihad) requires a human being to conduct the deductive analysis from primary sources of the Sharī'ah while applying secondary sources. Therefore, besides proficiency in the Islamic hermeneutic principles and applicable rules, there is also the requirement for the person or system conducting such ijtihad to be pious and this can only be possible with a human and not an artificial predictive heart. To ensure consumer protection and proper compliance with the Sharī'ah principles, this requirement of proper human Sharī'ah compliance review may be clearly stipulated in the overall legal requirements for the operations of digital Islamic banks.



4.3. Bionic digital banking

Taking a clue from the argument established under the discussion on Sharī'ah robo advisory above, a more general question that needs to be clarified is whether we need bionic digital banking in Islamic finance. The cardinal question to be addressed here is whether the human component is still needed in Islamic digital banking? Before answering this question, it is important to clarify what bionic banking implies. Bionic banking in retail banking simply refers to the process of implementing a perfect balance between the objective of digitisation and human interaction in the delivery of banking solutions. The Boston Consulting Group defines a bionic banking as the process of “blending digital technology and a human touch to deliver the right products and services to target customers.” (Walsh, et al., 2015). Considering the need to have a built-in Sharī'ah governance and compliance framework for digital Islamic banks, it thus appears that the bionic banking model fits the specific requirements of the Islamic financial services industry.

4.4. Mandatory Requirement for Online Dispute Resolution

The PSD2 of the EU requires digital banks to have an efficient dispute or complaint handling process. The timeframe for handling complaints relating to payments services have been established and digital banks are obliged to comply with such timeline. In addition, PSD2 also introduces complaint reporting requirements. If a complaint is made by a customer, digital banks now have shorter timeframe to respond to such complaints, and the response is expected to be in a written form. Such written response must be made within 15 business days or 35 business days in some exceptional circumstances. Regardless of the nature of the complaint, the complainant must be kept informed in case there would be any delay in special circumstances. Furthermore, once the consumer receives a final response from the digital bank, it can then refer the complaint to the Financial Ombudsman Service (FOS) if he or she is not satisfied with the response. While this new procedure is efficient, digital Islamic banks may introduce further rules to implement online dispute resolution (ODR) via the digital banking platform (Oseni, Adewale, & Omoola, 2018). There could be an API to the FOS, which will make the whole dispute resolution process fully digital. It is also possible to build into the process a Sharī'ah verification procedure to ensure the final decision of the FOS does not contradict with any Sharī'ah principle. This enhanced procedure would make digital Islamic banks stand out in the increasingly competitive global market.



4.5. The Need for Prudential Standards for Cross-border Transactions

Though digital solutions are often leveraged to ease cross-border financial services, the divergence in regulatory frameworks has led to a huge setback to the financial services industry. Considering the nature of digital Islamic banks, most transactions and contractual arrangements might be cross-border, particularly when such involve some third-party service providers, merchants, or even e-commerce vendors. For the regulation of cross-border digital Islamic banks, the “EU Passport” model may be adopted in the GCC or even the OIC region where investment and credit institutions established in a member state are conferred with the right to provide services through branches or other direct means in other member states. This may be implemented through conventions or treaties, and it is expected to allow for some form of partial harmonisation of banking licensing laws.

5. Conclusion

In an increasingly globalised world, there is no doubt that innovation in financial technology would continue to move in a fast pace, and regulations may try to catch up with it even though such remains a Herculean task. For the new types of banks in this era as digital Islamic banks, it is important to come up with some clear parameters on their operations. This is where the legal requirements for such digital Islamic banks are important to ensure consumer protection and avoid fraudulent practices.

It has been argued in this study that there is a need for a uniquely different legal and regulatory framework for digital Islamic banks to enhance their efficiency in an increasingly competitive industry where well-established big players have the unquestionable potential to overshadow digital Islamic banks. Though non-exhaustive, some of the key aspects identified, which may be implemented through legal and regulatory stipulations, include: determining the nature of license; Shari‘ah advisory requirements and the limited potentials of Shari‘ah robo advisory services; bionic digital banking; mandatory requirement for online dispute resolution; and prudential standards for cross-border transactions. It is hereby concluded that digital Islamic banking will be seen more from a bionic banking perspective.

Finally, forward-looking initiatives in digital Islamic banking need to be further explored. Beyond digital Islamic banks, traditional Islamic banks may start considering the adoption of blockchain technology for their banking activities. The distributed ledger technology can be used for automating and recording credit scores, managing treasury operations, including liquidity management, automation of the process of creating letters of credit in international trade financing, and verification of digital certificates.



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