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ISLAMIC FINANCE IN THE RECONFIGURATION OF THE GLOBAL FINANCIAL SYSTEM: A STRUCTURAL ANALYSIS AND POTENTIAL IMPLICATIONS

Under Ed. Zoriana Lutsyshyn

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This monograph explores the transformative role of Islamic finance in the global financial landscape. Through a meticulous structural analysis, it delves into the foundations, development, and response to contemporary challenges. The work is structured across three chapters, tracing historical roots, delineating core principles, and addressing adaptability. Section 1 unveils the origins and evolution of Islamic finance, emphasizing its ethical and Shariah-based framework. Section 2 conducts a thorough examination of the current global Islamic finance market, encompassing growth, challenges, and the dynamics of globalization. Meanwhile, Section 3 investigates the sector's adeptness at navigating technological advancements and economic fluctuations, spotlighting its resilience in times of crisis. Employing a rigorous analytical approach, this monograph intricately dissects Islamic finance, revealing its mechanisms and potential global ramifications. Throughout the narrative, the author's rigorous structural analysis illuminates the multifaceted field of Islamic finance, unearthing historical, conceptual, developmental, and adaptive insights. In doing so, the work not only demystifies the intricate mechanisms of Islamic finance but also underscores its pivotal role in shaping the global financial system.

This monograph appeals to a diverse audience, including scholars, educators, graduate students, and undergraduates with an interest in the intricate realm of Islamic finance and its global impact. It offers a valuable resource for individuals keen on exploring historical, conceptual, and practical aspects of Islamic finance. Moreover, professionals and researchers within the fields of international finance, economics, and financial policy will find this monograph to be a comprehensive reference. Whether delving into the foundations of Islamic finance or seeking insights into its adaptability in modern contexts, this work offers an illuminating perspective for a wide range of readers.

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CONTENT

INTRODUCTION

Finance is not merely about making money. It's about achieving our deep goals and protecting the fruits of our labor. It's about stewardship and, therefore, about achieving the good society.
Robert J. Shiller, Economist and Nobel Laureate in Economics.

The essence of Islamic finance is not just risk-sharing, but also ethical investing and socially responsible finance, which aligns with the principles of justice, equity, and fairness.
Tariq Ramadan, Swiss Muslim philosopher and academic.

In recent years, Islamic finance has garnered more attention as a feasible alternative to conventional finance. Following the global financial crisis of 2008, awareness of the constraints and dangers of the conventional financial system has grown, renewing interest in "alternative" financial systems. This interest has also been heightened by several recent events, including the Club of Rome members' stance on global economic principles, the publication of the anniversary report in 2018 [1] regarding the revision of many world order principles, the economic slowdown during COVID-19 and the ensuing period, the surging digitalisation and the development and enhancement of mechanisms and instruments of virtual financial systems, such as blockchain technologies and cryptocurrencies.

Islamic finance, based on Shariah law principles, is recognised as a feasible alternative because of its focus on ethical investment, risk sharing and socially responsible investing. This financing methodology has drawn the attention of investors searching for options that match their ideals and convictions.

In recent years, Islamic finance has witnessed integration into the global financial system, marked by an increased number of Islamic financial institutions operating worldwide. Accordingly, the demand for Islamic financial products and services has surged, such as sukuk (Islamic bonds), takaful (Islamic insurance), and Islamic banking.

[1] *Weizsacker E.U., Wijkman A.* Come On! Capitalism, Short-termism, Population and Destruction of the Planet – A Report to the Club of Rome / Ernst Ulrich von Weizsacker, Anders Wijkman. NY : Springer Science+Business Media LLC, 2018. – 220 p

In addition, the growing adoption of Islamic finance by non-Muslim nations such as the UK and Luxembourg indicates recognition of its potential as a viable alternate financial system that complements domestic financial systems. The reorganization of the global financial system in the post-COVID-19 period, along with the present state of uncertainty, could potentially open up opportunities for further integration and broader acceptance of Islamic finance.

According to the Global Islamic Finance Report 2021, the international Islamic finance sector is valued at £2.88 trillion. The biggest part of this is represented by Islamic banking at £2.2 trillion.[2]

The five countries with the most significant Islamic finance assets are Malaysia, Saudi Arabia, the UAE, Qatar, and Indonesia.

Islamic finance has shown a faster growth rate than conventional finance, with a compound annual growth rate (CAGR) of 8.3% from 2015 to 2020, compared to 4.9% for conventional finance over the same period, according to the mentioned report.

Recently, the issuance of sukuk, one of the primary products of Islamic finance, has continued to increase at a steady pace. According to the Refinitiv 2021 Islamic Finance Development Report, the global sukuk volume rose from $115 billion in 2019 to $140 billion in 2020.

The first Islamic bank was established in the United Kingdom in 2014, making it a prominent proponent of Islamic finance in Western markets. As of 2020, the UK has issued over £7 billion (US$9.6 billion) in sukuk, securing its position as the world's largest non-Muslim sukuk issuer.

The COVID-19 pandemic has demonstrated the significance of Islamic finance as a more robust and sustainable substitute to the mechanisms of the worldwide financial system. As per a report by the Islamic Financial Services Board (IFSB)[3], Islamic financial organisations were more proficient in withstanding the effects of the pandemic due to their funding structures backed by risk and assets.

[2] Islamic Finance Outlook 2021 Edition [Electronic resource] // S&P Global. - 2021. - Mode of access to resource: https://www.spglobal.com/_assets/documents/ratings/research/islamic-finance-book-2021-edition.pdf

[3] The COVID-19 Crisis and Islamic Finance. Response of the islamic Development Bank Group // Islamic Development Bank (IsDB). –2020. – Access mode to the resource: https://www.isdb.org/sites/default/files/media/documents/2020-10/1.%20IsDB%20Group%20Report%20on%20Covid19%20and%20Islamic%20Finance__FINAL.pdf .

In general, the issue of Islamic finance within the restructuring of the global financial system is highly pertinent in the modern world, as interest in financial systems that are more ethical, sustainable and socially responsible continues to increase. Such a role is determined by the core of the Islamic financial model, which imposes strict adherence to the principles of Islamic Shariah. This, in turn, establishes the foundation for social justice in society and guarantees transparent practices for all parties involved in financial transactions.

A defining aspect of the contemporary global economy is its self-organisation, whereby the reshuffling or merging of pre-existing organisational or institutional arrangements is intertwined with the establishment of novel ones. A novel structure for the global economic and political system is taking shape, marked by significant changes. The boundary between internal and external activity as well as domestic and foreign policy is getting blurred. Simultaneously, politicisation of the economy is gaining momentum, with the geo-financial arena exerting a greater influence on the strongest phenomena of economic trends and instability. Former foreign economic dogmas are losing their power, as events are no longer confined to transpiring solely on the global market, but also within its financial spheres. All of this necessitates reform, critical re-examination of the principles, mechanisms, and the development of new methodologies for the functioning of international financial institutions, amongst other things. Given the aforementioned changes that are both transformational and structural, global financial reform is currently one of today's priority issues.

However, when examining the global financial system from historical and transformational perspectives[4], it becomes clear that it is currently more appropriate and accurate to refer to a singular global financial and economic space. This space operates based on the utilization of new technologies, specifically digitalisation, rather than a distinct, structured system determined by the correct and systematic deployment and interconnection of parts of a whole. Based on the above, a comprehensive study of the changes occurring within the global financial environment due to globalization is

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[4]Детальніше див. *Луцишин З.О.* Трансформація світової фінансової системи в умовах глобалізації. К.: Видавничий центр «Друк», 2002. – 320 с.// For more details, see Lutsyshyn Z.O. Transformation of the world financial system in the context of globalisation. Kyiv: Druk Publishing Centre, 2002. 320 p.

necessary. This should include the identification of transformational and restructuring features and an exploration of possible ways and options to develop the already existing global financial system. The new financial system must be based on the principles of synergistic constructivism, planetary harmonisation of economic development and a spiritual and moral outlook.[5]

The roots of Islamic banking stem from the early days of Islam in the 7th century, when Khadija, the first wife of the Prophet Muhammad, engaged in trade as an agent for her business, implementing many comparable principles observed in contemporary Islamic banking practices. During the Middle Ages, Islamic banking principles formed the foundation for trade and business interactions within the Muslim world, expanding into Spain, the Mediterranean, and the Baltic States. In the 1960s and 1970s, Islamic banking resurfaced in the modern financial world. Generally, objective evaluations are required when discussing Islamic finance, a well-researched topic. From the 1990s, Islamic banking has been of particular interest to researchers as Islamic financial institutions have demonstrated steady quantitative and qualitative growth. The Islamic Development Bank (IDB) reports the presence of around 300 Islamic financial institutions across 75 countries. However, Islamic financial institutions have only a small share in the global financial system, accounting for merely 1% of total banking assets. Islamic finance is gaining interest not only from Muslim countries but also from Western countries due to the positive dynamics of these institutions, emerging trends like behavioural economics, and their resilience during financial and economic crises, as opposed to the existing Anglo-Saxon model. The application of Islamic principles in finance and business has a solid foundation, as Islam integrates theoretical underpinnings into almost every aspect of human life, including behaviour and legally binding actions within the finance and economics industry. Communities of believers commonly employ Islamic principles in transactions with believers of different faiths, and adherence to Islamic norms is intrinsic to Muslims, leaving no room for deviation.

In this respect, economists, financiers and experts in Islamic fiqh are primarily

[5] Detail: Club of Rome, Anniversary Report. Verdict: "The Old World is doomed. The New World is inevitable!". URL: https://politcom.org.ua/rimskij-klub-jubilejnyj-doklad-verdik/?fbclid=IwAR35pbBq1VnLTrwk1dryvECjhaDXmPKHk3TRxgDBGnvsUIIBqbZpuslynww

interested in the intricacies of Islamic finance and the challenges they pose for integration into the global financial market system[6]. The emergence, principles, and mechanism of Islamic finance are extensively researched by economists, analysts, mathematicians, and political scientists from both the East and the West. They examine various aspects of the Islamic financial market, its functioning, latest trends, and practical philosophy for adaptation. Numerous renowned works exist in this field. No changes necessary as the text lacks context and already adheres to the given principles. Usmani specialises in the field of Islamic financial instruments and institutions, including scholars such as Khan, Habib, Jobst, Tariq, and Dar, Jabin and Javed, Sundararajan, Wilson, Nanaeva, Said, Majid, Shahimi, Abdullah, and Alsayed.

There is a dearth of research concerning the place, role and importance of Islamic finance and institutions within the modern global financial and economic architecture. In conducting analytical studies in the field of reconfiguration of the global financial system, the works of such scholars as O. Barshchevsky, P. Bernstein, N. Bilous, O. Volkov, V. Zahovalko, S. Kislov, N. Kravchuk, D. Lukyanenko, Z. Lutsyshyn, O. Mozgovyi, L. Novoshynska, O. Subochev were used.

It is worth noting that the financial and economic literature currently lacks extensive scientific research on the features and workings of Islamic finance. The incorporation of Islamic finance into the current rapid changes of the conventional (Anglo-Saxon model) global financial architecture is also lacking investigation. When the anniversary report of the Club of Rome criticises capitalism and revises the interpretations of Adam Smith, David Ricardo, and Charles Darwin by their followers, it recognises them as promoting unacceptable financial speculation, the rejection of

[6] Fiqh - Islamic Law
Islamic Law or Fiqh is a legal system that regulates Muslim life in accordance with the Qur'an and the teachings of the Prophet Muhammad. Fiqh provides guidance in matters such as ritual worship, transactions, family law and criminal law. In Islam, Fiqh is considered a means of achieving closeness to Allah and of fulfilling one's duty as a Muslim. Fiqh is developed through the process of interpretation and deducing legal rulings from the principles and sources of Islamic Law. The sources of Islamic Law include the Qur'an, the Sunnah (the Prophet Muhammad's sayings and actions), ijma (consensus among Islamic scholars), and qiyas (analogical reasoning). Fiqh is an ever-evolving system of law, with scholars continuously seeking to interpret and apply Islamic principles to contemporary issues. This ensures that Fiqh remains relevant to the changing social, economic and political landscape of the Muslim world. Fiqh plays a crucial role in the everyday lives of Muslims worldwide, guiding individuals on how to live their lives in accordance with Islamic principles. It provides a means of harmonizing the individual, the community and the wider society in accordance with Islamic morals and ethics. Through Fiqh, Muslims strive to create a better world for themselves and for others, based on the principles of justice, compassion and mercy.

material things, and a simplified understanding of the world. This is an objective prerequisite for the radical paradigm shift of the entire civilisation. This requires a reorganization of the current world order based on an alternative economy, a "new Enlightenment," and a moral and spiritual outlook. Consequently, the global financial system will be significantly restructured, considering the lessons and principles of Islamic finance.

There is a lack of comprehensive scientific research that examines the functioning mechanisms of all structural components within the global financial system. This research should also consider the transformative changes occurring due to globalisation, including horizontal and vertical subordination, as well as transversal perspectives. That is why, bearing in mind the present stage's necessities, it is crucial to research the challenges and transformational courses of the global financial system, the sources and outcomes of self-sustainability, the efficacy of diverse financial structures, techniques to diminish the risks and bubble-like characteristics of operations as the structural and coordinative components of the worldwide financial framework.

In addition, overly simplistic and uniform interpretations of the global monetary and financial system, and its internal features, fail to fully reflect its current state. And it is crucial, as highlighted by Professor V. Khoros, for researchers to identify and describe internal contradictions, signs, and semantic positions that operate within each link. They should evaluate the significance of internal tensions, the activity of marginalized masses and groups, and assess the importance of the dialectic of protest, destructive or reformist tendencies.

The aim of this monograph is to examine the preconditions necessary for the restructuring of the world financial system within a globalisation framework and to explore the position and function of the Islamic financial system in this process. This will be achieved through a thorough analysis of the unique characteristics of the functioning of Islamic financial systems, the specifics of the Islamic context and an examination of the risks facing Islamic investments and the banking sector.

The research draws upon the works of both foreign and domestic scholars and practitioners, together with materials on Islamic finance and risks. In addition, statistics from national banks in Abu Dhabi, Malaysia, the UAE, Iran, Iraq, Turkey, and other countries, as well as data from the IMF, World Bank, National Bank of Great Britain, Fed, Bank for International Settlements, and banks of developing countries, were also utilized. Furthermore, relevant data and materials from sources such as Statista, Bloomberg, Investopedia, and Investing were also included.

The findings acquired from this study could prove constructive for comparative analysis and provide guidance on implementing Islamic financial principles within the contemporary global financial model. This includes utilising Islamic financial forms in investment ventures, generating Islamic financial instruments based on these forms, and executing appropriate securitisation procedures.

SECTION 1

CONCEPTUAL PRINCIPLES OF ISLAMIC FINANCE FUNCTIONING

The principles of Islamic finance represent a paradigm shift in the way we think about finance, emphasizing ethics, social responsibility, and risk-sharing over profit at any cost. This provides a framework for a more sustainable and equitable financial system that benefits society as a whole

Sheikh Mohammed bin Rashid Al Maktoum,
Vice President and Prime Minister of the United Arab Emirates.

Those who devour usury will not stand except as stand one whom the Evil one by his touch hath driven to madness. That is because they say: "Trade is like usury," but Allah hath permitted trade and forbidden usury

Quran 2:275

Islamic finance is guided by the principles of Shariah law, a moral, ethical and legal framework that governs the lives of Muslims. Shariah law offers guidance on all facets of life, including finance and economics. The principles of Islamic finance are derived from these teachings.

The Islamic finance model has developed since the introduction of Islamic religious doctrine. However, due to the absence of a codified source for the Shariah rules on financial dealings and the existence of various interpretations, Islamic finance was previously restricted to the implementation of specific regulations and principles, rather than comprising a cohesive set of relations. Although the formation of the Islamic financial system began around 1400 years ago, its modern history traces back to the 1970s. Since then, some countries have adopted the Islamic financial model at a national level via the establishment of Islamic banks and insurance institutions. This period is viewed as the inception of the contemporary worldwide model of Islamic finance.

A core tenet of Islamic finance is the prohibition of riba - the charging of interest on loans. Riba is considered unjust and exploitative, allowing lenders to gain profit without taking on any of the borrower's risks. Instead, Islamic finance prioritises risk and profit sharing, with lenders and investors alike sharing both the potential risks and rewards of an investment.

The concepts of halal (allowed) and haram (forbidden) investments form a further key element of Islamic finance. Islamic finance prohibits investments in industries deemed harmful to society, such as alcohol, gambling, and tobacco. It places particular importance on ethical investing, where investments are made in socially responsible companies that support Islamic values.

Additionally, the concept of the time value of money operates differently in Islamic finance. Whereas conventional finance takes time into account when determining the value of money, Islamic finance emphasizes the actual value of money and the effects of inflation on its value over time.

The theoretical perspectives of Islamic finance stress ethical and socially responsible financing, risk-sharing, and the prohibition of riba. These principles serve as a foundation for a more equitable financial system that aligns with the values and beliefs of many investors.

1.1. Historical roots of Islamic finance

Allah has permitted trade and has forbidden interest
Quran 2:275

This verse illustrates the historical origins of Islamic finance, which can be traced back to the early days of Islam. The Prophet Muhammad established the practice of ethical and permissible business transactions, and the principles of Islamic finance were developed over centuries of Islamic scholarship. This passage from the Qur'an establishes the basis for the historical roots of Islamic finance and demonstrates the longstanding tradition of ethical and just business practices in Islam.

In the historical analysis of Islamic finance's evolution, the writings of Iranian scholar Reza Aslan's "No God but God: The Origins, Evolution, and Future of Islam" merit inspection. The author traces the development of Islamic commercial and financial relations from the time of the Prophet Muhammad. He asserts that, even before the religion's formation, the prophet advocated for social reforms and economic equity[7]. In his sermons, Muhammad firmly denounced the mistreatment and exploitation of the weak and defenceless. He strongly advocated for an end to false contracts and the practice of usury, which enslaved the poor. Accordingly, the Prophet Muhammad prohibited usury during his lifetime[8], effectively addressing the issue that plagued the religious and economic system of his era. This decision aimed to bridge the gap between the affluent and indigent members of society.

History presents examples of medieval banks in the Middle East, which had a widespread branch network and a complicated cheque payment system. B. Lewis, the historian, notes that religious schools believed that moderation in interest rates did not amount to usury[9.] However, due to the ban on usury, the number of Muslim bankers was limited. Since then, the Islamic world has experienced periods of both prosperity and decline under Ottoman rule and European occupation, but a resolution was not reached until the 20th century.

At the inception of Islamic history, Muslims established an interest-free financial system to cater to both production activities and consumer needs. The system functioned successfully during the peak of Islamic civilisation and for many centuries thereafter. As noted by Professor S. D. Goytayn, commerce and industry in the Mediterranean during the twelfth and thirteenth centuries were based on partnership and profit sharing, rather than interest[10]. However, as the centre of economic gravity shifted to the Western world over the centuries, Western financial institutions, including banks, became dominant, and the Islamic tradition remained largely inactive. Valuable theoretical work was conducted in the early nineteenth century. At that time, most of the Muslim world was under colonial rule, and financial services were provided by Muslim credit societies and cooperatives on an interest-free basis. When Muslim countries achieved independence following the Second World War, practical trials of

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[7] *Reza Aslan*. No god but God: The Origins, Evolution, and Future of Islam / Reza Aslan - Random House – March 15, 2005. – 310 p.

[8] لقرآن الكريم. معنى الآية 275 من سورة البقرة The Holy Qur'an. The meaning of Ayat 275 of Surah "The Cow", [Electronic resource], accessed on the Internet: https://surahquran.com/quran-search/saadi-aya-275-sora-2.html

[9] Lewis, B. (1950). The Arabs in history. http://ci.nii.ac.jp/ncid/BA61097203

[10] *S.D.Goitein.* Studies in Islamic History and Institutions [Electronic resource], access mode: https://brill.com/view/title/16572

financing without interest were instituted on a small scale initially and then diffused gradually.

In recent times, there has been a noteworthy resurgence in developing a contemporary form of the Islamic financial system (fig.1.1), owing to the Muslims' desire to not engage with the interest-based system. Interest in the Islamic financial system can be traced back to the Industrial Revolution, which saw the establishment of the first commercial banks. However, most Muslim scholars expressed concerns about this model of financial intermediation due to its reliance on interest. They proposed the establishment of substitute mechanisms for carrying out the role of financial intermediation within Muslim communities[11]. Muslim communities have largely refrained from engaging with commercial banks. However, there was an urgent need for financial services by traders, industrialists and other entrepreneurs. Muslim economists and banks took up the challenge of developing alternative models of financial intermediation.

Despite the presence of certain ethno-confessional contradictions in Islam, all disputes between religious movements are actually reduced to matters of law enforcement, rather than dogma. Different schools of Sharia law (madhabs) only have a few discrepancies, mainly in the interpretation of hadiths. In regards to the understanding of the core principles of Islam, contradictions among the madhhabs are non-existent, resulting in no debates around the creation of the Islamic finance model.

The foundation of Islamic finance is based on Islamic law, also known as Shariah. Shariah determines the regulations for the conduct of Muslims in various aspects of life, including financial activities. A significant standard of Shariah is the prohibition of riba which refers to the charging of interest on loans. This indicates that traditional financing sources like bank loans and bonds are not compatible with Islamic principles.

[11] M.Iqbal, P.Molyneux. History and growth of Islamic banking and finance URL: https://link.springer.com/chapter/10.1007/978-0-230-50322-9_4

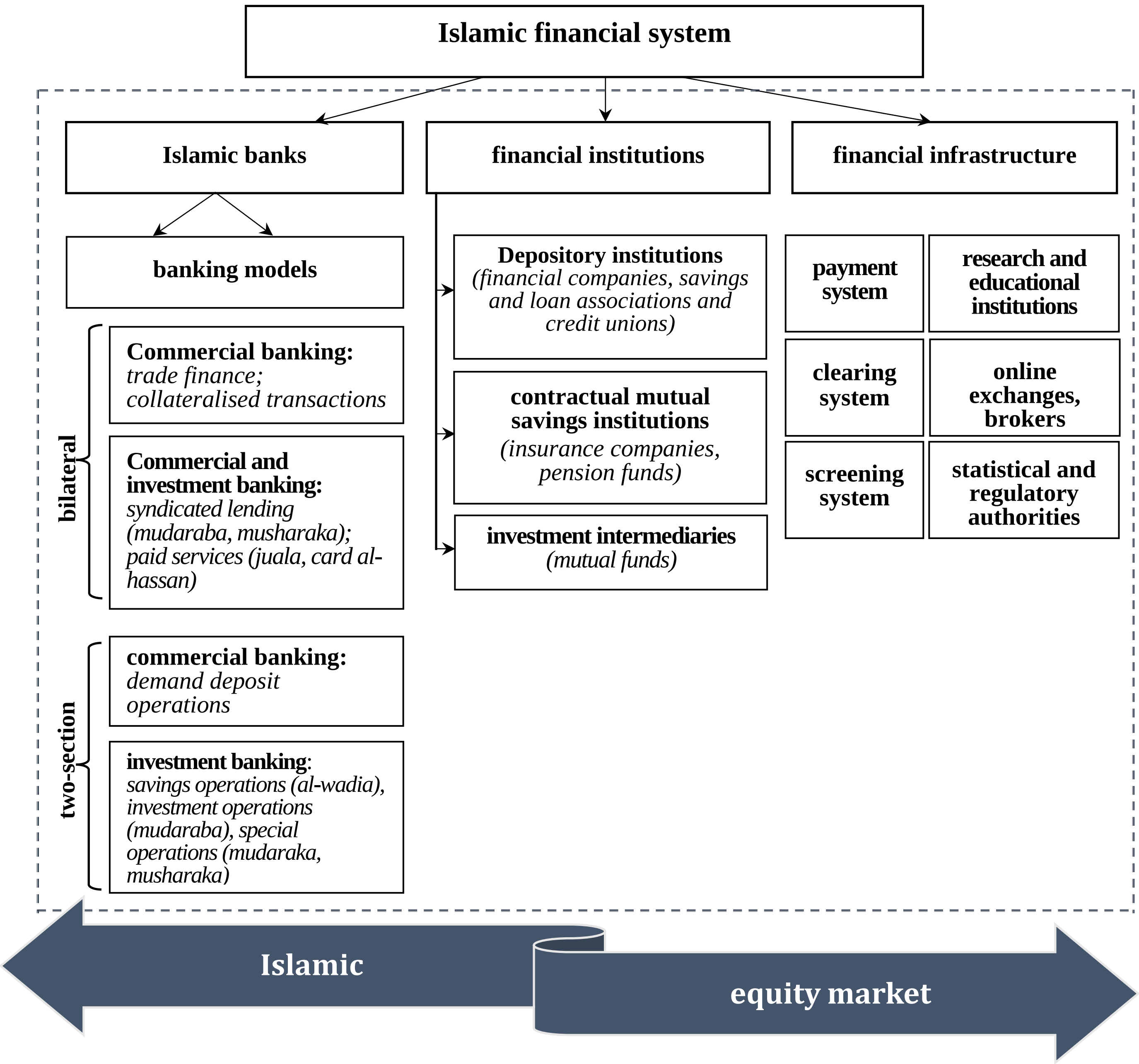

Figure 1.1 Structure of the Islamic financial system

Instead, Islamic finance evolved based on two primary principles - Mudaraba and Murabaha.

Mudaraba is a collaborative arrangement where one party supplies the capital and the other party offers the labour. Mudaraba is a collaborative arrangement where one party supplies the capital and the other party offers the labour. They share business profits according to a pre-agreed arrangement. The investor, in the event of a loss, takes on all costs, and the labourer isn't compensated for their work.

Murabaha is a sale and purchase agreement in which the seller purchases a product for a predetermined price and then sells it at an increased price that incorporates their profit. This principle is employed to fund the acquisition of costly assets such as real estate.

Islamic finance has seen substantial growth in recent times, especially due to the demand for newer instruments and products that can cater to the more intricate requirements of the economy and businesses.

In the mid-twentieth century, certain models for organisations were put forth that provided financial services in line with Islamic law. The inaugural trial of an Islamic bank that didn't levy interest on loans was established in the late 1950s in rural Pakistan[12.] Although credit societies and cooperatives existed in several Muslim countries during the colonial period, the emergence of banking institutions in accordance with Islamic law did not occur until the early 1960s.

In 1963, economist Ahmad Elnaggar made a significant effort towards this goal with a pilot experiment on the application of Islamic principles governing financial relations, conducted in Mit Gamar, Egypt from 1963 to 1967. He welcomed individuals from rural regions of Egypt who had lost faith in state-owned banks to partake in an experiment of "profit-sharing" (the Mit Ghamr Savings project). Taking cues from German savings banks, the Mit Ghamr undertaking gathered meagre savings from rural sectors. No interest was given to account holders. Nevertheless, as motivation, they were qualified for short-term, interest-free loans for production purposes. Depositors could retrieve their savings instantly upon request. Additionally, profit-sharing investment accounts were introduced. These funds were mobilised and invested based on profit sharing between the financiers and entrepreneurs. The project was not heavily advertised due to fear of accusations of Islamic fundamentalism, which was actively suppressed by Gamal Nasser's regime at that time. In 1968, the government ended the experiment, although it was deemed a success by many individuals13. In 1972, the Mit

[12] Кравчук Н., Вербіцька М. Особливості інституційного та правового регулювання ісламських ринків цінних паперів / Н. Кравчук М. Вербіцька // Актуальні проблеми правознавства. – 2018 -№3 -С. 87-92.// Kravchuk N., Verbitska M. Peculiarities of institutional and legal regulation of Islamic securities markets / N. Kravchuk M. Verbitska // Actual problems of jurisprudence. - 2018 - № 3 -P. 87-92.

[13] Кравчук Н., Вербіцька М. Особливості інституційного та правового регулювання ісламських ринків цінних паперів / Н.

Ghamr Savings project was integrated into the Nasr Social Bank, which remains operational in Egypt[14]. The Nasr Social Bank, the first interest-free institution referred to as a bank, originated in Egypt in 1971. It marked the initial interest of a Muslim government to establish such a financial institution. Although the objectives of Nasr Social Bank were primarily social, including the provision of interest-free loans to the disadvantaged, scholarships to students, and microcredit for small, profit-sharing-based projects, the government's role in establishing interest-free banking sent a significant message to Muslim businesspeople with surplus funds. At that time, there were already nine similar banks operating within the country. A group of businesspeople initiated the establishment of Dubai Islamic Bank in 1975 in Dubai, United Arab Emirates (UAE). It was the premier Islamic bank established on a private initiative. Nevertheless, official support played a crucial role in this project, as the governments of the UAE and Kuwait respectively contributed 20% and 10% of the bank's capital.

Around the same time, the Perbadanan Wang Simpanan Bakal-Bakal Haji bank was established in Malaysia to assist Muslims in raising funds for the hajj.

From the 1970s onwards, the participation of institutions and governments, along with conferences and research, played a crucial role in applying theory to reality in the establishment of the first non-interest-based banks. The inflow of petrodollars to the Gulf countries and the general trend of "re-Islamisation" after the Yom Kippur War and the 1973 oil crisis provided significant momentum for the growth of the Islamic banking sector, which has been expanding across all Muslim nations since 1975.

The pivotal period of development for Islamic banking initiated in 1975 with the formation of the Islamic Development Bank (IDB) by the Islamic Conference, which aimed to fund projects in its member states. The bank drew its capital from contributions by founding nations. The primary contributors were Saudi Arabia, Sudan, Kuwait, Libya, Turkey, the UAE, Iran, Egypt, Indonesia, and Pakistan. At the second conference of finance ministers held in Jeddah in August 1974, an agreement was

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Кравчук М. Вербіцька // Актуальні проблеми правознавства. – 2018 -№3 -С. 87-92.// Kravchuk N., Verbitska M. Peculiarities of institutional and legal regulation of Islamic securities markets / N. Kravchuk M. Verbitska // Actual problems of jurisprudence. - 2018 - № 3 -P. 87-92.

[14] Islamic finance: Big interest, no interest // The Economist. – 2014. – September. – URL: http://www.economist.com/news/financeandeconomics/21617014marketislamicfinancialproductsgrowingfastbiginterestnointerest.

adopted to establish the Islamic Development Bank (IDB)[15]. The IDB's Board of Governors held its inaugural meeting in Riyadh, Saudi Arabia, in July 1975, and the bank commenced operations on 20th October 1975. In the same year, the Dubai Islamic Bank (DIB) became the first modern commercial Islamic bank to be established.

The years from 1975 to 1990 marked the most pivotal time in the history of the Islamic financial industry. During the 1980s, there was a notable hastening in the progression of Islamic finance. It was during that epoch that the Islamic financial system grew into a practical and feasible substitute model of financial intermediation, gaining reliability in both theoretical advancements and empirical involvement. On one hand, various Sharia-compliant financial products have been developed, whilst on the other hand, Islamic banks have performed well in utilising such products. During 1980 to 1985, Islamic investments made a significant expansion in the Muslim world, providing deposit agreements that promised "great benefits" and "religious guarantees". Islamic jurists were also actively engaged in issuing fatwas that condemned traditional financial institutions, whilst encouraging their Islamic counterparts. In 1980, the Pakistani government established a legal framework for the majority of Islamic financial instruments. Simultaneously, the Egyptian government launched a media campaign against Islamic banks in 1988, troubled by the ascent of Islamist movements that were reliant on financial sovereignty. This resulted in a financial crisis that caused the insolvency of several banking institutions.

In 1990, the Accounting and Auditing Organisation for Islamic Financial Institutions (AAOIFI) was established in Algeria to develop standards for accounting, auditing, governance, ethics, and Shariah. Since the 1990s, Bahrain and Malaysia have significantly contributed to the Islamic financial ecosystem.

By 1995, there were 144 Islamic financial institutions around the world, consisting of 33 government-owned banks, 40 privately-owned banks, and 71 investment firms. During the first years of the 21st century, until the global financial crisis of 2008, the Islamic financial industry grew at a rate of 10-15% annually. By

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[15] The IDB was established in December 1973 as an international financial institution following a declaration of intent released at the Conference of Finance Ministers of Islamic Countries which took place in Jeddah, Saudi Arabia.

2008, the Islamic banking sector had expanded to 300 financial institutions in 51 countries, and there were 250 mutual funds operating according to Islamic business principles.

At the start of the 21st century, Islamic finance experienced significant growth within the global financial system. The International Association of Islamic Banks (IAB) reports that there were 176 Islamic financial institutions operating in 38 countries, which included commercial and investment banks, insurance companies, and others. By 2008, this number had increased to 362 Islamic financial organisations, which included around 300 Islamic banks. Today, there are over 500 Islamic banks worldwide[16]. Islamic financial institutions are now operational not only in Muslim nations but also in a range of non-Muslim countries, like the UK, Luxembourg, and the USA, among others. In 2009, the highest spiritual leadership of the Roman Catholic Church suggested that "the principles of Islamic finance can be a remedy for patients suffering from excessive market turbulence," citing the fact that no Islamic bank succumbed to bankruptcy during the global financial crisis.

By 2015, the market for Islamic bonds - **sukuk** - had grown so large that non-Muslim states, such as the UK, Switzerland and Luxembourg, began issuing their own securities.

Today, Islamic finance segments are categorised, quantified, and governed based on the following business categories:

- retail banking;
- trade finance;
- takaful - capital market transactions;
- investment banking facilities;
- equity and venture capital dealings.

Figure 1.2 presents the progression of Islamic financial products and services from their establishment in the 1970s to the current period. Initially consisting of uncomplicated banking products, Islamic finance has steadily broadened into

[16] Mundy, K. (2009). Educational Multilateralism and World (Dis)Order. Comparative Education Review, 42(4), 448–478. https://doi.org/10.1086/447523

commercial ventures, including capital markets, asset management, and Islamic insurance.

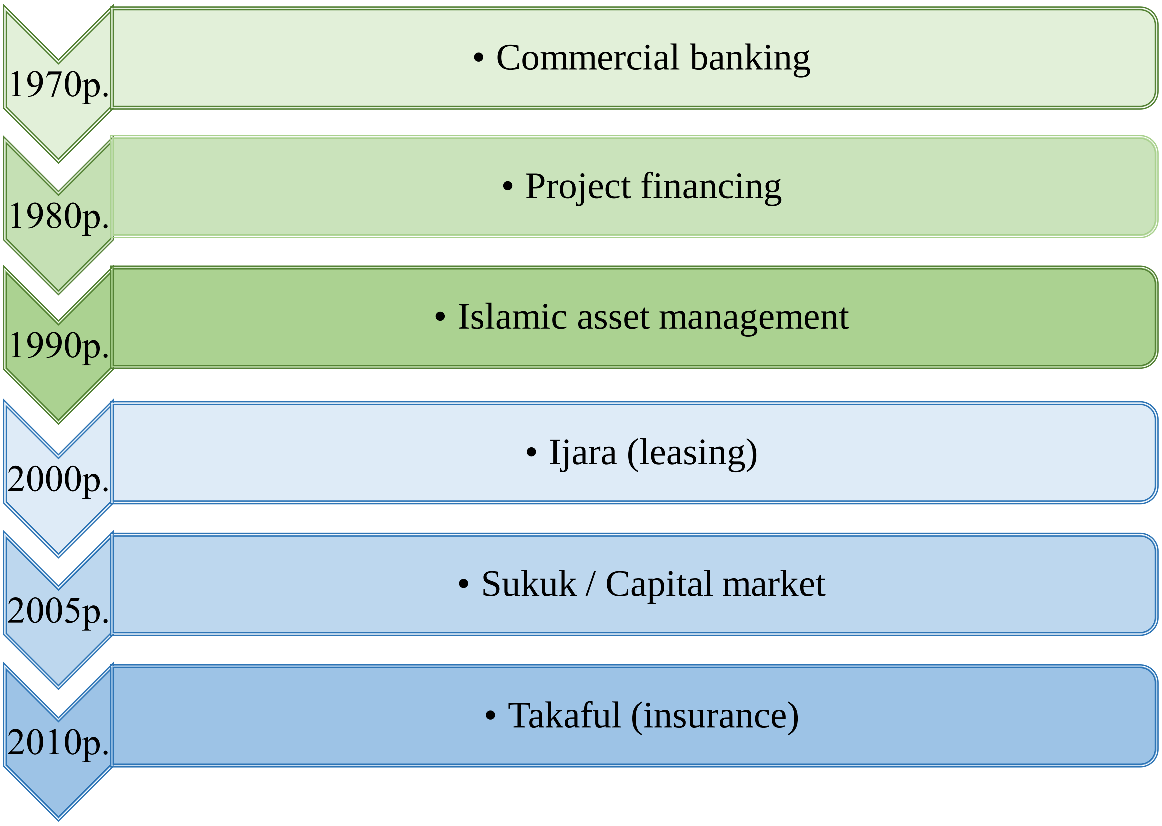

Figure 1.2. Evolution of Islamic banking, financial products and services [17]

Although Islamic products in the capital market are still developing and there are limited hedging instruments available, the creation and advancement of purely Islamic products are crucial for Islamic finance to rival conventional financial instruments.

Organisations like the International Swaps and Derivatives Association (ISDA) and the International Islamic Financial Market (IIFM) collaborate to structure and standardise instruments for alignment with Shariah requirements while enhancing hedging opportunities. The ISDA/IIFM Tahawwut Master Agreement outlines the guidelines for financial institutions to conduct derivatives transactions. (Appendix 10) All of this is aimed at making the Islamic finance industry more stable, liquid, and convenient for various transactions. Additionally, it contributes to the effective management of financial risks and private capital transactions.

[17] Мозговий О. М. Сутність та розвиток доктрини ісламських фінансів / О. М. Мозговий, О. В. Субочев, О. М. Юркевич // Економіка України. - 2018. - № 2. - С. 65-78.// The essence and development of the doctrine of Islamic finance / Mozgovyi O.M., Subochev O.V., Yurkevych O.M. // Ekonomika Ukrainy. - 2018. - № 2. - С. 65-78.

The evolution of Islamic banking has demonstrated the efficiency and viability of this system within the framework of capitalism. Although the proportion of Islamic banking in comparison with conventional banking remains small, prominent Western banking corporations, recognizing the potential of this industry, are joining this global movement of this global trend. Islamic banking is a formidable contender in a market economy and is expected to maintain a high growth rate.

The majority of global Islamic banking assets (77%) are situated in the Middle East and North Africa (MENA), while Asia accounts for 18%, Europe for 3.73%, and Sub-Saharan Africa for less than 1%.

The same pattern is observed with Islamic banks: 50% of them can be found in MENA, 30% in Asia, and 15% in Sub-Saharan Africa, despite holding less than 1% of total assets.

Sudan and the Islamic Republic of Iran are the sole nations with a financial system entirely grounded in Islamic finance. Given the rapid growth of Islamic banking and its significance to the economies of other countries in the Gulf Cooperation Council (GCC), Indonesia, Malaysia, and Pakistan, it is vital to comprehend recent developments, current trends, and driving forces of the industry in depth.

The growth of Islamic banking has resulted from several factors.

Firstly, the surge in oil prices up until 2015, particularly in the GCC, increased liquidity in these economies, leading to an augmented demand for financial services. However, the notable decline in oil prices in 2014 and 2015 has raised concerns about sustainability.

Secondly and more encouragingly, Islamic banks were not negatively impacted by the global financial crisis of 2008-2009, unlike their conventional counterparts.

Finally, Islamic banking is consolidating its position as a trustworthy competitor to conventional banking. Its offerings and services are developing together with the legal and regulatory structure that underpins it.

Therefore, there are two distinct avenues for the expansion of Islamic banking:

1) the establishment of new Islamic banks in the industry, as well as the growth of current banks in territories where Islamic banking is already present.

The establishment of new Islamic banks and the expansion of existing institutions is necessary in regions where Islamic banking is underdeveloped.

Currently, the Islamic banking industry accounts for only 1.25% of the traditional global banking industry – around 1/80. Ernst & Young's study concluded that Islamic banking's share of total Muslim banking assets is relatively small. However, it has the potential to attract funds from economic agents in Muslim and non-Muslim countries, enabling rapid growth.

This is supported by statistical evidence: the Islamic banking sector exhibited annual growth of around 17.6% from 2009 to 2013, while conventional banks remained stagnant. On average, conventional banks' assets increase by no more than 4-5% per year, while Islamic banks' assets, for instance, increased by 9.4% (USD 1.814 trillion) in 2014 as compared to 2013 (USD 1.66 trillion.)[18].

This notable surge in assets stemmed from robust progress in all areas of Islamic finance, such as banking, takaful, sukuk and Islamic funds. It is projected that asset values in the Islamic finance domain will persist in growing at a rate of 10% yearly over the next five years, ultimately reaching an estimated $3.24tn by 2020[19].

Today, there are over 1,000 Islamic financial institutions in 75 countries. It is widely expected that their number will increase significantly in the next decade. The primary drivers of Islamic finance growth are the Gulf countries, as well as Malaysia (which is in close proximity to dynamic South Asian markets) and Iran (which is gradually being released from international sanctions).

The Islamic finance industry is currently receiving institutional support from international Islamic financial organizations, whose goal is to standardize principles, norms and instruments. Table 1.1 shows some of the key organisations involved in developing this industry.

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[18] Мозговий О.М., Субочев О.В., Юркевич О.М. Основні моделі функціонування ісламських фінансів // Інвестиції: практика та досвід. – 2017. – No 6. – с. 20–25 [Електронний ресурс]. – Режим доступу: http://www.investplan.com.ua/ ?op=1&z=5422&i=3. // Mozgovyi O.M., Subochev O.V., Yurkevych O.M. Basic models of functioning of Islamic finance // Investitsii: praktika i opyt. - 2017. - No. 6. - pp. 20-25 [Electronic resource]. - Access mode: http://www.investplan.com.ua/ ?op=1&z=5422&i=3.

[19] Islamic finance: Big interest, no interest // The Economist. – 2014. – September 13: http://www.economist.com/news/financeandeconomics/21617014marketislamicfinancialproductsgrowingfastbiginterestnointerest.

Table 1.1: Organizations Involved in the Development of the Islamic Finance Industry[20]

Organisation	Year and country of foundation	Objective of the activity
The Islamic Development Bank IDB	1973, Jeddah (Saudi Arabia)	Promoting economic and social development of OIC (Organisation of the Islamic Conference) member states and Islamic communities
The Accounting and Auditing Organization for Islamic Financial Institutions – AAOIFI	1991, Bahrain	Preparation of accounting, audit and governance, ethics and Shariah standards for Islamic financial institutions.
The Islamic Financial Services Board – IFSB	2002, Kuala Lumpur (Malaysia)	Standardisation and harmonisation of the operation and supervision of Islamic financial institutions, capital adequacy standards, risk management and corporate governance
Islamic Interbank Money Market – IIMM	1994, Kuala Lumpur (Malaysia)	Development and implementation of tools for effective liquidity management of banking portfolios
General Council for Islamic Banks and Financial Institutions - CIBAFI	2001, Bahrain	Encouraging and supporting banks and financial institutions of all types operating in accordance with Shariah law
International Islamic Rating Agency – IIRA	2005, Bahrain	Conducting scientific research on the basis of which ratings are derived, the value of securities is determined, and risk is assessed within the framework of Islamic instruments
The Dow Jones Islamic Market Index – DJIMI	1999, Bahrain	Independent expert assessment of the dynamics of capitalisation of enterprises (banks) that position themselves as Islamic
Dow Jones Citigroup Sukuk Index	2006	Independent expert assessment of the capitalisation dynamics of the sukuk market
World Islamic Economic Forum – WIEF	2003, Malaysia	Increasing economic prosperity, expanding trade and business opportunities, and promoting cooperation

In addition to Islamic countries, the sector is also rapidly developing in several non-Muslim nations, particularly in Western Europe, the United States, Canada, and Australia. It operates in both consumer markets, aimed at local Muslim communities, and corporate

[20] Мозговий О. М. Сутність та розвиток доктрини ісламських фінансів / О. М. Мозговий, О. В. Субочев, О. М. Юркевич // Економіка України. - 2018. - № 2. - С. 65-78.// The essence and development of the doctrine of Islamic finance / Mozgovyi O.M., Subochev O.V., Yurkevych O.M. // Ekonomika Ukrainy. - 2018. - № 2. - С. 65-78.

segments, focused on attracting investment from oil-producing countries in the Persian Gulf region. The UK has been particularly successful in this area, with 22 Islamic banks, six of which report assets totalling $19 billion. Additionally, there are 34 Islamic investment funds with assets of $300 million, and 43 sukuk with a total value of $24 billion listed on the London Stock Exchange. The UK's experience demonstrates that Islamic finance is an appealing market segment for the banking sector. Out of the 22 banks operating with Islamic principles, 17 are "Islamic windows" of local conventional banks and only 5 are fully-fledged Islamic banks established by investors from the Gulf countries.

The history of the Islamic financial model is brief, enabling it to expand geographically and introduce novel trends in its structure and operational mechanisms, including interactions with traditional finance elements.

1.2. Basic principles of Islamic finance

The principles of Islamic finance are grounded in the principles of justice, equity, and fairness, which provide a framework for a more sustainable and ethical financial system

Sheikh Abdurrahman Al-Sudais,
Imam of the Grand Mosque of Mecca.

O you who have believed, fear Allah and give up what remains [due to you] of interest, if you should be believers. And if you do not, then be informed of a war [against you] from Allah and His Messenger

Quran 2:278-279

This verse highlights the fundamental principles of Islamic finance, which revolve around the prohibition of riba or interest on loans. It stresses the significance of avoiding transactions based on interest and the potential consequences of failing to do so. Additionally, the verse stresses the role of faith and belief in Islamic finance and highlights the importance of adhering to the principles of fairness, justice, and equity.

The exact meaning of "Islamic finance" is still a subject of debate. In essence, it refers to financial relationships that are regulated "on the basis of Shariah"[21] or those based on the socio-economic doctrine of Islam. However, it should be noted that the question of whether non-Muslims are able to utilise the Islamic financial system remains unclear. Both definitions provide a basic understanding of the topic, yet they do not capture its complete essence. Based on this perspective, Islamic finance *can be perceived as public financial relations rooted in Islamic religious doctrine. Participation is permitted for all those who comply with Shariah rules governing business and transactional conduct.* The authors believe that this definition highlights the appeal of Islamic finance beyond the Muslim world, which has grown in global prominence.

Today, Islamic finance is extensively researched by both domestic and foreign academics. However, only a handful of works provide a comprehensive understanding of the intricate and multifaceted nature of this phenomenon. In this regard, the 2010 publication "Islamic Finance in the Global Economy"[22] by I. Warde, an American researcher of Lebanese descent, is of notable significance. The work is published by Edinburgh University Press. In his research, the author concludes that Islamic finance is not a static and uniform entity, but rather an emanation of the multifaceted nature of Islam across several regions. He highlights the importance of assessing Islamic finance in the context of both religious and financial contexts, as well as considering its historical, political, economic, commercial, and cultural positioning. Furthermore, Ward suggests that when examining this phenomenon, it is crucial to consider the intricacy of an individual's religious incentives when selecting financial products.

The issue at hand is the diversity of approaches to organising financial relations in Islam. This poses a current obstacle and will also complicate future regulation at both national and international levels. It is therefore important to address this diversity in order to achieve effective regulation. The approaches to finance in the Islamic context

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[21] Pulatov, A., & Ahmad, A. H. (2021). Political business cycles in Post-Communist European countries. Politics and Policy, 49(5), 1248–1269. https://doi.org/10.1111/polp.12427

[22] I. Warde «Islamic Finance in the Global Economy». - Edinburgh University Press. – 2000. – 267 p. URL: https://iefpedia.com/english/wp-content/uploads/2011/03/2000-Ibrahim-Warde-Islamic-finance-in-the-global-economy-Edinburh-University-Press.pdf

can be categorised into three levels. The highest-level distinction is between the Sunni and Shia doctrines of Islam, within which there exist various schools (traditions or madhabs). In Sunni doctrine, four schools of thought exist namely Hanifi, Hanbali, Maliki and Shafi'i. On the other hand, in Shiite doctrine, financial relations are governed by general regulations followed by a number of religious scholars and their respective schools of thought. Finally, the third level encompasses distinct approaches to Islamic governance in each Islamic country. As the governing bodies of the states are made up of secular individuals rather than purely religious figures, they hold the power to determine the extent to which certain Shariah rules and prohibitions are incorporated into domestic legislation. Consequently, the range of approaches adopted may also be influenced by their individual initiatives.

Thus, the fundamental requirement for the presence of Islamic finance is adhering to Shariah regulations found within the Islamic law sources, which are implemented in accordance with the interpretation of Islam and the prevailing local laws in each Muslim country.

In general, the Islamic finance system employs distinct instruments for investment activities, which all share two significant features:

(a) any Islamic investment is connected to the tangible sector of the economy;

(b) the financial institution is directly involved in commodity and investment transactions.

Tabdybaeva provides a list of common Islamic financial instruments, including:

1)Card-ul-Hasan, an interest-free loan.

2) Murabaha - resale with a trade margin;

3) Musharaka - partnership;

4) Mudaraba - participation in profit and loss;

5) Ijara - leasing;

6) Ijara Tumma Al Bai - lease with the right of further purchase;

7) Sukuk - Islamic securities;

8) Istisna' refers to term contracts for future delivery of goods.

9) Zakat is a mandatory tax required in Islam.

10) Salam is a type of advance financing in which full payment is made in advance for goods to be delivered at a later date.

11) Ijar wa-iktina is a contract for leasing with the option to buy.

12) Buy-buy-silah' is a type of forward transaction.

13) Takaful is an Islamic insurance concept.

14) Wadi'a refers to bank deposits held in custody.[23]

However, this classification is merely a list of potential financial relationships within Islamic doctrine. Considering the explanation provided in the preceding paragraph, it cannot be deemed a form of Islamic finance, nor does it entirely fulfil the definition of a financial instrument for investment intentions.

In practice, the financial instrument in the Islamic model is typically a security, such as a sukuk, the designation of which is contingent on the type of financing it is utilised for. Therefore, it is recommended to regard the categorisation of sukuk outlined in AAOIFI Shariah Standard No. 17 (Investment Sukuk) as comprehensive. As per this standard, investment sukuk are certificates of equal value that represent undivided interests in tangible assets, usufruct, services, or assets' ownership of specific projects or special investment activities. These sukuk are considered valid after determining their value, closing subscriptions, and using the funds received for their intended purposes[24]. The above standard defines sukuk as investment securities to distinguish them from shares and bonds, as stated within the standard.

At present, sukuk (translated from Arabic as "legal document, deed, receipt, cheque") allows for opportunities to attract debt financing. Unlike bonds, a sukuk or property certificate is not an issuer's debt obligation, but instead, a share of an asset (project) backed by a property right. A sukuk is a targeted financial instrument that offers a non-guaranteed income derived from the profits generated by an asset or project. Issuance of a sukuk is conditional upon its security by real assets, both tangible

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[23] Г.Ж.Таджибаева. Понятие, правовая природа, виды исламских финансовых инструментов. Вестник Института законодательства Республики Казахстан, № 3 (19), 2010 [Електронний ресурс], режим доступу: https://cyberleninka.ru/article/n/ponyatie-pravovaya-priroda-vidy-islamskih-finansovyh-instrumentov/viewer //
G.J.Tajibaeva. The concept, legal nature, types of Islamic financial instruments. Vestnik of the Institute of Legislation of the Republic of Kazakhstan, № 3 (19), 2010 [Electronic resource], access mode: https://cyberleninka.ru/article/n/ponyatie-pravovaya-priroda-vidy-islamskih-finansovyh-instrumentov/viewer

[24] AAOIFI Shariah Standards URL: http://aaoifi.com/shariaa-standards/?lang=en.

and intangible. The risks associated with asset ownership fall onto sukuk holders, rather than the issuer[25].

Thus, a sukuk does not offer a fixed interest rate for the investor and does not imply a debt obligation. As a share in the ownership of the issuer's asset, a sukuk is akin to a share in this regard.

This type of security was initially issued in 1983 by the Central Bank of Malaysia in the form of investment certificates of the Malaysian government[26].

Today, sukuk can take various forms that are determined by the type of Shariah contract and asset on which these instruments are based. All sukuk types are established by the AAOIFI, with 14 categories in total.

Table 1.2 Main types of sukuk by type of contract governing the underlying asset of the transaction

Name of the instrument	Structure of the instrument
Sukuk musharaka	The project company and the borrower form a joint venture and distribute profits based on their respective ownership shares.
Sukuk mudaraba	One of the partners provides capital, while the other contributes knowledge and skills in its management. Investors are afforded the chance to take part in the partnership's management.
Sukuk-ijara	The project company and borrower execute a property sale and purchase agreement, during which the borrower sells the asset to the project company. Additionally, they also enter into a property lease agreement, whereby the borrower leases the asset from the project company and has the right to purchase it upon the expiration of the lease term.
Sukuk salaam	A contract for the sale and purchase of goods, such as real estate, which involves payment in advance and delivery at a later date mutually agreed upon by the buyer and the seller.
Sukuk-Istisna'	It is used during the construction phase of investment projects. Settlements are made at the price at the date of the contract, and payments are made at the end of the project or at pre-agreed-upon times during the project.
Sukuk murabaha	A debt financing contract under which the Project Company acquires assets and sells them to a borrower on a deferred basis. The borrower uses the asset for profit and gradually pays for the value of the assets sold to it.
Sukuk Istitmar	It is used in a transaction where the asset securing the sukuk is intangible. The

[25] Abdel-Khaleq, A. H., & Richardson, C. F. (2007). New horizons for Islamic Securities: Emerging trends in Sukuk offerings. Chicago Journal of International Law, 7(2), 5. https://chicagounbound.uchicago.edu/cgi/viewcontent.cgi?article=1578&context=cjil
[26] Yeoh, B. S. A. (2005). The Global Cultural City? Spatial Imagineering and Politics in the (Multi)cultural Marketplaces of South-east Asia. Urban Studies, 42(5–6), 945–958. https://doi.org/10.1080/00420980500107201

	borrower sells the rights to the sukuk assets to the Project Company with the condition that they are repurchased. Rental payments are recognised as sukuk income received by the borrower.
Sukuk-wakala	Investment Management Agreement: An investor appoints an agent to invest in investment funds based on a predetermined portfolio. The parties agree on the distribution of income from investment management prior to entering into the contract.
Suku manfa	A grant is awarded to a manager for the purpose of long-term asset management. The terms of the agreement dictate the management process and asset utilisation methods.
Sukuk muzara	Applies to leases of agricultural land. The borrower assumes the role of the landowner or usufructuary, whilst the investors act as farmers. The structure may also allow for the opposite arrangement, where the borrower functions as a farmer.
Sukuk musaka	An analogue of sukuk muzara has been applied to orchards, entitling sukuk holders to share in the harvest as per the agreement's terms[27].

Source: AAOIFI Shariah Standard No. 17: Investment Sukuk [28].

As a general rule, depending on the type of ownership and the nature of the use of the underlying asset, there are secured sukuk and unsecured sukuk.

Secured sukuk entail the complete transfer of asset ownership to the investor, followed by registration of the latter as the new owner. Consequently, in this case, investors bear the borrower's risks while the asset is utilized to provide finance, rather than as collateral.

Unsecured sukuk do not necessitate state registration of ownership transfer – the underlying asset remains on the issuer's balance sheet. The risks associated with the asset are borne by investors, and the borrower does not provide any added guarantees. Only with unsecured sukuk can the transaction be seen as asset securitisation[29].

There are three types of sukuk: sovereign, semi-sovereign, and corporate. Sovereign sukuk are issued by national governments, semi-sovereign sukuk are issued by state-owned companies, and corporate sukuk are issued by privately owned companies[30]

Currently, most sukuk are unsecured. However, experts predict that mounting

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[27] Abdel-Khaleq, A. H., & Richardson, C. F. (2007b). New horizons for Islamic Securities: Emerging trends in Sukuk offerings. Chicago Journal of International Law, 7(2), 5. https://chicagounbound.uchicago.edu/cgi/viewcontent.cgi?article=1578&context=cjil
[28] AAOIFI Shariah Standards URL: http://aaoifi.com/shariaa-standards/?lang=en.
[29] Abdel-Khaleq, A. H., & Richardson, C. F. (2007b). New horizons for Islamic Securities: Emerging trends in Sukuk offerings. Chicago Journal of International Law, 7(2), 5. https://chicagounbound.uchicago.edu/cgi/viewcontent.cgi?article=1578&context=cjil
[30] Mohammad Al-Suhaibani. The Role of Sovereign and Semi-Sovereign Sukuk in Financing Profit-Generating Infrastructure Projects, 2016 - Imam University - Department of Economics URL: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2991327.

risks in the global financial markets will boost the usage of secured sukuk.

Among Islamic securities, murabaha sukuk are widely known, representing around 50% of all sukuk contracts. Such contracts are prevalent in Islamic banking.

Specifically, sukuk murabaha are frequently seen in Malaysia, whereas sukuk ijarah are typically issued in the financial markets of the Middle East[31].

The worldwide trend in sukuk issuance is significant.

As per Bloomberg, global sukuk issuance totalled approximately USD 139 billion in 2020, indicating a 2.6% decrease compared to global sukuk issuance of around USD 142 billion in 2019.

This decline may be attributed to the impact of the COVID-19 pandemic on the global economy and financial markets. Despite this, sukuk remain a favoured tool for fundraising in Islamic nations and beyond.

In 2020, the Gulf countries, notably the UAE, Saudi Arabia and Qatar, witnessed the largest sukuk issuances. Malaysia, Indonesia, and Pakistan also issued a substantial amount of sukuk, with both public organizations and private firms involved.

The inclusion of environmental, social, and governance (ESG) aspects into investment mandates is anticipated to foster the growth of Green & SPI sukuk offerings. The issuance of sukuk to support the financing requirements of SMEs, the issuance of sukuk via blockchain, and the emergence of Formosa sukuk are expected to boost this market positively.

There are dissimilarities in the structure, features, and participants of sukuk between the international and domestic GCC markets. As a result, different sukuk financing structures are preferred in the two markets.

As far as the international sukuk market is concerned, the al-wakala sukuk has been the most commonly used structure since 2015, accounting for approximately 50.85% of sukuk issuances during 2010-2017. Although the share of sukuk al-Ijarah had been diminishing, its share improved to 26.85% in 2019, up from 17% in 2018.

It has been over 5 years (since 2015) since the transition from the al-Ijarah model

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[31] Sukuk Report. A comprehensive study of global Sukuk market. July, 2020, 9th edition URL: https://www.iifm.net/wp-content/uploads/2020/09/IIFM-Сукук-Report-9th-Edition.pdf

to the al-Wakala model occurred and this trend persisted in 2019, with the proportion of sukuk al-Wakala comprising $21.757bn (56%) of overall global issuance. In 2017, Saudi Arabia introduced a new hybrid structure combining al-mudarabah and al-murabahah, leading to increased issuance. In 2019, the structure's share of international sukuk issuance rose to 8% (GBP 2.17 billion), up from 6% (GBP 1.45 billion) in 2018.

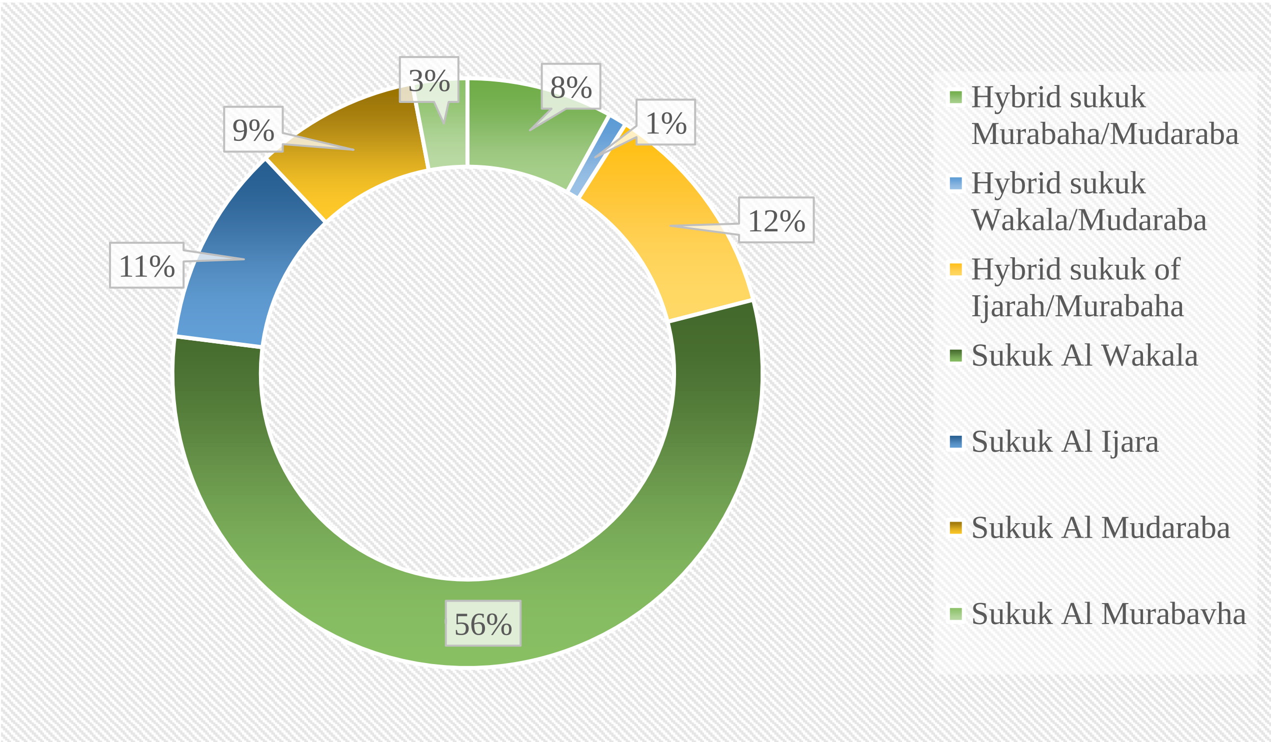

Figure 1.3. Issuance of sukuk by structure, 2019, international market, USD bn.

Source: IIFM Sukuk Report. A comprehensive study of global Sukuk market. July, 2020, 9th edition URL: https://www.iifm.net/wp-content/uploads/2020/09/IIFM-Sukuk-Report-9th-Edition.pdf.

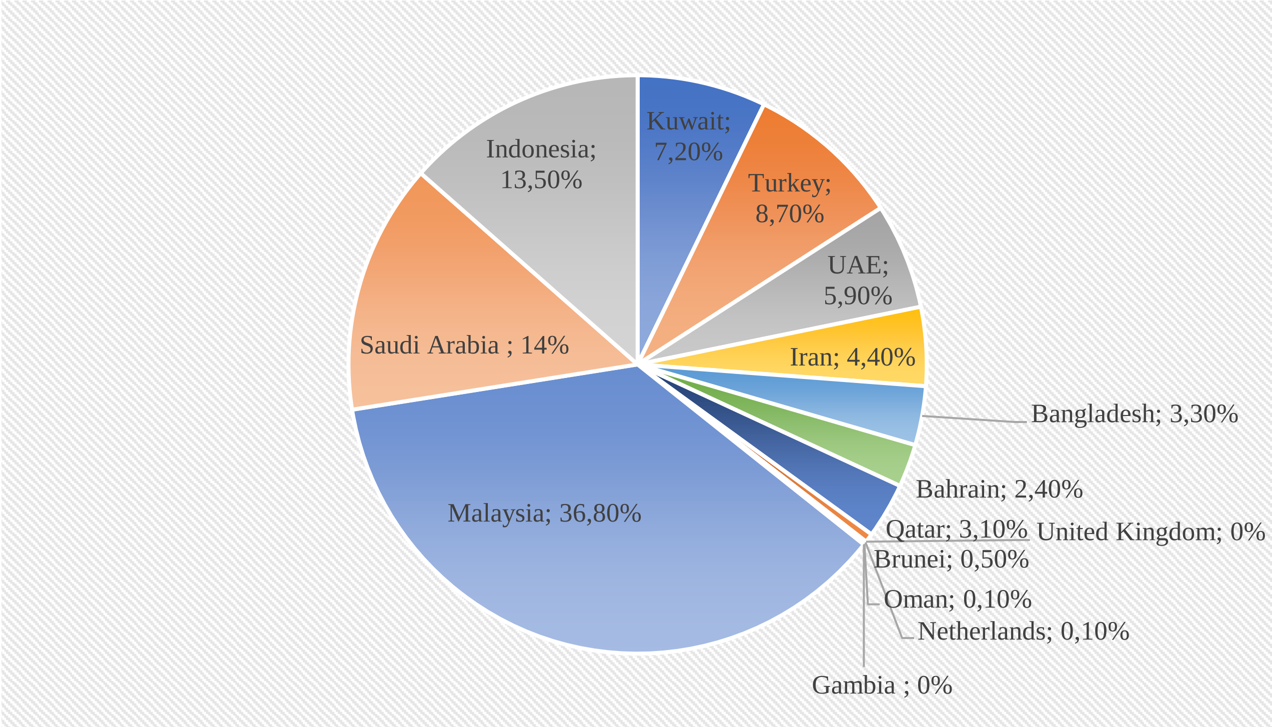

Figure 1.4 Total sukuk issuance by jurisdiction (2019)

Source: IIFM Sukuk Report. A comprehensive study of global Sukuk market. July, 2020, 9th edition URL: https://www.iifm.net/wp-content/uploads/2020/09/IIFM-Sukuk-Report-9th-Edition.pdf

Given the aforementioned information and the subsequent analysis, certain benefits of sukuk can be identified.

The guarantee provision to investors makes all types of sukuk contracts appealing to not just Muslim investors, but also to individuals of other religions.

Additionally, sukuk is a negotiable instrument. Sukuk equality is only in place at the time of issuance. After issuance, the investor-owner has the right to sell the sukuk for more or less than its initial value. The sale price in the secondary market is determined by supply and demand conditions and the financing terms of the underlying asset or project.

As for the valuation of sukuk for investors, it is derived from the value of the assets supporting it. In contrast, traditional bonds are primarily evaluated based on their credit rating. This approach is more transparent and accurately reflects the risk for the holder of sukuk.

There is currently a debate surrounding the presence of derivative financial products in accordance with Shariah law. Due to this, the development of Islamic derivatives markets has not yet transpired. Regulatory limitations implemented by Shariah law pertaining to these types of financial instruments pose the primary challenge to the creation of these markets. These include, above all, the proscription of charging interest, the proscription of selling what one doesn't own, the proscription of sales in advance, and the proscription of trading debt instruments at a discount.

However, the International Islamic Financial Centre (Bahrain) (IIFV) and the International Swaps and Derivatives Association (ISDA) have collaborated to develop model documents for various derivatives that are deemed appropriate for use in the Islamic financial market. This initiative commenced in 2010 upon approving the Master Hedging (Tahawwut) Agreement (TMA), which resembles the Master Hedging Agreement 2002 published by ISDA in 2002 for conventional transactions.

The TMA's key principles are as follows:

- hedging transactions concluded under the TMA should only address the specific risks of the concerned party, and such transactions should not be employed for speculative purposes.
- Transactions must be genuine, involving the transfer of ownership of tangible assets, actual risks, and settlements.
- The asset must be halal, and no interest may be charged on the transaction.[32].

The TMA-based transactions employ two forms of Islamic finance, namely murabaha and musawamah. To comply with Shariah law, a promise to sell or buy, known as wa'ad, is used instead of a forward transaction. TMA has introduced a Shariah-approved concept, called Designated Future Transaction, for this purpose. It replaces the actual Transaction that follows the former[33].

As a result of discussing the practical application of the TMA, an additional 6 standards were created:

1) Islamic Profit Rate Swap (IPRS) - single sale;
2) Islamic Profit Rate Swap (IPRS) - dual sales;

[32] Ijlal Ahmed Alvi, IIFM Chief Executive Manager. IIFM/ISDA Tahawwut Master Agreement, Credit Support Deed and Hedging Products Confirmations. – IIFM Specialized Sessions on Islamic Finance: Sukuk, Islamic Hedging and Liquidity Management Hosted by Bank Indonesia, 7th November 2017 URL: https://www.iifm.net/wp-content/uploads/2019/08/Session-2-Islamic-Hedging-Standards-Ijlal-Alvi-IIFM.pdf

[33] Richard Fagerer, Michael E. Pikiel, Michael J.T. McMillen. The 2010 Tahawwut Master Agreement: paving the Way for Shari'ah-Compliant Hedging, 2012 URL: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1670118

3) Islamic Cross Currency Swap (ICRCS) - dual sales;
4) Islamic Foreign Exchange Forward (IFX Forward) (Islamic currency swap or forex swap) - single obligation based on a promise (wa'ad).
5) The Islamic Foreign Exchange Forward (IFX Forward) comprises two unilateral and independent obligations that are based on a promise (wa'ad).
6) The Islamic Credit Support Deed for Cash Collateral (Variation Margin) is an Islamic credit support agreement for cash collateral (variation margin)[34].

Despite this framework, the use of derivatives in Islamic finance is still in the early stages. The various madhabs, which advocate different standards for Islamic derivatives, have resulted in the use of a diverse range of structures and documentation. This lack of uniformity has restricted the frequent use of Islamic derivative instruments, despite the industry's intention to introduce Shariah-compliant risk hedging capabilities. The absence of harmonisation and coordination hinders the ability of Islamic financial institutions to operate beyond their domestic markets, where Shariah standards may be unfamiliar or deviate from those of their own markets. An Islamic currency swap serves as a useful illustration of such standards.

An Islamic currency swap is a contractual mechanism that serves as a hedging tool for minimising the impact of market exchange rate volatility and fluctuations on participants. Typically, there are three Islamic swap instruments in practice today: **a forex swap, a cross-currency swap**, and **an interest rate swap**[35].

A ***foreign exchange (forex) swap*** is a derivative used to hedge against risks from fluctuations in foreign exchange rates. The standard structure of a forex swap involves two cash flow exchanges: on the date of initiation and on the date of maturity (which includes exchanging and reversing currencies).

A ***traditional currency swap*** involves two exchange stages. Initially, when the first currency is swapped, one currency is converted to another based on the spot rate. On the same day, both parties will enter a forward contract, exchanging the second currency back to the first currency at a predetermined forward rate.

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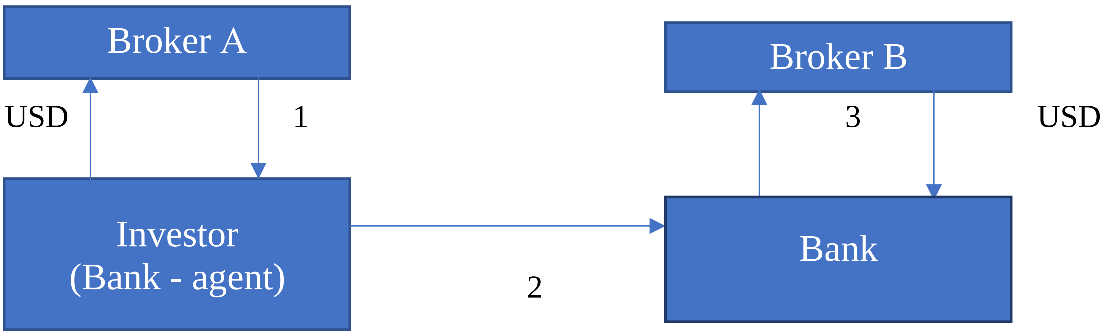
[34] https://www.isda.org/2010/03/01/islamic-finance/
[35] Islamic Finance – International Swaps and Derivatives Association (isda.org)

From a Shariah viewpoint, the structure of a traditional currency swap becomes problematic when the parties involved intend to exchange currencies in the future, yet fix the rate on the day the contract is established. This contradicts the fundamental Shariah rules regulating currency exchange (Sarf). According to Sarf, it is impermissible to engage in a forward foreign exchange contract unless both parties own both counter flows of money concurrently.

There are two structures in the Islamic currency swap. The first structure is founded on a tawarruq contract (also referred to as a commodity murabaha) while the other is based on the idea of a wa'ad (promise).

This text is already well written and does not require further improvement.

Figures 1.5 and 1.6 below demonstrate the process of a Shariah currency swap according to the tawarruq scheme. This scheme involves trading currency through the purchase and sale of tangible commodities[36].

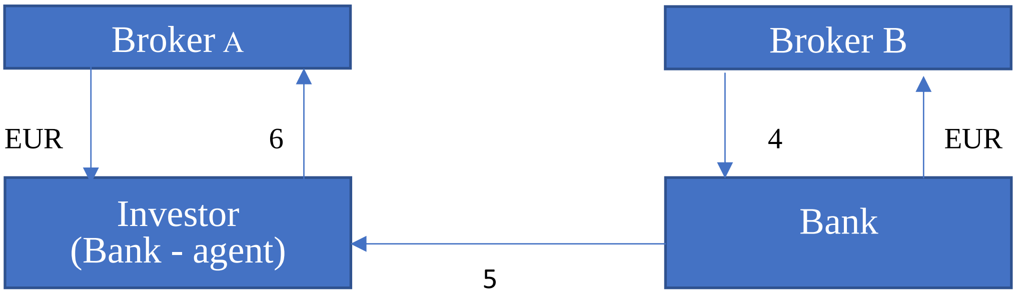


1. The investor will purchase the goods for £14.5 million through a bank transaction in cash.
2. The investor, through the bank, sells the goods at a price of £14,501 million to the bank with a deferred payment plan. US dollars with a deferred payment are exchanged during a deferral period of one year.
3. The bank sells the goods to Broker B for cash and receives £14.5 million. The Bank exchanges £14.5 million for EUR 10 million at the spot rate.

Figure 1.5 Scheme of the tawarruq-based Islamic currency swap, first transaction

Developed by the authors on the basis of:: Asyraf Wajdi Dusuki. Islamic Foreign Exchange Swap as a Hedging Mechanism Perspective, International Shariah Research Academy for Islamic Finance URL: https://www.eurekahedge.com/Research/News/490/Islamic-Foreign-Exchange-Swap-as-a-Hedging-Mechanism-Perspective#lightbox[eureka]/2/.

[36] دكتور عبد الكريم محمد السوري. الجامعة الخليجية، مملكة البحرين. التورق المصرفي. التكييف الشرعي والحكم الفقهي، 2012
http://iefpedia.com/arab/wp-content/uploads/2012/05/anpu12.pdf



4. The Bank will purchase €10 million worth of goods from Broker B for cash.
5. The Bank sells the €10 million worth of goods to an investor for €10,141 million on a deferred basis. The deferral period is also 1 year.
6. The investor sells the commodity (through the bank) to Broker A and receives €10 million.

Figure 1.6 Scheme of the tawarruq-based Islamic currency swap, second transaction

Developed by the authors on the basis of: Asyraf Wajdi Dusuki. Islamic Foreign Exchange Swap as a Hedging Mechanism Perspective, International Shariah Research Academy for Islamic Finance URL: https://www.eurekahedge.com/Research/News/490/Islamic-Foreign-Exchange-Swap-as-a-Hedging-Mechanism-Perspective#lightbox[eureka]/2/.

Table 1.3 Cash flows on Islamic currency swap

				Cash flow from investor	Cash flow from the Bank
	Profit	**Purchase price**	**Selling price**	**The beginning**	**The end**
Tavarruk USD	1 base point	14 500 000	14 501 450	(14 500 000)	14 501 450
Tavarruk EUR	1,40874%	10 000 000	10 140 874	10 000 000	(10 140 874)
Exchange rate		1,45	1,43		

Developed by the authors on the basis of: Asyraf Wajdi Dusuki. Islamic Foreign Exchange Swap as a Hedging Mechanism Perspective, International Shariah Research Academy for Islamic Finance URL: https://www.eurekahedge.com/Research/News/490/Islamic-Foreign-Exchange-Swap-as-a-Hedging-Mechanism-Perspective#lightbox[eureka]/2/.

The second structure of a currency swap is based on the concept of wa'ad, which means "promise" in Arabic.

A promise may have moral implications, as breaking it can result in shame (social guilt), but it does not entail legal obligations or sanctions. Wa'ad can be binding or non-binding under civil law depending on the intention of the party making the promise[37].

The OIC Islamic Fiqh Academy, located in Saudi Arabia, has established that wa'ad is

[37]https://www.eurekahedge.com/Research/News/490/Islamic-Foreign-Exchange-Swap-as-a-Hedging-Mechanism-Perspective#lightbox[eureka]/2/

"legally binding not only under divine law but also in the legal system" if:

- it is executed in commercial dealings;
- it is one-sided;
- it produces commitments.[38].

In addition, objectivity is necessary when evaluating goods that are promised to be sold. If the promise pertains to a specific asset, the sale and purchase agreement should be finalized during the exchange of offer and acceptance of the goods (also referred to as majlis al-akd) rather than at the time of the wa'ad. If the promise pertains to a specific asset, the sale and purchase agreement should be finalized during the exchange of offer and acceptance of the goods (also referred to as majlis al-akd) rather than at the time of the wa'ad. An Islamic currency swap using a wa'ad structure entails exchanging currencies (sarf) initially and pledging or committing (wa'ad) to execute another sarf in the future, based on the presently determined exchange rate. The second swap is utilised to return the original currency at the term's end.

Bai al-Sarf[39]

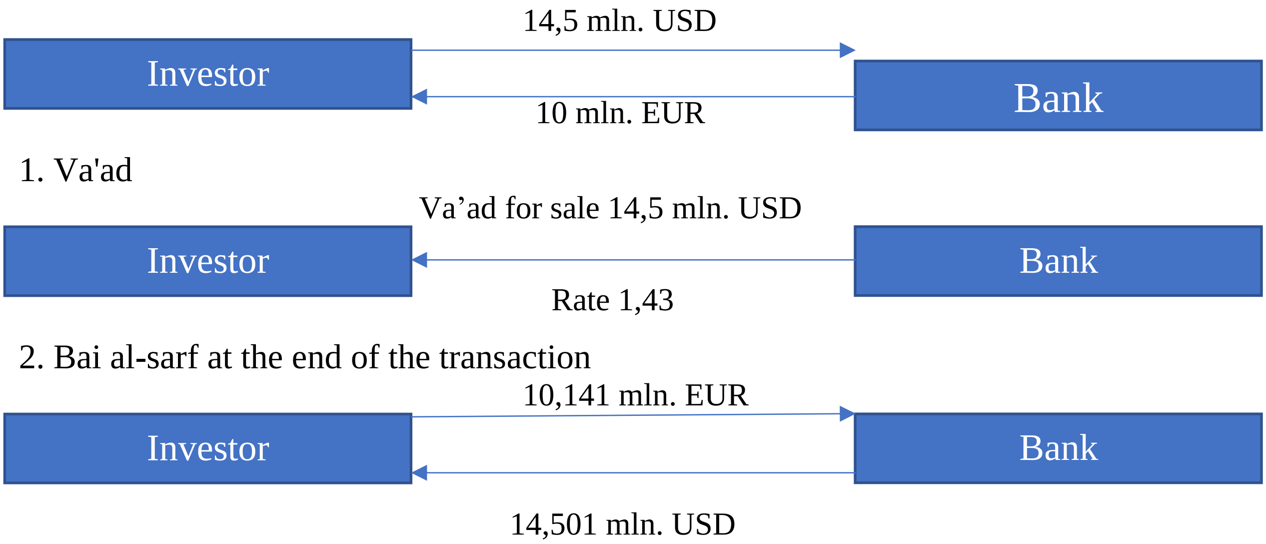


Figure 1.6 Diagram of an Islamic currency swap based on va'ad

Developed by the authors on the basis of Asyraf Wajdi Dusuki. Islamic Foreign Exchange Swap as a Hedging Mechanism Perspective, International Shariah Research Academy for Islamic Finance URL: https://www.eurekahedge.com/Research/News/490/Islamic-Foreign-Exchange-Swap-as-a-Hedging-Mechanism-Perspective#lightbox[eureka]/2/

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[38] Asyraf Wajdi Dusuki. Islamic Foreign Exchange Swap as a Hedging Mechanism Perspective, International Shariah Research Academy for Islamic Finance URL: https://www.eurekahedge.com/Research/News/490/Islamic-Foreign-Exchange-Swap-as-a-Hedging-Mechanism-Perspective#lightbox[eureka]/2/

[39] Bai al-Sarf (exchange of currency) refers to the mode of exchange in Islamic finance within the context of international trade. The concept necessitates the transfer of the same value of currency in settlement. Bai al-sarf is permissible if it is in the fulfillment of a need, such as in international trade, and leads to avoiding riba (usury) or another prohibited end. However, it is not advisable to engage in non need-based exchange of currency. Furthermore, Islamic banks that wish to offer overseas transactions must be extremely cautious to ensure their actions comply with Shariah rules.

The following general Shariah requirements must be met when structuring swap products:

- Each contract in the swap structure must be genuine and not fictitious.

- Each contract must have its own specific outcome. For instance, a sale and purchase agreement results in the acquisition of ownership, with no encumbrances on the title. The purchaser can determine whether they wish to sell, retain, or utilise the item.

- Each contract within the framework must stand alone and be distinct; contracts must not be contingent upon one another.

For exchange-traded contracts, it is important to adhere to the fundamental principles and conditions of the contracts. The contract must be lucid, a genuine transaction must occur and be verified.

The sequence of executing each contract must be followed strictly, so that these contracts are mutually exclusive.

Most Shariah-compliant swap products require approval from the relevant financial institution's Shariah committee and are designed exclusively for hedging purposes. This implies that swaps are only to be utilized for insuring an asset against unfavourable fluctuations, such as unexpected or negative changes in its value, at a minimal cost.

According to reports from the Office of the Comptroller of the Currency, a mere 2.7% of derivatives are used by end users, indicating that hedging transactions comprise only this proportion whilst the remaining 97.3% is utilised by dealers, commonly known as speculators[40].

These statistics unquestionably raise concerns regarding the extent to which an Islamic swap product is genuinely free from speculative activities prohibited by Shariah. Consequently, more detailed guidelines or parameters are required to guarantee that the product is employed exclusively for hedging purposes rather than speculative activities. Some financial institutions provide written confirmation to acquire a guarantee and declaration from the counterparty subscribing to the swap

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[40] Usmani, M. M. T. (2001). An Introduction to Islamic Finance. https://doi.org/10.1163/9789004479913

product, thus guaranteeing that the swap is solely utilised for hedging and not for speculation.

In the case of other financial institutions, a swap is only used for hedging when there is a distinct underlying transaction and contract, such as an ijar contract. This ensures that the underlying asset of the swap is solely based on genuine and tangible economic activity, rather than on imaginary agreements.

According to the aforementioned analysis, it is evident that Islamic sukuk securities are extensively sought-after instruments in global financial markets. This is largely due to the transparency of the procedures governing their origination, evaluation, and assurance of maintaining investors' entitlements.

In contrast, Islamic derivatives are not widely used, despite applicable standards, due to various interpretations of Islamic jurisprudence. Practically speaking, only forex swaps and derivatives based on tawarruq or wa'ad are employed. Other derivatives types that involve interest, futures purchases, or transactions for non-existent goods or services, are contentious in terms of their validity and not utilized by banks in practice. The legality of these derivatives remains the subject of ongoing debate.

1.3 Features of banking activities in Islamic finance

Islamic finance offers unique features and advantages, including risk-sharing, asset-backed transactions, and a focus on ethical and socially responsible investing, that make it a viable and attractive alternative to conventional banking

Dr. Mahmoud Mohieldin,
former Minister of Investment of Egypt and
World Bank Group Senior Vice President.

Those who consume interest cannot stand [on the Day of Resurrection] except as one stands who is being beaten by Satan into insanity. That is because they say, 'Trade is [just] like interest.' But Allah has permitted trade and has forbidden interest

Quran 2:275

This passage from the Qur'an underlines the distinguishing characteristics of banking in Islamic finance, specifically the forbiddance of riba or interest-driven transactions. It accentuates the significance of permissible commerce and ethical business conduct as a means of attaining profits and advancing economic development. The ayah emphasises the adverse effects of involvement in interest-based transactions, which are not only forbidden in Islam but also linked to financial instability and social inequality.

One of the postulates of the Islamic economic concept is objective identification of human exploitation, where income is received by a person who does not participate in the production process and does not risk their property. The symbol of such exploitation in the Qur'an is usury. The prohibition of interest on loans is firmly established in the Qur'an, where it is held equivalent to the most serious sins. In Islamic tradition, charging interest is considered 36 times more forbidden than adultery, punishable by stoning under Shariah law. Nonetheless, the condemnation of interest is not limited to Islam. Two other monotheistic religions, Judaism and Christianity, also prohibit it.

In Europe, some countries, until the 16th century, considered charging interest as usury and prohibited it by law. Only after the emergence of capitalism and the establishment of banking in continental Europe was interest made lawful. In contemporary society, only Islamic communities have upheld an unwavering disdain for interest, whilst social systems stemming from Judaism and Christianity have permitted what was previously viewed as usury[41].

Interest on loans is prohibited in Islam due to its predetermined nature, relationship with loan terms and amounts, and need for repayment, irrespective of the transaction's success.

Islam's approach to financial matters exemplifies this stance, where money cannot be treated as a standalone entity. Therefore, lending at interest to increase its value is not permitted. Money ought to contribute to the rise in added value that is rooted in the genuine economy of trade and production. This is the only way that the compensation for providing financial capital can be considered equitable. The earnings accrued by the bank must not be a fixed percentage of the loan issued, which is customary for conventional banks, instead, it should be a specific portion of the project's profit. The bank should act as a collaborator with

[41] Lārī, M. M., & Goulding, F. J. (1977). Western civilisation through Muslim eyes. http://ci.nii.ac.jp/ncid/BA20037889

the person borrowing the funds (entrepreneur) that it finances[42].

Such a programme encompasses not just the bank's involvement in earnings from the funded undertaking, but also its responsibility to share a portion of the potential losses proportionate to the sum of its monetary input. Thus, the Islamic perspective on business operations is founded on the concept of partnership, viewed as a mutual obligation of the parties concerned towards their inputs in a commercial enterprise and acknowledgement of the equal significance of all production factors - including the entrepreneur's skills and expertise as well as the bank's resources.

Modern economic literature frequently emphasizes the significance and necessity of lending interest in a market economy, notwithstanding the contentions that this practice results in the imprudent use of resources. In the current era, not only liberal economists but also ordinary consumers view interest as remuneration to a bank for a loan to buy any property[43].

The distinguishing features of Islamic banking activities in comparison to conventional banking are presented in Table 1.4.

Table 1.4. Key differences between Islamic and conventional banks

Characteristics	Islamic banks	Traditional banks
Guaranteed payments on demand deposits	+	+
Interest rate on deposits	Not determined, not guaranteed for investment deposits	Defined and guaranteed
The purpose of the loan	The loan is issued for investment purposes only	Loan disbursement is not conditional on investment
Mechanism for determining the interest rate on deposits	Determined by the bank's profitability	The return on investment does not depend on the bank's profitability
Participation of depositors in the bank's profit and loss	+	-
Loan disbursement condition	Loan disbursement is subject to an assessment of the borrower's financial position	A prerequisite for entering into an agreement with a bank is the existence of an investment asset

42 Петренко Ф. А може варто замислитися? Про ісламський банкінг заговорили в Україні. URL:: http://islam.in.ua/5/ukr/full_articles/2999/visibletype/1/index.html. // Petrenko F. Maybe it's worth considering? Islamic banking is being discussed in Ukraine. URL:: http://islam.in.ua/5/ukr/full_articles/2999/visibletype/1/index.html.
43 Quttainah, M. A., Song, L., & Wu, Q. (2013). Do Islamic Banks employ less earnings management? Journal of International Financial Management and Accounting, 24(3), 203–233. https://doi.org/10.1111/jifm.12011

The protagonist in "A Hero of Our Time" is a financier who trades unsecured financial instruments for tangible assets. The Islamic financial market also prohibits the use of instruments associated with excessive risk (harar). Typical examples of such contracts may comprise a transaction without specifying a precise price, a transaction that makes the fulfilment of a contractual obligation conditional on the occurrence of an event of uncertain timing, the purchase and sale of goods without an exhaustive specification, and so on.[44]

It is important to note that Shariah does not universally condemn risk, as it is a fundamental component of commercial transactions. Instead, it is excessive risk that cannot be adequately assessed before executing a transaction that may be problematic. In particular, when market information is asymmetrical, one party may have access to information that the other party does not possess, leading to errors or deception.

The concept of gharar in Islamic business ethics is closely related to the concept of maysir, which denotes income received not as a result of productive resource utilization but arising from a random coincidence. *Meisir*, which comprises gambling, is also prohibited in Islam. Notably, such transactions are exemplified by speculative transactions conducted in the financial markets, wherein capital is invested in instruments that lack any real asset basis. These are mainly financial instruments derived from other assets, that have experienced a noteworthy surge in trading volumes across global financial markets in recent times. Unlike conventional banks, Islamic banks refrain from participating in speculative dealings and abstain from investing in derivatives.[45].

Islamic banks operate similarly to conventional banks by aggregating funds from their clients and then lending them out, while also facilitating payments and settlements between businesses and individuals.

However, what sets Islamic banks apart from traditional banks is their avoidance of interest-based compensation in their operations. They opt for alternative methods of profit

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[44] Станков О. С. Особливості діяльності фінансових арабських інститутів. Регіональна економіка. 2018. № 4. С. 151–156.// Stankov O. S. Peculiarities of the activity of financial Arab institutions. Regional economy. 2018. № 4. C. 151-156.

[45] Особливості діяльності ісламських банків та їх входження на фінансові ринки європейських країн URL: http://dspace.uabs.edu.ua/jspui/bitstream/123456789/6761/1/ Mockalemko%20I.%20Konkurs%20robota.pdf. // Peculiarities of Islamic banks and their entry into the financial markets of European countries URL: http://dspace.uabs.edu.ua/jspui/bitstream/123456789/6761/1/ Mockalemko%20I.%20Konkurs%20robota.pdf.

generation that align with Islamic finance principles.

While not condemning the concept of profit, Islam discourages earning fixed profits that are independent of performance. Therefore, ensuring remuneration for the capital owner, regardless of the borrower's output, as conventional banks do by charging interest, is prohibited.

In contrast, an Islamic bank may generate profits by participating in a project and must share profits and losses with the entrepreneur. Thus, the operational principles of Islamic banks do not contradict the principles of the market economy, and by refraining from charging interest, Islamic banks do not aim to operate on a charitable basis[46].

Thus, in accordance with Shariah, the organisation of Islamic financial activities is based on the following principles: prohibition of interest-bearing lending, risk sharing with clients, prohibition of financing projects related to prohibited activities, no investment in high-risk derivatives and speculative transactions, certainty of contract terms regarding goods, terms and remuneration.

1.4 Islamic financial instruments

Islamic financial instruments offer a unique and innovative approach to finance that prioritizes social responsibility and sustainable economic development

Dr. Mohamed Maait,
Egyptian Minister of Finance.

Allah has permitted trade and has forbidden interest

Quran 2:275

This passage emphasises the significance of ethical financial tools in Islamic finance, which aim to enable permissible trade and avoid interest-based transactions. The Qur'an promotes conducting business deals that are truthful, equitable, and advantageous for all involved parties. Islamic financial instruments, including mudaraba, musharaka, and sukuk, aim

[46] Moussawi, C. E., & Obeid, H. (2011). Evaluating the Productive Efficiency of Islamic Banking in GCC: A Non-PArametric Approach. International Management Review, 7(1), 10. https://www.questia.com/library/journal/1P3-2343973341/evaluating-the-productive-efficiency-of-islamic-banking

to promote the principles of fairness and equity by providing inventive and socially responsible alternatives to traditional financial instruments. Islamic financial instruments, including mudaraba, musharaka, and sukuk, aim to promote the principles of fairness and equity by providing inventive and socially responsible alternatives to traditional financial instruments. Adopting a sustainable and one-of-a-kind approach to finance, these instruments benefit investors alongside the wider society.

Based on these principles, Islamic banks provide various forms of Islamic financing that currently form the basis of operating and investment activities of Islamic banks.

Mudarabah (trust financing) is based on equity participation in the total profit received from the implemented investment project. In this type of agreement, the bank entrusts its funds to an entrepreneur (mudarib) to implement an investment project as the owner of the capital.

Upon project completion, the income generated from the invested funds is divided between the bank and the entrepreneur according to the original agreement. Generally, the contract does not outline a specific monetary value, but rather the share in which the profit will be distributed. The distribution proportions rely on the duration of the deposited sum. The crucial aspect is that in case of a loss, the capital owner assumes the full financial loss, and the *mudarib* does not receive any compensation[47].

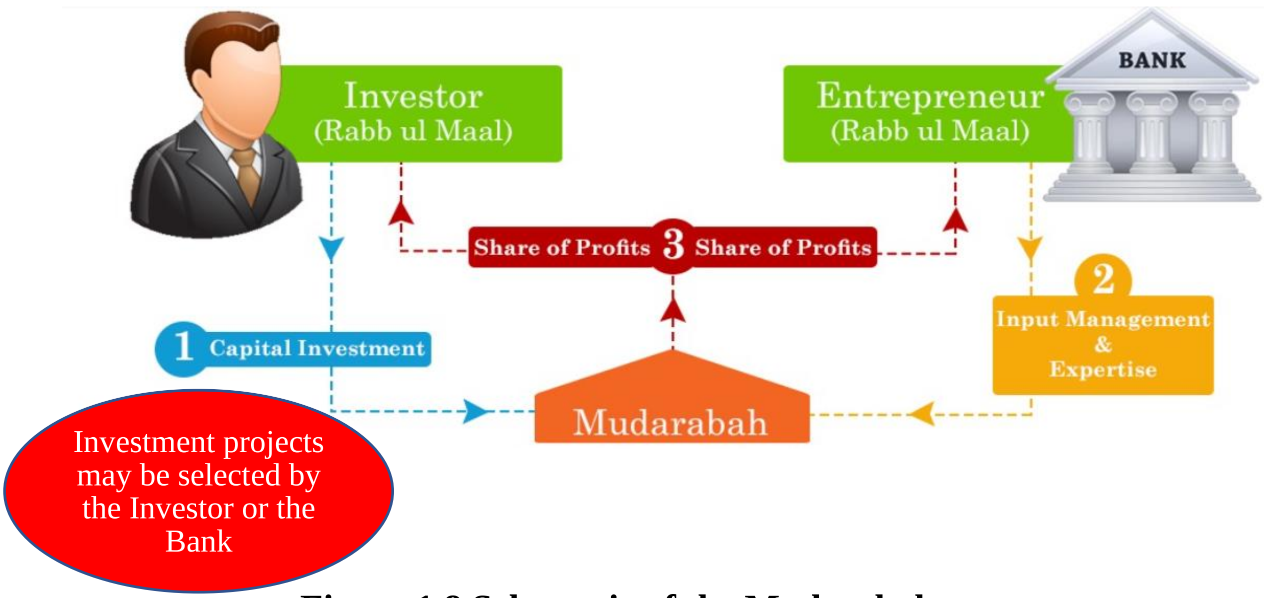

Figure 1.8 Schematic of the Mudarabah agreement

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[47] McCall, L. (2005). The complexity of intersectionality. Signs, 30(3), 1771–1800. https://doi.org/10.1086/426800

In Islamic banking practice, *mudarabah* is typically divided into limited and unlimited variants. In the former, the client selects the investment object, while in the latter, the bank determines the direction of the depositor's funds. Additionally, mudaraba can be special or general.

If the client wants their funds to be invested and managed separately from other clients, a special mudaraba arrangement is used to regulate the relationship. Otherwise, a standard mudarabah arrangement is applicable. *Mudarabah* is commonly employed for financing short- and medium-term investment schemes, such as trading and securities trading.

Musharaka (partnership) denotes a collaborative investment venture between a bank and an entrepreneur. Herein, the parties execute a partnership agreement to finance the project jointly. Profits are divided according to the pre-agreed shares, whereas losses are shared proportionately to the capital contribution[48].

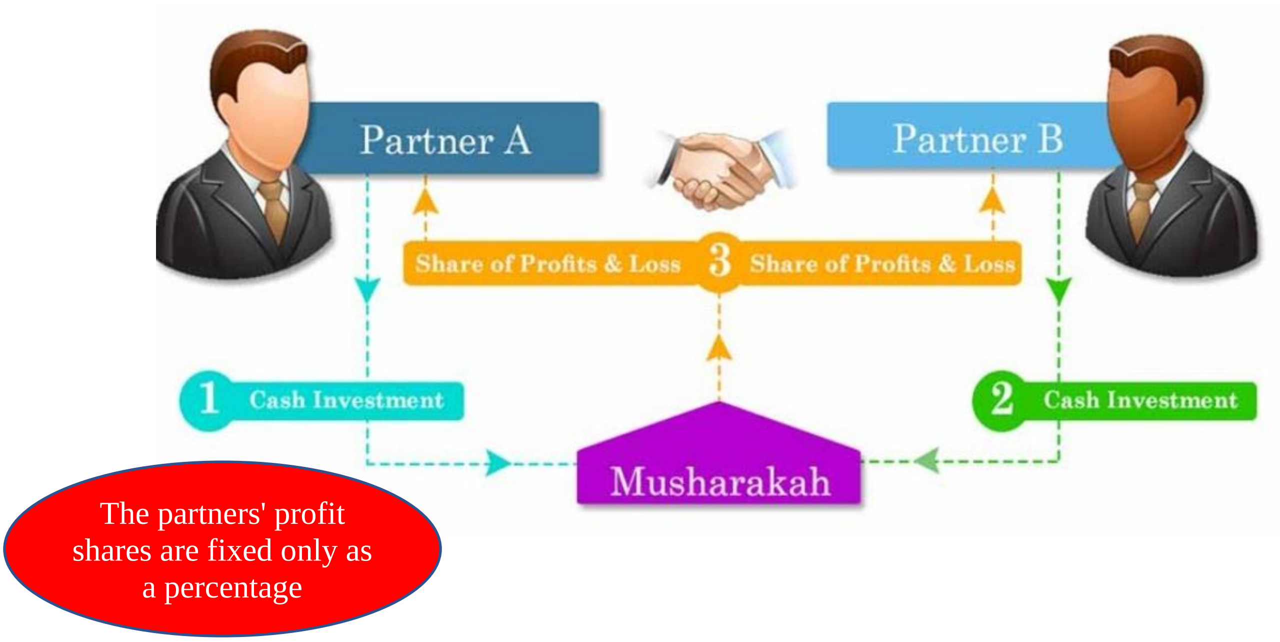

Figure 1.9 Scheme of the Musharak agreement

[48] Eichengreen, B., Tobin, J., & Wyplosz, C. (1995). Two cases for sand in the wheels of international finance. The Economic Journal, 105(428), 162. https://doi.org/10.2307/2235326

In contrast to the *mudarabah*, the *musharaka* is a contract whereby the administration of an investment project may be carried out by all parties involved or by a single party. (Appendix 1) This assists in overcoming the information asymmetry and moral hazard inherent in a *mudarabah* contract. In the practice of Islamic banks, two kinds of *musharakah* are employed, based on the extent of the parties' rights under the agreement: equality partnership (*mufawada*) and commerce partnership (*aynan*).

When utilizing the *mufawada* variant of *musharakah*, the collaborating counterparts contribute identical shares to the capital and possess identical privileges for disposal of property. Meanwhile, in an ainan partnership, the involved parties exhibit non-identical capital amounts and property management authorities. Ordinarily, a singular participant assumes a majority share capital-wise and handles the venture's operations while the other, despite possessing formal capabilities for managerial involvement, does not practically impact the decision-making process. The *musharaka* agreement is utilised for joint investment activities, including investments in real estate, agriculture, and other sectors.

Murabaha is a contract for selling and buying goods between a bank and a buyer at a pre-agreed price. The bank purchases the goods at its expense and becomes their owner before reselling them to the buyer at a profit. As a short-term financing method, compared to forms of financing based on sharing losses and profits (*musharaha* and *mudaraba*), murabaha carries low risk. (Appendix 2) The murabaha financing mechanism is currently widespread throughout the portfolios of Islamic banks in all regions[49].

[49] Patrick, H. T. (1966). Financial development and economic growth in underdeveloped countries. Economic Development and Cultural Change, 14(2), 174–189. https://doi.org/10.1086/450153

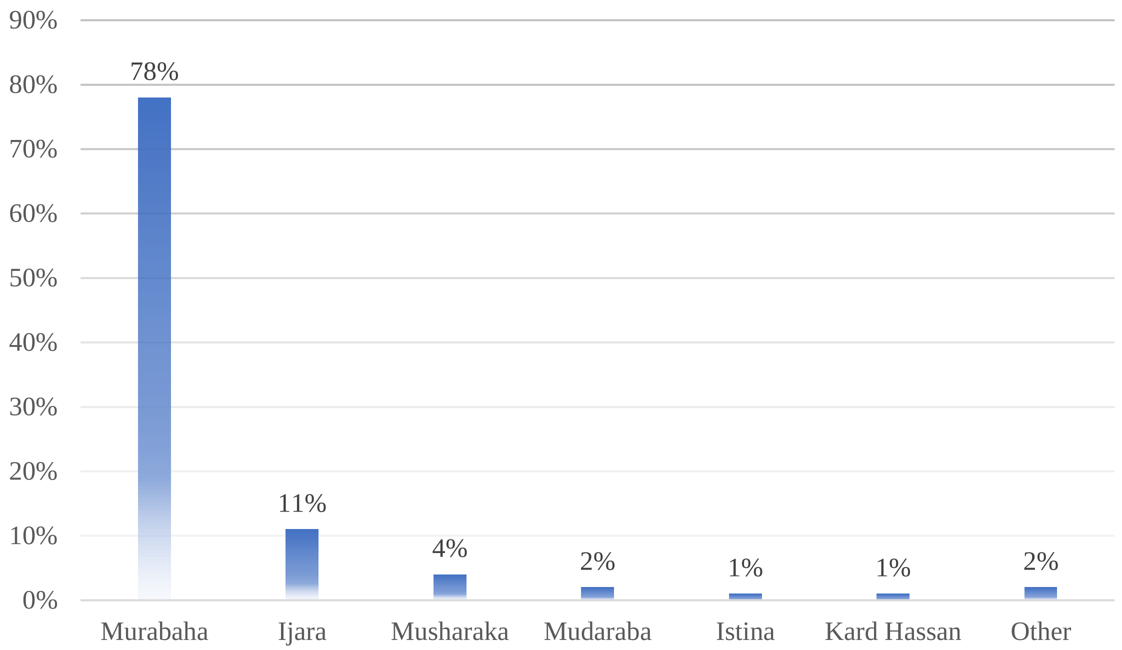

Figure 1.10. Portfolio structure of Islamic banks

The murabaha agreement is utilised by banks to procure raw materials, equipment, buildings, land and assets from third parties, which are then resold to the client at a price higher than that agreed in the original agreement. (Appendix 3)

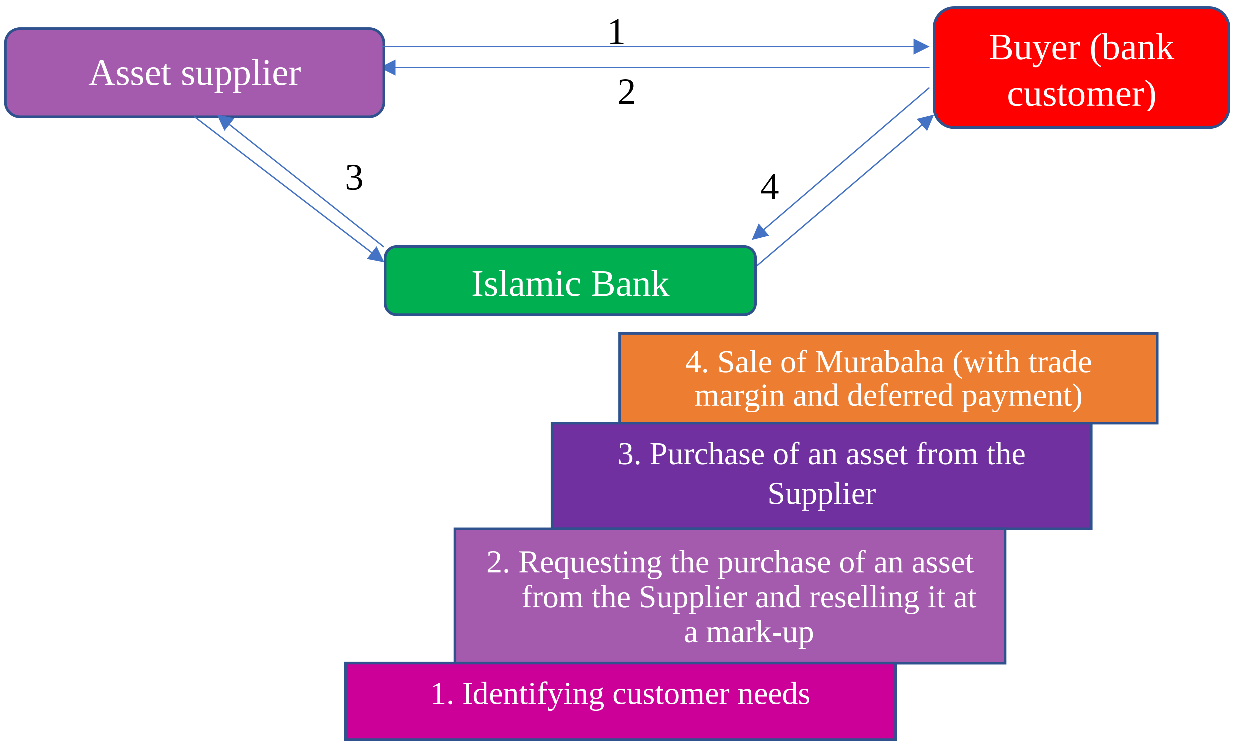

Figure 1.11 Schematic of the Murabaha agreement

Salaam, or bai al-Salaam, is a contract for the sale of goods with deferred delivery against a means of payment and with a pre-arranged value of the goods that the seller (bank) undertakes to provide to the buyer. In essence, a salam contract is an advanced form of financing where one party (the bank) acts as the customer and the other party acts as the contractor. It is legally similar to a contracting agreement[50.]

Under the *bai al-Salam* agreement, the bank lends to the contractor, and the latter is subject to a debt obligation that is considered fulfilled upon delivery of the manufactured goods to the bank. The subject matter of the contract is movable property that can be assessed by quality, quantity, and labour invested in its production.

Why is it advantageous for an Islamic bank to enter into a *Salaam* agreement? It is understood that the bank purchases goods below their market value. In this situation, the bank assumes the risk of the goods decreasing in value until the contractor fulfils their duties under the contract.

Istisna is a financial tool intended for funding extensive and enduring schemes. The disparity between an *Istisna* agreement and a Salam agreement is that the bank itself functions as the supplier of the goods rather than the client, and payment for the goods is not given as a single payment before the buyer receives the goods, but gradually as the goods' manufacturer performs work[51].

The uniqueness of Islamic financing of this kind is the creation of a schedule and its strict adherence during implementation. Presently, *Istisna* contracts are utilised for financing significant industrial undertakings, purchasing costly machinery (such as ships and aircraft), and also residential building.

Ijara (leasing) is comparable to leasing within the traditional financial system. Under this agreement, the bank (the lessor) acquires and leases the property to the lessee for a specified period. (Appendix 6) The lessee will pay the bank remuneration in the form of predetermined payments.

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[50] Некрасов А. Н. Исламский банкинг пробивается в Казахстан. Эксперт Казахстан. 2013. № 18. С. 29. // Nekrasov A. N. Islamic banking makes its way to Kazakhstan. Expert Kazakhstan. 2013. № 18. С. 29.
[51] Astiz, M. F., Wiseman, A. W., & Baker, D. P. (2002). Slouching towards Decentralization: Consequences of Globalization for Curricular Control in National Education Systems. Comparative Education Review, 46(1), 66–88. https://doi.org/10.1086/324050

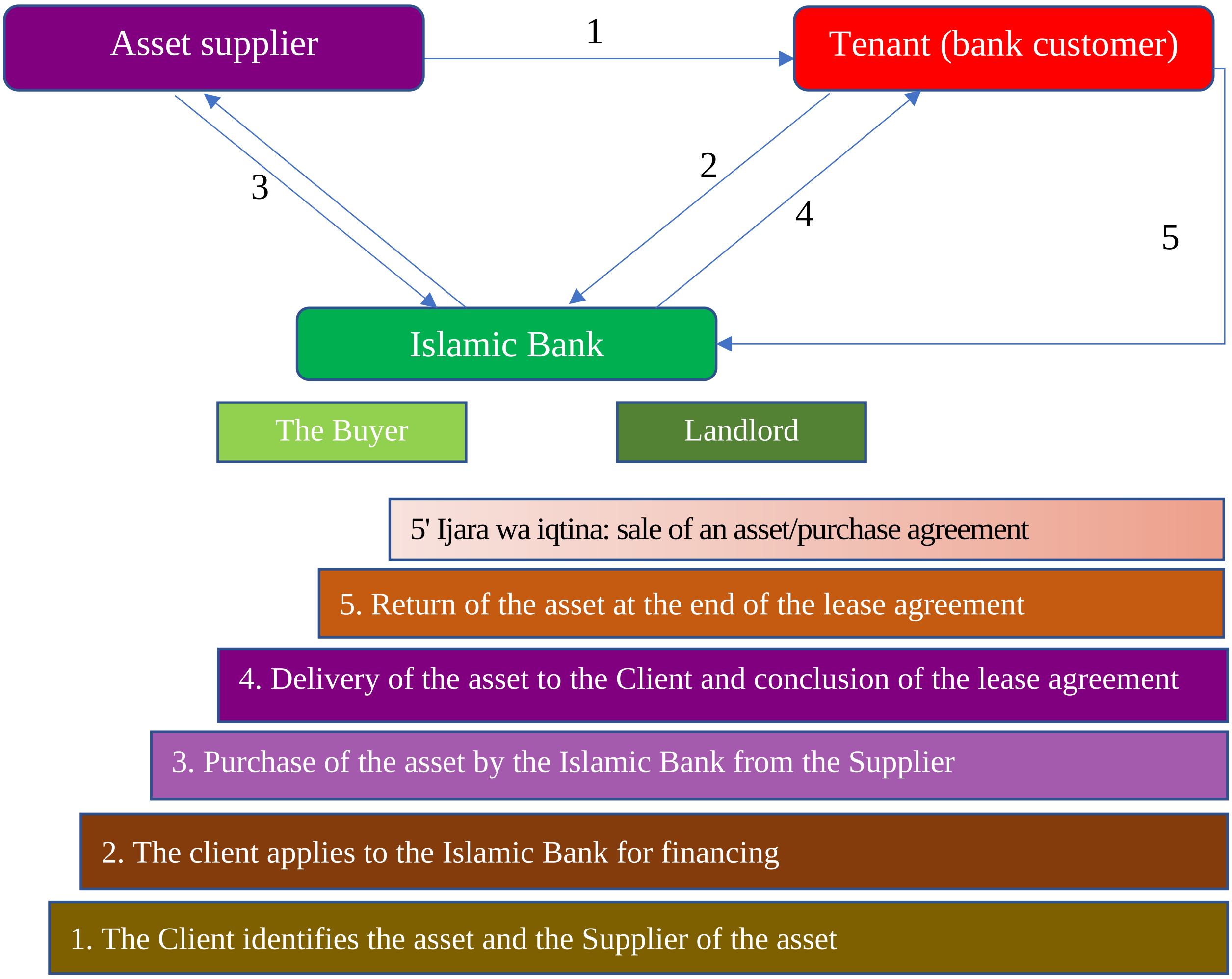

Figure 1.12 Schematic of the Ijarah agreement

The interest-free loan agreement, known as the card, serves a religious rather than an economic function within the operations of Islamic banks. It can be considered as a form of repayable financial assistance provided to individuals for purposes including education, marriage, or enabling traders and craftsmen to start their own businesses.

The interest-free lending system is extended to businesses that receive short-term loans from banks, to dissuade them from switching to conventional banks. The Islamic Bank offers hasan-card loans contingent on the profitability of the applicant's business and solely to those businesses that have engaged in transactions with the bank over an extended period and in significant volumes[52].

The Islamic financial products aforementioned are not always implemented. Frequently, conventional financial market practices conflict with Islamic finance's

[52] Beekun, R. I. (2013). Islamic Business Ethics. In Springer eBooks (p. 1500). https://doi.org/10.1007/978-3-642-28036-8_100942

ethical and legal framework due to the market's natural high level of uncertainty, information asymmetry, and prioritisation of private interest over public interest.

Islamic banking primarily generates income through the sale of goods (murabaha) rather than investment activities (musharakah). This shift towards debt-based financing and away from equity-based financing and profit and loss sharing agreements is undermining other Islamic financing methods and threatening financial stability and sustainable development.

This scenario is comprehensible as investment-related instruments involve lower risk. Figure 1.7 demonstrates this issue: over 75% of financing provided by Islamic banks globally is in the form of *murabaha*, followed by leasing (*ijarah*) at approximately 11%. (Appendix 4) The shares of profit-sharing agreements (musharakah and mudarabah) are just above 4% and 1% respectively. The allotment of card hasan contracts is a mere 1%. In general, less than 8% of the overall volume of Islamic finance worldwide is comprised of profit-sharing-based Islamic banking products[53].

It is noteworthy that the legislative development in the financial sector across Islamic countries was not consistent. This lack of uniformity can be attributed to revolutions aimed at toppling the monarchical system and the socialist inclination of most Islamic countries, in addition to the discovery of significant oil reserves and subsequent escalation of oil prices.

Simultaneously, it is worth mentioning that the Islamization of public policy and public life also began to emerge. It was only in the latter half of the 20th century that legal regulation of financial relations began to be widely adopted, including the notable prohibition of financial transactions involving interest. Most constitutions of Islamic nations have dedicated sections on economics and finance, budget proceedings and legalities surrounding currency circulation.

In certain states, such as Saudi Arabia and the Sultanate of Oman, the "Basic Law of Government" or the "White Book" serves as the constitution, and other Islamic

[53] World Bank and Islamic Development Bank Group. 2016. Global Report on Islamic Finance: Islamic Finance: A Catalyst for Shared Prosperity. Washington, DC: World Bank. 218 p.

countries have dedicated sections that deal with the state's financial matters. Thus, the financial legislation of many Islamic countries ascribes special financial and legal mechanisms of the Islamic religious and legal doctrine. These mechanisms are considered an asset of Islamic civilization. For instance, zakat is deemed as a "religious tax" that aims to provide material support for socially unprotected populations. Similarly, *khums* is a similar "religious tax" that is accepted in the Shiite part of the Islamic world. Additionally, some countries (e.g. Pakistan, Saudi Arabia) impose *ushr*, a tax on agricultural land[54].

In addition, the legal regime for implementing the *waqf*[55] institution in practice is defined by the legislation of many Islamic countries. Waqf refers to property that has a social purpose, such as the construction of buildings, hospitals, schools, or mosques, but remains on the financial balance sheet of the founder (donor) and is non-alienable. The right of ownership is inherited.

The analysis of the tax legislation of Islamic states allows for a gradation of Islamic countries with regard to the desire to enshrine *zakat* - "religious tax" - at the legislative level. In particular, the following are distinguished:

1) Islamic states in which there is no legislative provision for the collection of zakat, but at the same time, zakat is paid by citizens on a voluntary basis to specialised funds (Egypt, Iran);

2) Islamic states where the obligation to pay zakat as voluntary contributions is enshrined in law, paid at the discretion of citizens in order to comply with the religious duties of Islam (Bangladesh, Bahrain);

3) Islamic states, in the legislation of which zakat is a mandatory state tax deduction (Saudi Arabia, Sudan, Libya, Pakistan, Malaysia, Jordan, Yemen). In addition, the approach to the withdrawal of funds to specialised zakat funds varies:

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[54] Standard & Poor's, «Islamic Finance Outlook 2018». The National Bureau of Asian Research. Islamic Finance: Global Trends and Challenges. 2019. № 4. V. 18.

[55] The waqf or Islamic endowment is a charitable trust where Muslims can donate property or money for religious or social purposes. The purpose is to keep the assets in trust and generate income that can be used for charitable purposes. The roots of waqf can be traced back to early Islamic history and have played a significant role in the Islamic economy ever since. Today, waqf can be established in many different forms, such as property, cash, or securities, and is governed by Islamic law. The waqf is also governed by a board of trustees that looks after the assets and ensures that they are being used for the intended purposes.

- centralised funds (most states where Islam is the state religion);
- decentralised funds (Iran);
- mixed funds (Kingdom of Saudi Arabia)[56].

Despite the fact that Islamic religious and legal doctrine was dormant for a long period, and despite the reception of European law in the late XIX - early XX centuries, Islamic doctrine has proven resistant to the demands of time. As a result, the fundamental concepts of Islamic law have remained unchanged and continue to be relevant today.

Of all Islamic religious and legal doctrine, the provisions concerning financial relations have emerged as the most successful due to the convergence of European and Islamic traditions.

1.5 Religious and Legal Basis for Islamic Finance

The religious and legal foundations of Islamic finance provide a comprehensive framework for promoting social justice and economic development, while adhering to the principles of faith and morality

Sheikh Yusuf al-Qaradawi,
Egyptian Islamic scholar and theologian.

Allah has permitted trade and has forbidden interest
Quran 2:275

This verse from the Qur'an serves as a foundation for both the religious and legal principles of Islamic finance. It emphasizes the significance of ethical business practices and the exclusion of interest-based transactions. The Qur'an offers a comprehensive framework for advancing economic development and promoting social justice through the application of principles such as zakat (charitable giving), musharaka (partnership), mudaraba (investment) and murabaha (trade). Islamic finance is underpinned by religious and moral principles, as well as a detailed legal framework that offers direction on the application of financial instruments and the oversight of financial transactions. The amalgamation of religious and legal principles

[56] New Frontier for Islamic Finance. Kazakhstan Islamic Finance 2016. Almaty: Mutual Insurance Society «Takaful» Halal Insurance». 2016. 85 p.

within Islamic finance is distinctive, presenting a holistic approach to finance that yields advantages for both individuals and society overall.

There are several particularly significant periods in the historical and legal development of Islamic law. In particular:

1) the period of the missionary activity of the Prophet Muhammad and the righteous caliphs (VII century);

2) the period of the Arab dynasties and the doctrinal development of Islamic law (Islamic jurisprudence) (late VII century - XIII century)

3) the period when the Ottoman Empire led the entire Islamic world and there was a certain convergence of the provisions of Islamic jurisprudence and European legal models;

4) the period of fundamental changes (late nineteenth century and early twentieth century) - the abolition of the Ottoman Empire and the creation of national-territorial units;

5) the modern period (mid-20th century to the present day), which is defined as the stage of independent development of Islamic states with varying levels of preservation of "adherence to Islam" in national legislation[57].

Of course, every period of development is significant from a historical and legal perspective, since Islamic law, as a multifaceted and complex phenomenon, is closely intertwined with religion and civilization. Nonetheless, the initial periods of Islamic civilization (early 7th century - mid-13th century) hold a distinctive and vital spot in the history of Islamic law.

This is because the conventional frameworks of Islamic legal thought were established during the preaching efforts of Prophet Muhammad and ultimately formulated during the development of Islamic legal doctrine (fiqh doctrine), encompassing the establishment of the essential sources of Islamic law - the Qur'an and the Sunnah of the Prophet Muhammad.

During historical periods, legal and religious principles and methods of social

[57] Sundararajan V., Errico L. Islamic Financial Institutions and Products in the Global Financial System: Key Issues in Risk Management and Challenges Ahead, IMF Working Paper No. 02/192, November 1, 2018. P.15–22

regulation were established, which can now be considered "timeless". For centuries, Islamic law has been derived from the religious and legal doctrine of Islam.

Since the eighth century, prominent scholars and theological and legal schools have interpreted provisions of the Qur'an. In turn, representatives from the law schools served as judges and advisors to the caliph regarding critical state matters[58].

The doctrinal advancements of Islamic jurists and theologians were not solely a collection of social norms created from the principles of Islam's foundational sources. They also served as a practical manual for governing social interactions within the Arab Caliphate, which encompasses financial relationships.

The interplay of mercantilism, morality and ethics, and the interpenetration of religion and law in the domain of financial relations was the starting point for legal scholars during the period of Islamic legal doctrine development.

Specifically, it encompassed issues related to currency transactions, establishment of the tax-free minimum (*Nisab*) boundary, and determination of the exact weight of gold and silver coins, which serve as principal means of payment. Such situations gave rise to a crisis in the relations between school representatives, as well as their subsequent consolidation and unification of methods for interpreting fundamental legal sources.

The legal doctrine of Islam encompasses two types of rules: The legal doctrine of Islam encompasses two types of rules: *Al-ibadat*, which regulate the performance of religious duties, and al-muamalat, which govern practical relationships among people. The legal doctrine of Islam encompasses two types of rules: *Al-mu'amalat* comprises the fundamental principles for implementing rules of financial legal relationships grounded in rational, rather than divine, principles.

Judges played a crucial part in the progression of Islamic doctrine. Due to the absence of a unified set of laws, they faced challenges with the lack of comprehensive guidance from the Qur'an on regulating society within the caliphate, particularly in matters of financial dealings and determining appropriate penalties for unlawful actions. The Qur'an does not provide precise guidance on liability measures for

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[58] Barro, R. J. (1996). Democracy and growth. Journal of Economic Growth, 1(1), 1–27. https://doi.org/10.1007/bf00163340

financial crimes, which fall under the category of tazir, the least severe acts. Therefore, judges were compelled to resolve numerous financial disputes by interpreting the key provisions of the Qur'an and comparing them to the actions of Prophet Muhammad.

The principle of "riba" (usury) is a key factor behind the establishment of Islamic banks, originating from the religion of Islam. Prior to the adoption of Islam, usury was present in the regions where Shariah was later enforced, though it was condemned. In this context, there was a need to revise the business practices in order to benefit the lender.

In 1988, the Islamic financial system played a crucial role beyond the mere exclusion of riba. It introduced Islamic principles of social justice as norms, methods, rules, and instruments promoting justice, equality, and fairness.

The concept of justice should follow the Qur'anic principles. The Arab world's philosophy developed and evolved over twelve centuries. The philosophy of Islam values human beings in their entirety within the world surrounding them[59].

Islam views business as an endeavour that requires honesty and serves as a means of livelihood for Muslims. It should be noted that Islam approves of and supports business if it adheres to the principles outlined[60].

Thus, a Muslim involved in business must consider two points. Firstly, they do not have the right of unlimited ownership of the property they own. Secondly, they are unable to use all their property as a trader would, by separating part of the property for reinvestment in order to increase capital. This is because an entrepreneur must pay zakat (charity) from their property.

The faithful have been promised by the Almighty that their benevolent actions will be compensated and their portion multiplied. Operating a business with honesty and integrity is expected to result in profits both in this life and the Hereafter. As with any organisation that upholds religious doctrines, Islamic banks must abide by the principles and philosophy of business as stated in the Qur'an and Hadith. An Islamic bank operates with guidance from the principles of justice, equality, trust, honesty, impartiality, mutual benefit, frugality, and fulfilment of obligations[61].

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[59] Barro, R. J. (1996). Democracy and growth. Journal of Economic Growth, 1(1), 1–27. https://doi.org/10.1007/bf00163340
[60] McCall, L. (2005b). The complexity of intersectionality. Signs, 30(3), 1771–1800. https://doi.org/10.1086/426800
[61] McCall, L. (2005b). The complexity of intersectionality. Signs, 30(3), 1771–1800. https://doi.org/10.1086/426800

Islam has provided Muslims with a unique legal framework called Shariah. The provisions of the Sharia are based on four sources, two of which are the most important (the Qur'an and the Sunnah) and the other two are secondary (Generalisation (Ijma) and Judgement by Analogy (Qiyas))[62]. Shariah is founded solely on the holy scriptures and comprehensively encompasses all aspects of every Muslim's life. However, the Quran is a spiritual text; it cannot be regarded merely as a collection of laws. Islamic fiqh specialists describe the Holy Quran as the words of Allah disclosed to his prophet Muhammad, the recitation of which is an act of worship. It comprises Surah Al-Fatiha as its beginning and Surah An-Nas as its conclusion[63.]

The concept of "Shariah" encompasses not only an individual's behaviour to fulfil the divine will but also all spiritual, mental and physical aspects of life. It is more than just law as it encompasses various facets of life, such as belief and practice, personal behaviour, legal and social issues. The former relates to worship and the latter to transactions. There are two aspects of Shariah - "*Ibadat*" and "*Muamalat*"[64.]

1. *Ibadat* pertains to the practical aspects of Muslim worship of Allah.
2. *Mu'amala*t refers to the relationship between individuals.

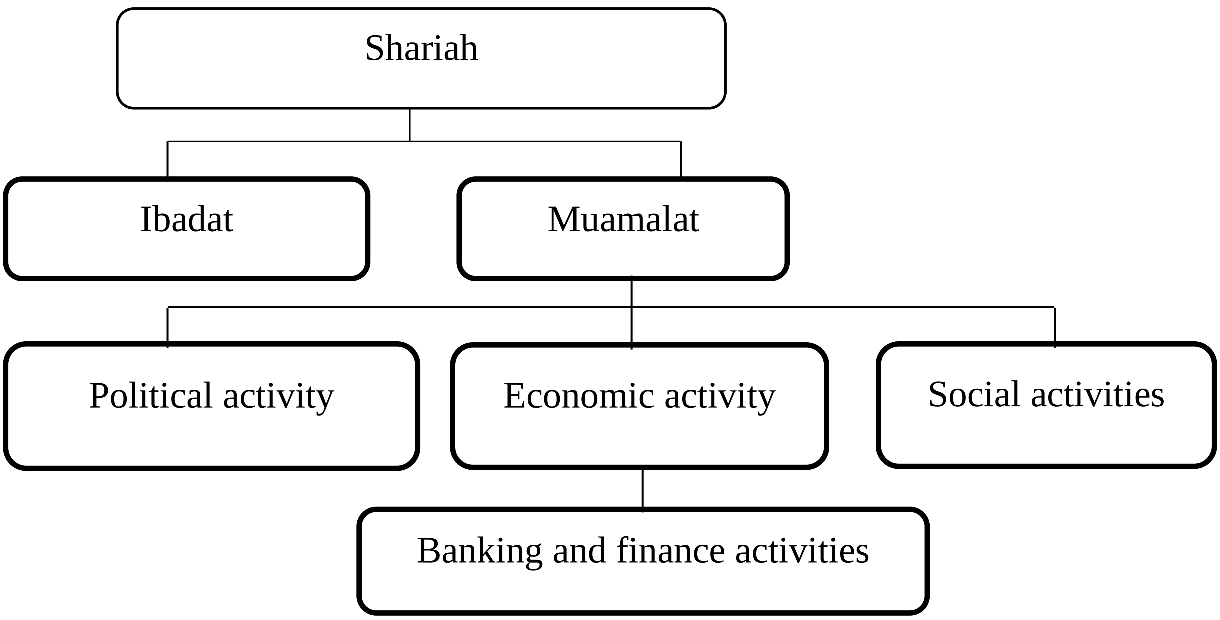

Figure 1.13: The structure of Shariah [65]

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[62] Kuwait Finance House URL: Understanding Islamic Banking (kfh.com)
[63] القرآن الكريم.
URL: https://surahquran.com/quran-pdf.html
[64] Toward A. Global Islamic Finance Standard. 2018. URL: https://www.gfmag.com/magazine/march–2018/toward–global–islamicfinance–standard
[65] Toward A. Global Islamic Finance Standard. 2018. URL: https://www.gfmag.com/magazine/march–2018/toward–global–

Therefore, politics, economics, and social activities fall within the scope of Mu'amalat.

As finance and banking are part of economic activity, they are linked to the principles of Shariah through Mu'amalat.

Abdul Doi expressed the view in 1984 that Shariah differs from all other laws because the Qur'an and *Sunnah* are gifts from Allah, and their value for the *Ummah* cannot be compared to anything else[66]. slamic financial institutions must abide by Shariah law as interpreted by Shariah scholars and make these interpretations accessible to the public. Islamic financial institutions must abide by Shariah law as interpreted by Shariah scholars and make these interpretations accessible to the public[67].

The Sunnah is comprised of the Prophet's hadith, his statements, actions, approval, or prohibition of certain behavior of others.

Ijma represents the opinions of Islamic jurists on specific phenomena or actions.

Qiyas is the ruling of Islamic jurists, applying Shariah rules to new, modern phenomena that require definition from an Islamic perspective.

National laws in Islamic countries incorporate norms from all these sources within its positive law. In particular, the regulations relating to the forbiddance of usury, the procedures for carrying out all transactions and the explanation of funding instruments are incorporated in the civil and commercial codes. For instance, Article 714 of the UAE Civil Transactions Law No. 5 of 1985 specifies that a term in a loan agreement that exceeds the advantage of the loan over the cost of protecting the creditor's rights is invalid[68]. The UAE Penal Law No. 3 of 1987 states that usury is a crime (Article 409), which can result in imprisonment and/or a fine[69]. Specific laws and regulations are issued to regulate certain aspects of the activities of Islamic banks, insurance

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islamicfinance–standard

[66] Siddiqi, M. N. (2006). Islamic Banking and Finance in Theory and Practice: A Survey of State of the Art. Islamic Economic Studies, 2–48. http://ierc.sbu.ac.ir/File/Article/ISLAMIC%20BANKING%20AND%20FINANCE%20IN%20THEORY%20AND%20PRACTICE%20A%20SURVEY%20OF%20STATE%20OF%20THE%20ART_93568.pdf

[67] Ayub, M. (2007). Understanding Islamic finance. In John Wiley & Sons eBooks. http://www.untag-smd.ac.id/files/Perpustakaan_Digital_1/FINANCE%20Understanding%20Islamic%20Finance.pdf

[68] Civil Code of the UAE URL: https://lexemiratidotnet.files.wordpress.com/2011/07/uae-civil-code-_english-translation_.pdf

[69] The UAE Penal Law URL: https://elaws.moj.gov.ae/UAE-MOJ_LC-En/00_PENALTIES%20AND%20CRIMINAL%20MEASURES/UAE-LC-En_1987-12-08_00003_Kait.html?val=EL1

companies, and other institutions and instruments based on Shariah law, as described at the beginning of this paragraph.

Summarising the sources of Islamic financial norms, six principles are identified that are conceptual for all Islamic financial structures. These principles include:

- prohibition of usury, which is understood as excessive and unreasonable benefit under a transaction (riba)
- prohibition of uncertainty, which is understood as non-transparency, ambiguity and asymmetry of information about transactions (gharar) ;
- prohibition of financing of harmful activities on production and sale of alcohol, tobacco, pork, weapons, entertainment, etc. (haram) ;
- division of risks between the owner of the capital and the entrepreneur;
- Materiality of the transaction, which is expressed in direct or indirect connection with real assets;
- Fairness, understood as the absence of exploitation of one party to the transaction by the other party.

In addition, there is a ban on the so-called "maysir" - gambling with elements of betting, which is relevant to the Islamic concept of insurance.

The key principle of Shariah is that money cannot be a commodity and has no value in itself, acting only as a measure of the value of a commodity. This principle underlies the prohibition of usury.

Thus, by considering the historical features of Islamic economic thought, it can be concluded that the religion of Islam serves as the foundation and practical guidance for conducting business among Muslims. The concept of "Shariah", based on the holy and comprehensive source such as the Quran, underpins this practice. As there are no other analogous practices in the world, the concept of "Shariah" is a distinguishing feature that makes Islamic economic activity unique. Another potential regulatory foundation for financing within the Islamic context could be the standards and guidelines formulated by international organizations to oversee Islamic finance. These directives are established through the practical experience of Islamic financial institutions and their contemporary counterparts. The role of international organisations is significant in this respect as they provide a platform for financial professionals to communicate effectively and create global solutions. It is important to note that these standards are advisory and may not be implemented promptly in the practices of financial institutions or national legislation. Given that Islamic banks, as a component within the global banking system, have demonstrated their sustainability, it is conclusive that the Islamic banking system can be considered a viable alternative to the conventional system.

SECTION 2

DEVELOPMENT OF ISLAMIC FINANCE WORLDWIDE

Islamic finance is not just about the ethical and moral dimension, but also about financial stability, sound governance, and effective risk management. These are the qualities that are needed in the global financial system.

Dr. Zeti Akhtar Aziz,
former Governor of Bank Negara Malaysia

This quote highlights the distinctive advantages of Islamic finance and its potential to enhance stability in general, and specifically in the global financial system. As the sector advances and progresses, it is crucial to acknowledge the significant role that Islamic finance can play in promoting ethical and responsible finance, as well as fostering wider economic growth.

And give full measure when you measure, and weigh with an even balance. That is the best [way] and best in result
Quran 17:35

This verse from the Qur'an underscores the significance of honest and equitable business practices, which constitute the crux of Islamic finance. It underscores the importance of integrity, clarity, and precision in all monetary transactions, urging individuals to pursue their commercial dealings in a just and honourable manner. This principle is evident in various spheres of Islamic finance, comprising the disallowance of interest-based transactions, the necessity for asset collateral and priority on risk and profit-sharing agreements.

Over the past few decades, Islamic finance has undergone significant expansion and development worldwide. In the 1970s, the Islamic Development Bank (IDB) was founded to encourage economic development in countries with a Muslim majority by offering Shariah-compliant financing. Since then, Islamic finance has progressed rapidly, increasing in popularity as an alternative to traditional finance in numerous regions of the world.

Today, over 300 Islamic financial institutions operate across 75 countries, with a total asset valuation of over £1.4 trillion. These institutions provide various Shariah-compliant financial offerings, such as Islamic banking, takaful (Islamic insurance), sukuk (Islamic investment funds), and Islamic microfinance. The expansion of Islamic finance has resulted from various factors, such as a rising demand for Shariah-compliant financial products, increasing awareness among consumers and investors regarding Islamic finance, and backing from governments and regulators in many countries.

One of the primary reasons for the expansion of Islamic finance is the increasing need for ethical and socially-responsible investment options. Islamic finance offers a distinctive financing approach that prioritises sustainable economic growth and social responsibility. Shariah-compliant financial products aim to encourage ethical business conduct, avoid transactions based on interest, and offer just and equitable returns to all stakeholders. These principles resonate with numerous investors and consumers who aim to align their financial decisions with their values and beliefs.

Moreover, Islamic finance has also displayed its durability during economic and financial crises. Amid the global financial crisis of 2008-2009, several Islamic financial institutions endured by adhering to principles, like risk sharing and asset-backed financing. This resilience has strengthened the appeal of Islamic finance to investors and consumers seeking stable and secure investment opportunities.

Overall, the evolution of Islamic finance internationally has been motivated by a blend of economic, religious and social elements. As the sector develops and refines, it is probable to have a more significant part in shaping the global financial system and stimulating sustainable economic progress.

2.1 Analysis of the Islamic finance market's current state

Islamic finance is an emerging industry that has witnessed tremendous growth and development in recent years. It has the potential to play a significant role in the global financial system and contribute to economic development in many countries around the world.

Sheikh Mohammed bin Rashid Al Maktoum,
Vice President and Prime Minister of the United Arab Emirates

This is how the Vice President and Prime Minister of the United Arab Emirates accurately described the swift progression and mounting significance of the Islamic finance sector, whilst emphasising its potential to enhance economic growth and development. Therefore, evaluating the present condition of the industry, as well as pinpointing significant trends and challenges that may impact its future endurance and expansion, is crucial.

O you who have believed, fear Allah and give up what remains [due to you] of interest, if you should be believers. And if you do not, then be informed of a war [against you] from Allah and His Messenger. But if you repent, you may have your principal - [thus] you do no wrong, nor are you wronged

Quran 2:278-279

This verse from the Qur'an highlights the forbidden nature of transactions based on interest in Islamic finance, a core principle of the industry. It acknowledges the paramount value of ethical and responsible financial practices, and advocates against activities perceived as unjust or detrimental to others. This principle is evident in numerous aspects of Islamic finance, such as the focus on risk and profit sharing, the necessity for asset backing, and the stress on social responsibility and ethical investments.

After the failure of the centralised economic system of the East in the 1980s, economists, experts, politicians and governments worldwide have concentrated on reinforcing market forces to attain optimal economic growth and sustainable development on national and global levels. However, despite minor progress, market forces have not attained fair and equal growth, not only in individual countries at the national level but also in regions of developed and developing countries.

The period from 2007 to 2010 displayed the vulnerability of the Anglo-Saxon model to the crisis, and some countries remain in economic decline to date. The Islamic financial system, although fairly new, has demonstrated greater resilience towards economic shocks. Its primary purpose is to achieve greater equity and promote socio-economic development. The Islamic financial system can function as a tool to boost economic growth and human well-being. The fundamental aims of policy makers concerned with economic development are to encourage risk sharing as opposed to debt financing, since this reduces poverty and inequality. Islamic banks oversee funds from investors, with a focus on Islamic financial methods.[70] In addition, financial intermediation is a crucial factor in assessing economic development and growth. This study aims to analyze the correlation between Islamic financing modes and Islamic financial intermediation, as well as their impact on financial stability in Islamic banks. The research will identify the most effective regime that should be promoted for implementation in the Islamic economy. After the 2007-2010 global financial crisis, much of the focus in the Islamic finance field has been on identifying the fiscal risks that threaten the financial stability of Islamic banks. This approach is intended to prevent future errors from occurring within the global financial system[71.]

Islamic finance refers to the provision of financial services that adhere to Shariah law. According to the IMF definition, Shariah prohibits the use of interest payments or receipts (riba), gambling (maysir), or excessive uncertainty (gharar). Consequently, practices such as short selling (betting on securities) are not allowed and all transactions must serve a legitimate economic purpose. The banking and sukuk markets are the two most essential components of the Islamic finance industry. The sukuk market is equivalent to the bond market in conventional finance. Together, they represent approximately 95% of Islamic finance assets, valued at £1.8 trillion. The industry experienced a substantial increase from the end of 2015 when it was valued at £1.8 trillion.[72]

Unlike traditional banks, Islamic banks are funded by deposits, for which they do not

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[70] Karen Pfeifer, Is Islamic Economics? In Joel Bainin and Joe Stork, Political Islam: Essays in a Middle Eastern Report, University of California Publishing House, 1997. P. 161-390.

[71] إلياس كاسريان ، "العمل الإسلامي مقابل الخدمات المصرفية التقليدية :الابتكار المالي في مصر "، بولدر :مطبعة ويستفيو ، 2015 ، ص .227. (Elias Kazarian, "Islamic banking versus conventional banking: financial innovation in Egypt", Boulder: Westview Press, 2015, p. 227..)

[72] The AAOIFI set standards that officially came into force at the end of 1995. However, many Islamic institutions still follow their own procedures.

pay interest, and profit-sharing investment accounts. The returns on these accounts are determined by the bank's profits. Similar to conventional bonds, sukuk are structured in a way that the income is associated with an underlying asset, and the lender receives a claim on the asset in exchange, like asset-backed securities. It is essential to note that the terminology used in Islamic finance can differ from the conventional approach.[73] According to Ernst & Young, commercial banks' total Islamic finance assets have increased by 17% between 2013 and 2018, reaching $778 billion. Out of this, approximately $517 billion is accounted for by the Gulf Cooperation Council countries, $160 billion for ASEAN countries and $23 billion for South Asia while the remainder, including Turkey, amounts to $78 billion.

Global Islamic financial assets expanded from under $600 billion in 2007 to over $3.3 trillion in 2019, propelled by the increasing pool of financial assets in countries where Muslims are the majority. The upsurge in demand for products conforming to religious codes also played a significant role[74]. Assets are concentrated in Muslim countries in the Middle East and Southeast Asia, but the sector appears poised to expand into Western markets and complement conventional financing.(Appendix 7)

Prime Minister David Cameron announced in 2013 that the United Kingdom would issue £200 million ($327 million) worth of Islamic bonds, or sukuk, making it the first non-Muslim country to use Islamic financing. Companies in the United States are also considering Islamic finance to finance businesses and infrastructure projects[75]. In 2015, there was a $100 billion shortfall of new Islamic investment, which helped alleviate liquidity pressures in some constrained markets[76].

Muslims adhered to their religious financial principles and invested their assets for over fourteen centuries prior to the establishment of the first Islamic financial institution, the Dubai Islamic Bank, in 1975.[77] Since 1975, hundreds of Islamic banks have been established

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[73] The most significant players remain the GCC countries, which account for the vast majority of assets. However, the model is also making progress in countries such as Malaysia, Indonesia, Turkey and Pakistan.
[74] Frank E. Vogel and Samuel L. Hayes, III, Islamic Law and Finance: Religion, Risk and Return, The Hague: Kluwer Law International 2013 P. 45.
[75] The Economist, 5 March 2018.
[76]M. Haleo Finance islamique et pouvoir politique: le cas de l'Egypte moderne Paris, Presses Universitaires de France, 2019
[77] Traditional finance has also taken ethics into account over centuries of development, as can be seen today in the area of corporate social responsibility investment.

and millions of Muslims have utilised Islamic financial products, from Malaysia to Michigan. Several countries, such as Malaysia, the United Arab Emirates, Iran, and Saudi Arabia, actively promote the formation and expansion of this industry. The fundamental structures of this new asset class are formed by reinterpreting medieval Islamic contract laws, which are in compliance with Shariah or Islamic law.[78]

One of the core components of Islamic finance is murabaha, wherein "two parties agree to engage in a trade at a cost that incorporates an increment or profit on the original amount."[79] This enables a bank to purchase an asset, e.g., a car, for £10,000 and then sell it to a customer for £11,000 in instalments spread over a year. Unlike traditional finance where a bank lends money on an interest rate against the car as collateral, the bank purchases commodities and retails them to customers during a murabaha transaction.[80] Other financial instruments and tools, including ijara (leasing), mudaraba (profit sharing, commonly between investors and managers), musharaka (joint venture), sukuk (Islamic bonds) and takaful (Islamic insurance), facilitate the creation of Islamic financial products that encompass retail and corporate banking, private equity, and insurance[81].

This financial innovation has created an asset category that caters to over a billion Muslims globally. Its acceleration is powered by increasing incomes in numerous Muslim nations, ranging from oil exporters in the Persian Gulf to dynamic Muslim economies in Southeast Asia. Muslims worried about their funds being used for non-Islamic purposes by traditional banks can opt for Islamic banks[82], available in over fifty countries. Such banks provide options for checking and savings accounts, credit cards, car and home financing, and insurance.

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[78] Shariah-compliant financial instruments cannot pay or collect interest due to the prohibition of usury in Islam; Islamic investments also cannot be linked to alcohol, pork, gambling, pornography, or other Muslim prohibitions. Risk sharing and profit sharing must be structured into contracts, investments must strengthen the community, and financing must be backed by assets. Islamic banks have developed tools to address these constraints and fulfil their core function: accepting deposits, investing them and making a profit on the spread.

[79] Rice University Professor Mahmoud Amin El-Gamal writes.

[80] نصيحة الشريعة بمثابة ضمان ضد التمويل المفرط "إبراهيم وارد ، جامعة توفوسا" («The Shariah advice acted as a safeguard against the excesses of conventional finance." Ibrahim Ward, University of Tufus)

[81] Al-Azmeh is a professor at the Central European University, where he teaches applied mathematics and economics. His works are available on the university's website.

[82] A credit card is a distinguishable investment tool. It should not be interpreted conventionally, as laws and convictions denote a credit card as closer to an investment or deposit card.

A fundamental tenet of Islamic finance is the direct correlation between the real and financial economies. Shariah boards, comprising experts in Islamic finance who are remunerated by banks to approve products and practices, may display leniency towards particular entities; nevertheless, they rigidly uphold the principle that financing must yield benefits for the real economy[83]

Islamic finance has faced longstanding criticism that it imitates the wider market, with some even questioning the basic premise of banning interest under Shariah law. In 1989, Muhammad Sayyid Tantawi[84], the then Grand Mufti of Egypt, issued a well-known fatwa that drew a parallel between riba (usury), which is defined in Sharia as excessive interest akin to borrowing, and predatory lending. Tantawi compared this with interest commonly used in conventional banking[85]. Analysts suggest that the reason behind Egypt's large Muslim population's slow adoption of Islamic finance is due to the collapse of various Islamic savings schemes in the 1980s, as well as his conclusion that modern finance aligns with the Shariah.

Many bankers in the Middle East are also sceptical about Islamic finance.[86] Hassan Heikal, a renowned Egyptian banker and founder of EFG Hermes, one of the largest investment banks in the region, has expressed criticism of the industry. Specifically, in 2006, he characterised sukuk as "ordinary bonds covered with an Islamic shell."[87] The discussion regarding the source and fundamental tenets of Islamic finance has lessened in recent years, with attention now directed towards emerging trends within the expanding industry.[88] Even the funds managed by EFG Hermes have invested according to Shariah principles[89]

The assets of Islamic banks are growing by over 15% annually, and according to Standard & Poor's analysts, it is possible for the Islamic financial markets to attain a

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[83]Ibrahim Vardi, a professor of international business at Tufts University, says some bankers were annoyed with their Shariah boards for forbidding Islamic banks from following the lead of conventional banks in preparing for the global financial crisis. "The Shariah boards acted as a safeguard against the excesses of conventional finance," he says.

[84] James A. Bill, The Eagle and the Lion: The Tragedy of American Iranian Relations, Yale University Press 2016.

[85] فضل الرحمن ، الإسلام والحداثة ، مطبعة جامعة شيكاغو ، 2018. (Fazlur Rahman, Islam and Modernity, University of Chicago Press, 2018.)

[86]فضل الرحمن ، الإسلام والحداثة ، مطبعة جامعة شيكاغو ، 2018. (Fazlur Rahman, Islam and Modernity, University of Chicago Press, 2018.)

[87] According to Ward, when Islamic banks emerged in the 1970s, the aim was to create an alternative financial system, but pragmatism set in and the industry developed products similar to those used in conventional finance. "Criticism of the industry is valid, up to a point," he adds. That point was clear when Islamic banks shunned subprime lending and exotic derivatives trading, demonstrating that the industry was not blindly following conventional finance.

[88]محمد سعيد العشماوي ، مؤسسة الإسلام ، باريس :لا ديكوفيرت 2010. (Muhammad Said al-Ashmawi, L'Islamisme contre l'Islam, Paris: La Découverte, 2010.)

[89] المرجع نفسه ، ص 145. (Ibid., C. 145.)

magnitude of several trillion pounds in value[90.] Banks in the Gulf and Malaysia have received an influx of Shariah-compliant deposits and are seeking out regional and global opportunities to utilise these funds in Islamic financial instruments to broaden their risk portfolio and enhance profits.[91]

Islamic banks play a crucial role in financing infrastructure projects in Muslim countries and act as a funding source for foreign companies and joint ventures operating in the Middle East and Asia.[92] International banks, like HSBC, Crédit Agricole, and Standard Chartered, have established Shariah-compliant banking departments and provided guidance to corporations and governments on the issuance of sukuk and other financial instruments[93]. Islamic banks have emerged in Western countries, including the Kuwaiti-backed Bank of London and the Middle East (BLME). The bank adheres to Shariah law, even down to the lease agreements for its photocopiers. [94] This geographical expansion is anticipated to persist in catering to Muslim consumers and identifying fresh investment prospects for sizeable, wealthy Islamic banks in the Middle East and Asia.

Sharia-compliant financial products, primarily personal mortgages, have been accessible in the United States since at least 2002, when the Reston[95], Virginia-based Guidance was established[96]. However, only a small amount of Islamic housing finance, equivalent to a few billion dollars, is offered each year, which is a minute fraction of the several million dollar traditional mortgage sector. Some American companies with worldwide operations have released sukuk, including General Electric's $500 million issue in 2009. [97]

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[90] Frank E. Vogel and Samuel L. Hays III, Islamic Law and Finance: Religion, Risk and Return, The Hague: Kluwer Law International 2016 p. 2.

[91] فؤاد العمر ومحمد عبد الحق ، المصرفية الإسلامية :النظرية ، الممارسة والتحديات ، لندن :كتب زيد 2016 ، ص 25. (Fouad Al-Omar and Mohammed Abdel-Haq, Islamic Banking: Theory, Practice and Challenges, London: Zed Books 2016, p. 25.)

[92] ألبرت هيرشمان ، "العواطف والاهتمامات :الحجج السياسية للرأسمالية قبل انتصارها "، دار نشر جامعة برينستون 2017. (Albert Hirschman, Passions and Interests: The Political Case for Capitalism Before Its Triumph, Princeton University Press, 2017.)

[93] Charles E. Butterworth, "Political Islam: Origins," in Charles E. Butterworth and I. William Zartman, Political Islam, American Academy of Political and Social Sciences, November 2017, P. 28.

[94] Abraham L. Udovic, “Bankers without Banks: Trade, Banking, and Society in the Islamic World of the Middle Ages”, in The Dawn of Modern Banking, Center for Medieval and Renaissance Studies, University of California, Los Angeles, Yale University, Yale, 2016 with. 259.

[95] A special organisation that provided mortgage loans according to Shariah rules.

[96] These financial institutions were cautious in their lending and did not attract borrowers with sub-prime credit.

[97] US News and World Report, 27 березня 2018.

Paolo Curiel and Ibrahim Mardam-Bey, both principals at Taylor-DeJongh, a Washington, D. C.-based investment bank, observe that Islamic banks in the United Arab Emirates have only deployed 80% of their assets, exemplified by their deposits, highlighting the surplus of capital in Islamic financial institutions. They have also successfully concluded Shariah-compliant transactions in the United States. These institutions have previously invested in international real estate, but are currently seeking to broaden their investments into new sectors that could offer fresh liquidity for small and medium-sized enterprises in the United Kingdom. The establishment of Sukuk infrastructure, comparable to that launched in Saudi Arabia and Malaysia, is also considered a possibility for funding in the United Kingdom[98]. Table 2.1 outlines the primary distinctions between Islamic and conventional banks.

Some financial institutions and UK lawmakers have raised worries that Islamic banking activities may channel funds to terrorists.[99] However, witnesses have testified before parliament that there is no proof that Islamic banks are more prone to enabling money laundering and terrorist financing than other banks.[100] A report from the Congressional Research Service highlights the possibility of combining Islamic finance with hawala, an informal money transfer system based on trust that has been used in the Middle East for centuries and has been associated with terrorist financing in recent decades[101].

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[98] Bernard Taylor, Banking Guide: Islamic Innovation, Paris: Kartala, 2016, P. 19.
[99] Exceptions include the Fundamentalism Project, a multi-volume series edited by Martin E. Marty and R. Scott Appleby and published by the University of Chicago Press, as well as several books such as Gilles Capel, La revanche de Diew: Chrétiens, juifs et musulmans à la recquête du monde, Paris: Editions du Seuil 2018.
[100] John L. Esposito, The Islamic Threat: Myth or Reality?, Oxford University Press 2014, P. 80.
[101] Michael Silva, Remarks on Islamic Banking, Review of Law and Business in the Americas, Spring 2016 Volume 12, Issue 2.

Table 2.1 - Main differences between Islamic and conventional banks

Characteristics	Islamic banks	Traditional banks
Guaranteed payments on demand deposits	+	+
Interest rate on deposits	Not determined, not guaranteed for investment deposits	Defined and guaranteed
The purpose of the loan	The loan is issued for investment purposes only	Loan disbursement is not conditional on investment
Mechanism for determining the interest rate on deposits	Determined by the bank's profitability, return on investment	Does not depend on the bank's profitability
Participation of depositors in the bank's profits and losses	+	-
Loan disbursement condition	Loan disbursement is subject to an assessment of the borrower's financial position	A prerequisite for entering into an agreement with a bank is the existence of an investment asset

Source: Developed by the authors on the basis of [102]

Islamic banks and investment firms are subject to regulation by both the ministries of finance and central banks that oversee conventional banks in Muslim countries[103]. According to the CRS report, the current financial laws and regulations are deemed sufficiently comprehensive to accommodate the industry[104]. Standards for the industry are mainly established by the Accounting and Auditing Organisation for Islamic Financial Institutions (AAOIFI) and the Islamic Financial Services Board (IFSB), which both comprise of representatives from regulatory bodies[105]. However, varying interpretations of Sharia and regulatory practices across different countries present challenges for achieving industry standardization.[106]

The future growth and development of the Islamic financial system lies in the improvements that are rapidly emerging in the market. Many institutions on the commercial

[102] Andreas Jobst, Economics of Islamic Finance and Securitization, IMF Working Paper WP / 07/117, August 2017.
[103] Patrick Imam and Kangnam Kpodar, "Islamic Banking: How Did It Spread?", International Monetary Fund (IMF), WP / 10/195, August 2016. P.3
[104] Andreas Jobst, Economics of Islamic Finance and Securitization, IMF Working Paper WP / 07/117, August 2017.
[105]National Bureau of Asian Studies Islamic Finance: Global Trends and Challenges, Volume 18, Number 4, February 2018 Standard & Poor's, Islamic Financial Forecast 2018.
[106] AAOIFI standards and membership information are available at http://www.aaoifi.com/.

and social perimeters are taking initiatives by deploying human and financial resources and amending instruments that significantly boost the liquidity of social banks. Additionally, a separate secondary, money and interbank market is being created. In addition, the indicators for assets, liabilities, and risk management are enhanced through public finance instruments. Today, due to the rapid expansion of Islamic financial institutions, the Islamic financial system offers microfinance alternatives through participation or supply-based financial assistance. In practice, greater emphasis is placed on user trust rather than bank security, as the financial system is based on a socio-economic system that prohibits riba[107]. It is evident that securitisation is indispensable for covering financial risks for users, and with the introduction of new finance, the system is progressing towards greater sophistication[108].

In the financial system, portfolios of securities are regarded as a means to enhance a company's competitiveness, turnover, and liquidity[109]. In the Islamic finance system, there is potential for growth as the current market transactions are restricted due to insufficient liquidity and attractive products. Additionally, the secondary markets are weak[110]. Among other things, tools for managing assets and liabilities are simply not available.

Microfinance is a viable solution in the application of Islamic finance. The Islamic financial system encourages sharing risk among multiple businesses, which promotes risk-sharing entrepreneurship. Although this product has potential opportunities for the economy, it also has some drawbacks[111]. The Islamic financial system is considered crucial for the economic development of Islamic countries. This system helps to channel the savings that are excluded from interest-based financial channels and promotes the growth of capital markets.

However, in the 21st century, geopolitical tensions have led to hatred between Muslim and Christian nations under the influence of Jewish groups. The potential impact of Islamophobia from the sole superpower spurred the Muslim world to ponder establishing an

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107 Watchdog Develops Management Standards, Misr News & Trade News July 28, 2018
108 "Islamic banks: no longer a novelty", BusinessWeek 8 August 2015
109 Liau J-Singh and Frederic Richter, Islamic Finance Seems Overloaded with Scientific Reforms, Reuters, September 28, 2018.
110 Stephen Timewell, Disaster Prevention Pattern? - Round Table, The Banker, January 1, 2019 Academic OneFile, Gail, Library of Congress, accessed February 6, 2019
111 Karen Pfeifer, “Is Islamic Economics?” In Joel Bainin and Joe Stork, “Political Islam: Essays on a Middle Eastern Report,” University of California Press 2017, P. 163.

autonomous economic foundation. Consequently, resources shifted towards Muslim nations by virtue of their expertise and opportunities. The advent of the 21st century unveiled untapped economic prospects within the Islamic world, resulting in over 100 Social Banks and Financial Institutions emerging as distinct financial entities in 51 countries, both Muslim and non-Muslim. These financial institutions/banks compete effectively with their traditional counterparts. Islamic finance and its monetary system have rapidly integrated into the international financial and global economy. Islamic finance tools and products are being introduced quickly[112].

With the ongoing progress of numerous Muslim countries and the rise in affluence across all of them, a rising count of Muslims have pursued to invest their wealth while abiding by Islam's limitations on riba (interest). The advancement of the Islamic financial and banking sector has resulted in an expanding reserve of "Islamic" funds searching for an outlet for investments that comply with Islamic beliefs[113]. While Islamic and conventional finance may seem incompatible on the surface, the structural challenges are not insurmountable. Financiers in both Islamic financial institutions and conventional banks are quickly developing techniques to offer the means and resources required to establish investment opportunities for this "Islamic" money, which can be merged with the help of proficient professional advisors who are acquainted with both Islamic finance and conventional finance principles[114].

Islamic finance refers to financial activities that must adhere to Sharia (Islamic law)[115]. The principles of Islamic finance and banking were established with the inception of Islam. Nevertheless, the establishment of formal Islamic finance transpired only in the 20th century. At present, the Islamic financial sector expands at a rate of 15-25% annually, and Islamic financial institutions manage funds worth over £2 trillion[116].

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112 R.J. Clews, East-West Project Financing, 2016

113 راجيش كومار ، استراتيجيات البنوك والمؤسسات المالية الأخرى ، 2018 (Rajesh Kumar, Strategies of Banks and Other Financial Institutions, 2018.)

114 ER Yescomb ، "2017 (الإصدار الثاني) "مبادئ تمويل المشاريع (E.R. Yescombe, Principles of Project Finance (second edition) 2017)

115 حسن ، ت .وزاهر ، م .ك). 2016. (مراجعة الأدب المقارن للتمويل الإسلامي والمصارف ، الأسواق المالية والمؤسسات والأدوات ، 10)4 (، 155 - 199 (Hassan, T.S. & Zaher, M.K. (2016). A comparative literature review of Islamic finance and banking. Financial Markets, Institutions and Instruments, 10(4), 155 - 199.)

116 الإمام P. و Kpodar K. (2017). المصرفية الإسلامية :كيف توسعت؟ تمويل وتداول الأسواق الناشئة ، 4)6 (، 112 - 137. (Imam, P. and Kpodar, K. (2017). Islamic banking: how did it expand? Emerging Markets Finance and Trade, 4 (6), 112 - 137.)

The key difference between conventional finance and Islamic finance lies in the strict prohibition of certain practices and principles by Shariah law. Compared to conventional finance, Islamic finance adheres strictly to Shariah law. Despite this, modern Islamic finance is sometimes practiced in countries where these prohibitions are legal in conventional finance institutions[117]:

1. Payment or accrual of interest [118]

Islam views interest-based lending as an exploitative practice that benefits the lender at the expense of the borrower. According to Shariah law, interest is usury (riba), which is strictly prohibited.

2. Investing in companies engaged in prohibited activities

Certain activities, such as the production and sale of alcohol or pork, are prohibited in Islam. These activities are considered haram or forbidden. Therefore, investing in such activities is also prohibited.

3. Speculation (maisir)

Sharia law strictly prohibits any form of speculation or gambling, known as maisir. Therefore, Islamic financial institutions cannot be involved in contracts where the ownership of goods depends on an uncertain future event.

4. Uncertainty and risk (gharar)[119].

Islamic finance rules prohibit participation in contracts with excessive risk and/or uncertainty. The term gharar measures the legitimacy of the risk or uncertainty in the nature of the investment. Gharar is seen in derivative contracts and short selling, which are prohibited in Islamic finance. Figure 2.3 shows the main prohibitions in the Islamic world.

In addition to the above prohibitions, Islamic finance is based on two other important principles:

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[117] مهيد وقاسم)2017(. يحتمل أن يتجاوز التنويع في أسواق الأسهم الإسلامية العالمية. مجلة التنمية الاقتصادية والاجتماعية ، 31)4(، 103 - 126. (Majid, M.S. & Kassim, S.H. (2017). The potential benefits of diversification in global Islamic equity markets. Journal of Economic Cooperation and Development.31 (4), 103 - 126.)

[118] أ ، عبد الرحمن. & Sidek، N.Z. (2017 ، أكتوبر). من الآثار الجانبية لأزمة آسيان الثانوية لدينا 5 أسواق للأوراق المالية. ورقة مقدمة في مؤتمر البحوث في إدارة الأعمال والعلوم الاجتماعية ، دبي.(Rahman, A.A. & Sidek, N.Z. (2017, October). A spillover effect of our ASEAN subprime crisis - 5 stock markets. Paper presented at the Business and Social Science Research Conference, Dubai)

[119] أ ، عبد الرحمن. & Sidek، N.Z. (2017 ، أكتوبر). من الآثار الجانبية لأزمة آسيان الثانوية لدينا 5 أسواق للأوراق المالية. ورقة مقدمة في مؤتمر البحوث في إدارة الأعمال والعلوم الاجتماعية ، دبي.(Rahman, A.A. & Sidek, N.Z. (2017, October). A spillover effect of our ASEAN subprime crisis - 5 stock markets. Paper presented at the Business and Social Science Research Conference, Dubai)

Substantive transaction completeness: each transaction must be linked to a real underlying economic transaction.

Profit/loss sharing. Parties to Islamic finance contracts share the profits/losses and risks associated with the transaction, in line with the principle of equivalence. No one can benefit more from the transaction than the other party.

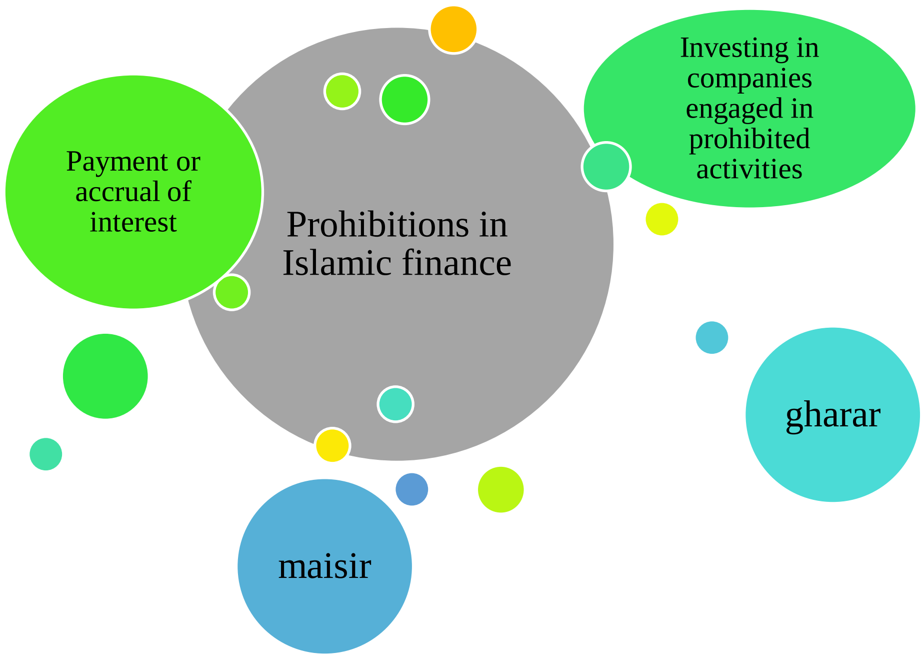

Figure 2.1 Prohibitions in Islamic finance.

Source: Developed by the authors on the basis of the Qur'an.

Central to Islamic banking and finance is an understanding of the importance of risk sharing as part of raising capital and preventing riba (usury) and gharar (risk or uncertainty)[120]. Islamic law views interest-based lending as a relationship that favours the lender who charges interest at the expense of the borrower. Because Islamic law views money as a means of measuring value, rather than an asset in itself, it requires that no one can derive income (e.g. interest or anything of the nature of money) from money alone[121].

Sharia-compliant (halal, or permissible) financing consists of profit banking, in which

[120] كيرني ، سي. (1996). التكامل المالي الدولي: القياس والسياسة الآثار. مجلة آسيا والمحيط الهادئ للاقتصاد ، 1 (3) ، 347 – 364. (Kearney, C. (1996). International financial integration: measurement and policy implications. Journal of Asian and Pacific Economics, 1 (3), 347-364..)

[121] Mansourfar G., Mohamad S. & Hassan T. (2018). The behavior of MENA oil and non-oil producing countries in international portfolio optimization. Quarterly Review of Economics and Finance, 50 (4), 415 - 423.

the financial institution shares in the profits and losses of the business it guarantees. No less important is the concept of garara. Defined as risk or uncertainty, in the financial context it refers to the sale of items whose existence is not certain. (Appendix 8) Examples of gharar are forms of insurance, such as the purchase of premiums to insure against something that may or may not happen, or derivatives used to hedge against possible outcomes[122].

Modern Islamic finance began to develop in the early 1970s with the growth of religiosity in the Muslim world and the rise in oil prices. Based on Sharia principles that combine justice, fairness and transparency, Islamic finance differs from traditional financial practices in its concept of the value of capital and labour.[123] Historically, the first Islamic index, the Socially Active Muslim Index (SAMI), was launched in 1998. Since then, the major providers of classical indices have expanded their product range to offer a wide range of Shariah-compliant indices to support the accelerated development of Islamic finance, including Shariah-compliant funds [124]. Currently, agencies such as Standards & Poors offer more than 30 Shariah indices. The Dow Jones Islamic Market (DJIM) is based on hundreds of capitalisations[125]. Most Islamic indices are based on benchmarks and their construction is a filter of the parent index. Islamic indices use various methods to screen financial assets for inclusion in their selection. For example, the Dow Jones Islamic Market Index (DJIM) is based on the prices of 2,700 companies that are owned by the Dow Jones Company but whose operations are in accordance with Sharia law. The DJIM takes several criteria into account. The first analyses a company's debt ratio: "debt to assets". The second screening, based on the level of unused percentage of income, sets a minimum level.[126]

In terms of liquidity, there is an assumption that the purchase of shares in companies for Muslim investors will not be in excess of 45% of total assets[127]. The DJIM screening

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[122] ساسي ، س .و جويد ، م. 2016. (التنمية المالية والخدمات المصرفية الإسلامية والنمو الاقتصادي في منطقة الشرق الأوسط وشمال إفريقيا. المجلة الدولية لعلوم الأعمال والإدارة، 4 (2)، 105. (Sassi, S. & Goaied, M. (2016). Financial development, Islamic banking and economic growth in the MENA region. International Journal of Business and Management Science, 4 (2), 105.)

[123] ر .بهالا ، "كتيب الأسواق المالية العالمية الرئيسية والمعاهد والبنية التحتية "، 2014 (P. Bhala, "A Guide to Key Global Financial Markets, Institutions and Infrastructures", 2014.)

[124] أبو بكر ن .ومسيح محمد م. 2014. (العلاقة الديناميكية بين المؤشر الإسلامي وأسواق الأسهم الرئيسية :بيانات جديدة لتحليل توسيع المويجات (وثيقة رقم MPRA 56977) (Abu Bakar, N. and Masih, A. M. (2014). Dynamic relationships between the Islamic index and major equity markets: new evidence from a time-varying wavelet decomposition analysis (MPRA Paper No. 56977))

[125] All geographies, sectors and capitalisation levels are covered. Sukuk market and Shariah ISR indices are available.

[126] For example, the haram portion of the income must be obtained through a charitable donation.

[127] Arshanapalli، B. & دوكاس، J. (2015). العلاقات الدولية لسوق الأوراق المالية :بيانات الفترة قبل وبعد أكتوبر 2015 .مجلة للدراسات المصرفية والمالية، 17 (1)، 193-208. (Arshanapalli, B. & Doukas, J. (2015). International linkages in the stock market: data for the period before and after October

process also stipulates that investors cannot buy securities with a predetermined rate of return and guaranteed capital. They are also not allowed to invest in shares of companies whose activities are illegal. In addition, the Sharia Board of the index recommends screening companies that are involved in environmental policy and/or humanitarian activities. In 2006, Dow Jones and the Sustainable Asset Management Group launched the Dow Jones Islamic Sustainability Index[128]. The primary aim of this index is to establish investment standards that comply with Islamic finance and sustainability criteria. Other significant indices prevalent in the industry are the Global Islamic Index Series, the S&P500 Shariah Index Series and the FTSE Global Islamic Index Series[129].

After a succinct introduction to Islamic indices, we have chosen three indices: the S&P Global Property (US), S&P Euro 75 (EUR), and S&P EUROPE 350 (EUR)[130]. These indices were selected based on data availability and their potential use in modelling, as they exhibit rationality. The analysis of S&P Global Property (USA) is justified by the significance of real estate assets in the recent financial crisis. European indices have been incorporated as previous studies on this subject mostly rely on US indices. Additionally, we acknowledge the tremendous growth of Islamic finance in Europe, especially in the UK and Luxembourg. Indeed, for years the UK has been the most active market for Islamic finance. Moreover, Luxembourg is one of the key financial locations in the Eurozone for the Islamic finance industry.[131] According to European analysis[132], Islamic finance has emerged as one of the rapidly developing sectors in recent decades, with the financial crisis further accentuating this trend. The returns of selected indices are presented below, and their dynamics are

2015. Journal of Banking and Finance, 17 (1), C.193 - 208.)

[128] بالا دال و تاكيموتو تي (2017). إعادة توزيع التقلبات في أسواق الأسهم خلال الأزمات المالية: DCC-MGarch مع نهج منحرف. البورصة اسطنبول، 17 (1)، 25 - 48.(Bala, D. and Takimoto, T. (2017). Redistribution of volatility in stock markets during financial crises: A DCC-MGarch with skewed density approach. Borsa Istanbul Review, 17 (1), pp. 25 - 48.)

[129] Black F. (2016). Research on stock price volatility. Proceedings of the 2016 Meeting of the Business and Economic Statistics Section. Washington, DC: American Statistical Association.

[130] شابرا إم، إبراهيم محمد، ميراخور أ. وصديقي م.ن. (2018). منتدى الحوار: الأزمة المالية من حيث الإسلام. مجلة الاقتصاد والإدارة، 16 (2)، 111-138. (Chapra M., Ebrahim M.S., Mirakhor A. & Siddiqi M.N. (2018). Discussion forum: the financial crisis from an Islamic perspective. Journal of Economics and Management, 16 (2), pp. 111-138.)

[131] Its popularity can be attributed to competitive pricing, various incentives, and easy access to the European market. Since 2002, Luxembourg has played a major role in the listing of Islamic funds, making it one of the largest Islamic financial centres in Europe. It is noteworthy that the Luxembourg Stock Exchange was the first to introduce Sukuk in 2002. Additionally, the Grand Duchy of Luxembourg holds the distinction of being the first European member of the International Islamic Liquidity Authority.

[132] Di Mauroet al., 2019: Extracorporeal Shock Wave Therapy in Peyronie's Disease: Clinical Efficacy and Safety from a Single-Arm Observational Study.

exhibited in Figure 2.4.[133]

S&P Euro 75

DJIM

S&P Euro 75(EUR)

S&P EUROPE 350(EUR)

Figure 2.2 - All variables were log-differentiated to obtain stationary properties.

The trajectory analysis indicates that the variable is stationary. To assess this finding, a Dickey-Fuller variant test is conducted.

Due to various interpretations of the Dickey-Fuller test, a regression model is applied first, followed by a unit root test.

$$\Delta y_t = \delta y_{t-1} + u_t, (1,1)$$

where y_t is the variable to be modelled, t - is the time variable, u_t- is the deviation.[134]

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[133] The data is derived from the 100th percentiles during the period from 31/07/2007, sourced from the us.spindices website. All variables were log-differentiated to obtain stationary properties.

[134] In all instances, the null hypothesis assumes the existence of a unit root, where δ= 0. These tests commonly lack the capacity to differentiate between a legitimate unit root process (δ= 0) and a process with a root nearly reaching one (where δ is close to zero), resulting in low efficacy. This phenomenon is commonly known as the "problem of apparent indistinguishability".

Table 2.2 below summarises the results of the unit rate roots.[135]

Table 2.2 - Dickey-Fuller test

t Statistic	Djim	S&P Global Property	S&P Euro 75	S&P EUROPE350
Augmented Dickey-Fuller statistics	-55.20118	-42.02674	-47.43498	-48.29522

The skewness values are all negative, apart from the DJIM variable. This indicates that the Islamic index encounters a greater frequency of positive returns than negative ones.

Table 2.3 - Descriptive statistics of stock indices.

Statistics	*S&P Euro 75*	*S&P EUROPE350*	*S&P Global Property*	*DJIM*
Medium	0.000368	0.000308	0.000203	0.000274
Standard deviation	0.024453	0.022628	0.012737	0.024266
Asymmetry	-0.091485	-0.097170	-0.411486	0.031735
Excess	9.463273	11.99898	11.49599	12.65959

Table 2.4 - Correlation of profitability with diversification benefits.

Jarque-Bera	4471.963	7700.047	7545.776	9707.967
Probability	0.00000	0.00000	0.00000	0.00000

Table 2.5 - Analysis of simple correlations.[136]

Probability	*S&P Euro 75*	*S&P EUROPE 350*	*S&P Global Property*	*DJIM*
S&P Euro 75	1.000000			
S&P EUROPE 350	0.969652 (0.0000)	1.000000		
S&P Global Property	0.726939 (0.0000)	0.651095 (0.0000)	1.000000	
DJIM	0.959594 (0.0000)	0.891541 (0.0000)	0.698677 (0.0000)	1.000000

[135] The critical values of the test at 1%, 5% and 10% are -4.959233, -4.543749 and -4.294627, respectively.
[136] The numbers in parentheses are p-values.

The correlation degree proves useful as an initial indicator for anticipating any potential spread of the economic and financial crisis.[137] To establish the relationship between the indexes, a Granger causality test was conducted (Table 2.6).

Table 2.6 - Granger causality pairwise tests.

The null hypothesis	*F-statistics*	*P-value*
S&P EUROPE 350 не включає S&P Euro 75	0.49298	0.9555
S&P Euro 75 не включає S&P EUROPE 350	0.28406	0.9384
S&P Euro 75 не включає DJIM	0.36670	0.8878
S&P Euro 75 не включає DJIM	0.78338	0.5799
DJIM не включає S&P EUROPE 350	0.69818	0.6344
S&P EUROPE 350 не включає DJIM	1.17212	0.4374

For the DCC-GARCH model, we introduced the S&P Global Property Index, given that the results of the causality tests remain inconclusive.

In considering a suitable Islamic index, we analysed empirical data and referred to European indices, such as the Dow Jones Islamic Market (DJIM), S&P Global Property US, S&P Euro 75 (EUR) and S&P Europe 350 (EUR). Statistical analysis was conducted for each variable to apply the DCC-GARCH model. For this purpose, we employed two densities: Gaussian and t density. Preliminary tests indicate the need to remove the real estate variable due to inconclusive causal assessment. Both approaches yield significant and appropriate results. However, the model that incorporates t-densities outperforms the alternative model based on logarithmic likelihood, Akaike's Information Criterion (AIC), and Bayesian Schwartz Criterion (SBC). The main findings from the period between 2007 and 2018 demonstrate a high degree of correlation between financial indicators. This is to be expected given the increased financial integration and global trade. However, in the event of a financial crisis, the possibility of contagion should not be disregarded and ought to be considered in any stabilisation policy. Despite constructing various models, it is evident that the global financial

[137] During the period spanning from the 1970s to the 1990s, multiple studies revealed a low correlation between stock indices (Solnik, 1991; Li and Kim, 1993; Arshanapalli and Doukas, 1993; Masih, 1997; Merci, 1997; Masih, 2001; and Longin and Solnik, 2001). More recent analyses indicate a high correlation between the indices (Yang et al., 2003; Narayan, 2004; Bley and Chen, 2006; Chuang and Tswei, 2007; Chapra, 2008; Alkulaib et al., 2009; Chang et al., 2010; Pop and Darne, 2011; and Walid et al., 2011). Financial liberalisation and the development of fintech activities appear to support this trend (Kearney and Lucey, 2004).

crisis did not impact the economic situation and it remained within the normal range. Nevertheless, it is noteworthy that during an oil crisis, the indicators exhibit a decline leading to a crisis.

At present, the Islamic index is considered either an alternative or complementary asset. Its performance is affected by global financial events. However, data is removed every 4 years, which prevents a full analysis of the 2007-2008 events. Table 2.7 illustrates the DCC-Garch model.

Table 2.7 - The built DCC-Garch model.

Parameters138	*Gaussian density estimation (Maximum likelihood/ BFGS)*[139]	*Density score t (Maximum likelihood/ BFGS)*
λ 11	0.92750*** (0.01773)	0.93235*** (0.015194)
λ 12	0.92999*** (0.016999)	0. 94269*** (0.014560)
λ 13	0.91569*** (0.03330)	0.92999*** (0.012959)
λ 21	0.07550*** (0.014843)	0.06979*** (0.02889)
λ 22	0.07779*** (0.015227)	0.06299*** (0.015227)
λ 23	0.06486*** (0.03330)	0.06974*** (0.02969)
δ1	0.94670	0.95265
δ2	0.03789	0.03569
ʋ	8.1875	8.6934
Maximum logarithmic likelihood	-9 879	-9 731
AIC	18.929	17.476
SBC	19.025	18.944

138 The results are derived from the DCC-GARCH model utilising both the Gaussian and t-distribution for the given period. i=1,2,3 corresponds to DJIM, S&P 350 and S&P 75 respectively, with the standard error indicated within parentheses. Critical test values at significance levels of 1%, 5% and 10% are represented by ***, ** and * respectively. The degree of freedom is noted as ʋ, and Λ refers to the coefficient of volatility of the parameters.
139 Broide-Fletcher-Goldfarb-Shannon. We use the Bayes Dcc Garch R package to cover the DCC-Garch model estimates.

The DCC-Garch model, associated with the t-distribution, displays a greater level of efficiency in comparison to the model associated with the Gaussian distribution. The study offers intriguing findings; however, it also highlights certain limitations. For instance, the sample size is relatively small, covering only the period between 2007 to 2018. Additionally, the model was developed using data from only 4 indices, which raises concerns about its reliability. Nevertheless, the availability of data for the last 4 years only, restricts the exploration of more indices for model refinement.

The financial system in the Islamic world is built upon the principles of Shariah, namely, honesty and adherence to all commandments of the Qur'an. The crux of their financial system is that the human element has a considerable influence in economic dealings.

2.2 Globalisation of Islamic finance: trends and prospects

The globalisation of Islamic finance is one of the most significant trends in the financial industry today. It represents a new paradigm for banking and investment based on the principles of fairness, transparency and ethical behaviour. As the industry continues to grow and expand, it is poised to become a major player in the global financial system and contribute to the economic development of many parts of the world

Professor Rodney Wilson,
an expert on Islamic finance

This quote highlights the increasing trend towards globalisation of Islamic finance and the potential for the sector to become a significant force in the global financial sector. As more countries and institutions recognise the advantages of Islamic finance, we are likely to witness a significant growth and expansion in this field in the years to come.

O you who have believed, do not consume interest, doubled and multiplied, but fear Allah that you may be successful

Quran 3:130

This Qur'anic verse is one of several highlighting the prohibition of interest-based transactions in Islamic finance. It underscores the significance of conducting business with ethics and responsibility and urges individuals to be mindful of their financial practices. By refraining from interest-based transactions and embracing Islamic finance's principles, people can endorse equity, lucidity and social accountability in the financial system.

The globalisation of Islamic finance is an emerging trend that is transforming the global financial landscape. Islamic finance is a rapidly growing industry that is projected to surpass £2.7 trillion in assets by 2023. This growth is being propelled by various factors, including the mounting demand for Shariah-compliant financial products, the increasing Muslim population and the yearning for more ethical and socially responsible investment options.

One of the main factors driving the globalisation of Islamic finance is the growing interest from non-Muslim countries and institutions. Many nations are aware of the possible advantages of Islamic finance, such as enhanced financial stability and access to a fresh source of capital. For instance, the United Kingdom issued sukuk (Islamic bonds) in 2014, becoming the first Western country to do so, and has since emerged as a global leader in Islamic finance. Similarly, numerous international banks and financial institutions have introduced Shariah-compliant products in response to their clients' increasing demand.

Additionally, a vital movement in Islamic finance's globalization is the industry's growth beyond its conventional markets in the Middle East and Southeast Asia. Countries in Africa, Europe, and the Americas are progressively embracing Islamic finance, with a growing number introducing regulatory frameworks and tax incentives to facilitate the industry's expansion.

While there are numerous opportunities to leverage the globalisation of Islamic finance, there are also several challenges that must be addressed. These entail concerns around standardisation, regulation and education. To fully unlock the potential of Islamic finance, a greater harmonisation of Shariah standards and regulatory frameworks is necessary, alongside improved education and awareness among both investors and the wider public.

Furthermore, the globalisation of Islamic finance presents a trend that could significantly impact the future of the financial industry. As the industry continues to grow and evolve, it has the potential to contribute to greater financial inclusion, stability, and social responsibility worldwide.

To comprehend the entire structure of the Islamic economy, which enables society to achieve these goals, it is first necessary to examine the concepts of proprietary economy and normative economy[140.]

Economics, also known as positive economics, focuses solely on scientifically explaining behaviour in the face of scarcity. This is a value-free discipline that concentrates on empirical rather than normative factors. Even when discussing values and objectives, they are objectively treated as facts that, together with other pertinent information, decide what is or could be, but not what ought to be. Lionel Robbins' description of "economics" is an illustration of positive economics. The second type of economics is normative economics or welfare economics, which is sometimes referred to as "political economy". In normative economics, policy recommendations often involve value judgements. According to the Islamic approach, economic development and wealth creation are a means of fulfilling human needs and sustaining society, rather than being pursued for the sake of boasting or spending through hostility, haughtiness, or manipulation. By connecting this world to the Hereafter, Islam requires Muslims to strive for the Hereafter through their earnings and not neglect their portion of worldly life.

Therefore, Islamic economic norms impel individuals to not only abide by the Shariah principles regarding permissible and impermissible actions, but also to consider the repercussions of their actions on others and society as a whole[141]. To achieve the objective, the government should strive to regulate individuals' requirements via a screening process,

[140] عبد غافروف، A. L. (2016)، "الاستثمار والتمويل على أساس المضاربة»، (6 فبراير 2016). (Abdul Gafurov, A. L. M. (2016), "Investment and Finance Based on Mudarabah", (6 February 2016).)

[141] غزالى (1971)، إيهيا أولوم الدين ، ترجمة باللغة الإنجليزية للحاج مولان فضل كريم ، لاهور ، باكستان: أكاديمية السند ساغار. (GAZZALI, I.M. (1971), Ihya Ulum-id-din, English translation by Al-Hajj Maulana Fazlur Karim, Lahore, Pakistan: Sindh Saharan Academy.)

encourage people to avoid actions which cause harm to others, and reorganise the socio-economic system to shift resources from one sector to another, consequently achieving the dual goal of welfare content which differentiates normative economics from positive economics[142.] In general, welfare economics encompasses the goals, objectives and expectations of society, which are reduced to the utilitarian principle of maximising satisfaction for the greatest number of people in society[143]. Islamic economics aims to eliminate injustice and inequality to promote progress. To achieve this goal, it adopts the essential elements of a market economy system, such as property rights, enterprise freedom, and business and industry competition. However, the vision of Islam in this regard differs from the role models of current market systems, which have become outdated over time. The city guides transformation towards a social order of justice, welfare, security, and knowledge, without imposing these laws. Sharjah provides opportunities for all to earn a livelihood, leading to a fair distribution of income and wealth[144].

This is also due to the non-coercive nature of Sharia, indicating that the market arises from natural ethical transformations of individuals. The Holy Prophet disapproved of interventions in price fixing as long as market forces were responsible for price fluctuations alone. But if there were unjustified monopolistic and unfair pricing, production, and distribution practices, the Al-Hisbah (Ombudsman) had the power, as a social regulatory body, to check these imbalances to restore a better semblance of market exchanges in light of the just order that Shariah seeks in society.

The objective of the Islamic economic system is similar to any other economic system; to guarantee efficiency and equity in resource allocation, by embracing market forces and individual freedom. However, the system acknowledges the harmful effects of a market

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[142] القرآن ، تيمور) .2014 (، "إعادة التوزيع الإسلامي من خلال الزكاة :السجلات التاريخية والحقائق الحديثة "، "في الفقر والإحسان في سياقات الشرق الأوسط) "محرر مايكل بونر ، ماين إينر وآيمي سينجر (، ألباني :مطبعة جامعة ولاية نيويورك. (Kuran, Timur (2014), "Islamic redistribution through zakat: the historical record and contemporary realities", in Poverty and Charity in Middle Eastern Contexts (eds. Michael Bonner, Mein Ener and Amy Singer), Albany: State University of New York Press.)

[143] نعماني ، فرهاد) .2016 (، "مشكلة الفائدة والخدمات المصرفية الإسلامية في منظور مقارن :حالة مصر وإيران وباكستان "، مجلة الشرق الأوسط للاقتصاد والتمويل ، المجلد 1 ، العدد 1 ، ص .37-70. (Nomani, Farhad (2016), "The problem of interest and Islamic banking in a comparative perspective: the case of Egypt, Iran and Pakistan", Middle East Economic and Financial Review, Vol. 1, No. 1, pp. 37-70.)

[144] ، ساشر ، طارق س .وكبير محمد حسن) .2018 (، "مراجعة الأدب المقارن للتمويل الإسلامي والمصرفي "، "الأسواق المالية ، المعاهد والأدوات "، المجلد 10 ، العدد 4 ص .99-155. (Zaher, Tarek S. and M. Kabir Hassan (2018), "A comparative literature review of Islamic finance and banking", Financial Markets, Institutions and Instruments, Vol. 10, No. 4, pp. 155-99.)

without regulation on various sections of society, particularly the disadvantaged and impoverished. The attainment of such objectives cannot be accomplished through a purely materialistic "positive" approach. Adam Smith argued that the "invisible hand" of market forces has not fulfilled the necessary social obligations for the ideal socio-economic outcome of human action. Therefore, the Islamic economy offers extensive opportunities for state intervention to achieve an optimal combination of market participant functions, guided by individual self-interest, and serving the social interest through state facilitation and oversight.

The pursuit of individual welfare without considering its impact on the welfare of others or society in general cannot lead to sustainable long-term growth and welfare for individuals or societies as a whole. Therefore, the market should achieve both positive and normative goals, with both state support and interventions aimed at achieving socio-economic goals. These goals include meeting needs, achieving optimal and stable growth, and fair distribution of income and wealth with class coherence.

Abolishing interest (riba), facilitating trade and real business transactions, establishing profit sharing as a tool, applying measures and avoiding wasteful consumption (israbf), along with effective state supervision are essential[145]. The examination of these variables will reveal the condition of an Islamic economy, encompassing its stability, weaknesses, strengths, and the various interconnections between resource producers and consumers.

The notion of well-being in Islam does not solely focus on materialism, nor is it entirely spiritual. Quranic teachings highlight both the spiritual and material dimensions of life, enabling them to act as reciprocal sources of strength and foundations for authentic human well-being and happiness. The examination of the teachings of the Holy Qur'an and the Sunnah enables us to comprehend fundamental principles of Islam's economic system. These principles foster individual progress, guarantee equity, eradicate exploitation, and endeavour to construct a contented society, rightfully designated as a welfare state[146].

As previously identified, the objective of the Islamic economic system is to guarantee the satisfaction of essential needs, such as food, clothing, and shelter, for every individual

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[145] Macroeconomic features of an ideal Islamic economy.

[146] A New Frontier for Islamic Finance. Islamic Finance 2016. Almaty: Mutual Insurance Society «Takaful» Halal Insurance». 2016.

without any form of discrimination. Additionally, this system provides resources for living within a particular society.[147] An Islamic economy can accomplish its aim by promoting universal employment and ensuring that individuals and their dependents have their basic needs met. The government is responsible for implementing policies and measures that facilitate job creation for those who seek it.

The Qur'an provides guidance on distributing wealth in a fair manner, which could be beneficial for establishing a more equitable system in the Ukrainian economy. This approach would ensure that no producer is unfairly deprived of their share or exploits others. The creation of value is a joint effort between land, labour, and capital, which means that production must be shared among the landowner, labourer, and capital owner. The Islamic system stands out for requiring that losses be borne by capital[148]. In addition, Islam requires the mandatory saving of a portion of produced wealth as "Zakat" for those who are unable to contribute to production due to social, physical, or economic constraints. Capitalism operates with four production **factors**:

1. **Capital**, the produced mode of production, compensated through "interest".

2. **Land**, which encompasses all natural resources - items used as a means of production that have not been previously under human control - compensated by rent.

3. **Labour** is defined as any effort or physical exertion on the part of an individual that is compensated through wages.

The entrepreneur or organization, which combines the other three factors of production, utilizes them, and assumes the risk of profit and loss in production, receives compensation in the form of "profit." In the Islamic economy, the factors of production are: (No changes needed) Fixed - Capital refers to the means of production that can only be fully consumed or transformed during the production process and does not generate rent. In the Islamic framework, "profit" is considered as a compensation for capital but also comes with associated responsibilities. Thus, the revenue generated by any capital is the remaining

[147] It is provided only in a society that professes Islam!
[148] عبد الغفور (2015)، البنك التجاري بدون فوائد ، جرونينجن :منشورات أبتك. (ABDUL GAFOOR, A.L.M. (2015), Interest-Free Commercial Bank, Groningen: Apptec Publications).

income of the business conducted with that capital after payments have been made to all other stakeholders. In case the surplus falls short, the capital owner must face a loss, which translates to the shortfall of the principal invested in the business.

Additionally, with regards to land, it generates rent as a form of compensation and can be either leased or borrowed. For instance, the proprietor of a factory will demand rent for the land and for the machinery and apparatus installed; likewise, owners of houses, vehicles, machinery, etc. are entitled to rent.

In addition, labour - that is, the physical or mental exertion of human beings, as well as organisation and planning - is compensated by wages[149].

Profit, according to Islamic theory, is the result of the productivity of the capital invested by an entrepreneur, or a reward for his skill or responsibility[150]. It is not a reward for capital or for the enterprise itself. An entrepreneur who, for example, combines factors such as land, labour, machinery, and employs their own cash capital must pay wages and rent for the use of land or machinery according to agreed terms. They will only receive a return on their capital or a reward for their enterprise if there is a surplus after paying rent, wages, and other costs of raw materials, etc.[151]. If cash capital is borrowed, the entrepreneur is obligated to repay the loan without any additions or interest, regardless of whether they have made a profit or incurred any losses in the business[152]. Therefore, a capital provider or entrepreneur is not automatically entitled to profits purely by virtue of being a participant in a joint venture. All parties involved in a joint venture have comparable rights and responsibilities in keeping with the nature of the operation or terms of agreement[153].

In light of the foregoing, banks serve as a supportive tool for facilitating commercial operations. Figure 2.3 illustrates the proportion of banking assets held by Islamic banks.

[149] ES-SADR, Muhammed. B. (2017), İslam Ekonomisti Öğretileri, (.ev. M. Keskin ve S. Ergün) Üçüncü Baskı, aleelale Yayınevi, İstanbul

[150] Institute of Islamic Banking and Insurance (2016) Anthology of Islamic Banking.

[151] الإسلام ، عبد العظيم)2018 (المفاهيم الاقتصادية لابن تيمية ، المؤسسة الإسلامية ، ليستر (Islah, Abdul Azim (2018) Economic Concepts of Ibn Taymiyyah, Islamic Foundation, Leicester.)

[152] Collar, Sami Hassan (1985) Islamic Banking. Arabic Information, London

[153] Janjua, M. Ashraf (2017) Pakistan Devlet Bankası Tarihi, Cilt 4 (1988-2017). SBP, Karaçi, ekonominin İslamlaştırılmasına ilişkin bölümler.

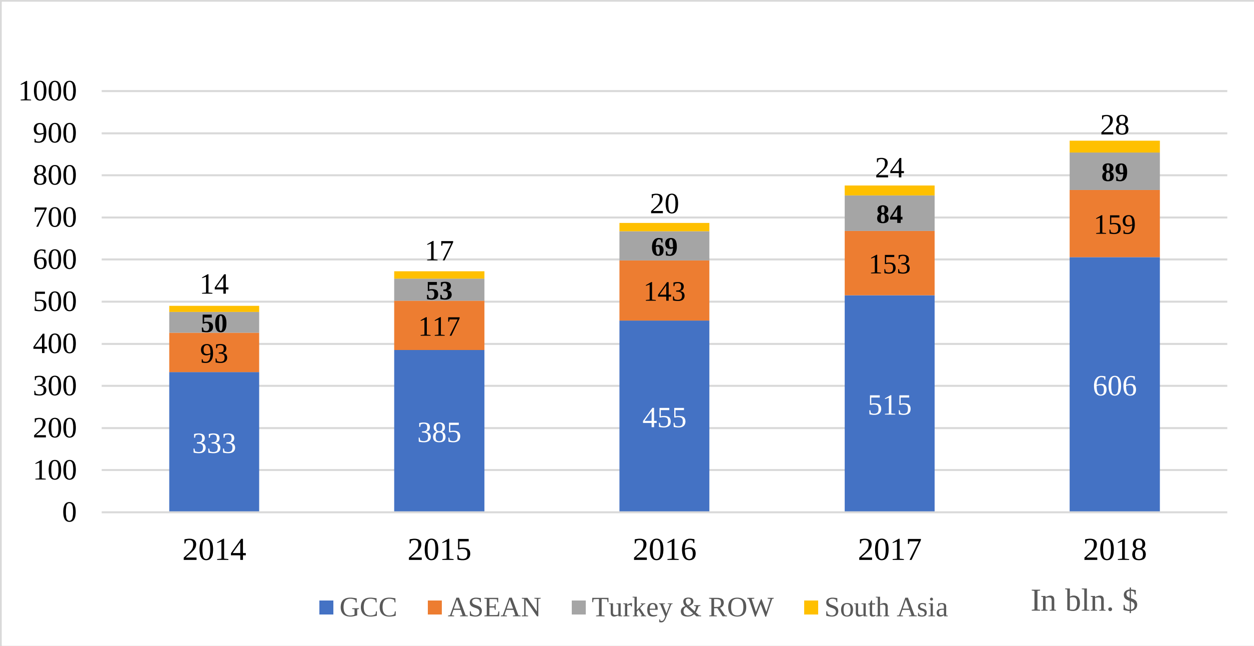

Figure. 2.3 - Share of banking assets [154]

As mentioned previously, Islamic banks have expanded their presence in conventional financial systems. This has typically been achieved via one of three methods: **1)** gradually testing new ways by obligating foreign firms to create accounts with Islamic banks; [155] **2)** creating an Islamic window, meaning that particular Islamic financial products are offered; **3)** obtaining the necessary permit to operate as a bank[156]. However, the integration of Islamic banking into the traditional system poses a significant challenge. A dual-level perspective must be taken into account, firstly, the legal implications of Islamic contracts, and secondly, the regulatory aspects of Islamic financial transactions.[157]

Firstly, the position of Islamic arrangements in modern legal systems needs to be addressed. It is probable that the current conventional legislation does not cover all the Shariah principles that should govern Islamic financial transactions. Nonetheless, DeLorenzo

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[154] Islamic Finance: A Catalyst for Shared Prosperity? Global Report on Islamic Finance 2016. Jeddah: Islamic Research and Training Institute (IRTI), 2016.

[155] Following the 2010 tragedy, when a tanker capsized near Abu Dhabi, an environmental disaster occurred that led to the contamination of water resources. Banks were entrusted with the function of observing the requirements related to the transport of oil products.

[156] التداعيات الرصدية للتمويل الإسلامي في البيئة التنظيمية الحالية "، في "التمويل الإسلامي :مشكلة التنظيم "، سايمون آرتشر ورفعت أحمد عبد" ، Hari 2017 ، بهامبري الكريم)محرران (، جون وايلي وأولاده)آسيا (بي تي إي المحدودة. (Bhambri, Hari 2017, 'Supervisory Implications of Islamic Finance in the Current Regulatory Environment', in Islamic Finance: The Regulatory Challenge, Simon Archer and Rifaat Ahmed Abdul Karim (eds), John Wiley & Sons (Asia) Pte Ltd.)

[157] In other words, on the one hand, there is the legal question of whether existing laws in secular jurisdictions allow for the regulation of financial transactions under Shariah principles. On the other hand, there is the regulatory question of whether Islamic institutions require the same intensity and type of prudential supervision as conventional institutions.

and McMillen (2017) observe that in jurisdictions with adaptable legal frameworks, parties involved are generally permitted to draft their own contracts[158]. By doing so, both parties will ensure that the principles they wish to advocate are maintained in the jurisdiction where the treaty is enforceable.

The second crucial aspect to consider is whether Islamic institutions require the same level of scrutiny as conventional institutions. It is a common misconception that Islamic banks, mainly relying on profit and loss sharing (PLS) agreements, do not necessitate supervision at the same rate as traditional banks.[159] These considerations encompass moral hazard, protection of the interests of demand depositors, and systemic implications. However, besides warranting the need for prudential supervision of Islamic institutions, one could enquire whether any particular amendments to the extant regulatory framework are indispensable to ensure that supervisors can carry out their prudential supervisory duties concerning Islamic banking. In this regard, the cross-country experience has been diverse, with options ranging from a minimalist approach (e.g. in the United Kingdom, where all deposit-taking institutions must comply with the same set of regulations, but with some minor additional requirements for institutions offering Islamic products) to a dual approach where regulators enforce distinct, specific rules for conventional and Islamic banks (e.g. Bahrain).[160]

While there may be some variation in approaches across countries, it is a fact that Islamic banks present specific risks that must be considered by financial institutions and regulators alike. The Islamic Financial Services Board (IFSB) was established in Malaysia in 2002 as an international standard-setting body by a group of central banks and national monetary authorities from Islamic nations to provide guidance on these issues.[161] The mandate of the IFSB is to ensure the stability and longevity of the Islamic financial services

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[158]DeLorenzo, Yusuf T. and Michael JT McMillen 2017, Law and Islamic Finance: An Interactive Analysis, Islamic Finance: The Problem of Regulation, Simon Archer and Rifaat Ahmed Abdul Karim (eds), John Wiley & Sons (Asia) PTE Ltd., p. 161.

[159] As Erikko and Farahbaksh (1998), El-Khawary (2014), Soule (2017), and Cihak and Hees (2018), among others, point out, there are certain features of Islamic banks that require prudential regulation to the same extent as conventional banks.

[160] Jobst, Andreas A. 2017, Islamic Economics and Securitization, Structured Finance Journal, Vol. 13, No. 1 (Spring), 1-22. Also published as IMF Working Paper 07/117 (Washington: International Monetary Fund

[161] In fact, in parallel with the revision of the Basel Capital Accord in 2005, the IFSB issued two regulatory standards on capital adequacy and risk management for Islamic institutions.

sector. This goal is achieved through the introduction of new or revised international financial standards that comply with Shariah principles, as well as by aligning industry practices.[162]

In addition, it is imperative for regulators to create an environment where Islamic banking can respond adequately to the demand for Islamic financial products from both investors and depositors. This does not imply that Islamic institutions must receive favourable regulatory treatment; rather, a fair and equal regulatory framework must be established. In fact, it is possible that during the early stages of the process, certain Islamic transactions may fall into legal gaps and therefore may not be deemed permissible according to current legal practices.

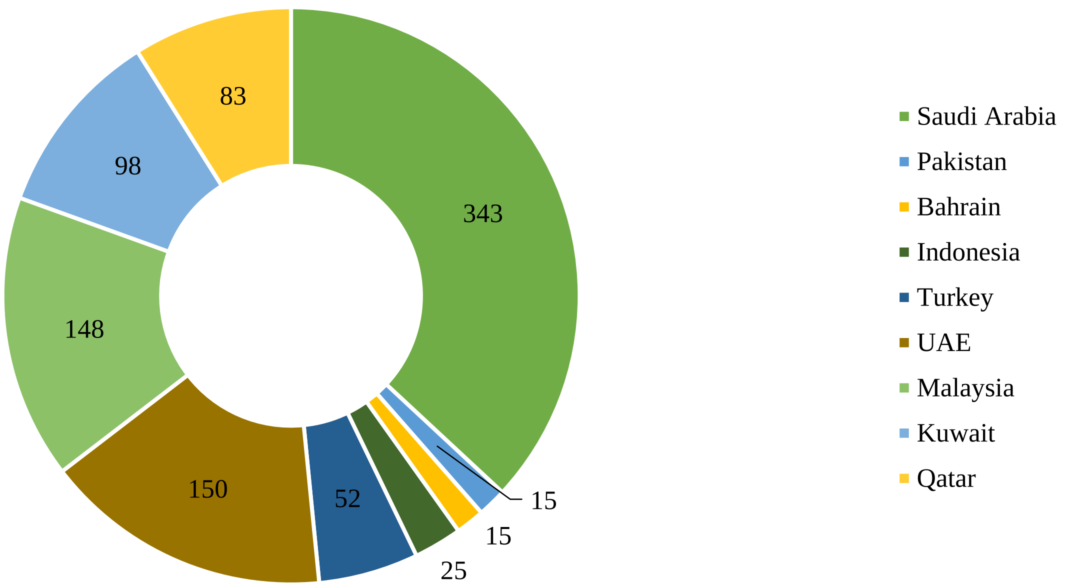

Figure 2.5 Average assets of the banking sector in 2015.[163]

[162] It has also issued additional standards in other important areas, such as corporate governance and supervision.

[163] Studying the analytics of Islamic banks, it was concluded that statistics on bank assets and any banking operations are presented on average. There are many reasons for this, the main one being bank security and reluctance to show real data.

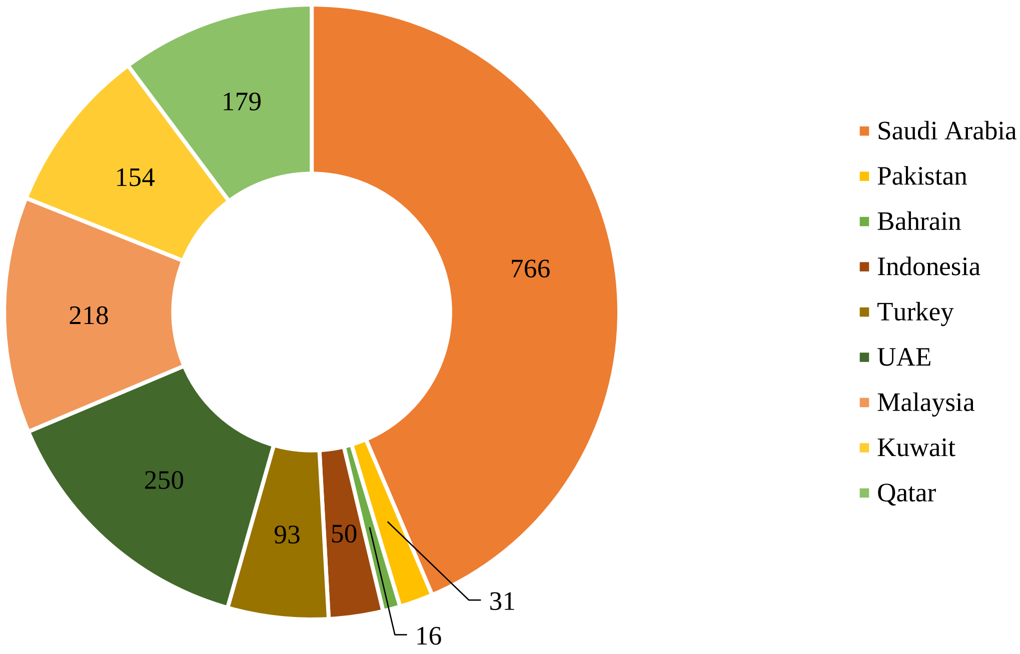

Figure 2.6 Banking sector assets in 2020

From a practical viewpoint, as Islamic banks broaden their reach in conventional systems, it is crucial to determine if Islamic banks are relatively more or less stable compared to conventional banks[164]. Some scholars contend that the dangers Islamic banks present to the financial system diverge from those of traditional banks in various aspects. Hazards exclusive to Islamic banks can arise both directly from the distinctiveness of Islamic contracts and indirectly from the usual legal, supervisory, and liquidity management infrastructure accessible to Islamic establishments.[165]

Furthermore, the lack of feasible Islamic financial markets that resemble those in Europe could worsen liquidity risks. Likewise, restrictions on the use of traditional derivatives curtail the capacity of Islamic banks to hedge specific risks[166]. Furthermore, the

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[164] عبد الغفور (2015)، البنك التجاري بدون فوائد ، جرونينجن :منشورات أبتك.(ABDUL GAFOOR, A.L.M. (2015), Interest-free commercial bank, Groningen: Apptec Publications.)

[165] For example, PLS financing shifts direct credit risk from banks to their depositors. But it also increases the overall exposure to the assets on banks' balance sheets, which is typically borne by equity investors rather than debt holders.

[166] آل Jarch / مبيدة علي (2016" (حالة المصرفية العامة كعنصر من عناصر الخدمات المصرفية الإسلامية "، البحوث الاقتصادية الإسلامية ، 12 (2 و 13 (1 ، فبراير ، أغسطس ، IRTI ، جدة ، البنك الإسلامي للتنمية.(Al-Jarh, Mabida Ali (2016) "The case for general banking as a component of Islamic banking", Islamic Economic Studies, 12 (2) and 13 (1), February/August, IRTI, IDB, Jeddah.)

majority of Islamic banks operate in environments where interbank and money markets, as well as government securities, are underdeveloped or non-existent. Additionally, these banks have limited access to central bank-managed lenders of last resort. These variations have been somewhat diminished by recent amendments in Islamic money market tools and Islamic last resort lending regulations, along with the express pledge of the authorities to offer liquidity assistance to all banks during extraordinary circumstances.

On the other hand, there are characteristics of Islamic banks that could make them more resilient than traditional banks. For instance, Islamic banks can withstand negative shocks to assets (such as a decline in oil prices that results in less cash flow from profit-and-loss sharing transactions) for depositors who have invested their funds[167]. Thus, risk-sharing mechanisms on the deposit side arguably provide another layer of protection for the bank, in addition to its core capital. Furthermore, it can be argued that the need to ensure stable and competitive returns for investors, shareholder liability for negligence or misconduct (operational risk) and more difficult access to liquidity force Islamic banks to be more conservative. In addition, since investors (depositors) share the risks (and usually do not have deposit insurance), they have more incentive to exercise strict control over the bank's management[168].

Table 2.8 Comparison of the Islamic and European sectors.

	Bahrain	**Kuwait**	**Oman**	**Qatar**	**KSA**	**OAЄ**	**GCC**	**UK**	**France**	**Singapore**
Population in million	1,5	4,4	6	2,6	34,2	9,8	52,7	66,8	66,9	7
Percentage of expatriates	52	69	44	86	33	88	48	12	11	39
GDP (USD)	35,43	141,65	81,08	192	369	383	37,3	2629	44,7	364.14
Level of transparency (Based on the consumer price index)	55	67	64	26	55	25	-	14	26	7
Concentration of three bank assets	91%	88%	70%	67%	52%	100%	20%	45%	30,8%	84%

167 Iqbal, Zamir and Abbas Mirahor 2017, Introduction to Islamic Finance: Theory and Practice (London: Wiley).
168 गांजा, एम। अशरफ (2016) स्टेट बैंक का इतिहास, खंड 3 (1977-2015)। एसबीपी, कराची। (Janjua, M. Ashraf (2016) History of the State Bank, Volume 3 (1977-2015). SBP, Karachi..)

Concentration of five banking assets	97%	100%	100%	96%	98%	84%	30%	64%	43,3%	100%
Size of the largest bank **(**Assets in USD)	32	66	22	121	100	93	121	2,63	2,526	401
Remittance market Outflows in 2018 (USD)	2,2	19	9,5	11,2	37	18	97	2,5	13	-
The level of competition (based on the H-index)	8%	40%	43,6%	-	48,8%	43,5%	-	66,4%	51,5%	65%

Partly because of the shortage of short-term investment opportunities, Islamic banks have often held a more significant percentage of their assets in reserve accounts with central banks or in correspondent accounts with other banks than commercial banks. Therefore, the issue from a financial stability viewpoint is whether the substantial buffers offset the higher risks of Islamic investments compared to conventional investments.[169]

The growth of assets and net income in the majority of markets where banks possess a significant customer base ensured that 2018 was a prosperous year for Islamic financial institutions (IFIs)170. As conventional banks and other entities pose a threat, IFIs recognize the significance of innovation and are actively investing in technology. The 2019 Global Finance Islamic Finance Awards acknowledge institutions that have achieved good financial results by utilizing innovative products supported by technology and services. Such institutions have effectively employed these tools[171].

2018 was conducive to innovation, as the fundamentals of the IFI remained robust. Award recipients experienced solid earnings growth, and their revenues were strong, leading to corresponding profits.[172] Impairment charges remained generally lower, while fee and commission income increased. In addition, several institutions bolstered their balance sheets through Basel III-compliant debt issues.

Kuwait Finance House (KFH), which recently received Global Finance's award for

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[169] In general, whether Islamic banks are more or less stable than conventional banks depends on the relative size of the effects discussed above and may in principle differ from country to country and even from bank to bank.

[170] Islamic finance and instruments..

[171] الوليد أحمد ، (2016) ، تقييس الاعتراف ، URL: http://standardizationsukuk.blogspot.com.tr/ 09/20/2015.

[172] آل الشايع ، عبد الله عبد اللطيف أ .وجوزيف تانيغا (2019) ، "هيكل الصكوك وتنظيمها البيئة في المملكة العربية السعودية "، مراجعة القانون والأسواق المالية ، المجلد 5 ، العدد 3 ، ص 183-200. (Al Elsheikh, Abdullah Abdullateef A. and Joseph Tanega (2019), "The Sukuk Structure and its Regulation Environment in the Kingdom of Saudi Arabia", Law and Financial Markets Review, Vol. 5, No. 3, pp. 183-200.)

Best Islamic Financial Institution, continued its expansion with the launch of new offerings. As a result, the bank has become one of the biggest Islamic financial institutions globally, with a presence throughout the Gulf Cooperation Council (GCC) region. KFH's net profit increased significantly in 2018, rising by 24% compared to the previous year. Additionally, the return on average equity experienced a sharp increase, jumping from 10.48% to 13.14%.[173]

Institutions throughout the sector are preparing themselves for future expansion. Bank Rakyat Indonesia Syariah, a branch of the largest state-owned bank in Indonesia, Bank Rakyat Indonesia, went public in May 2020. CIMB Islamic Bank in Malaysia has begun to expand its trade network linking businesses throughout China and Asia by means of trade infrastructure in order to benefit from the rising worldwide demand for halal items. Many traditional banks are also establishing Shariah-compliant enterprises in important markets. Standard Chartered, via Saadiq, is broadening its worldwide Islamic banking enterprise, increasing its asset portfolio and introducing novel offerings and services.

The sukuk (bonds) market decreased slightly in 2018, with sukuk sales amounting to $46 billion, which is less than the record amount of the previous year.[174] To date, 2019 has been a successful year, with some significant resolutions in Indonesia and Turkey. In March, Indonesia exceeded its government target by raising over Rp 21 trillion (USD 1.5 billion) through the retail sale of sukuk bonds[175] .

Table 2.9 The world's best Islamic financial institutions in 2019.

Global winners	
Category	***Bank***
Best Islamic Financial Institution	Kuwait Finance House
The best bank in Sukuku	CIMB Islamic Bank Berhad
Best Islamic retail bank	Standard Chartered Saadiq

[173] KFH is currently conducting due diligence on Bahrain's planned takeover of Ahli United Bank, which could be a game-changer in the Islamic finance industry. If completed, it will be the first major cross-border transaction in the GCC, creating the sixth largest bank in the region with assets exceeding USD 92 billion. The Deal Will Create the Sixth Largest Bank in the Region with Assets Exceeding usd 92 Billion. Further mergers are expected in the future as IFIs seek to increase scale and remain competitive.
[174] ICD (Islamic Cooperation for the Development of the Private Sector) (2016), London Stock Exchange Welcomes ICD Today, http://www.icd-ps.org/en/newsmedia/newsdetail/London-StockExchange-today-welcomes- ICD-153, 10.06.2017.
[175] Cakir, Selim ve Raei, Faezeh (2019), "Sukuk against Eurobonds: Is there a Difference in Value at Risk", IMF Working Paper No. WP / 07/237.

Best Islamic investment bank	Samba Financial Group
Best deposit bank	BNY Mellon Asset Servicing
Best Islamic fund manager	Jadwa Investment
Best Islamic SME Bank	Maybank Islamic
Best Islamic corporate bank	Samba Financial Group
Best Islamic asset manager	Al Rajhi Capital
Best Islamic bank for CSR	CIMB Islamic Bank Berhad
The best Islamic trade finance provider	Kuwait Finance House
The best Islamic Takaful[176]	Etiqa Takaful Berhad
The best provider of Islamic finance projects	Qatar Islamic Bank
Best promising Islamic financial institution	Bank Rakyat Indonesia Syariah
The best Islamic window	Standard Chartered Saadiq
Deal of the year Sukuk	Standard Chartered Saadiq: Al Rayan Bank PLC-Tolkien Funding Sukuk No.1 PLC
IPO/deal for the year	BRI Syariah
Real estate deal of the year	Standard Chartered Saadiq—Aldar Investment Properties LLC. Aldar Sukuk
Best Islamic asset manager	Al Rajhi Capital
Best Islamic bank for CSR	CIMB Islamic Bank Berhad
Regional winners	
Africa	Al Baraka Banking Group
Asia	Maybank Islamic Berhad
USA	Bank of America
Europe	GB Bank
Middle East	Kuwait Finance House

Global Finance editors, with input from industry analysts, business executives, and technology experts, selected the winners of the Best Bank Awards using records provided by banks and other vendors, as well as independent research based on a range of objective and subjective factors.

Judgements were grounded on results from 1st January 2019 to 31st December 2019. An algorithm was applied to shortlist the candidates and achieve a numerical score of excellence, which is marked as 100. The algorithm we own comprises of specific criteria,

[176] Appendix 9

such as local knowledge and customer demands, financial stability and security, vital partnerships and governance, competitive rates, investment in resources, and innovation of products and services, categorized by respective importance.

Once the essential information is compiled, the final criteria are determined, which include worldwide sector coverage, staff count, quality of customer service, risk management, the provision of products and services, proficiency in execution, and optimum use of technology. Additionally, rating agencies generally favour privately-owned banks over those state-affiliated.[177] The victors are the banks and providers that most effectively cater to the precise demands of corporates conducting business worldwide. The victors are not always the largest institutions, but rather the most exceptional - those possessing the traits that companies ought to consider when deciding on a provider.

First, Kuwait Finance House (KFH) is a leading Islamic financial institution and a pioneer in Islamic banking. It was awarded the global accolade of Best Islamic Financial Institution for its outstanding commitment to developing new products and services. KFH has successfully extended its business operations and now boasts more than 500 branches, making it one of the world's largest Islamic financial institutions with assets ranking fifth worldwide[178].

KFH offers a wide range of Islamic banking solutions, comprising investment, trade finance, and real estate, as well as commercial, corporate, and retail banking facilities179. The company aims to broaden its investment and business prospects through global expansion. KFH has expertise in fintech technologies and offers 20 high-tech banking services, several of which are distinctive, including the inventive XTM service that provides visual and auditory communication features[180].

KFH operates in Turkey through its subsidiary, Kuveyt Turk Participation Bank

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177 الوليد أحمد، (2016)، تقييس الاعتراف (Lovells (2016), шаріат, сукук і сек'юритизація, примітка клієнта.) http://www.yasaar.org/pubs/20177%20Islamic%20finance%20client%20note1.pdf (30.06.2016), 11.08.2015.

178 محمود، مايو (2016)، "التمويل الإسلامي في الخليج الفارسي في أوقات التقشف"، معهد الخليج في واشنطن العدد 5. (Mahmoud, May (2016), "Islamic Finance in the Gulf in a Time of Austerity", Gulf States Institute Washington Briefing Paper, Issue 5).

179 Kusum, Ketut Ariadou et Anderson Caputo Silva (2014), «Sukuk Markets. a Proposed Approach for Development », Document de travail de recherche sur les politiques de la Banque mondiale, numéro WPS7133.

180 عمر، م. أ.، م. عبده، و ر. سوكمان (2016)، أساسيات أسواق المال ورأس المال الإسلامي، جون ويلي وأولاده المحدودة، سنغافورة. (Omar, M. A., M. Abduh and R. Sukmana (2016), Fundamentals of Islamic Money and Capital Markets, John Wiley & Sons Ltd, Singapore).

(KTPB), which is one of the largest Islamic banks in the country. KTPB is licensed to operate an Islamic bank in Germany called KT Bank AG, which is the first of its kind to accept deposits and loans in accordance with Islamic regulations. The bank is a viable option for Muslims in Germany seeking financial services in compliance with Islamic law. [181] KT Bank is expanding and innovating its Islamic banking presence within the EU, with the introduction of a recently launched mobile application and a Shariah-compliant payment card, in lieu of a Western-style credit card. Additionally, they are promoting the Islamic Finance Philosophy through various mechanisms including the global Faith and Finance Conference, the Islamic Finance Task Force, and the Turkish-German Healthcare Foundation. KFH is presently undertaking due diligence on its proposed acquisition of Bahrain's Ahli United Bank, which would result in the formation of the sixth-largest Gulf bank.

As for the best investment bank, total assets amounted to USD 61.3 billion by the end of 2019, with an equity of USD 11.3 billion. As for the best investment bank, total assets amounted to USD 61.3 billion by the end of 2019, with an equity of USD 11.3 billion. As for the best investment bank, total assets amounted to USD 61.3 billion by the end of 2019, with an equity of USD 11.3 billion. The net profit increased to USD 1.5 billion, with an average yield of 2.41%. The success of the bank relies partially on its robust deal-making enterprise. In recent years, Samba has overseen syndicated transactions worth over £44 billion throughout the GCC, actively participating in arranging and coordinating funding for borrowers.

Samba's Islamic debt structuring proficiency covers diverse market segments, such as corporate finance, project finance, and capital markets (sukuk).182 Samba has been involved in arranging and coordinating the majority of Islamic syndicated finance transactions, as well as providing advisory services.

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[181] By the end of 2018, KFH's total assets amounted to USD 58.5 billion. KFH's equity was USD 6.8 billion. THE GROUP'S NET PROFIT INCREASED BY 24% YEAR-ON-YEAR. Net profit grew strongly, up 24% year-on-year, while return on average equity jumped to 13.14% from 10.48%. The bank was named the main principal dealer of the International Islamic Liquidity Management Corporation's sukuk programme in 2018.

[182] كهف ، منذر ، وتريك الله خان (2016) ، "مبادئ التمويل الإسلامي"، ورقة دراسة رقم 16. ، معهد البحوث الإسلامية ، البنك الإسلامي للتنمية ، جدة. (Ulusoy, Ahmet and Ela, Mehmet (2016), Sukukun Ikinçi El Piyasa Sorunu. Hukuk ve İktisat Araştırmaları Dergisi, C.8 S.1, S. 55-70.)

The company has developed advanced Islamic treasury products, such as dual murabaha structured Islamic structured deposits, swaps combined with Ijara, trigger swaps, cancellable swaps, and forex target currency repurchase (FX-TARN). Additionally, Samba engages in collateralised murabaha activities. Samba recently facilitated the conversion of a significant corporation's SAR 3 billion (GBP 547 million) conventional finance into murabaha. This was an exceptional transaction where Samba offered the Shariah structure, agency and Islamic operational support through commodity intraday financing.

Another example is the global Islamic banking and finance establishment, CIMB Berhad Islamic Bank, which is part of the Kuala Lumpur-based CIMB Group, the fifth largest banking group in ASEAN.[183] CIMB Islamic provides full and Shariah-compliant financial solutions covering areas such as investment banking, consumer banking, wealth management, private banking and asset management. Their performance in the sukuk market in 2018 was successful, resulting in a significant market share gain. The global sukuk market saw a significant increase in both the number of deals and their volume, with it reaching the top of the sukuk league table.

Another example of a leading player in the banking industry is Standard Chartered, boasting its global Islamic banking division. Within this division, Standard Chartered Saadiq is the only international Islamic bank with retail banking operations in Asia, Africa, and the Middle East, serving all segments of retail customers in seven markets: the United Arab Emirates, Pakistan, Malaysia, Bangladesh, Bahrain, Kenya, and Indonesia. It offers a complete range of retail items: credit cards, personal finance, vehicle finance, business finance, property finance, and asset management solutions. Distribution is carried out through Saadiq's specialised branches as well as through regular branches.[184]

A recent illustration is Maybank Islamic, the biggest Islamic bank in the ASEAN area

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[183] CIMB Islamic has extensive experience in the debt capital markets around the world. In 2018, it led global sovereign, quasi-sovereign, supranational and corporate sukuk issuances, including for the Republic of Indonesia (US$3 billion in trust certificates), the Islamic Development Bank (US$1.3 billion and US$1.25 billion) and Tenaga National Berhad (US$750 million of Wakala sukuk).

[184] Standard Chartered Saadiq has introduced a multitude of pioneering initiatives and provides diverse digital banking solutions. Assets experienced substantial growth in 2018, particularly in Pakistan, Malaysia, Bangladesh, the UAE, and Indonesia. The company launched numerous new products in home finance, credit cards, wealth management, and deposit products last year.

One additional example is BNY Mellon Asset Servicing, the biggest custodian in the world providing securities custody and servicing solutions to institutional investors, including those following Sharia law. However, it does not specifically highlight this group. At the end of 2018, it managed assets worth £33 trillion and operates in over 100 markets.

and one of the five largest globally with a combined total of $55 billion assets. In Malaysia, it commands 30% of the Islamic banking sector and provides its products and services through a network spanning Malaysia, Indonesia, Singapore, Hong Kong, London, and Bahrain.

Maybank Islam's position as a stronghold for Islamic banking finance in ASEAN positions it as a regional hub and conduit for Islamic finance from around the world. Total Islamic finance assets increased by over 20% in 2018. The bank's specialization in services for small and medium-sized enterprises warrants attention. In 2018, Maybank Islamic established a new digital service for small and medium-sized enterprises (SMEs) that expedites approvals through a user-friendly online platform. SMEs and the business banking (BB) sector are now able to apply for business loans via Maybank Islamic's internet banking applications: Maybank2u and M2UBiz.

The widespread establishment of Islamic banks has facilitated their competition with European and global banks, notwithstanding the fact that the Islamic economy is relatively nascent.

2.3 The role of Islamic finance in ensuring the stability of the global economy

The instability of the world economy is rooted in the instability of human nature

Paul Samuelson, American economist and Nobel laureate.

This statement by Paul Samuelson posits that human nature plays a key role in the volatility of the global economy. Specifically, Samuelson argues that individuals and groups are often irrational when making financial decisions, prioritising immediate gains over sustained security. This tendency can pave the way for speculative bubbles, market collapses, and other forms of economic instability, which have the potential to harm both individuals and entire national economies. Highlighting the role of human nature in global economic instability, Samuelson suggests that solutions to economic instability must consider human behaviour and decision-making.

> *Those who devour usury will not stand except as stands one whom Satan by his touch hath driven to [epileptic] madness. That is because they say: 'Trade is like usury', but Allah hath permitted trade and forbidden usury*
>
> **Quran 2:275**

This passage, sourced from the Quran, the sacred text of Islam, critiques usury- the practice of charging interest on loans- and values the importance of participating in moral trade. The verse warns that individuals who engage in usury will suffer the same madness caused by the touch of Satan, indicating that the act of usury is both sinful and malevolent. Additionally, the verse makes a distinction between trade and usury, specifying that whilst trade is allowed by Allah (God), usury is prohibited. This distinction emphasises the significance of carrying out business deals in a sincere and equitable fashion without exploiting others for personal profit. By and large, this verse from the Qur'an establishes the foundation for the principles of Islamic finance, which strive to encourage honourable financial practices and deter exploitation and oppression in financial dealings.

Islamic finance has experienced tremendous growth in recent years with assets projected to surpass £3.8 trillion by 2023. In 2020, assets in the global Islamic finance industry totalled approximately £2.88 trillion, showing growth from £2.5 trillion in 2019. Over the past decade, this industry has recorded an average annual growth rate of 8.4%, outperforming conventional finance in many nations.

The United Arab Emirates, Malaysia, and Saudi Arabia presently dominate the Islamic finance market and hold roughly 80% of global Islamic financial assets. Still, the industry is quickly expanding beyond its traditional markets. In 2020, Africa's Islamic finance industry grew by 10.6%, Europe's by 9.6%, and the Americas' grew by 8.7%.

Additionally, the sukuk market, which provides Shariah-compliant options to traditional bonds, is rapidly expanding. In 2020, the worldwide issuance of sukuk attained a historic high of USD 180.8 billion, as compared to USD 162.5 billion in 2019. It is anticipated that the sukuk market will continue to expand, particularly as more nations aim to fund infrastructure projects through Shariah-approved methods.

Nonetheless, there are still obstacles to overcome in order to fully unlock the industry's potential. These consist of matters concerning standardisation, regulation, and education. To tackle these issues, institutions like the Accounting and Auditing Organisation for Islamic Financial Institutions (AAOIFI) and the Islamic Financial Services Board (IFSB) are collaborating to create shared Shariah standards and regulatory frameworks. Furthermore, educational establishments worldwide, including universities and business schools, are organising Islamic finance courses and degree programmes to enhance understanding and knowledge among investors and the broader public.

One example of Islamic finance's increasing global significance is the growth of sukuk (Islamic bonds) markets in Muslim and non-Muslim financial sectors. Both the demand and supply for sukuk are expanding rapidly. Sukuk can be issued by private or sovereign organisations.

Islamic finance demonstrated its resilience and stability during the global financial crisis of 2008-2009, when numerous conventional financial institutions endured substantial losses. By contrast, the Islamic finance sector remained mostly unscathed and demonstrated stability, with certain Islamic financial institutions even reporting growth during the crisis.

The International Monetary Fund (IMF) and the World Bank have recognised the potential of Islamic finance to promote global economic stability. The IMF has outlined that Islamic finance possesses the capability to advance financial stability, bolster small and medium-sized enterprises, and enhance financial inclusivity.

In addition, there has been a significant expansion of Islamic finance in recent years, with the industry growing at an annual rate of approximately 10-12%. In 2020, the global value of Islamic financial assets was estimated at around $2.88 trillion, with the industry operating in over 60 countries. This trend is expected to continue as many non-Muslim majority countries are showing interest in adopting Islamic finance practices.

However, the development and expansion of Islamic finance also present challenges.

This disparity creates ambiguity, leading to a hindrance to cross-border investment. One significant obstacle is the absence of standardization and harmonisation of Islamic finance practices across various jurisdictions. Additionally, the scarcity of Islamic finance education and training programmes further compounds the challenge, thereby impeding the creation of qualified professionals in the field.

Overall, the potential for Islamic finance to enhance global economic stability and sustainability is noteworthy despite some challenges. The recent growth and development of the industry demonstrate its increasing significance in the global financial landscape. "Ṣukuk" refers to Islamic bonds that abide by Shariah standards. The term "ṣakk" denotes an Islamic bond in the singular form.[185] Unlike a conventional bond (secured or unsecured), which is a debt obligation of the issuer, a sukuk technically represents an interest in an underlying Shariah-compliant financing arrangement. This entitles the holder to a proportionate share of the proceeds of the transaction and, at a certain future date, a return of capital[186].

From an economic perspective, a sukuk involves a comparable transaction, however, there are two notable distinctions. Firstly, sukuk does not prescribe a set interest rate for investors.[187] Secondly, sukuk are not considered to be debt securities, but are instead referred to as "participation certificates". This means that sukuk are certificates of participation that are bought by investors during an initial public offering (IPO) and are subsequently issued against a pool of assets.[188]

To return to the technical definition of "ṣukuk," the term is the plural of the Arabic word "kakk."[189] Both words are nouns. The literal translation of "kakk" is "certificate".[190]

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[185] It should be noted that the term "ukukuk" does not refer to securitisation. This is because securitisation - in the common non-Muslim sense of the word - is prohibited under Islamic law, "securitisation" refers to a transaction in which an issuer issues debt securities to investors by pooling individual financial assets (such as mortgages) into a pool that serves as collateral for those debt securities. The assets are owned by the originator, which bundles identical contracts (again, e.g., mortgages) and sells them to a special purpose vehicle.
[186] Chong B. S. and Ming-Hua L., (2017). "Islamic Banking: Interest Free or Interest-Based?" Pacific-Basin Finance Journal 17, P.125-144.
[187] This is obviously necessary in order to comply with the rule against riba (interest).
[188] In other words, the basic structure of any sukuk transaction is money versus assets.
[189] Ernst & Young (2018). Ernst & Young Islamic Funds and Investments Report 2018.
[190] A sukuk is a financial instrument through which property rights are transferred. The underlying property to which ownership is transferred may be an asset of an existing project, a leased facility, a dormant partnership (mudaraba) or a business interest (musharaka). In particular, the certificates may be "asset-based", meaning that they are secured by the cash flows generated by the underlying property, but are not "asset-backed" and therefore not backed by "hard" assets.

The legal meaning of the word "kakk" is "financial instrument". In practical financial language, a reference to a plural term is more common than a singular one.[191]

Additionally, a sukuk is a transferable instrument, implying that a bond investor obtains partial ownership of the underlying assets or involvement in the related business. The parity among these bonds is solely present during the issuance phase. Following the IPO of bonds, an investor holds the option to sell them for a value either higher or lower than the purchase price. Following the IPO of bonds, an investor holds the option to sell them for a value either higher or lower than the purchase price. The selling price on the secondary market will rely on the supply and demand conditions for the bonds, as well as the credit conditions of the underlying asset or business[192].

Sukuk issued in the global capital markets were mainly structured as trust certificates.[193] Some civil law jurisdictions, which do not recognise the idea of a trust, occasionally release sukuk structured according to the laws of that specific state. The various dynamics and types of sukuk, especially the worldwide issuance of sukuk, should be noted.

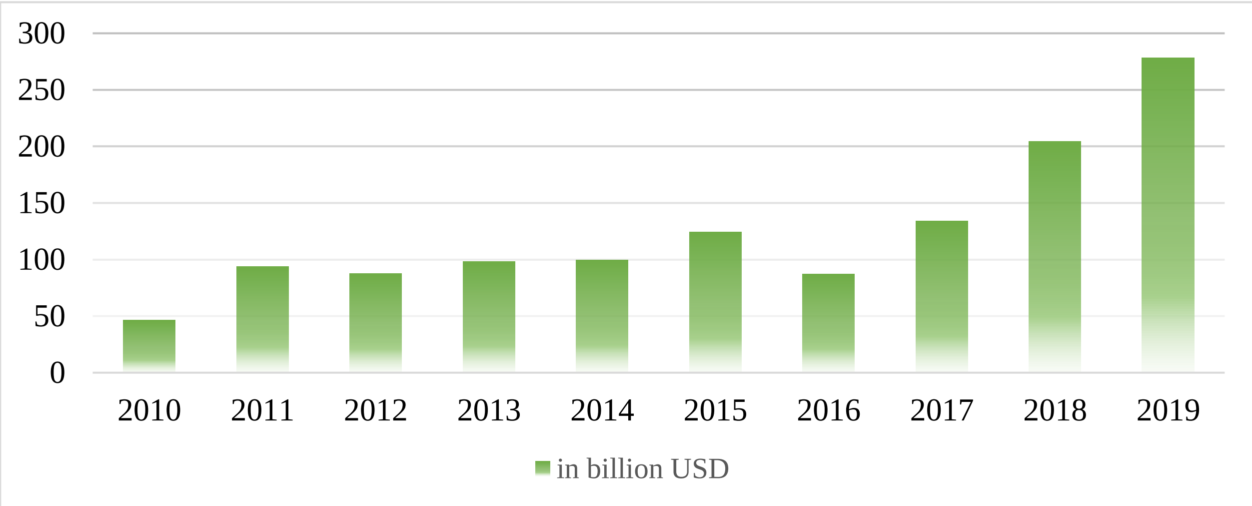

Figure 2.11 Global sukuk production in 2010-2019

In a standard trust certificate transaction, a company aiming to generate capital (the

[191] To enhance the debate on the legal meaning of sukuk, two scholars propose the following meaningful definition. The plural of the Arabic word Sakk, which means certificate, reflects participation rights in the underlying assets.
[192] Grossman S., Hart O. (2013). Corporate Financial Structure and Management Incentives. In: J. McCall, Economics of Information and Uncertainty (University of Chicago Press, Chicago).
[193] Generally governed by English law.

debtor) establishes an unmanaged offshore special purpose vehicle (SPV) in the pertinent jurisdiction[194]. The SPV distributes trust certificates to investors and utilises the funds to establish a financing agreement with the debtor. As per English law, the SPV functions as a financier and the rights of the certificate holders are favoured.

Typical financing arrangements in the Islamic market employ structures such as sale and leaseback (ijara), trade finance (murabaha), and joint venture investment (musharaka)[195].

The above structure of the trust certificate requires recognition of the trust concept in the relevant jurisdiction in which the debtor is located.[196] As a result, alternative structures have begun to emerge that allow sukuk transactions to be conducted in accordance with local law.[197]

An intriguing instance of this trend is Turkey, which has embraced specific legislation permitting the utilisation of sukuk. This legislation has ushered in the founding of leasing firms, which themselves constitute a type of SPV regulated by the Turkish Capital Markets Board.[198] These leasing companies are established specifically to issue certificates under the Ijarah structure to investors. This structure allows companies to buy assets and lease them to the debtor[199].

In summary, the leasing company funds the asset purchase through certificate issuance. The debtor's lease payments correspond to the distribution of certificate profits, with the cash flow servicing the profit distribution for certificate holders. The debtor's lease payments correspond to the distribution of certificate profits, with the cash flow servicing the

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[194] Patell, J.M. (2016). Corporate earnings per share forecasts and stock price behaviors: empirical tests. Journal of Accounting Research 14, 246-276

[195] سولي ، J. (2018). آفاق ومشاكل تطوير صكوك الشركات وأسواق السندات. المجلة الدولية للتمويل والإدارة في الشرق الأوسط ، 1 (1 ، 20-30. (Solé, J. (2018). "Prospects and problems of development of corporate markets of sukuk and bonds". International Journal of Middle Eastern Finance and Management, 1 (1), 20-30.)

[196] In many jurisdictions, especially in civil law traditions, this is very rare.

[197] كوخ ، تيموثي (2015) ، إدارة البنوك ، أورلاندو: درايدن برس (Usmani, M.T. (2017). "Sukuk and its modern application". Translated from the Arabic by Sheikh Yusuf Talal DeLorenzo, AAOIFI Shariah Council Meeting, Saudi Arabia. Visser, H. (2019). Islamic finance: principles and practice. Edward Elgar, Cheltenham.)

[198] شاكر س. وراي إف (2017). الصكوك ضد سندات اليورو: هل هناك فرق في القيمة في خطر؟ ورقة عمل صندوق النقد الدولي رقم WP / 07/237. (Chakir, S. and F. Raey (2017). Sukuk versus Eurobonds: Is there a difference in value at risk? International Monetary Fund, Working Paper, No. WP/07/237).

[199] عبد الحالك أ. ، ريتشاردسون س. (2017). آفاق جديدة للأوراق المالية الإسلامية: اتجاهات جديدة في عروض الصكوك ، مجلة شيكاغو للقانون الدولي ، 7 (2) ، 409-425. (Abdel-Khalek, A., Richardson, S.F. (2017). New horizons for Islamic securities: emerging trends in sukuk offerings, Chicago Journal of International Law, 7 (2), pp. 409-425).

profit distribution for certificate holders.[200]

Although the sukuk is issued by an orphan SPV, the investor will not typically be exposed to the credit risk of that SPV alone. Instead, today's typical sukuk transactions are primarily designed to allow the investor to be exposed to the credit risk of the borrower[201].

However, prospective investors should assess whether the sukuk affords them recourse solely to the debtor or to distinct segregated property symbolised by the assets encompassed by the financing agreement underlying the sukuk.[202]

Therefore, it is crucial for a prospective investor to determine whether the asset underlying the funding arrangement has been irrevocably transferred to the SPV. Either the investor will have a legal right of recourse against the underlying asset (known as an asset-backed sukuk), or even if the transfer of the asset is valid between the debtor and the SPV, the investor's recourse will be limited to only against the debtor as the transfer isn't as effective against third parties or the debtor's estate (known as an asset-based sukuk).[203]

Each sukuk has a face value, which is determined by the underlying asset's value. The investor may choose to pay this amount or purchase it at a premium or discount, similar to a conventional bond. [204] When sukuk are employed, the upcoming cash flows from the fundamental asset are transferred to the current cash flow. Sukuk may be released for extant or proposed assets. Holders of sukuk receive a portion of the profits created by the asset but do not earn interest payments since it violates Shariah (haraar).[205]

Most Shariah scholars hold that it is impermissible to have sukuk managers, partners, or agents who assure to redeem the sukuk for a nominal amount.[206] Instead, the sukuk is

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[200] This model is best suited for loan participation notes that have been on the market for several decades.

[201] Bourkhis, K. & Nabi, M.S. (2013). Reliability of Islamic and Traditional Banks in the Financial Crisis of 2007-2008, Financial Economics Review, 22 (2), 68-77. DOI. 10.1016 / j.rfe.2013.01.001

[202] Understanding the real nature of the relationship between the financing mechanism and the asset to which it relates is key to understanding the economic risk of sukuk and its allocation.

[203] In an asset-based sukuk structure, the primary reliance of investors is on the creditworthiness of the debtor rather than the underlying assets. This allows the debtor to simplify reporting and segregation of assets, as the debtor knows that investors are really only relying on the strength of the debtor's creditor.

[204] However, with sukuk, the initial investment is not guaranteed; the sukuk holder may or may not get back the entire principal (face value) amount. This is because, unlike conventional bondholders, sukuk holders share the risk of the underlying asset. If the project or business for which the sukuk is issued does not perform as expected, the sukuk investor must bear some of the losses.

[205] As with conventional bonds, sukuk are issued with specific maturities. When the maturity date comes, the issuer of the sukuk buys them back (through an intermediary who assists in the transaction and sometimes acts as a "financier").

[206] In 2019, there was a scandal in France, as a loan shark manager organised a deal for almost $8 million and did not reimburse his part, just as it is customary in Shariah, but at the same time, the loan shark could not be sued

usually redeemed according to the net asset value of the underlying assets (where each share receives a proportional portion of this value) or at an agreed-upon price at the time of purchase.[207] In practice, some sukuk are issued with repurchase guarantees, similar to conventional bonds. While not all Shariah scholars agree that this transaction complies with Islamic law, a product called sukuk ijara may be accompanied by a redemption guarantee.[208]

Having previously explained the functionality of conventional bonds and sukuk, it is now appropriate to present a comparative analysis. The following table affords a concise outline of the key points of comparison between these investment vehicles.[209]

Table 2.10 - Difference between sukuk and ordinary bonds

	Ordinary bonds	*Sukuk*
Asset ownership	Bonds do not give the investor an ownership stake in the asset, project, business or joint venture they support. They are a debt obligation of the issuer to the bondholder.	The sukuk gives the investor partial ownership of the asset on which the sukuk is based.
Investment criteria	Generally, bonds may be used to finance any asset, project, business or joint venture, subject to local law.	The asset on which the sukuk is based must be Shariah compliant.
Issue unit	Each bond represents a share of debt.	Each sukuk is a share of the underlying asset.
The price of the issue	The nominal value of a bond is based on creditworthiness (including its rating).	The nominal value of the sukuk is based on the market value of the underlying asset.
Investment benefits and risks	Bondholders receive regularly scheduled (and often fixed) interest payments over the life of the bond and are guaranteed that their principal will be repaid at maturity.	Sukuk holders receive a share of the profits from the underlying asset (and accept a share of any losses incurred).
Cost impact	Bondholders are generally not affected by the costs of the assets, projects, businesses or joint ventures they support. The performance of the underlying asset does not affect investor remuneration.	На власників сукуків впливають витрати, пов'язані з базовим активом. Більш високі витрати можуть привести до зниження прибутку інвесторів і навпаки.

For a corporate or sovereign bank, some of the key advantages of employing the sukuk

[207] Hassoune, A. (2018). Cartography of Islamic Financial Science, Conférence sur la Finance Islamique, Paris, Bercy, Novembre, 3

[208] The key characteristic of sukuk is the fact that they provide partial ownership of the underlying asset. This decision means that Islamic investors are entitled to receive a share of the profits from the underlying sukuk asset.

[209] Godlewski, C.J. Turk-Arsis, R. & Weill, L. (2017). Do Sukuk and Common Bond Markets Perceive as Different Financing Instruments ?, BOFIT Discussion Papers, No. 2/2017.

market include:

• possible marketing benefits for issuers operating in Islamic markets if they are seeking investment in these markets.

• potential for expansion into other niche financial markets as a broader market for ethical investments, which can provide reputational advantages.

There are also some potential drawbacks of the sukuk market.

As the primary factor in drawing investor interest is the debtor's creditworthiness, this market may prove challenging for corporates or sovereigns with insufficient credit ratings.

A sukuk that implements an ijarah-based financing agreement will necessitate the debtor to possess suitable (halal) revenue-generating assets with which to underwrite the agreement. Furthermore, should the documentation lack the appropriate protocol, replacement of comparable assets within the arrangement may be infeasible. Such a scenario may restrict the debtor's capacity to vend or transact such assets throughout the duration of the agreement.[210]

Unlike the traditional bond market, the standardisation of sukuk issuance documents has been slow to develop, and this may have adverse effects on pricing.[211] This can add some additional cost and unpredictability to the process of structuring a transaction[212].

The sukuk market is currently maturing, supported by interest from issuers and investors. The expanding investor base confirms the viability of sukuk as an alternative method of mobilising medium- and long-term savings and investment.[213] One drawback, however, is that each country has its own interpretation of what is and is not Shariah compliant, and such interpretations may differ from one government to another. Such differences between Shariah and other legal aspects can sometimes lead to complications.

Given the principle of permissibility, the Islamic financial system can develop within

[210] Tax treatment of sukuk may differ from conventional bonds in some jurisdictions.
[211] On a transaction-by-transaction basis, to the extent that the structure used for sukuk differs from the typical structures already well known in the market, the involvement of Shariah scholars is necessarily required. This may add some additional cost and unpredictability to the process of structuring the transaction..
[212] الاتجاهات الرئيسية .أساسيات سوكو) «2017) ديباشيس داي » (Debashis Dey (2017) «The basics of sukuku. The main trends»)
[213] The countries that have issued the sukuk include: Bahrain, Brunei, Egypt, Gambia, Indonesia, Iran, Kazakhstan, Kuwait, Pakistan, Qatar, Saudi Arabia, Singapore, Somalia, Turkey, United Arab Emirates, United Kingdom, United States, France, Ireland, Italy and Hong Kong..

the constraints of Shariah. The recent history of the growth of the Islamic financial sector is based on new decisions of Shariah scholars. A notable aspect of the Islamic financial system is its continuous evolution, enabling it to conform to global economic patterns.

Risk factors consist of both asset value vulnerability and opportunities for income expansion. Thriving companies utilise such opportunities. Appreciating the balance between risk and yield for various assets and investors is a significant aspect of risk management. The more significant the return rate for investors, the greater their risk threshold[214]. As the purpose of financial institutions is to create value for shareholders through the acquisition of assets by multiple shareholder-owned funds, managing the associated risks faced by shareholders' equity becomes an important function of these institutions.

As Islamic banking is relatively new, the risks inherent in the instruments used are not fully understood. Islamic banks can be expected to face two types of risks: risks similar to those faced by conventional financial intermediaries and risks that are unique due to their Shariah compliance. In addition, Islamic banks are restricted from using some of the risk mitigation tools used by their conventional counterparts as they are not permitted under Islamic commercial law[215].

The asset and liability sides of Islamic banks have unique risk characteristics. The Islamic banking model has evolved into a single-tier mudaraba with several investment instruments.[216] As for the liabilities of Islamic banks, savings and investment deposits take the form of profit-sharing investment accounts.[217]

Demand deposits or cheque/current accounts in Islamic banks are in the nature of qard hasan[218] (interest-free loans), which are repaid in full on demand.[219] On the asset side, banks

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[214] Vogel, Frank E. and Samuel L. Hayes (2018), Islamic Law and Finance: Religion, Risk and Return, The Hague, The Netherlands: Kluwer Law International.

[215] IRTI and IFA (2000), Resolutions and Recommendations of the Council of the Islamic Fiqh Academy, Islamic Institute for Research and Learning, Islamic Development Bank, Jeddah.

[216] Why mudarabah? It is the most widely used instrument in the Islamic market, but if you look at the history of all instruments, mudarabah was the first new instrument. All the others are quite similar to this instrument.

[217] Investment accounts can be further classified as restricted and unrestricted, with the former having restrictions on withdrawals until maturity.

[218] There are several variants of translation, the first one is kaard hassan, and the second one is karda hasn. Looking at the Arabic and Hebrew languages, it is impossible to translate this name correctly, but according to its description and statistics, it can be argued that this instrument is similar to an interest-free loan.

[219] كمال محمد حسن (2005)، العقود الآجلة الثابتة في السلع الآجلة ، منور إقبال وتريك الله خان (ملحق)، الهندسة المالية والعقود الإسلامية ، لندن: بالجريف ماكميلان. (Камал M.X. (2005), «Fiqh Issues in Commodity Futures", in Munawar Iqbal and Tariqullah Khan (eds), Financial Engineering and Islamic

use murabaha (sale at a mark-up), hire purchase (medium/long term murabaha), bai muajal (sale with deferred price – Appendix 5), istinah/salam (deferred sale or pre-sale of an item) and ijarah (leasing) and profit-sharing financing (musharaka and mudaraba). These asset-based instruments, which use the principle of profit sharing to reward depositors, are a unique feature of Islamic banks.[220]

Credit risk refers to the potential loss of income resulting from a counterparty's failure to make a contractual payment in a timely or complete manner. This possibility may underlie all Islamic financing techniques.[221] Default can occur due to external systematic sources or internal financial reasons, or it may be the result of moral hazard (wilful default). It is important to clearly define wilful default, as Islam restricts compensation-based debt restructuring to instances of wilful default alone. In the case of profit-sharing types of financing, including mudaraba and musharaka, the credit risk involves the entrepreneur's failure to pay the bank's share as required. This problem may occur for banks in these instances because of an information asymmetry issue, where they lack adequate knowledge regarding the actual earnings of the company.[222]

Market risks can be systematic, arising from macro sources, or unsystematic, depending on the instrument of the asset.[223]

Islamic finance institutions utilise a base rate for assessing different financial instruments. To elaborate, a Murabaha contract's profit margin is determined by adding a risk premium to the base rate - typically LIBOR. Since a Murabaha involves a pre-set markup for the whole contract period, margin rates on such fixed income deals can't be adjusted if underlying rates vary[224]. As a result, Islamic banks face risks associated with changes in market interest rates.[225]

Contracts, London: Palgrave Macmillan..)

[220] These instruments change the nature of the risks faced by Islamic banks. Some of the key risks faced by Islamic banks are discussed below.

[221] For example, credit risk in Murabaha contracts arises in the form of a counterparty that fails to pay its debts in full and on time.

[222] Applies only to Islamic banks located in

[223] For example, foreign exchange and equity price risks fall into the systematic category, and changes in the prices of the commodities or assets the bank deals with fall into the specific market risk.

[224] IRTI and IFA (2000), Resolutions and Recommendations of the Council of the Islamic Fiqh Academy, Islamic Institute for Research and Learning, Islamic Development Bank, Jeddah.

[225] Mark-up risk can also manifest itself in forms of profit-sharing financing, such as mudaraba and musharaka, as the profit-sharing ratio depends, among other things, on a benchmark rate such as LIBOR.

Murabaha and commodity/asset price risks should be differentiated clearly. As previously stated, the basis for margin price risk is changes in LIBOR. Additionally, it arises from funding rather than the trading process. It is essential to explain technical term abbreviations upon their first use. In contrast to margin risk, commodity price risk arises as a result of the bank's ownership of commodities or long-lived assets such as Salam, Ijara, and Mudaraba/Musharaka.[226]

Liquidity risk can emerge due to challenges in obtaining cash at a reasonable price from borrowed funds (funding liquidity risk) or from selling assets (asset liquidity risk). This risk is particularly crucial for Islamic banks. Various factors contribute to the substantial liquidity risks that Islamic banks face. Firstly, there is a stringent restriction on the securitisation of Islamic banks' existing assets, which are primarily in the form of debt. Secondly, the development of financial instruments in Islamic banking has been slow, resulting in a lack of expedited market fund raising. This issue is compounded by the nonexistence of an inter-Islamic bank money market. Additionally, lender of last resort (LLR) facilities are interest-based, rendering them unusable for Islamic banks.[227]

Legal risks for Islamic banks are also significant and arise for a variety of reasons. Firstly, as most countries have adopted a common law or civil law framework, there are no specific laws/statutes in their legal systems that support the unique features of Islamic financial products.[228] Secondly, non-standardised contracts increase the complexity and expense of negotiating different aspects of a transaction. Financial institutions are vulnerable to unforeseeable or unrealisable risks. Standardised contracts can simplify the administration and monitoring of transactions post-signature. Additionally, the lack of Islamic courts to enforce Islamic contracts heightens legal risks[229].

The fluctuating rate of return on savings/investment deposits creates uncertainty

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[226] Note that both margin risk and commodity/asset price risk can exist in the same contract. For example, in a lease, the equipment itself is exposed to commodity price risk, while a fixed or overdue lease is exposed to mark-up risk.

[227] شابرا ، م .عمر ، وتريك الله خان (2000)، "التنظيم والإشراف على البنوك الإسلامية"، ورقة دورية رقم 3، معهد البحوث الإسلامية ، البنك الإسلامي للتنمية ، جدة.
(Chapra, M. Umer and Tariqullah Khan (2000), "Regulation and Supervision of Islamic Banks", Occasional Paper no. 3, Islamic Research Institute, Islamic Development Bank, Jeddah).

[228] For example, while the core business of Islamic banks is trading (murabaha) and equity investment (musharaka and mudaraba), current banking laws and regulations in most jurisdictions prohibit commercial banks from engaging in such activities.

[229] BCBS Basel Committee on Banking Supervision, 2018.

surrounding the actual worth of deposits. Safeguarding assets to diminish the risk of losses due to lower rates of return may significantly impact depositors' withdrawal decisions.[230] From the bank's point of view, this creates a "withdrawal risk", which is associated with a lower rate of return compared to other financial institutions.

Fiduciary risk can be caused by a breach of contract by an Islamic bank.[231] For instance, a bank may be unable to fully adhere to the Shariah requirements of multiple contracts. A lack of confidence among depositors arises when the bank fails to comply with Islamic Shariah, knowingly or unknowingly, resulting in deposit withdrawals. Also, if depositors/investors view below-market returns as a violation of the investment contract or fund mismanagement by the bank, they may create a fiduciary risk[232].

Transferred commercial risk is the transfer of risk associated with deposits to shareholders. This occurs when, under commercial pressure, banks lose some of their profits to pay depositors to prevent withdrawals due to lower returns[233]. Displaced commercial risk means that a bank can comply fully with Shariah requirements. However, it may not be able to offer an interest rate that is competitive with other Islamic banks in its group and other competitors. This situation creates an incentive for depositors to withdraw their funds. To prevent this from happening, bank owners must distribute a portion of their profits to depositors. This type of risk is not acceptable under Shariah law[234]. However, in most Islamic financing methods, multiple risks exist concurrently.[235]

The complexities and changes in risks in Islamic finance are highlighted in Table 2.11, encompassing 18 different Islamic bankers' perspectives on significant risk issues pertaining to distinct Islamic financing modes. Ratings of the risks' magnitudes are included in the table, with higher scores indicating higher relative risks. [236]

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[230] It is impossible to find out the formula for the rate of return on deposits, as this information is hidden.
[231] The risk of loss arising from the inability to ensure the safety of its assets or the profitability of property entrusted to another party.
[232] AAOIFI, 1999.
[233] أحمد ، حبيب (2018)، "محددات تقاسم الأرباح في تمويل المشروع: مذكرة"، البحوث الاقتصادية الإسلامية ، 9 (1)، 41-5. (Ahmed, Habib (2018), "Determinants of profit sharing in project finance: a note", Islamic Economic Studies, 9 (1), 41-5.)
[234] أحمد ، حبيب (2017)، "الاستعانة بمصادر خارجية للمخاطر وانضباط السوق والكفاءة في الخدمات المصرفية الإسلامية" (Ahmed, Habib (2017), "Withdrawal risk, market discipline and efficiency in Islamic banking»)
[235] For example, in Salamah, when the bank made an advance payment, it began to assume the counterparty's risk of timely delivery of the required goods, the market risk of the goods, the liquidity risk of their conversion into cash, the operational risk of their storage and movement, etc. The same can be said about truth, financial murabaha, ijara and musharaka/mudaraba.
[236] Tariqullah Khan and Dadang Muljawan (eds.), "Stability of Islamic Banking: The Role of Risk Management, Regulation and

Table 2.11 - Risk perception: risks in different forms of financing.[237]

	Credit risk	Market risk	Liquidity risk	Operational risk
Murabaha	2.47(17)	2.75(12)	2.62(16)	2.8(15)
Mudaraba	3.38(13)	3.56(9)	2.57(14)	2.92(13)
Musharaka	3.71(14)	3.67(9)	3.0(13)	3.08(12)
Ijara	2.64(14)	3.17(6)	3.1(10)	2.9(10)
Truth	3.13(8)	2.75(4)	3.0(6)	3.29(7)
Salam	3.20(5)	3.25(4)	3.2(5)	3.25(4)
Salami hybrid	3.43(7)	3.5(6)	3.43(7)	3.17(6)

Credit risk is likely lowest for murabaha (2.47) and highest for musharaka (3.71), followed by hybrid salam (3.43) and mudaraba (3.38). It is evident that bankers believe profit-making methods may pose a higher credit risk. Ijara is ranked second (2.64) after murabaha in terms of the lowest credit risk. Similar to the Murabaha contract, the Ijarah contract provides banks with a specific income while maintaining ownership of the leased asset with the bank. Truth and salaam, which are valued at 3.13 and 3.20 respectively, are considered relatively more risky. These methods of deferred product financing are deemed more hazardous than deferred price sales (murabaha). This could be due to the uncertainty of the goods' value (and hence the return) at the contract's end, as well as the possibility that the counterparty may be unable to deliver the goods on time. This may occur due to diverse motives, including adverse meteorological events (for commodities under the Salam agreement) and manufacturing malfunctions (for items encompassed by the Truth contract). Even if the merchandise has been dispatched, there may be confusion regarding the value of the items upon delivery, which then impinges on the expeditious delivery of the merchandise.[238].

Market risk is relatively high across most financing modalities. It is particularly severe in profit-sharing financing modes, and the greatest risk is associated with musharaka (3.67),

Supervision", Institute for Islamic Research and Training, Jeddah: Islamic Development Bank.

[237] Figures in parentheses indicate the number of respondents; scale from 1 to 5, where 1 means "not serious" and 5 means "critically serious".

[238] BCBS (Basel Committee on Banking Supervision) (2018), Operational risk, consultation paper, Basel: Bank for International Settlements.

followed by mudarabi (3.56) and hybrid sukuk (3.5). Instruments such as Murabaha and Truth have the lowest market risk (2.75), followed by Ijara (3.17). The liquidity risk of instruments will decrease if the assets can be sold in the markets or have a short-term maturity. According to bankers, mudaraba has the lowest liquidity risk (2.57), followed by murabaha (2.62).[239] The remaining instruments are comparatively deemed riskier, where the hybrid sukuk carries the greatest liquidity risk (ranked at 3.43) and the instrument-specific deferred payments Salaam and Truth follow at 3.2 and 3.0 consecutively. Ijara also exhibits a relatively higher liquidity risk (3.1).

Any assessments of operational risk for various instruments should take these matters into consideration. Murabaha, ijara, and mudaraba exhibit relatively lower levels of operational risk (2.8, 2.9, and 2.92 respectively). Salaam and Truth, with deferred product sales contracts, are considered to carry the highest operational risk (3.25 and 3.29 respectively). The profit-sharing methods of musharaka and hybrid sukuk demonstrate a closely linked operational risk rating, amounting to 3.08 and 3.17 respectively.

The risks confronting Islamic banks are multifaceted and arduous to reduce for numerous reasons[240]. First, unlike conventional banks, given the trade-based instruments and partial funding, there are significant market risks alongside credit risks in the Islamic bank book. Second, risks are mixed and vary from one type to another, at different stages of the transaction. For example, trade contracts (Murabaha, Salaam and Truth) and leasing are subject to both credit and market risks.[241] Third, deficiencies in infrastructure, institutions and instruments increase the risks faced and make them difficult to mitigate. For example, there are objections to the use of currency futures to hedge foreign exchange risk, and in most jurisdictions there are no Shariah-compliant short-term securities to manage liquidity risk[242]. Table 2.12 presents an assessment of the overall risk management framework of the 17 Islamic banks. Each bank was asked about various aspects of its risk management framework

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[239] Note that both of these instruments are typically used for short-term financing.

[240] داموداران، أصوات (2015)، "القيمة والمخاطر: ما بعد الإصدار التجريبي"، التحليلات المالية، 61 (2)، 38-45. (Damodaran, Aswath (2015), "Value and risk: beyond betas", Journal of Financial Analytics, 61 (2), pp. 38-45).

[241] For example, during the transaction period of a Salam contract, a bank is exposed to credit risk and, at the time of entering into the contract, is exposed to commodity price risk.

[242] كرو، ميشيل، دان غالا وروبرت مارك (2015)، إدارة المخاطر، نيويورك: مكجرو هيل. (Crow, Michelle, Dan Galay and Robert Mark (2016), Risk Management, New York: McGraw Hill.)

and the process described above.[243] In particular, the survey included six queries regarding the establishment of an appropriate risk and environmental management system, nine regarding maintaining a suitable risk measurement system, and five concerning the sufficiency of internal control measures.[244]

Table 2.12 Components of the risk management system for Islamic banks.

Risk management components	Overall assessment	Percentage
Establishing an appropriate risk management system and environment	84 (102)	82,4%
Maintaining an appropriate risk measurement system	106 (153)	69,3%
Adequate internal controls	65 (85)	76,5%

Table 2.12 depicts that Islamic banks have demonstrated greater proficiency in developing effective risk management policies and procedures (82.4%) compared to risk measurement, mitigation, and monitoring (69.3%), while internal controls fall somewhere in between (76.5%). The percentages indicate that Islamic financial institutions must enhance their measurement, mitigation, and monitoring processes, followed by internal controls, to elevate their risk management framework.

The risk identification and management techniques offered to Islamic banks fall into two categories. The first category entails standard approaches, which adhere to Islamic financing principles, such as risk reporting, internal and external audits, GAP analysis, RAROC, internal rating, and so on. The second category comprises methods that must be tailored or created to meet Shariah compliance standards. Consequently, discussing risk management techniques for Islamic banking is a intricate matter. While it is not feasible to discuss all the relevant issues related to Shariah in this section, this chapter will focus on a few selected issues[245].

Methods to mitigate risks may include standardising all business-related activities and

[243] All these questions were asked by a special service that operates only in the Islamic world, and it is this service that monitors all the risks faced by both the bank and the ordinary user.
[244] The figures presented in the table are the sum of positive responses as a percentage of the total number of possible responses in each component.
[245] كرو ، ميشيل ، دان غالا وروبرت مارك (2015) ، إدارة المخاطر ، نيويورك :مكجرو هيل. (Crow, Michelle, Dan Galay and Robert Mark (2015), Risk Management, New York: McGraw Hill..)

processes, creating a diversified portfolio, and implementing an incentive-compatible scheme with accountability for performance. Some risks faced by banks can be reduced or eliminated by transferring or selling them in clearly defined markets. The ways in which certain risks in Islamic banks can be reduced or eliminated are discussed below.

As Islamic banks employ distinct financing techniques, appropriate documentation of the products is necessary to reduce certain risks[246]. Gharar, which refers to the uncertainty of outcome caused by ambiguous terms in deferred exchange contracts, can be mild and unavoidable but can also become excessive and result in unfairness, contract failures and defaults. Counterparties use appropriate contractual arrangements as risk control methods, with several examples available.[247]

✓ □ To overcome counterparty risks arising from the non-binding nature of the Murabaha contract, the upfront payment of a substantial commitment fee has become a permanent feature of the contract [248]. In order not to fulfil the promise made by the customer to take possession of the ordered goods (in the case of murabaha), the contract must be binding on the customer and not binding on the bank. This proposal assumes that the bank will fulfil the contract and deliver the goods in accordance with the agreement, even if the contract is not binding on it.

✓ Since the murabaha agreement is approved on the condition that the bank will take possession of the asset, at least in theory the bank will hold the asset for some time. This holding period is more or less eliminated by Islamic banks by appointing the client as the bank's agent to purchase the asset[249].

✓ In a truth-in-contract, enforceability becomes a problem, especially with regard to the fulfilment of qualitative requirements. To overcome such counterparty risks, fiqh scholars have permitted the al-Jazan band (penalty clause). Again, in truth financing, the

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[246] داس ساتياجيت (محرر) (2015)، المشتقات الائتمانية وتلاحظ الائتمان، الطبعة 2، سنغافورة: جون وايلي وأولاده، ND (Das, Satyajit (ed.) (2015), Credit Derivatives and Credit Notes, No. 2, Singapore: John Wiley and Sons.)

[247] IFSB (Islamic Financial Services Board) (2017 г.)

[248] "Capital adequacy standard for institutions (other than insurance) offering Islamic financial services only", Exposure Draft. 2, Islamic Financial Services Board, Kuala Lumpur (2017).).

[249] كهف ، منذر ، وتريك الله خان (2016) ، "مبادئ التمويل الإسلامي "، ورقة دراسة رقم 16. ، معهد البحوث الإسلامية ، البنك الإسلامي للتنمية ، جدة. (Kahf, Monzer and Tariqullah Khan (2016), Principles of Islamic Finance, Research Paper no. 16, Islamic Research Institute, Islamic Development Bank, Jeddah.)

allocation of funds can be staggered depending on the different stages of construction, rather than accumulating them at the beginning of construction work.

✓ In several contracts, a discount on the remaining premium amount is provided as an incentive to increase repayment.

✓ Fixed-rate contracts, such as hire purchase, are generally subject to greater risk than variable-rate contracts, such as operating leases [250] .

✓ In Islamic banking, the lack of formal judicial systems or Islamic courts poses a significant risk factor for dispute resolution. To mitigate such risks, counterparties can agree to a contractual process to be followed in the event of disputes. Specifically, provisions in Islamic financial contracts enable the parties to select and settle disputes.[251] This is particularly important regarding default resolution, as rescheduling similar to interest-bearing debt is not feasible.

Many of these contractual characteristics work to diminish the risk of counterparty default. Such features may enhance the credit quality of agreements in various situations.

GAP analysis is one of the most common and dependable strategies for managing interest rate risk[252]. The effectiveness of the GAP management strategy depends on the revaluation of assets and liabilities. In Islamic banks, investment deposits are ideally revalued, as the expected return depends on market yields. However, most of the assets of Islamic banks are fixed income and cannot be revalued. One of the ways Islamic banks mitigate yield risk is through the use of two-stage contracts[253]. In them, the Islamic bank can play the role of guarantor in providing funds to users. Since the guarantee cannot be provided as a commercial activity under Shariah, in a two-stage contract it can be provided by the Islamic bank's participation in the financing process as the actual buyer. In a two-stage contract, the bank will have two contracts under murabaha: one as a supplier with the client and the other as a buyer with the actual supplier. Therefore, the bank will not make an

[250] IRTI i IFA (2018) Resolutions and Recommendations of the Council of the Islamic Fiqh Academy, Islamic Institute for Research and Learning, Islamic Development Bank, Jeddah.
[251] Vogel and Hayes, 1998, P. 250
[252] Gershun A., Gorsky M. Gap analysis Balanced management technologies.
[253] [كهف ، منذر ، وتريك الله خان (2016) ، "مبادئ التمويل الإسلامي" ، ورقة دراسة رقم 16. ، معهد البحوث الإسلامية ، البنك الإسلامي للتنمية ، جدة. (Kahf, Monzer and Tariqullah Khan (2016), Principles of Islamic Finance, Research Paper no. 16, Islamic Research Institute, Islamic Development Bank, Jeddah.)

advance payment to the supplier, but will do so when it receives payment from the buyer[254].

Another element of risk management is balance sheet netting, which involves matching mutual gross financial liabilities and recording only net positions of mutual liabilities[255]. For instance, Bank A has a USD 2 million debt to Bank B which resulted from a previous transaction. Bank B has AU$2.2 million in liabilities besides this obligation. A netting agreement would match the mutual liabilities of AU$2 million, leading to B repaying a net amount of AU$0.2 million, which equals to USD 0.2 million. This transaction entails various factors such as the maturity of the two liabilities, the currencies and financial instruments involved. Therefore, the offsetting process may involve discounting, selling, and exchanging gross liabilities. On-balance sheet netting can minimise the risk of a net amount between the counterparty's receivables and payables. Netting is more appropriate for settlements between two subsidiaries. With non-subsidiary counterparties, the currency positions of the receivables and payables can usually be compared, minimising mutual exposure.

Carefully prepared netting can mitigate credit risk exposure between two parties when a third party acts as a clearinghouse for obligation information. This arrangement becomes a powerful risk mitigation tool. Currently, Islamic banks have not developed such a mechanism.[256] This could potentially indicate an essential realm for future collaboration among Islamic banks, particularly as the market for two-stage contracts, as previously noted, grows, and banks obtain additional mutual obligations.

Upon minimisation of the net foreign exchange exposure, there is a probability of hedging the risk[257]. Assume an Islamic bank must pay a net amount of £1 million in three

[254] خان ، Tariqullah (2017) ، "الصكوك شبه الإسلامية (الدين) وأدوات الميزانية العمومية: تحليل أولي"، البحوث الاقتصادية الإسلامية ، 7 (2) ، 1-32. (Khan, Tariqullah (2017), "Islamic quasi-equity (debt) instruments and balance sheet hedging issues: a preliminary analysis", Islamic Economic Studies, 7 (2), 1-32.)

[255] خان ، طارق وحبيب أحمد (2018) ، "إدارة المخاطر: تحليل المشكلات في الصناعة المالية الإسلامية"، الورقة الدورية رقم 5. 1 ، المعهد الإسلامي للبحث والتدريب ، البنك الإسلامي للتنمية ، جدة. (Khan, Tariqullah and Habib Ahmed (2018), "Risk management: an analysis of challenges in the Islamic finance industry", Occasional Paper no. 5, Islamic Research and Training Institute, Islamic Development Bank, Jeddah.)

[256] Looking at all the Shariah rules, I couldn't find a maghar, i.e. why netting shouldn't be used. After reading the works of many financiers and risk managers, I came across many opinions on this topic, the opinion of financiers is that netting is an acceptable function, but risk managers believe the opposite, as netting is contrary to Shariah. It was in this case that I expressed my opinion based on my knowledge of this topic and my knowledge of the Quran.

[257] Frank E. Vogel and Samuel L. Hayes, III, Islamic Law and Finance: Religion, Risk and Return, The Hague: Kluwer Law International, 2013 p. 45.

months, and the current spot rate is 71.76 rupees to the pound. The potential risk is that the pound could strengthen in three months when compared to the current exchange rate. To hedge this risk, the bank can collect a three-month rupee profit and loss split (PLS) deposit of £1 million and purchase pounds for that amount at the spot rate. These pounds can then be held in a designated account for three months. At the end of the three-month term and upon maturity, the PLS deposit will be redeemed and the bank shall share the income from the dollar deposit with the rupee depositors. This fully hedges the risk of fluctuations in the dollar exchange rate over the term.

During the jubilee meeting of the Club of Rome, the primary economic development strategy was presented, advocating for the reconfiguration of the financial system. The Club of Rome acknowledged that the forthcoming economy will be founded on ethical and moral principles that align with the Islamic financial system.

Risk transfer mechanisms encompass, but are not limited to, derivative usage for hedging purposes, trade of financial claims, and alterations in borrowing conditions.[258] It is important to note that most conventional derivatives are not Shariah compliant. I will discuss some of the instruments that can be used for risk transfer in Islamic banks and other related issues below.

Collateral is also one of the most important securities against loan loss. Islamic banks use collateral to secure financing because it is permitted in the Shariah[259]. According to the principles of Islamic finance, debt due from a third party, which includes perishable goods and anything that is not protected by Islamic law as an asset, such as an interest-based financial instrument, cannot be used as collateral[260] . On the other hand, cash, tangible assets, gold, silver and other precious commodities, equity interests and debts due from a finance provider to a finance user are assets that are eligible for collateral. The overall industry quality of collateral depends on a number of institutional characteristics of the environment as well

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[258] رأس المال الاقتصادي واتفاقية بازل الجديدة "، ورقة العمل 01-11 ، بنك الاحتياطي الفيدرالي في كليفلاند ، PSAF" ، طومسون ، جيمس ب (2011). (Thomson, James B. (2011), "PSAF, Economic Capital, and the New Basel Accord," Working Paper 01-11, Federal Reserve Bank of Cleveland.)

[259] Asset held as collateral for a deferred liability.

[260] عبيد الله ، محمد (2018) ، "الهندسة المالية مع الخيارات الإسلامية "، البحوث الاقتصادية الإسلامية ، 6 (1) ، 73-103. (Obaidullah, Mohammad (2018), "Financial engineering with Islamic options", Islamic Economic Studies, 6(1), pp.73-103.)

as the products offered by the industry. Improvements in the institutional infrastructure and Islamic banking products can help to enhance collateral quality and reduce credit risk[261].

Guarantees supplement collateral when improving the quality of a loan. Commercial guarantees are extremely important credit risk control instruments for conventional banks.[262]

Adequate loan loss provisions offer safeguarding against anticipated credit losses. The efficacy of these provisions rests on the dependability of the systems used to compute expected losses. The application of recent developments in credit risk management techniques has allowed traditional banks to precisely estimate anticipated losses. Similarly, Islamic banks must adhere to obligatory loan loss provisions, based on regulatory requisites in various jurisdictions. However, as previously discussed, Islamic finance methods are varied and dissimilar in comparison to interest-based loans. Therefore, more stringent and sturdy systems are necessary to calculate projected losses. Additionally, to facilitate the comparative analysis of risks amongst institutions, there is a requirement for uniform practices for loss recognition across all financial institutions, finance types, and regulatory jurisdictions.[263]

In addition to the mandatory reserves, some Islamic banks have set aside reserves to protect investments.[264] Provisions are in place to safeguard capital and investment deposits from any potential loss, including default, and thus minimise withdrawal risk.

The principle of risk-adjusted return on capital (RAROC) is utilised to establish a decision-making criterion that assigns capital to projects and investments based on risk[265]. RAROC can be used to allocate capital between different asset classes and between business units by examining their associated risk and return factors.[266] The allocation of capital to

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[261] سانتوميرا، أنتوني M. (2016)، "إدارة المخاطر للبنوك التجارية: تحليل" مجلة البحوث للخدمات المالية، 12، 83-115. (Santomera, Anthony M. (2016), Commercial bank risk management: a process analysis, Journal of Financial Services Research, 12, 83-115.)

[262] While some Islamic banks also use commercial guarantees, the general understanding is against their use. According to fiqh, only a third party can provide guarantees as a benevolent act and on a cost-of-service basis. Therefore, due to the lack of consensus, this instrument is not used effectively in the Islamic banking industry.

[263] AAOIFI Standard No. 1 provides a framework for recognising gains and losses on Islamic finance. However, with the exception of a few institutions, banks and regulators do not apply these standards..

[264] The Islamic Bank of Jordan was the first to create these reserves, which are created through contributions from depositors and bank owners..

[265] عبيد الله ، محمد (2018)، "الهندسة المالية مع الخيارات الإسلامية"، البحوث الاقتصادية الإسلامية ، 6 (1)، 73-103. (Obaidullah, Mohammad (2018), "Financial engineering with Islamic options", Islamic Economic Studies, 6 (1), pp.73-103)

[266] Thomson, The intelligence, technology and human expertise you need to find trusted answers 2001, p. 260.

various modes of financing can be accomplished by using RAROC in Islamic finance. Various Islamic financial instruments exhibit differing risk profiles. For example, murabaha is reckoned to be less risky than profit-sharing financing methods such as mudaraba and musharaka.

Using historical data to assess diverse investment financing methods, it becomes achievable to estimate anticipated and maximum losses at a specific level of certainty throughout a certain period regarding various financial tools. This data can be employed to distribute risk capital to the different modes of Islamic finance. Moreover, the RAROC notion can be utilised to assess the return or profit rate for diverse instruments via equating their RAROCs, illustrated below.

$$RAROC_i = RAROC_j$$

Or (*risk-adjusted return)i /(risk capital)i = (risk-adjusted return)j /(risk capital)j*

Where i and j represent different funding modes (mudaraba and musharaka, respectively). Therefore, if instrument j is riskier (i.e. has a higher denominator), the financial institution may demand a higher yield to equalize the RAROC of the instrument to the yield of instrument i.

Islamic banks encounter supplementary risks owing to the nature of their balance sheet and Shariah compliance. The absence of financial tools accessible to Islamic banks creates a significant impediment to market risk management in comparison to conventional banks[267] . While certain fiqh-related matters may be determined by Shariah scholars, the creation of infrastructure institutions ought to be overseen by regulatory authorities and governments across various countries. It's evident that Islamic banks, on account of religious constraints, cannot access the traditional banking market. Nevertheless, traditional banks provide Islamic products in addition to their own products. Competition undoubtedly enhances efficiency, and an equal and fair competition environment is vital for a robust competition atmosphere.[268] To establish a balanced competition between Islamic and conventional banks,

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[267] خان ، طارق وحبيب أحمد)2018 (، "إدارة المخاطر :تحليل المشكلات في الصناعة المالية الإسلامية "، الورقة الدورية رقم 5. 1 ، المعهد الإسلامي للبحث والتدريب ، البنك الإسلامي للتنمية ، جدة.(Khan, Tariqullah and Habib Ahmed (2018), "Risk management: an analysis of challenges in the Islamic finance industry", Occasional Paper no. 5, Islamic Research and Training Institute, Islamic Development Bank, Jeddah).

[268] كوخ ، تيموثي)2015 (، إدارة البنوك ، أورلاندو :درايدن برس.(Koch, Timothy (2015), Bank Management, Orlando: Dryden Press..)

it is imperative that Islamic banks are equipped with comparable infrastructure support systems. Adopting a risk management culture is crucial for Islamic banks. A recommended method to implement such a culture is by instituting an internal rating system. This system should weigh the risks of each asset separately[269]. In the medium to long term, they may develop into more advanced systems. The implementation of such a system could aid in addressing deficiencies in the risk management system, which could result in an improved rating by regulators and external credit rating agencies.[270]

Stakeholders within Islamic financial institutions exhibit greater risk awareness compared to their counterparts in conventional firms. Consequently, they require their banks, mutual fund companies and other financial institutions to adopt a risk-mitigating approach for every transaction. Such demands cannot be made by conventional customers and investors.[271].

This increased awareness among stakeholders in the Islamic financial sector exists for several key reasons [272]:

Profit and loss sharing. Islamic banking products, such as savings accounts and investment products, are structured on contracts that entail profit and loss sharing between the customer and the institution.

When a client invests in a contractual activity, they are aware that their principal will be repaid and their investment rewarded only if it is profitable. This investment decision carries inherent risk, and they expect their financial institution partner to take precautions with their investment.

To ensure Shariah compliance, Islamic financial transactions must avoid interest, gambling, speculation, and prohibited industries.[273] Depositors and investors frequently turn

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[269] Kolb, Robert W. (2017), Futures Options i Swaps, Malden, MA: Blackwell Publishers, P.478.

[270] Abdul-Rahman, Yahia (2006) Islamic instruments for managing liquidity International Journal of Islamic Financial Services Vol. 1 No.1

[271] الكهف ، منذر (2006 ، 22-23 أبريل) ورقة ابتكار وإدارة المخاطر في التمويل الإسلامي تم إعدادها لمنتدى هارفارد الدولي السابع حول التمويل الإسلامي (Kahef, Monzer (2006, April 22-23) Innovation and Risk Management in Islamic Finance Paper prepared for the 7th Harvard International Forum on Islamic Finance.)

[272] ساركر، M. A. A. (1999) الخدمات المصرفية الإسلامية في بنغلاديش :الأداء، مشاكل وآفاق المجلة الدولية للخدمات المالية الإسلامية (1)،(Sarker, M. A. A. (1999) Islamic Banking in Bangladesh: Performance, Problems,and Prospects International Journal of Islamic Financial Services, 1.)

[273] Kahef, Monzer (2006, April 22-23) Innovation and Risk Management in Islamic Finance Paper prepared for the 7th Harvard International Forum on Islamic Finance.

to Islamic firms due to their adherence to Shariah principles, but they are also conscious that this commitment somewhat restricts the firms. Shariah compliance elevates specific financial risks.

Due to the Islamic financial industry's relatively short history and the regulatory restrictions of Shariah law, Islamic financial institutions sometimes struggle to manage their risks as effectively as their conventional counterparts[274] . The Islamic capital market is currently less developed compared to its conventional counterpart. Therefore, there are limited options available to assist Islamic firms in reducing liquidity risk. However, such options are not yet widely available for Islamic firms.

Conventional capital markets provide financial institutions with instruments, such as short-term or long-term debt and derivatives, to reduce liquidity risk. [275] But these instruments are generally prohibited for Islamic firms because they are not Shariah compliant.

In addition, Islamic financial firms do not have access to the same hedging techniques used by conventional firms.[276] There are few hedging techniques currently available to Islamic firms, with disagreement among Shariah scholars as to their Shariah compliance.

As Islamic institutions develop innovative product lines to better compete in global financial markets, risk management will assume greater significance[277] .

Islamic financial firms offer instruments based on equity investments. Two contracts are commonly used for these instruments: mudaraba (partnership) and musharaka (joint venture). The risk of equity investments arises from the potential decline in the fair value of the offering owned by the Islamic firm[278] .

A firm's equity involvement can range from direct investments in projects or joint ventures to indirect Shariah-compliant investments such as shares.[279] If a firm experiences a

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[274] ساركر، M. A. A. (1999) (1(الخدمات المصرفية الإسلامية في بنغلاديش :الأداء، مشاكل وآفاق المجلة الدولية للخدمات المالية الإسلامية، (Sarker, M. A. A. (1999) Islamic Banking in Bangladesh: Performance, Problems,and Prospects International Journal of Islamic Financial Services)

[275] لوكا Errico وميترا فرح بخش)1998 (للمصارف الإسلامية :قضايا في تنظيم الحصيفة والإشراف وصندوق النقد الدولي ورقة العمل رقم WP / 98/30. (Luca Errico and Mitra Farahbaksh (1998) Islamic Banking: Issues in PrudentialRegulation and Supervision, IMF Working Paper No. WP/98/30)

[276] كوخ ، تيموثي)2015(، إدارة البنوك ، أورلاندو :درايدن برس. (Koch, Timothy (2015), Bank Management, Orlando: Dryden Press..)

[277] COSO (2004). Enterprise Risk Managemnet – Integrated framework.

[278] المجلة الدولية لإدارة المشاريع ، 16)6(، 343-333 (Chapman, R. J. (1998). The effectiveness of working group risk identification and assessment techniques. International Journal of Project Management, 16(6), P. 333-343.)

[279] كيرني ، سي(.1996.)التكامل المالي الدولي :القياس والسياسة الآثار .مجلة آسيا والمحيط الهادئ للاقتصاد ، 1)3(، 347 – 364 (Al-Omar & Abdel-Haq (1996).

decline in the value of its equity interest, it may lose any potential return on its investment and may even lose its invested capital. This situation can cause additional problems, such as credit and liquidity risk[280] .

An Islamic firm can try to mitigate equity risk by analysing some key factors, including the following, before signing a contract [281] :

- background and business plan of the managing partner or management team;
- The anticipated legal and economic environment in which the project will be implemented;
- In addition, the firm must continue to monitor the investment after the contract is signed to avoid information asymmetry with its partner(s); return risk arises from unexpected changes in market returns that negatively affect the firm's profits[282]. In a conventional financial institution, returns are fixed; both the firm and the fund provider know in advance what their profits will be. In Islamic firms, returns are uncertain, and investors share profits and losses with the institution.

If the firm does not follow the principles and guiding laws of Shariah, the consequences can be severe[283]. If one or more Islamic scholars indicate that an Islamic firm is deviating from compliance, its reputation will fall.

Here are some principles of Shariah compliance:[284]

Compliance with transactions and operations. Even if a firm begins to comply, its internal controls should ensure that transactions and operations are continually reviewed. The Shariah Board is responsible for conducting regular Shariah reviews to identify possible inconsistencies that could undermine the firm's reputation.[285]

Islamic banking, theory, practice & challenges. London & New Jersey: Oxford University Press, Karachi, and Zed Books.)

[280] Iqbal، Z.، وميراخور، A. (2007). مقدمة في التمويل الإسلامي ، النظرية والتطبيق. جون وايلي وأولاده (بي تي إي المحدودة ، آسيا) سنغافورة. (Iqbal, Z., & Mirakhor, A., (2007). An introduction to Islamic finance, theory and practice. John Wiley & Sons (Asia) Pte Ltd., Singapore.(Iqbal Z. & Mirakhor A., (2007).)

[281] Sundarajan، V.، & Errico، L. (2002). المؤسسات المالية الإسلامية والمنتجات في النظم المالية العالمية: القضايا الرئيسية في إدارة المخاطر والتحديات المقبلة. (صندوق النقد الدولي، ورقة العمل رقم WP / 02/192). Sundarajan, V., & Errico, L. (2002). Islamic financial institutions and products in the global financial systems: Key issues in risk management and challenges ahead. (International Monetary Fund, Working Paper No WP/02/192).

[282] Iqbal، Z.، وميراخور، A. (2007). مقدمة في التمويل الإسلامي ، النظرية والتطبيق. جون وايلي وأولاده (بي تي إي المحدودة ، آسيا) سنغافورة.

[283] Romney, M. B., & Steinbart, P. J. (2012). Accounting information systems. England: Pearson-Prentice Hall.

[284] (محي الدين ، 2012). المصرفية الإسلامية والمالية تلاحظ بالطبع. معهد بحوث المحاسبة ، جامعة مارا للتكنولوجيا ، ماليزيا (Mahayuddin, I. (2012). Islamic banking and finance course notes. Accounting Research Institute, University Technology MARA, Malaysia.)

[285] شابمان ، ر. ج. (1998). فعالية تقنيات تحديد وتقييم مخاطر مجموعة العمل. المجلة الدولية لإدارة المشاريع ، 16 (6)، 333-343. (Chapman, R. J. (1998). The effectiveness of working group risk identification and assessment techniques. International Journal of Project Management, 16(6), P. 333-343.)

Development of appropriate products: Every product developed by an Islamic financial institution must be approved by the Shariah Board of Institutions.[286] Once internal approval has been secured, the product is then sent to third-party regulators, who also review its Shariah compliance and may reject it if they have compliance concerns. A firm's internal controls should carefully describe this process so that any product submitted to regulators is Shariah compliant without question[287].

Conversely, a firm's Sharia board may reject a product idea that is subsequently approved by another institution. In these situations, the company's stakeholders may request additional confirmation of the product's Sharia compliance. This product development risk is unique to the Islamic finance industry.

Therefore, considering the aforementioned points, it can be concluded that economic development will occur only if the global community acquires moral and ethical qualities and employs them appropriately.

[286] COSO (2004). Enterprise Risk Managemnet – Integrated framework

[287] الكهف ، منذر)2006 ، 22-23 أبريل (ورقة ابتكار وإدارة المخاطر في التمويل الإسلامي تم إعدادها لمنتدى هارفارد الدولي السابع حول التمويل الإسلامي (Kahef, Monzer (2006, April 22-23) Innovation and Risk Management in Islamic Finance Paper prepared for the 7th Harvard International Forum on Islamic Finance.)

SECTION 3

ADAPTABILITY OF ISLAMIC FINANCE TO MODERN TECHNOLOGICAL INNOVATIONS

The difficulty lies not so much in developing new ideas as in escaping from old ones

John Maynard Keynes

A quote by John Maynard Keynes suggests that it is often difficult to move away from established beliefs and practices, even when new and better ideas are available. In the context of Islamic finance, this quote could mean that while modern technological innovations offer new opportunities and possibilities for the industry, there may be resistance to adopting them due to traditional approaches and perspectives. This highlights the need for the industry to remain open-minded and adapt to change in order to evolve and grow.

The rapid development of technology has greatly influenced the financial industry, including Islamic finance. It is crucial to adapt Islamic finance to modern technological innovations to ensure the continued growth and relevance of the industry. Islamic financial institutions have acknowledged the importance of enhancing their services and maintaining competitiveness through technological advancement.

One of the notable technological progressions in Islamic finance is the implementation of digital platforms. Online banking, mobile applications, and other digital channels have enhanced accessibility and convenience for customers, consequently rendering banking services more economical. Additionally, they have enabled Islamic financial institutions to extend their outreach and provide services to a broader audience.

Alongside this, Islamic finance has embraced blockchain technology as another innovative leap. The unchangeable nature of blockchain technology offers transparency and security, aligning with the ethical values of Islamic finance. Furthermore, it increases transactional efficiency and lowers costs, making it a desirable solution for Islamic financial institutions.

Therefore, the integration of modern technological advancements is crucial in maintaining the growth and relevance of Islamic finance. By utilizing digital platforms and blockchain technology, Islamic financial institutions can offer improved services to their clients without compromising their ethical principles.

3.1 Adaptability of the Islamic banking sector to the global financial crisis

The measure of intelligence is the ability to change

Albert Einstein

This quote from Albert Einstein underscores the significance of being adaptable in all circumstances. It suggests that intelligence is not only about knowledge or ability, but also about the capacity to adjust and transform in response to new situations. In the context of the Islamic banking sector, this quote may be interpreted to imply that to flourish in the midst of the global financial crisis, Islamic financial institutions must be ready to adjust and develop in accordance with the evolving economic environment. By embracing technological innovation and exploring new financial products, the Islamic banking sector can improve its position to withstand economic downturns and continue to fulfil its customers' needs.

Considering the principle of permissibility, the Islamic financial system can operate within the constraints of the Shariah. The recent history of the Islamic financial sector's growth is defined by new decisions made by Shariah scholars. A characteristic of the Islamic financial system is its continual development, granting it the ability to adjust to the patterns of the worldwide economy.

Risk entails both vulnerability of asset values and opportunities for revenue growth. Successful firms take advantage of these opportunities [288]. An important element of risk management is understanding the trade-off between risk and return for different assets and

[288] Damodaran Aswath is a professor who is known as the "Dean of Evaluation", the information was taken from his personal website, where all his papers and lectures are posted.

investors. Investors can only expect a higher rate of return by increasing their risk appetite[289]. As the primary goal of financial institutions is to enhance value for shareholders through the acquisition of assets by various shareholder-owned funds, the management of associated risks is a crucial function of these institutions.

Islamic finance has shown resilience in recent times when the global economic recovery has been sluggish, and conventional Western banks have faced pressure from the crisis. During the global financial and economic crisis, Islamic banks emerged on top, with none facing bankruptcy proceedings or requiring government subsidies in 2008-2009 compared to conventional banks.

According to an IMF study, Islamic banks experienced asset growth exceeding that of conventional banks by over two times during and after the crisis. At the same time, nevertheless, the mean assets of Islamic banks are still less than those of conventional banks[290].

Empirical proof of the hypothesis that there is a linear regression relationship between the GDP growth rate of a country and the level of development of banking activities that comply with Shariah religious norms involves building a mathematical model of an object containing two groups of elements:

1) the characteristic of the object to be determined (unknown values) - a vector $Y = (y_j)$;

2) characteristics of external (relative to the modelled object) conditions that change - vector $X = (x_j)$;

The sets of parameters X can be considered as exogenous values (i.e., those that are determined outside the model), and the values belonging to the vector Y can be considered as endogenous values (i.e., those that are determined by the model).

A mathematical model, therefore, should be understood as a conditional mechanism for transforming the external conditions of object X into the characteristics of object Y to be found. This type of interconnection of variables is

[289] Vogel, Frank E. and Samuel L. Hayes (2018), Islamic Law and Finance: Religion, Risk and Return, The Hague, The Netherlands: Kluwer Law International.

[290] Islamic Financial Services Industry Stability Report 2016. Kuala Lumpur: Islamic Financial Services Board, 2016. 154 p.

considered functional and consists in building a functional model, the task of which is to cognise the essence of the object through the most important manifestations of this essence: activity, functioning, behaviour. The internal structure of the object is not studied, and therefore information about the structure is not used. Functional econometric models quantitatively describe the relationship between the input X of an economic system and the output Y. In general, an econometric model can be written as follows:

$$Y = f(x) + u \tag{3.1}$$

where *X*— initial economic indicators;
u — random (or stochastic) component..

Given that the dependent variable Y depends on i, it is also stochastic, and therefore, when identifying a correlation-regression relationship between economic indicators, it is necessary to reduce the error caused by the presence of a random component within certain permissible limits, which in practice is carried out by linear approximation of the model parameters:

$$Y = a_0 + a_1 X + u \tag{3.2}$$

where a_0 and a_1 — unknown parameters.

The scattering of independent variables on the coordinate plane is the main factor of data distortion in a regression model. In order to improve the adequacy of linear regression, the principle of minimising the sum of squares of deviations of points from a certain line, which generally describes the regression dependence, is used - the least squares method (LSM). This method consists of finding the following a_0 and a_1, for is $\sum_{i=1}^{n} u_i^2$ minimum.

A necessary condition for minimising a random variable is that the partial derivatives of the function f (x) are equal to zero for each of the parameters a_0 and a_1. For a linear dependence, the MPC will look like this:

$$F = \sum_{i=1}^{n} u_i^2 = \sum_{i=1}^{n} (y_i - \hat{y}_i)^2 = \sum_{i=1}^{n} (y_i - \hat{a}_0 - \hat{a}_1 x_i)^2 \to \min \qquad (3.3)$$

provided that

$$\begin{cases} \dfrac{\partial F}{\partial a_0} = -2\sum_{i=1}^{n} (y_i - \hat{a}_0 - \hat{a}_1 x_i) = 0 \\ \dfrac{\partial F}{\partial a_1} = -2\sum_{i=1}^{n} x_i (y_i - \hat{a}_0 - \hat{a}_1 x_i) = 0 \end{cases} \qquad (3.4)$$

After performing elementary transformations, we obtain a system of linear equations:

$$\begin{cases} \sum_{i=1}^{n} y_i - n\hat{a}_0 - \hat{a}_1 \sum_{i=1}^{n} x_i = 0 \\ \sum_{i=1}^{n} x_i y_i - \hat{a}_0 \sum_{i=1}^{n} x_i - \hat{a}_1 \sum_{i=1}^{n} x_i^2 = 0 \end{cases} \qquad (3.5)$$

Where we get it from:

$$\begin{cases} n\,\hat{a}_0 + \hat{a}_1 \sum_{i=1}^{n} x_i = \sum_{i=1}^{n} y_i \\ a_0 \sum_{i=1}^{n} x_i + a_1 \sum_{i=1}^{n} x_i^2 = \sum_{i=1}^{n} x_i y_i \end{cases} \qquad (3.6)$$

By solving the system of linear equations, we obtain estimates of the parameters a_0 and a_1 - $\widehat{a_0}$ and $\widehat{a_1}$:

$$\hat{a}_1 = \frac{\sum_{i=1}^{n} x_i \sum_{i=1}^{n} y_i - n\sum_{i=1}^{n} x_i y_i}{\left(\sum_{i=1}^{n} x_i\right)^2 - n\sum_{i=1}^{n} x_i^2} \text{ та} \qquad (3.7)$$

$$\hat{a}_0 = \frac{\sum_{i=1}^{n} x_i \sum_{i=1}^{n} x_i y_i - \sum_{i=1}^{n} x_i^2 \sum_{i=1}^{n} y_i}{\left(\sum_{i=1}^{n} x_i\right)^2 - n\sum x_i^2}. \qquad (3.8)$$

An important step in building any regression model is to determine the significance (adequacy) of the obtained parameter estimates. There are various algorithms for conducting such a study, most of which involve assessing the dependence of:

- of the entire array of explanatory variables (χ^2 — «xi»- square);
- of each explanatory variable with the remaining variables (F- criterion);
- of each pair of explanatory variables (t- criterion).

These criteria, when compared with their critical values, give grounds to draw specific conclusions about the presence or absence of multicollinearity of explanatory variables and their adequacy to the real processes being modelled.

Let the vectors of independent variables of the econometric model $X_1, X_2, X_3 \ldots X_m$. The elements of normalised vectors are calculated by the formula:

$$x_{ik}^{*} = \frac{x_{ik} - \bar{x}_k}{\sqrt{\sigma_{x_k}^2 n}}, \qquad (3.9)$$

where n — number of observations $(i = \overline{1,n})$;

m — number of explanatory variables $(k = \overline{1,m})$;

$\bar{x}_k$ — is the arithmetic mean of the k-th explanatory variable;

$\sigma_{x_k}^2$ — is the variance of the k-th explanatory variable.

In order to detect multicollinearity, the correlation matrices of normalised variables are also found:

$$r_{xx} = X^{*'} X^{*}, \qquad (3.10)$$

where X^{*} — matrix of normalised independent variables, $X^{*'}$ — matrix transposed to a matrix X^{*}.

The next step is to calculate the values of χ^2:

$$\chi^2 = -\left[n - 1 - \tfrac{1}{6}(2m + 5)\right] ln \ |r_{xx}|, \qquad (3.11)$$

where $|r_{xx}|$ — determinant of the correlation matrix r_{xx}.

The value of this criterion is compared with the table value at $\frac{1}{2} m (m-1)$ degrees of freedom and levels of significance α. If $\chi^2_{fact} > \chi^2_{tab}$, then there is multicollinearity in the array of independent variables.

The inverse matrix is determined by the formula:

$$C = r_{xx}^{-1} = \left(X^{*\prime} X^{*}\right)^{-1} \tag{3.12}$$

And the calculation of F-criteria accordingly

$$F_k = (c_{kk} - 1)\ \frac{n-m}{m-1}, \tag{3.13}$$

where c_{kk} — diagonal elements of the matrix C.

The actual values of the criteria are compared with the tabulated values at $m-1$ i $n-m$ degrees of freedom and levels of significance α. If $F_{k\,\text{fact}} > F_{\text{tab}}$, the corresponding k the explanatory variable adequately describes the process under study.

Coefficient of determination for each variable:

$$R_k^2 = 1 - \frac{1}{c_{kk}} \tag{3.14}$$

If the coefficient of determination is close to one, then the regression coefficients generally adequately explain the process under study.

The next step is to calculate the t-criteria:

$$t_{kj} = \frac{r_{kj}\sqrt{n-m}}{\sqrt{1-r_{kj}^2}} \tag{3.15}$$

Actual values of the criteria t_{kj} are compared with the tabular ones at $n-m$ degrees of freedom and levels of significance α. If $t_{kj} > t_{tab}$, the model coefficients adequately explain the independent variables.

In line with our hypothesis that the GDP growth rate of respective countries is directly impacted by the growth rate of active and passive operations of Islamic banks, we constructed a regression model. The model matched the dependent variable, GDP growth in % (GDP), with the dependent variables which typically characterise the level of development of Islamic finance in a country: the growth rate of syndicated loans and financing raised under joint investment programmes (Musharaka). The study analysed the growth rate of loans for financing foreign economic activities and current assets of enterprises using Murabaha, as well as the growth rate of insurance contracts that comply with Shariah norms like ijara and istisna.

Statistical data from 16 countries, each with different usage of financial instruments that adhere to Islamic religious norms, were considered (refer to Table 3.1).

Table 3.1. Average growth rates of model inputs in 2011-2018

Country	GDP growth rate, %.	The volume of musharak usage, in %	The volume of murabaha used, in %	The volume of ijar and istisna use, in %.
Saudi Arabia	2,125	22,7	18,1	40,2
Bahrain	4,022	20,6	16,6	33,7
Kuwait	6,118	18,1	29,4	14,6
UAE	5,147	39,2	30,8	19,9
Qatar	3,109	28,4	8,8	7,8
Malaysia	1,890	13,8	12,5	21,6
Algeria	3,051	11,8	17,2	22,5
Indonesia	5,271	21,7	9,4	14,5
Thailand	4,216	19,5	10,1	12,7
Morocco	2,891	20,4	14,3	16,6
Egypt	2,178	18,6	20,7	17,8
Philippines	2,541	17,7	19,9	20,2
Yemen	3,109	15,6	10,5	14,8
Bengladesh	4,556	14,1	18,8	19,5
Pakistan	3,925	9,1	10,7	16,6
Iran	2,856	12,2	16,9	20,7

Source: Calculated by the authors based on data from [https://www.globenewswire.com/news-release/2019/03/20/1758003/0/en/Global-Islamic-Finance-Markets-Report-2019-Islamic-Banking-is-the-Largest-Sector-Contributing-to-71-or-USD-1-72-Trillion.html].

The statistical base of the model, therefore, includes the average growth rates of the variables studied in the regression for the period 2011-2018 for each of the countries for which statistical information is available. The average growth rates (CAGR) of the relevant indicators were determined for each country where Islamic banks and insurance companies are represented:

$$\mathrm{T}_{av} = \sqrt[7]{\frac{Y_{2018}}{Y_{2011}}}, \qquad (3.16)$$

where Y_{2011} if Y_{2018} the value of the indicator in 2011 and 2018, respectively.

This approach allows analysing trends in dynamics, which increases the accuracy of the resulting data.

Based on the data presented in Table 1, a diagram of the model factors was constructed to check the possibility of their analysis by linear regression methods:

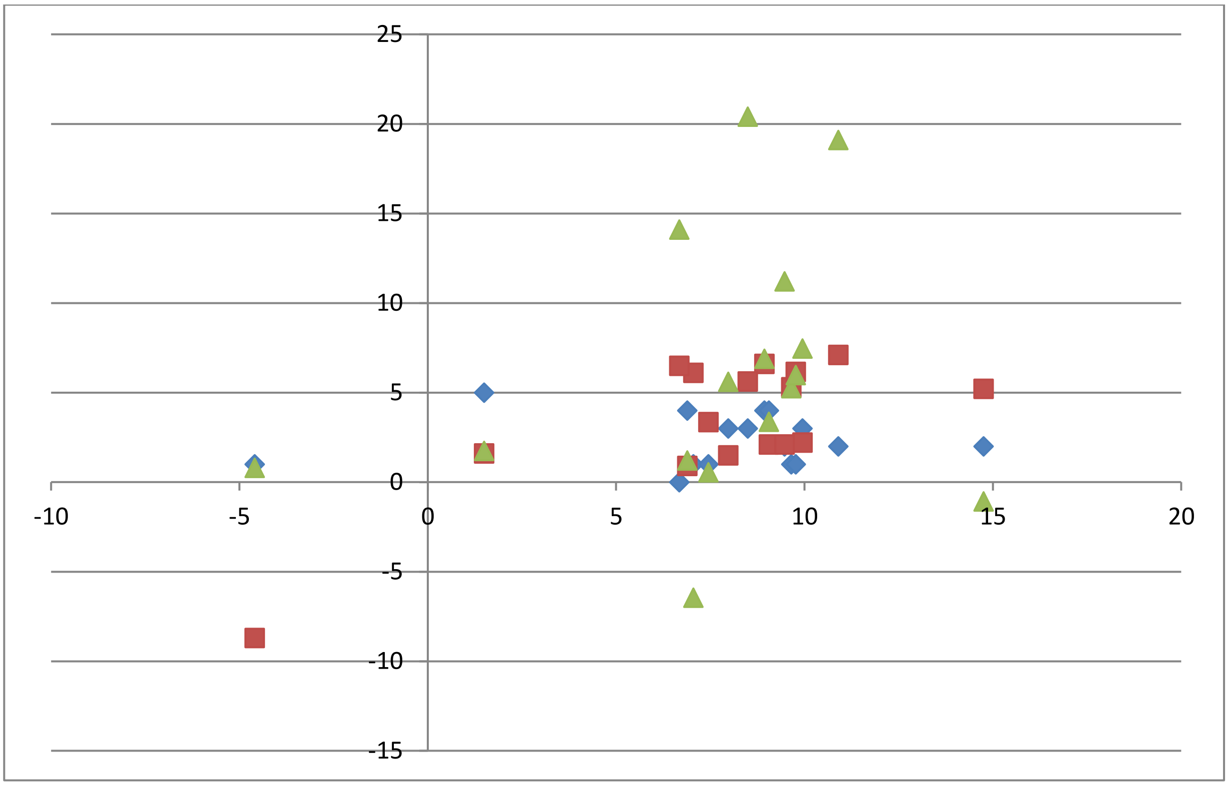

Fig. 3.1. Checking model output for compliance with linear regression assumptions

Notes: Independent variables 1,2,3 - growth rate of syndicated loans and financing raised under joint investment programmes (Musharaka), growth rate of loans to finance foreign economic activity and working capital of enterprises (Murabaha) and growth rate of insurance contracts concluded that comply with Shariah religious norms (ijara and istisna).

In Fig. 3.1, the values of the dependent variable for each of the factors were plotted on the abscissa axis, and the independent variables on the ordinate axis. The analysis of the location of the model factors suggests that most of the values are located around the conditional centre, i.e. there may be a linear relationship between the independent and dependent variables. Thus, the linear regression equation will have the form:

$$GDP=a_0+a_1MSC+a_2MX+a_3II, \qquad (3.17)$$

where GDP is the growth rate of the country's GDP, MSC is the growth rate of syndicated loans and financing raised under joint investment programmes (Musharaka),

MX is the growth rate of loans granted to finance foreign economic activity and current assets of enterprises (Murabaha),a

II - growth rate of insurance contracts concluded that comply with Shariah religious norms (ijara and istisna),

a0...a3 - coefficients characterising the degree of influence of each of the independent variables on the GDP growth rate.

As a result of the calculations, the following regression equation was obtained:

$$GDP=4,46+0,21\times MSC+0,86\times MX-0,02\times II \qquad (3.18)$$

The coefficients' values before each factor demonstrate the degree to which an independent variable impacts GDP growth while keeping the others constant. The negative coefficient before the third factor suggests an inverse correlation with the dependent variable, which means that a 1% rise in value leads to a decrease in GDP. This dependency can be explained by the fact that life insurance, in compliance with Shariah religious norms, is partially financed by the state budget. As a result, the costs of insurance, particularly for countries involved in construction, are relatively more significant for the state budget. The effects of utilising life insurance in the economy are felt with a certain lag, only after the constructed object is put into operation.

Of the two factors that positively impact economic growth, the growth rate of syndicated loans and financing raised under co-investment programmes is the most significant. Increasing it by 1% leads to a 0.86% rise in GDP growth. Additionally, the volume of loans granted for financing foreign economic activity and current assets of enterprises also contributes positively to GDP growth.

To verify the model's adequacy, we employed standard tests, especially the determination coefficient value R2, which amounted to 0.6. Considering the number of observations (16), this is a sign of high reliability of the model. It confirms that the GDP growth variance aligns with actual indicators. The coefficients' p-values were 0.024, 0.037, 0.017, and 0.044, respectively. Consequently, all the coefficients identified are significant and below the established significance level of 0.05.

The research demonstrates that Islamic banks' economic policy permitted them to counteract the negative impact of the 2008 financial crisis on profitability. The adherence to Shariah principles, small investment portfolios, and a decrease in lending rates had an unexpected positive impact on the competitiveness of the Islamic banking system. It defied prevailing expectations.

Islamic banks supported lending twice as much as conventional banks. This suggests that they have made a greater contribution to maintaining macroeconomic and financial stability through more affordable lending. Islamic banks are closer to the real economy than conventional banks, as they do not offer conditional or virtual products. The market share of Islamic banks is likely to continue to grow.

But the crisis also revealed the shortcomings of Islamic banks. Priority areas for their development have been identified: strengthening financial regulation and supervision. The development of Islamic banks is constrained by a number of factors related to the specifics of their activities:

– different application of supervisory and accounting standards;
– the risk of non-compliance with Shariah;
– difficulties in liquidity management;
– lack of risk hedging instruments;
– lack of qualified personnel[291].

Despite the existing challenges that hinder the development and expansion of Islamic banks, this industry is one of the fastest growing in the global financial services industry.

The entry of Islamic finance into Western markets shows that it is being taken seriously by regulators and financial institutions. And the crisis proved that Islamic banking products are a competitive alternative to traditional ones. According to experts,

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[291] Hadrat Khalifatul–Masih II. The economic system of Islam. M. : Tilford, 2011. 155 c.

the main trends in the development of Islamic banks in the coming years will be

- strengthening of positions in the market segments of social groups with medium and low incomes, in small and medium-sized businesses, and in the financial markets of developing countries with a large share of Muslim population;
- gradual transition from quantitative growth of Islamic financial products to their simplification and standardisation;
- the growing importance of financial innovations and risk hedging instruments.

Further geographical expansion of Islamic banking requires, first of all, the creation of appropriate infrastructure, which is most developed in most GCC countries, Iraq, Iran and Malaysia. The existing financial centres are located in Bahrain, Malaysia, the UAE and the UK.

According to Ernst & Young, the Middle East and North Africa will experience significant economic growth in the near future. The assets of Islamic banking in this region are projected to reach USD 990 billion by 2020. In order to reduce the outflow of investments from the country, Oman announced in early 2017 its intention to join the development of Islamic banks and meet the regional demand for Shariah-compliant products[292].

Egypt is planning to release sukuk, or sovereign Islamic bonds. Libya and Tunisia are exploring the expansion of Islamic banking in their economies. In the West, the United Kingdom takes a proactive stance on the development of Islamic banks, with around 22 banks offering Shariah-compliant services (five of which are entirely Islamic).

The United States trails behind the UK in terms of the number of Islamic banks. Islamic banks are present in Australia, Switzerland, France, Canada, Germany, Luxembourg, Ireland, Kazakhstan and the Cayman Islands. Their reach extends specifically to countries with advanced banking sectors and high investment potential.

The prospects for this industry are evident from a few

[292] Iqbal Z., Mirakhor A. : An Introduction to Islamic Finance: Theory and Practice // John Wiley & Sons, Pte. Ltd, 2018. 74 p.

key facts: firstly, Muslims possess the largest stockpile of hydrocarbon raw materials, which will continue to be the biggest energy source globally in the near future. Significant revenues generated from the sale of this raw material will underpin the development of this industry.

Additionally, the growing tensions between Islamic and Western cultures are stimulating the transfer of funds from traditional banking systems to Islamic ones.

Finally, the liabilities of Islamic banks are often conditional and free of charge. As a result, conventional bankers with financial engineering expertise are compelled to compete for these liabilities. Competition within the industry promotes the advancement of banking practices grounded in religious principles.

Additionally, numerous large multinational corporations now utilise the Islamic banking system, drawn in by the prospect of reduced fees for loan usage, whilst Islamic banks are intrigued by the dependability of loan repayments.

Fifthly, the establishment of a Shariah-compliant capital market and a unified Islamic currency would further promote the growth of the banking sector.

However, some argue that Islamic banking may remain restricted to a specific market segment. The development of Islamic finance is restricted by the religious beliefs of Muslims. A believer must demonstrate faith by rejecting interest, speculation, repayment of borrowed funds, targeted use of funds, and participating in profit sharing.

Taking these views into account, it is important to recognise that the Islamic banking system has significant potential for development, not only in technical and quantitative terms, but also as a new philosophy for the global community. This philosophy suggests the implementation of ethical restrictions in all human activities, whether it involves harvesting wood or providing financial services[293].

The traditional banking system is only now beginning to take on ethical responsibilities. First of all, these are measures to combat money laundering. The Islamic model is noteworthy for its attempt to make the real sector of the economy

[293] UNCTAD: Islamic Finance and Structured Commodity Finance Techniques: Where the Twain Can Meet. 2018. 196 p.

dependent on the financial sector, but vice versa, as monetary assets are created in response to investment opportunities in the real sector.

That is why the real sector determines the rate of return in the financial sector. In other words, the manufacturing sector begins to create a favourable investment climate for itself. With this in mind, we can note the similarities between the basic principle of Islamic banks (sharing profits and losses between partners) and the principle of the stock market in a traditional economy. However, in the Western world, only large companies can issue shares, while virtually any devout Muslim can become a client of an Islamic bank. Lending based on similar principles requires close interaction between lenders and borrowers. In this case, both between the depositor and the bank and between the bank and the borrower[294].

In summary, the international crisis has given Islamic banks a chance to showcase their resilience. However, it has also exposed crucial problems that must be tackled for them to maintain a sustainable growth rate.

Firstly, there is a shortage of solid liquidity risk management infrastructure. Relying on retail deposits more heavily than traditional banks, Islamic banks have access to more stable sources of funds. However, they encounter significant challenges in managing liquidity.

These challenges include a shallow money market due to the limited number of participants and a lack of instruments that can serve as collateral for borrowing or that can be discounted (sold) through the central bank's re-pricing mechanism.

Some Islamic banks tackle these concerns by over-liquidating their balance sheets, where they hold a considerable amount of quasi-monetary assets that generate lower returns than loans and securities, therefore sacrificing their profit-making potential. For instance, Islamic financial institutions hold 40% more liquidity than their traditional counterparts. As a consequence, though this approach to liquidity reduced risks during the crisis, it is not the best solution in more stable conditions.

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[294] Mufti Muhammad Taqi Usmani. An introduction to Islamic Finance. M.: HousePrint, 2017. 169 p.

To the extent that Islamic banks attempt to emulate conventional banks in the creation of their financial products, they open themselves up to parallel credit, liquidity, and solvency risks that result in comparable systemic instability as in the conventional banking industry. The pursuit of conformity with conventional banking practices stems from the current operational constraints and regulatory landscape, which lack the requisite support and institutional infrastructures for a thriving Islamic banking industry.

A key reason for the Islamic banks' heavy dependence on leveraged funding is linked to these challenges. Consequently, these factors expose the industry to financial instability, akin to that faced by their conventional counterparts. Despite Islamic banks only gradually entering markets within the former Soviet Union, particularly those with a significant Muslim population, we believe the Ukrainian banking system should conduct a comprehensive analysis of potential risks and regulations, which should have a systemic nature. In particular, this does not contradict the Basel III standards, which are currently being revised due to the global financial crisis triggered by the prevalence of speculative components in banking assets.

3.2 The impact of the Covid-19 pandemic on Islamic banks

The ultimate measure of a man is not where he stands in moments of comfort and convenience, but where he stands at times of challenge and controversy

Martin Luther King Jr.

This quote can be used to introduce the topic of the impact of the Covid-19 pandemic on Islamic banks and the challenges they face in this difficult time. It highlights the idea that true character is revealed in times of crisis, and the pandemic has undoubtedly tested the resilience and adaptability of Islamic banks around the world.

The COVID-19 pandemic and the resulting lockdown have adversely affected the worldwide economic progress. In 2020, the Islamic finance sector experienced a considerable slowdown in its rate of growth compared to the previous year when it saw a swift boost of 13%. This year, Islamic financial organizations encountered a dual impact: adjusting to the Covid-19 pandemic and enduring historically low oil prices. However, S&P suggests that Covid-19 may unleash the sector's long-term potential, providing opportunities for more integrated and transformational growth. This includes greater standardisation, a stronger emphasis on the industry's social responsibility, and the adoption of financial technology. The pandemic has had a significant impact on the global economy and the banking sector, including Islamic banks.

In particular, the impact of the pandemic on Islamic banks has resulted in the following:

Changes in the economic environment: The pandemic has triggered a worldwide economic downturn, which has impacted and will continue to affect the solvency of banks' clients and the overall resilience of banks. This may lead to a surge in the number of outstanding loans and a decline in the profits of Islamic banks.

Changes in consumer behaviour: The pandemic has impacted consumer behaviour, resulting in a reduction in demand for certain services and products, which could lead to a decline in the volume of transactions conducted by

banks. Governmental regulatory policies may undergo changes to ensure the financial stability of banks such as alterations to liquidity and capital regulations.

The employment of technology is on the rise. The pandemic has compelled many banks to swiftly adopt remote working and technology usage to ensure productivity and security. This could result in augmented investment in technology and digital tools, which may improve the standard of service and elevate banks' efficiency.

The growth of Islamic banks, and the wider Islamic finance industry, persists globally; several nations are keen to foster and adjust legislation to establish an advantageous climate for Shariah-compliant commerce. The Islamic banking structure showcased its immunity to economic crises during the 2008 financial crisis, engendering interest from not solely the Muslim community, but also from other faiths.

The year 2020 brought negative changes to the operations of Islamic financial institutions due to the pandemic. However, despite restrictions, the industry's assets have increased overall. To evaluate the performance in this sector, one can examine the results of Islamic banking institutions in 2019-2020.

Islamic finance continues to grow in scope and influence, spreading far beyond the Middle East to Muslim-majority countries in Asia and Africa, as well as parts of Europe and beyond. Greater awareness of Islamic finance, coupled with improved legal and regulatory structures in many countries, is helping the sector expand into larger geographic areas, a trend that is unlikely to slow down in the medium term[295].

The Banker 2020 ranking of the top Islamic financial institutions highlights the continued growth of the industry, which has doubled in size over the past decade and has had a compound annual growth rate (CAGR) of around 10.8% since 2006. In total, there are now 47 financial institutions with Shariah-compliant assets of more than $10 billion, an increase from 2019; 27 institutions generated pre-tax profits of more than $500 million in 2019.

Table 3.3 Selected data on the state of Islamic assets in 2020

Total Islamic assets in the rating	**USD 1791 billion**
Total Islamic assets in individual institutions (without windows)	**1338 billion USD**
Total Islamic profits in individual institutions	**16.2 billion USD**
Average return on assets (ROA) of individual institutions	**1,21%**

Source: The Banker 2020 [Electronic resource], access mode: https://www.thebanker.com/Markets/Top-Islamic-Financial-Institutions-2020

In the 2020 rankings, the quantity of financial institutions reporting their Shariah-compliant assets increased to 402 from 395, where the majority (284) were standalone Islamic financial institutions. Simultaneously, the number of conventional lenders listed with Shariah-compliant banking windows in the rankings reduced by two to 118 compared to the

295 S&P Global Ratings: https://www.spglobal.com/_assets/documents/ratings/research/islamic_finance_2020_screen.pdf

preceding year. However, it is improbable that this forms part of a wider global trend.

Shariah-compliant assets worldwide saw significant growth compared to the 2019 rankings, rising by 8.2% to USD 1.79 billion in 2020.

However, the performance varied across regions. The Middle East and North Africa (MENA) witnessed a growing divide between the six Gulf Cooperation Council (GCC) countries and the rest of the region, with assets growing by 9.2% to USD 1.4 trillion. While the GCC's assets grew by 12.2%, the rest of the region recorded a mere 3.8% growth in total assets.

At the same time, Sub-Saharan Africa - the success story of the 2019 rankings with assets growing by 18.2% - experienced a sharp drop in 2020. Total Shariah-compliant assets were down 23.5% year-on-year. At the end of 2019, the region still accounted for the smallest share of total global Shariah-compliant assets at $14.4 billion. Briefly, it had overtaken Australia, Europe, and the Americas in the 2019 rankings. This regional grouping is identified separately by The Banker to analyse the spread of Islamic financial services outside of Muslim countries.

The latter grouping demonstrated notable growth in 2019, with Shariah-compliant assets increasing by more than 20% year-on-year (12.8%). Asia experienced a more moderate growth rate of 5.4%, but with a CAGR of 7.7% over the past five years, it was the fastest growing region.

The significance of the MENA region persists evident since it constituted 77.4% of the overall Shariah-compliant assets in the newest rankings, a slight decrease from 2019, when the region represented 79.5% of assets.

Iran and Saudi Arabia continue to possess, by far, the most substantial markets concerning Shariah-compliant assets, with over $400bn assets held by both markets. Six out of the 10 biggest Islamic lenders stem from these two countries, with just one - the Malaysian-Malaysian banking firm Berhard (Maybank) - established outside the Middle East.

Among individual financial institutions, Kuwait Financial House, which is the largest Islamic bank in Kuwait, recaptured its third position in the overall ranking by assets. However, the bank's acquisition of Bahrain-based Al Ahli United, ranked 32nd in the list, was postponed due to the coronavirus pandemic. The agreement was made in January 2019 and authorized by the central bank of Bahrain in April 2019, creating a financial institution with more than USD 90 billion in Shariah-compliant assets, the second-largest after Saudi Arabia's Al Rajhi Bank, which had USD 102.4 billion in assets at the close of 2019.

Despite the uncertainty caused by economic sanctions against the country, Iran's Islamic banking sector continues to thrive. Four of the country's five largest lenders have seen their Shariah-compliant assets grow by more than 40% year-on-year (although key data is missing for the fifth, Bank Saderat Iran, to determine whether it would also fall into this category). Iran's Bank Mellat, the second largest lender in the global rankings, had a particularly impressive year, with Shariah-compliant assets up 55.4% to $82.3bn and a return on assets (ROA) of 4.6%.

Table 3.4 Top 10 fastest growing wholly-owned Islamic banks with assets over USD 500 million

Rank	Institute	Country	Islamic assets (USD million)	% change
1	Bank of Khartoum	Sudan	1918,27	381,67%
2	Omdurman National Bank	Sudan	1652,60	166,34%
3	Barwa Bank	Qatar	21189,00	73,87%
4	Iraqi Islamic Bank for Inv & Dev	Iraq	686,11	60,74%
5	Gatehouse Bank	UK	881,86	57,17%
6	Mellat Bank	Iran	82304,52	55,38%
7	Jaiz Bank	Nigeria	544,94	54,22%
8	Post Bank of Iran	Iran	3716,90	49,14%
9	Bank Keshavarzi	Iran	38973,00	46,55%
10	Warba Bank	Kuwait	10357,56	43,25%

Source: The Banker 2020 [Electronic resource], access mode: https://www.thebanker.com/Markets/Top-Islamic-Financial-Institutions-2020

Sub-Saharan Africa is considered a high-growth market, although there was a decrease of almost a quarter in total Shariah-compliant assets in the 2020 rankings.

The first and second positions among the 10 fastest-growing Shariah-compliant institutions with assets exceeding USD 500 million were held by Sudanese lenders: Bank of Khartoum and Omdurman National Bank. Another four banks, including

Qatar's Barwa Bank, Iraqi Islamic Bank for Investment & Development, the UK's Gatehouse Bank, and Kuwait's Warba Bank, joined Iran in the ranking of the fastest growing banks.

Bank of Khartoum achieved an impressive 381.7% increase in its Shariah assets in 2019, which was twice as much as Omdurman National Bank's 166.3% increase. Qatar's Barwa Bank came in third with a 73.9% increase.

Across Africa, Jaiz Bank of Nigeria had a notably successful year, with assets rising by 54.2% to reach USD 545 million. Additionally, Al Salam Bank of Algeria grew its asset base by 28.4%, and Faisal Islamic Bank of Egypt saw an increase of 22.5%. All three financial institutions operate in regions with significant opportunities for growth in Islamic banking products.

In contrast, the Australia/Europe/America regions have experienced significant turbulence in recent years. Asset growth in the 2020 rankings increased by 20.3%, following a 12.8% decrease in 2019 and a 20.2% rise in 2018. The region has demonstrated an upward trend with a CAGR of 2.32% over the past five years, suggesting

significant growth potential in the near future. In January 2020, Moody's Investors Service forecasted that the assets of Islamic banking in Turkey would double over the next decade due to government initiatives and new regulations, which would fuel expansion of the sector. This encompasses the International Financial Centre in Istanbul funded by the state, scheduled to commence operations in 2023.

Asia remains a key target for those aiming to develop Islamic banking worldwide, as it boasts sizable populations in nations including Bangladesh, Indonesia and Pakistan - all majority Muslim countries. Anticipated expansion also includes the Commonwealth of Independent States region, comprising countries such as Azerbaijan and Kazakhstan.

Table 3.5 Top 10 fastest growing Islamic windows among banks with assets exceeding USD 500 million

Rank	Institute	Country	Islamic assets (USD million)	% change
1	Abu Dhabi Commercial Bank	UAE	12764,03	119,74%
2	MIDF Amanah Investment Bank Berhard	Malaysia	985,86	85,15%
3	Faysal Bank	Pakistan	1156,70	51,68%
4	The Bank of Khyber	Pakistan	518,77	46,55%
5	Saudi British Bank	Saudi Arabia	38855,43	43,76
6	PT Bank Tabungan Pensiunan Nasional	Indonesia	1053,12	27,90%
7	Habib Bank	Pakistan	1775,67	25,47%
8	PT Bank Niaga	Indonesia	3020,54	23,61%
9	Bank Al Habib	Pakistan	604,90	20,17%
10	Riyad Bank	Saudi Arabia	28240,00	19,46%

Source: The Banker 2020 [Electronic resource], access mode: https://www.thebanker.com/Markets/Top-Islamic-Financial-Institutions-2020

In regards to Islamic windows (refer to Table 3.5) having assets exceeding USD 500 million, the Abu Dhabi Commercial Bank (ADCB Meethaq) was ranked at the top of the list as the fastest growing bank with its assets having grown at a rate of 119.7% to USD 12.8 billion. Nevertheless, the remaining banks in the top 10 were predominated by Asian borrowers, with two banks from Indonesia, four banks from Pakistan, and one from Malaysia - in addition to Saudi British Bank and Riyad Bank. Amanah Investment Bank Berhard demonstrated an 85.2% year-on-year growth in Shariah-compliant MIDF assets, earning them 2nd place. Pakistani borrowers, Faysal Bank and Bank Khyber, followed behind with growth rates of 51.7% and 46.6%, respectively.

In Malaysia, six out of the ten largest Islamic banks exhibited double-digit growth in Shariah-compliant assets in 2019. Over half of the 21 Pakistani banks in the ranking experienced double-digit growth in Shariah-compliant assets between 2018 and 2019.

Financial institutions offering Shariah-compliant services maintained strong profits in 2019, with autonomous Islamic financial institutions achieving a combined profit of £16.2 billion. The number of financial institutions on the list that posted pre-tax profits of more than

£500 million remained stable at 27, but four additional banks recorded profits between £100 million and £500 million, up from 53 in 2018.

The leading Shariah-compliant commercial bank (with a minimum profit of USD 100 million) is Blue Nile Mashreq Bank of Sudan, which recorded a pre-tax profit of USD 516.8 million and a return on assets of 14.8%. Following closely is Al Hilal Bank of the UAE, with a return on assets of 10.5%. No other commercial bank of comparable size achieved a return on assets (ROA) exceeding 5%, with Iran's Mellat Bank, ranked third, achieving a 4.6% ROA.

Faisal Islamic Bank has achieved an impressive feat by securing two spots in the top 10 commercial banks based on their ROA, with their Egyptian and Sudanese operations ranking fourth and seventh, respectively, with ROAs of 3.8% and 2.6%.

The average return on assets for all independent institutions included in the global ranking was only 1.2%.

The acquisition of Noor Bank in the UAE, which is ranked 39th in terms of Shariah-compliant assets, by Dubai Islamic Bank (ranked fifth), was completed in January 2019. The merger established a bank that would have been ranked third in the latest ranking, with only Saudi Arabia's Al Rajhi Bank and Iran's Mellat Bank ahead of it.

National Bank of Bahrain acquired a 78.8% stake in Bahrain Islamic Bank in January 2020. National Bank of Bahrain was the seventh largest lender in Bahrain in terms of Shariah assets in 2019, although its assets decreased by 4.4% to USD 3.25 billion over the year.

At the same time, discussions on a potential merger between Saudi Arabia's National Commercial Bank (ranked fourth in 2020 by Shariah-compliant assets) and Riyad Bank (ranked 19th) were suspended in 2019. In June, it was announced that negotiations are underway for the potential acquisition of Samba Financial Group (26th position) by National Commercial Bank, which would create a new bank that would control approximately a quarter of all banking operations in Saudi Arabia. In October, the banks announced that the deal was ongoing and would be worth USD 14.8bn.

Alongside the growth in assets and operations, the geographical spread of Islamic financial institutions remains largely static, with the number of countries included in the

2020 list falling from 45 to 44. Continuing the trend from last year's ranking, a period of consolidation rather than rapid expansion of Islamic banking operations is expected.

Looking ahead, demand for Islamic banking services, both in more mature markets such as the Middle East and in regions such as Africa where there are still large unbanked populations, will continue to grow.

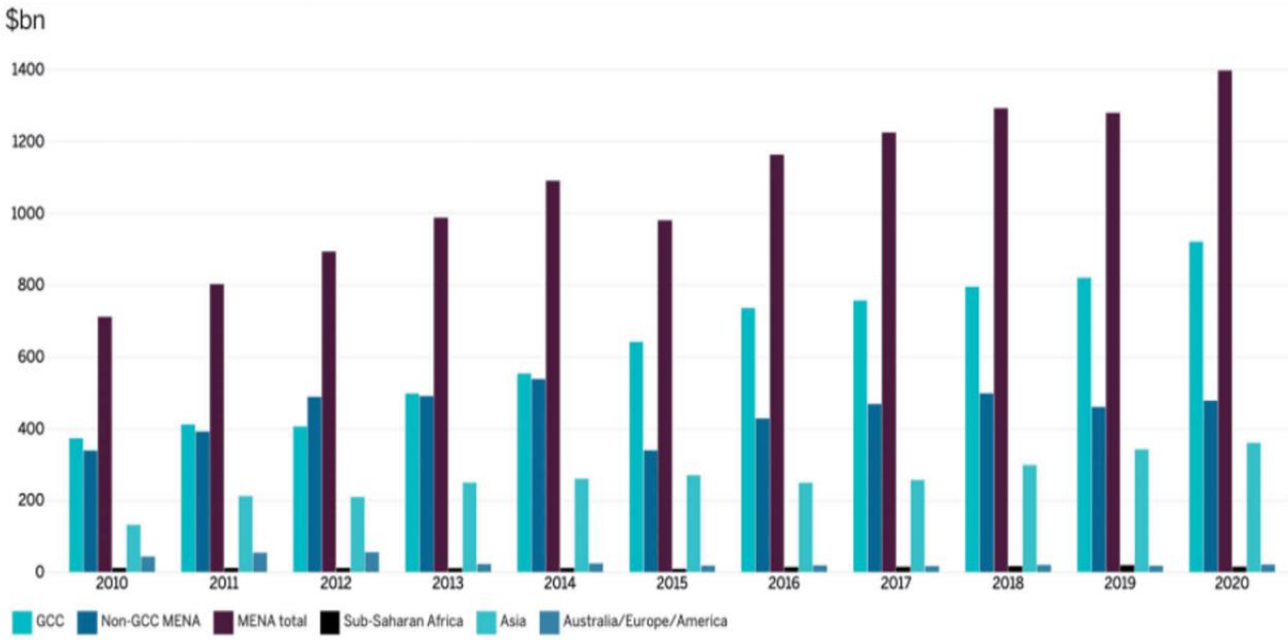

Figure 3.2 Growth of Islamic assets by region, 2019-2020
Source: The Banker 2020 URL: https://www.thebanker.com/Markets/Top-Islamic-Financial-Institutions-2020

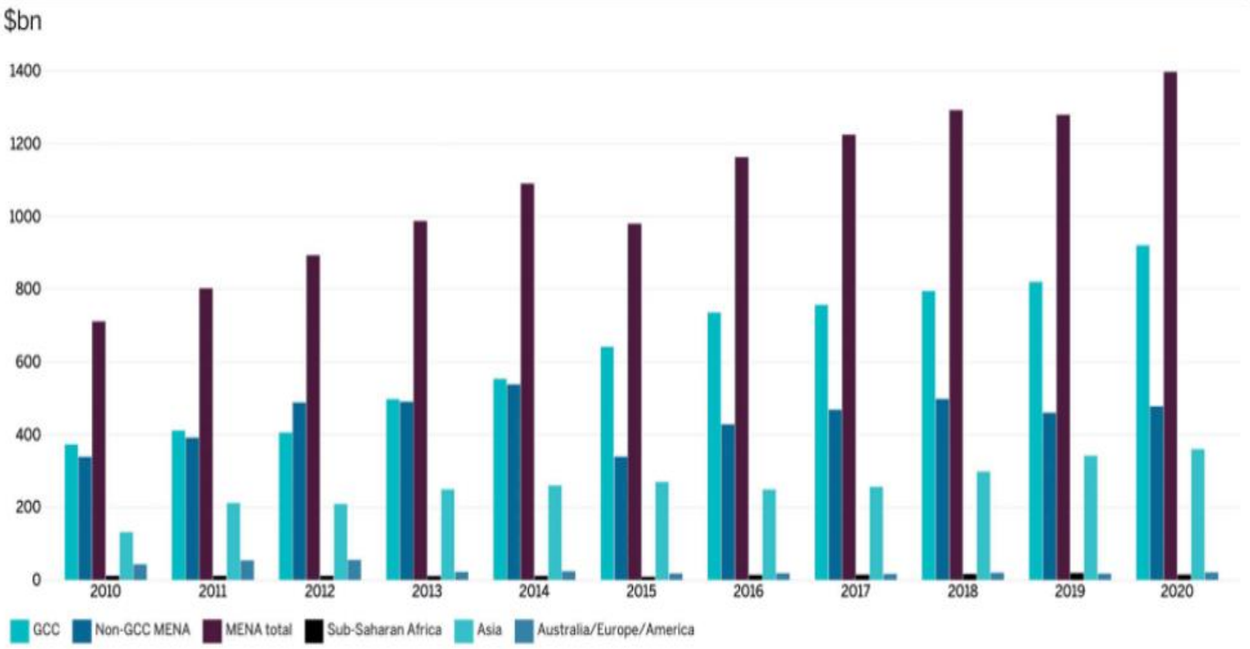

Figure 3.3 Breakdown of Islamic banking assets by region, 2008-2020.
Source: The Banker 2020 URL: https://www.thebanker.com/Markets/Top-Islamic-Financial-Institutions-2020

As the statistics from international rating agencies above demonstrate, the assets and volume of Islamic financial services worldwide continue to develop, with the potential for expanding further in terms of geographical reach and diversified services. This ongoing growth is expected to bolster the impact of Islamic financing and make it more appealing to non-Muslim populations in nations with established financial markets. Such a prediction can form the foundation for planning alterations at the legislative level for motivated countries, as well as for the restructuring of financial services by conventional banks and financial institutions.

Worldwide statistics exhibit a remarkably moderate effect of the Covid-19 pandemic on the output of Islamic banks. In general, the COVID-19 era and the subsequent post-COVID period have illustrated the adaptable nature of the Islamic financial system, adeptly combining Shariah law with a willingness to embrace and implement technological advancements. This fact demonstrates the reliability and appeal of the Islamic financial model and its potential use by banks to hedge risks related to recurrent global financial crises. This could act as a stabilising factor for the entire global economy.

CONCLUSION

Based on the study of the essence of the Islamic financial system, its position in the global financial system and its role in the reconfiguration architecture of the global financial system, taking into account the latest civilizational trends, several conclusions can be drawn.

The term "Islamic economy," in the sense of the optimal economic system preached by Islam, emerged in 1947. There are two primary definitions of Islamic economics: traditional - an economic system founded on the principles of Islamic law (Shariah) and created solely for Muslim communities' benefit; and applied - a global economic system that conforms to Shariah. This is a trend within global economic thought.

The principles of Islamic banking comply with Shariah law, which is founded on the Qur'an and hadith - the recorded sayings and actions of the Prophet Muhammad. When guidance is required, Islamic bankers consult scholars or utilise independent reasoning based on custom. Bankers also ensure that their ideas adhere to the fundamental principles of the Qur'an.

To generate profits without charging interest, Islamic banks employ shareholding systems. Equity participation refers to a business repaying a loan to a bank without interest, but in return granting the bank a portion of its profits. If the business fails to turn a profit, the bank does not benefit either.

Although an Islamic bank operates on Islamic principles and governance, an Islamic window denotes services provided by a conventional bank that are founded upon Islamic principles. In Oman, two Islamic banks, Bank Nizwa and Al-SHS Islamic Bank, exist. Six of the country's seven commercial banks additionally provide Islamic banking services through specified windows or sections.

Islamic finance operates in all areas of financial services including banking, capital markets, investment in all sectors of the economy except for activities prohibited by Shariah, insurance and even risk hedging through derivatives. The legal component is a crucial aspect of this industry. Shariah regulations establish the methods for implementing Islamic financial services, and standardising the regulations and forms of financial activity under Shariah gradually harmonises the operations of Islamic financial institutions, assisting with resolving issues in their application. The development of Islamic financial standards and their implementation on a global scale could become a catalyst for even more dynamic industry growth, leading to greater assets and profits.

The future progress of the Islamic financial system will significantly rely on the innovative products and solutions that enter the market. These include tools for enhancing liquidity, the advance of secondary, money and interbank markets, risk management of assets and liabilities as well as the introduction of public financing investment opportunities. Moreover, the Islamic financial system could also provide alternative options for microfinance.

Over the years, Islamic banks have demonstrated their reliability, stability, and resilience to global economic crises. The 2008 crisis had a minimal impact on Islamic banks, compared to other industry players. Similarly, the ongoing Covid-19 crisis highlights the near invulnerability of Islamic banks to the decline in global and regional trade turnover caused by business interruption. According to global rating agencies such as S&P, Moody's, and others, the Islamic finance industry is expected to continue its growth trajectory, despite the impact of the pandemic crisis. With only a handful of regions experiencing a minor setback or remaining at the level of 2019, the industry has maintained an unblemished record of no Islamic bank failures since its inception. These accomplishments are attributed to the sound principles of doing business under Shariah. In addition to providing financial stability to businesses and economies, Islamic finance is a pillar of social welfare and social justice. However, despite the establishment of the Islamic financial sector almost half a century ago, assessments of its contribution to the socio-economic development of Islamic countries remain mixed, with opinions ranging from positive to negative.

Alongside its achievements, Islamic finance encounters numerous challenges, globally and regionally. The most significant challenge is the diverse interpretation of Shariah rules governing financial relationships in diverse legal schools of Islam and regions. Nongovernmental organizations are gradually addressing this issue by establishing a global regulatory structure for this industry. Secondly, the integration of Islamic finance into the global financial system remains a challenge that is gradually being addressed. This is achieved through the gas industry's openness to all users, irrespective of their religion, while adhering to Shariah rules and regulations. Muslim customers of Islamic institutions use the services of conventional banks, such as opening an account with an overdraft facility, which is prohibited by Shariah, alongside the services of Islamic banks. At the same time, an increasing number of non-Muslim individuals and organizations from non-Muslim countries are entering the market of Islamic investment instruments (sukuk) owing to their secure and transparent structure of profit distribution and payment. The third present issue, which results from the first two, is the underdevelopment or unequal development of certain components of the Islamic financial system. For instance, the most advanced sector is Islamic banking, whereas takaful (Islamic insurance) is a considerably weaker sector, and Islamic stock markets and various investment funds remain underdeveloped. Regulatory and practical coordination are both necessary for implementing hedging mechanisms.

Among the factors that may attract customers to utilise Islamic financial services are, primarily, the assurance of actual asset ownership, transparency, lack of lending interest and egalitarian policy by Islamic banks, at least in the current phase. Islamic financial arrangements, such as murabaha and ijarah, prove to be effective and profitable alternatives to mortgages and leasing, respectively. They are popular amongst clients and operate successfully in all countries, including non-Muslim regions such as the UK, Luxembourg, and the US. The main factor behind the attractiveness of these forms is again the absence of interest due to Shariah. On the other hand, a favourable aspect supporting participation in the Islamic financial system is its financing mechanisms through the issuance of sukuk, which are highly sought-after instruments by investors, as recent statistics demonstrate.

Islamic financial international organizations are actively supporting the development of the industry. In addition to regulatory assistance, they aid in the collection, processing, and implementation of innovative solutions. Islamic digital banks are already operating in the UK, Malaysia, and Kenya. Regulations have been drafted, and applications have been submitted to SAMA, the regulatory authority, for the creation of two digital Islamic banks in Saudi Arabia. Additionally, plans are in place to introduce digital Islamic banks in Europe and other parts of the world.

Based on the data from global rating agencies and the analysis of the Islamic financial services market, it is concluded that the Islamic finance industry has significant leverage for further growth in the near future.

This includes the presence of a large unbanked Muslim population, particularly in Africa, India, and Southeast Asia. Additionally, there is a growing interest in Islamic finance from Western governments and businesses.

There are various factors contributing to the increasing popularity of Islamic banking in the West. Firstly, according to the Pew Research Center 2019, the population of Muslims in Western countries is estimated at 1.8 billion, with a continual growth rate, which has prompted financial service providers' interest. Secondly, there is a burgeoning demand for ethical and socially responsible services and products. However, it is essential to consider that the introduction of Islamic financial services may not only draw in customers who have not previously utilised financial services, but also prompt a migration of consumers from conventional financial institutions to Islamic ones.

The report recently released by the Club of Rome highlights the inevitable downfall of the old world. The experts and leaders of the Club of Rome have concluded that a fundamental shift in civilisation's paradigm is necessary. Aside from abandoning capitalism, this change calls for an alternative economy that is spiritually and morally grounded. Moreover, it rejects financial speculation, materialism, and simplistic worldviews. Thus, it can be concluded that the Islamic economic system meets all the necessary criteria, and there is potential for the Islamic financial system to serve as the foundation for the structure of the new global financial system.

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APPENDICES

Appendix 1

The difference between musharaka and mudaraba

№	Musharaka	Mudaraba
1	Investments come from all partners	The investment is the sole responsibility of Rabb al-Mal
2	All partners have the right to participate in the management of the business and perform work related to it	Rabb al-mal has no right to take part in the management, which is carried out exclusively by mudarib
3	Losses are distributed among all partners in proportion to their share in the investment	Only the rabb al-mal incurs losses, since the mudarib does not participate in the investment
4	The liability of partners is not limited (this does not apply to companies operating before the positive law of Islamic countries (company laws), in which shareholders have limited liability) or may be full for certain partners and limited for others	The liability of the rabb al-mal is limited to his investment, unless the rabb al-mal authorises the mudarib to take on debt on his (the investor's) behalf
5	The capital is the common fund of the partners divided into shares in accordance with the established proportion	All goods purchased by the mudarib belong exclusively to the rabb al-mal, and the mudarib may receive a share of the profits. Therefore, the mudarib cannot demand his share of the property, even if its value has increased

Continuation of Annex 1

MUSHARAKA	MUDARABA
Investments come from all partners	The investment is the sole responsibility of Rabb al-Mal
All partners have the right to participate in the management of the business and perform work related to it	Rabb al-mal has no right to take part in the management, which is carried out exclusively by mudarib
Losses are distributed among all partners in proportion to their share in the investment	Only the rabb al-mal incurs losses, since the mudarib does not participate in the investment
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The capital is the common fund of the partners divided into shares in accordance with the established proportion	All goods purchased by the mudarib belong exclusively to the rabb al-mal, and the mudarib may receive a share of the profit. Therefore, the mudarib cannot demand his share in the property, even if its value has increased

Mudaraba can be of two types - al-mudaraba al-mukayyada (when the investor chooses a particular business) and al-mudaraba al-mutlaqa (when the right to choose a business depends on the mudarib)[296] .

[296] المضاربة. فقه المعاملات
Mudaraba. Fiqh agreements URL: http://www.islamilimleri.com/Kulliyat/Fkh/4Hanbeli/pg_122_0007.htmhttp://www.islamilimleri.com/Kulliyat/Fkh/4Hanbeli/pg_122_0007.htm

Appendix 2

Basic general rules of purchase and sale for murabaha

№	RULE	EXAMPLE
1	The object of the sale must exist at the time of the sale. An item that does not exist cannot be sold. If a non-existent thing is sold, even with the mutual consent of the parties, such a sale is invalid from the Shariah point of view.	Person A sells the unborn calf of his cow to person B. The sale is void.
2	The object of the sale must be in the seller's possession at the time of the sale. If he sells something before he has acquired title to it, the sale is invalid.	Person A sells a car to person B that is currently owned by person C, but person A hopes that person C will sell the car to him so that he can give it to person B. The sale is void.
3	The object of the sale must be in the seller's physical or indirect possession at the time of the sale. "Indirect possession" means a situation in which the owner does not actually own the goods, but the goods are under his control and all rights and obligations associated with the possession of the goods lie with him, including the risk of damage.	Person A has bought a car from person B. Person B has not yet delivered the car to person A or its agent. Person A may not sell the car to person B; if he does, the transaction is void.
4	The sale must be simultaneous and complete. This means that a sale that relates to a date in the future and a sale that is conditional on the occurrence of a future event are invalid.	Person A informs Person B on 1 January that he will sell a car to Person B on 1 February. The sale is invalid because it relates to a future date. Person A tells Person B that he will sell her a car if the car tax is increased. The agreement is void because it depends on a future event.
5	The object of sale must have property value. An item that has no value in terms of its use for trade cannot be sold.	
6	The object of sale must not be an item used for prohibited purposes (haram), for example, wine, pork.	
7	The object of sale must be specifically identified and known to the buyer.	There is a building with many apartments of the same type. Person A, who owns the building, informs person B that he will sell one of the flats to person B, and person B agrees. The sale is not valid until the apartment that

		person A intends to sell is specifically identified or shown to the buyer.
8	The delivery of the goods sold to the buyer must be certain and should not depend on contingent circumstances or events.	Person A sells his car, which has been stolen by an unknown person, and the buyer purchases it in the hope that the stolen car will be returned. The sale is invalid.
9	Price certainty is a necessary condition for the validity of a sale. If the price is not fixed, the transaction is void.	Entity A informs Entity B that if payment is made within one month, the price is $50, but if payment is made within three months, the price is $60, to which Entity B agrees. The price is indefinite and the sale is not valid until one of the two options is chosen by the parties.
10	The sale must be unconditional (except for conditions that are part of the agreement).	Person A buys a car from person B on the condition that person B hires her son to work for his company. This is a sale subject to an additional agreement that is void. Person A buys a refrigerator from Person B on the condition that Person B will maintain it for two years. This sale is legal.

Appendix 3

Main characteristics of murabaha financing

1	Murabaha is not an interest-bearing debt. It is the sale of goods on deferred payment, the price of which includes the agreed profit and expenses incurred by the seller
2	Since the murabaha is a sale and not a debt, it must meet the conditions necessary for the validity of the sale
3	Murabaha as a financing model can be used only when the client needs funds to buy goods
4	The financier must have ownership of the goods before selling them to the client
5	The goods must be in the possession of the financier, whether physical or indirect, in the sense that the risk of ownership must be the responsibility of the financier before the goods are transferred to the customer
6	The preferred method for a murabaha is for the financier to purchase the goods himself and take possession of them, or to purchase the goods with the help of a third party appointed as an agent before he sells them to the customer. However, in exceptional cases where a direct purchase from the supplier is not possible, it is permissible for the client to act as an agent. The customer purchases the goods on behalf of the financier and takes possession of the goods in that capacity. He then buys the goods from the financier on a deferred payment basis. In the first case, the customer takes possession of the goods as an agent of the financier. In this role, he is merely a trustee, and the title is vested in the financier. The risk associated with the goods also remains with the financier, as a consequence of ownership. However, at the time of purchase by the customer, the ownership, together with the risk, is transferred to the customer by the financier.
7	Until the goods are in the possession of the financier, he may promise to sell the goods

Appendix 4

The procedure for financing under the murabaha model

1. The customer and the financier sign a definitive agreement under which the financier promises to sell and the customer promises to buy certain goods at a specified time, with an agreed profit margin added to the costs. This agreement may specify a deadline by which the goods must be delivered

2. If a client makes a request for a certain product and the financier appoints the client as its own agent to purchase it, an agency agreement is signed between the parties

3. The client purchases the goods on behalf of the financier and holds them as the financier's agent

4. The customer informs the financier that he has purchased the goods on his behalf and simultaneously makes an offer to purchase the goods from the financier

5. The financier accepts the customer's offer and sells the goods to the customer, as a result of which the ownership and risks associated with the goods are transferred to the customer

Appendix 5

Mandatory conditions of sale with deferred payment ("bai' mu'ajal")

A specific payment date or time period must be established

If a specific term is set for payment, it starts from the moment of delivery of the goods, unless otherwise agreed

Deferred payment can be set in a larger amount than simultaneous payment, but its exact amount must be determined at the time of sale.

A promise may be taken from the buyer to donate a certain amount to charity through the seller in case of late payment.

The seller may require the buyer to pay the entire amount at once in case of late payment

The seller may require a lien or lien on the buyer's property to secure payment for the goods sold

The buyer may be asked to sign a promissory note or a bill of exchange, but the bill cannot be transferred to a third party at a price other than face value

Appendix 6

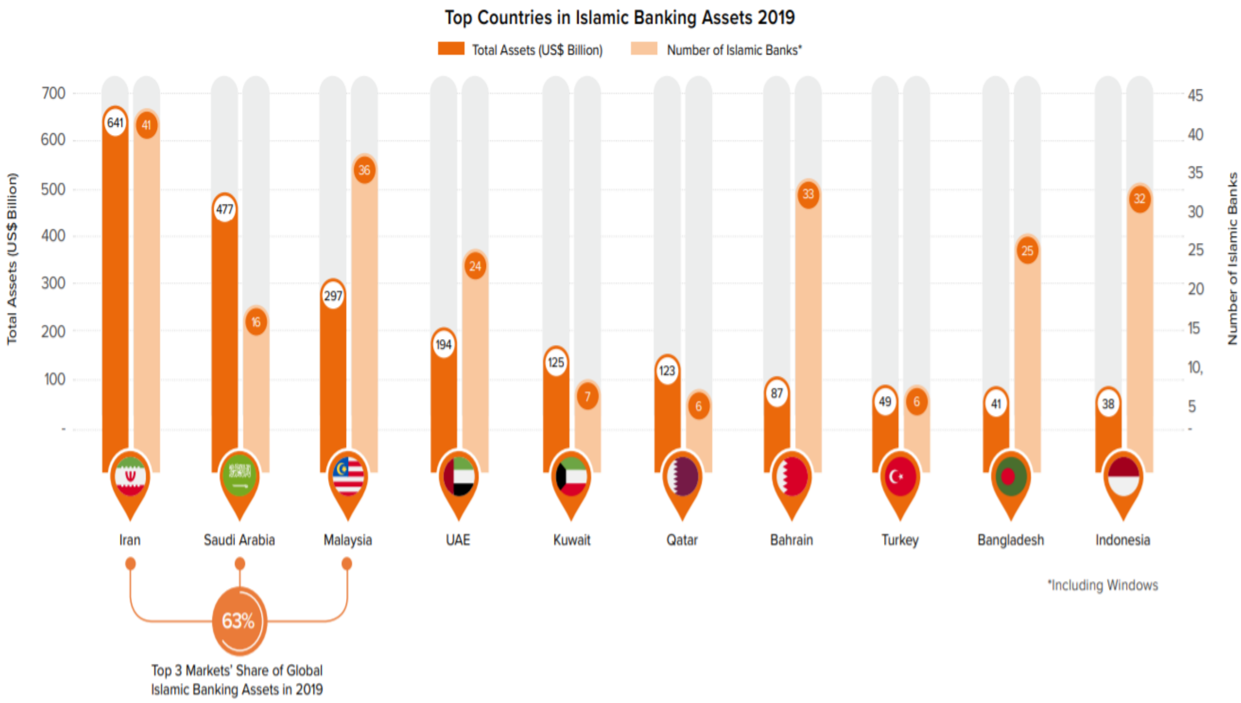
Differences in terms of ijara and financial leasing

Condition	Ijara	Financial leasing
Start of lease	In contrast to the purchase and sale, the lease can be concluded at a future date. The tenancy starts when the rent is paid. Rent is paid only after the asset is transferred to the lessee	The lease may begin when the lessor pays for the goods, but when the asset has not actually been transferred to the lessee
Costs	The lessor, since he is the owner of the property, bears all costs in the process of purchasing or importing the property, taxes, duties, etc. He can take these costs into account when setting the rent.	It is allowed to pay the expenses for the purchase and delivery of the property by the tenant
Liability for damage	The rental is responsible for damage to the property in case of its negligence or improper use. He is not responsible for damage or destruction of property that occurred for reasons beyond his control	Absolute liability of the tenant for damage is allowed, except for force majeure
Variable amount of rental payments	Islamic financial institutions use the interest rate of another country only as a benchmark for calculating changes in lease payments	A specific interest rate, such as LIBOR, is used to correlate lease payments
Penalties for late payment	In some Islamic countries, it is forbidden to charge a penalty for late payment, as it is interest on the debt, for example, in Saudi Arabia. Instead, a requirement to make charitable payments or a bank commission for late payment is applied. However, in most of them it is allowed by positive law. For example, in the UAE, Article 76 of the Law on Commercial Transactions of 1993 establishes interest for late payment of up to 12% (the exact percentage is determined by the court)	As a rule, fines are imposed for late rent payments
Termination of lease	If the tenant has no violations, the lease cannot be unilaterally terminated by the landlord	It is allowed to terminate the lease at the initiative of the lessor in the absence of violations by the lessee
Property insurance	Only Takaful insurance is allowed	Any traditional insurance is possible
Transfer of property to the lessee after the end of the lease term	An ijara contract itself cannot include a provision for the transfer of an asset as a gift or for a fee at the end of the lease period. But the lessor can make a unilateral promise to sell or gift the asset at the end of the lease term, which cannot be a condition of the lease in any	Lease and transfer of property to the tenant at the end of the lease term is possible within the framework of one contract. The lease may be subject to the transfer of the property after the end of the lease.

	way. Such a contract is called ijara wa iktina.	
Sublease	The Hanifite Madhhab stipulates that the tenant's income from subletting mani should not exceed the rent. Other schools allow such tenant income	There are no restrictions. The only condition is the landlord's consent
Assignment of lease	The lessor may assign the lease without transferring ownership of the property to another person, but this can only be done free of charge. For example, to pay off a debt or as a gift	The sale of the right to receive (collect) rental payments is allowed

Appendix 7

Top countries by assets of Islamic banks in 2019



Source: ICD-Refinitiv. Islamic Finance Development Report 2020. Progressing Through Adversity URL: https://icd-ps.org/uploads/files/ICD-Refinitiv%20IFDI%20Report%2020201607502893_2100.pdf

Appendix 8

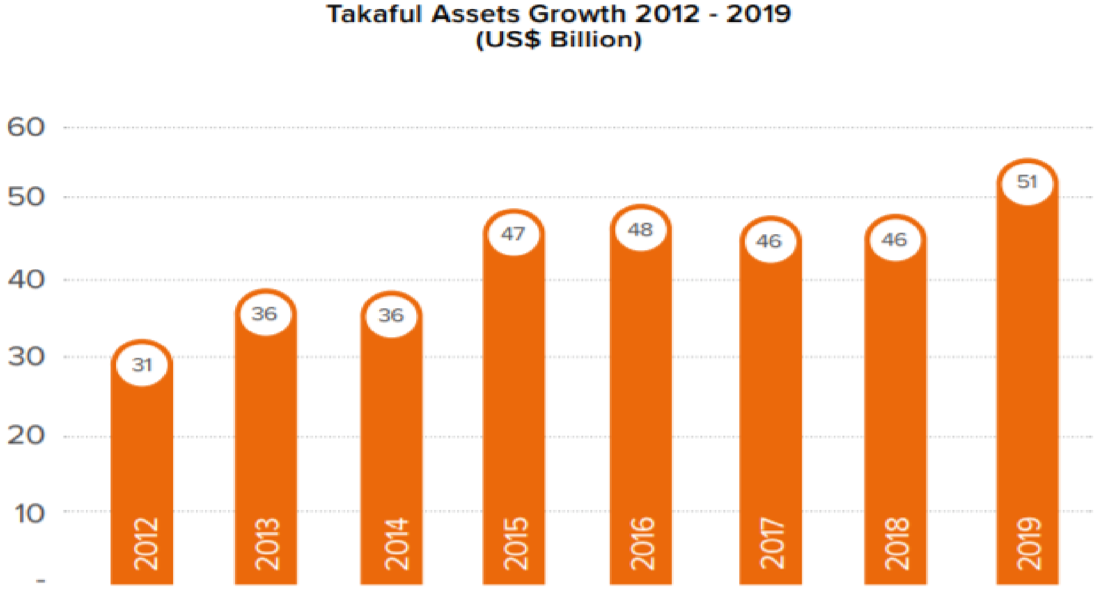
General Sukuk Risk Profile

Transaction risk	Commercial risk	Treasury risk	Management risk	Systemic risk
Credit risk	Commercial crowding out risk*	Asset and liability management risk	Operational risk	Business environment risk
Market risk	Investor exit risk	Liquidity risk	Trust risk	Institutional risk
Markup risk	Risk of insolvency	Hedging risk	Risk of opacity	Regulatory risk
Currency risk				

* Commercial crowding out risk is a unique risk that applies to Islamic banking, especially in a dual banking environment. Commercial crowding out risk (DCR) is a particular risk for Islamic banks, which are subject to commercial pressure to pay a rate of return equivalent to a competitive rate of return and absorb some of the losses that would normally be borne by investment account holders to prevent mass withdrawals

Source: El-Hawary, D., Grais, W., and Iqbal, Z (2004). Regulation of Islamic financial institutions: The nature of the regulated. Journal of International Banking Regulation, vol. 18, pp. 1-50

Appendix 9



Source: ICD-Refinitiv. Islamic Finance Development Report 2020. Progressing Through Adversity URL: https://icd-ps.org/uploads/files/ICD-Refinitiv%20IFDI%20Report%2020201607502893_2100.pdf

Appendix 10

Islamic derivatives

Master Hedging (Tahawwut) Agreement) (TMA) 2010

Islamic Profit Rate Swap (IPRS)

(Islamic interest rate swap) is a single sale

Islamic Profit Rate Swap (IPRS)

(Islamic interest rate swap) – two sales

Islamic Cross Currency Swap (ICRCS)

(Islamic cross rate swap)

Islamic Foreign Exchange Forward (IFX Forward)

(Islamic currency swap or forex swap) is a single obligation based on a promise (wa'ad)

Islamic Foreign Exchange Forward (IFX Forward)

(Islamic currency forward) – two unilateral and independent obligations based on a promise (wa'ad)

Islamic Credit Support Deed for Cash Collateral (Variation Margin)

(islamic credit support agreement for cash collateral (variation margin)

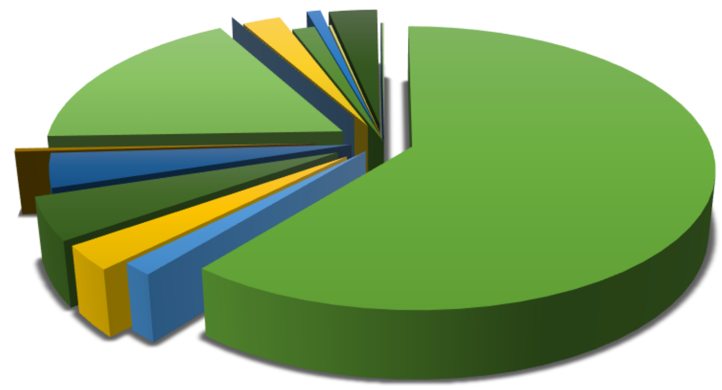
Appendix 11

The objectives of central banks

Country	File name	focus (ext/int)	external objectives/ No	internal goals/ No.	Total	Public goals yes/no	Comment
Australia	Strategic Plan	mixed	4	2	6	Yes	axes are mixed every year, but 4 axes are constant
Armenia	Strategic Plan	mixed	2	12	14	Yes	Diverse targets, more focused on strategic industries
Estonia	Strategic Plan	mixed	0	9	9	Yes	focused only on internal goals, the strategy is based on internal problems
Ireland	Strategic Plan	mixed	3	8	11	Yes	diverse goals, more than 10 areas
Italy	Strategic Plan	mixed	3	1	4	Yes	4 goals, 11 action plans
Canada	Strategic Plan	mixed	4	6	10	Yes	The guidelines are divided into 5 areas
Lithuania	Strategic directions	mixed	4	1	5	Yes	only strategic directions and a few goals are public - 12 strategic goals
Moldova	Strategic directions	more of internal	2	5	7	Yes	7 goals, 2 action plans
Germany	Strategic Plan	mixed	8	8	16	Yes	more than 20 targets, 5 axes
New Zealand	Strategic directions	mixed	5	7	12	Yes	12 targets, 8 axes
Norway	Strategic Plan	mixed	5	9	14	Yes	4 focus areas
S. Korea	Strategic directions	more of internal	2	4	6	Yes	3 focus areas, 8 planned actions
Poland	Strategic Plan	mixed	4	6	10	Yes	3 axes focused on internal goals, external axes linked to the EU
Portugal	Strategic Plan	mixed	3	1	4	Yes	The broad strategic guidelines are divided into 16 areas
Tunisia	Strategic Plan	mixed	6	6	12	Yes	2 axles, 6 external, 6 internal
Turkey	Strategic Plan	more of internal	0	5	5	No?	5 focus areas
Finland	Strategic Plan	mixed	2	10	12	Yes	12 goals, more focused on internal goals
Japan	Strategic directions	mixed	3	8	11	Yes	focused on internal issues, but this is a novelty of 2020

Appendix 12

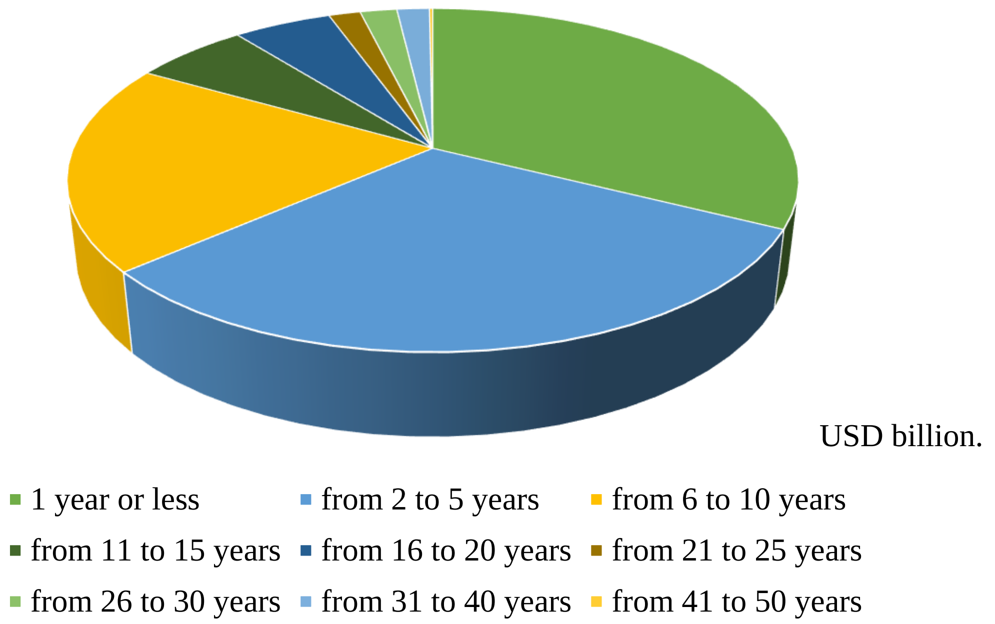
Global sukuk issuance by currency



Currency	In USD billion.	Percentage
Malaysian Ringgit (MYR)	205,509	60,87%
Pakistani Rupees (PKR)	5,181	1,53%
Qatari Riyals (QAR)	9,548	2,83%
Saudi Riyals (SAR)	16,592	4,91%
Sudanese Pounds (SDG)	13,214	3,91%
Singapore Dollars (SGD)	1,295	0,38%
United States Dollars (USD)	58,775	17,41%
Yemeni Riyals (YER)	18,7	0,01%
Emirati Dirham (AED)	8,185	2,42%
Bahraini Dinars (BHD)	4,772	1,41%
Bruneian Dollars (BND)	2,965	0,88%
Chinese Yuan Renminbi (CNY)	0,78	0,02%
Euro EUR	0,221	0,07%
Gambian Dalasi (GMD)	0,49	0,01%
British Pounds (GBP)	0,261	0,08%
Indonesian Rupiah (IDR)	10,298	3,05%
Iranian Riyals (IRR)	0,198	0,06%
Kuwaiti Dinars (KWD)	0,329	0,1%
Jordanian Dinars (JOD)	0,119	0,04%

Appendix 13

Global sukuk issuance by maturity



Maturity	*Amount, billion USD*	*Percentage*
1 year or less	*109,410*	*32,41%*
from 2 to 5 years	*105,289*	*31,19%*
from 6 to 10 years	*66,382*	*19,66%*
from 11 to 15 years	*20,415*	*6,05%*
from 16 to 20 years	*17,505*	*5,19%*
from 21 to 25 years	*5,639*	*1,67%*
from 26 to 30 years	*6,560*	*1,94%*
from 31 to 40 years	*5,822*	*1,72%*
from 41 to 50 years	*0,586*	*0,17%*