



AZJAF AZKA INTERNATIONAL JOURNAL OF ZAKAT & SOCIAL FINANCE (1883) 2715 1864



Vol.4 No.1 (2023)

DOI: 10.51377/aziaf.vol4no1.110

AN ASSESSMENT OF THE EFFECTIVENESS OF ISLAMIC INTER-BANK MONEY MARKET INSTRUMENTS IN OMAN

UMAR AHMED Modern College of Business & Science, Muscat Oman. Email: <u>ahmad.u2005@gmail.com</u>

A PEER-REVIEWED ARTICLE (**RECEIVED** – 1STSEPT. 2022: **REVISED** – 4TH FEB. 2023: **ACCEPTED** – 17TH MAR. 2023)

ABSTRACT

The objective of this study is to assess the Islamic inter-bank money market instruments in Oman and their associated challenges. Wakalah inter-bank investment, currently the most widely used liquidity management tool by Islamic banks in the inter-bank money market, has some limitations including an uncertain profit rate, risk of bankruptcy, reliance on conventional benchmarks, and lack of secondary market tradability. To address these limitations, the study adopts a qualitative research methodology and employs both library information and secondary data. The results suggest that alternative instruments, such as Mudharabah inter-bank investment, Islamic negotiable Instrument of Deposit, and Wadiah acceptance, could serve as viable alternatives to Wakalah for deposit and placement purposes in the Islamic inter-bank money market. These instruments are grounded in the widely accepted Mudharabah concept and are expected to receive widespread support from stakeholders. The implementation of these alternatives is predicted to enhance market options and activities, thereby supporting the growth and expansion of the Islamic finance sector in Oman. This expansion could enable Islamic banks to support Islamic social institutions such as Zakat and waqf, thereby improving the social welfare of the Muslim community.

Keywords: An Assessment, Effectiveness, Islamic Inter-bank Market Instruments, Oman

INTRODUCTION

The lack of standardized, tradable Islamic inter-bank money market instruments poses a significant challenge for Islamic banks in terms of liquidity management (Ritu, et.al, 2015). El Hamiani, et.al. (2015) highlights the difficulty in designing

consistent Islamic money market instruments that can be accepted, priced, and traded across different Islamic banking jurisdictions. The scarcity of Shariahcompliant financial instruments impedes the flow of liquidity among Islamic banks (El Hamiani et.al., 2015). To overcome this challenge, it is necessary to reinvent the Islamic money market and develop inter-bank money market products that are universally recognized across Muslim jurisdictions (Ritu, et.al, 2015). Some Islamic banking jurisdictions, such as Malaysia, Bahrain, and the UAE, have made progress in this area by establishing standardized Shariah contracts and guidelines for Islamic money market instruments (Ritu, et.al, 2015).

According to the IMF annual report (2011), the measures for managing liquidity in Muslim countries are limited. Most of the central banks in these countries do not have Shariah-compliant credit options to Islamic banks in need of liquidity (IFSB, 2008). In many GCC markets, central banks either lack Islamic monetary policies or use commodity *Murabahah* to control liquidity. There is no Shariah-compliant way to absorb excess liquidity from Islamic banks, which is usually stored with the central bank as excess reserves for potential use but with no return, as central banks do not engage in profit-generating activities (UAE Central Bank, 2017). In Malaysia, however, the central bank absorbs excess liquidity through al-*Wadiah and* has the option to grant *hibah* to banks (Norma, 2022).

Banks and the Central Bank have a shared responsibility for liquidity management. Banks must effectively manage their liquidity to meet their obligations to depositors, comply with reserve requirements, and maximize profits. This ensures a stable and efficient banking system, smooth operation of the interbank payment settlement system, and effective implementation of monetary policy by the Central Bank (Kahf & Hamadi, 2014). However, in many Islamic banking jurisdictions, such as Oman, the Islamic interbank money market is still in its early stages, making Islamic banks susceptible to liquidity risk due to a lack of Islamic money market products (Ritu et al, 2015).

Additionally, there are limited interbank money market instruments that meet both the needs of the sector and comply with Shariah regulations. As a result, Islamic banks in the GCC keep 9.8% of their assets in placements with other financial institutions and 8.8% in cash and equivalents. For example, Islamic banks in Kuwait hold roughly 20% of their assets as placements with other banks, while Islamic banks in Bahrain hold over 12% of their assets in cash (www.ceif.iba.edu.pk). In Oman, Islamic banking is rapidly growing due to increased consumer awareness of Sharia-compliant products, strong retail demand, and supportive policies. From 2013 to 2022, total assets increased by an average of 30% each year, making up 15.4% of total market shares. Despite this

success, the industry remains vulnerable to liquidity management issues, as the Oman Islamic interbank money market is still in its early stages and lacks products (Gulam, 2022).

This paper, therefore, examines the Oman Islamic interbank money market and its instruments and challenges, and suggests alternative instruments that can aid in liquidity management. The paper is divided into five sections, including an introduction. Section two provides an overview of the money market and its operations. Section three analyses Islamic interbank money market deposit and placement instruments. Section four scrutinizes the Oman Islamic interbank money market and its challenges, while the final section concludes the paper.

THE MONEY MARKET, ITS FUNCTIONS, AND INSTRUMENTS

The money market refers to the financial sector that deals with the borrowing and lending of short-term funds, usually for a period of one year or less. It plays a crucial role in ensuring the stability and efficiency of the overall financial system. The money market provides a platform for financial institutions, such as banks and corporations, to access and provide short-term funding, and helps to facilitate the implementation of monetary policy by the central bank (Randall, 2022). There are various instruments used in the money market, including treasury bills, commercial papers, certificates of deposit, and repurchase agreements. These instruments serve as a means for financial institutions to manage their short-term funding needs and provide a return on excess funds. By providing a range of options for borrowing and lending short-term funds, the money market supports the stability and efficiency of the financial system (Mark, 2011).

In the money market, financial institutions, governments, central banks, and corporations are primary participants (ISRA, 2021). In the money market, banks serve as issuers, buyers, and sellers. Governments and agencies issue and sell short-term instruments such as Treasury bills to fund public debt, while state and local governments sell municipal paper. Treasury notes have the most significant outstanding volume and the most active secondary market. Large firms use commercial paper for local transactions and bankers' acceptance for international trade. Banks may hold or sell acceptances. Finance businesses raise funds by issuing large volumes of asset-backed commercial paper (CP), secured by credit card receivables, mortgage-backed securities, auto loans, and other financial assets (ISRA, 2021). Central banks can control money supply through open market operations (Hakim, 2007). The inter-bank money market allows banks to borrow and lend among themselves, primarily using Banker's Acceptances and Certificates of Deposit (Obiyathulla, 2009). The money market

is essential for banks, particularly in terms of liquidity management, and is colloquially known as the Inter-bank Money Market (Muttalib, 2104).

The securities in the money market have large denominations, making them inaccessible to most households and small businesses. It has a low default risk and an active and liquid secondary market (Hakim, 2007). The market is better suited for large transactions in excess of \$1 million and is accessed by brokers and dealers through large banks, brokerage houses, or electronic networks (ISRA, 2021). The low-risk nature of money market securities is due to their low investment rates of return compared to the capital market. Investors are attracted to money market securities because they offer a substitute for holding idle cash for short periods until a productive use for the cash is found (Muttalib, 2104). Muttalib adds that brokers and dealers play a crucial role in the money market by advertising new money market instruments and providing secondary markets. They act as intermediaries by connecting market borrowers and lenders. Banks also participate in the money market to support their lending portfolios and meet regulatory reserve requirements. They trade interest-rate derivatives over the counter (OTC) and ensure timely payment to money market investors (Muttalib, 2014).

AN ASSESSMENT OF ISLAMIC INTER-BANK MONEY MARKET

The conventional Interbank Money Market uses debt instruments based on interest, which are prohibited in Islam. To address this, the Islamic interbank money market was introduced to allow Islamic banks to function similarly to conventional banks but with instruments based on Shariah laws and principles (ISRA, 2021). This market facilitates the raising of short-term funds at a low-cost using sales-based, equity-based, and agency-based Islamic financial contracts from corporations, and Islamic financial institutions (Saiti et al., 2016). Common instruments in the Islamic inter-bank money market across notable Muslim jurisdictions include *Mudharabah* interbank investment, *Wadi'ah* acceptance, Wakalah inter-bank investment, Commodity *Murabahah, Islamic* Negotiable Certificates of Deposit (CDs), among others (Abdul Azeez et al., 2016).

Mudarabah inter-bank investment is a profit-sharing financial instrument used by Islamic banks to lend and borrow funds on a Mudarabah basis. In this arrangement, a deficit Islamic bank can act as a fund manager and obtain investment funds from a surplus Islamic bank at a pre-agreed profitsharing ratio. The investment period typically ranges from one day to twelve months (Obiyathullah, 2009). Mudarabah inter-bank investment securities are issued by Islamic banks whenever there is a temporary fund deficit. The rate of return is determined by the investee bank's annual gross profit rate, and the profit-sharing ratio is negotiable. The principal amount invested will be repaid at the end of the investment period, along with a portion of the profit generated by the investee bank's use of the investment funds (Muttalib, 2014). The main disadvantage of this instrument is that counterparties expect a fixed rate of return, which is contrary to the Mudarabah principle. Also, MII was previously classified as a deposit rather than an investment scheme, and operational issues need to be resolved to ensure compliance with the actual Mudarabah concept (Sait et al. 2016).

Wadi'ah acceptance is a financial instrument used by Islamic institutions to deposit excess cash with the Central Bank using the Wadi'ah principle (safekeeping). This instrument enables Islamic banks to exchange funds with the Central Bank without interest-based transactions. While the Central Bank is not required to provide a specified return, it may distribute profits to fund owners in the form of *hibah* at its discretion (gift). *Wadi'ah* Acceptance helps the Central Bank's liquidity management operations as it permits the Central Bank to declare dividends without being forced to invest the cash in its custody (Seiti, et.al 2016). However, *Wadi'ah* acceptance has several drawbacks. Firstly, *Wadi'ah* bonuses may not comply with Sharia principles, according to some Islamic scholars. Secondly, it is not a liquid financial asset since it cannot be traded on the secondary market. Thirdly, the return of *Wadi'ah* acceptance cannot be predetermined, as it is assumed to follow the Sharia rules. However, the Central Bank's bonuses are dependent on the overnight policy rate and behave similarly to traditional-based instruments (Wahyudi and Sani, 2014).

Wakalah inter-bank investment involves the use of a Wakalah contract (agency contract) in which the principal (Muwakkil) appoints an agent (wakil) to invest in Shariah-compliant transactions on its behalf for a fee. The Muwakkil (surplus fund bank) engages the Wakil (deficit fund bank) to lend and borrow money among themselves in the Islamic interbank money market. The investment maturity period may range from one day to one year, and the surplus fund bank is entitled to all earnings while paying the deficit fund bank agency fees (ISRA, 2021). ISRA adds that the Wakil collects a fee regardless of whether the investment makes a profit or a loss. In the event of a loss, the surplus fund bank bears the cost, but if caused by severe negligence or error of the deficit fund bank, it will pay for it. Islamic banks use the Inter-bank Master Investment Wakalah Agreement to manage their liquidity via Shariah-compliant inter-bank treasury transactions. Before trading, banks sign and execute the Master Investment Wakalah Agreement (BNM,2013). There are two types of Wakalah Agreements: unrestricted and limited. The unrestricted agreement allows the Wakil to spend the Muwakil's money at his discretion, while the restricted agreement limits the Wakil's use of assets based on specified criteria (Clifford

Chance, 2013). Unrestricted Wakalah is more appealing for liquidity management since it allows Islamic banks to make any lucrative investment (IIFM, 2012).

WAKALAH INTER-BANK INVESTMENT MODE OF OPERATION

Yousuf (2016) and Bernardo (2013) have identified the mechanism used by Islamic banks in Oman's interbank money market for borrowing and lending among themselves. The following steps are involved in the process:

- 1. Bank A, in need of funds, contacts Bank B, which has surplus funds to deal under *Wakalah*. In this case, Bank A assumes the role of the Wakil as it is the borrower, while Bank B, which intends to place its surplus funds with Bank A, assumes the role of the *Muwakil*.
- 2. Bank A contacts Bank B using the authorized mode of communication established while signing the Wakalah Agreement. These authorized modes of communication may include the dealing systems provided by Reuters or Bloomberg or through recorded and designated telephone lines. In some cases where the volume of daily transactions is not very high, Wakalah transactions may also be executed through official emails or fax.
- 3. Bank A specifies the amount, currency, and tenor of the transaction to Bank B, who provides Bank A with a Bid and Offer rate. The Bid Rate is the rate at which Bank B is willing to accept funds, while the Offer Rate is the rate at which Bank B is willing to place funds under Wakalah.
- 4. If the rates are acceptable to Bank A, it responds back to Bank B, specifying that it is willing to accept funds at Bank B's offered rate as Bank A is a borrower.
- 5. Both banks agree on the amount, tenor, rate, and currency of the transaction and provide their settlement instructions. Bank A specifies the account in which it requires funds on the value date, while Bank B specifies the account where Bank A will return the funds along with the profit on the maturity date of the transaction.
- 6. The deal is recorded in both banks' systems and forwarded to their back offices for settlement.
- 7. The back office of Bank A confirms the transaction details and arranges to send a Wakil offer through an authenticated SWIFT message, while Bank B, after receiving the Wakil Offer, arranges to send a Muwakil's acceptance to Bank A confirming the transaction details.
- 8. The back office of Bank B arranges a transfer of funds on RTGS (Real Time Gross Settlement System) through Central Bank of Oman if it is a local currency. In the case of foreign currency, the back office sends a

SWIFT message to its correspondent bank to transfer the funds into the Wakil's designated account.

9. On the date of maturity, the back office of Bank A arranges to pay back the principal along with the profit amount to the designated account specified by the Muwakil in their Muwakil's acceptance.

WAKALAH INTER-BANK INVESTMENT CHALLANGES

According to IIFM (2012), there are various challenges that may hinder the potential of the wakalah inter-bank investment instrument, such as the rate of return, on and off-balance sheet treatment, handling of the asset pool, regulatory environment, application issues, accounting issues, and legal interpretation. For example, the three-dimensional profit-sharing system in the Wakalah Placement Agreement (WPA) can cause problems. The Islamic bank provides the investor with the profit minus the wakalah charge if the real profit is the same as the planned profit. If the real profit is higher than expected, the Islamic bank keeps the difference and gives the investor the planned profit minus the wakalah charge. If the real profit is lower than expected, the investor receives their money back minus the wakalah fee. This may be perceived as unfair by investors, but it is legal since the retained profit serves as a fee or incentive for the Islamic bank to manage investment portfolios and meet the investors' expected return rates. Additionally, under Shari'ah law, wakalah agreements cannot guarantee investment amounts or returns, and any promise of a specific profit or minimum return on the principal amount violates Shari'ah. Therefore, the earnings from wakalah agreements are indicative and not guaranteed. In situations where investment portfolios do not generate sufficient returns, Islamic banks may offer a hibah (gift) to offset poor real returns, but this should not be guaranteed in advance (Saiti, et.al. 2016).

It is important to note that while the *Wakalah* arrangment uses a suggested profit rate, the expected rate of return is determined using the LIBOR. According to Abdul Karim (2013), there are several distinct characteristics of benchmarking from a commercial perspective. First, the profit given to investors is based on the benchmark, rather than the company's earnings. Second, the profit is calculated without considering the possibility of not generating any returns. Third, the profit paid is a percentage of the money borrowed, much like traditional lending, rather than a portion of the total profit earned. Fourth, both the principal amount and the profits of investors are guaranteed. These four characteristics deviate significantly from standard business practices, where dividends are paid as a percentage of total profit made, and only after it has been established that profits have been generated. Additionally, no company has ever guaranteed dividends or capital to its shareholders (Abdul Karim, 2013).

Another interesting issue to consider is the potential bankruptcy scenario in the context of a Wakalah fund pool. According to market practice, when a Muwakkil invests funds with the Wakil under a Wakalah, these funds may be commingled with the Wakil's own pool of funds. In the event that the Wakil becomes insolvent, the Muwakkil's funds may be considered part of the Wakil's liquidation assets by the liquidator in some jurisdictions' law-controlled insolvency. This means that in certain countries where insolvency law is not present, investors should be aware of this risk before investing their assets in a Wakalah arrangement (Clifford Chance, 2013).

According to Ritu et al. (2015), the lack of liquidity and absence of a secondary market for Shari'ah-compliant inter-bank and capital market instruments are major issues facing the Islamic financial market. They attribute this to a shortage of appropriate instruments, difficulty in their evaluation, and legal uncertainties surrounding their compliance. A key challenge is to create instruments that meet the needs of all market participants and can be traded on both primary and secondary markets. In Malaysia, some inter-bank money market instruments are more liquid as they can be exchanged on the secondary market using bay' al-dayn, but debt trading is controversial among Islamic scholars, which limits Islamic financial transactions. In some Muslim jurisdictions, the Wakalah inter-bank instrument is used for multiple transactions where the Islamic financial institution (IFI) functions as both wakil and muwakkil. By using the placement money to invest with other IFIs, the IFI can generate large returns on the same funds. However, this complex procedure poses Shariah-related, operational, and legal issues for IFIs (Muhammad, 2017).

CONCLUSION

The previous discussion provided an assessment of the effectiveness of Islamic inter-bank instruments for deposit and placement, as well as the challenges they present. While Oman's Islamic finance industry is growing rapidly, the lack of suitable inter-bank instruments poses a significant liquidity risk for Islamic banks, limiting the flow of funds between them. Resolving this issue will require the development of new products and the introduction of innovative inter-bank Islamic money market instruments. As the sector expands and the liquidity requirements of Islamic banks increase, it is essential to offer Shariah-compliant Islamic deposit and placement inter-bank money market products in Oman without delay. To increase market liquidity and tradability, the Oman Islamic inter-bank money market needs to diversify its products. In the future, a range of products that attract fewer Shariah concerns should be introduced to the market to ensure the viability of additional Islamic money market instruments. The study therefore recommends the adoption of additional interbank instruments, such as Mudharabah Interbank Investment (MII) and Islamic Negotiable Instrument of Deposit (INID), among others.

Since the Mudharabah principle is widely recognized as a Shariahcompliant contract and is primarily used by Islamic banks in Oman, the structure of MII and INID will be based on this principle. In MII, a bank with a deficit (Mudarib or investee bank) can obtain investment capital from a bank with a surplus (Rabbul Mal or investor bank) at a predetermined profit-sharing ratio (Mudharabah). The maturity of the investment can range from one day to twelve months. The return paid by the investee bank will be based on its annual gross profit rate, and profits will be distributed according to the agreed-upon ratio. The principal investment will be returned to the investor bank at the end of the term, along with a portion of the investment's earnings. Any losses will be borne by the investing banks (Rabbul Mal). However, the investee bank will be responsible for losses resulting from its negligence or error. The price of MII will have two significant components: the profit-sharing ratio (PSR), which is known and agreed upon by both parties, and the expected gross rate of return (EGR), which each party decides based on its historical average rate of return on investments over time. To ensure that only banks with appropriate rates of return engage in the MII and to prevent agency problems in which investee institutions report low profit rates, the central bank benchmark rate should be employed.

Islamic banks may issue Islamic Negotiable Instruments of Deposit (INID) to attract significant amounts of capital from investors and solicit significant deposits from corporations and government bodies. These certificates are issued in accordance with Mudarabah, where the investor is Rabbul Mal, and the bank is Mudarib. Additionally, the Central Bank may use Wadiah acceptance to absorb surplus liquidity with hibah that is not fixed and is dependent on the overnight rate. The adoption of MII, INID, Wadiah acceptance, and other Islamic financial instruments can help Islamic banks better manage their liquidity, promoting the expansion of the Islamic banking sector in the Sultanate. The increased liquidity and expansion of Islamic banking activities can also enable Islamic banks to support the growth and development of Islamic social institutions such as Zakat, Waqf, and charitable activities. These institutions can utilize the funds provided by Islamic banks to provide microfinance services to underserved communities, particularly in areas such as education, health, and housing. Islamic microfinance can also be extended to small and medium-sized enterprises (SMEs), creating employment opportunities, and contributing to poverty reduction. Overall, the use of Islamic interbank financial instruments can help promote the development of the Islamic social finance sector, which plays a crucial role in addressing societal needs and promoting social justice.

REFERENCES

- Abdul Karim Abdullah (2013). Use of interest rate benchmarks for determining profits on Islamic sukuk, International Institute of Advance Islamic Studies Malaysia. Access at: <u>http://www.iais.org.my/e/index.php/dirasat-sp-</u> <u>1862130118/economic-finance-zakat-awqaf/item/153-use-of-interest-</u> <u>rate-benchmarks-for-determining-profits-on-islamic-sukuk.html</u>
- Abdul Azeez Maruf Olayemi, Aznan Hasan, Uzaimah Ibrahim, Siti Mashitoh Binti Mahamood and Ahmad Hidayat Bin Buang (2016). Modus Operandi of the Islamic Money Market: A Proposal for Holistic Shariah Adaptation. University of Sharjah Journal for Humanities & Social Sciences, Volume 13, No. Special Issue.
- BNM (2013). *Wakalah:* Shariah Requirements and Optional Practices. Bank Negara Malaysia. Access at: www.bnm.gov.my/documents/SAC/07 Wakalah.pdf
- Bernardo Vizcaino (2013). Omani Islamic lenders build interbank market with Wakala. Reuters. Access at: <u>http://www.reuters.com/article/islamic-finance-oman-idUSL6N0FL04J20130715</u>
- Saiti Buerhan , Aznan Hasan, Engku Rabiah Adawiah Engku Ali (2016). Islamic Interbank Money Market: Contracts, Instruments and Their Pricing. Palgrave CIBFR Studies in Islamic Finance.
- Clifford Chance (2013). Launch of IIFM Interbank Unrestricted Master Investment Wakalah Agreement. Access at: www.cliffordchance.com
- El Hamiani Khatat, Mariam (2015). Monetary Policy Implementation in the Presence of Islamic Banking. IMF Working Paper Gulam Ali Khan. Oman's Islamic banking assets crosses RO6bn mark, Daily Muscat (17th May 2022. Available: <u>https://www.muscatdaily.com/2022/05/17/omans-islamic-banking-assets-crosses-ro6bn-mark/</u>
- Hakim, S. R. (2007). "Islamic Money Market Instruments" in M. Kabir Hassan and Mervyn, K. Lewis (ed.). *Handbook of Islamic Banking*. Edward Elgar: Cheltenham.
- ISRA (2021). Islamic Financial System: Principles and Operation, 2nd Edition, Kuala Lumpur: International Shariah Research Academy for Islamic Finance (ISRA).
- Islamic Financial Services Board. (2008). Technical Note on Issues in Strengthening Liquidity Management of Institutions Offering Islamic Financial Services: The Development of Islamic Money Markets. Kuala Lumpur. Islamic Financial Services Board. International Islamic

Financial Market (IIFM). Issues in Inter-Bank Unrestricted Wakalah. IIFM Industry Seminar on Islamic Capital Market, Liquidity Management & Risk Mitigation Instruments, 19th Annual WIBC, 9th December 2012, Gulf Hotel, Kingdom of Bahrain.

- IMF Annual Report (2011). Pursuing Equitable and Balanced Growth. International Monetary Fund. <u>https://www.imf.org/external/pubs/ft/scr/2011/cr11241.pdf</u>
- Imam Wahyudi and Gandhi Anwar Sani (2014). Interdependence between Islamic capital market and money market: Evidence from Indonesia, <u>Borsa Istanbul Review</u>, 2014, vol. 14, issue 1, 32-47. <u>https://www.researchgate.net/publication/267455402 Interdependenc e between Islamic capital market and money market Evidence fro <u>m Indonesia</u></u>
- Mark, M. (2011). "The Islamic Money Market and its Relevance to the Islamic Capital Markets" in Rahail Ali (ed.). Sukuk and Islamic Capital Markets: A Practical Guide, London: Global Business Publishing Ltd.
- Monzer Kahf and Cherin Hamadi (2014). An Attempt to Develop Sharī'ah Compliant Liquidity Management Instruments for the Financier of Last Resort: With Reference to Qatar Development Plan. *Islamic Economic Studies* Vol. 22, No. 1, pp 109-138.
- Muttalib, Sekoni Abiola (2014). Islamic Money Market: An Instrument for Managing Liquidity Risk in Islamic Bank. International Institute of Advanced Islamic Studies (IAIS) Malaysia, Vol. 5. No. 2. Accessed at:https://www.semanticscholar.org/paper/Islamic-Money-Market%3A-An-Instrument-for-Managing-in-

Muttalib/3c3816a7889d1ede5f453a124dff30c70de62fa0?p2df

- Muhammad Ayub (2017). Liquidity Management by Islamic Banks: An Issue or a Contrivance for Risk-Free Returns, Journal of Islamic Business and Management2017, 7(1), 1-10. Accessed at: <u>https://www.researchgate.net/publication/326539600 Liquidity Mana</u> <u>gement by Islamic Banks An Issue or a Contrivance for Risk-Free Returns</u>
- Norma Md Saad (2022). The Role of Central Bank and Monetary Policy, International Islamic University. <u>https://www.iium.edu.my/media/84221/Cert%20in%20IE%2018Sept2</u>022_Norma%20Md%20Saad%20Topic%202.pdf
- Obiyathulla Ismath Bacha (2009). The Islamic Interbank Money Market and a Dual Banking System: The Malaysian Experience. Munich Personal RePEc Archive. Accessed at: Online at <u>http://mpra.ub.uni-muenchen.de/12699/</u>

- Ritu Basu, Ananthakrishnan Prasad, and Sergio Rodriguez (2015). Monetary Operations and Islamic Banking in the (GCC): Challenges and Options. IMF Working Paper, Middle East and Central Asia Department.
- Randall Dodd (2022). What Are Money Markets? IMF. Accessed: <u>https://www.imf.org/external/pubs/ft/fandd/basics/58-money-</u> <u>markets.htm#author1</u>
- UAE Central Bank (2017). Innovation in Islamic Liquidity Management: Transforming Islamic Finance Business, Thomson Reuters. Access at: <u>https://ceif.iba.edu.pk/.../ThomsonReuters-</u> <u>InnovationinIslamicLiquidityManagement2</u>
- Yousuf Mohammed Suleiman Al Balushi (2016). Oman Islamic money Market Instruments. Modern College of Business & Science. Project Paper for Master of Islamic Finance.