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The Effect Of Monetary Policy On Islamic Financial Institution: A Perspective Of Liquidity Management

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ABSTRACT

This study aims to examine the different instruments central banks use to regulate the economy of any country as well as what are the modifications required by the central bank to deal with a Shari'ah-compliant economic system with the perspective of liquidity management. As the Islamic economic system is based on Shari'ah (Islamic law) and it does not allow dealings with *riba* (interest) and call for a 100 percent reserve system. This study uses library research which comprises articles and books as sources to collect and analyse the data. This study is focusing on the financial institutions (Islamic/conventional) of Malaysia, Bahrain, Iran, Sudan, and Pakistan. Findings showed that a comparative literature review of Islamic and conventional monetary policy revealed that many monetary policy instruments can be adopted in Islamic monetary policy with or without major modifications. The creation of solid monetary policy frameworks for nations with Islamic banks necessitates extensive research and analysis.

INTRODUCTION

Monetary policy is the macroeconomics practiced by the Central Bank to control the money supply by adjusting the interest rates, influencing the rate of inflation, consumption, growth, and liquidity. It is well advertised that Islamic financial institutions' products are interest-free. Hence, the monetary policy that involves expansion and contraction of the economy via interest rate swapping should not impose any effect on these Islamic financial institutions. However, a study by Grais and Ahmed (2014) indicates that Islamic financial institutions are indirectly influenced by the monetary policy is applied by the conventional financial institutions. Liquidity management is acknowledged as one of the imperative problems in banking and the banks' liquidity and lending activities have a negative relationship in which when the bank grants more loans, it would automatically create a demand for deposits and, this reduced the liquidity of the bank. In other words, the bank's liquidity risk increases as more loans are given out of the bank. Hence, the monetary policy is linked with the liquidity risks since its policy instruments alter a trade-off between the choice of profiting from lending versus additional liquidity risks. To sum up, the first two information that can be extracted here are; i) Monetary policy implemented by conventional institutions has an indirect impact on Islamic financial institutions' balance sheet; ii) Monetary policy imposed at a certain economic condition, acts as a determining factor whether the bank should give more loans or reduce the loan issuance to maintain the bank's liquidity.

Nowadays, modern economies basically rely on central banks for their stability and growth, turning from their various important functions comprising traditional and developmental functions (Blancheton, 2016) The traditional functions of a central bank can be divided into two groups, like the primary functions that include the issuance of currency notes, supervision of the financial system, maintenance of liquidity for both the government and private sectors and conduct of monetary policy. And for the secondary functions which have management of public debt, management of foreign exchange, and advising the government on policy matters.

The developmental functions include infrastructure development for the financial sector, the institutionalization of savings and investments, allocation of credit to priority sectors, and provision of training to industry participants. To effectively perform these functions, central banks use different instruments such as treasury bills, required reserve ratio, and the discount rate that rely on money creation and the manipulation of the interest rate in the economy. A central bank may fail to achieve its broad objectives if it cannot use conventional interest-based instruments to perform its functions. The most important instruments that exist in central banks are based on money creation or interest rates. The interest-based central banking system is not suitable for countries following that Shari'ah-compliant economic system, and certain modifications would be required. As the principles of Shari'ah (Islamic law) does not allow dealings with riba (interest) and call for a 100 percent reserve system (Askari, Iqbal, Krichene, & Mirakhor, 2014), a lot of the current practices need to be discarded and new tools and instruments should be devised to effectively perform central banking functions in a Shari'ah-compliant basis. The existing set of central banking guidelines (principally influenced by the Basel accords) definitely lays on achieving an optimal capital adequacy ratio and using capital as a buffer against any potential losses (Syed Ali & Hasan, 2014). The followings section discussed the related past studies; research method; discussion and conclusion of the study.

LITERATURE REVIEW

Monetary Policy's Effects on IFIs and its Relation with Liquidity Management.

Some studies highlight the positive relationship between a monetary policy with Islamic financial institutions' performance as well as the bank's liquidity (Agénor & El Aynaoui, 2010; Kassim, Majid, & Yusof, 2009; Zulkhibri, 2018). Firstly, there is no significant difference between Islamic bank financing and conventional bank lending behavior with respect to changes in monetary policy because monetary policy increases liquidity to create economic growth. Meanwhile, monetary policy can also reduce liquidity to prevent inflation (Agénor & El Aynaoui, 2010; Zulkhibri, 2018). Therefore, this applies to both Islamic and conventional banking with no difference according to these authors. Secondly, according to Kassim et al. (2009), monetary policy has positive relationship with Islamic financial institutions in the sense that even though monetary policy inculcates the change in interest rate, they unpredictably found that the monetary policy gives a more significant impact on Islamic banks' balance sheet as compared to conventional banks. This is because the monetary policy gives a higher destabilizing effect on Islamic financial institutions. The reason behind this according to the authors is due to the fact that conventional banking was established earlier than Islamic banking and hence it has a wider market, making it more capable of setting off the decline in liquidity caused by the tightening of monetary policy. Besides, the Islamic financial institutions need to withstand the shocks of monetary policy and the refinement of Islamic financial institution products which are still actively procreating. On the contrary, certain studies discover that monetary policy is negatively correlated with liquidity management and also gives an insignificant impact on Islamic financial institutions (Rashid, Hassan, & Shah, 2020; Zaheer, Ongena, & Van Wijnbergen, 2013). This is due to the fact that the credit supply of Islamic banks responds less to the tight monetary policy as compared to conventional counterparts due to the unique contractual and motivational features of Islamic financial institutions. In terms of the impact of monetary policy on liquidity, less-liquid banks supply less credit during periods of tight monetary policy. According to the study by Zaheer et al. (2013), Islamic financial institutions grow continuously despite the tightening of the monetary policy imposed by the Central Bank in Malaysia, irrespective of their size and liquidity. This indicates that monetary policy gives less significant impact on Islamic financial institutions.

Shari'ah-compliant central banking practices: lessons from Muslim countries' experience

A past study by Anwer, Khan, and Bakar (2020) is discussing more about these themes that include the history and functions of a central bank, orthodox versus heterodox monetary policy, proposed structure of Shari'ah-compliant central banks and monetary policy framework. On the themes about history and functions of a central bank starts with Cukierman (1992) mentioned the history of modern central banking with the establishment of the Bank of England (BOE) in 1694 following a model devised by Charles Montagu. Then, central banking functions to run the financial system and contribute to economic growth (Blinder, 1999). Else, the direct instruments set or limit prices or quantities through regulation and target the balance sheets of commercial banks, whereas indirect instruments operate through the market by influencing the underlying demand and supply conditions and aim at the balance sheet of the central bank (Choudhry & Mirakhor, 1997).

The themes of orthodox versus heterodox monetary policy were discussed through changing of central banking practices after the global financial crisis (Lenza, Pill, & Reichlin, 2010). The orthodox approach called for quantitative easing such as the expansion of the central bank's balance sheet, particularly on the monetary base. However, the heterodox approach calls for qualitative easing as composition of asset holdings is changed in a manner that "unconventional assets" are introduced by replacing conventional assets.

For the themes of the proposed structure of Shari'ah-compliant central banks (SCCBs), Uzair (1978) asserts that SCCBs should hold 25 percent of the credit stock of all the commercial banks operating in the country, to regulate investments and restrict risky investments. Then, Siddiqi (1983) consented with the objective of an SCCB is to strive for the public benefit. Next, (Chapra, 1985) predicted that in achieving the socio-economic goals of the Islamic economy, a central bank could look as the pivot of the Islamic banking system through its productive efforts. Furthermore, the Islamic Financial Services Board (IFSB, 2005) had introduced core principles to complement the Basel guidelines and facilitate central banks in performing monitoring functions more effectively. An SCCB is also required to facilitate on comprehensive risk management framework for IFIs (Akkizidis & Khandelwal, 2007). Likewise, SCCBs should advise IFIs about Shari'ah-compliant instruments to raise capital in accordance with Basel III requirements (Haneef & Tahir, 2018; Usman, Pitchay, Nor, Izati, & Zahra, 2021). Discussing the monetary policy framework theme, (Siddiqi, 1982) starts with proposing several innovative tools like the refinance ratio that would move in the opposite direction of the cash reserve ratio. In case the central bank intends to reduce the expansion of credit, it would lower the refinance ratio, and in case the central bank intends to increase the supply of credit, it can target this ratio. Then, Al-Jarhi (1983) floated the concept of central deposits, the investment accounts opened by the SCCB in member banks to control the money supply either by depositing the newly created money (expansion) or withdrawing the retired money (contraction). These funds would be used by member banks for investment in the real sector and could also be sold to the public in the form of central deposit certificates (CDCs) for subsequent investment. After that, Chapra (1985) evaluates how three broad sources of monetary expansion, namely, fiscal deficits, commercial credit and balance of payments – which are extensively used in contemporary settings, could be exercised under these conditions.

Firstly, the framework of fiscal deficits could be used if it could be ensured that the deficits are permitted only to achieve broad-based objectives and stable prices instead of making wasteful expenditures. Moreover, governments would be required to restructure the financial system and devise Shari'ah-compliant contracts to fund these fiscal deficits. Secondly, commercial banking credit could be used as a monetary policy tool by effectively regulating deposits. Finally, the balance of payments could be used to affect the money supply if the country possesses strong foreign trade fundamentals. He also proposes various distinguished instruments that SCCBs can use to achieve the broad monetary policy objectives in an interest-free paradigm. Next, he argues, unlike conventional economic thought, monetary policy in an Islamic economic system is not confined to stability in the value of money, economic growth and full employment. It also extends to the pursuit of distributive justice and the adoption of sustainable practices. Regarding this issue, Chapra (1985) argues that in an Islamic economy, the demand for money will originate from transactions and precautionary needs – factors that are largely determined by the pattern of income and distribution. In the absence of interest rates, savers will have no option but to hold cash or make investments. Besides, Zangeneh and Salam (1993) advocate the idea of introducing modifications to existing monetary policy tools to practice them in an Islamic framework, instead of adopting new and lesser-known instruments. Moreover, Choudhry and Mirakhor (1997) proposes equity-based government securities as a replacement of treasury bills to conduct open market operations having yields in the form of the budget surplus to be quoted initially as "expected dividends". Askari et al. (2014) introduce a framework of monetary policy in which the central bank directly affects private portfolios by trading in risk-sharing securities and indirectly affects the financial sector through financial signals. They envisage a 100 percent reserve system coupled with no deposit guarantee. In this framework, to cover budget deficits, governments could borrow through asset-backed or asset-based Sukuk instruments to finance development projects while refraining from interest-based instruments. They also emphasize that the primary goal of monetary policy in an Islamic economy is to achieve price-level stability and a sustainable balance of payments position to ensure macroeconomic stability and to boost savings, investments, and the inflow of foreign funds. Then, Selim (2018) shows, with the help of empirical evidence, that qard-al-hasan (benevolent loans) can be used as an effective monetary policy tool that positively influences real sectors of the economy, increases output, and helps the economy in achieving full employment owing to the lowest possible borrowing costs attached with this instrument. Dolgun, Mirakhor, and Ng (2019) assert that the Basel III liquidity framework can pose challenges to Islamic banks owing to the

limited availability of high-quality liquid assets and difficulties in shaping the structure to suit the practices of Islamic banks.

The role of Islamic Banks in the monetary transmission process in Malaysia

Monetary policy is traditionally defined as the activities performed by a central bank to impact the availability (money supply) and cost of money and credit, while frequently targeting an interest rate, (Developments, 1998). In Malaysia, the Bank Negara Malaysia Overnight Policy Rate (OPR) has a substantial impact on the financing costs of Islamic banks, and various articles demonstrate the presence of a transmission from the conventional to the 20 Islamic financial system. The Malaysian Islamic Interbank Money Market (IIMM) was formed on January 3, 1994, to match liquidity needs and surpluses among Islamic banks. The Mudharabah Interbank Investments (MII) are part of the IIMM. The Central Bank Act 2009 enjoins the Bank Negara Malaysia (BNM) responsibility for implementing the monetary policy to promote monetary stability and financial stability conducive to the sustainable growth of the Malaysian economy. To signal monetary policy more effectively and enhance the efficiency of the monetary transmission mechanism, BNM adopted a policy rate that is closely linked to other interest rates and has introduced enhancements to its monetary operating procedures. During the global financial crisis 2007–2009, BNM stabilized the financial markets using monetary policy expansion in mitigating the pressure on capital outflows and declining share prices, (Policy, 2009). Malaysia is currently the most advanced country in developing Islamic finance. The country's Islamic finance system has pioneered the shift from simply being a viable alternative to conventional systems to producing unique products and services that are unique to the Islamic finance system itself, serving the needs of customers as well as the real economy. In the conventional economic system, monetary policy is a tool for controlling the money supply and demand by manipulating interest rates, however, in the Islamic economic system, Riba, or interest rates, is banned. Thus, to really govern the supply and demand for money in the economy, some other approach, technique, or instrument is necessary, (Uddin, Romlie, Abdullah, Abd Halim, & Kwang, 2018). The Bank's monetary operations, according to (BNM, 2016) provided enough liquidity to enable the orderly operation of money and foreign exchange markets. Because of the essential role that the banking sector plays in funding economic activity in the economy, the bank lending channel is a potential candidate for an important monetary transmission mechanism in the Malaysian economy, (Scalbi et al., 2021). Many literature reviews have identified several mechanisms for monetary transmission. However, (Kassim et al., 2009; Rafay & Farid, 2019) identify that both bank loans and deposits play a crucial role in the monetary transmission process in the economy. Studies done by Article C stated that there is a significant relationship between Islamic banks and monetary policy, with Islamic banks serving as a channel to transfer monetary policy consequences to the real economy, and this is supported by (Kassim et al., 2009; Majid & Hasin, 2014).

Conventionally, bank loans, in particular, are shown to be significant in the monetary transmission process by spreading the effects of policy shocks through the money channel. However, a study by (Hasan, 1991) argued that Islamic banks are less vulnerable to monetary shocks and hence more stable than conventional banks, because profit and loss sharing allows Islamic banks to shift some of the risk to depositors. Response to this, recent study by Akhatova, Zainal, and Ibrahim (2016) validated these findings by estimating an SVAR and evaluating the responsiveness of both Islamic and conventional banks to monetary policy shocks in Malaysia. They discover that Islamic banks have a large response to a positive interest rate shock. Evidently, Islamic banks in Malaysia contribute to the transmission of monetary policy shocks to the real economy through the banking channel.

Moreover, based on the study from Sukmana and Kassim (2010) mentioned that central banks can influence economic activity by controlling the quantity of bank loan issuance in the economy. When a central bank conducts open market operations (OMO) to reduce system liquidity, banks' deposits and liquidity are reduced, which reduces banks' ability to make new loans, (McCauley, 2008). This means that any monetary policy adjustments, like changes in the Islamic interbank rate, will have a considerable impact on the loan supply. However, a study by (Tahir, 2013) argued that, according to Islamic law, open market operations are forbidden and should be replaced with Sukuk (project-based). The issue of Islamic Banking Institutions' excessive liquidity might be efficiently addressed by implementing Sukuk-backed Open Market Operations (OMOs) and, in the future, by establishing a modaraba-based discount facility for IBIs. Similarly, a study by (Khatat, 2016), also mentioned that Government-issued Sukuk may be the best collateral for Sharia-compliant monetary operations. From an operational standpoint, the development of a liquid, transparent government Sukuk market may lessen the influence of individual transactions. For example, government

issuances on price discovery, hence lessening the risk of fiscal dominance and lowering market risks. In Malaysia, the increasing market share of Islamic finance, as well as the emergence of a unique equity structure, could affect the efficiency of monetary policy transmission for Islamic banks

RESEARCH METHOD

The present study uses library research which comprises of articles and books as sources to collect and analyses the data. Ideas and conclusions are also being integrated to make the conclusion synthesized. This study is focusing on the financial institutions (Islamic/conventional) of various countries such as in Malaysia, Bahrain, Iran, Sudan and Pakistan. In the context of Malaysia, 3 books and more than 20 articles dealing with the monetary policy and monetary transmission in Global and Malaysia were collected. This method was found through Bank Negara Malaysia annual report, internet search (CFA Institution), Emerald Insight, Science Direct, Global insight and Social Sciences Citation Index databases

DISCUSSION

Based on the study by Grais and Ahmed (2014), in dual financing systems, (Islamic finance and conventional financing) it is important to develop a uniform monetary operations framework covering both Islamic and conventional financial institutions. The effort to increase liquidity by offering a liquid money market for both Islamic financial institutions and conventional institutions is recommended. However, it should not stop there, as it is not sufficient. Licensing International Islamic Financial Market (IIFS) in dual financial systems necessitates the authorities' responsibility in conducting the monetary policy and systemic liquidity management. This is attainable, but the issue needs to be addressed comprehensively. Besides that, this study also identifies some linkage of monetary policy applied in conventional financial institutions that have a significant impact on Islamic financial institutions, in which it affects the liquidity management of Islamic financial institutions. To ensure the stability of Islamic financial institutions, the liquidity of the said institutions needs to be maintained by implementing monetary policy that is adapted to the nature of the Islamic financial institution. For example, one of the basic principles of Islamic Finance is to eliminate the elements of interest (riba) (Usman, Pitchay, & Zahra, 2021). Therefore, monetary policy needs to be controlling the profit rate in Islamic financial institutions instead of the interest rate, while controlling the business made in the Islamic financial institution's activities. This profit rate will be generated from the agreement made in Islamic financial institutions using the shariah-compliant underlying contract. According on the study by Anwer et al. (2020), shows that Iran played an effective role in pursuing broader objectives of monetary policy by setting priorities for credit allocation and assisting the government in reducing expenses; however, with respect to the instruments, its experience is limited as the rebranding of conventional products. Sudan on the other hand has not only used monetary policy to effectively restrain inflation but also it has introduced various indirect instruments to perform well in monetary operations. Pakistan likely succeeded in formulating a theoretical roadmap to establish a SCCB but the desired objectives could not be attained due to multiple factors. Although these countries tried to introduce traditional Islamic finance modes to perform conventional monetary actions, and these instruments fulfil legal requirements of Shari'ah, there is still a long way to go to design effective instruments to achieve the objectives of Shari'ah. The role of the SCCB is very important in this respect.

Based on the study by Sukmana and Kassim (2010), they identify that monetary transmission via Islamic banking occurs in Malaysia. Monetary mechanisms resulting from strict monetary policy cause the quantity of Islamic finance to drop, leading economic activity to diminish. Furthermore, studies show that Islamic banking, which operates under the country's dual banking system, is not immune to the country's interest rate and monetary conditions. When interest rates rise, the value of Islamic banking falls. However, study by Hayat and Malik (2014), they discovered that although using conventional benchmark is permissible from Shariah point of view as a tool and basis for pricing of goods and their usufructs, a benchmark reflective of fictitious assets, as is the case in the conventional framework, will not be helpful in realising the socio-economic objectives of Islamic banking and finance. Therefore, in the context of the monetary transmission mechanism, the Islamic banking deposit is a useful variable to consider in the implementation of monetary policy due to its strong influence on the monetary policy variable. Even in Malaysia, which is often recognized as the global leader in Islamic banking, the effectiveness of the monetary policy transmission process is now hampered by the significant presence of Islamic banks in the financial system. The growing market share of Islamic finance, as well as the creation of novel equity structures, may have an impact on the effectiveness of monetary policy.

Overall, is it possible to conclude that the monetary policy applied by Islamic financial institutions such as Islamic Bank plays an important role for economic activity. The success of Islamic money market activities in Malaysia brings light to those who urge for the creation of a long-term framework for Sharia-compliant monetary policy. Over the last two decades, financial institutions and markets in Malaysia and other Muslim nations throughout the world have created an expanding variety of Islamic monetary management techniques and regulations. Because of the particular risks that Islamic financial institutions confront, as described by the study, it is critical to develop appropriate risk mitigation strategies. In this context, it is imperative to seek a practical and durable alternative to interest rates, which are outright forbidden in the Islamic economic system. This study emphasizes the need of considering the effects of monetary policy execution on Islamic banking institutions, as well as the necessity for the country to build a complete Islamic financial system. As a result, we must seek an alternative approach to running and controlling monetary policy in a sustainable manner.

CONCLUSION

The present study highlights the importance of managing systemic liquidity to promote financial stability, besides inculcating the contingency financing framework to deal with cases of distress when they emerge. The current situation of uprising Islamic financial institutions demands for a thorough approach to monetary policy due to the fact that most economies with Islamic banks also have conventional banks. Therefore, the first recommendation is to establish a dual approach to monetary policy especially if the Islamic segment of the financial system is not as developed as the conventional one. This approach is also suggested by Khatat, Buessing-Loercks, Fleuriet, and Alwazir (2020) in their study where they said that in order to integrate monetary policy in Islamic financial institutions, everything needs to be in compliance with the Islamic finance core principles. They added that the diverse frameworks of financial systems and monetary policy in the countries where Islamic banking exists will be one of the challenges to incorporate the customized 'Islamic Monetary Policy' in Islamic financial institutions. Therefore, the development of this monetary policy should be well-adapted in accordance with the Islamic financial institutions' heterogeneous systems. Incorporating Islamic banks into the monetary policy framework is a difficult endeavour, not only because of the requirement to adhere to Islamic finance's essential principles, but also because of the diversity of financial systems and monetary policy frameworks in countries where Islamic banking is practiced. The creation of solid monetary policy frameworks for nations with Islamic banks necessitates extensive research and analysis. Implementing an Islamic monetary policy is thought to be a powerful and successful monetary strategy that would lead to financial inclusion and socioeconomic progress, helping Malaysia to realize its goal of being a developed high-income country.

Last but not least, these studies reviewed literature on the early Islamic monetary system, contemporary Islamic monetary policy and the current practices followed by the central bank in Malaysia. A comparative literature review of Islamic and conventional monetary policy revealed that there are many monetary policy instruments which can be adopted in Islamic monetary policy with or without major modifications. At the same time, Islamic economists and researchers have come up with instruments which are unique and Shari'ah-compliant. The success of Islamic moneymarket operations in Malaysia weighs in favour of those who advocate the development of a sustainable framework for Shari'ah-compliant monetary policy. As a final suggestion, the governments have to ensure before their central banking is going to be full-fledged in Islamic economic system, they have to avoid involving debt from foreign countries. Without any debt outof their boundaries, they are free to do what they want to do regarding the monetary policy.

REFERENCES

- Agénor, P.-R., & El Aynaoui, K. (2010). Excess Liquidity, Bank Pricing Rules, And Monetary Policy. *Journal Of Banking & Finance*, 34(5), 923-933.
- Akhatova, M., Zainal, M. P., & Ibrahim, M. H. (2016). Banking Models And Monetary Transmission Mechanisms In Malaysia: Are Islamic Banks Different? *Economic Papers: A Journal Of Applied Economics And Policy*, 35(2), 169-183.
- Akkizidis, I., & Khandelwal, S. (2007). *Financial Risk Management For Islamic Banking And Finance*: Springer.

- Al-Jarhi, M. A. (1983). A Monetary And Financial Structure For An Interest-Free Islamic Economy: Institutions, Mechanism And Policy. *Money And Banking In Islam, Islamabad: IPS & Jeddah: KAAU*, 69-88.
- Anwer, Z., Khan, S., & Bakar, M. A. (2020). Shari'ah-Compliant Central Banking Practices: Lessons From Muslim Countries' Experience. *ISRA International Journal Of Islamic Finance*, 12(1), 7-26.
- Askari, H., Iqbal, Z., Krichene, N., & Mirakhor, A. (2014). Understanding Development In An Islamic Framework. *Islamic Economic Studies*, 22(1).
- Blancheton, B. (2016). Central Bank Independence In A Historical Perspective. Myth, Lessons And A New Model. *Economic Modelling*, 52, 101-107.
- Blinder, A. (1999). *Central Banking In Theory And Practice* (0262522608).
- BNM. (2016). Bank Negara Malaysia Annual Report - Monetary Policy In 2016. 65-72. <https://www.bnm.gov.my/files/publication/ar/en/2016/cp03.pdf>
- Chapra, M. U. (1985). *Towards A Just Monetary System* (Vol. 8): International Institute Of Islamic Thought (IIIT).
- Choudhry, N. N., & Mirakhor, A. (1997). Indirect Instruments Of Monetary Control In An Islamic Financial System. *Islamic Economic Studies*, 4, 28-65.
- Cukierman, A. (1992). Central Bank Strategy, Credibility, And Independence: Theory And Evidence. *Journal Des Économistes Et Des Études Humaines*, 3(4), 581-590.
- Dolgun, M. H., Mirakhor, A., & Ng, A. (2019). A Proposal Designed For Calibrating The Liquidity Coverage Ratio For Islamic Banks. *ISRA International Journal Of Islamic Finance*, 11(1), 82-97.
- Grais, W., & Ahmed, A. M. E. T. (2014). *Islamic Finance And Economic Development: Risk, Regulation, And Corporate Governance*: John Wiley & Sons.
- Haneef, M. A., & Tahir, S. (2018). Rethinking Islamic Economics And Finance: Taking Stock And Moving Forward. *Intellectual Discourse*, 26, 281-290.
- Hasan, Z. (1991). The Financial System And Monetary Policy In An Islamic Economy By Mohsin S. Khan & Abbas Mirakhor. *Journal Of King Abdulaziz University: Islamic Economics*, 3(1), 85-93.
- Hayat, U., & Malik, A. (2014). Islamic Finance: Ethics, Concepts, Practice. *Practice (November 2014)*. CFA Institute Research Foundation L2014-3.
- IFSB. (2005). *Guiding Principles Of Risk Management For Institutions (Other Than Insurance Institutions) Offering Only Islamic Financial Services*: Islamic Financial Services Board.
- Kassim, S. H., Majid, M. S. A., & Yusof, R. M. (2009). Impact Of Monetary Policy Shocks On The Conventional And Islamic Banks In A Dual Banking System: Evidence From Malaysia. *Journal Of Economic Cooperation And Development*, 30(1), 41-58.
- Khatat, M. E. H. (2016). *Monetary Policy In The Presence Of Islamic Banking*: International Monetary Fund.
- Khatat, M. E. H., Buessing-Loercks, M., Fleuriet, V., & Alwazir, J. (2020). Monetary Policy Under An Exchange Rate Anchor. *IMF Working Papers*, 2020(180).
- Lenza, M., Pill, H., & Reichlin, L. (2010). Monetary Policy In Exceptional Times. *Economic Policy*, 25(62), 295-339.

- Majid, M. S. A., & Hasin, Z. (2014). Islamic Banks And Monetary Transmission Mechanism In Malaysia. *Journal Of Economic Cooperation And Development*, 35(2), 137-166.
- Mccauley, J. L. (2008). Evolution Of FX Markets Via Globalization Of Capital *Evolution From Cellular To Social Scales* (Pp. 111-142): Springer.
- Rafay, A., & Farid, S. (2019). Islamic Banking System: A Credit Channel Of Monetary Policy–Evidence From An Emerging Economy. *Economic Research-Ekonomska Istraživanja*, 32(1), 742-754.
- Rashid, A., Hassan, M. K., & Shah, M. A. R. (2020). On The Role Of Islamic And Conventional Banks In The Monetary Policy Transmission In Malaysia: Do Size And Liquidity Matter? *Research In International Business And Finance*, 52, 101123.
- Scalbi, S., Buttol, P., Dominici Loprieno, A., Garavini, G., Mancuso, E., Reale, F., & Zamagni, A. (2021). Toward A Low-Carbon Economy: The Clim'Foot Project Approach For The Organization's Carbon Footprint *LCA Based Carbon Footprint Assessment* (Pp. 71-92): Springer.
- Selim, N. (2018). Arabic Teaching At Australian Islamic Schools: A Call Framework *Islamic Schooling In The West* (Pp. 285-314): Springer.
- Siddiqi, M. N. (1982). *Recent Works On History Of Economic Thought In Islam: A Survey*: International Centre For Research In Islamic Economics, King Abdulaziz
- Siddiqi, M. N. (1983). *Banking Without Interest* (Vol. 5): Islamic Foundation Leicester.
- Sukmana, R., & Kassim, S. (2010). Roles Of The Islamic Banks In The Monetary Transmission Process In Malaysia. *International Journal Of Islamic And Middle Eastern Finance And Management*, 3(1), 7-19.
- Syed Ali, S., & Hasan, H. (2014). *Towards A Maqasid Al-Shariah Based Development Index*.
- Tahir, S. (2013). Fiscal And Monetary Policies In Islamic Economics: Contours Of An Institutional Framework. *Islamic Economic Studies*, 130(905), 1-22.
- Uddin, M., Romlie, M. F., Abdullah, M. F., Abd Halim, S., & Kwang, T. C. (2018). A Review On Peak Load Shaving Strategies. *Renewable And Sustainable Energy Reviews*, 82, 3323-3332.
- Usman, M., Pitchay, A. A., Nor, E., Izati, E., & Zahra, M. (2021). Non-Shari'ah Compliant Income Gain Of Islamic Banks And Its Impact On Customers Trust And Commitment: A Qualitative Approach. *Advanced International Journal Of Banking, Accounting And Finance*, 3(9), 15-22.
- Usman, M., Pitchay, A. A., & Zahra, M. (2021). Non-Shariah Compliance Of Islamic Banks And Customers Commitment: Trust As Mediator. *Advanced International Journal Of Banking, Accounting And Finance*, 3(8), 28-36.
- Uzair, M. (1978). *Interest Free Banking*: Royal Book Company Karachi, Pakistan.
- Zaheer, S., Ongena, S., & Van Wijnbergen, S. (2013). The Transmission Of Monetary Policy Through Conventional And Islamic Banks. *European Banking Center Discussion Paper*(2011-018), 2011-2078.
- Zangeneh, H., & Salam, A. (1993). Central Banking In An Interest-Free Banking System. *Journal Of King Abdulaziz University: Islamic Economics*, 5.
- Zulhibri, M. (2018). The Impact Of Monetary Policy On Islamic Bank Financing: Bank-Level Evidence From Malaysia. *Journal Of Economics, Finance And Administrative Science*, 23(46), 306-322.