Inclusive Welfare: On The Role of Islamic Public-Social Finance and Monetary Economics

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INCLUSIVE WELFARE: ON THE ROLE OF ISLAMIC PUBLIC-SOCIAL FINANCE AND MONETARY ECONOMICS [1]

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Abstract

The concept of inclusive economic development has gained traction among researchers due to the failure of old concepts to solve poverty and social inequality. Shifting of the economic development is needed, from the focus on good and service value to increasing economic participation of communities. To shed a light on the solution, this study aim to examine the lesson learned from Islamic social-public finance and monetary economics role in realizing inclusive welfare. Based on in-depth observation, we found that economic inclusion and inclusive growth are fully in line with the spirit and goals of the Islamic economy in terms of creating equitable welfare for all. There is also an existing linkage between the role of Islamic social-public finance and monetary economics.

Keywords: Islamic economy, Public and social finance, Monetary economics, Economic development, Inclusive welfare.

JEL Classification: O10, D63, E50, H61, H75

[1] Conclusions, opinions, and views in this paper are based on the authors' perspective and do not constitute official conclusions, opinions, and views of Bank Indonesia.

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I. Introduction

Indiscriminately blighting advanced and emerging economies alike, economic and financial crises have prompted further exploration of more suitable, stronger economic concepts and systems. Furthermore, economic development has hitherto failed to manifest a significant impact on poverty alleviation and social inequality (Dabla-Norris et al., 2015), thus fostering the application of an economic and development strategy approach that prioritises inclusive welfare. The global initiative of the Millennium Development Goals (MDGs), followed by the Sustainable Development Goals (SDGs), is a response to the failure of the outdated trickle-down theory approach to development (Greenwood & Holt, 2010). The MDG/SDG approach employs a modern development style with a direct impact on achieving poverty alleviation targets, reducing inequality and ameliorating welfare for all through economic empowerment and financial inclusion programs (microfinance) (Woodbridge, 2015).

Naturally, the concept of inclusive economic development has become a hot discussion topic, accompanied by research and discourse in scientific journals and global economic forums (Anand et al., 2013; Andrews et al., 2021; Askarova et al., 2021; Kanbur & Rauniyar, 2009). Various financial inclusion strategies have been discussed and recommended in a virtuous effort to improve the living standards of the poor as well as support micro and small enterprises. Diverse economic development concepts are being recommended for the attention of economic authorities, including the notion of economic inclusion and inclusive growth. In general, a more inclusive view of economic development is one in which the benefits stretch beyond elevating income or expanding the number of products and services in an economy to encompass social aspects, such as quality-of-life improvements (ADB, 2017), social security (Damon, 2016), health and the environment (Canada Minister of Environment and Climate Change, 2020), which are the inviolable rights of all, irrespective of social standing.

Underpinned by the paradigm of economic inclusion and inclusive growth, experts are recommending holistic economic development concepts with the benefits felt by the entire population (Everett, 2022; Klinec, 2004; Srivastava, 2005; UN ECLAC, 2015). Rather than focusing on the value of goods and services produced (GDP), economic inclusion and inclusive growth are oriented towards increasing economic participation in the wider community and how many people will experience the benefits in the form of living standards, health, social security, food sovereignty and other similar indicators. As recommended by Stiglitz (2018), a comprehensive development strategy is required according to the concept of inclusive growth based on a new understanding of economic success and social transformation.

In general, the goal of economic inclusion and inclusive growth is to ameliorate public welfare for as many people as possible, while supporting development strategies that prioritise the interests of the broader community, especially those languishing towards the bottom of the pyramid (*dhuafa*), who traditionally have not experienced much prosperity or welfare (Omar & Inaba, 2020; Syakir et al., 2021). Referring to quality development, namely living standards, social security, health, economic participation and similar indicators, this new paradigm of economic development aligns harmoniously with the overarching principles of the Islamic economy (Ismail & Shaikh, 2017). Almsgiving based on *zakat* in Islamic social-public finance and the absolute prohibition of *riba* (interest) and *maysir* (gambling/speculation) in the commercial financial sector (monetary economy), for example, facilitate an economy based on sharia principles that prioritises the interests of the poor and optimises resource allocation, thus maximising economic participation in productive activities (Jaffer, 2020; Shaikh & Ismail, 2017).

Fundamentally, the absence of *riba* and *maysir* nurtures financial intermediation in the financial sector, thereby supporting activity in the productive sectors as the real sectors of the economy (Hardianto & Wulandari, 2016; Ibrahim & Law, 2020). Financial intermediation through Islamic financial institutions, typically dominated by Islamic finance, can now apply sales and purchase contracts or investment (profit-sharing) contracts (Hadi et al., 2021). The exclusion of *riba*, therefore, promotes close linkages between the financial sector and the real sector, where financial intermediation perpetually leads to the creation of goods and services in the real sector (Farooq & Selim, 2019). Consequently, through the prohibition of *riba*, the Islamic economy encourages the optimisation of community involvement and economic participation. This represents the inclusiveness of the sharia economic system from an Islamic finance perspective. Once again, Islamic economic principles in the Islamic social-public finance sector and monetary economy characterise economic inclusiveness.

This study aims to explore the concepts and thoughts of inclusive economic development in solving poverty and social inequality. Specifically, it examines the lesson learned from Islamic social-public finance and monetary economics role in realizing inclusive welfare. Based on in-depth observation, we found that economic inclusion and inclusive growth are fully in line with the spirit and goals of the Islamic economy, particularly in terms of creating equitable welfare for all, including material satisfaction and spiritual peace through the development of humanity and resources. In that context, the need to achieve equitable wealth distribution in the inclusive welfare dimension can be satisfied. This is contrary to the conventional notion of prosperity and welfare, namely a Pareto efficient or Pareto optimal situation.[2]

The rest of the paper is organized as follows. Section II presents perspectives of economic inclusion in terms of the role of Islamic social-public finance. Section III and IV present perspectives of economic inclusion in terms of the role of Islamic monetary economics and emerging issues in the modern monetary system. Section V explores the linkages between Islamic social-public finance and Islamic monetary economics. Last section concludes.

II. Economic Inclusion and the Islamic Social-Public Finance

The public sector involves government budget management as manifested in public or fiscal policy that aims to reduce unemployment (Caponi, 2017), control inflation (Berumen, 2003), and stimulate economic growth (Conte & Darrat, 1988). Public finance is concerned with government revenue and expenditure activities. Conventional theories of public finance strive to achieve three goals, namely mobilising resources to meet government spending needs, moderating or dampening fluctuations in the business cycle and reducing inequality in income distribution (Salama, 1995). Although the goals of conventional public finance appear economically beneficial, particularly for the community, the theories are built on a materialistic philosophy that prioritises the interests of the state or ruler above all. Occidental philosophy of public finance is inextricably linked to the history of taxation, which serves to mobilise funds from the people for the benefit of the ruler. Economic inclusiveness, therefore, has only emerged through issues in development policy.

The public finance sector exists to support the market (private sector) as the primary conduit of wealth and income distribution (Deloitte, 2018). From an Islamic perspective, however, the distribution of wealth and orderly flow of economic resources is not left entirely to the private sector. In fact, Islam institutes mandatory mechanisms that compel the equitable

[2] Pareto optimal is defined as a condition where it is no longer possible to change the allocation of resources to improve welfare of economic actors (better off) without compromising other economic actors (worse off). Under current conditions, society can only increase the optimal level of satisfaction to the detriment of others. Based on real experience, such conditions are clearly untenable as a basis for achieving true economic welfare and prosperity due to the lack of impartiality and overall benefit.

distribution of wealth and economic resources (IMF, 1989). Public finance in Islam not only complements the private sector but also serves as a safeguard, an ineluctable mainstay of the economy. Islamic social fiscal instruments, such as *zakat*, collected from the rich and distributed to the poor, are fundamental to the equitable distribution of economic resources (Hossain, 2012). On the other hand, *zakat* functions as income for the poor, strengthening their purchasing power (Sulaeman et al., 2021). In other words, the purchasing power afforded by *zakat* distribution to the poor enables economic participation and market access to the economic resources needed.

Zakat ensures that the economy (based on sharia principles), the social-public finance sector in particular, prioritises the interests of the poor and needy in economic development. *Zakat* represents a key characteristic of the sharia economy, focusing on *dhuafa* as the predominant policy line of the Islamic public sector. This attribute emerged as a consequence of *zakat* principles, demonstrating the inclusive nature of the Islamic economy. Through *zakat*, the Islamic economy has shown consistent inclusiveness from the beginning, with the poor positioned as the main priority of economic development (Ayuniyyah et al., 2022; Jaffer, 2020). The sharia economy not only targets the poor for development policies but also serves as fundamental economic guidelines.

From an Islamic perspective, economic inclusion did not emerge due to policies as part of a paradigm shift towards inclusive growth yet has remained the overarching priority of development since inception. *Zakat* is a religious obligation and a pillar of Islam (Abdullah & Suhaib, 2011). In other words, inclusiveness has been a tenet of Islamic economics from the beginning as a consequence of *zakat*. Islamic economic inclusion *is* social inclusion and has been since the beginning, ensuring that the basic needs of the poor are met because of the purchasing power provided by *zakat*. This mechanism, therefore, also maintains economic participation amongst the poor. Without exaggeration, the Islamic economy is positioned as a viable alternative economic concept, answering the growing call for economic inclusion.

Beyond the dimension of inclusiveness, which has distribution implications in terms of wealth and income, Islamic social-public finance based on *zakat, infaq, sadaqah* and *waqf* (ZISWAF) instruments has a spiritual dimension as the embodiment of its philosophical function, namely the preservation of moral values by maintaining the faith of the people and community collectively. Maintaining faith is the ultimate goal of all economic activities in

Islam, not only social-public activities but also the activities of individuals, households and corporations in the private (commercial) sector (Kuran, 2018). Maintaining the flow of economic resources and distribution of wealth and income through the social-public finance sector, therefore, essentially strives to provide the basic needs of Muslims so that they may fulfil their obligations to God (maintaining faith). Qardhawi (1997) stated that *zakat* serves as a guardian of the faith, especially for the poor and other *mustahik* groups in general. A combination of the material dimension in concert with the spiritual dimension represents a robust characteristic of the Islamic economy, including Islamic social-public finance activity.

A number of modern Islamic economists have stated that the application of public finance in Islam relates to the state function in terms of the economy. Sidiqqi (1996) mentioned three functions of state: (i) implement the permanent mandate of sharia law, including the *zakat* mechanism, while prohibiting *riba* and *maysir*, (ii) implement the mandate of sharia law in accordance with *ijtihad* based on specific needs or conditions at a certain time, and (iii) implement the people's mandate, which in the case of Indonesia is based on the Consultative Council of Muslims (Majelis Suryo). This opinion is supported by Kahf (1995), namely that the most important function of the state is to maintain the religion and supremacy of the will or rules of Allah SWT. Kahf (1995) also stated that in terms of public policy, state spending should be limited to the following objectives: (i) safeguarding the internal and external security of the state, (ii) minimising the administrative needs of the state, (iii) meeting the basic necessities of the people, and (iv) developing sectors that are not attractive to the private sector.

A characteristic of Islamic social-public finance is that each instrument has its own specific set of rules, implying that each instrument has its own target, which are nevertheless mutually reinforcing and complementary (Atmaja et al., 2019; IMF, 1989). For example, *zakat* targets the poor and needy (*dhuafa*), travellers in search of knowledge (*ibnussabil*) as well as preachers and teachers (*fisabilillah*). Meanwhile, *khums* are intended for the state (with a portion for Allah SWT, Rasul SAW and His family), orphans and the poor. In the Islamic public-social finance sector, *waqf* instruments are definitive and must be used in accordance with the intention of the donor (*muqoyyadah*). In addition, when the use of *waqf* assets is left to the discretion of the *nazhir*, the benefits are still directed in the interest of Muslims. *Waqf* for Muslims can reduce social costs and, for the economy, increase social investment, thus boosting economic volume on a macro scale (Ahmad, 2015).

In addition to the technical dimensions associated with wealth-income distribution, the mechanism of Islamic social-public finance also has a spiritual dimension as a goal, namely maintaining the faith of the Islamic community and society collectively (Ubale & Abdullah, 2015). Fundamentally, maintaining faith is the ultimate goal of all economic activities in Islam, not only activity in the social-public sector but also the goals of individuals, families and corporations in the private (commercial) sector. By focusing on the objective of maintaining the flow of economic resources and wealth-income distribution, the social-public finance sector essentially aims to provide the basic needs of the Islamic community in order to fulfil their obligations to God (maintaining the faith). Qardhawi (1997) argued that *zakat* is an instrument which functions as a guardian of faith, especially for the poor or *asnaf* groups of *mustahik*. The material dimension that goes hand-in-hand with the spiritual dimension is a robust characteristic of the application of the Islamic economic system, including Islamic social-public finance activities.

The application of Islamic social-public finance must not be constrained by past understanding based on a significantly less complicated economic environment. Deep understanding is required along with innovations appropriate to the concept of Islamic public finance for application in the highly complex modern economic environment. Socialisation and education activities concerning the application of Islamic public finance must be continued, with the opportunity for inclusion in formal public finance curricula explored to enrich and expand insight, particularly amongst policymakers. Efforts to integrate Islamic public finance in the conventional public finance framework are equally important to develop alternative policy options for policymakers to achieve their objectives, namely stimulating economic growth, reducing unemployment and alleviating poverty.

Challenges and Opportunities

The development of *zakat, infaq, sadaqah* and *waqf* (ZISWAF) is gradually demonstrating the usefulness and significance of Islamic social-public finance in many countries. In fact, several non-Muslim majority countries are implementing sharia economic practices in their economies, including commercial and social finance, such as Singapore (Khan & Bashar, 2008) and the United Kingdom (Belouafi & Chachi, 2014). It is no exaggeration, therefore, to say that if sharia economic development reaches beyond the social sector to also encompass the financial sector and real sector, such development would have great potential as a new source of economic growth, at least on a national scale (Juhro et al., 2019). Realising inclusive sharia economic development in the application of modern economy has a number of inherent challenges.

In the context of Indonesia, the following challenges have been identified. *First*, challenges in terms of regulation and development to ensure the sector maximises its role in the national economy, particularly efforts to alleviate poverty, reduce inequality and improve public welfare in general. In terms of government regulation, the application of Islamic social-public finance must be integrated with the existing legal or regulatory systems. *Second*, despite a dominant Muslim majority population, the application of Islamic social-public finance requires continuous education and socialisation efforts as well as constant refinement and improvement. The current culture of paying *zakat* individually, coupled with a lack of proper bookkeeping and financial accounting, has led to distribution overlaps, thus impeding optimal outreach to all community groups in need.[3] *Third*, scientific exploration and insight must be nurtured concerning the development and implementation of Islamic social-public finance instruments that are relevant to current conditions. Innovative products, such as cash waqf-linked sukuk (CWLS), represent solid breakthroughs in terms of developing Islamic social-public finance applications in the modern era. Innovation in the form of social and commercial finance integration, targeting the instruments, programs and business models, must be fostered and developed continuously as the community requires a variety of applications to increase economic participation. *Fourth,* the government and all relevant parties must continue to raise public literacy concerning the application of Islamic social-public finance. Enthusiasm for social funds beyond *zakat*, such as voluntary *infaq, sadaqah* and *waqf*, must be exploited to increase willingness amongst Muslims to set aside a portion of their wealth to help others in need. Fundamentally, building awareness in the community is akin to increasing faith, understanding *zuhud* values in terms of wealth and property as well as the values of solidarity. Maximising the socio-public finance sector in Islam requires government support in terms of public understanding towards religion.

Meanwhile, the opportunities afforded by the successful implementation of Islamic social-public finance and achieving the goals recommended by sharia are massive. In this respect, Indonesia is blessed with several endowments offering great potential. *First*, Indonesia is the most populous Muslim country in the world, with Muslims dominating more than 80% of the Indonesian population.[4] The predominantly Muslim population in Indonesia will help

[3] For example, many Muslims in Indonesia pay their *zakat* obligations directly to the *mustahik*, rather than through official government or private sector institutions. This is part of the culture in Indonesia and requires education at the community level together with structural improvements in its application.

[4] Totalling approximately 271 million in December 2020 (BPS-Statistics Indonesia)

the government and private sector facilitate development of Islamic social-public finance. *Second,* Government regulatory support to increase Islamic social-public finance, which is slowly being internalised in the daily lives of the people. This is also inextricably linked to the state's function in terms of social-public finance. Currently, the opportunity is even larger due to the existence of the National Islamic Economy and Finance Committee (KNEKS), as a coordinating body for all sharia economic stakeholders in Indonesia. *Third*, the development of Islamic social-public finance by private Islamic social-finance institutions which helps to raise public literacy and awareness. This is in line with growing awareness and understanding amongst the Muslim community towards religion, ushering in greater compliance with sharia principles and moral values when managing assets, including *zakat* obligations or heeding religious teachings and recommendations to set aside a portion of assets in the form of *infaq, sadaqah* and *waqf*. *Fourth*, sharia rules that regulate the mobilisation and distribution of funds or assets in Islamic social-public finance tend to promote much greater transparency and accountability in terms of government budget management. This represents an attractive alternative form of public finance for the government because Islamic public finance policies offer a viable alternative to existing public policy options, while simultaneously improving the government's reputation and increasing public trust in the government as a result of greater transparency and accountability.

III. Economic Inclusion and Islamic Monetary Economics

As previously stated, Islamic economic inclusion naturally exists in the system due to sharia principles that prohibit *riba* and *maysir*. By prohibiting *riba* and *maysir*, the primary objective of the financial sector shifts away from money creation, instead supporting activity in the real sector. Money is not a commodity to be traded. Al-Ghazali stated that money reflects the value of goods and services transacted with that amount of money. In the absence of *riba* and *maysir*, the reasons for holding money are limited to the transaction motive and the precautionary motive. According to Islamic principles, money cannot be held for the speculative motive (Bin Salamon et al., 2015). In the absence of *riba* and *maysir*, the only profit-generating activities are transactions in the real sector. If an owner of funds, irrespective of reason, cannot generate income directly in the real sector, investing through an investment manager in real sector businesses provides an alternative opportunity. The proceeds of the investment are subsequently distributed to all parties involved based on a mutually agreed ratio. Underlying assets, therefore, from financial transactions in Islamic financial institutions are required. Underlying assets reflect the value added in the economy. Accordingly, changes in the financial sector depend on the real sector and the financial sector cannot grow without commensurate growth in the real sector.

Such conditions depict the private commercial financial sector from an Islamic perspective. Meanwhile, private Islamic commercial financial intermediation activities are also supported by the presence of a competent authority, responsible for providing various instruments to facilitate financial activity, including instruments for liquidity management at financial institutions and policy instruments issued by the relevant authorities. In fact, alternative instruments of Islamic finance are currently being developed, such as government sukuk. The underlying assets of government sukuk are infrastructure projects initiated by the state, including airports, toll roads, ports and other similar projects, demonstrating that government sukuk are a viable financial instrument in the government sector with close linkages to productive economic activity. In theory, government sukuk can also be utilised as a policy instrument, offering a practical alternative when the private commercial financial sector experiences intermediation constraints to the real sector as a result of specific conditions. Government sukuk, therefore, provide an alternative channel to circulate liquidity to productive economic sectors, thus balancing supply with demand to maintain price stability. In general, the application of Islamic finance, in the private and public sectors, aims to support productive economic activity in the real sector.

Sharia values and principles towards money also strengthen Islamic economic inclusion in the financial sector (Abou-Youssef et al., 2015). From an Islamic perspective, money is regarded as a medium of exchange rather than an asset that can be traded, such as in the conventional financial system where money is traded using interest as the price of that money. This also has implications for the absolute prohibition of *riba* and *maysir* in the Islamic economy. In accordance with sharia principles, therefore, the total stock of money in the economy will not increase excessively beyond additional productivity (creating economic value added in the form of goods and services) in the economy. Moreover, sharia principles tend to rein in the excessive printing of money by the competent authority. In theory, sharia principles tend to balance the amount of money in circulation with the amount of goods and services created, where the relevant authorities balance the creation of money with the addition of goods and services produced in the economy (Hasan, 2011).

With the characteristics of Islamic finance outlined above, economic inclusion from an Islamic perspective is also evident in the monetary system or in the discipline of Islamic monetary economics (Chapra, 1983). By optimising financial intermediation, the prohibition of *riba* and *maysir* unlock more economic participation opportunities in the community. The absence of *riba* and *maysir* ensures that the Islamic monetary sector cannot decouple from the real sector. Consequently, financial activities that generate profit must have underlying transactions in the real sector. Echoing those sentiments, the prohibition of *riba* and *maysir* in Islamic finance mould the characteristics of the sharia economy as an inclusive economy.

The role of the monetary system based on sharia principles is critical, especially in light of modern economic practices. Contemporary economic activity has become complex (Hidalgo, 2021), compelling economic players to not only depend on private sector actors but also the government and authorities. In the financial sector, it is the function of the competent authority to establish a monetary system that can direct orderly financial activities. From an Islamic perspective, the monetary system is not merely implemented to attain the overarching policy objectives, the health and equity of the system are also important metrics. Not only is knowledge of Islamic economic principles and theories required, yet also the full support of the relevant institutions and regulators in order to achieve an effective, robust and equitable monetary system. The application of the current monetary system can be evaluated based on the following aspects.

The alignment of conventional principles and Islamic principles, or even transformational principles, must be facilitated not only on an individual level but also collectively, accompanied by institutional transformation (Khatat, 2016). Monetary institutions and authorities are expected to create regulatory and policy frameworks for the holistic application of Islamic values in the monetary system. The Islamic community and institutions have mutually supporting roles to create a climate and practices conducive to implementing a monetary system in accordance with Islamic principles. Institutions must formulate rules and regulations to ensure implementation within a corridor of Islamic values. In addition, institutions are also tasked with developing infrastructure for the implementation of their regulations. On the other hand, the role of the community certainly supports the institutional measures. The rules set by the authorities are futile if not applied and obeyed by the community. Moreover, the community must be able to maintain and make the best use of the infrastructure that has been developed. Notwithstanding, the first step of this journey entails that both the community and relevant institutions must fully comprehend the urgency of implementing Islamic values and principles in the monetary system.

Ultimately, the role of the authority is to maintain stability in the value of money. Based on the contemporary monetary system, however, it is difficult to stabilise interest rates without adjusting the money supply and it is difficult to control the money supply without the support of setting interest rates. In Islam, there is no interest rate system, so price stability can be maintained because growth in the money supply is linked to consistent growth in the real sector (Ismal, 2011). Consequently, quality social welfare can be achieved in real terms. The uninhibited creation (printing) of money beyond the needs of the real sector is a major cause of economic imbalances (Brito & Hester, 1974). Imbalances because the amount of money in the monetary sector is incongruent with real sector requirements and imbalances due to the concentration of wealth in the hands of a few. Islamic economic principles, therefore, can overcome such problems associated with inequality. Furthermore, sharia principles facilitate wealth-income distribution in the community to ensure the basic needs are met.

In addition to the monetary authority, government support is also required. The government must participate in synergised policymaking and ensure policies do not conflict with Islamic principles (Hasan, 2008). The goals and practices of government policy must be formulated in such a way to not conflict with Islamic values. The comprehensive inculcation of Islamic values can be achieved in a country if all stakeholders are aligned in their policy goals and objectives. This is also consistent with the inexorable fact and expectation that rapid growth and development of the Islamic economy and finance offers a solution for economic empowerment of the wider community, in turn fostering economic growth. Synergy between the government, central bank and other relevant national and local authorities is required, therefore, to achieve the overall national development goals.

Additionally, the absence of interest rates will have an indirect impact on the spending behaviour associated with fiscal policy. Fiscal policy plays a strategic role in supporting economic activity in the real sector through the main policy instruments, namely taxes and management of state expenditures. Government spending intends to provide public facilities and infrastructure as well as other social programs that support quality welfare in the community. The absence of interest-bearing financing, therefore, will increase government discipline in terms of managing expenditures to avoid a reliance on sources of finance. Furthermore, project implementation will be more controlled as projects without a significant social impact on community welfare can be ruled out immediately. Conversely, a focus on government projects that significantly ameliorate socio-economic welfare will also have a strong social impact by optimising government debt management.

Fundamentally, the Islamic monetary sector is a catalyst of the financial sector in terms of facilitating the flow of resources. Economic resources, including money, as a lubricant and catalyst of economic activity, the monetary authority that determines monetary policy and the requisite instruments as well as financial institutions must cooperate and coordinate in synergy to foster full employment in the real sector. Such conditions can overcome the issues associated with unemployment, currency instability and suboptimal economic growth. With the characteristics of Islamic finance functioning to support the real sector, Islamic monetary instruments are accommodative in terms of achieving price stability and economic growth. At their core, Islamic monetary policy instruments provide a channel for excess money in the financial sector to flow to the real sector. Such Islamic monetary instruments ensure the efficient use of resources (full employment) and avoid idle funds.

Challenges and Opportunities

Rapid growth of the Islamic economy and finance represents a potential new source of economic growth (Boukhatem & Ben Moussa, 2018; Caporale & Helmi, 2018; Imam & Kpodar, 2016). As the most populous Muslim nation globally, this represents Indonesia's main capital to establish a more significant role for the Islamic economy and finance sector in the national economy. Development of the Islamic monetary economy moving forward faces a number of challenges as follows.

First, the dominance of conventional economics and finance, coupled with a lack of well-established Islamic economics and finance, means that conventional economics is often used as a benchmark for the application of an Islamic monetary system, which potentially undermining the formulation of Islamic monetary policy. *Second,* conventional and Islamic monetary policy implemented under the roof of one authority in a dual system demands harmony and alignment in terms of the policy direction and objectives, yet the principles, concepts, theories and application of the two can be quite different. This is the biggest challenge for the authorities in terms of formulating the most optimal policies to achieve the target of stability in the value of money and economic growth. *Third,* the dominance of conventional financial practices in the community prevents Islamic finance from appearing authentic in accordance with ideal Islamic principles. The public remain unfamiliar with Islamic finance. Education and socialisation activities targeting segments of the public concerning the urgent need to apply an Islamic monetary system are crucial. *Fourth*, US dollar dominance (in the fiat system) at the international level remains a challenge for the implementation of an Islamic monetary system. The challenge, therefore, is how to mobilise a global lobby advocating the reintroduction of gold and silver currencies for international transactions.

Meanwhile, there are a number of opportunities to be exploited for the development of an Islamic monetary economy as follows. *First,* public interest (socially and academically) in financial practices free from *riba* and *maysir* continues to grow in line with the spirit of community faith. This will also serve to enhance the quality of human resources in the Islamic finance and monetary sectors. *Second,* existing legal and regulatory aspects (though not maximised) provide sufficient space for the development of sharia monetary and finance applications, such as the emergence of Islamic financial products and monetary instruments that can represent ideal Islamic finance and monetary practices. For example, Indonesia is currently developing the concept of indexing real sector returns as a reference for industry players to set prices for their financial products. *Third,* technological development offers new opportunities to develop and use gold money. Gold money can be converted into electronic money, such as e-dinar and e-gold, etc. In addition, educational, socialisation and promotional activities regarding the application of gold money are possible through technological advancements. *Fourth*, economic decline and other structural issues that continue to plague the most developed and advanced economies, including the United States, Europe and Japan, have spurred various studies into the root of the problem. Current discussions include the role of a universal currency to support the growing trend of international transactions, including the role of gold.

Taking these challenges and opportunities, therefore, various integrated efforts to support Islamic monetary system development through scientific exploration are required. Importantly, monetary authorities must formulate Islamic monetary policies and instruments that can function optimally in a dual financial system environment. Expanding insight and knowledge of the Islamic financial and monetary system in an ideal, comprehensive and holistic way will help to determine the most appropriate Islamic monetary development strategy. Development of the Islamic economic and financial system in Indonesia, including the Islamic monetary economy, is expected to provide a viable alternative to the conventional monetary and economic system currently applied because the Islamic system offers a superior arrangement to improve public welfare (Juhro et al., 2019). Application of an Islamic economic system that priorities *maqashid shariah* will achieve the overarching goal of the Islamic economy, namely quality welfare and socio-economic justice for all (*falah*) within a corridor that is in accordance with Islamic law. By applying Islamic values, mankind will find happiness in the economy in this world and the next.

IV. Emerging Issues in the Modern Monetary System

The modern monetary system has matured and become complex. The need for monetary management that can create a robust and resilient financial system based on the experiences and lessons learned from numerous financial crises raises various issues in terms of monetary system implementation. In addition, issues in the monetary sector are developing with rapidity, influenced by the relentless advancement of digital technology, particularly in the use of money, including digital currency and cryptocurrency. Some of the emerging issues relating to the use of such currency in the monetary system are as follows.

Gold as a Global Currency

Growing awareness that the current monetary system is the root cause of instability and financial crises that have rocked the financial system in both developed and advanced economies has revived discourse concerning the application of a gold standard (Durani, 2019), as implemented under the Bretton Woods system of monetary management in 1944 but unilaterally terminated by the United States in the early 1970s. Economists have stated that successful implementation of the gold standard in the past was supported by a simpler financial system compared with the complexities of today, coupled with innovative economic activities (Bordo, 1999; Cooper, 1982; Kvasnička, 2007). Furthermore, the contemporary economic and financial system relies on interest rates and *maysir* (speculation), thus rendering the reintroduction of gold money an even greater challenge.

One of the difficulties using gold as currency is the limited availability of gold as a raw material, coupled with the total reform needed of the financial system in terms of regulation, structure and operations. The constraints faced in the application of a gold standard are sufficiently complex, both systemically and situationally (Diwany, 2002; Meera & Aziz, 2002; Vadillo, 2002). The difficulties and constraints faced in returning to a gold standard as a currency and medium of exchange in the economy have led to the application of gold merely as a benchmark for the price of various financial portfolios. Moreover, in times of economic distress and uncertainty, many investors diversify and rebalance their portfolios towards safe-haven assets, such as gold, which is why gold is commonly used as a backup asset (Rosskoph

& Rutersten, 2020; Yaacob & Ahmad, 2014). Beyond its status as a safe-haven asset, gold prices also do not tend to decline in the medium-long term.

Reinstating gold as currency for all transactions is not impossible but only if decided and enacted by the regulator (Cutsinger, 2020). In addition, the government would be responsible for ensuring whether other countries would reciprocate and receive payments in gold. In general, the acceptance and approval of other countries would be needed in accordance with Islamic law. Cooperation between all countries, particularly Muslim majority countries, would be critical, therefore, to establish a single currency for international trade. The most important first step would be for Muslim countries to unite through serious discussions to realise such a mechanism.

In terms of the discourse outlined above, a more pertinent and contextual question would be to ask what the opportunities are for the dinar and dirham as global currencies. Sharia law is absolute, as revealed by Allah SWT. The truth of His law is inevitable and indubitable. Sharia law does not need to adapt to the current human condition. On the contrary, humans are still subject to and bound by the laws stipulated in Islam under any and all conditions, including sharia law in the economy.

In economics, particularly the monetary branch, fiat money as used today is not fully in accordance with Islamic teachings (Kameel et al., 2006). The existence of fiat money and exchange rates between currencies in different jurisdictions creates inequality in the value of money between countries, including the United States dollar, as the dominant international trade currency. The United States endeavours to maintain US dollar dominance and rejects the use of other global currencies, such as the dinar and dirham. According to Vadillo (2002), even the International Monetary Fund (IMF) supports the continued use of US dollars and avoids the reintroduction of gold currency.

Dinar and dirham are viable global currencies. Between Indonesia and Russia, the dinar is the same, providing unequivocal reliability. Furthermore, the value of the dinar and dirham tends to be stable, as reflected in the price of a chicken at the time of Rasulullah SAW until now, both costing 1 dirham. The market value of dinar and dirham is accordance with the intrinsic value (Saratian et al., 2019). By using dinar and dirham, money creation and lending could not function as freely as in the conventional system. The current economic system supports the application of a speculative economic system, creating a bubble economy. This is clearly evident by the fact that Gross National Product (GNP) is accelerating but the income gap is growing because financial sector transactions are not commensurate with real sector transactions. In contrast, the application of gold and silver currency is related directly to the real sector, thus reducing speculative actions and safeguarding monetary stability.

Role of Electronic and Digital Money

In line with rapid and broad-based technological development, economic transactions have also experienced significant evolution, including the types of money now available as a medium of exchange for economic transactions (Kagan, 2020). Fiat money is evolving into electronic money (e-money), while technology and knowledge have been used to create cryptocurrency (Bech & Garratt, 2017). Such innovations have simplified economic transactions and enhanced efficiency. Keeping up with modern advances, central banks are developing central bank digital currency (CBDC).

Based on Islamic teachings, Muslims must not merely focus on the innovation side, which is generally associated with greater efficiency and outcomes, but also pay attention to the compatibility with Islamic principles. Not all innovations are created in accordance with Islamic values and principles. As Muslims, we should not take innovation for granted, we must seek the truth (*tabayyun*) in line with Islamic principles (Salleh & Nasarudin, 2020). Innovation that is achieved in accordance with the principles and values of Islam is justifiable, but if found to contain any elements proscribed by sharia law, it must be avoided. Rigorous studies are required, therefore, into current development trends and innovations in terms of money.

The rapid advancement of modern technology has accelerated all aspects of our mutually interconnected existence (Theis, 2000). Technology has also permeated economic transactions, such as through electronic commerce (e-commerce) transactions via online platforms. The emergence and proliferation of e-commerce has dramatically increased the urgency for electronic means of payment, such as e-banking, m-banking and e-money. E-banking and m-banking are fairly recent banking industry innovations that provide convenient customer access to the banking system to check account balances, transfer funds, pay bills and so on. Discussions concerning innovation in terms of money should thus focus on electronic money.[5]

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[5] According to Bank Indonesia, electronic money is defined as a payment instrument that meets the following criteria: *issued based on the value of money paid in advance to an issuer, the value of money is stored electronically on a server or chip, used as a payment instrument to a merchant that is not the issuer of the electronic money, and the value of electronic money managed by an issuer is not defined as a deposit in*

Fundamentally, electronic money is similar to fiat money commonly used by the public, which has just been converted into digital form. Electronic money can be stored on certain media (such as a chip-based card) or in a payment system account (Seetharaman & Raj, 2009). Ownership of electronic money starts with the holder who exchanges cash for e-money with electronic money issuers. The issuer provides electronic money to the holder with an account balance commensurate to the cash exchanged. The holder can then use the electronic money as a means of payment at cooperating merchants. The electronic money balance is automatically debited for every transaction made. Furthermore, the holder can top up the electronic money balance at any time.

The discussion on electronic money from an Islamic perspective can begin with the benefits (*maslahah*) felt by the users of electronic money (Al-Mubarak & Osmani, 2010; Ishak, 2019). If there is no *maslahah*, it is not in line with Islamic principles. In general, technological advancement can increase transaction efficiency from various perspectives. The time required to complete transactions is more efficient. Cash transactions are more time-consuming because the cash must be counted along with the change. Electronic money payments are faster because the balance is automatically debited according to the amount to be paid. This can drastically reduce queueing for cash payments on toll roads or at retail outlets.

Transactions using electronic money can also simplify the transaction process through the integration of agents, cards, applications, websites and systems accessible online. Users are no longer required, therefore, to visit a bank branch. In addition, electronic money can heighten the sense of security and convenience by obviating the need to carry large sums of cash (Garrido & Nolte, 2021). Users can mobilise electronic money worry free, even when large sums are involved. Finally, electronic money transactions can minimise calculation errors that typically occur when using cash, while avoiding the need to calculate or give change.

Additionally, whether electronic money is halal must also be discussed. According to Muamar and Alparisi (2017), the concept of electronic money is in accordance with the concept of money in Islam. This is indicated by the reliability of electronic money as a medium of exchange and unit of account in economic transactions. In addition, the use of electronic money can rein in excessive spending due to the maximum limits imposed on transactions and

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accordance with laws regulating the banking industry. In summary, electronic money is a payment instrument, the value of which is paid in advance to an issuer to be stored on a chip-based electronic medium.

balances. Consequently, electronic money users are discouraged from excessive transactions and consumption, while reducing losses from the misuse of electronic money.

In terms of security, electronic money offers different levels of security and protection based on the type (CPSS, 1996; Solat, 2017; Tsiakis & Sthephanides, 2005). Registered electronic money is protected by a stringent security system, using biometric data, such as fingerprints and retinal scans, or a personal identification number (PIN) to obtain access. Such tight security helps to minimise theft, loss and other misuse. On the other hand, unregistered electronic money does not employ the same level of security in the form of biometric data or a PIN, exposing it to misuse by a third party. Consequently, unregistered electronic money does meet the prerequisite security standards for use as money.

It is important to note that electronic money does not contain any element of *riba*. The amount of cash converted into electronic money is always of the same value, thus avoiding *riba fadhl*. In addition, the exchange of cash for electronic money is simultaneous (Hartman et al., 2019), thus avoiding *riba nasiah*. It can be concluded, therefore, that electronic money complies with Islamic principles, as evidenced by the absence of elements that are forbidden in Islam when using electronic money. On the other hand, electronic money can bring many benefits (*maslahah*) to human life. Certain aspects of the electronic money mechanism require further refinement, however, especially unregistered electronic money. The level of security when using unregistered electronic money must be improved, for example by adding a password or PIN to obtain access.

Contrasting e-money that is issued on a server or chip basis, cryptocurrency is digital money created by applying encryption techniques and cryptography (Bakar & Rosbi, 2017).[6] Cryptocurrencies do not have any real physical form and are not backed by real assets. This type of currency, therefore, has no intrinsic value. Cryptocurrencies are created and issued by private parties. Unlike fiat money, cryptocurrencies are not regulated or supervised by any government or central bank. Thus far, cryptocurrency has not been recognised by the central bank as a currency or legal tender (Agur, 2018; Shin, 2020). Lacking central bank supervision, there are no specialised institutions to guarantee cryptocurrency, leading to uncertainty and potentially high risk.

[6] Encryption techniques are used to manage currency units and verify the transactions. Meanwhile, cryptography is applied to limit the creation of cryptocurrency and provide system security when transacting. In addition, cryptocurrency is created through mining, namely using sophisticated hardware that solves extremely complex computational math problems. Each unit of cryptocurrency is mined based on a different computational math problem (Meera & Aziz, 2002)

The advantage of cryptocurrency, however, is that it is difficult to counterfeit due to cryptography, unlike banknotes (Agrawal et al., 2021; Politou et al., 2019). This is also because cryptocurrency can only be created by solving complex mathematical problems, the value of which is stored digitally. The price of cryptocurrency is determined based on an algorithm using blockchain technology to store the data set (World Bank, 2017). This data is calculated using complex algorithmic techniques and it is this mechanism that forms the value of the cryptocurrency when it is first issued. The subsequent price is determined based on interaction between demand and supply. Cryptocurrency highlights the advantages of transaction cost efficiency resulting from technological innovation, and the capability in mitigating the risks associated with a single point of failure (Bakar et al., 2017).

Notwithstanding, the absence of centralised supervision or oversight and the continued use of cryptocurrency will destabilise the value of money (Harwick, 2016), even posing a threat to finance and banking (IMF, 2018). The position of cryptocurrency is strengthened by the fact that transactions are purely peer-to-peer, without approval required from an external source or third party. If performance continues to flourish, it is not beyond the realm of possibility to see government-issued fiat money usurped by cryptocurrency.

Cryptocurrency: An Islamic Perspective

How Islam views the practice of cryptocurrency is an interesting topic. Cryptocurrency uses cryptographic technology and algorithms in a blockchain system, thus providing various advantages, such as security, long-term storability, complexity (difficult to counterfeit) and efficiency. To become money, however, the following characteristics are preferable, stability, security and effectiveness (Al-Laham et al., 2009). Rigorous studies are required to ascertain whether cryptocurrency is compatible with the characteristics of money from an Islamic perspective. The following discussion is oriented towards the existence of bitcoin as a fair representation of cryptocurrencies in general, considering that bitcoin maintains a dominant market share amongst all cryptocurrencies.

Broadly speaking, Islam does not recommend the use of cryptocurrency given its lack of intrinsic value and backing by a reserve of real underlying assets (Abu Bakar et al., 2017; Meera, 2018; Siswantoro et al., 2020). The intrinsic value or reserve of real assets fundamentally serves to maintain a balance between money creation and the increase of goods and services created in the economy. A device or mechanism that can maintain a balance between the creation of money and additional goods and services in the economy is important.

Cryptocurrencies, however, do not employ a mechanism to control creation, stoking fears of disrupting currency stability and the financial system as a whole. Concerns also stem from the lack of regulation and supervision by the competent authority. Cryptocurrency creation is independent from prevailing monetary policy and national economic conditions, which could have a significantly adverse impact on the economy as a whole.

The criteria used for robust and reliable money must be reviewed to analyse the suitability of bitcoin in accordance with Islamic principles. In addition, elements forbidden in Islam must also be reviewed, namely the use of *riba*, *maysir* and *gharar*. If cryptocurrencies are found to contain at least one of the proscribed elements, the use of bitcoin would be haram from an Islamic perspective. According to Meera (2018), money must have the following characteristics to carry out its role effectively and efficiently: (i) acceptability, (ii) durability, (iii) portability, (iv) divisibility, (v) uniformity, (vi) stability, and (vii) limited availability.

Bitcoin is created through cryptography and encryption techniques to solve complex mathematical problems, known as mining. Bitcoin does not have a tangible physical form and is not backed by real assets (Abu Bakar et al., 2017). Consequently, bitcoin does not even meet the first criterion above. Bitcoin is stored in a system that is secure enough to maintain the durability and protect against counterfeiting (Agrawal et al., 2021). Bitcoin cannot be counterfeited, the only way to acquire bitcoin is through purchases and mining. In terms of this criterion, bitcoin is superior due to its lack of physical form, thereby meeting the second characteristic above. In terms of the third characteristic, bitcoin is highly portable and easily mobilised. Bitcoin has no physical form and, therefore, can be transported easily, while requiring no physical space for storage. By simply having an account, bitcoin users can access their bitcoins from anywhere and at any time. Given its electronic form, bitcoin also enjoys uniformity in terms of the value of each unit and is easily divisible into smaller values for transaction purposes, thus meeting the fourth and fifth criteria above. On the other hand, bitcoin is very volatile, as reflected by the dramatic increase in value towards the end of 2017 (Rooney, 2018). Bitcoin instability stems from the absence of real underlying assets, exposing the currency to interaction between demand and supply. Consequently, bitcoin fails to meet the sixth criterion. Bitcoin is not easily obtained, with enthusiasts compelled to purchase bitcoin or mine bitcoin using powerful computers to solve complex mathematical problems (Nakamoto, 2008). Bitcoin, therefore, satisfies the seventh characteristic of currency.

It can be concluded, therefore, that bitcoin fails to meet some of the criteria to be considered as a currency. The criteria not met by bitcoin are critical, however, thus bringing about a negative impact on the economy. A medium of exchange that has no intrinsic value creates a bubble economy and illusory economic growth (Enoksen et al., 2020). The purchasing power of a currency with no intrinsic value does not reflect the actual purchasing power of that currency, such as bitcoin. In addition, bitcoin is highly volatile, thus impacting the economy through uncertainty caused by price fluctuations affecting goods and services, possibly leading to inflation (Doumenis et al., 2021). Moreover, the complete absence of government oversight and regulation would lead to greater price uncertainty if bitcoin were used as a medium of exchange. Based on the aforementioned criteria of money, therefore, bitcoin is not in accordance with Islamic principles.

The use of bitcoin must also be explored in terms of whether the cryptocurrency contains elements of *riba*, *maysir* and *gharar*. Concerning whether bitcoin contains *riba*, certain currencies are exchanged for bitcoins of commensurate value and in cash, with no deferred payment on either side. This indicates that bitcoin does not contain *riba*, providing currencies and bitcoins are exchanged of commensurate value and in cash.

Though bitcoin has been shown to not contain elements of *riba*, the application of bitcoin is not necessarily in line with Islamic teachings due to the potential elements of *maysir* and *gharar* (Meera, 2018). *Maysir* entails gambling and speculative activities, thus justifying an advantage for one of the transacting parties to the detriment of the other. In terms of using bitcoin, high volatility encourages *maysir* (speculation) due to fluctuations in the value of the cryptocurrency, with speculators poised to take advantage.

In addition to probably containing elements of *maysir*, bitcoin is also at risk to *gharar* (uncertainty). Uncertainty is an inherent characteristic of bitcoin (Bakar & Rosbi, 2017). The inventor and creator of bitcoin is unknown. No regulator supervises or regulates the technical implementation of bitcoin. Where bitcoin comes from and what is behind it are replete with uncertainty. Similarly, there is no central competent authority to control, supervise and confirm each transaction using bitcoin, making it harder to track and investigate cases of fraud or system errors. The mechanisms to create and use bitcoin are internet and technology-based, which are vulnerable to cyberattack risk. Furthermore, the cyberattack is increasing over time in line with technological advancement and sophistication, coupled with the lack of a central authority and oversight. On the other hand, bitcoin users are anonymous, making it difficult to trace their identity in the event of unusual or suspicious transactions, which could endanger other parties (Reid & Harrigan, 2011). Such conditions evidence the ambiguity and uncertainty inherent to bitcoin.

Depending on the exchange transaction, the discussion above shows that bitcoin can be used without containing any elements of *riba*. Notwithstanding, *maysir* and especially *gharar* are intrinsic to bitcoin use. Consequently, bitcoin as a medium of exchange and currency is contrary to the principles and values contained in Islamic teachings. This argument was reinforced by Bakar et al. (2017), stating that cryptocurrency is not suitable for use as money due to the lack of intrinsic value, anonymous ownership and issuer as well as instability of value. Furthermore, cryptocurrencies are issued without underlying real assets.

The use of conventional cryptocurrencies, as described above, seems incompatible with sharia law. By changing several of the mechanisms, however, it may be possible to implement a cryptocurrency in accordance with Islamic principles. Not all mechanisms of conventional cryptocurrency violate Islamic principles. The use of cryptographic and blockchain technology are in line with Islamic teachings (Billah, 2019).

In general, Islamic cryptocurrencies could be applied after some changes in their mechanisms and operation are made. The changes include legal issuances, broadly accepted by the public, clear objectives, valid documents, official rules and frameworks and operational mechanisms that are in accordance with Islamic principles. When Islamic principles are upheld, therefore, alternative Islamic cryptocurrencies become available. The blockchain mechanism, cryptographic technology, models, goals, operational functions and all other activities relating to cryptocurrency must comply with Islamic rules and standards for use as an Islamic cryptocurrency, accompanied by the establishment of a legal regulator. An Islamic institution would be necessary to supervise and maintain sharia compliance concerning the use of an Islamic cryptocurrency (Abozaid, 2021). In addition, the overarching goal of implementing an Islamic cryptocurrency would have to be oriented towards achieving the quality welfare of all (*falah*) through the creation of a cryptocurrency platform based on the principles of cooperation and solidarity.

In addition to the main principles that must be built-in to the foundations of Islamic cryptocurrency, Billah (2019) put forward several principles that must be met in terms of cryptocurrency governance according to Islamic principles as follows: (i) all models used in Islamic cryptocurrency must be in accordance with sharia principles and standards, (ii) all Islamic cryptocurrency operations using hybrid models must be in accordance Islamic principles, (iii) asset-backed and asset-based mechanisms of Islamic cryptocurrency must be within a sharia framework, (iv) products and services must be based on underlying real assets with value, (v) all Islamic cryptocurrency operations are accommodated by sharia-compliant contracts, such as *mudharabah*, *musyarakah*, *sharf*, *wadiah*, *wakalah* and other contracts.

A number of products and services could be provided in the implementation of Islamic cryptocurrency. Halal cryptocurrency in the form of coins that have intrinsic value could be commercialised through a platform applying blockchain technology. The platform would facilitate international trade, as well as exchange and payment transactions using the coins. There are also services that could offer cashless payments through the issuance of cryptocurrency. This has become very important in today's society, where cashless transactions are usurping cash to become king (Brugge et al., 2018; Wolf, 2021). With such a service, in addition to being cashless, we can also become card-less. Meanwhile, there are many spaces or areas that could use Islamic cryptocurrency, such as *waqf* management, trading platforms and corporate social responsibility or charitable foundations established by companies that manage Islamic cryptocurrency. With the products and services that become available through the issuance of Islamic cryptocurrency it is hoped that *maqashid syariah* will be maintained and quality welfare (*falah*) achieved. All products and services stemming from Islamic cryptocurrency must be backed by real assets. Such assets are in the form of an initial coin offering (Billah, 2019).

From the discussion above, cryptocurrency can be understood to have emerged as a prerequisite of development in the digital era and moving forwards. There is currently no standardised or legal operating system or mechanism, however, for cryptocurrency (McGinnis & Roche, 2019). Consequently, cryptocurrency requires further improvement in terms of management, regulation and operation to align with Islamic values (Islamic cryptocurrency). Islamic cryptocurrency offers a solution in terms of applying technology to different forms and types of money without ignoring the principles and rules of Islamic teachings. The system, operations, code of ethics and regulations of Islamic cryptocurrency, therefore, must remain in accordance with *maqashid syariah*.

Central Bank Digital Currency (CBDC)

Departing from cryptocurrency issued by private parties, central bank digital currency (CBDC) is a digital form of fiat money issued in accordance with the regulations of the monetary authority and prevailing laws (CPMI, 2018). The concept of CBDC, also known as digital fiat currency, is being explored by central banks in several jurisdictions, including Canada, UK, China, Switzerland and Iran (Bank of England, 2021; BIS et al., 2020; Davoodalhosseini et al., 2020; People's Bank of China, 2021). In general, the authorities are applying a similar concept to digital currency, namely using distributed ledger technology (DLT)[7]. What differentiates CBDC from other digital currencies is the issuer, with CBDC issued by the central bank. Moving forward, CBDC is expected to discharge the functions and roles of the existing fiat money as a medium of exchange, unit of account and store of value. In addition, CBDC will enjoy status as legal tender.[8]

The CBDC concept has a number of advantages and benefits. One advantage of CBDC is increasing the accuracy and transparency of transaction recording using distributed ledger technology (CPMI, 2018; Ma, 2021). Consequently, actual and accurate data and information will be available for optimal monetary policy formulation (Burgos & Batavia, 2018). According to Dyson and Hodgson (2016), the central bank will reap the following positive impacts and benefits by issuing CBDC: (i) expanding the choice of monetary policy instruments to implement negative real interest rate policies, (ii) enhancing financial system security using central bank money for transactions, (iii) reducing liquidity risk in the payment system, and (iv) supporting financial inclusion by expanding public access through companies providing digital cash accounts.

CBDC is also being developed with consideration to the implications for central banks, commercial banks and payment systems. For central banks, the use of CBDCs could create a potential conflict of interest if the CBDC issued can also be deposited at the central bank given the central bank functions as supervisor and regulator (Jiang & Lucero, 2021; Riksbank, 2021). When CBDC becomes a perfect substitute for savings instruments and term deposits at commercial banks (Agur et al., 2019), a new monetary policy framework will be required that is quite different from the existing framework. In addition, CBDC could have positive implications for the monetary system by enhancing the effectiveness of low interest rate policies and economic efficiency (Davoodalhosseini, 2018). On the other hand, the role of commercial banks will be eroded in line with declining bank business. As CBDC converges with deposits and savings instruments in commercial banks, the possibility of commercial banks losing out to the central bank will become quite high. Customers will likely prefer to transact using accounts at the central bank due to the heightened security and lower risks

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[7] Distributed Ledger Technology (DLT) refers to the technological infrastructure and protocols that allow simultaneous access, validation and record updating in an immutable manner across all members in a network. Transactions between members, therefore, can be processed directly without the need for an intermediary, which has its own advantages, such as greater transaction cost efficiency and mitigating single point of failure (SPOF) risk. Notwithstanding, the technology also contains inherent weaknesses, including a protracted transaction process and potential fragmentation. After a transaction has occurred in the distributed ledger network, validation will simultaneously occur. A transaction cannot be changed once recorded and validated.

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compared with commercial banks. Consequently, a narrow banking system will emerge. In terms of the payment system, CBDC will reduce the risks associated with the centralised system, including credit risk, liquidity risk and operational risk (Allen et al., 2020).

From the perspective of Islamic finance, CBDC has different implications than other digital currencies, including cryptocurrency. CBDC issued by a central bank will have an effective mechanism to regulate the money supply, which, based on sharia principles, must consider the additional creation of goods and services in the economy considering the main function of money is as a medium of exchange for goods and services. Money is not a commodity that can be bought or sold based on interest (*riba*) or speculation (*maysir*). In terms of Islamic finance, the seamless circulation of money is maintained as far as possible to avoid hoarding and idle funds, which would interfere with the allocation of resources and smooth production processes of the goods and services needed in the economy. As a digital currency, CBDC would certainly facilitate unimpeded circulation in transaction activities. In other words, (digital) technology will increase the velocity of money, both in commercial and social activities.

V. Linkages between Islamic Social-Public Finance and Islamic Monetary Policy

As explained in the previous subchapter, the Islamic social-public finance sector and the Islamic monetary economy emphasise the inclusiveness of the sharia economy. There is a link, therefore, between the role of Islamic Monetary Policy and the role of Islamic Social Finance in terms of moulding the Islamic economy, particularly the equitable distribution of wealth, thereby significantly reducing inequality, ameliorating welfare and expanding public participation in the economy. This relationship can be described in five dimensions as follows:

i. Spirit and Final Goal

The mechanisms of Islamic monetary economics and Islamic social finance have a corresponding spiritual dimension, namely to maintain the faith of individuals and the community collectively. The focus, therefore, on the goal of maintaining an orderly flow of economic resources as well as the equitable distribution of wealth and income in the Islamic monetary sector and Islamic social finance essentially aims to provide the basic needs of Muslims and the community to fulfil their obligations to God (maintaining the faith). The goal of implementing an Islamic monetary economic system and Islamic social finance is to provide just and equitable distribution and facilitate the ultimate goal of effective policy. The full panoply of economic tools in the Islamic economic system function, therefore, to facilitate the distribution/circulation of economic resources for the benefit of all.

ii. Regulatory Role

In pursuit of this goal, the Islamic monetary sector and Islamic social finance require deep knowledge and understanding of Islamic economic principles and theories, with the full support and protection of the institutions and regulators. Similarly, poverty alleviation and equitable wealth distribution require a financial system as a regulatory conduit, with Islam, as a way of life, providing perfect guidance. Islam is a perfect and comprehensive guide covering every facet of life, including worship, social aspects, political aspects and *muamalah*. In this case, the role of government is necessary to establish institutions and regulations that support and grow Islamic monetary policy and Islamic social finance, which are expected to formulate regulations and frameworks for the overall application of Islamic values in both systems.

iii. Public Participation

Public participation is essential to ensure the policies and programs formulated and implemented by the institutions and regulators are successful in supporting the ideal application of both financial systems. A preliminary step in implementing the two systems is comprehensive understanding regarding the urgency of applying Islamic values in both financial systems by the community and institutions. *Zakat* principles in the Islamic social-public finance sector, coupled with the absolute prohibition of *riba* and *maysir* in the Islamic monetary sector, will increase public participation in economic activities. Consequently, the economy is more dynamic, with higher transaction volume expected to foster prosperous economic growth. On the other hand, public participation is also a prerequisite for creating a sound and robust Islamic financial climate to optimise the equitable distribution of wealth.

iv. System Balance and Economic Empowerment

Economic inequality, the gap between rich and poor, is rising. This is due to economic imbalances caused by the unencumbered creation of money beyond real sector needs as well as imbalances precipitated by the concentration of wealth in the hands of a few. Seeking to overcome such gaps, the overarching role of the Islamic monetary economic system and Islamic social finance is fair and impartial distribution. In addition, both systems can accelerate the distribution of wealth between community groups, while simultaneously meeting the social needs of the community. The Islamic monetary economic system and Islamic social finance also have a propitious impact on the economic system, including equitable wealth distribution and the money supply returning to its natural state, thus only increasing to meet the demand for money in the real sector. Furthermore, both Islamic financial systems can serve to increase economic empowerment in the wider community and revive economic growth, thus contributing to comprehensive national development with the support of synergy between the government, central bank and various relevant institutions centrally and regionally.

v. Optimising the Role of Money

The Islamic monetary economic system and Islamic social finance could create a flourishing system that compels the financial sector to prevent the hoarding of wealth and ultimately facilitate the flow of money as business capital, thereby optimising the real sector. Fundamentally, the two financial systems (Islamic monetary economy and Islamic social finance) discharge their functions as drivers of the financial sector in terms of facilitating the flow of resources, including money. Money is an economic resource that functions as a medium of exchange to facilitate economic activity. Money in Islamic social finance and Islamic monetary economics helps to increase the velocity of wealth between humans (economic players). Money can be used to facilitate the unhindered flow of *zakat, infaq, sadaqah, waqf, jizyah, kharja*, etc. Furthermore, money can lubricate and accelerate economic activity in the private, social and public sectors. If the Islamic monetary economic authority and Islamic social financial institutions can execute their policies in synergy with the corresponding instruments, they could simultaneously achieve full employment in the real sector.

Finite resources and the actualisation of the Islamic vision of *falah* and *hayatan thayyibatan* for every individual are two of the challenges faced by all Muslim countries. Such conditions encourage higher moral quality as well as brotherhood and socio-economic justice, which will remain but a fleeting illusion unless the finite resources can be brought to bear to alleviate poverty, provide basic necessities and bridge the income gap. In fact, similar to other developing economies, most Muslim countries experience severe inequality, along with external imbalances and macroeconomic hardships without progressing towards the realisation of their vision.

The material happiness of all individuals is impossible to achieve unless the available resources are used efficiently and equitably. Happiness, as it is now recognised, is a reflection of peace of mind or *an-nafs al-muthma'innah* in Al-Qur'an (al-Fajr:27), which cannot be achieved unless the individual is in harmony with inner peace. Happiness is only possible when the material and spiritual needs of the individual are satisfactorily met because material satisfaction and spiritual peace are mutually and inextricably linked, for which the fulfilment of both will only occur when the spiritual dimension is imbued into the material dimension to provide meaning and purpose.

A specific strategy is required, therefore, to facilitate the efficient and equitable allocation of finite resources according to the demands of *hayatan thayyibah*. Such a strategy is separate from the socially accepted filter mechanisms to distinguish the efficient and equitable use of resources. In addition, a system that motivates individuals to use resources in accordance with the filter mechanism requires socio-economic restructuring to enforce both components in their reallocation and distribution of resources, as demanded by *hayatan thayyibatan*.

In this regard, the financial system has a strategic role to play not only in the allocation and distribution of finite resources, but also in terms of economic stability and growth. Consequently, financial institutions are also considered as national resources because the sources of finance available to financial institutions originate from deposits placed by a representative sample of the entire population, which must be used, therefore, for the welfare of society. Such financial resources are scarce, however, implying equitable utilisation and optimal efficiency.

To that end, the financial system also plays a major role by encouraging and facilitating the efficient allocation of financial resources and real resources for different purposes and targets. Islamic finance is a system that originated from Al-Quran and Sunnah, as well as the scholarly interpretations of the revelations. The aim is to provide halal financial services to the Muslim community, while providing a tangible contribution to the achievement of Islamic socio-economic goals. The main goals also include economic welfare, job availability, robust and sustainable economic growth, socio-economic justice and equitable income distribution, reasonable wealth, stability in the value of money, as well as the mobilisation and investment of savings for economic development to offer profit sharing for the transacting parties and social security for the wider community. Through such ideas and strategic measures, underpinned by stronger brotherhood (*ukhuwah*), inclusive welfare can be maximised effectively.

VI. Conclusion

This study examines the lesson learned from Islamic social-public finance and monetary economics role in realizing inclusive welfare. Based on in-depth observation, we found that economic inclusion and inclusive growth are fully in line with the spirit and goals of the Islamic economy, particularly in terms of creating equitable welfare for all, including material satisfaction and spiritual peace through the development of humanity and resources. In that context, the need to achieve equitable wealth distribution in the inclusive welfare dimension can be satisfied.

While the study covers the current challenges and opportunities facing all economic players through the monetary and financial sectors, as well as the policy implications for all public policymakers to ensure quality welfare is achieved, it also become a reflection concerning the future of money, specifically the role of the gold money as well as money development and innovation, such as technological disruption. Currently, electronic money and digital currencies are developing with rapidity, including digital money issued by private entities (cryptocurrency) and central banks (CBDC). This provides no tangible reason, however, to feel the application of Islamic principles is more complex. Muslims are naturally inclined to review financial innovations based on Islamic principles. Finally, to optimise the realisation of quality welfare, the portrait and potential of Islamic social-public finance to create new sources of economic growth are explored along with the salient issues concerning sustainable development through the green economy and financing.

We are aware that the substances of this study will be adjusted to current needs and developments over time in terms of public policy practices and recommendations from readers and teachers in line with the issues developing in the public space and academic community. We hope that, this study not only meets the needs of readers wishing to obtain deeper understanding concerning the salient aspects of social-public finance and monetary economics from an Islamic perspective, but also expands our scientific knowledge. To that end, comments, recommendations and suggestions from the readers are warmly welcomed.

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