

Empirical Evidence of the Impact of Islamic Financial Inclusion on Human Welfare of Maqashid Sharia Perspective in Indonesia

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Abstract

Purpose – The study aims to determine the effect of Islamic financial inclusion using 3 (three) dimensions, namely accessibility, availability, and use (usage of banking services) of Islamic banking in Indonesia on the concept of welfare which includes 5 (five) elements: protection (hifz) of religion (din), mind ('aql), soul (nafs), offspring (nasl), and property (mal).

Methodology - The Islamic financial inclusion components are represented by several variables: the total number of third-party funds and financing, the total number of deposit accounts, and Automated Teller Machines (ATM) of Islamic banking. Meanwhile, the Islamic Human Development Index (I-HDI) is a suggested variable that represents welfare in the perspective of maqashid sharia. The research data used is annual data from 2010-2019 and then analyzed by multiple linear regression method.

Findings - The result shows that Islamic financial inclusion has a significant effect on people's welfare in Indonesia. Variable availability (availability) and the use of Islamic banking services (usage of banking services) have a real influence, but not so on the variable accessibility (accessibility). The increase in Islamic financial services indicated by the increase in third-party funds and financing in Islamic banking will also improve human welfare.

Keywords: Islamic financial inclusion, Islamic Human Development Index (I-HDI), material welfare index (MWI), non-material welfare index (NWI), maqashid sharia.

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1. INTRODUCTION

The successful development was marked by the creation stable financial system that benefits all levels of society. In this regard, financial institutions play an important role through their intermediary function to promote economic growth, income distribution, poverty alleviation, and the achievement of financial system stability. However, unluckily, the rapidly growing financial industry that not accompanied by adequate access to finance. While, access to financial services is a critical requirement for the involvement of the broader community in the economic system (Hamzah, 2019).

Financial inclusion is essentially all efforts to eliminate all barriers forms to public access in utilizing financial services. Based on World Bank research, various countries have implemented financial inclusion to alleviate poverty and promote economic growth (Anwar, Purwanto, Suwaidi & Anianda, 2017). Financial inclusion, as considered by the World Bank, targets the individuals and business having “access to useful and affordable financial products and services that meet their needs-transactions, payments, savings, credit and insurance delivered in a responsible and sustainable way” (Siddiqui & Junaid, 2020: 3). Financial inclusion is an important issue due to that there are still many Indonesians who do not have access to the formal financial sector. In addition, the formal financial sector is a public good. So, every citizen has the right to access various quality, timely, convenient, fair, and affordable formal financial products and services. Therefore, access to formal financial products and services must well provide for all segments of society, with particular attention to the low-income poor, the productive poor, migrant workers, and community groups living in remote areas (Kementerian Keuangan Republik Indonesia, 2021).

In its development, the efforts to increase financial inclusion are not only limited to the development of financial products and services but also include four other elements: the expansion of financial access, the availability of financial products and services, the use of financial products and services, as well as improving the quality of use. financial products and services as well as the quality of financial products and services themselves (Otoritas Jasa Keuangan, 2017). The access dimension is a dimension used to measure the ability to use formal financial services, so it is noticeable that there are potential obstacles to opening and applying bank accounts, such as financial services' cost or physical affordability (bank offices, ATMs, etc.). The usage dimension is the dimension used to measure the actual ability to use financial products and services, including those related to regularity, frequency, and duration of use (Bank Indonesia, 2017). The availability dimension is a dimension used to measure the extent to which people can and can use the services of formal financial institutions in serving the needs of the community (Puspitasari, Mahri & Utami, 2020). Meanwhile, the dimension is the dimension used to determine whether the availability of financial products and service attributes has met customer needs. Unfortunately, measurement of this dimension is still problematic to do. Currently, several international institutions concerned with financial inclusion development are compiling indicators of the quality dimension and the tools used. In general, The Alliance for Financial Inclusion (AFI) has agreed on the principles used in compiling indicators from the quality dimension, include succinct (conciseness), specific (specify), simple (simplicity), improvement (improvement), and client perspective (Azwar & Saragih, 2018).

Inclusive finance is often touted as a state agenda to accelerate economic growth, promote equality of income distribution, reduce poverty and achieve financial stability. On the other hand, Indonesia has a relatively low financial inclusion rate compared to other developing countries. The World Bank's 2017 Global Findex reported that more than half (51.1%) of Indonesian adults are unbanked. Forty-six percent of men have an account, five percent less than the proportion of women (51%) with an account. What makes this study crucial and timely is, to the best of the researchers' knowledge, no study has so far been conducted on Islamic financial inclusion and human welfare from the perspective of *maqashid* sharia.

Some of the previous research only examines the effect of financial inclusion on poverty, human development in general, as well as material-based indicators, as research conducted by Muslikhah & Utami (2019), Azwar & Saragih (2018), Efendi (2019), Ali, Sakti & Devi (2019), Prastowo & Putriani

(2019), Ningrum (2018), Faisal, Rehman & Ramdani (2016), and Mohieldin, Iqbal, Rostom & Fu (2011). Thus, this study tries to reveal the impact of the human welfare from the *maqashid* sharia perspective along with dimension approach of the protection of religion (*hifz din*), soul (*hifz nafs*), intellect (*hifz 'aql*), offspring (*hifz nasl*), and property (*hifz mal*). The Islamic Human Development Index (I-HDI), developed by Anto (2011), is considering to represent an indicator of human welfare from the perspective of *maqashid* sharia. Specifically, the present paper aims to achieve the following objectives:

1. To examine the impact of the accessibility dimension of Islamic financial inclusion on the Islamic human development index (I-HDI) in Indonesia
2. To examine the impact of the availability dimension of Islamic financial inclusion on the Islamic human development index (I-HDI) in Indonesia
3. To examine the impact of the banking services usage dimension of Islamic financial inclusion on the Islamic human development index (I-HDI) in Indonesia.

2. LITERATURE REVIEW

2.1. Human Welfare on Maqashid Sharia Persective

Welfare in socio-economic development cannot be defined only based on materialist and hedonic notions but also includes humanitarian and spiritual goals. These goals are to cover economic welfare issues and include human fraternity, socio-economic justice, the sanctity of life, individual and property honor, mind peacefulness, happiness, and harmony in family and community life. Therefore, development must refer to or be based on shari'ah provisions, both in the form of the word of God, Apostle, *ijma'*, *qiyas*, and the scholar's *ijtihad*. Although not all of them believe in its efficacy in solving economic, social, political, legal, cultural, and various natural problems, the concept of welfare in the Islamic perspective provides a perfect understanding of the universe, namely: the sky, the earth, and everything in it including humans as caliphs in it (Purwana, 2013).

So far, human welfare in development identified with an increase in the Human Development Index (HDI) introduced by the United Nations Development Program. The UN's Human Development Index (HDI) emerged as a response to the shortcoming of using income per capita as a proxy for development. The HDI was not the first, but it has been the most successful attempt to capture human development differently. The index comprises three dimensions: economic, educational, and health. The developments in the economic dimension are measured through income per capita, while the educational dimension assesses through two variables: mean years of schooling and expected years of schooling age. The health dimension is capture through the life expectancy at a birth proxy. The purpose behind the HDI is to evaluate nations in terms of their success in enhancing people's choices to disclose their potential. Human development is a fundamental goal from an Islamic perspective as well. Indeed, the Qur'an describes the creation of human beings as God's major project in the universe. It states that humans are created in the best form with excellent potential for both good and evil. Thus, one can consider the Qur'an and Sunnah as the divine guide for human development to be the best of the best among entire creation, even surpassing angels. For that matter, the conventional HDI provides some guidance. However, it is not sufficient from an Islamic economic perspective because the model is claimed to be value-neutral, without assigning importance to human beings' moral and spiritual aspects (Aydin, 2017). Ideal human development is substantially different from what is measured by conventional HDI, so we think it is necessary to develop an alternative measurement for Islamic Human Development Index (I-HDI) as follows.

2.2. Islamic-Human Development Index (I-HDI)

The concept of the Islamic Human Development Index (I-HDI) is said to be a more representative concept of the human development index compared to the notion of the Human Development Index (HDI) of the United Nations Development Program (UNDP) when viewed from an Islamic perspective. The Islamic Human Development Index (I-HDI) is an indicator of community welfare that represents the 5 (five)

dimensions of *maqashid sharia* (Anto, 2011). These dimensions measure both performance of material welfare (MW) as well non-material welfare (NW). First is the materialistic one which relates to the performance in fulfillment of property (mal) needs. Islam highlights the importance of property ownership and its distribution among society as a means for achieving *maslahah* and then *falah*. Therefore, the Islamic system would probably prefer a relatively lower level of property ownership with a better distribution of income/wealth as compared with the high level of property ownership but with an inadequate distribution of income/wealth (Qur'an and Surah al-Hashr Surah 19 Ayah 7). However, the higher the property ownership and its distribution, the better the level of material welfare (Anto, 2011).

The second relates to all non-directly related material things but fundamental for achieving *maslahah* or is called Islamic Environment and Values (IEV). These are all related to an *nafs*, *al 'aql*, *al nasl*, *ad din* in *maqasid al Shari'ah*. The longer the life, the better, as a longer life could be assumed to be a wider opportunity to do many good things that benefit achieving *maslahah*. Knowledge and science has pivotal position for development, so that all of society members should deserve education. Development process will be more efficient and effective if family and social relationship among society members are in harmony. The family also takes an essential role in building the next generation, which is essential for sustainable development. Moreover, finally, the role of religiosity in society is un-debatable from the Islamic perspective (Anto, 2011).

Following the above theoretical foundation, the development in Islam can be expressed as follows:

$$\begin{aligned}
 Wh &= f(MW, NW) && (1) \\
 MW &= f(PO, DE) && (2) \\
 NW &= f(IEV) && (3) \\
 IEV &= f(LE, E, FSR, R) && (4)
 \end{aligned}$$

Where:

- Wh : Holistic welfare
- MW : Material welfare
- NW : Non material welfare
- PO : Property ownership
- DE : Distributional equity
- IEV : Islamic environment and values
- LE : Life expectancy
- E : Education
- F : Family and social relationship
- R : Religiosity

Table 1. Holistic Welfare with Its Proposed Indicators Based on *Maqashid Sharia*

Welfare	Type of Needs	Aspects	Proposed Indicators
Material Welfare Index (MWI)	<i>Hifz Mal</i>	Property Ownership	GDP Index
		Distributional equity	Gini Index Poverty Index
Non-material Welfare Index (NWI)	<i>Hifz Nafs</i> <i>Hifz 'Aql</i> <i>Hifz Nasl</i> <i>Hifz Din</i>	Islamic environment & values	Life Expectancy Index Education Index Family-Social Index Religiosity Index

More entirely, indicators that represent each dimension of holistic welfare are described in Table 2 as follows:

Table 2. Proposed Indicators of Both Material (MWI) and Non-Material Welfare Index (NWI)

Welfare	Proposed Indicators	Description
Material Welfare Index (MWI)	GDP Index (GI)	GI = Actual GDP per capita (PPP U\$) - Min GDP per capita Max GDP per capita
	Gini Index (GNI)	GNI = Actual normalize Gini coefficient (nGc) - Min nGc Max nGc - Min nGc
	Poverty Index (PI)	PI = ½ (Actual normalize Poverty (nPr) - Min nPr) Max nPr - Min nPr
	Life Expectancy Index (LEI)	LEI = Actual life expectancy - Min value Max value - Min value
Non-material Welfare Index (NWI)	Education Index (EI)	EI = ½ (Actual adult literacy - Min value) Max value - Min value
	Family-Social Index (FSI)	FSI = ½ (FI + MI) Fertility Index (FI) = Actual birth rate - Min birth rate Max birth rate - Min birth rate Mortality Index (MI) = Actual normalize mortality rate (nMr) - Min nMr Max nMr - Min nMr
	Religiosity Index (RI)	RI = Actual number of crimes (NCr) - Min NCr Max NCr - Min NCr

Based on Tabel 2 above, material welfare index (MWI) is simply an arithmetic average of those two indices GDP Index and Distributional Equity Index (DEI) as follows:

$$MWI = \frac{1}{2} (GI + DEI) \quad (5)$$

Non-material welfare index (NWI) measures the level of non-material welfare that come from all non-directly related to material things but fundamental for achieving *maslahah*. NWI is composite index of Life Expectancy Index (LEI), Education Index (EI), Family Social Index (FSI), and Religiosity Index (RI), so this is simply an arithmetic average of those four indices as follow:

$$NWI = \frac{1}{4} (LEI + EI + FSI + RI) \quad (6)$$

2.3. Islamic Financial Inclusion

The term finance in the Indonesian Comprehensive Dictionary (KBBI) has the meaning of monetary, the intricacies of money, money matters. Meanwhile, the word inclusion in the Comprehensive Indonesian Dictionary (KBBI) means including, counting, and comprehensive (Kementerian Pendidikan Nasional, 2020). According to the Indonesian Financial Services Authority (Otoritas Jasa Keuangan, 2017), financial inclusion is the availability of access to various financial institutions, products, and services following the needs and abilities of the community to improve the community welfare (Otoritas Jasa

Keuangan, 2019). According to Bank Indonesia, financial inclusion is all efforts aimed to eliminate all forms of price and non-price barriers to public access to financial services (Bank Indonesia, 2020). Financial inclusion, as considered by the World Bank, targets the individuals and business having “access to useful and affordable financial products and services that meet their needs- transactions, payments, savings, credit and insurance delivered in a responsible and sustainable way” (Siddiqui & Junaid, 2020: 3). Following the understanding given by the various sources mentioned, it can conclude that Islamic financial inclusion is an effort to facilitate open access, availability, and use of Islamic financial products and services at affordable prices for the community.

The access dimension measures the ability of formal financial services usage, so the potential barriers to opening and using bank accounts can be seen, such as the cost or physical affordability of financial services (bank offices, ATMs, etc.). The usage dimension is the dimension used to measure the actual ability to use financial products and services, including those related to regularity, frequency, and duration of use (Bank Indonesia, 2017). Finally, the availability dimension is a dimension used to measure the extent to which people can and can use the services of formal financial institutions in serving the needs of the community (Puspitasari, Mahri & Utami, 2020).

Each indicator of Islamic financial inclusion includes the dimensions of access (accessibility), availability (availability), and the use of Islamic banking services (usage of banking services) following several studies that have been conducted by Azwar & Saragih (2018) and Sarma, (2012). The accessibility dimension is representing by the number of deposit accounts per 1,000 adults. The usage dimension represents the volume ratio of the two banking system essential services, namely total third-party funds and financing from the adult population to the value of the gross domestic product (GDP). Finally, the availability dimension represents the number of bank outlets per 1,000 population and the number of ATMs per 1,000 population.

2.4. The Relationship between Human Welfare and Islamic Financial Inclusion

Muslikhah & Utami (2019) states that improvement of people's welfare counts by reducing income inequality (Gini coefficient) sought through the realization of an accessed financial system for all levels of society to encourage economic growth through financial inclusion programs. The Financial Inclusion Index (IIK), economic growth, inflation, and Indonesia's real minimum wage (UMP) from 2012-2017 are using in the study. The results show that the Financial Inclusion Index (IIK) is not significant in influencing income inequality. Therefore, financial development in Indonesia has not been able to reduce income inequality. This condition happens because of the low access to finance from the middle to lower-income community. Currently, the development of the financial sector can only utilize by the middle and upper class, so inequality has been surprising and causes gaps in access to finance in Indonesia.

Azwar and Saragih (2018) analyzes Islamic financial inclusion in Indonesia and states that the Islamic financial inclusion index includes the dimensions of accessibility, availability, and usage of banking services in Indonesia is low, with an average value of 0.127. Furthermore, the researcher also analyzed the relationship between Islamic financial inclusion and public welfare as represented by the Human Development Index (HDI) indicator in Indonesia and found a positive and significant correlation. The development of the financial sector, especially the banking sector, can increase public access and use of banking services. The more open access to financial services, the public is expected to take advantage of this access and increase their income through lending by financial institutions, especially for productive activities. Difficult access to financial services causes the poor to rely on limited savings for investment and small entrepreneurs to rely on profits to continue their business. As a result, income inequality does not decrease and slow economic growth (Allen, Demirguc-Kunt, Klapper & Peria, 2021).

Efendi (2019) study the effect of Islamic banking financial inclusion and gross regional domestic product on provincial poverty in Indonesia by using panel data regression analysis and random-effects models. He obtained the results that the number of Islamic banking branch offices per 1,000 km² has no significant effect on poverty. Meanwhile, gross regional domestic product and financing have a significant adverse effect on provincial poverty in Indonesia and show that Islamic banking has given its intermediary

role to the community through Islamic financing in various fields, sectors, and uses.

Ali, Sakti & Devi (2019), studies to measures an Islamic financial inclusion index in Indonesia based on three dimensions, namely the accessibility, availability, and usage of Islamic banking services. Additionally, it measures the relationship between the Islamic financial inclusion index and the human development index (HDI). The results show a positive relationship between the Islamic financial inclusion index with the human development index (HDI). It explained that if an area has a high Islamic financial inclusion index, it also has a high HDI. These findings suggest that Islamic banks in Indonesia positively contribute to economic growth, promote better access to education, and increase living standards.

Prastowo and Putriani (2019) measures financial inclusion index in 2 (two) dimensions in Indonesia Islamic banks. In practice, if Islamic banks open new branches at the regional level, the entrepreneurs who try to expand their business may approach Islamic banks. As the entrepreneurs were expanding their business, the quantity of production will increase, which will offer new jobs. In other words, there will be more people employed and thus minimizing income inequality.

3. METHODOLOGY

This study uses annual data from 2010-2019, while several variables taken from various sources and have undergone previous adjustments. The Islamic financial inclusion variables divide into the dimensions of accessibility (accessibility), availability (availability), and usage of banking services (use) (Sarma, 2012). The accessibility dimension is proxied by the number of deposit accounts per 1,000 adults. The availability dimension is proxied by the number of Automated Teller Machines (ATM) per 1,000 population. In contrast, the usage dimension is proxied by total third party funds and financing by 3 (three) banking sectors (Islamic Commercial Banks, Sharia Business Units, and Sharia People's Financing Banks).

Meanwhile, the Islamic Human Development Index (I-HDI) adopts the idea (Anto, 2011) by involving 5 (five) elements of holistic welfare based on *maqashid* sharia as shown in table 2.2 in the previous chapter. Furthermore, the material welfare index (MWI) represent by the variable gross domestic product per capita (PPP US\$), the Gini ratio, the depth index (P1), and the severity (P2) of poverty. On the other hand, the non-material welfare index (NWI) represent by variables: life expectancy, the length of education expectation, the length average of education, total birth rate (per 1,000 people), infant mortality rate (per 1,000 people), and crime rates.

Sources of research data are varied, taken from the World Development Indicators (World Bank), Global Economic Monitor (World Bank), Central Statistics Agency (BPS), Sharia Banking Statistics, Financial Services Authority (OJK). The data were processed using the Eviews 9.0 software program in multiple linear regression analysis models following the classical assumption testing, including histogram normality test, multicollinearity variance inflation factor (VIF) test, White heteroscedasticity test, and Breusch-Pagan Godfrey serial correlation autocorrelation test. The research model is written as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e \dots\dots\dots$$

Where Y is I-HDI, a is a constant, X1 is the number of deposit accounts (per 1,000 people), X2 is the number of ATMs (per 1,000 people), X3 is the total third party funds and financing carried out by Islamic commercial banks, business units sharia and Islamic rural banks, b1, b2, b3 are regression coefficients, while e is the error term.

4. RESULTS AND DISCUSSION

The rapidly growing development of Islamic finance expects to touch every line of people's lives without any limitations on differences in demographic characteristics, age, gender, education level, community income, social, cultural, economic, and other things that make Islamic finance exclusive everyone. Inclusive Islamic finance is expected to answer all life welfare problems, which will lead to the achievement of *maqashid* sharia itself.

The results show there are no classical assumption test problems in the research model at the pre-analysis stage of multiple linear regression. Some classical assumption tests conducted by researchers include normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. Look at Figure 1 below.

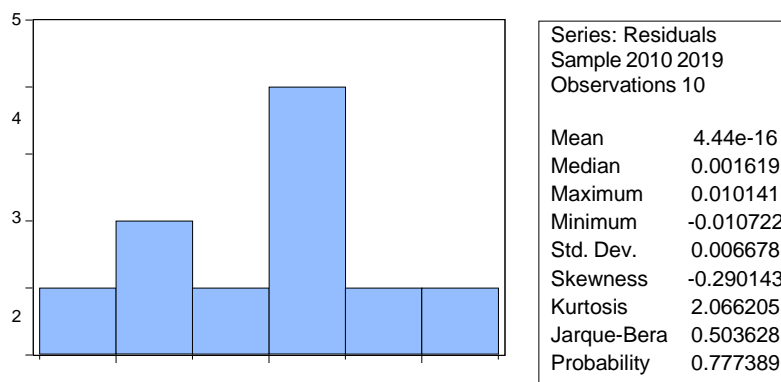


Figure 1. Histogram Normality Test Results
(Source: Eviews 9.0)

The normality test used in this study aims to determine whether the data normally distributed or not. The normality test can be seen by looking at the jarque-bera probability value. If the jarque-bera probability value is greater than the significance value of 5% or 0.05 then the data normally distribute.

However, if the jarque-bera probability value is less than the significance value of 5% or 0.05 then the data is not normally distributed. Based on Table 3, it seems that the Jarque-Bera Probability value is $0.777389 > 0.05$, so the residual data in this model normally distributed.

Table 3. Multicollinearity Test Result of Variance Inflation Factor (VIF)

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
AKSES	4.444316	77.20213	2.551258
AVAIL	3.57E-07	227.0791	28.83469
GUNA	0.000893	151196.5	33.71866
C	0.908193	135767.7	NA

Source: Eviews 9.0 (Processed by the Author)

The purpose of using the multicollinearity test in this study is to test whether the regression model found a correlation (strong relationship) between independent variables or independent variables. A good regression model should not correlate with the independent variables or there should be no multicollinearity symptoms. The basis for decision making is on the multicollinearity test with Tolerance and VIF (Variance Inflation Factor). Tolerance measures other independent variables. So a low Tolerance value is the same as a VIF value (because $VIF = 1/\text{tolerance}$). The value commonly used to indicate multicollinearity presence is the tolerance value > 0.01 or equal to $VIF < 10$. After the analysis, based on Table 3, the research model has multicollinearity problems.

Table 4. Heteroskedasticity White Test Result

Heteroskedasticity Test: White			
F-statistic	0.171921	Prob. F(8,1)	0.9576
Obs*R-squared	5.790125	Prob. Chi-Square(8)	0.6707
Scaled explained SS	1.111223	Prob. Chi-Square(8)	0.9974

Source: Eviews 9.0 (Processed by the Author)

The heteroscedasticity test in this study used the white test (Table 4). The heteroscedasticity test has conducted to see if there was an inequality of variance from the residuals of one observation to another. If the probability value is > 0.05 or 5% significance level, there is no heteroscedasticity problem exist. On the contrary, if the probability is < 0.05 or 5%, there is a heteroscedasticity problem. Therefore the value of Prob. F of 0.9576, then there is no heteroscedasticity problem in this study.

Table 5. Breusch-Godfrey Serial Correlation for Autocorrelation Test Result

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	0.165698	Prob. F(1,5)	0.7008
Obs*R-squared	0.320766	Prob. Chi-Square(1)	0.5711

Source: Eviews 9.0 (Processed by the Author)

In a study, a regression model that is said to be good is a regression model that is free from autocorrelation symptoms. The autocorrelation test in this study is the Breusch-Godfrey Serial Correlation LM Test (Table 5). If the chi-square probability value is > 0.05 or 5%, then the data does not have autocorrelation symptoms. However, if the probability value of chi-square is < 0.05 or 5% significance level, there is an autocorrelation problem exist. Table 5 the above shows the research model free from autocorrelation problems.

Table 6. Results of Multiple Linear Regression Effect of Islamic Financial Inclusion on Human Welfare from the *Maqashid* Sharia Perspective

AKSES	-1.740768	2.108155	-0.825731	0.4405
GUNA	0.190769	0.029883	6.383923	0.0007
AVAIL	-0.002819	0.000598	-4.716747	0.0033
C	-5.757880	0.952992	-6.041899	0.0009
R-squared	0.967763	Mean dependent var		0.471400
Adj. R-squared	0.951645	S.D. dependent var		0.037194
S.E. of Reg.	0.008179	Akaike Info Criterion		-6.485362
Sum Sq. Resid	0.000401	Schwarz criterion		-6.364328
Log Likelihood	36.42681	Hannan-Quinn criterion		-6.618136
F-statistic	60.04121	Durbin-Watson stat		2.125415
Prob (F-Statistic)	0.000072			

Based on Table 6, total third party funds and financing as an indicator of usage Islamic banking services variable (GUNA) along with the number of Automated Teller Machines (ATM) per 1,000 population as an indicator of the availability variable (AVAIL) shows a significant influence on the human welfare in Indonesia. Meanwhile, the number of deposit accounts per 1,000 adults as an indicator of the accessibility variable (AKSES) shows the opposite result. The dimensions of access and availability both show significance in the 1% level, but the regression coefficient values are opposite.

A positive regression coefficient value on the variable of use indicates that the greater the use of third party funds and financing by banks, business units, Islamic rural credit banks will contribute to improving human welfare. If the use of third-party funds and financing increases by 1% (one percent) with the assumption that the other independent variables are constant, the human welfare in Indonesia will increase by 19% (nineteen percent).

Because there are inadequate studies discuss the effect of Islamic financial inclusion on people's welfare in the perspective of maqashid sharia using the Islamic Human Development Index (I-HDI) indicator, but Efendi's (2019) research which discusses the effect of variables using Islamic finance on poverty in Indonesia shows support for the results of this study. Likewise, the studies conducted by

Muslikhah & Utami (2019), Azwar & Saragih (2018), Prastowo & Putriani (2019), Naceur, Barajas & Massara (2015), Faisal, Rehman & Ramdani (2016), Ali, Sakti & Devi (2019), Mohieldin, Iqbal, Rostom & Fu (2011), Firmansyah & Ramdani (2018), Swamy (2014) and Nengsih (2015).

The use of Islamic banking services incorporated in third-party fundraising products offered by banks will provide opportunities for parties who need funds to collaborate with banks whose profits and risks can share with both parties according to their portion. The increase in financing has proven to open access and opportunities for the public to enjoy the intermediation function of Islamic banking. These two main functions of Islamic banking are proven can improve human welfare in Indonesia. More specifically, this increase in welfare is not only measured in material aspect but also non-material that complement of other's sharia objectives in terms of protecting religion, reason, life, descendant, and property.

In the availability variable, an increase of 1% (one percent) with the assumption that other variables remain will reduce the human welfare by 0.3% (zero point three percent). The researcher assumes that an increase in the number of ATMs per 1,000 (one thousand) population in Indonesia will reduce the human welfare initially marked by a decrease in the dimension of protection against religion (*hifz din*) and follow by a decrease in other dimensions of *maqashid sharia*. The protection of religious dimension in this study used religiosity index indicator which indicates by crime rate data of each province in Indonesia during the period of the study. The addition of the number of ATMs will increase the crime rate in Indonesia. The concept of an ATM that leaves a certain amount of money in a machine in certain locations considered to create an opportunity for criminals to commit crimes in the form of money theft at ATMs.

The crime of theft of money is an act of violation of the concept of the property ownership protection dimension (*hifz maal*) of others which will have direct consequences for their survival. The stolen property has resulted in the people whose stolen property was unable to meet the basic needs of life such as food, drink, proper housing, education, health, recreation, and so on so forth. Without the fulfillment of the basic need to survive, other sharia goals will not be fulfilled as well (*hifz nafs, hifz 'aql, hifz nasl, and hifz din*).

Islam views property as belongs to Allah SWT. The wealth owned by a human is a gift from God that is authorized to him. Ownership of individual property is a person's right to take advantage of something that allows someone to use the goods or get compensation either because the goods are taken advantage of by others. The right of ownership of individual property is a *syar'i* right for individuals. This right is protected and regulated by Islamic law. The protection of sole proprietorship is the state's obligation. Therefore, the sharia law stipulates the existence of sanctions as a preventive (prevention) for anyone who abuses these rights (Nizaruddin, 2019). Islam also prohibits the acquisition of wealth through vanity efforts such as gambling, prostitution, corruption, and other immoral acts. So that acts of theft, robbery and confiscation of property from someone who owns it are contrary to Islamic law because these actions will only lead to the destruction and humiliation of human life itself and other innocent parties.

The accessibility dimension does not show a significant influence on the welfare of the people in Indonesia. These results supported by Efendi's research (2019) entitled with The Effect of Islamic Banking Inclusion and Gross Regional Domestic Product (GRDP) on Provincial Poverty in Indonesia for the 2014-2018 Period and examines the effect of the Financial Inclusion Index (IIF) on income inequality in Indonesia. According to Bank Indonesia, low access to public finance in Indonesia is caused by low providers of banking services (supply), as well as from the community itself as users of banking services (demand). This condition exists caused by the expensive prices of banking products and their ability to reach all people (price barrier), in addition, there is still a lack of information (information barrier), product design barrier (suitable product), and appropriate facilities (channel barrier). This indicates that the combination of information about banking and prices and geographical conditions makes it difficult for the public to access Islamic financial services.

Furthermore, the research model of the influence of Islamic financial inclusion on people's welfare in the perspective of *maqashid sharia* in Indonesia is said to be very good. These indicate by the coefficient of determination (R^2) of 96.8% means that independent variables such as total third-party funds and financing, the number of Automated Teller Machines (ATM) per 1,000 residents, and deposit accounts per 1,000 adult residents can explain the variable of Islamic Human Development Index (I- HDI), while the

remaining 3.2% explains by other variables excluded in this study.

CONCLUSION

In general, Islamic financial inclusion has a significant impact on human welfare from the perspective of maqashid sharia in Indonesia. The significance represents by the variable number of ATMs per 1,000 people, total third-party funds, and financing by Islamic banking. While the number of deposit accounts per 1,000 people does not show significant results on the Islamic human development index (I-HDI). Responding to these results, banks need to pay more attention to the strategies formulated in expanding access to financial services to people in need. Islamic banking can take the initiative of a program that can increase the ownership of accounts or accounts at their institutions. Those refer to access to financial services have proven to be very low in Indonesia. In addition, Islamic banking can also maintain or increase the distribution of financing to sectors that have productive prospects in the future according to the regional economic conditions. However, this does not apply to the bank's strategy if it wants to increase the number of ATMs in certain areas.

It should be underlined. This research opens up opportunities for further studies to include other indicators of Islamic financial inclusion and examine their effect on human welfare in each dimension of maqashid sharia in each province in Indonesia. Thus, more specific results will obtain to provide an overview of each province in the achievement of the five maqashid sharia on the role of Islamic banking in Indonesia.

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