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The Proceeding

of the International Conference on Islamic Economics and Finance (ICIEF)

“Strengthening Islamic Economy and Financial System in the Post Pandemic Era,
Digitalization and Sustainability”

Online conference-Bogor, October 25–26, 2021

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Fakultas Ekonomi dan Manajemen
IPB UNIVERSITY

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The Proceeding of the International Conference on Islamic Economics and Finance (ICIEF): “Strengthening Islamic Economy and Financial System in the Post Pandemic Era, Digitalization and Sustainability”

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FOREWORDS

Assalaamua'laikum Warahmatullah Wabarakaatuh,

Hopefully we are all in good health.

Alhamdulillah, praise to Allah SWT, The Most Gracious and The Most Merciful, because of His mercy we can arrange this proceeding of our conference: International Conference on Islamic Economics and Finance (ICIEF).

International Conference on Islamic Economics and Finance (ICIEF) was held on October 25-26, 2021, entitled “***Strengthening Islamic Economy and Financial System in the Post Pandemic Era, Digitalization and Sustainability***”. The purpose of this conference is to serve as the avenue for some alluring areas and questions in the field of Islamic economics and finance and to list and reiterate the topics that arising from the development of global Islamic economy in an environment of new normal and digital transformation.

The COVID-19 pandemic has been affecting the global economy since 2020. A series of stimulus, economic aid packages, and other policy responses has been implemented by governments to combat the spread of the disease and to survive the recession. The unprecedented event serves as a momentum to rethink about a stable, resilient, inclusive, and sustainable economic system, along with strong social safety net system. Rapid digital transformation supported by the rise of the sharing and collaborative economy has also contributed to a more effective and efficient resource allocation. This development has shaped a new normal for the global Islamic economy, which requires breakthrough initiatives and innovations to strengthen ecosystem of Islamic economy that synergizes Islamic finance, Islamic social finance, halal industries, and Islamic businesses, to achieve inclusive, resilient, and sustainable growth.

International Conference on Islamic Economics and Finance (ICIEF) will provide an ideal platform for dialogue and discussion among the practitioners, academics, higher degree students, researchers, as well as the policymakers around the world. The aim is to discuss issues with respect to strengthening the ecosystem of Islamic economy in new normal, within the Islamic economics and finance frameworks.

On behalf of the committee of ICIEF 2021, I would like to thank everyone for their participation and contribution in the International Conference on Islamic Economics and Finance. I also apologize for any inconveniences caused during and after the program. I also would like to thank all of the committees who have put a great effort to make this event available. Hopefully we could receive meaningful benefit and outcome from this precious program.

Wabillahi taufik wal hidayah,

Wassalamu'alaikum Warahmatullah Wabarakaatuh.

Prof. Dr. Noer Azam Achsani, M.S.
Chairman of Academic Committee ICIEF
IPB University

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SCHEDULE

DAY 1

(Jakarta Time; GMT +7)	Monday, October 25, 2021
08:15 – 08:58	Zoom Registration Video ISEF (looping)
08:58 – 09:00	Greeting by MC (Voice Over)
09:00 – 09:03	Indonesia National Anthem
09:03 – 09:05	Opening by MC
09:05 – 09:15	Recitation of the Holy Qur'an
09:15 – 09:17	BI Institute Manifesto
09:17 – 09:27	Committee Report: Dr. Solikin M. Juhro, Head of Bank Indonesia Institute
09:27 – 09:37	Keynote Speech: Prof. Dr Koutoub M Sano, Secretary General of International Islamic Fiqh Academy
09:37 – 09:57	Keynote Speech: Perry Warjiyo, Ph.D, Governor of Bank Indonesia
09:57 – 09:59	Photo Session
09:59 – 10:06	Photo Session
10:06 – 12:15	Webinar Plenary Sessions 1 Topic: Islamic Economy, Halal Economy, and Industry for Organic Growth Towards Global Value Chain Speakers: – Prof. Tariqullah Khan, IAIE / Istanbul Sabahattin Zaim University, Turkey – Prof. Marco Tieman, Help University, Malaysia – Prof. Irwandi Jaswir, INHART IIUM, Malaysia – Mrs. Amalia Sarah Santi, Paragon Technology and Innovation, Indonesia Moderator: Mr. Afdhal Aliasar, M.B.A., KNEKS, Indonesia
12:15 – 13:30	Break
13:30 – 15:10	Parallel Sessions 1
15:10 – 15:40	Break
15:40 – 17:45	Parallel Sessions 2

DAY 2

(Jakarta Time; GMT +7)	Tuesday, October 26, 2021
08:15 – 09:00	Zoom Registration Video ISEF (looping)
09:00 – 09:05	Opening by MC
09:05 – 09:15	Welcoming Remarks: Dr. Sutan Emir Hidayat, MBA, Director of Islamic Economy Supporting Ecosystem
09:15 – 09:30	Keynote Speech: Dr. Laksana Tri Handoko, Chairman of BRIN
09:30 – 09:45	Keynote Speech: Prof. Dr. Dato Mohd Azmi Omar, Vice President of IAIE
09:45 – 10:00	Keynote Speech (tbc): Sri Mulyani Indrawati, Ph.D, Chairman of IAEI / Minister of Finance, Republic of Indonesia
10:00 – 11:40	Parallel Sessions 3
11:40 – 12:45	Break
12:45 – 14:50	Parallel Sessions 4
14:50 – 15:00	Break
15:00 – 16:45	Webinar Plenary Sessions 2 Topic: Islamic Banking & Finance for Economic Recovery and Sustainable Development in Digital Era Speakers: – Prof. Zamir Iqbal, Islamic Development Bank, Saudi Arabia – Prof. Mohd Ma’sum Billah, King Abdulaziz University, Saudi Arabia – Dr. Jardine A. Husman, Bank Indonesia, Indonesia Moderator: Dr. Irfan Syauqi Beik, Institut Pertanian Bogor, Indonesia
16:45 – 16:48	Pre-Launching of Indonesia Research Framework for Islamic Economics, Finance, and Halal Science
16:48 – 17:00	Announcement of Best Papers JIMF and Closing of the ICIEF and the IIMEFC Closing ICIEF: Dr Omar Z Hafiz, President of IAIE Announcement of best paper + closing IIMEFC: Dr. Solikin M. Juhro, BI Institute (BINS)

DETAIL OF PARALLEL SESSIONS

Day 1: Monday, October 25, 2021

Zoom Room 1

Time	Presenter	Paper Title
03.40 – 04.05 PM	Paper 1 041 INDONESIA Patria Yunita; Kunrat Wirasubrata; Didik Permono; Ita Sitasari; Emmy Hamidiyah	The Evolution of Money to Cryptocurrency: Are They Eligible for Islamic Economic?
04.05 – 04.30 PM	Paper 2 118 R USA Umar Yaseer Abdur Rahman	Identifying and Assessing Correlations in Indonesia'S 2019 E-Commerce Marketplace
04.30 – 04.55 PM	Paper 3 149 NEPAL/PAKISTAN/INDIA Rabin Paudel; Ghanashyam Khanal; Niranjana Devkota; Surendra Mahato; Ihtsham Ul Haq Padda; Sushanta Mahapatra; Udaya Raj Paudel; Seeprata Parajuli; Sharad Rajbhandari; Sashi Rana Magar	Industrial Readiness on Artificial Intelligence Adoption in Kathmandu Valley, Nepal: A Structural Equation Model Analysis
04.55 – 05.20 PM	Paper 4 56 INDONESIA/MALAYSIA: Achmad Hidayat; Salina Kassim	Does E-Banking Adoption Reduce Labour Cost? Evidence from Islamic Banks in Indonesia
05.20 – 05.45 PM	Paper 5 221 MALAYSIA: Aznan Hasan; Najim Nur Fauziah	Exploring Islamic Blended Finance in Supporting Micro, Small and Medium Enterprises against Covid-19 in Indonesia

Day 1: Monday, October 25, 2021

Zoom Room 2

Time	Presenter	Paper Title
03.40 – 04.05 PM	Paper 1 28 MALAYSIA: Nurul Izzati Binti Justine@Masinin; Mohamad Isa Abd Jalil	What Factors Influence Sabahan to Repeat Cash Waqf Donation
04.05 – 04.30 PM	Paper 2 270 INDONESIA: Sulaeman; Raditya Sukmana	Determining The Real Factors of Poverty Alleviation in Achieving SDGs Number 1: Empirical Evidence From OIC Countries

Time	Presenter	Paper Title
04.30 – 04.55 PM	Paper 3 264 MALAYSIA: Riasat Amin Imon; Mohamed Aslam Haneef	Structural Rigidity within the Malaysian Islamic Financial System and Implications on Future Financial Narratives
04.55 – 05.20 PM	Paper 4 254 INDONESIA: Rahmi Edriyanti; Muslim Marpaung; Sugianto; Uning Musthofiyah; Lisa Listiana	Are There Any Strategies For Nazirr's Development?
05.20 – 05.45 PM	Paper 5 85 INDONESIA: Muhammad Rofi Udin Nur Fuadi; Qurroh Ayuniyyah; Ibdalsyah	The Impact of the Production-based Zakat Distribution Programs during the Covid-19 Pandemic: Evidence from BAZNAS in Pekalongan Regency, Central Java, Indonesia

Day 1: Monday, October 25, 2021

Zoom Room 3

Time	Presenter	Paper Title
03.40 – 04.05 PM	Paper 1 188 PAKISTAN: Atiq ur Rehman	Objectives of Shariah and SDGs friendly Monetary Policy Framework
04.05 – 04.30 PM	Paper 2 010 SAUDI ARABIA: Nevi Danila	Conditional Correlation Volatility and spillover between Sharia stock index and foreign exchange rates: Empirical Study of ASEAN and GCC market
04.30 – 04.55 PM	Paper 3 125 R INDONESIA: Putri Swastika; Nur Hidayah	Performance of Conventional, Islamic, and Socially Responsible Investing in Pandemic Crisis
04.55 – 05.20 PM	Paper 4 208 INDONESIA: Alvina Syafira Fauzia; Sri Mulatsih; Findi Alexandi	Mapping the Potential of Zakat Collection through Digital in Indonesia
05.20 – 05.45 PM	Paper 5 184 INDONESIA: Azizon; Rahmatina Awaliah Kasri; Kenny Devita Indraswari	Is Beyond Money Based Framing Impactful in Enlarging Islamic Banking's Market Share? An Experimental Exploration

Day 1: Monday, October 25, 2021

Zoom Room 4

Time	Presenter	Paper Title
03.40 – 04.05 PM	Paper 1 095 MALAYSIA/USA/PAKISTAN: Abu Hanifa Md. Noman; Muhammd Mahmudul Karim; Mohammad Kabir Hassan; Muhammad Asif Khan	Covid-19 Pandemic and the Dynamics of Major Investable Assets: What Gives Shelter to Investors?
04.05 – 04.30 PM	Paper 2 233 INDONESIA: Fitranty Adirestuty; Juliana; Rizky Maidan Ilmy; Masrizal	Determinant Factor of Cash Waqf Intentions Among Indonesian Society
04.30 – 04.55 PM	Paper 3 261 UNITED ARAB EMIRATES: El Tigani Abdelgadir Ahmed	تميز مبادئ ومفاهيم الإسلام المالية والاقتصادية (Distinguishing the Principles and Concepts of Islamic Economics and Finance)
04.55 – 05.20 PM	Paper 4 213 INDONESIA: Muhamad Anindya Hiroshi Purbayanto; Taufik Faturohman; Yulianti; Arson Aliludin	Do Islamic Banks in Indonesia Take Excessive Risk in Their Financing Activities?
05.20 – 05.45 PM	Paper 5 238 INDONESIA: Alif Khuwarazmi Maulana Julendra; Dwi Marlina Wijayanti; Slamet Haryono	Determinant Performance of Islamic Equity Funds in Indonesia

Day 1: Monday, October 25, 2021

Zoom Room 5

Time	Presenter	Paper Title
03.40 – 04.05 PM	Paper 1 200 INDONESIA: Mun Yah Zahiroh; Dinik Fitri Rahajeng Pangestuti	Indonesian Muslim Green Behavioral Intention : The Role of Values and Eco-Literacy
04.05 – 04.30 PM	Paper 2 153 QATAR: Abdul-Jalil Ibrahim; Nasim S. Shirazi; Amin Mohseni-Cheraghlo	Islamic Financial Development Impact on Energy Intensity: Evidence from Islamic Banks

Time	Presenter	Paper Title
04.30 – 04.55 PM	Paper 3 132 PAKISTAN/USA: Umaira Danish Dervi; Ashraf Khan; Irum Saba; M. Kabir Hassan	Sharia Compliant Green Financing Options for Sustainable Economy Past, Present, and Future
04.55 – 05.20 PM	Paper 4 269 TURKI: Ayman M. Bakr; Mohamed Cherif El Amri	Artificial Intelligence and Islamic Green Finance
05.20 – 05.45 PM	Paper 5 138 INDONESIA: Azizah Hervina Hapsari; Nuraini Desty Nurmasari; Latifah Putranti	Corporate Social Responsibility, Corporate Governance, Slack Resources, and Firm Performance

Day 2: Tuesday, October 26, 2021

Zoom Room 1

Time	Presenter	Paper Title
12.45 – 01.10 PM	Paper 1 177 TURKI: Tariqullah khan	Climate Remediation and Circular Economy - Reframing the Islamic Finance Architecture and Infrastructure
01.10 – 01.35 PM	Paper 2 026R INDONESIA: Davy Hendri; Roni Andespa; Nurmina; Husnul Hakim	Wage Regime and Its Impact On Employee Performance (Main Mato Practices as Peculiarities of Rumah Makan Padang)
01.35 – 02.00 PM	Paper 3 081 USA/AUSTRALIA: M. Kabir Hassan; Muhammad Kamran; Hadrian Geri Djajadikerta; Tonmoy Choudhury	Search for Safe Havens and Resilience to Global Financial Volatility: Response of GCC Equity Indexes to GFC and COVID-19
02.00 – 02.25 PM	Paper 4 128 INDONESIA: Lina Nugraha Rani; Eko Fajar Cahyono; M Fariz Fadillah Mardianto	The Role of Macroeconomics, Bank Internal Factors, and Macroprudential Factors on The NPL Performance of Rural Banks and NPF of Islamic Rural Banks in Indonesia
02.25 – 02.50 PM	Paper 5 203 IRAN: Farkhondeh Kiaee; Mohammadhossein Kiyaei	A LSTM-based Predictive Model for Islamic Bank Vulnerability Raised by Covid-19 Pandemic

Day 2: Tuesday, October 26, 2021

Zoom Room 2

Time	Presenter	Paper Title
12.45 – 01.10 PM	Paper 1 232 INDONESIA: Nining Islamiyah; Gusrianti; Neneng Ela Fauziyyah; Lisa Listiana	Tax Laws on Waqf in Indonesia: Opportunities and Challenges
01.10 – 01.35 PM	Paper 2 116 QATAR/SUDAN: Ebaidalla Mahjoub Ebaidalla; Mohamed Abuelgasim	The role of zakat in the provision of health care for poor in Sudan
01.35 – 02.00 PM	Paper 3 143 INDONESIA/USA: Fahmi Ali Hudaefi; Mohammad Kabir Hassan	Virtual Zakat Events in YouTube and Zoom: A Knowledge Discovery via Text Mining
02.00 – 02.25 PM	Paper 4 246 MALAYSIA: Najim Nur Fauziah; Salina Kassim	Maximizing The Potential of Cash Waqf for Social Enterprise Business to Achieve Sustainable Development Goals in Indonesia
02.25 – 02.50 PM	Paper 5 242 ALGERIA/INDONESIA: Fatimah Sayah; Khairunnisa Musari	Reviving the Role of Zakat for Financing and Socio–Economic Development: A Case Study of Algeria

Day 2: Tuesday, October 26, 2021

Zoom Room 3

Time	Presenter	Paper Title
12.45 – 01.10 PM	Paper 1 228 INDONESIA: Ririn Riani; Ries Wulandari	Assessing The Islamic Bank Financing During Economic Recession : The Role of Stimulus Regulation POJK Number 11/POJK.03/2020
01.10 – 01.35 PM	Paper 2 180 INDONESIA: Indah Rahmawati; Nisful Laila	How Supportive are Indonesian Macroeconomics to Encourage the Growth of Islamic Bank Financing ? : Evidence of ARDL Model
01.35 – 02.00 PM	Paper 3 185 R INDONESIA/MALAYSIA: Muhammad Nur Faaiz Fathah Achsani; Salina H Kassim	The Determinants of Unsystematic Credit Risk under Dual Banking System: Empirical Evidence from Indonesia

Time	Presenter	Paper Title
02.00 – 02.25 PM	Paper 4 204 PAKISTAN: Shar Zaman; Atiq-ur-Rehman; Farooq Ahmad	A Comparative Analysis of Return Rates of Islamic and Conventional Banks of Pakistan
02.25 – 02.50 PM	Paper 5 217 INDONESIA: Raehan Fadila	The Influence of Macroeconomic Variables on Trading of Sukuk Negara during Pandemic in Indonesia

Day 2: Tuesday, October 26, 2021

Zoom Room 4

Time	Presenter	Paper Title
12.45 – 01.10 PM	Paper 1 123 MALAYSIA: Mohamad Nasiruddin Mohamad Johari; Najwa Mohd Khalil ; Mohd Nasir Samsulbahri	Factors influencing the effectiveness of zakat distribution among the asnaf in Labuan, Malaysia
01.10 – 01.35 PM	Paper 2 70 INDONESIA: Sri Milawati Asshagab	Empowering Single Mothers for Economic Independence through BISA Program at Yatim Mandiri
01.35 – 02.00 PM	Paper 3 186 INDONESIA: Siti Ainun Nisa; Tika Arundina; Nadira Amalia	Measuring Impact of Access to Microfinance on Health Condition in Indonesia
02.00 – 02.25 PM	Paper 4 222 MALAYSIA: Samsad Jahan	Effective Utilization of Unused Waqf Land – A Pilot Proposal
02.25 – 02.50 PM	Paper 5 248 INDONESIA: Nur Arifah; Putri Maulidiah; Luliyatul Mutmainah; Lisa Listiana	Waqf and Impact Sustainable Finance in Indonesia: Lessons from ESG Reporting Concept

Day 2: Tuesday, October 26, 2021

Zoom Room 5

Time	Presenter	Paper Title
12.45 – 01.10 PM	Paper 1 164 R INDONESIA: Indra Gunawan; Muhammad Firdaus; Hermanto Siregar; Mulya E. Siregar	Crises and Covid-19 Impact on Indonesia's Sustainable, Liquid, and Sharia Equity
01.10 – 01.35 PM	Paper 2 161 TURKI: Ecky Imamul Muttaqin	Do SRI and Its Shariah Concept to Deal with the Emergence of a New Strain of VUCA (Covid-19) Still Useful in Indonesia?
01.35 – 02.00 PM	Paper 3 214 INDONESIA: Mohammad Bintang Pamuncak; Arland Pratama Wijaya	Investigating the Determinants of Shariah-Compliant Firm Profitability: Does Covid-19 Play an Essential Role?
02.00 – 02.25 PM	Paper 4 71 PAKISTAN: Omar Javaid	Economic Circularization vis-à-vis Islamic Beliefs, Values and Norms: Friends or Foe?
02.25 – 02.50 PM	Paper 5 225 INDONESIA: Diyah Hesti Kusumawardani; Rini; Amin Suma	Islamic Sustainable Finance Assessment in The Development of The Muhammadiyah Organization's Waqf Assets

The Role of Islamic Human Development Index on Sustainability Economic Development

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Abstract. Based on the Sustainable Development Goals (SDGs), the government must be able to provide welfare for its citizens without expending natural resources and/or destroying the environment. The sustainability of this nature really depends on the role of man himself as stated in the Qur'an Surah Al-Baqarah: 30. Humans as caliphs on this earth have the responsibility to carry out economic activities while maintaining natural ecosystems and must think so that the current perceived prosperity can be passed down for future generations. Therefore, the purpose of this study was to determine the role of the Islamic human development index on sustainable economic development. The analytical tool used in this research is the k-means method used to cluster development achievements, Klassen typology is used to categorize sustainable economic development achievements and simple regression analysis is used to determine the effect of IHDI on the typology of sustainable economic development. The results of the analysis show that IHDI has a positive and significant effect on the typology of sustainable economic development in the Regency/City of East Java Province. This means that Islamic human resources will care about the environment and its sustainability as instructed in Islam.

Keyword: Islamic economics, Islamic human development index, sustainable economic development.

INTRODUCTION

Sustainable economic development is development that is oriented towards meeting human needs through the wise, efficient use of natural resources, and paying attention to their sustainable use for present and future generations (Jaya, 2004; Husodo, 2015). Sustainable regional development has three dimensions or aspects of life, namely economic, social and environmental aspects (Jaya, 2004). These three aspects become weighting criteria in decision making. The economic aspect is seen from the criteria of economic aggregate, average economy, economic quality, and economic growth in each region. The social aspect is seen from the criteria for population size, regional infrastructure development, quality of life for the population, and the progress of social civilization. The environmental aspect is seen from the criteria for natural resources, ecosystems, and environmental quality in each region.

The principle of balance in aspects between dimensions, namely economic, social and environmental aspects, makes a sustainable area (Margiyono, Fauzi, Rustiadi, & Juanda, 2019). On the other hand, on a local, national and global scale, the realization of sustainable development is closely related to quantitative or qualitative measurements. Through measurement in sustainable development, there is an effort to take a role in decision-making that serves to assist policy formulation in the future (Sorman & Uras, 2007). Therefore, measurement in sustainable economic development is a very important assessment in an area.

In its development, it is seen that the greater development leads to economic and social aspects, as well as impacts on environmental aspects. This shows that sustainable development is expected to prioritize environmental aspects, optimizing the balance between dimensions so that pressure from environmental aspects becomes “correction” in the progress of other aspects, namely economic and social (Fauzi & Oxtavianus, Pengukuran pembangunan berkelanjutan di Indonesia, 2014).

Aspects or criteria in the evaluation of sustainable regional development have various links. Assessment and evaluation of performance related to sustainable development shows the trend of progress or decline in sustainable development aspects such as economic, social and environmental, can also provide information for policy makers to determine strategies and communicate the results. to stakeholders (Parris & Kates, 2003; Böhringer & Jochem, 2007; Babčický, 2013; Hák & Moldan, 2016). Research on sustainable economic development is needed to determine the success rate of development. Many quantitative studies have been carried out and cover all dimensions/aspects of sustainable development simultaneously so that it can be used as an evaluation of policy implementation and development success (Mayer, 2008).

In addition, things that support sustainable economic development certainly cannot be separated from the role of society or humans themselves. Koch et al., (2016) stated that what is closer to the concept of sustainable development is the idea of a ‘sustainable society’, namely a society that is economically viable, environmentally sound and socially responsible. If this is achieved then sustainable economic development will naturally be realized. That is, sustainable economic development is also related to human resources and natural capital. Surah Al-Baqarah: 30. Humans as caliphs on this earth have the responsibility to carry out economic activities while maintaining natural ecosystems and must think so that the flow of prosperity that is felt can be felt. for future generations.

Often the economic orientation of each individual only produces maximum profit. He will always try to increase his pleasure, without moral considerations. He will avoid altruism, because their main focus is how to please himself. He will leave the care of nature, because it is considered to hinder or reduce his material well-being. Humans like this will ignore other people and nature and will become selfish creatures who aim to please themselves without moral or religious considerations (Furqani, 2015).

Whereas the messages conveyed by the Qur’an about the environment are very clear and prospective. These messages contain orders to take care and care for the environment that must be carried out by humans (Sutoyo, 2015). In the perspective of Islam, humans are created as the best creatures among Allah’s creation. (Qur’an At-tin: 4; Al-Isra’: 70) he was appointed as caliph (Qur’an Al-Baqarah: 30) and has the responsibility to manage the earth and prosper it (Qur’an Al-Ahzab: 72). Based on its function as caliph, humans are ordered to worship Allah SWT. and do good and do not do damage, (Qur’an Al-Qasas: 77), humans are prohibited from doing damage on the earth after it was created well (Qur’an Al-A’raf: 56), and humans are prohibited from obeying the orders of those who do damage and do not make repairs (QS. Asy-Syu’ara’: 151-152). Islam is a mercy for the universe. Because the perfection of his teachings will lead humans to create a harmonious, fair, harmonious and balanced life for all humans, nature, and all creatures on this earth (Sutoyo, 2015).

Thus, in order to realize sustainable economic development, the first step taken is human development first, because the basic component for development is the human itself (Asmuni, 2014). The measurement of human development in an Islamic perspective can use the Islamic Human Development Index (I-HDI) (Anto, 2011; Septiarini & Herianingrum, 2017; Rama & Yusuf, 2019; Zangouezhad &

Moshabaki, 2011). There are still many existing studies on IHDI that are limited to measuring the value of IHDI in a region or country, none of which has examined its relationship with sustainable economic development.

East Java is one of the provinces in Indonesia with a large Muslim population. Data for 2021 shows that the population of East Java is Muslim ± 39 million people. In addition, culture in East Java is closely related to Islamic teachings, therefore the I-HDI is very relevant when used in measuring the quality of human resources in East Java. On the other hand, East Java is also the locomotive of the national economy. This is evidenced by the contribution of 14.45 percent to the formation of Indonesia's Gross Domestic Product (GDP) in the first quarter of 2021.

Based on this description, the researcher considers it important to conduct research on the effect of the Islamic human development index on the achievement of sustainable economic development in East Java.

LITERATURE REVIEW

The Relationship between Humans and Sustainable Development

The concept of sustainability also seems to influence future discourse on development science. According to Porter and van der Linde in 1995, the best choice is to meet the needs of the community, be environmentally friendly, economically viable, economically, and socially just, socially, and environmentally safe. This results in three interrelated areas or domains of sustainability that explain the relationship between environmental, economic, and social aspects (Mensah, 2019).

Basically, almost everything people do or plan on this planet affects the environment, the economy or society, in this case the well-being of mankind. Like Wanamaker (2018), development is a set of interrelated concepts that must form the basis for human decision-making and action to achieve sustainable development. Yang (2019) supports this argument by arguing that sustainable resource management will fundamentally bring sustainable growth to a sustainable society. Examples include land use decisions, surface water management, agricultural practices, building design and construction, energy management, education, equal opportunities, legislation, and law enforcement (Montaldo, 2013). If the concept of sustainability is successfully applied to real-life situations, it is because natural resources are protected, the environment is protected, the economy is prosperous, resilient, and social life is good because of peace and respect for human rights. is the argument that everyone wins (Kaivo-oja, Panula-Ontto, Vehmas, & Luukkanen, 2014).

Islamic Human Development Index and Sustainable Development

As a religion of mercy li al-'alamîn, Islam has set etiquette towards the environment. This can be found in the procession of the implementation of the pilgrimage. When the pilgrims begin to intend to do ihram or enter the land of the Haram, then the pilgrims are not allowed to uproot trees, hurt animals, even grass is forbidden to pick them. The concept of environmental conservation has also been implemented by the Prophet Muhammad through the protected area program (hima), which is a special area protected by the government with the aim of preserving ecosystem life in the forest. The Prophet also once made a nature reserve around Medina as a hima with the aim of protecting the valley, and the plants that are in it.

The concept of *ihya'ul mawât* is also introduced in Islam, which is an effort in land management that is still not useful to be efficient for human needs. In addition to plants, the Prophet Muhammad SAW. also very concerned about the preservation of animals, as is told in a hadith narrated by Abu Daud. The Prophet Muhammad warned a companion on the way for taking a chick from his nest, so the mother bird followed the steps wherever the group went. Seeing this, the Prophet Muhammad. said "Who has troubled this mother bird and took her young, return the chicks to their mother" (La Fua, 2013).

Based on this information, the rules in Islam clearly encourage humans to protect and preserve the environment. The purpose of the regulation is to prevent the occurrence of disasters caused by environmental destruction. In interacting and managing nature and the environment, humans are given three mandates by Allah SWT. First, the *al-intifa'* relationship, meaning that humans are welcome to take advantage of nature and reuse it for prosperity and benefit. Second, the *al-i'tibar* relationship, meaning that humans are ordered to be able to take lessons from various natural events. Third, the *al-islâh* relationship, meaning that humans are required to continue to maintain and preserve the environment. This means that humans who live in the midst of the natural environment with all their strength and wealth should be able to place themselves in a relationship by taking advantage, taking lessons and preserving nature.

So much of the Qur'an demonstrates this point. For example, what is around humans is *mata'an lakum wa li'an'amikum*, "which means a pleasure, a pleasure of facilities for you" (Qur'an 79: 33 and QS. 80: 32) (Obaid, 2013). According to Mahmudi Asyari, the preservation of nature is the same as safeguarding aspects related to *al-usul al-khamsah* in the material of *usul alfiqh*, namely *hifz ad-din* (maintenance of religion), *hifz an-nafs* (maintenance of the soul), *hifz al-'aql* (maintenance of reason), *hifz al-mal* (maintenance of property), and *hifz al-'ardl* (maintenance of honor). And if it is necessary to add, then *hifz al-bi'ah* (environmental care) is more appropriate to add, considering that the continuity of human life cannot be separated from nature and its environment. This proves that Islamic teachings are proportional teachings, covering various aspects of life and adapted to the times (Purwidiyanto, 2017). From this description, the environmental perspective in Islam is not only at the normative level, but has been exemplified in the course of the Prophet Muhammad's treatise.

Thus, Islam as an economic system regarding a broad and comprehensive view of economic development and human development (Hadi, 2018). Amir-ud-Din compiled a more complex measurement of development, which could cover all aspects of *maqashid al-syari'ah*, using an index that could be used for all countries that are members of the OIC, and produced the *Maqashid al-Syariah Index (MSI)* (Amir-ud-Din, 2019). Hasan, Ali, and Muhammad used the *Maqashid al-Shari'ah Index (MSI)* as the basis for the development index. Compared to the OPHI and UNDP indices, MSI presents better results in social economic development in Pakistan (Hasan, Ali, & Muhammad, 2018). The *Maqashid al-Syariah (MSI)* index is a general concept for all development concepts in Islam. *Maqashid al-Sharia* has become an important basis in every concept of development in Islam.

Several researchers have proposed a human development index that is more in line with maqashid al-shari'ah. The Islamic Human Development Index (I-HDI) is built on the basis of five components in the basic needs of maqashid al-syariah commonly known as al-kulliyat al-khamsah, namely guarding religion (Hifz al-Din), guarding the soul (Hifz al-Nafs), safeguarding reason (Hifz al-'Aql), guarding offspring (Hifz al-Nasl), and guarding property (Hifz al-Mal). If the five things above can be realized, it will achieve a noble and prosperous life in this world and the hereafter, or in Islamic economics commonly known as falah (Fauzia & Riyadi, 2014).

The Islamic Human Development Index (I-HDI) is a very new measurement of human development. The indicators used to measure the index are still in the development stage. MB Hendrie Anto was the first to propose the Islamic Human Development Index (I-HDI) which was presented at the Langkawi Islamic Finance and Economics International Conference (LIFE 1) in 2009. In his research, Anto describes the results of the I-HDI measurement in member countries. in the Organization of Islamic Cooperation (Anto, 2011).

Khursid Ahmad in 1980 and 1994 outlined four philosophical foundations of the Islamic approach to development, namely: 1) Tawhid, 2) Rububbiyyah, 3) Khilafah, and 4) Tazkiyah, as well as the important features of the concept of Islamic development, as follows (Bhat, 2016):

1. Economic development in Islam is comprehensive and contains spiritual, moral and material elements. Development is an activity oriented towards goals and values. Material, moral, economic, social spiritual and fiscal aspects cannot be separated. The happiness to be achieved is not only material happiness and prosperity in this world, but also in the hereafter.
2. The main focus of development is humans and their cultural environment. This is different from the modern concept of economic development which emphasizes that the area of operation for development is the physical environment only. Thus Islam expands the scope of the object of development from the physical environment to humans.
3. Economic development is a multidimensional activity so that all efforts must be submitted to the balance of various factors and do not cause inequality.
4. Economic development involves a number of changes, both quantitatively and qualitatively, and in balance with each other.

The main emphasis in development according to Islam, lies in; a) use the resources that Allah has given to mankind and the environment as much as possible, b) use these resources through distribution, increase them in a grateful and fair manner and condemn the attitude of kufr and injustice.

METHODOLOGY

This study uses observation time for the last five years before the Covid-19 event and the objects of research are 38 cities/districts in East Java with a research focus on analyzing the Islamic human development index and clusters of sustainable economic development in East Java. As for answering the objectives in this study, a quantitative approach will be used, namely the data obtained are processed according to the statistical methods used and regression analysis is carried out and then interpreted.

Collecting data through secondary data collection activities by collecting institutional data from relevant offices, agencies and agencies in the regions, documentation includes:

- | | |
|------------------------------------|---------------------------------------|
| a. Number of Industries | i. Crime rate |
| b. Number of SMEs | j. Life expectancy |
| c. Gross Regional Domestic Product | k. Expected number of years of school |
| d. GRDP Per Capita | l. Average length of school |
| e. Unemployment rate | m. Total birth rate |
| f. Poverty level | n. Infant mortality rate |
| g. Green open space ratio (RTH) | o. Gini index |
| h. Air quality index (KPI) | |

Analysis of Islamic Human Development Index

The Index of Religion The preservation of religion (Hifz al-Din) on the I-HDI is referred to as the religious index (faith index). Religion index can be measured using certain indicators as proxies. Although not the most appropriate action, the number of criminal acts can serve as a proxy because Islamic society must stay away from crimes that can cause a loss of peace. As we know the vision of Islam is to be a mercy to all nature. The formula for the religious index is as follows:

$$Index\ ad-Dien = 1 - \left(\frac{Number\ of\ Crimes - 0}{65.000 - 0} \right) \times 100\%$$

The Life Care Index (Hifz al-Nafs) is measured using Life Expectancy (LE). Life expectancy at birth is defined as the estimated average number of years a person can travel from birth. LE reflects the health status of a community. LE is calculated from the results of the census and population survey. The high life expectancy proves the better protection of the soul. The soul index formula is as follows:

$$Index\ an-Nafs = \left(\frac{Life\ Expectancy - 25}{85 - 25} \right) \times 100\%$$

The Intellectual Care Index (Hifz al-'Aql) is measured using the expected length of schooling and the average length of schooling. Average Years of Schooling (AYS) is defined as the number of years spent by the population in formal education. It is assumed that under normal conditions the average length of schooling in a region will not decrease. The population that is calculated in the calculation of the average length of schooling is the population aged 25 years and over. The Expected Years of Schooling (EYS) is defined as the length of schooling (in years) that is expected to be experienced by children at a certain age in the future. It is assumed that the probability that the child will remain in school at the following ages is the same as the probability of the population attending school per population for the same age at this time. The Expected Years of Schooling is calculated for residents aged 7 years and over. EYS can be used to determine the condition of the development of the education system at various levels which is indicated in the form of the length of education (in years) that is expected to be achieved by each child. The sense index formula is as follows:

$$Index\ al-'Aql = \left(\frac{\frac{EYS - 0}{25 - 0} + \frac{AYS - 0}{15 - 0}}{2} \right) \times 100\%$$

The an-Nasl Index is measured using data on the total birth rate (Fertility Index/FI) and infant mortality rate (Mortality Index/MI) from each district/city:

$$FI = \left(\frac{\text{Actual FI} - \text{Min.FI}}{\text{Max.FI} - \text{Min.FI}} \right)$$

$$MI = \left(\frac{\text{Actual MI} - \text{Min.MI}}{\text{Max.MI} - \text{Min.MI}} \right)$$

$$\text{Index an-Nasl} = \frac{1}{2} (FI + MI)$$

The Maal Index is measured using the Gini Ratio (Gc) coefficient, the poverty depth rate (Poverty Index), adjusted per capita expenditure. Before looking for the Al-Maal Index, the Gini ratio and the depth of poverty need to be normalized with the formula:

- **Normalization of Gini**

$$nGc = 1 - Gc$$

- **Normalization of poverty depth**

$$nP_i = 100 - P_i$$

- **Gini index**

$$Gci \text{ (Gini Index)} = \frac{\text{Actual } nGc - \text{Min. } nGc}{\text{Max. } nGc - \text{Min. } nGc}$$

- **Poverty depth index**

$$Pi \text{ (Poverty Index)} = \frac{\text{Actual } nP_i - \text{Min. } nP_i}{\text{Max. } nP_i - \text{Min. } nP_i}$$

After these two indexes are obtained, it will be called the Distribution Equity Index (DEI).

$$DEI = \frac{1}{2} (Gci + Pi)$$

Then the per capita expenditure data is adjusted into an index with the formula:

$$PPi = \frac{\text{Actual PP} - \text{Min.PP}}{\text{Max.PP} - \text{Min.PP}}$$

By calculating the Distribution Equity Index (DEI) and the index of expenditure per capita (PPi) it will be possible to calculate the Al-Maal Index with the following formula:

$$\text{Index al-Maal} = \frac{1}{2} (DEI + PPi)$$

Cluster Analysis using the K-Means

Clustering data is one method *Data Mining* which is unsupervised. There are two types of clustering data that are often used in the data grouping process, namely hierarchical (hierarchical) clustering data and non-hierarchical (non-hierarchical) clustering data. K-Means is a non-hierarchical data clustering method that attempts to partition existing data into one or more clusters/groups.

The K-Means method partitions data into clusters / groups so that data that has the same characteristics is grouped into the same cluster and data that has different characteristics is grouped into other groups. The purpose of this clustering data is to minimize the objective function set in the clustering process, which generally seeks to minimize variations within a cluster and maximize variation between clusters. Because in this study the clusters will be used to rank a certain category, the inter-cluster warning will be carried out by looking at the average of each centroid. The reasons for using the K-Means algorithm are among others because this algorithm has a high enough accuracy to the object size.

Clustering data using the K-Means method in this study is generally carried out with the following basic algorithm.

1. Determine the number of clusters
2. Allocate data into clusters randomly
3. Calculate the centroid / average of the data in each cluster
4. Allocate each data to the nearest centroid / average
5. Return to Step 3, if there is still data moving clusters or if the change in the centroid value is above the specified threshold value or if the value change in the objective function used is above the specified threshold value
6. Find the average value of the highest centroid and then the cluster under it is determined based on the closest to farthest distance for each cluster.

To facilitate calculations, the K-Means method clustering will use the XLSTAT software. This analysis is used to determine the industrialization and economic clusters in the Regency/City of East Java Province. This is necessary because industrialization and economic aspects are aspects that contribute to regional development as well as environmental sustainability.

Analysis Klassen Typology

This modified Klassen Typology Analysis Tool was used to determine the description of the sustainable development patterns of each region. This typology of Klassen is carried out by dividing the regions based on two sustainable development indicators, namely the results of the development cluster and the results of the sustainable cluster.

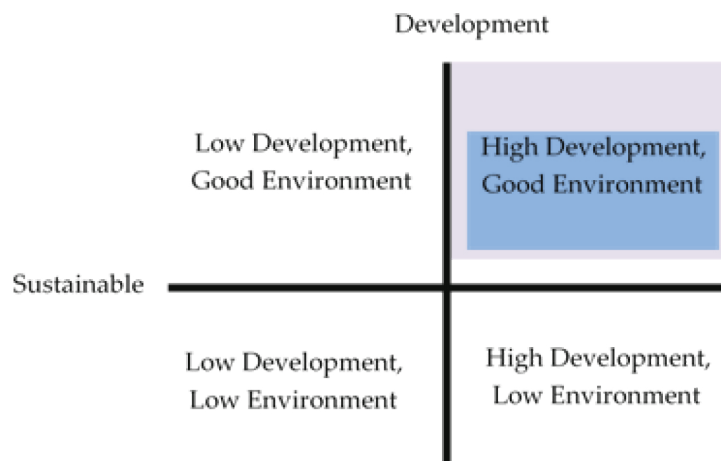


Figure 1. Typology of sustainable development

Simple Regression Analysis

This study also uses simple linear regression analysis which can be formulated into the following equation:

$$Y = \beta_0 + \beta_1 X_1 + e_i$$

Where: Y = Typology of sustainable economic development; X_1 = Islamic human development index

RESULTS AND ANALYSIS

Industrialization Cluster

The industrialization scale clustering in East Java in this study uses two variables, namely the number of industrial companies and the number of MSMEs. Taking into account the labor absorption and production output of the two variables, industrial companies are given a weight of 1 for the labor and production output variables, while MSMEs are given a weight of 0.1 for labor absorption and 0.01 for production output. So that for each real number of MSMEs, the absorption weight of labor and the weight of production output will be multiplied.

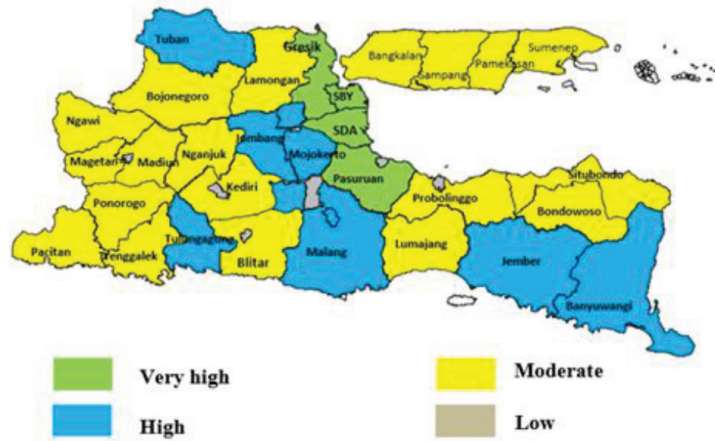
$$MSME \text{ industrialization index} = 0,001 n$$

n = the real number of MSMEs in each region

The results of the classification for the industrialization aspect show that Pasuruan Regency, Sidoarjo Regency, Gresik Regency and Surabaya City occupy the highest cluster. This means that the four regions are regions with the highest industrialization levels in East Java.

Judging from its structure, the four regions included in the very high industrialization cluster are regions with an average number of industrial companies of 873.25 and an average number of MSMEs of 212,305. Sidoarjo is the region with the largest number of industrial companies with 978 industrial companies, while the highest number of MSMEs in the very high cluster is occupied by the City of Surabaya with the number of MSMEs reaching 212,305.

Eight regions starting from Tulungagung Regency, Malang Regency, Jember Regency, Banyuwangi Regency, Mojokerto Regency, Jombang Regency, Tuban Regency, and Malang City occupy the high category industrialization cluster. When compared with the very high category industrialization cluster, it will be seen that there are quite obvious differences in characteristics. The industrialization cluster area is very high, the average number of companies is around 837 companies, while in the high industrialization cluster the average number of companies per region is only 227.



Source: BPS East Java, 2019 (Processed Data)

Figure 2. Mapping of regency/city industrialization clusters in East Java

The main variable driving the industrialization of areas that are included in the high industrialization cluster is MSMEs with an average MSME in this cluster being around 245,323 and higher than the average number of MSMEs in the industrialization cluster which is very high. Malang Regency is the region with the largest number of MSMEs not only in the high category of industrialization cluster but also regionally in East Java with the number of MSMEs reaching 414,516.

Furthermore, the category industrialization cluster is currently occupied by 19 regions ranging from Pacitan Regency, Ponorogo Regency, Trenggalek Regency, Blitar Regency, Kediri Regency, Probolinggo Regency to all areas on Madura Island. The medium category industrialization cluster structure shows that the majority of industries are dominated by MSMEs, even though on average the number of MSMEs in this cluster is not different when compared to the high category industrialization cluster.

The medium industrialization cluster only has an average number of companies for each region of 63, far enough when compared to the high industrialization cluster which has an average number of companies of 226 and very far when compared to the average industrialization cluster category which is very high with average -The average number of industrial companies is 837.

The low category industrialization cluster is occupied by seven cities, starting from Kediri City, Blitar City, Probolinggo City, Pasuruan City, Mojokerto City, Madiun City and Batu City. Judging from the area and population of the seven cities in this cluster, it can be said that it is natural that the seven cities are included in the low category industrialization cluster. The average number of MSMEs in the low category industrialization cluster is only 23,524 and the average number of industrial companies is only 45.

Based on the results of clustering using the k-means method, it can be seen that there are only four regions that are included in the very high category industrialization cluster and from a geographical point of view the areas included in the cluster are areas that directly border starting from Gresik Regency, Surabaya City, Sidoarjo Regency and Pasuruan Regency. This shows that industrialization in East Java is still centralized around the city of Surabaya.

The industrialized cluster areas with a high category also show a tendency that the majority of cluster members are in the central part of East Java, which is geographically relatively close to the very high category industrialization cluster. Only Banyuwangi, Jember and Tulungagung Regencies are relatively far from areas in the highly industrialized cluster.

Geographically, the regions that occupy the industrialized cluster category are mostly in the western part of East Java, part of the horseshoe area and Madura Island. For example, the western part of East Java, such as Pacitan, has only 17 large-scale industrial companies and 181,115 MSMEs, Ngawi Regency which has 27 large-scale industries and 185,312 MSMEs.

Meanwhile, the areas on Madura Island actually have a fairly high number of UMKM industries but they have not been matched by the number of large-scale industries. Sumenep has 269,000 MSMEs but only 78 industrial companies, Sampang has 195,215 MSMEs but only 25 industrial companies. Furthermore, for the low category industrialization cluster, the majority are urban areas with a large area and not too large population so that the economic sector is not oriented towards the manufacturing sector.

The city of Probolinggo, which is the center of the low category industrialization cluster, with Pasuruan Regency which is the center of the very high category industrialization cluster, is around 795. Based on this, it can be seen that the regions in the very high category cluster and the areas in the low category cluster have very different differences. Meanwhile Pamekasan, which is the cluster center for the medium category cluster, with Pasuruan Regency around 737 and Tulungagung as the cluster center for the high category industrialization cluster is about 626 with Pasuruan Regency. The average distance of each cluster center to the center of the highest cluster is 720. This data shows that between the very high clusters and the three other clusters that are quite far apart.

Looking at the results of the existing cluster centers, it can be concluded that the areas that are in the low and medium category industrialization cluster have the potential to upgrade to the cluster above. However, this does not apply to regions that exist in high clusters where the cluster center distance from the very high regional cluster center is quite far away.

Based on Figure 3, it can be seen that the majority of areas in East Java are supported by MSMEs. Only a few areas, especially those that fall into the very high cluster, such as Surabaya City, Pasuruan Regency, Sidoarjo Regency and Gresik Regency, whose industrial sector is supported by medium and large scale industrial companies.

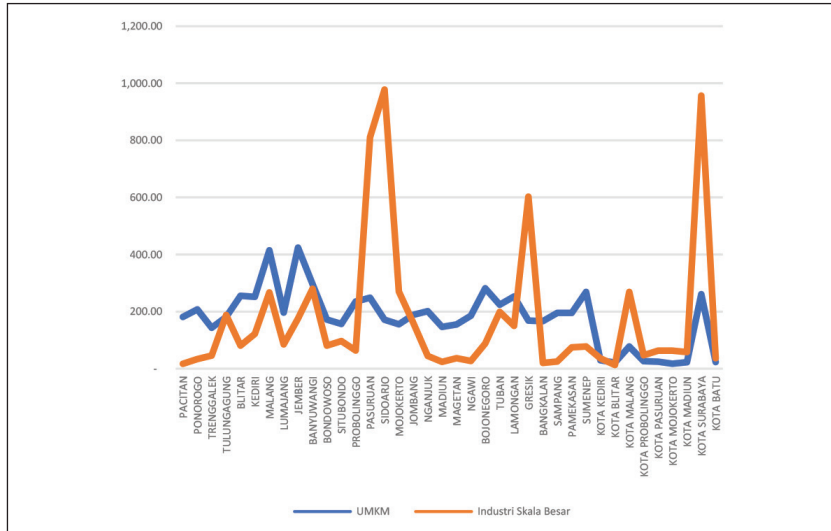
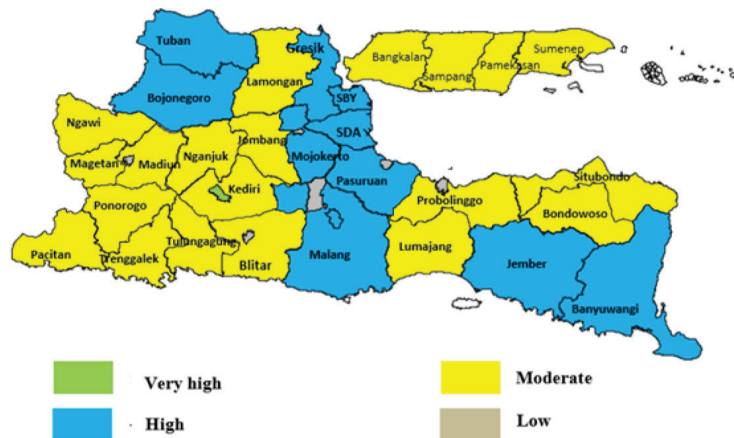


Figure 3. Industrialization index of MSMEs and Industrial Companies

Economic Aspects Cluster

Economic sector clustering uses three indicators, namely GRDP, GRDP Per capita and the rate of GRDP. Each indicator is calculated cumulatively over the last five years and then the mean is calculated. The use of data for the last five years aims to find data congestion (steady). The GRDP indicator and the GRDP rate were chosen because they reflect the economic scale of a region and are able to explain how the economic scale growth in the area is, while the GRDP per capita illustrates how much economic output each individual has in the region.



Source: BPS East Java, 2019 (Processed Data)

Figure 4. District/City Economic Aspect Cluster Mapping in East Java

The majority of areas included in the medium cluster are areas in the industrialized cluster which are categorized as high and medium. Meanwhile, areas included in the low economic cluster are urban areas, where the majority have areas that are not too large and their economies are not supported by manufacturing.

The most striking characteristics for areas that are included in the medium and low clusters are the \ln GRDP and \ln GRDP per capita values. Areas that are included in the medium economic cluster are areas that geographically have a large area and a population that is relatively more than the areas in the low cluster areas. Therefore, all areas that are included in the cluster are having a higher GRDP value when compared to the GRDP of the areas in the low cluster.

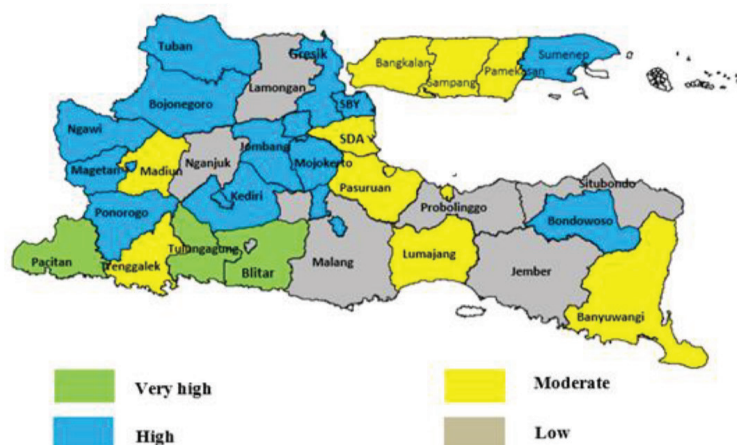
On the other hand, the GRDP per capita area in the low cluster is always higher than the GRDP per capita area in the medium economic cluster. However, the regions in the two clusters have sufficient uniformity in the average economic growth over the last five years.

Bojonegoro City is the cluster center for the high cluster and is about 1.98 with Kediri City as the center of the medium cluster. The distance that is not too far between the high cluster center and the very high cluster center indicates that statistically the difference between these two classes is not too far. In fact, Kediri City occupies a very high cluster only because of the GRDP per capita and it is quite low in the indicators of GRDP and GRDP growth rate. This in real terms, as we have discussed, also has no impact on the average income of residents in Kediri City.

The distance of Nganjuk Regency as the center of the medium category cluster with Kediri City is in the range of 3.31 and the distance of Probolinggo City as the center of the low category cluster with Kediri City is in the range of 3.25. Based on this, the areas that are included in the low and medium cluster must have more effort to enter the high or even high cluster. In contrast to areas with low clusters where the cluster center is only 1.08 with a medium cluster center, the areas in the low cluster are believed to be Probolinggo City, Mojokerto City, Pasuruan City and Blitar City.

Environmental Aspect Cluster

Area clustering based on environmental quality in this study only used two indicators, namely, the ratio of green open space (RTH) and air quality index (IKU). RTH and IKU used in this study are RTH and IKU of East Java Regency / City in 2017 based on the report of the East Java Province Environmental Agency (DLH).



Source: East Java DLH, 2019 (Processed Data)

Figure 5. District / City Environmental Aspect Cluster Mapping in East Java

Based on these two indicators, 3 districts in East Java occupy the very good cluster and 17 regions occupy the good cluster. The medium and low clusters are respectively occupied by 12 regions and four regions.

The very good cluster for the environmental category is occupied by Pacitan Regency, Tulungagung Regency and Blitar Regency. When the area has very good air quality, the average air quality in the three districts is 94.43, even Blitar Regency records air quality at 97.78. However, it should be noted that green open space for Tulungagung Regency is only 8% and Blitar Regency is at 11%, while RTH in Pacitan Regency has almost touched 30% to be exact 29.7%. This data shows that Pacitan District pays serious attention to environmental issues ranging from meeting the RYH ratio of 30% to maintaining air quality which reaches 93.05.

The good category environmental cluster occupied by 17 districts / cities has an average RTH ratio of 24% and an average IKU of 88.18. In several areas, such as Bondowoso Regency, Magetan Regency and Tuban Regency, the ratio of RTH to RTH reached 93%, 30% and 39%, respectively, however the IKU of the three regions respectively Bondowosi Regency 88.77; Tuban Regency 87; and Magetan Regency 88.41. Meanwhile, the Surabaya City IKU reached 90.31, but the ratio of RTH in Surabaya City was only 18%.

Several other areas, such as Ponorogo Regency and Batu City, although included in the good category, the ratio of RTH and IKU in the three regions is quite low. The ratio of green open space in Ponorogo Regency is only 9% and the air quality index in the area is 86.05. RTH Batu city is at 1% and the air quality index is in the range of 87.08. In particular, Batu City as a tourist destination city should further increase the quantity of green open space and air quality in the region. However, the IKU in Batu City is not very good, it seems that it is not due to industrial factors but more due to transportation emissions.

District/City areas that are included in the environmental cluster category are generally worrying for the ratio of RTH not much different from the RTH ratio for environmental clusters in the good category, but what is striking is the low air quality in this area. The average KPI in this cluster is 83.4 with Sidoarjo Regency being the region with the lowest air quality. Sidoarjo Regency recorded IKU at 82.05 and for RTH ratio of 17%. Next, the air quality of the two diclusters is Pasuruan Regency with IKU at 82.25, although it is not much different from Sidoarjo Regency, Pasuruan Regency has a RTH ratio of 30%.

Sidoarjo Regency and Pasuruan Regency are two areas in which industrial clustering is an area with a very high industrialization cluster and also a fairly dense population. Therefore, Sidoarjo and Pasuruan regencies should really pay more attention to environmental issues.

Areas that are included in the low cluster have a low average ratio of RTH and IKU. The average green space ratio in this cluster is only 16% and the average KPI is 76.74. Nganjuk Regency is an area with the lowest KPI, only 75.78, but the ratio of RTH to Nganjuk Regency is 0.38%. Next is Malang Regency, which in the other three clusters shows a fairly good performance in fact for the environmental cluster it is at the bottom of the ranks. Malang Regency which is a high cluster industrialization area in fact cannot protect its environment properly, even the air quality in Malang Regency is the second worst in East Java, only above Nganjuk Regency.

Magetan Regency which is the center of the good category cluster has a distance of 4.72 with Pacitan Regency as the center of the very good category cluster. Bangkalan Regency which is the cluster center for the worrying category has a distance of 9.38 from Pacitan Regency and Jember Regency as the regional cluster center with the low category is 16.02 with Pacitan Regency. The cluster center presented shows that areas that are in the good category have great potential to be categorized as very good, as well as areas with an alarming category such as Paasuruan Regency and Sidoarjo Regency whose cluster center distance from the good category area is around 5.4. considerable potential to improve its position.

Unlike the good and worrying areas that generally have high potential and are sufficient to move up to the above category, the areas in the environmental cluster with the low category seem to need extra effort to at least be able to make up for the good category clusters. the distance of the low category cluster center to the medium category cluster center is 11.30 this figure indicates a fairly far distance. Therefore, areas with low environmental cluster categories such as Malang Regency and Jember Regency have carried out reforms in the environmental sector both to improve the quality of IKU and RTH ratio.

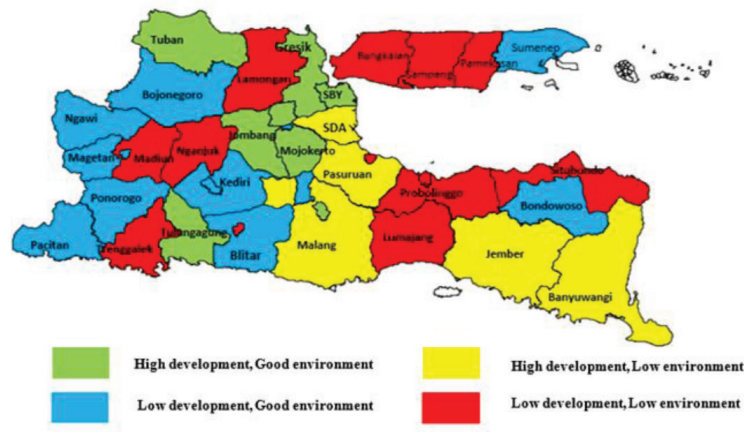
Sustainable Economic Development Cluster

All regions with very high industrialized clusters are not included in the environmental cluster category either. Even Sidoarjo Regency and Pasuruan Regency have a worrying category in the environmental cluster, while Surabaya City and Gresik Regency still get good categories in the environmental quality cluster.

The low air quality in Sidoarjo and Gresik Regencies is one of the main reasons these two areas fall into the worrying category for environmental aspects. Therefore there must be strategic steps to overcome these problems, it is necessary to pay attention to environmentally friendly industrialization because industrialization is an important factor that affects environmental degradation (Gandhi, Selladurai, & Santhi, 2006).

Meanwhile, some areas that are included in the high category industrial clustering are in fact unable to maintain their environment properly. Theoretically, with lower industrial activity, the environmental quality in the area could be higher, but in fact this is not the case. Malang Regency and Jember Regency which are included in the high cluster for the industrialization aspect get the low category in the environmental quality cluster. Only Tulungagung Regency recorded very good environmental quality.

Another fact in this clustering is that the three regions with the best environmental quality in East Java, namely, District, Pacitan, Tulungagung and Blitar Regency are areas with medium and high industrialization scales. However, areas with a low industrial scale such as Pasuruan city, Probolinggo City and Blitar City actually have an alarming environmental quality.



Source: data processing by K-mean method with XLStat

Figure 7. Mapping of Sustainable Economics Development Clusters in East Java

The clustering of sustainable development that occurred in East Java shows the interaction of all the variables studied, so it needs to be considered as a precautionary principle to determine the direction of better decisions (Sorman & Uras, 2007). The magnitude of economic performance has not followed sustainable development, meaning that there is a trade off between economic performance and environmental quality in the area, this is in line with the pessimistic responses of experts, both economists and environmentalists. These experts consider that sustainable development is rhetoric that cannot be carried out without trade offs between aspects (Fauzi, 2009; Moore, 2011; Drews & van den Bergh, 2017).

As an effort towards sustainable development, a quality development strategy is needed, which is to keep increasing economic growth and income, but by emphasizing greater attention to equity and environmental sustainability. Mikucka, Sarracino, & Dubrow (2017) states that high economic growth will improve social quality if it is followed by a decrease in income inequality. Likewise the environment which is an important variable in sustainable development (Fauzi & Oxtavianus, 2014).

Analysis of Islamic Human Development Index

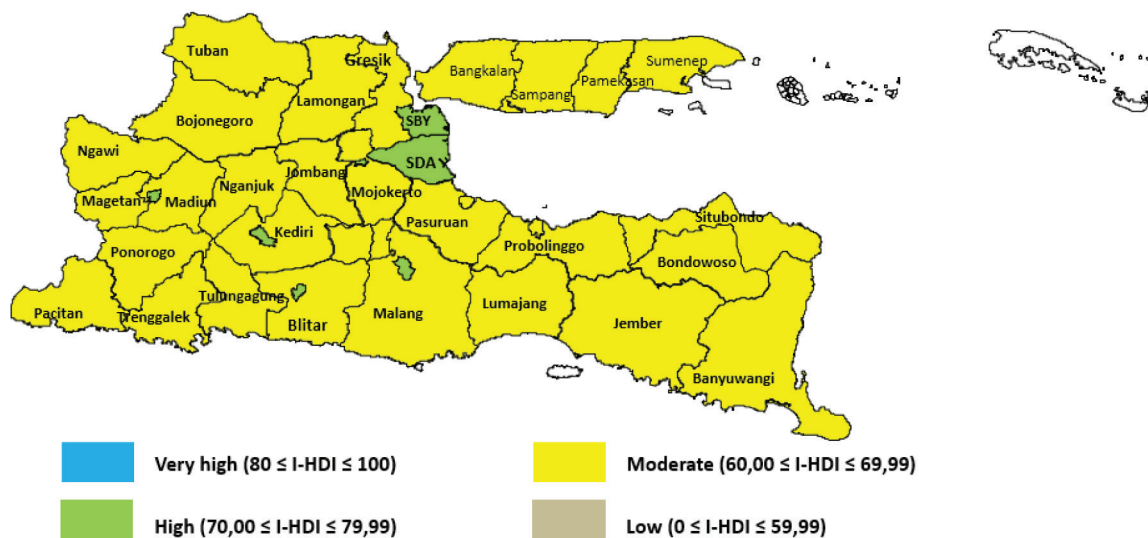
Based on the calculation with the Ad-Diin Index formula, the results are obtained as above. The results of the calculation of the Ad-Diin Index show that all regencies/cities in East Java are in the very high category. This means that the crime rate in all districts/cities in East Java is very low. As for the calculation using the An-Nafs Index formula, the districts/cities that fall into the very high category are Tulungagung District, Sidoarjo, Kediri City, Blitar City, and Surabaya City. The regencies/cities that fall into the Medium category are Bondowoso, Probolinggo, and Pamekasan Regencies. Meanwhile, 30 other Regencies/Cities are in the High category.

As for the Al-Aql Index, regencies/cities in the Very High category are Sidoarjo, Gresik, Kediri, Blitar, Malang, Probolinggo, Pasuruan City, Mojokerto, Madiun, Surabaya and Batu. Regencies/cities included in the high category are Ponorogo, Trenggalek, Tulungagung, Blitar, Kediri, Banyuwangi, Mojokerto, Jombang, Nganjuk, Madiun, Magetan, and Lamongan regencies. Regencies/cities that fall into the medium category are Pacitan, Malang, Lumajang, Jember, Bondowoso, Situbondo,

Probolinggo, Pasuruan, Ngawi, Bojonegoro, Tuban and Pamekasan. Meanwhile, Bangkalan, Sampang and Sumenep are in the low category. In contrast to other indices, for the Nasl index, all districts/cities in East Java are in the low category, this means that in East Java the infant mortality rate is still very high.

Next is the Al-maal index, there are no districts / cities that are in the very high category and there are only 3 districts / cities that are in the high category, namely Malang City, Madiun City and Surabaya City. The regencies in the medium category are Tulungagung, Blitar, Kediri, Banyuwangi, Bondowoso, Probolinggo, Pasuruan, Sidoarjo, Mojokerto, Jombang, Nganjuk, Madiun, Magetan, Ngawi, Tuban, Lamongan, Gresik, Kediri City, Blitar City, Probolinggo City, Pasuruan City, Mojokerto City, and Batu City. While the rest are in the low category.

Based on these indices, the value of the Islamic human development index can be calculated. The results of the Islamic human development index of districts/cities in East Java only have high and medium categories. IHDI Regencies/Cities that fall into the high category are Sidoarjo Regency, Kediri City, Blitar City, Malang City, Mojokerto City, Madiun City and Surabaya City. Meanwhile, other regencies/cities are in the medium category. This shows that the quality of Islamic human development in East Java is still not evenly distributed, the majority are still at a moderate level. The majority of districts/cities that fall into the high category are areas that fall into the "urban" category, as it is known that urban areas have better quality economic and educational access than non-urban areas (Vito & Krisnani, 2015). This is what makes these areas included in the high category.



The Role of the Islamic Human Development Index on Sustainable Economic Development

In measuring the magnitude of the influence of the Islamic human development index (X_1) on the typology of sustainable economic development (Y) is done by means of simple linear regression, while the model analysis results can be interpreted as follows:

$$Y = -1.883 + 0.041 X_1$$

The value of β_1 of 0.041 means that there is a positive influence between IHDI on the typology of sustainable economic development of 0.041. If the IHDI (X1) increases by 1%, sustainable economic development (Y) will increase by 0.041, and vice versa. From the regression results, it can be seen that the P-Value of the IHDI variable is 0.0373, so it can be concluded that the IHDI has a positive and significant effect on α 5% of sustainable economic development.

The significance of IHDI's influence on sustainable economic development shows that Islamic human resources will have a concern for nature and environmental sustainability, it can be seen that areas with high IHDI values are in areas that are included in the typology of high sustainable economic development. The preservation of natural resources and the environment will have a positive impact on life, mainly related to various human economic activities in fulfilling their daily needs. So that Islamic human resources will carry out economic activities ranging from production activities to consumption activities while still paying attention to the environment (Rahmatullah, 2021).

If human behavior in economic life does not hold Islamic values, it will tend to be exploitative, causing various environmental problems such as global warming, floods, droughts, environmental pollution, and various other forms of environmental damage. This of course will cause the welfare of the community, socio-cultural life and the preservation of nature and the environment to decline.

Therefore, as Muslims, they should make efforts to develop environmental awareness and always prevent environmental damage, even in repairing the damage that has occurred. Awareness itself is one of the factors that can determine the form of one's actions and support environmental conservation efforts. The willingness to behave and the willingness to preserve the environment must be prepared from an early age so that the flow of one's consciousness can be developed properly.

CONCLUSION

All areas with very high industrial clusters are not included in the very high environmental cluster category. Even Sidoarjo Regency and Pasuruan Regency have a worrying category in the environmental cluster, while the City of Surabaya and Gresik Regency still get a good category in the environmental quality cluster. Surabaya City, Malang City, Mojokerto City, Kediri City, and Madiun City which have a high quality category of Islamic human development are also in the high environmental quality cluster. This shows that Islamic human resources will be able to maintain and interact with the environment, as significant regression results indicate the role of IHDI in the typology of sustainable economic development. Therefore, improving the quality of Islamic human resources is very important to support the sustainable economic development movement as mandated in Islam.

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E-Banking Adoption, Labour Cost and Deposit in Islamic Banking: Evidence from Indonesia

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Abstract. Financial technology has brought about enormous changes in the financial sector including the Islamic banking industry in Indonesia. This, together with the demographic changes and current Covid-19 pandemic has resulted in banking customers demanding more convenient and less physical contact in banking services. Consequently, electronic banking (e-banking), which consists of internet banking and mobile banking have become increasingly important to be adopted by the banks to satisfy their customers. Existing studies on this topic have mostly focused on issues relating to customer adoption of e-banking, while studies on e-banking taking the perspective of the banks, especially Islamic banks are still scarce. This study aims to fill in the gap in the literature by analysing the causal relationship between e-banking adoption, Islamic banking deposits and Islamic banking labour cost by applying time-series analysis on sample monthly aggregate level data in the banking industry and Islamic banking industry in Indonesia covering the period from 2014 to 2020. E-banking adoption is proxied by e-banking transactions. The findings of the Granger causality test show that the Islamic banking deposits have a significant effect on e-banking adoption, but not vice versa. Similarly, the Variance Decomposition and VAR model also confirm that Islamic banking deposit influences e-banking transactions, though with a lag. The study finds no evidence of a significant relationship between Islamic banking labour cost with e-banking transactions, suggesting that cost reduction on e-banking adoption due to labour cost reduction is not happening in the Islamic banking industry. Therefore, instead of labour intensive, Islamic banks are encouraged to optimize the information technology and intensively utilized the technology in delivering the services as well as performing activities. More attention should be given to Islamic banking deposits by adopting e-banking services that collect funds for the Islamic banks rather than transfer out the funds from the Islamic banks.

Keyword: Electronic banking, Granger causality, Islamic banking, labour cost.

JEL Classification: C22, G21.

INTRODUCTION

Technology advancement has brought about considerable changes in the financial sector. The application of Automated Teller Machines (ATMs), Point of Sales (POS), phone banking, internet banking and mobile banking are the results of financial technology (fintech) that has made enormous changes in the financial sector (Hoehle et al., 2012; Mullan et al., 2017; Thakor, 2020). These technologies utilize the electronic channel to deliver the services to the customers, providing an alternative channel, i.e., the

electronic banking channel (e-banking) (Schaechter, 2002). With the booming of internet technology, e-banking channel is preferable to the customers compared to the physical banking model since it utilizes electronic channels such as the internet and mobile banking as a medium delivery channel (Shah and Clarke, 2009).

The benefit of internet-based banking to the bank as well as to the customer has been the motive of banks to adopt internet banking and mobile banking in their products and services (Takieddine and Sun, 2015). E-banking seems to reduce the dependency on physical workers and bank tellers, thus reducing labour costs, with the added advantage of convenience and unlimited banking hours anywhere in the world (Tiwari et al., 2006; Hoehle et al., 2012; Takieddine and Sun, 2015). On the bank customer side, the latest situation of the Covid-19 pandemic has changed customer behaviour demanding cashless transactions and minimized physical contact (IFSB, 2020).

The diffusion rate of e-banking varies from one country to another particularly between developing and developed countries (Mullan et al., 2017; Barnes and Corbitt, 2003). The diffusion of mobile banking in developing countries is higher relative to developed countries (Mullan, 2017). Developing countries find the value of mobile banking technology can reach many individuals at low cost compared to previously internet banking that ineffectively accessible whilst developed countries that have been matured with internet banking as remote services find mobile banking should have more advantages to compete with internet banking (Barnes and Corbitt, 2003).

Currently, Indonesia, as a developing country, has undergone considerable growing usage of the internet. Internet users in Indonesia are estimated to account for 201.4 million users in 2021 and this number is predicted to grow for years to come estimated at 233 million users by 2025 (Degenhard, 2021). Indonesian demographics is dominated by the younger generation (Bank Indonesia, 2019) that tend to use new technology intensively and demand more convenient services (Schindler, 2017). E-banking, including internet banking and mobile banking, has been assumed to provide convenient services to customers anytime and anywhere to access the banking services (Takieddine and Sun, 2015; Laukkanen, 2007).

Internet banking, as well as mobile banking, also represents the digital banking channel (Shaikh and Karjaluo, 2016). Supporting the diffusion of this digital banking channel, the Indonesian government also has encouraged and supported banks to transform their financial services to digital financial services (Bank Indonesia, 2019) including inherently Islamic banking. However, Bank Indonesia's assessment has shown that Indonesian banking has been adopted digital technology at a slow pace (Bank Indonesia, 2019). With regard to Islamic banking, information technology has been a challenge to overcome by Islamic banks (Ministry of National Development Planning, 2016) and the authority has encouraged Islamic banks to optimize the information technology to support the development of products and services that have value added to the customers and competitive advantage in the market (OJK, 2020).

Studies on this area normally focus on the bank's perspective and customer perspective (Nejad, 2016). Studies on banks' perspectives are still scarce (Nejad, 2016) and normally regarding the benefits as well as the bank characteristics (Hernando and Nieto, 2007). Motivation banks to adopt e-banking mainly is encouraged for reducing costs (Tiwari et al., 2006; Shah and Clarke, 2009) particularly overhead costs related to branch office such as the premises and the labour (DeYoung et al., 2007; Shah and Clarke, 2009) as efficiency is one of the motives for financial innovation to take place in

the market (Van Horne, 1985; Merton, 1992). Previous studies have shown that the evidence on the relationship between e-banking adoption with labour cost is inconclusive (Shah and Clarke, 2009) where several researchers identified a significant relationship between e-banking adoption with labour cost (DeYoung et al., 2007; Hernando and Nieto, 2007) whilst other researchers found no significant evidence (Malhotra and Singh, 2007; Sullivan and Wang, 2020).

In addition, the adoption of e-banking such as electronic payments by banks is assumed to influence other banking services for example deposits (Hasan et al., 2009) where it can change customers behaviour managing their deposit accounts affecting transaction deposits or small time deposits (DeYoung et al., 2007). Moreover, studies on e-banking adoption may take perspectives: e-banking as an independent variable influencing bank performance (DeYoung et al., 2007; Hernando and Nieto, 2007; Hasan et al., 2009) or e-banking as a dependent variable influenced by bank characteristics (Furst et al., 2002; Malhotra and Singh, 2007; Hernandez-Murillo et al., 2010) in which both perspectives were examined separately. All these studies utilized conventional banks as a sample to investigate.

Therefore, it is important to investigate the adoption of e-banking to have a better understanding relationship of e-banking with other relevant factors in banking, particularly Islamic banking in Indonesia since it has been identified, for Islamic banking in Indonesia, lack of research and development has been addressed as a challenge to overcome (Ministry of National Development Planning, 2016). Academically, there is a need to study various parts of the world to provide a comprehensive picture since there are countries differences in the market as well as practices (Nejad, 2016). The purpose of this study is to examine the e-banking adoption in Indonesia, particularly in Islamic banking by assessing the relationship between e-banking adoption and the Islamic banking characteristics represented by deposits and labour using monthly aggregate level data covering 2014 to 2020.

The remaining part of the study is structured as follows: Section II discusses underlying theory for this study as well as a review of relevant literature, section III describes the data used in the study and model as well as the method to analyze, section IV presents the result and robustness test concerning with the model used, and lastly, conclusion and recommendations are drawn based on the result and analysis.

LITERATURE REVIEW

Theoretical Foundation

Financial innovation is considered as “one of the bedrocks of our financial system, the lifeblood of efficient” and to be seen as financial innovation, an idea should make the market more efficient (in an operational sense) and or more complete by taking form as a process innovation or product innovation (Van Horne, 1985). Efficiency is achieved by reducing the cost of financial intermediation to customers, reducing the cost of inconvenience, or transaction costs (Van Horne, 1985; Merton, 1992). Financial innovation may lead to market completeness by completing the market with new products and services (Van Horne, 1985; Merton, 1992) to meet the unfilled desire of the investor clientele (Van Horne, 1985).

Van Horne (1985) posited that there must exist a changing environment for innovation to take place such as volatility of inflation and interest rate, regulatory changes, tax changes, technological advances, the level of economic activity, and academic work on efficiency and inefficiencies. Merton

(1992) identified factors that influence financial innovations are institutional, regulatory environment, size, complexity, technology, political, and cultural backgrounds. Schindler (2017) classified factors that enabled financial technology to take place into supply factors such as technology, regulation, innovation spiral, and change to the financial or macroeconomic landscape whilst demand factors such as regulation and demographics.

Financial technology to take place normally involves two or more factors of those supply and demand (Schindler, 2017). Of the environmental changes or factors that enabled financial technology to take place, technological advances stimulated more on process innovation rather than product innovation (Van Horne, 1985). Electronic funds transfer, automated teller machines (ATMs), point of sale terminals, phone banking, and online banking that currently called e-banking are several examples of implementation technological advances in financial innovation (Van Horne, 1985) as well as financial technology (Thakor, 2020) since in a broad sense, e-banking can be viewed as financial technology which is simply defined referring to providing new and improved financial services using the technology (Thakor, 2020).

Diffusion of Innovation theory stipulated attributes of innovation such as relative advantage, complexity, compatibility, observability and trialability determine the adoption rate of innovation (Kolodinsky et al., 2004; Puschel et al., 2010; Mullan et al., 2017; Dearing and Cox, 2018). E-banking that consists of internet banking and mobile banking in this sense is regarded as a service innovation enabling banks to use multi-channel in delivering banking services adopted along with physical branch channels (Hernando and Nieto, 2007; Mullan et al., 2017).

E-banking is assumed to have some advantages due to cost reduction and increase customer satisfaction that encouraged the bank to adopt e-banking (Tiwari et al., 2006; Shah and Clarke, 2009; Hoehle et al., 2012). Relative advantage refers to superiority compared to other option (Hernandez and Mazzon, 2007) and depend on the existing banking services (Barnes and Corbitt, 2003). The relative advantage in this context may stem from competitive advantages, brand development and evidence of Return on Investment (Mullan et al., 2017). Other than attributes of innovation, Diffusion of Innovation theory posited characteristics of the innovation adopter (Dearing and Cox, 2018) or in this context is the bank as an adopter of e-banking.

Interaction customers using the web in internet banking qualitatively have a difference with a person to person interaction in the branch that implies banks to business mixes, funding sources, labour forces, growth rate and risk-return profiles (DeYoung et al., 2007). For instance, lending via the web is fitted to transaction loans such as mortgages whilst lending via branch is better suited to relationship loans for SMEs and the internet has enabled banks to reach customers across geographic borders impacted to faster and larger raising new deposits (DeYoung et al., 2007). Economic argument bank to adopt internet banking ultimately considering ability to reduce the overhead expense by reducing or eliminating the physical branches and its associated costs such as staff and rent expenses (DeYoung et al., 2007; Hernando and Nieto, 2007).

In addition, internet banking may exploit the scale of economies higher compared to traditional bank channel in which the cost unit of internet banking decline rapidly as output increase relative to traditional bank channel (Hernando and Nieto, 2007). Another impact of internet banking is likely to change customer behaviour in which transferring funds from existing deposit accounts into other

accounts that yield more, consequently, the customer may hold lower balances (DeYoung et al., 2007). Overall, it is expected click and mortar banks to have fewer branches, lower labour expenses involved, charge a lower interest rate on loans, offer higher interest rates on deposits, charge lower fees and grow faster relative to brick and mortar banks (DeYoung et al., 2007).

Factors Affecting E-banking Adoption among Commercial Banks

Studies on financial innovation particularly e-banking including internet banking and mobile banking may take a view from the bank's perspective (Furst et al., 2002; DeYoung et al., 2007; Hernando and Nieto, 2007; Malhotra and Singh, 2007; Sullivan and Wang, 2020) or customer's perspective (Kolodinsky et al., 2004; Laukkanen, 2007; Laukkanen, 2016) with majority studies focussing on customers adoption and studies on the bank as the adopter is still scarce (Nejad, 2016). Bank's perspective may be related to bank characteristics adopted the innovation and the benefit of the adoption (Hernando and Nieto, 2007). This literature review concentrates on the adoption of e-banking using the bank's perspective.

Several factors were found to influence the decision to adopt e-banking by banks. These factors commonly are envisaged as bank characteristics. Furst et al. (2002) investigated the adoption of internet banking by the banks in the United States in 1998 in order to identify bank characteristics that determine the adoption of internet banking. They found that bank with the condition having large assets, a younger bank, bank holding company affiliation, location in the urban area and good rating on supervisory examination is more likely to adopt internet banking. In addition, higher expenses, involvement in non-traditional activities, higher profitability and higher inefficiency are several characteristics that determine banks more likely to adopt internet banking.

Differ from the previous study conducted in a developed country, Singh and Malhotra (2007) investigated bank characteristics on internet banking adoption in a developing country, India, covering data from 1997-1998 to 2004-2005. Their findings are similar to Furst et al. (2002) in large assets, bank age and higher expenses. However, bank age, deposit and expenses (for premises and fixed assets) are significant only at marginal, 10% level. They also found that type of bank has a significant relationship with the possibility bank to adopt internet banking with the private bank was more likely to adopt online banking. With regard to labour expense, no evidence was found. Moreover, branch intensity was found to have a significant relationship with bank adoption in internet banking. In addition, the market share of the bank has a significant relationship although the significance is at a marginal level. They concluded application of internet banking adoption is utilized to complement for existing physical branch network in order to increase market share and lowering expenses.

In addition, Hernandez-Murillo et al. (2010) concentrated on bank strategy in response to the adoption of online banking by competitors using data US commercial bank during 2002 – 2006 and found that the adoption rate was faster for the banks that operate in the market in which others bank have adopted online banking. Bank specific variables represented by size (assets) and membership in bank holding companies also were identified to have a significant effect on the decision to adopt online banking, however, bank age was only significant at marginally (10% level).

In addition, bank financial health such as share of non-performing loans, profitability measured by return on assets, loan to asset ratio and equity to asset ratio also found to be significant relationship on the decision to adopt online banking. These authors also found that competitive consideration played an important role in the decision to adopt e-banking. Another main finding concerning whether online

banking is complementary or substitution to the physical branch and they found that online banking played as a substitute to physical branch as branch intensity variable have significant effects on the decision to adopt online banking. Sullivan and Wang (2020) confirmed the findings of a previous study that the size of the bank represented by deposits and bank age are significant relationship to decision adopting internet banking.

Differ from the previous study, they found type of bank-affiliated to bank holding company have no significant effect on the decision. Another finding concerning with population density and household internet access that have significant effects on decision bank to adopt internet banking. In addition, labour expense indicated with wage has no significant relationship.

While previous studies concentrated on factors determining the decision to adopt e-banking by putting the adoption of e-banking as the dependent variable, other researchers were attracted to investigate the effects of bank adoption e-banking on bank performance as well as to find evidence on whether adoption e-banking complements or substitute for the existing physical branch. For instance, using a sample of small banks in the United States covering year-end 1999 to year-end 2001, DeYoung et al. (2007) found that “click and mortar” banks relatively grow faster in assets relative to “brick and mortar” banks, tend to move loan portfolio to transaction loans such as mortgage loans, and invested more on marketable securities. On the liability side, the presence of internet banking has an impact on customer behaviour that moving their funds from checking accounts to more yielding accounts such as money market deposit accounts. “Click and mortar” banks also tend to rely more on market deposit funding rather than relationship deposit funding. There was no evidence the adoption of internet banking brought about a reduction in total overhead expenses.

In fact, labour expenses were relatively higher. They concluded that internet banking adoption economically and significantly improved profitability of “click and mortar” banks and this was addressed to higher revenue from non-interest income suggesting revenue resulted from deposit service charges. With regard to complementary or substitution physical branch, since the variable branch to asset ratio found positively significant suggesting that internet banking is complementary to a physical branch. Other main findings are internet banking adoption is more likely regarded as product innovation due to changes in customer behaviour and process innovation due to changes in production cost, input mix and lending process.

Hernando and Nieto (2007) investigate the effect of the internet banking adoption as multi-channel banks in Spain covering the period 1994-2002. The adoption of a multi-channel bank strategy has a positive significant effect on banks' profitability that could explain a significant reduction in overhead expenses. The significant reduction in staff, IT and marketing expenditures suggest efficiency gains resulted from internet banking adoption as a multi-channel strategy. Bank activities on brokerage seemed to have no significant effect on higher profitability. Similar to DeYoung et al. (2007), they concluded the adoption of internet banking played a role as complementary to existing physical branch rather than a substitute for.

Hasan et al. (2009) examine the impact of retail payments on bank performance in EU markets from 2000 – 2007. They find a significant relationship between retail payments with bank performance in terms of accounting ratios (ROA and ROE) and profit and cost-efficiency. Bank with more developed retail payments was found to have better performance. In addition, heterogeneity in retail payments

instruments impacts bank performance as addressed to greater use of electronic payment instruments. Moreover, savings and cooperative bank performance are more impacted by retail payments than commercial banks and, in terms of income, banks' non-interest income is more impacted than banks' interest income. Finally, retail payment services influence bank stability which generates a stable revenue for banks.

Previous studies on bank characteristics have shown that bank size considering assets or deposits, bank age, type of bank and profitability were found to have a significant relationship on the decision to adopt e-banking whilst labour expense have no significant relationship. In addition, branches intensity was also found to have a significant effect on the decision to adopt e-banking. With regard to whether a complement of substitution for the existing physical branch, the evidence is mixed. Previous studies taking bank performance perspective, internet banking adoption has a significant effect on profitability and the presence of internet banking is suggested as a complement to an existing physical branch. However, regarding the labour expense reduction, the evidence is mixed.

Conceptual Framework

Given the background theory, the desire to increase efficiency has encouraged financial innovation occurred and one of the measures is by reducing the relevant cost. Financial technology facilitates financial innovation to profitably take place in the market. This is in line with the motive bank adopting e-banking that is reducing the costs, in particular, cost related to the physical branch and its associated overhead costs such as labour cost with an expectation to bring about profitability since the one of advantage adopting e-banking theoretically relies on cost reduction. Previous studies have shown that evidence of cost reduction due to adopting e-banking is mixed, for instance, Malhotra and Singh (2007) and Sullivan and Wang (2020) found no evidence whilst DeYoung et al. (2007) and Hernando and Nieto (2007) found the presence internet banking to have a significant relationship on labour expense although the positive relationship contrasted with theoretically the effect internet banking (DeYoung et al., 2007).

Another finding is concerned with deposits variable that considers having a significant relationship to decision adopting internet banking (Malhotra and Singh, 2007; Sullivan and Wang, 2020) although Furst et al. (2002) found no evidence. In addition, the presence of internet banking considers having a significant relationship to deposit in terms of core deposit, demand deposit, and transaction deposit. Effective payment service assists banks to amplify long-relationship with customers that would lead to other banking services for example deposits as customers prefer to deposit their money in the bank that have a good payment service (Hasan et al., 2009). Greater use of electronic payment instruments assist banks to improve their performance (Hasan et al., 2009). Against this backdrop, the purpose of this study is to investigate the causal relationship between the adoption of e-banking with labour cost and deposit, if there is a causal relationship, whether the causal relationship is unidirectional or bidirectional. Figure 1 illustrates the conceptual framework of this study.

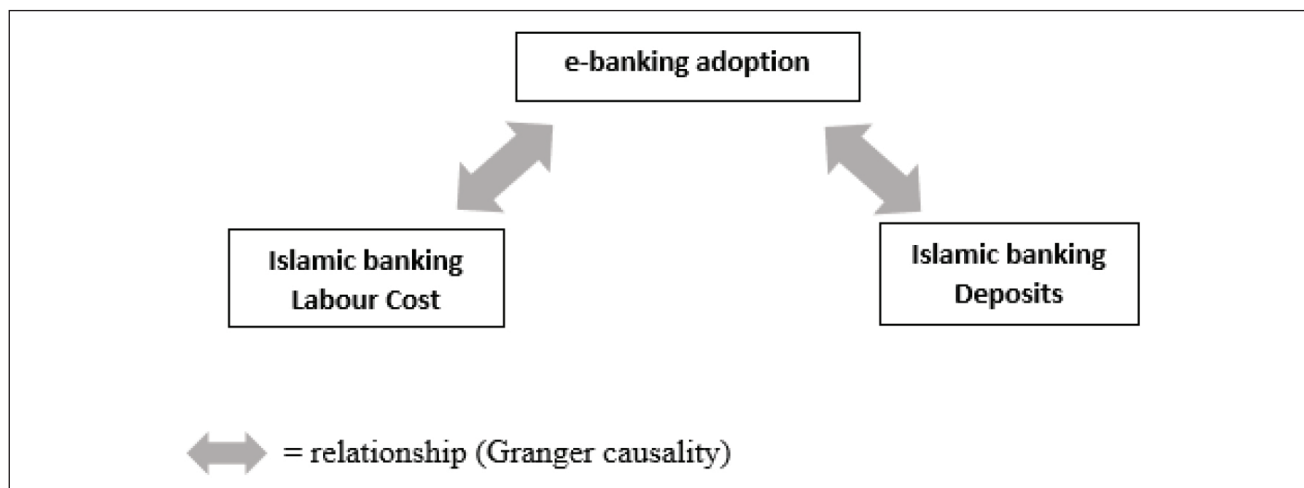


Figure 1. Conceptual framework of the study

This study utilized Islamic banking in Indonesia as a sample considering as follows:

1. Islamic banking is a growing industry that has been continuously grown positively. In 2020 when the Covid-19 outbreak began to hit Indonesia, Islamic banking still experienced asset growth of 13.11% year-on-year (OJK, 2021).
2. Indonesia is the largest Muslim population globally which have made a potential market for Islamic banking, however, the share of Islamic banking is still relatively low account for 6.51% as of December 2020 (OJK, 2021).
3. Islamic banking Indonesia having challenges regarding optimizing information technology to support product development as well as business model development (OJK, 2021).

METHODOLOGY

Data

This study focuses on the e-banking adoption in Islamic banking in Indonesia using sample monthly aggregate level data during the period 2014 to 2020. The decision to use those period data consider limitation data availability publicly since data availability on e-banking is a major challenge performing research on this area (DeYoung et al, 2007). Thus, adoption of e-banking is proxied by e-banking transaction in nominal monetary term unit that incorporates internet banking transaction and mobile banking transaction considering e-banking is preferred to be addressed to banking services using electronic channels such as internet (Shah and Clarke, 2009) and this lead to internet banking and mobile banking. Internet is regarded as a virtual delivery channel (Shaikh and Karjaluto, 2016).

Therefore, e-banking used in this study is labelled as a virtual data channel and in the log form (LNVDC). Data on e-banking transactions are regarded as an ideal measure of how intensively customer interaction using electronic channels (DeYoung et al, 2007). However, data on e-banking transactions are not divided into conventional banking and Islamic banking rather than is aggregated on banking industry-level data. These data are collected from Bank Indonesia's official website. The labour expense of Sharia Commercial Bank (full-fledged Islamic Bank) and Sharia Business Unit (Islamic window) constitute the labour expense (LABEX) that denote the labour cost of Islamic banking.

This study utilized deposit (DSDEP) that incorporates demand deposits and saving deposits following DeYoung et al (2007) and normally customer's transaction more frequently using this type of deposit rather than time deposit. Labour expense over the total assets of Islamic banking and deposit over the total asset is utilized in this study. The data stem from Sharia Banking Statistics (monthly) that can be downloaded on Otoritas Jasa Keuangan (OJK) website. This study refers to December's Sharia Banking Statistics for each year during the period of observation to generate monthly data (January to December). Due to the limitation of the data, this study utilized sample data starting half-year 2014 until year-end 2020 account for 78 observations for each variable included.

Model Development

This study uses the following model to study the causal relationship between e-banking adoption with labour cost and deposits:

$$\text{LNVDC} = (\text{DSDEP}, \text{LABEX})$$

Where:

LNVDC = Log form of Virtual Delivery Channel is a log form for the sum of internet banking and mobile banking transactions in monetary terms which is a proxy for e-banking adoption.

LABEX = Labour Expense to total assets which represent Islamic banking labour cost.

DSDEP = Sum of demand deposit and saving deposits to the total asset which represents Islamic banking deposit.

This study employs Granger Causality to explore the causal relationship between adoption of e-banking, Islamic banking labour cost, and Islamic banking deposit. Prior to conducting Granger Causality, several steps should be followed as explained below.

Granger Causality Test

Prior to Granger Causality Test, a Unit root test is conducted to examine statistical properties of time series variables using the Augmented Dickey-Fuller (ADF) Test and the Phillips-Perron (PP) Test by testing the null hypothesis of the unit root presence against the alternate hypothesis of stationarity (Sabiu and Abduh, 2020). It is also necessary to determine the optimal lag length to include in the Granger Causality test using lag length criteria in the Vector Auto Regressive model, namely, the Akaike Information Criterion (AIC) and the Schwarz Information Criterion (SIC), which are commonly used in the VAR analysis (Abduh and Chowdhury, 2012).

Granger Causality test is conducted to examine whether predictability exists among involved variables in the model (Othman et al, 2017). If a signal X_1 "Granger causes" a signal X_2 then the past value of X_1 that is contained past information of X_1 that assist to predict X_1 and beyond the information contained X_2 alone (Mushafiq and Sehar, 2021). With regard to this study, null hypotheses are provided to test by Granger Causality test in order to achieve the purpose of the study:

1. The deposit does not Granger cause e-banking transactions.
2. E-banking transaction does not Granger cause deposits.
3. Labour cost does not Granger cause e-banking transactions.
4. E-banking transaction does not Granger cause labour cost.

Further, Variance Decomposition is provided to examine the degree to which shocks in the past in one variable impact changes in that variable considering shocks in other independent variables impact changes in that variable (Mushafiq and Sehar, 2021). This study utilizes e-Views 10 to estimate and analyze the data automatically.

RESULTS AND ANALYSIS

Descriptive Statistics

Table 1 presents descriptive statistics of the variables involved in this study.

Table 1. Descriptive statistics

Indicator	DSDEP	LABEX	LNVDK
Mean	0.330457	0.018736	6.186280
Median	0.325935	0.018334	6.163620
Maximum	0.394496	0.023325	6.464080
Minimum	0.288357	0.014574	5.944133
Std. Dev.	0.028120	0.002465	0.148289
Skewness	0.732562	0.309957	0.145224
Kurtosis	2.690229	2.059483	1.721332
Observations	78	78	78

Notes:

DSDEP = Islamic banking deposit to total assets

LABEX = Islamic banking labour expense to total assets

LNVDK = log of e-banking transactions

The share deposits that comprise demand deposits and saving deposits in Islamic banking are relatively low account for 33.04% on average with the highest share achieved at 39.45% and minimum at 28.83%. Islamic banking has been relied on the relatively high cost to cover funding needs that are time deposits rather than relatively low-cost funds (demand deposits and saving deposits). This contrast with conventional banking that is dominated by relatively low-cost fund account for 58.18% (OJK, 2021). Table 1 displays overall Kurtosis value is less than three that satisfy the condition for normally distributed as Stock and Watson (2006) recommends the threshold of three for Kurtosis value (Othman et al,2017). There is no evidence for skewness values outside the limit (-1 to +1) indicating all the variables are symmetrical (Othman et al, 2017).

Correlation Analysis

Table 2 displays correlation among the variables to examine the degree of correlation as well as identify the possibility multicollinearity occurred in the correlation.

Table 2. Correlation matrix

	DSDEP	LABEX	LVNDC
DSDEP	1	-0.8596	0.8274
LABEX	-0.8596	1	-0.8720
LVNDC	0.8274	-0.8720	1

The result of the correlation matrix displays the satisfaction degree of correlation among variables. Table 3 confirms there is no collinearity problems exist since the degree of correlation are less than the rule of thumb, following Asteriou and Hall (2006), that is collinearity is more than 0.9 (Othman et al, 2017).

Unit Root Test

Unit Root tests are conducted to detect the presence of stationarity in the variables involved using the Augmented Dickey-Fuller test (ADF) and Phillip-Perron test (PP). Table 3 presents the result of the Unit Root Test.

Table 3. Unit root test

Variables Name	On Levels		On First Difference	
	ADF	PP	ADF	PP
LVNDC	-2.658354	-6.655732***	-12.31280***	-19.26790***
DSDEP	-2.841014	-2.747160	-10.47285***	-10.91624***
LABEX	-3.843600**	-3.185283*	-3.940618**	-10.34891***

ADF test indicates that only labour cost is stationary on level whilst two other variables, that is e-banking transactions and deposits are stationary on first difference at the 5% and 1% level significance respectively. PP test indicates e-banking transaction is stationary at 1% level of significance whilst deposit and labour cost are stationary on first difference at 1% level of significance. Unit root test confirms stationarity of the variables that occurred on the level and first difference. It also confirms the series of all variables indicate predictable behaviour (Othman et al, 2017).

Applying Vector Autoregressive (VAR) model on the stationarity of variables occurred on the level and difference demands the data used by variables transformed into first difference. It is necessary to comply with this rule since determining the optimal lag length used in Granger Causality follow the optimal lag length criteria in the VAR model. Therefore, all the variables are transformed into the first difference labelled with DLNDVC, DDSDEP, and DLABEX for e-banking transactions, deposits and labour cost respectively. The process to convert variables into differences is formulated automatically with the EViews application. The subsequent process uses these variables in form of difference.

It is necessary to determine the optimal lag length that will be used to run Granger Causality Test. Using Akaike Information Criterion (AIC) and Schwarz Criterion (SC) to determine optimal lag length criteria for Vector Autoregressive model, following Heilmann (2010) which recommended the longer lag as the optimal lag length (Othman et al, 2017), AIC with 2 lags found to be longer than SC that will be used in Granger Causality Test.

Granger Causality Test

Table 4 presents the result of the Granger Causality test among variables that is, DDSDEP, DLABEX, and LNVDC.

Table 4. Granger causality test results

Null Hypothesis:	Obs	F-Statistic	Prob.
DLNVDC does not Granger Cause DDSDEP	75	0.68117	0.5093
DDSDEP does not Granger Cause DLNVDC		3.66582	0.0306
DLNVDC does not Granger Cause DLABEX	75	0.65745	0.5213
DLABEX does not Granger Cause DLNVDC		2.11262	0.1286

This study focuses only on the e-banking adoption relationship that is 1st hypothesis to 4th hypothesis tested on Granger Causality test. Criteria to reject the null hypothesis is that the probability value should be less than a 5% level of significance that lead to the relationship between hypothesized variables. The results Granger Causality provides evidence causal relationship deposits on e-banking transactions. Since the probability value is less than a 5% level of significance, the null hypothesis of “deposits does not Granger causes e-banking transaction” is rejected that leading to the acceptance of “deposits Granger causes e-banking transactions”.

However, the relationship is unidirectional where deposits have an impact on e-banking transactions but not vice versa since the probability value of “e-banking transactions Granger causes deposits” is greater than a 5% level of significance lead to accepting the null hypothesis. The rests of the Granger Causality test results indicate no significant relationship since all the probability values are greater than a 5% level of significance in a sense there is no evidence of the significant relationship between labour cost and e-banking transactions as well as deposits and labour cost.

Variance Decomposition

Variance decomposition provides the degree to which the shocks of other variables contributes to one variable as well as shocks of past value itself. Only relationship deposits to e-banking transactions are presented since only this relationship that evident to be significant. Table 5 provides the result of variance decomposition for ten months forecast of e-banking transactions.

Table 5. Variance decomposition of e-banking transaction

Variance Decomposition of DLNVDC:				
Period	S.E.	DLNVDC	DDSDEP	DLABEX
1	0.043501	100.0000	0.000000	0.000000
2	0.050990	98.19659	0.000575	1.802839
3	0.053733	89.04415	6.260303	4.695550
4	0.057740	85.68024	10.20788	4.111885
5	0.058720	86.00477	9.877881	4.117350
6	0.059163	84.78820	11.12810	4.083698
7	0.059788	84.34823	11.65152	4.000255
8	0.059937	84.42118	11.59396	3.984868
9	0.060011	84.22679	11.79726	3.975942
10	0.060110	84.16624	11.87093	3.962835

It seems that deposits have no effect on the e-banking transaction until the second month. In the third month, the effect of deposits on e-banking transactions increase by 6.26% from the previous in just one shock period. For the next three months period, the effect increases by almost 5%. In the sixth month, the effect of deposits starts to be stable at 11% until the tenth month.

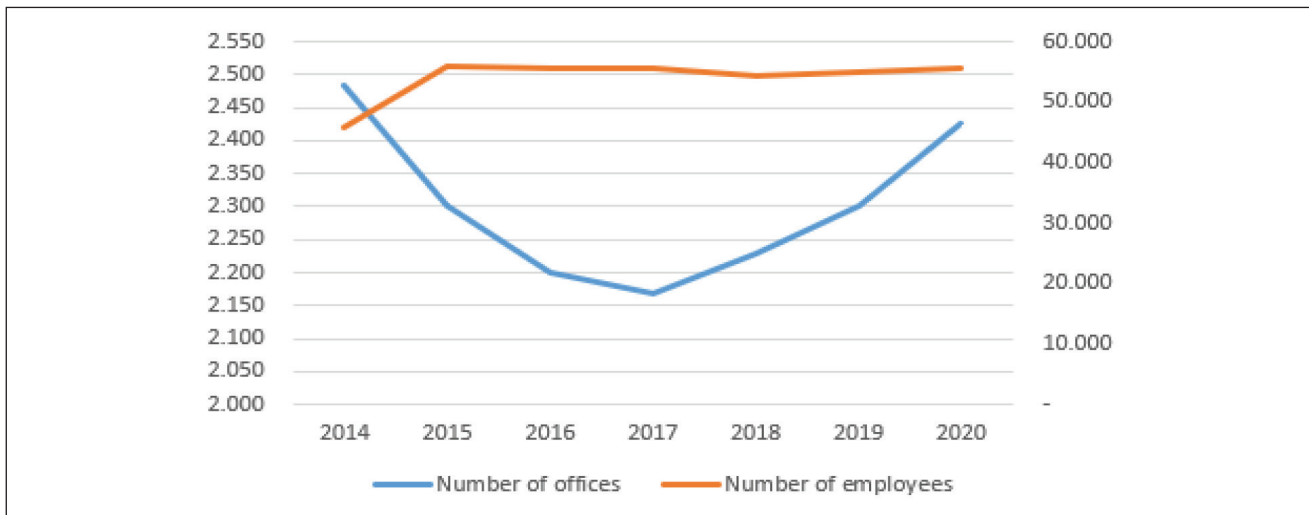
Analysis

This study concentrates on the causality relationship among Islamic banking labour cost, Islamic banking deposits and e-banking adoption. Concerning the relationship between labour costs and e-banking adoption, the present study has found no significant evidence on the relationship between Islamic banking labour costs and e-banking transactions. E-banking transactions are assumed to be a proxy for e-banking adoption by the bank. Therefore, it can be said that there is no significant relationship between Islamic banking labour cost with the adoption of e-banking.

This finding is consistent with previous studies on internet banking adoption performed by Malhotra and Singh (2007) and Sullivan and Wang (2020) that found employee wages as a proxy for labour cost has no significant effect on internet banking adoption by the banks, suggesting that labour cost is not the main motivation to adopt e-banking and perhaps, following Hernandez-Murillo et al (2010), the competition is the motivation. It also suggests that no evidence is provided regarding cost reduction particularly reduction of labour cost (DeYoung et al, 2017), in contrast with Hernando and Nieto (2007) that found significant evidence effect on labour cost reduction.

Theoretically, bank adopting internet banking mainly considers the ability to reduce the overhead expense by reducing or eliminating the physical branches and their associated costs such as staff and rent expenses (DeYoung et al, 2007; Hernando and Nieto, 2007). Labour cost is generated mainly by the presence of employees in the bank. In Indonesia, e-banking adoption has not been followed by the decline of employee number in Islamic banking. Indonesian Islamic banking experienced an inclination to increase the number of employees over the period of observation.

In 2014, there were 45,818 employees and it has been increased to 55,538 employees in 2020 (OJK, 2021), accounting for 21% of growth compared to 2014. In addition, over the period of observation, a slight decrease of operational offices occurred in Islamic banking. In 2014, there were 2,483 Islamic bank offices followed by a slight decrease in 2020, accounting for 2% (57 offices) compared to 2014. E-banking adoption has not been impacted to considerable elimination of Islamic bank offices while the reduction cost caused by e-banking adoption mainly is addressed to the reduction of cost associated with offices which have not been evident for Indonesian Islamic banking. Figure 2 illustrates the growth of Islamic bank employees and offices.



Source: OJK, 2021

Figure 2. Number of offices and employees for Indonesian Islamic Banking

Granger causality test result has also given significant evidence regarding the unidirectional relationship between deposits of Islamic banking and e-banking transactions in that Islamic banking deposits (Granger) cause the e-banking transactions but not vice versa. E-banking transactions in this study are assumed as a proxy of e-banking adoption. Thus, the finding can be viewed that Islamic banking deposits have a significant effect on e-banking adoption. This finding support previous studies on internet banking adoption conducted by Malhotra and Singh (2007) and Sullivan and Wang (2020) that found the influence deposits on the internet banking adoption by the banks though deposits are viewed as the bank characteristic encouraging bank to adopt internet banking. The finding also suggests that e-banking adoption is motivated by the bank's orientation on the client base (Malhotra and Singh, 2007).

Robustness Check

Though this study utilized Granger Causality to test the relationship in e-banking adoption, the VAR model is constructed and tested due to usage optimal lag length criteria on the Granger Causality test. The VAR model utilized variables in form of a first difference since the unit root test found stationary time series of variables is achieved on level and difference. In addition, the Johansen-Juselius cointegration test is conducted to examine whether cointegration exists after the variables are transformed into the form of the first difference. The probability values related to trace statistics and Max-eigenvalue generated less than 5% level of significance that suggests there is cointegration among variables involved.

The VAR model is stable as no unit root outside the circle, no serial correlation at two lags as well as no heteroskedasticity occurred (Mushafiq and Sehar, 2021). VAR estimation output indicates, in the e-banking transaction as the dependent variable, the past value of e-banking transaction and past value of deposit that influence e-banking transaction whilst labour cost has no significant effect. This corroborates the result of the Granger Causality test that has a similar finding, Islamic banking deposits influence e-banking transactions or in another way, Islamic banking deposits influence e-banking adoption since the e-banking transactions are assumed to be a proxy for e-banking adoption in this study whilst labour cost have no significant relationship on e-banking transactions. Variance decomposition has shown the shock of deposits find its contribution to the e-banking transaction in the second month of the forecast period that is consistent with the VAR estimation output that indicates deposits of 2 months lag affecting the e-banking transaction.

However, caution should be given to interpreting the negative relationship in the significant deposits coefficient. DeYoung et al (2007) found internet banking adoption has an impact on the small-time and transaction deposits changing customer behaviour in managing account by lowering the account balance and moving the balance from the existing deposit account to a more yielding account for example multi-market deposit accounts due to brokerage function in the internet banking. In the context of Islamic banking, deposits in this study are addressed to demand deposits and saving deposits which tend to be transactional functions.

Decreasing the deposits would be impacted by the increase in e-banking transactions in the sense that customer funds perhaps flow out to conventional banks since e-banking has made it possible to transfer funds between conventional and Islamic banks. According to Banking Industry Profile Fourth Quarter 2020 (OJK, 2021), conventional banking demand deposits and saving deposits account for 1,636 trillion rupiahs and 2,053 trillion rupiahs respectively as of December 2020 whilst Islamic banking demand deposits and saving deposits account for 67.70 trillion rupiahs (4.14% of conventional demand deposits) and 159.38 trillion rupiahs (7.76% of conventional saving deposits) respectively as of December 2020 (OJK,2021). Further research involving conventional banking should give a more comprehensive view regarding e-banking adoption.

CONCLUSION

Conclusion

This study examines the dynamic interactions between e-banking adoption, Islamic banking deposits and Islamic banking labour cost in Indonesia. Due to the limitation of data availability, e-banking adoption is proxied by e-banking transactions that consist of internet banking and mobile banking transactions. Islamic banking demand deposits and saving deposits constitute Islamic banking deposits in this study. Granger Causality was utilized to examine the interactions among variables.

The results indicated that only Islamic banking deposit has a significant influence on e-banking transactions but not vice versa. Therefore, the relationship is unidirectional. Islamic banking labour cost has no significant effect on e-banking transactions and vice versa. Variance Decomposition shows the contribution shocks of Islamic banking deposits requires two months to affect e-banking transactions. This is corroborated by the Vector Autoregressive model that is also employed to further analysis and

found only Islamic banking deposits with 2 months lag and past value of e-banking adoption influence the e-banking transactions. The findings suggest that Islamic banking deposit has a role in e-banking adoption particularly e-banking transactions and there is no evidence provided to support the cost reduction due to labour cost reduction regarding e-banking adoption.

Recommendation

Given the finding of this study, several recommendations can be made to the policy in the Islamic banking industry. The insignificant labour cost that suggests labour cost is not the main motivation to adopt e-banking encourages Islamic banks to optimize the information technology rather than relying on the physical branches in delivering the banking services. By doing so, it is expected Islamic banks will more intensively utilize information technology to perform banking services and activities instead of labour intensive.

Though the share of Islamic banking is still low compared to conventional banking, more attention should be given to Islamic banking deposits particularly demand deposits and saving deposits related to e-banking adoption as the deposits have a significant influence on e-banking transactions. Islamic banks should be encouraged to adopt e-banking with various types of services that enable to collect funds and retain the fund in the Islamic banks instead of transferring to other banks (payments) for instance collaborating with Islamic social fund managers to receive Islamic social funds through e-banking services.

Study on the e-banking area is challenging due to limited data available publicly for instance Islamic banking reports that have been published quarterly by Islamic banks have not contained data regarding e-banking services (internet banking as well as mobile banking). In order to encourage more study on this area, data regarding e-banking including internet banking and mobile banking should be available publicly and easier to access, for example, Islamic banks, as well as conventional banks, are required to report the type of services that available on internet banking and or mobile banking in the report to the authority and the authority may upload this report to the relevant authority's official website so that public could access the data for various interest particularly for the scholar to conduct research activities.

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Islamic Financing Guarantee for Micro and Small Enterprises during the Covid Pandemic

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Abstract. Many studies have examined the conditions of micro and small enterprises in normal conditions. However, research related to the worsening economic conditions that impacted micro and small enterprises in accessing capital, especially related to their perceptions on Islamic financing guarantee, is still limited. This research was conducted using a qualitative research method by distributing questionnaires to 125 participants which were then continued with interviews with selected participants to explore answers to the questionnaire given. This study shows the results that there are obstacles for micro and small enterprises who are further exacerbated by the conditions of Covid 19. This research also shows the need for broader socialization and education on the existence of credit guarantees or Islamic financing guarantee as one of the important solutions for micro and small enterprises to access capital to financial institutions, especially in conditions affected by the Covid 19 pandemic.

Keyword: Covid 19, credit, Islamic financing, micro and small enterprises.

JEL: C12, G21, L31, H81.

INTRODUCTION

Corona virus 19, which was first identified in Wuhan China on December 1, 2019 and designated as a pandemic by WHO on March 11, 2020, has become widespread in nearly 65 countries in the world. The wide spread of Covid 19 has had a negative impact not only on the health sector but also affects the economies of countries around the world. The pandemic outbreak has put the world economy under enormous pressure, especially due to restrictions that have led to a decline in international trade (Baldwin, 2020). The spread of the Covid 19 outbreak has also contributed to reducing economic growth in many countries due to decreased income, decreased employment rates, decreased tourist visit rates, and decreased trade volume (Fernandes, 2020).

The spread out of Covid 19 has also had a negative effect on the development of the business world in various lines, including in the micro and medium business sector. The Covid 19 pandemic has caused business sector to lose daily income due to lockdown policies or social restrictions that have caused people not to leave their residences.¹ In the Asian Policy Brief Report related to the economic impact of the covid 19 outbreak on Asean, it was stated that ten Asean countries have confirmed the number of infected with Covid 19 and show the negative impact of Covid 19 on the economies of Asean countries

¹ Gerhard Huemer, A view on the COVID impact on and support measures for SMEs, Director for Economic and Fiscal Policy, Report Sme-United, 2020 downloaded at <https://smeunited.eu/admin/storage/smeunited/200417-covid19-impact1.pdf>

in 2020. The main economic sectors that are reported to be affected are mainly travel and tourism, retail business and other service sectors, business operations are problematic because the supply chain is disrupted, the workforce has problems, and the level of consumer confidence has decreased.²

Based on a report from the Ministry of Medium Small Micro Enterprises and Cooperatives in Indonesia, there are 37,000 small and medium businesses affected by the COVID-19 pandemic, where around 56% reported experiencing a decline in sales, 22% experiencing financing problems, 15% of business actors having problems with the distribution of goods, and 4% reportedly having problems with access to materials. raw.³ This condition certainly disrupts small and medium enterprises, which are an important element in economic growth. The small and medium enterprises sector also plays an important role in efforts to create jobs in a country.

Small and medium enterprises are increasingly attracting attention not only in developing countries but also in developed economies. Small and medium business enterprises are an engine in supporting a country's economy and contributing positively to the country's economy. The contribution of small and medium enterprises can be seen from data in Japan, the United States, Germany and China that more than 99% of business actors are small and medium enterprises. Meanwhile, the amount of labor absorption reached 66% in Japan, 53% in the United States, and 68% in Germany. The added value contributed by small and medium enterprises in Japan was 55%, the United States reached 51%, and Germany 45%. Small and medium enterprises play a significant role in the national economy by providing a variety of goods and services, creating jobs, building local economies and communities, fostering competition and collaboration in markets, and advancing innovation.

Small and medium entrepreneurs in Indonesia have also shown a positive contribution to the Indonesian economy, as small and medium enterprises account for 99.9% and employ 96.2% of the workforce. The economic sectors carried out by small and medium enterprises include the manufacturing industry, distribution industry and service industry (Tulus, 2011). The contribution of small and medium enterprises to the economic sector in various parts of the world is also strengthened by Petkovska (2015), Cibela (2016), Fitzgerald and Muske (2016).

Learning from past experiences, a number of studies have shown how bad the conditions of micro and small businesses are in conditions of a pandemic as happened during the SARS and MERS pandemics. Marcus Richard Keogh-Brown and Richard David Smith (2008), Beutels P. (2009), Camille Achonu (2005), Heesoo Joo (2015) emphasized that at the time of SARS and MERS and the flu pandemic, it had an impact not only on the sector. public health but also has a negative impact on the economic sector. Therefore, it is necessary to make policies that are able to overcome not only the health impacts but also the economy due to the pandemic.

The argument for the need for certain policies during the Pandemic was reinforced by research by Niall (2020), George Verikios (2020), and Paul JJ Welfens (2020) which showed that in the conditions of Covid 19, policies such as relaxation were needed to help business actors overcome financial flow problems. It is hampered by the spread of covid 19. Likewise, Syamsul Hadi's research (2020) shows the

² Economic Impact of COVID-19 Outbreak on ASEAN, https://asean.org/storage/2020/04/ASEAN-Policy-Brief-April-2020_FINAL.pdf

³ Smes hit by covid 19 crisis as government prepares aid, <https://www.thejakartapost.com/news/2020/04/16/37000-smes-hit-by-covid-19-crisis-as-government-prepares-aid.html>

need for policies that are able to encourage the transformation of business actors so that they can pass through the crisis period to a stable stage due to the slowing down of the small and medium business lines. Likewise, Gonzalez-Urbe Juanita and Wang (2020) emphasized that credit guarantee during the Covid 19 pandemic is a popular thing to do in various countries.

The results of a number of researches are also in line with the results of research conducted on 119 developing countries around the world regarding the opinions of business actors regarding the main obstacles to developing a business. The results of this research indicate that the biggest obstacle faced by small and medium enterprises in developing their business is barriers to access to finance (capital). This condition is due to the burden of borrowing costs that are felt to be burdensome and the lack of consultants who are able to support their efforts to account for financial reports. This condition will certainly be more difficult with the outbreak of Covid 19 which has caused restrictions on human movement and territorial restrictions (Wang You, 2016).

The obstacles for Micro and Small business actors in accessing capital to financial institutions are generally caused by the inability to prepare collateral. Administratively, Micro and Small business actors are also deemed incompetent in preparing the requirements requested by financial institutions. Departing from this condition, a solution is needed that enables micro and small business actors to be able to access capital, one of which is through a credit/financing guarantee mechanism. In a global context, the practice of credit guarantee was initially introduced in Switzerland and then continued to develop in European countries such as Germany, Austria, France, Italy, the Netherlands, England, Belgium, Spain, the United States and Canada and also moved to Asian countries such as Japan, Taiwan, South Korea and other countries. This credit guarantee was later accommodated in Indonesia.

Research related to the perspective of micro and small business actors on financing guarantee during the spreading out of Covid 19 is certainly something urgent to do. In normal times, micro and small business actors are faced with various problems and the biggest one is the problem of access to capital. The condition of Covid 19 certainly makes it more difficult for small business actors to get access to funding. Policies related to the existence of sharia-based financing guarantees in the perspective of small business actors, especially during the Covid 19 pandemic, will be an issue that according to the author is very interesting to implement, considering that no similar research has been found yet.

LITERATURE REVIEW

Existing studies have shown that micro and small entrepreneurs are an important element in a country's economy. Micro and small businesses have become a cushion that is able to withstand the economic turmoil faced by a country. It's just that there are still a number of things that deserve to be a problem, among others, there are still a number of obstacles encountered by micro and small entrepreneurs, especially those related to access to capital. In this case, credit guarantee is one of the important issues in overcoming the main problems faced by micro and small business actors. In addition, along with the development of the Islamic economy, the offer of alternative credit guarantees using the Islamic system is also a matter of discussion.

Micro and Small Business Problems

Globally, there is an increasing recognition of the contribution of the small and medium enterprises sector to the country's economic growth. Naidu, S. and Chand, A. (2012) stated that in the South Pacific region small and medium enterprises are an important engine behind the country's economic growth, especially in contributing to GDP, absorbing employment, and playing a role in the supply chain cycle of big businesses. However, the small and medium enterprises sector needs capital assistance in order to develop and become an important part of economic development. There is a phenomenon that occurs in general in almost all over the world, namely that small and medium enterprises have major obstacles in accessing capital to increase their business. Therefore, there needs to be a policy that can sustain the growth of small and medium enterprises, one of which is by opening access to capital for small and medium business actors.

The World Bank Report states that although the small and medium enterprises sector plays an important role in representing 90% of the business sector, absorbing more than 50% of the workforce worldwide, the formal sector of MSMEs contributes up to 40% of GDP in developing countries, but this sector is still constrained in terms of capital problems in both developing and developed countries. The MSME sector relies more on internal capital, cash funds from friends or family to run their businesses. The East Asia and Pacific region experienced the largest global financing gap (46%), followed by Latin America and the Caribbean (23%), and the European and Central Asia regions (15%). The highest gaps are in Latin America, the Caribbean, the Middle East and North Africa. The inability to access capital will be even greater if micro and informal enterprises are included in the data.

A number of studies such as Cheong, C.W.H., Lee, M.H. and Weissmann, M.A., (2020) stated that constraints in accessing capital are one of the biggest problems for small and medium enterprises in Malaysia. Their research results indicate that more accessible fund to non-bank capital has proven to have a positive impact on the development of small and medium enterprises. Maiti, M., (2018) stated that the problem of access to finance is also a major obstacle for small and medium enterprises in India. To overcome this, a solution is needed in the form of various policies that are able to overcome the problem of financing difficulties other than through the bank credit scheme. Klonowski, D. (2012) states that access to capital is the biggest challenge for small and medium enterprises in Poland. To solve this problem, the Polish government has launched a program to obtain finance and is looking for ways to help the small and small business sector. Likewise, the research of Abe, M., Troilo, M. and Batsaikhan, O., (2015) that in the Asia Pacific region, based on the results of a literature survey, it shows that the problem of access to capital is the toughest problem for small and medium enterprises in surviving and developing their business. There needs to be a policy that is able to assist small and medium enterprises in obtaining financing which will have an impact on encouraging economic growth.

A number of other researches also confirm that access to capital financing is the biggest obstacle confronted by small and medium enterprises (Wang, 2016). There needs to be government policies and alternative solutions that can be taken so that business actors can gain access to capital for developing their businesses. Hennecke et.al. (2019) emphasized that increasing the capacity of small and medium enterprises will contribute to the country's economic growth, especially in increasing production capacity and labor absorption. Irani Arráiz et.al. (2014), stated that there are many reports that the small and medium enterprises sector often experiences obstacles in obtaining financing to the banking sector. This condition occurs because of the risks faced by banks when allocating credit to the small and

medium enterprises sector, such as the absence of assets as collateral, lack of quality information, low quality of financial reports, constraints related to business risk evaluation, informal business character, and weak family management patterns. The role of the government by providing loan guarantees for both fully and partly has resolved two main problems, namely the lack of adequate guarantees and regulatory issues as well as the situation of banking operational contracts.

Credit or Financing Guarantee Urgency

Jia and Chen (2002) stated that the practice of guaranteeing financing by the government is a global solution in overcoming the capital difficulties of the small and medium enterprises sector. The results of his research show that it is quite reasonable for banks to allocate loans to the small and medium enterprises sector instead of only focusing on big businesses. The credit guarantee system is the key to overcoming difficulties in financing the small and medium enterprises sector. Efforts to increase credit guarantee activities include building appropriate organizational structures, regulating guarantee fund operations, controlling risks and sharing responsibilities. Wilcox and Yasuda (2019) state that credit guaranteed by the government actually has a positive impact not only on small and medium enterprises but also for the banking sector because banks have more capital to be managed in the unsecured credit sector. Positive things related to the impact of credit guarantee practices are also found in the research of Haag and Henschel (2016), Nigrini and Schoombec (2002), Lee (2018).

Naoyuki and Farhad (2019) also state that difficulties in accessing finance are the main problems that limit small and medium business actors. One of the efficient ways to advance the financing of the small and medium enterprises sector is through a credit guarantee scheme. The credit guarantee ratio must be at the level expected by the government where non-performing financing is minimal and at the same time able to achieve the target of growing the small and medium enterprises sector by reducing information asymmetry. To increase the credit guarantee ratio, there are three main factors, namely government policies, macroeconomic conditions, and banking behavior. In order to avoid moral hazard and ensure the stability of loans to the MSME sector, the government needs to set an optimal credit guarantee ratio based on macroeconomic conditions and adjust it to the health conditions of the bank.

Zhang X. & Wang Z. (2020) state that guarantees from the government are perceived to be important in efforts to develop the business sector, especially the banking sector. The existence of guarantees from the government has a positive impact on the business sector and the banking sector both under normal conditions, especially in conditions of economic recession. Nobuyoshi (2015) reinforces the need for a credit guarantee scheme by the government, especially in protecting the economy from collapse in conditions of economic crisis. However, it should be noted that this credit guarantee program will become a burden to the government if it runs inefficiently, as stated by Bocock and Shariff (2005). The argument for the importance of the credit guarantee program by the government for small and medium business sector loans to banks is that government credit guarantees act as collateral when the guaranteed market situation is not as efficient as expected (de la Torre, 2007). On the impact of providing credit guarantees to the business sector, based on the research of Inha Oh et.al., the results show that credit guarantees have a significant effect on the company's ability to maintain business size and increase the company's ability to survive. The goodness of this credit guarantee policy for the banking sector and the small and medium business sector is also confirmed by research by Cowling (2003), Kang (2008), Kuo (2011), and Tsafack (2020).

Financing guarantee in Islamic perspective

Along with the growth of the Islamic economy and finance, credit guarantees are also available in the Islamic scheme. Many countries in the world, both Muslim countries and non-Muslim countries such as England, France, USA and Switzerland recognize the Islamic financial and banking system in their regulations as stated by Vahed and Vawda (2008), Williams (2010), Pollard and Samers (2011), Mastrosimone (2013), Fang (2014), and Lai (2014).

The Islamic economic and financial system offers an alternative based on Islamic teachings in addition to those offered in the economic and financial patterns offered by the mainstream economic system (capitalism and socialism). Al-Jarhi (2017) emphasizes the same thing that the implementation of the Islamic financial system, especially with the character of profit and loss sharing, will provide an adequate alternative to the mainstream financial system. There are a number of models that can be applied in the Islamic-based financing guarantee mechanism by using a number of available contracts such as the profit sharing agreement (musharakah and mudharabah) and the kafalah contract as stated by Hassan and Soumaré (2014).

Based on the explanations of the review literature above, it can be understood that many researches and studies related to the problems of micro and small business actors and studies related to the urgency of credit guarantees to overcome the biggest obstacles confronted by micro and small business actors have been carried out. However, studies on how the perceptions of micro and small business actors towards Islamic-based financing guarantees, especially during the pandemic, have not yet been carried out. That is why this research is significant to do.

METHODOLOGY

This research was conducted to determine the perceptions of micro and small business actors on the urgency of Islamic financing guarantee during the outbreak of the Covid 19 pandemic. This study uses a qualitative research approach to determine how to find, collect, process and analyze research data. This research method was chosen to express the opinions or responses of Micro and Small Business actors about the obstacles faced in running a business, as well as their responses related to guaranteeing financing, especially Islamic financing guarantee in the era of the Covid 19 pandemic. This research is an exploratory information to get information as it is found in the field (Waterworth and Chignell, 1991).

In this study, questionnaires were distributed to 125 participants who were micro and small entrepreneurs in Indonesia who were relevant to the characteristics of the social phenomena being studied (Glaser and Strauss, 1967). The data obtained from the results of distributing questionnaires are then classified according to the distribution of answers and tabulated. The results of the respondents' answers were then analyzed based on the contents of the respondents' answers (Kyngäs, 2008). Data collection methods use surveys and in-depth interviews to gain a better understanding of social phenomena and the processes involved (Fidel, 1993).

The technique for selecting respondents was carried out by purposive sampling with the criteria of Muslim micro and small business actors who run businesses in halal products. Information obtained through distributing questionnaires and interviews. In the condition that covid 19 is still spreading, the

survey was conducted by distributing online questionnaires via WhatsApp to 125 respondents. Based on data collection from the results of online research surveys, it is followed by deepening the data by conducting in-depth online interviews with 20 participants via Whatsapp video call media. To these selected participants the researcher explained the intent and purpose of the overall interview questions and ensured that the participants felt comfortable and not distressed by the overall questions asked.

The questions asked are an in-depth study of the survey related to the reasons for the participants to provide opinions or responses from Micro and Small Business actors regarding the obstacles faced in running a business. For further surveys related to the responses of micro and small business actors related to financing guarantees, especially Islamic financing guarantee in the Covid 19 pandemic situation, researchers first provide preliminary information (grids) related to the existence of a financing guarantee policy as regulated in the Law. Number 1 of 2016 concerning guarantees. The researcher also conveyed information that besides using the conventional bank mechanism, credit guarantee can also be carried out by the Islamic bank mechanism by implementing an agreement in accordance with Islamic principles.

RESULTS AND ANALYSIS

Micro and small business actors are an important element in economic resilience and efforts to build the country's economy. However, the micro and small business sector is still experiencing obstacles. Based on statistical data from around 264 million people in Indonesia, approximately 200 million of them are people with middle to lower income. But unfortunately, almost 74% of micro and small business actors in Indonesia do not have access to credit services from banks. Especially, small entrepreneurs living in rural areas. In general, limited access to finance occurs due to the problem of asymmetric information between providers of capital and recipients of capital, namely micro and small business actors.

This research resulted in two main findings, namely, first, related to the main obstacles faced by micro and small businesses in accessing financing, especially in the conditions of the Covid 19 pandemic. Second, related to the response of micro and small business actors related to regulations and credit/Islamic financing guarantee systems.

Problems for Micro and Small Business Actors in Accessing Financing

The micro and small business actors in normal conditions have faced various obstacles, moreover in conditions affected by a pandemic. Based on previous research, it was found that the biggest obstacle faced by micro and small entrepreneurs is in accessing financing. Researcher conducted a survey of micro and small business actors related to what obstacles they face so that micro and small businesses find it difficult to get financing facilities from financial institutions, especially during the Covid 19 pandemic. The respondents may provide more than one answer. A number of answers were given by 125 micro and small business actors.

Based on the tabulation results on respondents' answers, there are five categories of problems faced by micro and small business actors in accessing sources of financing to financial institutions. With respect to the answers of these respondents, the researcher then conducted an indept interview with the selected participants to explore each of the answers below.

Table 1. Problems for micro and small business actors in accessing financing

No	Answers	Frequency	
		Number	Percentage
1	Micro and small entrepreneurs have personal reasons.	16	12,8%
2	Micro and small entrepreneurs feel that the funding costs of financial institutions are relatively high.	34	27,2%
3	Micro and small entrepreneurs are perceived as having bad reputation.	76	60,8%
4	Micro and small business actors are perceived as less skilled in running a business.	84	67,2%
5	Micro and small entrepreneurs find it difficult to provide collateral for funding their micro and small businesses.	112	89,6%

Personal reasons

In the lowest order, personal reasons are the cause of inhibition for micro and small businesses from obtaining funding facilities from banks or other financial institutions. There were 16 respondents or 12.8% of the total 125 respondents who stated that personal reasons prevented micro and small entrepreneurs from obtaining funding facilities from financial institutions.

In the in-depth interview stage for respondents who gave answers for personal reasons, information was obtained that the personal reasons referred to as obstacles for micro and small business actors to obtain credit/financing from banks or other financial institutions, among others, were because respondents felt less confident in dealing with financial institutions, especially due to the problem of business failure that was affected by the Covid 19 outbreak. This was stated by one respondent, "I do not have the confidence to take a loan from a bank. Business is sluggish due to Covid. There are no buyers. Even if you want to sell, it's lousy. How can the bank give us a loan if our business doesn't go smoothly like this situation? I am shame was that I also applied for a loan if the conditions were like this. I am ashamed to apply for a loan in this condition." (R14, interview, May 9, 2020).

Another personal reason that inhibits micro and small business actors was conveyed by another respondent who stated that the respondent did not take financing from a financial institution because he did not get permission from his Partner (husband or wife). This is as conveyed by one respondent, "I really want to develop my business by getting more fund from a bank or cooperative, yes, but my husband did not give permission. My Husband said that getting more debt in this crisis situation will give more burden to the business. It will be better to get credit later, when the situation is back to normal again." (R9, interview, May 9, 2020).

Another obstacle that becomes the personal reason for micro and small business actors in accessing capital to financial institutions is that participants do not want to get bother dealing with financial institutions if they can still borrow it from individuals or families. This was stated by a respondent, "It seems like it is complicated to get loan from a bank. The procedure takes time. If you can borrow from families, just do it first. Borrowing from family is not subject to fines and if you can't pay, we won't have our property confiscated. Business is already difficult to get hit by covid, it will be even more difficult to deal with banks." (R6, interview, May 11, 2020).

Further information from respondents related to barriers to accessing fund for personal reasons was because a number of respondents admitted that they could no longer access fund from financial institutions because their names were included in the category of black listed customers in the Central Bank Checking process. A number of respondents admitted that they previously had bad credit at a leasing agency for motorbike installment transactions. This condition as mentioned by a respondent, “I can no longer take bank loans. My name is already on the black list at the bank. Some times ago, I took a motorbike but it was withdrawn by leasing because I couldn’t pay the installments. Later on, when I tried to borrow money from the bank, it is said that I had to pay off my motorbike loan first. Well, I don’t have the money to pay it off. I can’t afford to pay it off.” (R7, interview, May 9, 2020).

The cost of accessing fund to financial institutions is perceived high

There were 34 respondents or 27.2% of micro and small business actors who stated that the cost of taking out credit / financing debt was still high. Respondents who are micro and small business actors stated that taking funding from financial institutions will increase the cost burden for micro and small business actors. According to the respondent’s explanation, the costs incurred include administration fees and interest costs for loans or financing margins. According to micro and small business actors, these costs are quite high, especially since the business situation is sluggish due to the impact of Covid 19. These micro and small business actors feel that they are unable to pay the fees. This is as stated by one respondent, “I think it costs a lot to take money from bank. There is money for stamp, money for administration, more interest (margin) at the installments payment. Business condition is now still struggling. Buyers are still at home, afraid of getting corona if they go out. It will be harder to pay for the loan at this situation.” (R2, interview, May 9, 2020).

Micro and small entrepreneurs, who are generally small-scale business actors with limited turnover, feel that taking credit/financing from bank will incur additional costs for them as part of the credit/financing application administration process. These costs are felt to them as burdens that prevent them from applying for capital financing to financial institutions.

Having bad reputation

There were 76 respondents or 60.8% of micro and small entrepreneurs stated that according to them it was difficult for micro and small entrepreneurs to get credit/financing because they were considered to have a poor reputation. Respondents stated that according to the bankers, in general micro and small entrepreneurs are considered as businesses that are prone to defaults and difficult to develop. Businesses run by micro and small business actors are generally private businesses or some are family businesses that are managed traditionally. This condition, as complained by one respondent, “We only have small businesses. Bankers usually just look at us as trivial. Other people believed that a small business like ours would never can pay bank loan installments. Moreover, this has been impacted by covid 19 pandemic. The bank would be more distrustful with our business.” (R1, interview, May 10, 2020).

Perceived to be less skilled in doing business

There are 84 micro and small business actors or 67.2% of respondents stated that it is common that micro and small business actors are seen as less skilled in business. Micro and small business actors are generally seen as lacking the ability to manage their business properly, not having the ability to book and report the business’s financial records. This condition was conveyed by one of the participants,

“Indeed, our efforts are small. We know how much capital we spend, how much we spend, how much profit we make, that’s what we will flow again and again. There are indeed simple book records, but the important thing is that we know how the money flows. Bank officers know that we can’t make financial reports. If the report is like professional report, it’s really bad.” (R13, interview on 09 May 2020).

Cannot provide collateral

There are 112 micro and small business actors or 89.6% of respondents stated that in general, they find it difficult to provide assets to guarantee their business funding. This is a common thing experienced by micro and small business actors. It is almost equally experienced by micro and small business actors in terms of providing collateral assets because the business scale is still small so that financial flows are generally confiscated for meeting daily needs. This condition, as stated by the respondent, “Borrowing money from the bank, we ask for a guarantee. Ask for a house certificate, a land certificate. We’re still renting the house. How can we provide guarantee for a business capital loan?” (R5, interview on 10 May 2020).

Five main reasons hinder micro and small business actors from accessing capital to financial institutions. The obstacles faced by business actors in accessing sources of capital to financial institutions to finance their businesses certainly have an impact on the difficulty of the businesses engaged in by business actors to develop. Moreover, the economic situation in the era of the COVID-19 outbreak has worsened the economic condition of the community. This condition certainly strengthens the barriers for micro and small business actors to access capital from financial institutions.

Responses of Micro and Small Business Actors Regarding Islamic Financing

Poor economic conditions due to the impact of the pandemic require special policies that can relax the needs of micro and small business actors. The difficulty of business actors in accessing sources of capital requires solutions, including the existence of regulations issued by the government regarding the existence of credit guarantees. The existence of credit guarantees is one solution to pave the way for micro-business actors to gain access to capital to financial institutions. Credit guarantees also have an Islamic principle-based feature called Islamic guarantees that can be accessed by micro and small business actors in Islamic banks.

This study then surveyed the knowledge of micro and small business actors related to credit guarantee or Islamic financing and the credit guarantee system or Islamic financing. Before the survey was conducted, the researcher provided initial information (grid) to the respondents related to general information regarding credit guarantees as regulated in Law No. 1 of 2016 concerning Guarantees. Grids are also provided related to credit guarantees for financing with Islamic principles-based schemes in Islamic banks. Based on the survey results from 125 respondents, micro and small business actors obtained the answers as shown in the following table:

Table 2. Responses of micro and small business actors regarding Islamic financing

No	Questions	Answer Frequencies	
		Know	Not Know
1	Do you know what credit guarantee is?	19 (15%)	106 (85%)
2	Do you know that credit guarantees can use Islamic financing guarantee scheme in Islamic banks?	5 (4%)	120 (96%)
3	Is Islamic financing guarantee a solution to the problem of access to capital for business actors, especially in pandemic conditions?	122 (98%)	3 (2%)
4	Credit guarantees or Islamic financing guarantees will make it easy for micro and small business actors to default?	6 (5%)	119 (95%)

Literacy on credit guarantee

Regarding the question about the level of knowledge of respondents about what credit guarantee is, the answer is that the majority respondents of micro and small business actors answered that they do not know 106 respondents (85%) while a small proportion of respondents who answered know that there were 19 respondents (15%). This indicates that the socialization and dissemination of information regarding credit guarantees are still very minimal in the community, especially at the level of micro and small business actors.

Literacy on Islamic financing guarantee

Regarding the question about the level of respondents' knowledge on whether the respondents know that credit guarantees can be executed through Islamic financing scheme in Islamic banks. The answer is that the majority respondents of micro and small business actors answered that they do not know 120 respondents (96%) while the rest are very few among them, only 5 respondents (4%). This indicates that the dissemination of information regarding credit guarantees with Islamic financing scheme in Islamic banks are still very low.

The condition of the low literacy of micro and small business actors towards credit guarantees at conventional banks and Islamic financing guarantees at Islamic banks is in line with the reality of the low level of bank financing to the micro and small business sector. The existence of information asymmetry where the creditor does not have adequate information about the credit recipient (the debtor) causes the creditor to apply the prudent principle in the process of granting credit to debtors. On the part of the debtor to get credit or financing, they often do many things to polish the data to make it more attractive to the creditor. In the creditor's perspective, errors in assessing the data of prospective debtors will ultimately lead to failure in the selection process and direct the credit/financing disbursed to become bad. Therefore, it is in this context that the role of the credit guarantee system or Islamic financing guarantee becomes one of the important elements so that micro and small business actors get access to credit/financing to financial institutions.

The urgency of the financing guarantee system

Regarding the question of whether credit guarantee or Islamic financing is a solution to the problem of access to capital for micro and small business actors, the answer is that the majority of respondents, namely 122 respondents (98%) answered agree, while only a few respondents who answered disagreed,

namely only 3 people. (2%). This shows that there are high expectations from the respondents to obtain solutions to problems faced related to difficulties in obtaining capital to finance businesses run by micro and small business actors. It has become a common problem Micro and small business actors have the biggest obstacles in accessing capital to financial institutions, especially the banking sector.

The banking sector also faces its own problems in distributing credit/financing to micro and small business actors due to doubts about the condition of micro and small business actors who generally do not meet the banking criteria (bankable). The existence of credit or financing guarantees from the financing guarantee institution will clear the doubts of the banks or other non-bank financial institutions. Micro and small business actors no longer need to deal with the complexity of selecting a financing application at the bank because there are credit guarantee institutions that provide credit guarantees on behalf of business actors.

Guarantee relations and commitment to complete responsibilities

The next question is whether the credit guarantee system or Islamic financing will make it easy for micro and small business actors to default. The banking sector generally has doubts about the capacity of micro and small business actors to complete credit/financing responsibilities so that micro and small business actors often do not meet banking criteria. With the existence of a credit/financing guarantee institution in the banking perspective, it will reduce the customer's sense of responsibility to pay off the credit/financing because there are already other institutions that guarantee the credit/financing. However, the survey results show that the majority of respondents as many as 119 people (95%) answered disagree and 6 people (5%) answered agree.

This indicates that most micro and small business actors still believe that the existence of credit guarantees or Islamic financing guarantees does not cause micro and small business actors to be negligent and do not apply caution and trust in using funds disbursed by banks or other financial institutions. The answers of respondents who answered disagreed with a total of 6 people (5%) indicating that there were also a minority of respondents who confirmed that the existence of credit guarantee institutions or financing guarantees could make micro and small business actors negligent so that in the end it could lead to the risk of default. This condition requires stronger work to increase the customer's sense of responsibility from the micro and small business actors to complete the responsibility for paying off credit or financing guarantees even though there are guarantee institutions. The existence of a credit guarantee institution must be understood as an institution that provides convenience for micro and small business actors to obtain access to credit or financing guarantees from the banking sector or other financial institutions.

Analysis

This research has shown that the COVID-19 pandemic has exacerbated the problems of micro and small business actors, especially in accessing capital. The results of the survey in this study explain some obstacles for micro and small business actors to access capital to financial institutions during the COVID-19 period, namely personal reasons, the assumption that the cost of accessing capital sources to financial institutions is high, the assumption that micro and small business actors feel they are seen as having a good reputation. unfavorable in the view of financial institutions, MSME actors are seen as less skilled in business, and micro and small business actors have difficulty providing collateral assets to access capital to financial institutions.

This study also shows the low literacy of the actors towards the existence of guarantees, both conventional and Islamic systems. The majority of respondents show a low level of literacy on the existence of a guarantee system for micro and small business actors who access capital from banks. A lower literacy level is also shown in the Islamic guarantee system in Islamic banking.

This research also strengthens the urgency of credit guarantees or Islamic financing as an important solution for micro and small business actors, especially in their deteriorating condition due to the impact of the COVID-19 pandemic. The existence of Islamic credit or financing guarantees according to micro and small business actors is an urgent solution so that they can access capital to run their business and open up opportunities to remove barriers to access to capital that they have faced so far. The results of this study indicate the rejection of the majority of respondents on the assumption that the existence of credit guarantees or Islamic financing guarantees for funding from banks has a negative (counterproductive) relationship with the responsibility of micro and small business actors in paying off the financing they take to banks.

The obstacles faced by micro and small business actors in accessing sources of capital reflect that there need to be policies that can overcome this problem. Moreover, in a deteriorating economic condition due to the outbreak of the covid 19 pandemic. A special policy that can provide wider access to micro and small business actors to obtain sources of capital is one solution that should be considered.

The low literacy of credit guarantees, especially Islamic financing, illustrates that socialization and education to micro and small business actors is still relevant and needs to be improved. Especially when it comes to the theme of Islamic financing. Islamic financial and economic institutions have recently become increasingly popular. Islamic economy is currently being developed in three main sectors, namely banking, non-bank financial institutions, and the real sector economy. Islamic banking and non-Islamic financial institutions are expected to be the main suppliers of capital and financial flows to the real sector economy. Efforts to develop Islamic-based banking and non-bank financial institutions are essential to provide financial institutions that are halal and capable of opening the widest possible access according to the needs of the people. The existence of sharia-based financial institutions is expected to be able to improve the welfare of the people through the support of financial services that will provide opportunities for the people to carry out various activities that require financial support with halal mechanisms from the Islamic finance industry.

There are several solutions provided by the Indonesian government to micro and small business actors with a sharia pattern, including credit distribution or revolving fund financing from the Ministry of Cooperatives and Micro and Small and Medium Enterprises (LPDP-KUKM) with a mudharabah (profit sharing) scheme since 2008 which its implementation through the intermediation of bank and non-bank financial institutions, as well as regulations related to credit/financing guarantees in Law number 1 of 2016 concerning Guarantees which also accommodates sharia-based guarantees. In the COVID-19 pandemic situation, the Indonesian government has also issued a special policy in the form of a protection and recovery scheme for MSMEs, one of which is to regulate guarantees for new MSME working capital loans. The policy is contained in the Coordinating Minister for Economic Affairs Regulation Number 6 of 2020 as amended in Regulation of the Coordinating Minister for the Economy Number 8 of 2020 concerning Special Provisions for Recipients of People's Business Credit Affected by the Covid-19 Pandemic. People's Small Business Credit is a government credit program that is rolled out with a credit guarantee scheme.

In-Law no. 1 of 2016 concerning Guarantee is defined as the activity of providing guarantees by the party providing the guarantee (guarantor) for the fulfillment of the financial obligations of parties who have obtained credit, financing, financing based on sharia principles or service contracts from financial institutions or outside financial institutions guaranteed by the guarantee company. to the recipient of the guarantee (guaranteed).

Based on the rules of Law no. 1 of 2016 it has been possible to have Sharia-based guarantees for MSME actors in Indonesia. In the perspective of Sharia-based guarantees, SMEs that are entitled to financing guarantees must be free from usury, namely illegal addition of income (bathil), among others, in exchange transactions for similar goods that are not of the same quality, quantity, and time of delivery (fadhl), or in lending and borrowing transactions that require the customer receiving the facility to return the funds received in excess of the loan principal due to the passage of time (nasi'ah); maisir is a transaction that is dependent on an uncertain and chancy situation; gharar, namely transactions whose object is unclear, not owned, whose whereabouts are unknown, or cannot be submitted at the time the transaction is made unless otherwise regulated in sharia; haram, namely transactions whose object is prohibited in sharia; or zalim, namely transactions that cause injustice to other parties.

The sharia-based financing guarantee is based on the kafalah contract. Kafalah contract refers to a contract that creates a party guarantee indicating obligations as a joint obligation of the guaranteed party and the guarantor. Kafalah is used by Islamic financial institutions to offer Guarantee services. In the Indonesian context, the kafalah contract has been confirmed through the issuance of the DSN MUI Fatwa No. 74/DSN-MUI/I/2009 concerning sharia insurance. In this fatwa it is emphasized that sharia guarantees are allowed by using kafalah bil ujah contracts with the general provision that the guaranteed object can be all or part of the payment obligation (dayn) arising from sharia transactions or other things that can be guaranteed based on sharia principles. The statement of ijab and qabul must be stated by the parties to show their will to enter into a contract (akad). The amount of the fee (ujrah) must be determined in the contract based on the agreement. The Kafalah bil ujah contract is binding and cannot be canceled unilaterally.

Based on the provisions of Article 38 of Law no. 1 of 2016 concerning Guarantees, it is explained that sharia guarantee activities involve 3 (three) parties, namely the guarantee recipient, the guarantor, and the guarantor, where the guarantor has the right to claim for the fulfillment of guaranteed financial obligations if the guarantor has fulfilled its obligations to fulfill the financial rights of the guarantee recipient if it is guaranteed to fail to fulfill its obligations. In the guarantee agreement, there are 3 main parties, namely the guarantor institution as the guarantor, the bank or financial institution as the guarantee recipient, and micro and small businesses as the guaranteed party.

In this guarantee agreement, there is an agreement regarding the ability of the guarantor institution to fulfill the financial obligations (debts) of micro and small business actors to banks or other financial institutions if the micro and small business actors do not fulfill their obligations to pay their debts to banks or other financial institutions. Micro and small business actors as Guaranteed Parties pay Kafalah Fees (IJK), namely the amount of money received by the Sharia Guarantee Company and Sharia Business Unit from the Guaranteed in the framework of Sharia Guarantee activities. This guarantee agreement is a complementary agreement to the main agreement, namely the credit or financing agreement can be implemented. This guarantee agreement will be canceled if the credit agreement or the debt receivable is deleted.

Micro and small business actors can apply for financing guarantees to guarantee institutions as long as they meet a number of criteria, namely, among others, a feasibility analysis of micro and small businesses as guaranteed candidates is carried out by prospective guarantee recipients, submission of guarantee applications, micro and small business actors applying for guarantees letter confirming the request for the guarantee, and micro and small business actors pay a guarantee fee to the guarantee company. Guarantee institutions need to minimize risk from the outset by properly selecting micro and small business actors by reviewing their character, capacity, and conditions that must be met by ignoring the elements of collateral (collateral) and capital funds (capital).

The existence of a guarantee institution that ignores the guarantee and capital aspects of micro and small business actors but focuses more on aspects of character, capacity, and conditions that must be met will open wider opportunities for micro and small business actors in accessing capital to financial institutions both bank and non-bank. This is a solution to the main problem that hinders micro and small business actors from accessing capital to financial institutions. Micro and small business actors who do not have capital and do not have collateral as a basis for submitting applications for financing to financial institutions can obtain solutions through a financing guarantee mechanism. With the existence of a guarantee institution, micro and small business actors are quite focused on their character as trustworthy business actors, the ability to manage a good business with a prospective business track record, and prepare themselves to be able to meet the terms and conditions set by the guarantor institution.

Research on the condition of micro and small business actors during the COVID-19 pandemic has shown increasing barriers to access to capital due to the impact of covid 19. Existing studies do not analyze the impact of the pandemic which has exacerbated the condition of micro and small business actors and do not provide policy solutions that loosen barriers. they face. The results of this study indicate that there needs to be an easing of policies so that micro and small business actors have greater access to sources of capital. Business actors face a number of obstacles that do not only come from internal themselves in the form of personal reasons, such as the absence of collateral as the basis for submitting capital to financial institutions, the impression that the cost of access to capital is seen as expensive, the perception that business actors are seen as incapable of managing their business and report the financial condition of its business.

This research is also different from previous research because this research is able to show the low literacy of micro and small business actors towards the existence of credit guarantees in conventional banks and even lower on Islamic financing guarantees in Islamic banks. Another difference between the results of this study and previous studies is that the results of this study also show that micro and small business actors have a positive perception of the existence of conventional credit guarantees or Islamic financing guarantees. Including the results of this study also shows that micro and small business actors have a positive perception of the relationship of credit financing in conventional banks with Islamic financing guarantees in Islamic banks on the work ethic of micro and small business actors in completing their obligations.

On the basis of the results of this study which show the increasing problems faced by micro and small business actors in accessing capital to financial institutions due to the deteriorating economic situation due to the impact of covid 19. The existence of a number of obstacles that have surfaced requires action plans and policies that make it easier for business actors micro and small in accessing capital

to financial institutions. Ease of access to capital in the form of socialization and education related to credit guarantees at conventional banks and financing guarantees at Islamic banks is also one of the things that need to be expanded.

CONCLUSION

Micro and small business actors are a segment of business actors who are considered to be quite instrumental in helping economic stability at the lowest level and have a significant contribution to the national economy. However, micro and small business actors are also the segments of business actors that most commonly face obstacles in terms of business development. The most common problem faced by micro and small business actors is the difficulty in accessing business capital. The COVID-19 pandemic has also worsened the condition of micro and small business actors. This study shows that in general, micro and small business actors are constrained in accessing credit/financing to financial institutions, among others, due to the difficulty in providing collateral assets as a basis for applying for credit/financing, the view of financial institutions on Micro and Small Business Actors who are considered less skilled in business, Micro and Small Business Actors are also seen as having an unfavorable reputation, the cost of financing financial institutions is also viewed as high by Micro and Small Business actors, and there are personal reasons that prevent Micro and Small Business actors from accessing financing from Financial Institutions.

This study also shows that the majority of respondents answered that they did not know about the credit guarantee system, let alone Islamic financing. This indicates that there is still a need for wider socialization so that the public can understand the existence of the applicable credit/financing guarantee system and improve the literacy of micro and small business actors who are low. The majority of respondents also answered that the credit guarantee system or Islamic financing is a solution to the problem of access to capital for Micro and Small Enterprises. This indicates that the credit guarantee system or Islamic financing is still hoped for micro and small business actors to be a solution to the difficulty of accessing capital to financial institutions. The majority of respondents answered that the credit guarantee system or Islamic financing would not make it easy for micro and small business actors to default. This shows that respondents believe that micro and small business actors can still be trusted to receive credit/financing from financial institutions.

Islamic financing guarantees basically offer solutions to the needs of micro and small business actors for financing based on Islamic principles. The Muslim population who currently needs an alternative to Islamic financing can find a solution. Thus, the public has a choice in determining the type of financing guarantee based on their beliefs, whether to choose a general financing guarantee or choose Islamic financing guarantee.

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Soundness Index of Zakat Institutions: A Proposed Model for Sustainable Measurement Tool of Zakat Institution

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Abstract. This study aims to formulate the Soundness Index of Zakat institutions to measure Zakat institutions ability to perform needed activities for the institution's sustainability. The research method used in formulating the concept and indicators of the index is a mixed-method using quantitative and qualitative approaches. In preparing the factors, variables, dimensions and indicators of the index, a series of focus groups and public hearings with competent experts, practitioners and academics in the field of zakat is conducted. Soundness Index assesses financial and management factors. Financial ratios are measured quantitatively through financial ratios consisting of four variables, namely Activities, Operations, Liquidity, and Growth. On the other hand, the management Factor is measured qualitatively with a Likert scale of 1 – 5 on three variables: General Management, Risk Management, and Sharia Compliance.

Keyword: Ratio, soundness assessment, sustainability, zakat.

INTRODUCTION

Background

The potential zakat in Indonesia reaches Rp327.6 trillion, where the potential zakat for the corporate and income sector has the most significant potential at Rp144.5 trillion and Rp. 139.1 trillion. The realization of zakat, infaq and sadaqah (ZIS) fundraising in 2019 reached Rp10.3 trillion or an increase of 26% compared to the realization in 2018, which was Rp8.1 trillion (Puskas BAZNAS, 2020). Nevertheless, the realization of the ZIS collection is relatively lower than the donated ZIS by the community to unofficial institutions. The study by Puskas BAZNAS stated that the estimated ZIS collection donated by the public to non-zakat institutions for the past two years has increased. The ZIS collections by the non-zakat institution in 2019 reached Rp58.3 trillion and increased by 5.1% in 2020 to Rp61.3 trillion (Puskas BAZNAS, 2020a).

The survey by Puskas (2020) showed that the reason for the society donating their zakat to unofficial institutions is accessibility (28%), service (25%), credibility (20%), image (15%), recommendations (3%). These data emphasize zakat institutions to evaluate their performance, especially related to the accountability of zakat management (BAZNAS Puskas, 2020b). Accountability is defined by Law Number 23 of 2011 as the management of zakat that can be accounted for and accessible to the

public. Therefore, accountability in managing zakat is one of the essential dimensions in measuring the credibility and accountability of finance in zakat institutions (Yuliatfitri & Khoiriyah, 2016); Zulkurnain, Saad & Abdul, 2016; Sasongko & Nurfadhilah, 2018; Istikhomah & Asrori, 2019).

Puskas BAZNAS has published several indexes and guidelines studies as the assessment tool of zakat management. These indexes and guidelines include the National Zakat Index 2.0 (Puskas BAZNAS, 2020c), Sharia Compliance Index (Puskas BAZNAS, 2020d), transparency index (Puskas BAZNAS, 2019a), Zakat Risk Management (Puskas BAZNAS, 2018), Zakat Utilization Index (Puskas BAZNAS, 2019b) and Finance Ratio of Zakat Management Organizations (Puskas BAZNAS, 2019c).

However, the studies mentioned above are still partial as no study combines and integrates the indices to measure the soundness level of zakat institutions. The measurement of the soundness index currently is only available for profit institutions, such as in financial institutions (banks and non-banks), which are regulated in the Financial Services Authority Regulation and the Regulation of the Deputy Supervision of the Ministry of Cooperatives Small and Medium Enterprises. The soundness level can be utilized as evaluation data to formulate a strategy that can spur the performance of zakat institutions. Furthermore, the zakat institution ideally could manage its finances and risk management. Based on this description, it is necessary to develop an instrument to assess the soundness level of zakat institutions.

Objective

The objectives of this study are (1) to formulate the components of the soundness index; (2) compiling the weights of the components of the soundness index; and (3) compiling the rating of the soundness level of zakat institutions.

LITERATURE REVIEW

Non-Profit Organization

Nonprofit organizations (NPOs), or civil society or non-governmental organizations (CSOs; NGOs) are private, voluntary organizations that are self-governed and legally required to apply surplus ("profit") to the pursuit of their mission rather than distributing it to members, officers, or directors (Anheier, 2014).

Nonprofits, in general has an objective to maximizing value-based member or client group benefits (for instance: the homeless, students, opera lovers, faith adherents). The products of nonprofits either club or collective good character and the distribution is based on solidarity between members or with the client groups. Nonprofits also produce private goods, but usually the nonprofits has cross-subsidize their collective good provision (James, 1983; Weisbrod, 1998). The nonprofit organization has unique characteristics that differ from other forms of institution. Table 1 shows the distinction between government agencies, non-profit organizations, and business firms.

Table 1. Characteristics of government agency, nonprofit organization, and business firms

	Government Agency	Nonprofit Organization	Business Firms
Objective Function	Social Welfare Maxmization	Member or client group benefit maximization	Profit-maximization
Outputs	Public/Collective Goods	Club/Collective Goods	Private goods
Resources	Coercive (Taxation)	Donative	Commercial
Distribution Criteria	Equity	Solidarity	Exchange
Goals	Complex, ambigious	Complex, Diffuse	Specific, Clear
Accountability	Voters	Members	Owners/shareholders
Participants	Automatic/Coercive	Voluntary	Quasi-voluntary (economic needs)
Motivation	Purposive	Solidary/Purposive	Material

Source: Based on Toepler and Anheier (2004) and Anheier (2014).

Furthermore, financial management in NPOs differs from other institutions. It can be distinguished from the goal, scope, short term, budgeting and forecasting, management of cash resources, performance analysis, ratio analysis, and variance analysis. Table 2 describe the characteristics of NPOs financial management.

Table 2. Characteristic of nonprofit financial management

	Characteristics
Goal	Donor utility maximization, cost minimization, avoiding financial risk, maximizing net donations
Scope	Does not generate income its own income and relies on external sources for its funding. Making debt is extremely risky and does not have shareholder
Short-term financial management	For most NPOs the issues of inventory management and accounts receivable management are likely to be less significant but the forecasting/budgeting of future cash requirements and management of cash is critical. The short-term financial management include 1. Budgeting and forecasting 2. Management of Cash Resources 3. Performance Analysis 4. Variance Analysis

Source: Copeland and Smith (1978), Gaertner (1982) from Strydom (2014)

Soundness Index of Islamic Finance

Soundness level of Islamic banks

As regulated in Financial Services Authority Regulation Number 8/POJK.03/2014, the soundness level of an Islamic bank is defined as the result of an assessment of the bank's condition based on risk, including risks related to the implementation of sharia principles and bank performance or known as Risk-based Bank Rating (henceforth, RBBR). RBBR consists of four factors which are 1) risk profile, 2) good corporate governance, 1) profitability (earnings), and 3) capital (OJK, 2014a). Furthermore,

as regulated in Circular Letter Number 10/SEOJK.03/2014 concerning Assessment of the Soundness Level of Sharia Commercial Banks and Sharia Business Units, the bank assessment mechanism states that Islamic banks must have an individual bank soundness assessment (OJK, 2014b).

From the concept of the Islamic Banks soundness level assessment that has been described above, the benchmark results that what can take in the preparation of the soundness index of zakat institution are:

1. Soundness index of zakat institution measured based on risk, both financial factors or non-financial;
2. The assessment method uses a qualitative approach and or quantitative;
3. The assessment can be carried out by the zakat institution (self-assessment) and regulator (National Board of Zakat); and
4. The soundness ranking of zakat Institutions is arranged with a composite rating.

Soundness level of Islamic rural banks

The soundness assessment for Islamic rural banks refers to the Financial Services Authority Circular Letter Number 28 / SEOJK.03/2019 concerning the Islamic Rural Bank Soundness Level Assessment System (OJK, 2019a). The assessment of the soundness level of Islamic rural banks includes an assessment of the following factors: 1) capital; 2) asset quality; 3) profitability; 4) liquidity; and 5) management (OJK, 2019b).

From the concept of the Islamic Rural Bank soundness level assessment described above, benchmark results that can take in the preparation of the soundness index of zakat institution are:

1. The OPZ health index is measured based on risk;
2. Assessment method using a qualitative and or quantitative approach;
3. National Board of Zakat carries out rate rating of Soundness; and
4. Determination of soundness level of zakat institution rating arranged with a composite rating.

Soundness level of takaful

The soundness level of takaful could be assessed from takaful performance on good corporate governance, risk profile, profitability, and capital or funding (POJK Number 28 / POJK.05/2020). The soundness assessment for takaful is regulated in the Financial Services Authority Circular Letter Number 1 / SEOJK.05/2021 concerning the Assessment of the Soundness Level of Insurance Companies, Takaful Companies, Reinsurance Companies, and Retakaful Companies. According to the regulation, the general principles in evaluating the soundness level are 1) risk-oriented, 2) proportionality, 3) materiality and significance, and 4) comprehensive and structured.

From the concept of assessing the level of soundness insurance above, the benchmark results, which can be taken in the preparation of the OPZ soundness index, are:

1. The soundness index of zakat institution is measured on a risk basis;
2. Assessment method using qualitative and or quantitative approaches;
3. Soundness level assessment is carried out independently; and
4. The determination of the OPZ health rating is prepared with a composite rating.

Soundness level of Islamic cooperative / Baitul Mal Tamwil

According to the regulation by the Deputy for Supervision of the Ministry of Cooperatives Small and Medium Enterprises, the Islamic cooperative soundness assessments are carried out on the following aspects: (1) capital; (2) the quality of earning assets; (3) management; (4) efficiency; (5) liquidity; (6) independence and growth; (7) the identity of the cooperative; and (8) sharia principles. In addition, the assessment employs a reward system with a credit score ranging from 0 to 100.

From the concept of the cooperative soundness level assessment above, the benchmark results which can be taken in the preparation of the soundness index of zakat institution are:

1. The soundness index of zakat institution is measured on a risk basis;
2. Assessment method using qualitative and or quantitative approaches;
3. Soundness level assessment is carried out by the Ministry or Department of Cooperatives in charge of the membership area cooperation; and
4. Calculation method using weighting.

Zakat institutions Performance Index

Until now, there is no measuring instrument to assess the soundness level of a zakat institution. There are only a few studies of the BAZNAS Center of Strategic Studies, which is used as an assessment tool for zakat institutions both from a financial and financial perspective non-financial, some of them are *Risk Management*, *Finance Ratio of Zakat Management Organizations*, *Sharia Compliance Index*, *Transparency Index*, and *National Zakat Index*.

Risk management

According to Puskas BAZNAS (2018), risk management in zakat institutions is categorized into eleven risks: strategic risk, corporatization, literacy, operations, property, amil & volunteers, muzakki and mustahik, transfers between countries, reporting, legal and obedience. The risk identification is analyzed further with ERM COSO Modification. Hence it can be divided into 11 types of risk, which are further elaborated into 36 sub-types of risk, and finally, 405 risks are identified.

Finance ratio of zakat management organizations

According to the Finance Ratio of Zakat Management Organizations, which was published by Puskas BAZNAS (2019), there are five types of ratios to measure the financial performance of zakat institutions which are (1) activity ratios, (2) efficiency ratios, (3) ratios amil funds, (4) liquidity ratio, and (5) growth ratio.

Sharia compliance index

The Sharia Compliance Index of Zakat institution by Puskas BAZNAS (2020) identifies and measures the level of sharia compliance of Zakat Institution through four dimensions, thirteen variables and forty-two indicators.

Transparency index

The Transparency Index aims to measure the overall level of transparency by analysing three essential aspects: transparency in financial management, governance and management, and transparency in collection and distribution programs. These three dimensions are further elaborated to 9 variables and 18 indicators relevant to assessing transparency practices in zakat institutions (Puskas BAZNAS, 2019a).

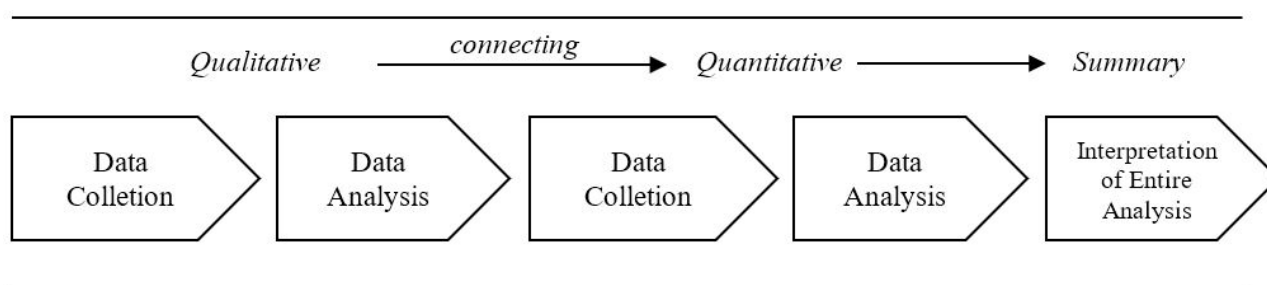
National zakat index

National Zakat Index is used as a measurement standard to assess and evaluate the performance of the national zakat, which covers the support role of the government and society, zakat institutions' performance, and the impact of zakat. The National Zakat Index is formed by two dimensions which are macro and micro (Puskas BAZNAS RI, 2020c).

METHODOLOGY

Research Approach

The research employs a mixed-method which is a combination of qualitative and quantitative approaches. The mixed-method approach is carried out using the Sequential Exploratory Design method. According to Sugiyono (2012), the Sequential Exploratory Design is a method that is performed sequentially, starting from qualitative methods and then quantitative methods. The output of the qualitative method is the source of material to be analysed further in the quantitative method.



Source: Sugiyono (2012)

Figure 1. Sequential exploratory design model

Research Stages

In formatting the soundness level index, three stages have been used, which are (1) desk study, (2) Focus Group Discussion (FGD) and (3) the calculation model. Stages 1 and 2 were observed using qualitative methods, while stages three were analyzed using quantitative methods. The desk study stage was performed by having data collection methods in the documenting method, collecting and reviewing documents. The primary documents are indexes published by Puskas BAZNAS, including (1) National Zakat Index; (2) Sharia Compliance Index; (3) Transparency Index; (4) Zakat Risk Management, and (5) Financial Ratios of Zakat Management Organization.

Meanwhile, the rating process for the soundness level employs Islamic financial institutions issued by the Financial Services Authority and the Ministry of Cooperatives and SMEs as the benchmark. By employing desk study, the research formulates the factors (variables, dimensions and indicators) and the format for a rating of the soundness level.

Next, Focus Group Discussion was performed three times. The first FGD was conducted with the BAZNAS team, which discussed the components of the soundness index. The second FGD was arranged by having a Public Hearing involving experts and academics, which discuss the components of the soundness index and the proposed ranking. The last FGD was conducted with BAZNAS to finalize the components, weighting, ranking format and index calculation methods. Lastly, the final component and calculation model are processed to provide a comprehensive index.

Analysis Method

The content analysis and interactive model analysis are utilized in the paper. Content analysis is an approach in qualitative research that makes text (written or discourse) as the object of study or unit of analysis (unit of analysis) to analyze the meaning of the content of the message (Ibrahim, 2015). Content analysis in this study is utilized to identify and examine the components of the soundness index from various literature sources.

The interactive model analysis qualitative research covers reduction, data display, and data verification and conclusion drawing (Miles and Hubberman, 1994). The interactive model analysis is used to analyze the data derived from FGD and in-depth interviews.

The quantitative analysis method uses the Multi-Stage Weighted Index method. This method combines each stage of weighting in each of the components that make up the index. Therefore, the weighting needs to be done gradually and procedurally. The result of this method is a composite value called the Soundness index of zakat institutions.

RESULTS AND ANALYSIS

The Indicators of Soundness Index of Zakat institutions

The Soundness Index is defined as an index that measures the performance of the zakat institution in performing their activities and maintaining their sustainability. The Soundness Level results from a composite assessment of various aspects relevant to the zakat institution performance. Based on the analysis ranging from a desk study and Focus Group Discussions, the Soundness Level Assessment is conducted by quantitative and qualitative approaches to Financial Factors and Management Factors. The quantitative approach is used to assess financial factors consisting of activity, operational, liquidity, and growth, where all the variables mentioned above are in the form of financial ratios. On the other hand, the qualitative approach is employed to assess management factors consisting of three variables which are General Management, Risk Management, and Sharia Compliance.

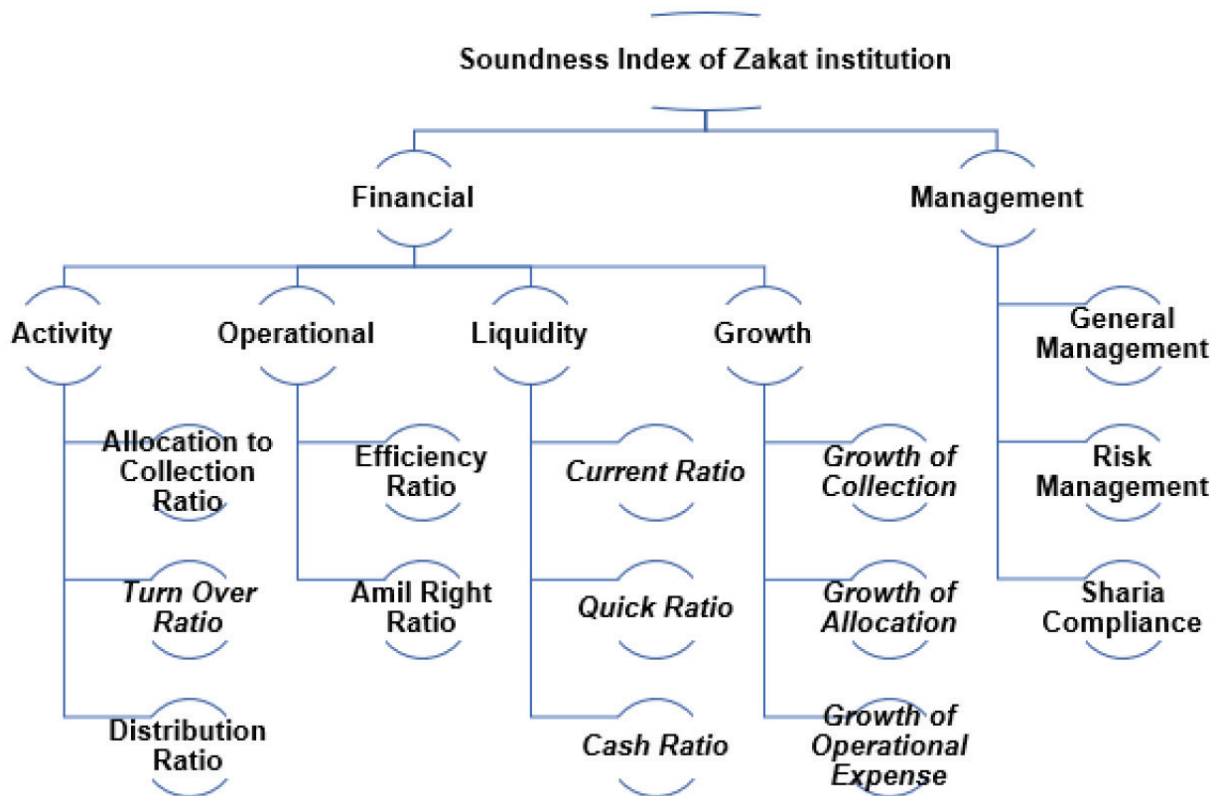


Figure 2. Factors and variables of soundness index of zakat institutions

Soundness Index

Activity

The activity ratio is an assessment to measure a company's effectiveness using its assets (Kasmir, 2017). For zakat institutions, the activity assessment aims to measure the effectiveness distribution of ZIS funds that should be channelled effectively to mustahik. In the Zakat Core Principle (2016), the effectiveness of allocating funds is one of the performance indicators of zakat institutions should prioritize. Meanwhile, according to the Zakat Management Act, the purpose of institutionalized zakat management is to increase the effectiveness of the service in zakat management.

Activities assessment to measure the performance of zakat institutions is analysed on three main ratios as follow:

1. *Allocation to Collection Ratio (ACR)*

Based on the Zakat Core Principles (2016) document, it is important that zakat institutions could ensure and monitor that their institution could perform as their plan and responsibility. Hence indicators are needed to measure their performance. One of the issues that concern the zakat stakeholder is the effectiveness level of distributing funds.

Allocation to Collection Ratio, henceforth ACR, is used to calculate the ability of zakat institutions to distribute zakat funds by dividing total payments by total collection. Based on the book Financial Ratios of Zakat Management Organizations (2019), ACR is measured by eight derived ratios: Gross ACR, Gross ACR Non-Amil, Net ACR, and Net ACR Non-Amil, Zakah ACR, Zakah ACR Non-Amil, Infak Sadaqa ACR, and ACR Non-Amil Infaq Alms.

2. *Zakat Turn Over Ratio*

Zakat Turn Over Ratio is a fund turnover ratio that describes the total funds distributed to the total average receipt of funds. In the ZCP document (2016), the promptness in distributing funds is a performance assessment indicator for zakat institutions. In other words, the faster the distribution of funds, the better the performance of the zakat institutions. Turn over ratio consists of six derivative ratios of Zakat Turn Over Ratio, Average of Days Zakat Outstanding, Infaq Sadaqah Turn Over Ratio, Average of Days Infaq Sadaqah Outstanding, ZIS Turn Over Ratio / ZIS Turnover Ratio, Average of Days ZIS Outstanding.

3. Disbursement Ratio

This ratio is utilized to see the proportion of disbursed receivables, down payment for activities, and assets under management to the total disbursement of funds. This ratio consists of three derived ratios: the Distribution Receivable Ratio, the Activity Advance Ratio, and the Zakat Management Asset Ratio.

Operational

The Operational Assessment is intended to measure the efficiency of the operational costs of zakat institution are over the fundraising. In other words, the higher efficiency of the fundraising, the better the governance of the zakat institution. Therefore, the calculation of the operational ratio is measured by two derived ratios: the efficiency ratio and the amil fund ratio.

1. *Efficiency Ratio*

The efficiency ratio aims to measure the efficiency of zakat institution's operations over the collection costs, operational costs, and human resources costs. The efficiency ratio consists of three derived ratios: the Ratio of Collection Expenses, the Ratio of Operating Costs, and the Ratio of Human Resources Costs.

2. *Amil Fund Ratio*

Amil funds are amil's share of the total funds raised. The ratio of amil funds is utilized to measure the portion of fundraised which are allocated as amil funds. Amil fund itself is intended as operational costs. Therefore, this ratio aims to determine the efficiency and effectiveness of amil funds used in operational activities of collecting and distributing zakat, infaq and sadaqah funds.

In PERBAZNAS No. 1 of 2016 concerning Guidelines for the Preparation of BAZNAS Chapter IV, it is explained that the maximum share of amil rights on funds collected is 12.5% of zakat funds, 20% of infaq/alms funds, while the maximum share of amil right over CSR funds is not explicitly regulated. Therefore, the Amil Fund Ratio is measured using the Amil Rights Ratio, Amil Rights Ratio to Zakat, Amil Rights Ratio to Infaq/Sadaqa, and Amil Rights Ratio to CSR.

Liquidity

The liquidity ratio is used to show the company's capability to cover its short-term liabilities. The liquidity ratio is also known as a ratio to measure the level of the company's capability in paying off its short-term obligations that will mature (Hery, 2018). In the soundness index for zakat institutions, the liquidity assessment is intended to measure the ability of the zakat institution to realize its short-term obligations. The most significant short-term obligation of zakat institutions is the obligation to distribute the funds raised.

The liquidity ratio of zakat institution consists of three derived ratios: the current ratio, quick ratio, and cash ratio. The current ratio is employed to assess the ability of the zakat institution to meet its short-term obligations that will mature by using the total current assets. Thus, the current ratio describes the number of current assets available compared to total current liabilities.

The quick ratio is the company's ability to pay its short-term obligations by using more liquid assets. The most liquid assets in zakat institutions consist of cash and cash equivalents, distribution receivables, and advances for activities. Lastly, the cash ratio is a ratio intended to measure the amount of cash and cash equivalents are available to pay short-term obligations.

Growth

The growth ratio is a ratio to show the percentage growth over time. Companies usually use the growth ratio to calculate the growth of their performance (Kesuma, 2009). In this study, the growth ratio is utilized to describe the growth in the collection of zakat, infaq and sadaqah funds at zakat institutions from previous years. The growth assessment is intended to measure the sustainability of the zakat institution annually through a quantitative assessment of three ratios: growth of the collection, growth of allocation, and growth of operating expense.

Soundness Index on Management Factors

The soundness index on management factors for zakat institutions is measured with three variables. Management assessment is intended to evaluate the managerial ability of zakat institutions in managing their operation, risk management, and sharia compliance, and statutory provisions compliance. This qualitative utilizes a Likert scale of 1 - 5 on three variables: General Management, Risk Management, and Sharia Compliance.

General management

The assessment of general management variables aims to measure the capability of the corporate governance of zakat institutions. The following indicators indicate this assessment: Vision and Mission, Strategic Plan, Annual Budget Plan, Management's Understanding of Vision and Mission, Strategic Plan, Structure Organization, Duties and Responsibilities of Leaders, Standard Operating Procedures, and Reporting.

Risk management

Based on ZCP document (2016) zakat institution is like financial institutions in term of getting exposed to various risks. Nevertheless, the types of risk exposure in zakat institutions are different from financial institutions due to the operational differences between the two institutions. Having the risk, zakat institution needs to do identification, management, and risk mitigation to ensure good governance. Risk Management in ZCP describes the various types of risk: Country and Transfer risk, Reputation Risk and Lack of Trust, Allocation Risk, and Operational Risk and Sharia Compliance.

Puskas BAZNAS (2018) stated that the overall risk of zakat institutions could be grouped into five risk categories: strategic, educational, operational, reporting and compliance. These five categories can be elaborated into eleven types of risk, which are further elaborated into 36 sub-types of risk, and a total of 405 risks have been identified.

In this study, the risk management assessment utilizes five risk dimensions, which are Strategic Risk, Educational Risk, Operational Risk, Reporting Risk, and Compliance Risk. In addition, the risk management measurement scale uses a likelihood measurement scale, as follows: (1) Almost Certain, (2) Likely, (3) Possible, (4) Rare, and (5) Incredible.

Sharia compliance

Based on the Zakat Management Act, one of the principles in zakat management is compliance with sharia. Therefore, the Ministry of Religious Affairs (2018) has compiled sharia audit guidelines for zakat institutions, where the components in the sharia audit are designed to evaluate sharia governance in zakat institutions. Generally, five significant aspects are measured by performance in the sharia audit system, namely the performance of the institution in general, the performance of the Amil, the performance of collection, and the performance of distribution and utilization of zakat.

Furthermore, in ZCP (2016), 18 minimum standards need to be implemented in zakat management, including the 15th standard, emphasising the importance of sharia governance. In other words, zakat institutions should have a sharia board to ensure zakat management is under sharia. In this study, to assess sharia compliance, the following three dimensions are analysed: Sharia Regulation, Sharia Supervision, and Code of Ethics.

Weighting the Soundness Index for Zakat institution

Weighting the financial factor of soundness index

Based on the FGD with zakat practitioners and academics, the weighting of the variables and dimensions of the soundness index on financial factors is elaborated as follows:

Table 3. Weighting of variables and dimensions for financial factor

Variable	Weight of Variable	Dimensions	Weight of Dimension
1	2	3	4
Activity (X1)	0,45	Allocation to Collection Ratio (ACR) (X11)	0,50
		Turn Over (X12)	0,30
		Disbursement (X13)	0,20
		Total Weight	1,00
Operational (X2)	0,25	Efficiency Ratio (X21)	0,50
		Amil Fund Ratio (X22)	0,50
		Total Weight	1,00
Liquidity (X3)	0,15	Current Ratio (X31)	0,33
		Quick Ratio (X32)	0,33
		Cash Ratio (X34)	0,33
		Total Weight	1,00
Growth (X4)	0,15	Growth of Collection (X41)	0,50
		Growth of Allocation (X42)	0,30
		Growth of Operational Expense (X43)	0,20
		Total Weight	1,00
Total Weight	1,00		

Weighting the management factor of soundness index

Based on the aforementioned methodology, the weighting of the variables and the dimensions for the management factors are as follows:

Table 4. Weighting of variables and dimensions for management factor

Variable	Weight of Variable	Dimensions	Weight of Dimension
1	2	3	4
General Management (X1)	0,30	Vision and Mission (X11)	0,13
		Strategic Plan (X12)	0,13
		Annual Budget Work Plan (X13)	0,13
		Amil's Knowledge of Vision, Mission Strategic Plan and Annual Budget Work Plan (X14)	0,13
		Organization Structure (X15)	0,13
		Duties and Responsibilities of Board Director (X16)	0,13
		Standard Operating Procedures (SOP) (X17)	0,13
		Reporting (X18)	0,13
		Total Weight	1,00
Risk Management (X2)	0,40	Strategic Risk (X21)	0,25
		Education Risk (X22)	0,15
		Operational Risk (X23)	0,30
		Report Risk (X24)	0,15
		Compliance Risk (X25)	0,15
		Total Weight	1,00
Sharia Compliance (X13)	0,30	Sharia Policy (X31)	0,15
		Sharia Board (X32)	0,50
		Code of Ethics (X33)	0,35
		Total Weight	1,00
Total Weight	1,00		

Soundness Index Ranking

Criteria for financial factor rating

Based on the calculation for each indicator of the soundness level, the ranking of each variable on financial factors is determined, ranging from 1–5. The ranking criteria for each variable on financial factors are as follow:

Table 5. Ranking criteria matrix for activity variable

RANKING				
1	2	3	4	5
Zakat institution has very effective capability in disbursement ZIS	Zakat institution has effective capability in disbursement ZIS	Zakat institution has fair capability in disbursement ZIS	Zakat institution has poor capability in disbursement ZIS	Zakat institution has not effective capability in disbursement ZIS

Table 6. Ranking criteria matrix for operational variable

RANKING				
1	2	3	4	5
Zakat institution has very effective capability in meeting its short-term obligations	Zakat institution has effective capability in meeting its short-term obligations	Zakat institution has fairly effective capability in meeting its short-term obligations	Zakat institution has poorly effective capability in meeting its short-term obligations	Zakat institution has not effective capability in meeting its short-term obligations

Table 7. Ranking criteria matrix for liquidity variable

RANKING				
1	2	3	4	5
Zakat institution has very efficient capability in the collection and distribution of ZIS funds	Zakat institution has efficient capability in meeting its short-term obligations	Zakat institution has fairly efficient capability in meeting its short-term obligations	Zakat institution has poorly efficient capability in meeting its short-term obligations	Zakat institution has not efficient capability in meeting its short-term obligations

Table 8. Ranking criteria matrix for growth variable

RANKING				
1	2	3	4	5
Zakat institution has very excellent capability in the collection and distribution of ZIS funds	Zakat institution has excellent capability in the collection and distribution of ZIS funds	Zakat institution has fair capability in the collection and distribution of ZIS funds	Zakat institution has poor capability in the collection and distribution of ZIS funds	Zakat institution has bad capability in the collection and distribution of ZIS funds

On the other hand, the rating criteria on financial factors are as follows:

Table 9. Ranking criteria matrix for financial factor

RANKING				
1	2	3	4	5
Zakat institution has very excellent financial performance, which is having the ability to manage ZIS funds with a very high level of effectiveness and efficiency so that the institution is able to grow optimally.	Zakat institution has excellent financial performance, which is having the ability to manage ZIS funds with a high level of effectiveness and efficiency so that the institution is able to grow.	Zakat institution has fair financial performance, which is having the ability to manage ZIS funds with enough level of effectiveness and efficiency. However, there are still some weaknesses in the management of funds that can reduce the financial condition of the zakat institution.	Zakat institution has poor financial performance, which has problems in managing ZIS funds, so that it has the potential to endanger the sustainability of zakat institution.	Zakat institution has bad financial performance, namely experiencing financial difficulties that endanger sustainability and potentially cannot be saved.

Criteria for management factor rating

Based on the calculation for each indicator of the soundness level, the ranking of each variable on management factors is determined ranging from 1–5. The ranking criteria for each variable on financial factors are as follow:

Table 10. Ranking criteria matrix for general management variable

RANKING				
1	2	3	4	5
Zakat institution has a very excellent and consistent general management of ZIS management	Zakat institution has excellent and consistent enough general management of ZIS management	Zakat institution has a fair and consistent enough general management of ZIS management	Zakat institution has a poor and not consistent enough general management of ZIS management	Zakat institution has a bad and not consistent general management of ZIS management

Table 11. Ranking criteria matrix for risk management variable

RANKING				
1	2	3	4	5
The management of zakat institution is very excellent in identifying and controlling strategic, educational, operational, reporting and compliance risks.	The management of zakat institution is excellent in identifying and controlling strategic, educational, operational, reporting and compliance risks.	The management of zakat institution is fair in identifying and controlling strategic, educational, operational, reporting and compliance risks.	The management of zakat institution is poor in identifying and controlling strategic, educational, operational, reporting and compliance risks.	The management of zakat institution is bad in identifying and controlling strategic, educational, operational, reporting and compliance risks.

Table 12. Ranking criteria matrix for sharia compliance variable

RANKING				
1	2	3	4	5
Zakat institution fully sharia compliance.	Zakat institution follow the sharia compliance provision.	Zakat institution fairly follow the sharia compliance provision.	Zakat institution poorly follow the sharia compliance provision.	Zakat institution not follow the sharia compliance provision.

Furthermore, the rating criteria for management factors are as follows:

Table 13. Rating criteria matrix for management factor

RANKING				
1	2	3	4	5
Zakat institution has very excellent corporate governance quality, very adequate risk management, and is very compliant with the applicable sharia principles.	Zakat institution has excellent corporate governance quality, adequate risk management, and is compliant with the applicable sharia principles.	Zakat institution has fair corporate governance quality, fair adequate risk management, but has violated few applicable shariah principles.	Zakat institution has poor corporate governance quality, poor adequate risk management, but has violated some applicable shariah principles.	Zakat institution has bad corporate governance quality, inadequate risk management, and not fully shariah principles.

Soundness Index Assessment Stages

The soundness index assessment is assigned in following stages:

Stage I: Scoring of each indicator

The first stage of the soundness assessment process is to calculate financial ratios for financial factors and a likert scale assessment for management factors. The results of the calculation and assessment of each indicator are then assigned as rating based on the established indicator rating criteria. After determining the ranking, the weight of each indicator is then multiplied to obtain the indicator score.

Stage II: Ranking for each variable

After obtaining the indicator score from previous stage, the ranking for each variable is determined by adding up the indicator score for each variable with the following formula

a. **Formula on variable ranking of financial factors**

1. Formula on ranking of activity variable:

$$X1 = 0,50X11 + 0,30X12 + 0,20X13$$

where:

$X1$ is the activity ratio variable

$X11$ is the ACR ratio dimension with weight at 0,50

$X12$ is the turnover ratio dimension with weight at 0,30

$X13$ is the disbursement ratio dimension with weight at 0,20

2. Formula on ranking of operational variable

$$X2 = 0,50X21 + 0,50X22$$

where:

$X2$ is the operational ratio variable

$X21$ is the efficiency ratio dimension with a weight at 0,50

$X22$ is the amil fund ratio dimension with a weight at 0,50

3. Formula on ranking of liquidity variable

$$X3 = 0,33X31 + 0,33X32 + 0,33X33$$

where:

$X3$ is the liquidity ratio variable

$X31$ is the current ratio dimension with a weight 0,33

$X32$ is the quick ratio dimension with a 0,33

$X33$ is the cash ratio dimension with a weight 0,33

4. Formula on ranking of growth variable

$$X4 = 0,50X41 + 0,30X42 + 0,20X43$$

where:

X4 is the growth ratio variable

X41 is the growth of collection dimension with a weight at 0,50

X42 is the growth of allocation dimension with a weight at 0,30

X43 is the growth of operational expense dimension with a weight at 0,20

b. **Formula on variable ranking on management factor**

1. Formula on ranking of general management

$$X1 = 0,13X11 + 0,13X12 + 0,13X13 + 0,13X14 + 0,13X15 + 0,13X16 + 0,13X17 + 0,13X18$$

where:

X1 is the general manager variable

X11 is the vision and mission dimension with a weight at 0,13

X12 is the strategic plan dimension with a weight at 0,13

X13 is the annual budget work plan dimensions with a weight at 0,13

X14 is the Amil's knowledge and understanding of the vision, mission, objective, strategic plan and annual budget work plan dimensions with a weight at 0,13

X15 is the structure organization dimensions with a weight at 0,13

X16 is the duty and responsibility of board director dimensions with a weight at 0,13

X17 is the standard operating procedures dimensions with a weight at 0,13

X18 is the reporting dimensions with a weight at 0,13

2. Formula on ranking variable of risk management

$$X2 = 0,25X21 + 0,15X22 + 0,30X23 + 0,15X24 + 0,15X25$$

where:

X2 is the risk management variable

X21 is the strategic risk dimensions with a weight at 0,25

X22 is the education risk dimensions with a weight at 0,15

X23 is the operational risk dimensions with a weight at 0,30

X24 is the reporting dimensions with a weight at 0,15

X25 is the compliance risk dimensions with a weight at 0,15

3. Formula on ranking variable of sharia compliance

$$X3 = 0,15X31 + 0,50X32 + 0,35X33$$

where:

$X3$ is the sharia compliance variable

$X31$ is the sharia regulation dimension with a weight at 0,15

$X32$ is the sharia board dimension with a weight at 0,50

$X33$ is the code of ethics dimension with a weight at 0,35

Stage III: Determining the composite rating of financial factors and management factors

After determining the variable rating from the previous stage, the ranking is determined at the factor level, which is financial factors and management factors. The ranking of financial factors and management factors uses the following calculation formula:

1. Formula of calculating financial factor of soundness index

$$Financial\ Factor = 0,45X1 + 0,25X2 + 0,15X3 + 0,15X4$$

where:

$X1$ is the activity ratio variable with a weight at 0,45

$X2$ is the operational ratio variable with a weight at 0,25

$X3$ is the liquidity ratio variable with a weight at 0,15, and

$X4$ is the growth ratio variable with a weight at 0,15

2. Formula of assessing management factor of soundness index

$$Management\ Factor = 0,30X1 + 0,40X2 + 0,30X3$$

where:

$X1$ is the general management variable with a weight at 0,30

$X2$ is the risk management variable with a weight at 0,40

$X3$ is the sharia compliance variable with a weight at 0,30

Stage IV: Determining ranking for composite of soundness index

The determination of the soundness index composite rating is assigned by performing a composite calculation of the financial factor ratings and management factor ratings by referring to the following conversion matrix:

ANAGEMENT	1	5	4	2	1	1
	2	5	4	3	2	1
	3	5	4	3	2	2
	4	5	4	4	3	2
	5	5	5	4	3	3
		5	4	3	2	1
		FINANCIAL				

Picture 3. Matrix of soundness index ranking

The following is the composite ranking criteria for the soundness index for zakat institution:

Table 14. Ranking of composite for soundness index for zakat institution

1	2	3	4	5
Zakat institution has a very excellent level of soundness as a result of very excellent management.	Zakat institution has an excellent level of soundness as a result of excellent management.	Zakat institution has a fair level of soundness as a result of good management.	Zakat institution has a poor level of soundness as a result of poor management.	Zakat institution has a bad level of soundness as a result of bad management.

CONCLUSION

Conclusion

The purpose of managing zakat through zakat institutions is to increase the effectiveness and efficiency; hence zakat can benefit to the wider community in alleviating poverty. Therefore, a comprehensive and holistic measurement to assess the performance of zakat institutions is needed. Some studies attempt to measure the performance of zakat institutions, both from the financial aspect and from the institutional aspect. Nevertheless, previous research is still a partial assessment of certain aspects.

Integrating the previous indices and studies, this research aims to be a comprehensive assessment that can measure the soundness level of the zakat institution. To formulate the indicators, a series of focused discussions and public hearings with experts, practitioners, and academics in zakat are conducted. There is also a pilot project process for three zakat institutions at the national, provincial, and city/district levels.

Recommendation

In formulating the index which require solid foundation for the methodology process, this study recommends important issues for zakat stakeholders in Indonesia, as regulators, zakat managers, and as academics. This recommendation is elaborated as follow:

1. For zakat regulators, soundness index should be adopted as reference in performing an evaluation and mapping the performance of zakat institution. Therefore, zakat regulators can formulate a relevant policy instruments for zakat movement in Indonesia.
2. For zakat institutions, soundness index can be employed as a reference in self-assessment on financial and management aspects. The result of the assessment could benefit the zakat institution as management evaluation and formulating needed improvement.
3. For academics, this study can be utilized as a reference in research related to the soundness level of zakat institution. On the other hand, academics can also develop the index further according to the needs of academic research. Hence, there is a more comprehensive and relevant assessment to measure the zakat management in Indonesia.

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Empowering Single Mothers for Economic Independence through BISA Program at Yatim Mandiri

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Abstract. Single mothers are vulnerable and often neglected in the community and do not have equal access to life opportunities despite they are the family's backbone. Accordingly, empowering single mothers is a necessary right of orphaned families, and to serve this cause, Yatim Mandiri offers an economic empowerment program named the BISA program. This study aims to comprehend the zakat utilization through the BISA program at Yatim Mandiri East Jakarta and Surabaya. The researcher employs a qualitative approach where the interviewer serves as the key instrument in the data collection by way of snowball sampling. The results showed that single mothers' empowerment in the BISA program is directed to achieve economic independence in the frame of Islamic-based prosperity, in which the orphaned families can generate new sources of income by opening new businesses or expanding their current businesses using the capital assistance provided by Yatim Mandiri. The recommendations for improving the BISA program are: 1) capital assistance should be given in the form of soft loans; 2) a vigorous online and offline marketing mix tactics should be combined to endorse the participants' businesses; 3) activation of benchmarking activities to other small-medium enterprises; and 4) an establishment of the BISA alumni community.

Keyword: Economic independence, empowerment, orphaned families, zakat utilization.

JES Classification: J15, J16, Z10, Z12.

INTRODUCTION

"Women are the pillars of the state. If the women are good, then the country will be good, and vice versa."
(Anonymous)

The popular proverb above shows the importance of women in society as women will be the first schools for children. For this reason, the role of women is vital in early education at home. Their role is even more pivotal in the orphaned families in which women act not only as the caregivers but also become the backbones of the family or sole providers for their families as they have no other option.

According to the population census conducted by Statistics Indonesia in 2020, the female population for Indonesia was 133.54 million people or 49.42% out of the total population⁴. In 2015, Indonesia was reported to have 9,550,980 widows and hence Indonesia made up the top five number of widows

⁴ Statistics Indonesia, 2021, *Population Census 2020*, Official Gazette of Statistics No. 7/01/Th. XXIV, January 21th, 2021, retrieved from <https://www.bps.go.id>.

in the world, along with India, China, the USA, and Russia respectively⁵. A vast majority of the widows and their orphaned children live well below the poverty line and it means that life can often be very hard for them.

It is an indisputable fact that helping orphans is an Islamic teaching that is explicitly mentioned in the Holy Qur'an, such as the following verse: *“And they give food in spite of love for it to the needy, the orphan, and the captive.”* (Al-Insan: 8, Saheeh International)⁶

The predicament of widows and orphans is also both moral and religious concern as it was reported by Abu Hurairah (may Allah be pleased with him): the Messenger of Allah (peace be upon him) said: *“One who strives to help the widows and the poor is like the one who fights in the way of Allah.”* The narrator said: *I think that he (peace be upon him) added also: “I shall regard him as the one who stands up (for prayer) without rest and as the one who observes fasts continuously.”* (Al-Bukhari and Muslim)⁷

The significance of supporting widows cannot be underestimated or ignored because they need to take care of themselves and their orphaned children without having the financial security and social protection that a husband normally offers. In such conditions, it will put in train a cycle of impoverishment that can last generations, extending deprivation and ending up as a threat to social stability. Mothers should, therefore, be at the center of any strategy and policy-making for poverty eradication. Focusing on mothers has the potential to break the intergenerational cycle of poverty.⁸

Established in 1994, Yatim Mandiri had collected lots of awards – among them, Indonesia Fundraising Award 2020 and Indonesia's National Zakat Agency (BAZNAS) Award 2020 – for nearly three decades delivered extensive programs in education, health, humanity, Islamic preaching endeavor, and economic empowerment. In general, the programs extended by Yatim Mandiri aim to educate orphans and empower them so that they can make a living and regain their dignity and begin on the path to a brighter future. Realizing that lots of those orphans live only with their single mothers, Yatim Mandiri introduced economic development program named *“Bunda Mandiri Sejahtera”* (BISA) or Prosperous Independent Mother as an instrument of zakat empowerment program.

BISA program is targeting poor widows with orphaned children to assist them in enhancing their abilities to provide for their households. In its implementation, the BISA program is designed to improve the quality of widows' life by arranging a set of training covering Islamic teachings, among others reading Qur'an and learning fiqh, motivation, parenting, and entrepreneurship. The program takes place for two years and targets a maximum of 15 widows in each group.

Currently, the BISA program has been implementing in 47 locations all over Indonesia, following the regions in which branch offices of Yatim Mandiri are domiciled. This paper is aimed to figure out the zakat utilization in empowering single mothers for economic independence through the BISA program executed by Yatim Mandiri, specifically in East Jakarta and Surabaya area. The reasons behind the

⁵ Risto F. Harma, 2016, *World Widows Report*, The Loomba Foundation, retrieved from <https://www.theloombafoundation.org>.

⁶ Retrieved from <https://quran.com>

⁷ Retrieved from <https://sunnah.com>.

⁸ Anonymous, 2017, *Empowering Mothers: A Key Strategy to Eradicate Poverty and Achieve Sustainable Development*, accessed July 10th, 2021, retrieved from <https://makemothersmatter.org>.

choosing of those two places are: 1) Yatim Mandiri East Jakarta is a Regional Office 3⁹ which serves as the data center of all programs reviewed in the area of its responsibility; 2) Surabaya is the location of the pilot project (and still running the program) and as the largest branch in Regional 1; 3) The researcher could easily access the information needed and communicate with related parties from both regions.

The administration of the BISA program in all branches is subject to the provisions set by the Head Office. Still, each branch can make necessary adjustments in accordance with their respective local wisdom. To gain a richer source of information so that the researcher can better examine research subjects' views, preferences, feelings, experiences, motivations, etc. and have a deeper understanding of zakat management through the BISA program, a qualitative research method is used by conducting interviews with stakeholders, including to the BISA participants and staffs of Yatim Mandiri (East Jakarta and Surabaya branches). In the final results and analysis, the researcher would like to present the outcomes of the BISA program which were crystallized from data analysis.

LITERATURE REVIEW

Zakat

The Holy Qur'an specifies eight categories for the distribution of zakat in the following verse: "*Zakat expenditures are only for the poor and for the needy and for those employed for it and for bringing hearts together (for Islam) and for freeing captives (or slaves) and for those in debt and for the cause of Allah and for the (stranded) traveler - an obligation (imposed) by Allah. And Allah is Knowing and Wise.*" (At-Tawbah: 60, Saheeh International)¹⁰

Based on the verse, the Islamic Religious Council of Singapore further explains the definition of each beneficiary: 1) Fakir (the poor) – One who has neither material possession nor means of livelihood or one who suffers, and has no means to sustain his/her daily needs; 2) Miskin (the needy) – One who has insufficient means of livelihood to meet his/her basic needs; 3) Amil (zakat collector) – One who is appointed to collect Zakat and the expenses incurred in the administration of Zakat; 4) Mu'allaf (convert) – One who recently embraced Islam; 5) Riqab (slave or bondsman) – One who is freeing himself/herself from the bondage or shackles of slavery; 6) Gharimin (person in debt) – One who is in debt and needs assistance to meet his/her basic needs; 7) Fisabilillah (Allah's cause) – One who strives in the cause of Allah for the betterment of the community; and 8) Ibnussabil (wayfarer) – Stranded travelers on a permissible journey.¹¹

⁹ Regional Office 1 covers: Banyuwangi, Blitar, Bojonegoro, Gresik, Jember, Jombang, Kediri, Kepanjen, Lamongan, Lumajang, Malang, Mojokerto, Pasuruan, Probolinggo, Sidoarjo, Surabaya, Tuban, Tulungagung; Regional Office 2 comprises: Balikpapan, Kudus, Madiun, Magelang, Makassar, Maros, Pekalongan, Ponorogo, Purwokerto, Samarinda, Semarang, Solo, Sragen, Yogyakarta; and Regional Office 3 includes: Bandung, Batam, Bekasi, Bogor, Cirebon, Depok, West Jakarta, South Jakarta, East Jakarta, Lampung, Medan, Palembang, Serang, Tangerang.

¹⁰ Retrieved from <https://quran.com>.

¹¹ Anonymous, *8 Asnaf of Zakat*, the Islamic Religious Council of Singapore, accessed July 10th, 2021, retrieved from <https://zakat.sg>.

In relation to zakat management in Indonesia, Islamic values have been assimilated into a specific law where it is regulated by the Indonesian government under Law Number 23 of 2011 concerning Zakat Institution Governance. According to the Law, zakat utilization is an activity of planning, implementing, and coordinating the collection, distribution, and management of zakat (Article 1). In Article 27, it is stipulated that zakat can be utilized for productive businesses in the matter of treating the needy and upgrading people's quality, in which such utilization is conducted when the mustahik's¹² basic needs have been fulfilled. Furthermore, the elucidation of Article 27 explicates that: 1) "productive business" is a business that can increase income, the standard of living, and public welfare; 2) "upgrading people's quality" is an elevation of human resources; and 3) mustahik's basic needs include food, clothing, housing, education, and health.¹³

Empowerment

Empowerment is viewed as a process or an outcome. Looking broadly, it is a process by which people, organizations, and communities gain power. The focus of empowerment as an outcome is more on solutions than problems. Empowerment at the community level is people uniting to accomplish common goals. Two underlying assumptions exist in the literature regarding empowerment and the community. *First*, every person has the potential to become empowered. *Second*, it is an assumption that empowered communities develop from empowered individuals working together to bring about a mutual goal for that community. Fostering relationships within the community is an integral part of successful empowerment.¹⁴

Individual empowerment is a process of personal development. The process involves both development of skills and abilities and a more positive self-definition. People testify to a better feeling about themselves, a sense of more self-respect, and self-esteem. A new self-confidence and a feeling of self-efficacy are connected with a redefinition of the self, and the latter is closely linked with a real improvement in personal knowledge, abilities, skills, resources, and life opportunities. A higher level of personal activity makes possible more effective interpersonal relations. Since self-perception is based on achievements in the real world, there is a clear positive interaction between the development of self-confidence and reinforcement of personal ability.¹⁵

The empowerment of women is not only imperative but also crucial for the all-round development of society and the nation as a whole. The issue of "women's empowerment" has become a central point in the programs and activities of the United Nations and other Government and Non-Government Organizations.¹⁶ A broad range of organizations has committed themselves to the goal of women's economic empowerment. These organizations realize that economically empowering women is

¹² Mustahik is zakat recipient.

¹³ Law Number 23 of 2011 concerning Zakat Institution Governance.

¹⁴ Lisa M. Haddad and Tammy J. Toney-Butler, *Empowerment*, 2020, accessed July 10th, 2021, retrieved from <https://www.ncbi.nlm.nih.gov>.

¹⁵ Elisheva Sadan, 1997, *Empowerment and Community Planning: Theory and Practice of People-Focused Social Solutions*, translated from Hebrew by Richard Flantz, retrieved from <http://mpow.org>.

¹⁶ Keshab Chandra Mandal, 2013, *Concept and Types of Women Empowerment*, *International Forum of Teaching and Studies*, Vol. 9 No. 2.

a win-win that can benefit not only women but society more broadly. It promotes women's ability to get their rights and well-being while also reducing household poverty, increasing economic growth and productivity, and increasing efficiency.¹⁷

Under Islamic teachings, women's empowerment is encouraged by the Holy Qur'an: "*The believing men and believing women are allies of one another. They enjoin what is right and forbid what is wrong and establish prayer and give zakat and obey Allah and His Messenger. Those – Allah will have mercy upon them. Indeed, Allah is Exalted in Might and Wise.*" (At-Tawbah: 11, Saheeh International)¹⁸ Another important verse in the Qur'an reads, "... *And when you are told, "Arise", then arise; Allah will raise those who have believed among you and those who were given knowledge, by degrees. And Allah is aware of what you do.*" (Al-Mujadila: 11, Saheeh International)¹⁹ Besides, the Prophet Muhammad (peace be upon him) also promoted equal access to education, teaching us that, "*Seeking knowledge is a duty incumbent on every Muslim ...*" (Ibn Majah: 224)²⁰

METHODOLOGY

This research employs a qualitative approach to understand the phenomena, in which the goal of qualitative research is emic (to describe and analyze the world as it is experienced, interpreted, and understood by people in the course of their everyday lives).²¹ This study took place in East Jakarta and Surabaya and lasted for two months (June – July 2021) starting from a preliminary review of the literature to paper writing.

The researcher gained data from two sources, namely primary and secondary. Primary data is the data obtained from interviews with the relevant informants, including BISA participants and the staffs of Yatim Mandiri (East Jakarta and Surabaya branches). Interviews with staffs of Yatim Mandiri were carried out in-person and via telephone, while interviews with the BISA participants were performed via telephone only. The interviewer serves as the major instrument in the collection of data over the snowball sampling.

As a data collection tool, an interview guide consisting of a set of open questions to each of the respondents was designed which allowed for a more participatory process. The questions were slightly updated for most cases according to the background of the participant to keep the conversation relevant. In many cases, the order of questions was changed without compromising the integrity of the topics to allow informants to elaborate on the questions in more detail. To measure the implementation of the BISA program in empowering orphaned mothers, the following framework is used to build interview questions to be addressed to the BISA participants.

¹⁷ Anne Marie Golla, Anju Malhotra, Priya Nanda, and Rekha Mehra, 2011, *Understanding and Measuring Women's Economic Empowerment: Definition, Framework and Indicators*, International Center for Research on Women (ICRW), retrieved from <https://www.icrw.org>.

¹⁸ Retrieved from <https://quran.com>.

¹⁹ Ibid.

²⁰ Retrieved from <https://sunnah.com>.

²¹ Arthur J. Cropley, 2021, *Qualitative Research Methods: A Practice-Oriented Introduction for Students of Psychology and Education*, 3rd updated, revised, and enlarged edition, University of Hamburg.

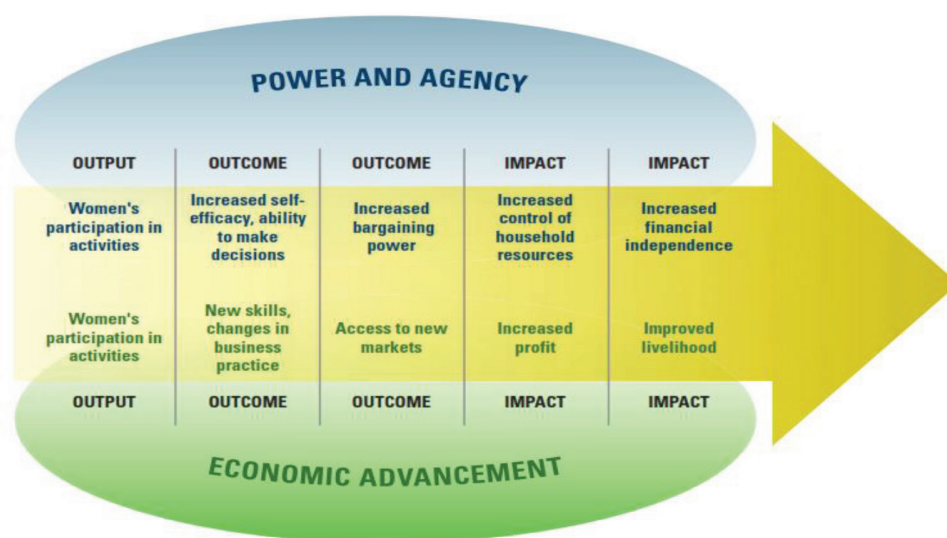


Figure 1. A framework to measure women's economic empowerment²²

The secondary data is the data gathered from optional sources such as books, journals, reports, documents, and the web. To validate, challenge, or extend existing findings, the researcher used triangulation as a mean by which an alternate perspective is used. This was undertaken to prevent misinformation/misinterpretation or data bias exhibited in this paper.

The data obtained in this study are in the form of descriptive qualitative data and analyzed using qualitative data procedure through four stages (steps), namely: familiarization, data reduction, data display, and report writing. In the first place, the researcher must become familiar with the variety and diversity of material gathered before kicking off the process of filtering and sorting data. The next step is engaging in the data reduction process which is valuable to edit the data, summarize it, and make it presentable. Afterward, data display roughly involves using textual representations of the data to select segments that best illustrate the researcher's concepts of interest. Lastly, drawing conclusions in the analysis involves making meaningful statements about how the data illustrates the topic of interest. In other words, the researcher draws the relevant meaning, structure, or processes out of the data based on the type of analysis the researcher chooses.²³

RESULTS AND ANALYSIS

Overview of BISA Program

BISA program was the first economic empowerment program created by Yatim Mandiri using zakat funding. It was initially launched in 2013 at Yatim Mandiri Surabaya branch. It was introduced as the extension of the prior program called "GENIUS", a program that providing informal mentoring and guidance targeted to orphans and poor people in areas who have not been able to fully enjoy

²² Anne Marie Golla, Anju Malhotra, Priya Nanda, and Rekha Mehra, 2011, *Understanding and Measuring Women's Economic Empowerment: Definition, Framework and Indicators*, International Center for Research on Women (ICRW), retrieved from <https://www.icrw.org>.

²³ Esubalew Aman Mezmir, 2020, *Qualitative Data Analysis: An Overview of Data Reduction, Data Display, and Interpretation*, Research on Humanities and Social Sciences, Vol. 10 No 21, retrieved from <https://www.iiste.org>.

education.²⁴ In consideration of the condition of those targeted children who live with their only single mothers and with the intention to improve their quality of life, Yatim Mandiri then created the BISA program to empower the mothers so that the family can be more independent and achieve a better life.

In its implementation, the BISA program was designed for assisting orphaned mothers in the field of spiritual development (Islamic and Qur'anic study), Islamic parenting, and household economic strengthening. Through the BISA program, it is hoped that the understanding of the Islamic and Qur'anic teachings of the orphaned mothers can escalate, so that they can support the educational process of their orphans. In addition, this program is expected to help reduce a family's vulnerability to poverty, increase economic independence, and improve mother's ability to provide for their children. In this sense, Yatim Mandiri has collaborated with a number of companies that entrusted Yatim Mandiri to help them managed and utilized their funds of Corporate Social Responsibility (CSR) to multiply the reach and benefits of the BISA program.

Eligibility Criteria of BISA Participants

There are at least five criteria to select the participators of the BISA program, namely: 1) A Muslim woman; 2) An orphaned mother; 3) Poor family; 4) Productive ages (interval between ages 25 and 50²⁵); and 5) Follow the rules of BISA program and Yatim Mandiri. These criteria are subject to change, especially in terms of age limit. One staff of the BISA program said that in some cases, they would have also accepted a Muslim woman who was over age 45 (age interval at that time was 25 and 45) because a quota of 15 participants per batch was still available. Besides a discretion of waiving age requirement, there was also a case in which a participant was not an orphaned mother. On the whole, if the minimum of two requirements is met by the potential beneficiaries and the quota is still possible, then there will be relaxation on this qualification criteria because the heart of the program is to help empower the poor mothers.

Flow of BISA Program

The flow of the BISA program can be seen in figure 2 below.

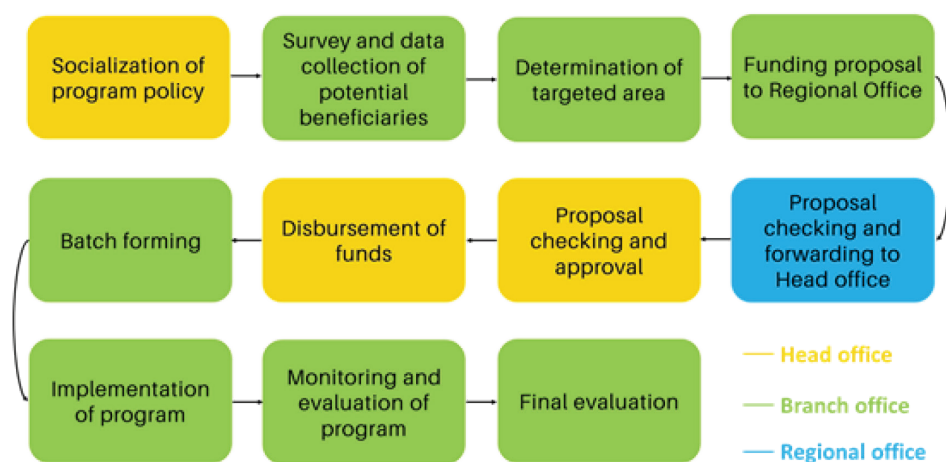


Figure 2. Flow of BISA program²⁶

²⁴ Anonymous, accessed July 17th, 2021, retrieved from yatimmandiri.org.

²⁵ In 2016, the interval between ages 25 and 45 and in 2021, the interval between ages 25 and 50.

²⁶ Adapted from Guidance of Orphaned Mothers Empowerment (BISA) Program, 2021, Yatim Mandiri.

The above flow shows that there are three key actors in executing the BISA program at Yatim Mandiri: Head Office, Regional Office, and Branch Office. Each of the offices has its respective role such as:

- a. Head Office will be responsible for disseminating the program policy applicable for the current year, checking the incoming proposals advanced by the Regional Office, and then disbursing the funds for the program directly to the Branch Office. To track the implementation and outputs systematically and measure the effectiveness of the program, the Head office will conduct biannual and annual monitoring and evaluation and final appraisal of the program.
- b. Regional Offices will be in charge of program review and endorsement and provide technical support to Branch Offices, particularly in the area of program development.
- c. Branch Offices will deal with pre, during, and post-implementation of BISA program, including conducting survey and data collection of potential beneficiaries, determination of targeted area, writing a funding proposal addressed to the Head Office, forming a batch or group of recipients consists of 15 beneficiaries, implementing the program, and carrying out monthly monitoring and evaluation of the program. In practice, the survey and determination of targeted area were occasionally used to done by collaboration with local orphanage foundation. A team dedicated to each program comprises of two people: one person is a staff of the branch office and the other one is a volunteer.

Implementation of BISA Program

Duration

The flexibility of the BISA program is not only appeared in the acceptability criteria, but also in the duration of the program accomplishment. The program was originally prepared for two years but in its execution, it could last for more than two years. For instance, batch 1 of the BISA program in Surabaya lasted for five years. The reason behind the prolongation of the program was clear, that was to say, adjustments should be made according to the targeted participants and conditions in the field. Meanwhile, the BISA programs in East Jakarta were implemented for two years, and this was following the provision of program policy.

Based on the data collected from an interview with the program staff, it was known that the pilot project of the BISA program lasted for five years, in which several factors contributing to the extension of the program. *Firstly*, the project was an experimental program introduced to test the feasibility of the program and in the search for an ideal program arrangement to implement.

Secondly, the program was offering soft loans with no interest for the period of one year. The financing was granted on a rotating basis, where in the first stage it would be given to the most diligent and active participants. Also, the readiness of the participants would be taken into account. In the first stage, there would be three participants who would get the loans and they were subjected to pay back the loans within one year, either on monthly basis or just as the payments were at hand.

The nominal amounts of the loans were adjusted based on the analysis of the types of business of the participants and the feasibility survey. The loan limit ranged from IDR 1,500,000/person to 2,500,000/person to support the business in buying possible business machines/tools or providing the business with any supplies needed.

The main idea of giving financial support in terms of concessional funding was to encourage the participants to reach their profit targets so that they could be more responsible for their financial situations. In practice, refunds were not always made by the participants and it was because they were stuck in debt with moneylenders. If the refunds were satisfied by the participants, then the collected money would then be given to the subsequent participants. Nonetheless, if the participants did not repay the loans, Yatim Mandiri would examine the causes and helped out the participants with the situations.

Challenges & Strategies

Community empowerment must be understood as an art of understanding people, including but not limited to their backgrounds, interests, motivations, and perceptions. Only by acknowledging those characteristics, the community empowerment team can more smoothly run any program. Hence, a good dedicated team should be able to some extent connect with the participants to run the program effectively.

Two participants to be interviewed for this research stated that they liked the most the concept of togetherness in the BISA program, in which participants supported each other. They agreed that working in a team would make everything easier. This statement was in pursuance of numerous studies which showed that women prefer to work in teams, men prefer to work alone, and their most important conclusion involved perceptions of relative competence. Women demonstrated less confidence about their own abilities, the researchers said, and more confidence in their potential partners' abilities.²⁷ Moreover, there is a factor of the psychology of the male-dominated society, which results in a gap between men and women related to education, social capital, financial capital, experience, and confidence. As an example, women are not prone to have the kinds of vigorous networks that are so essential to entrepreneurial fortune.

Calling to mind the characteristics of women, here are five major challenges and strategies developed by a program team while empowering single mothers:

1. *Member Generated Engagement*

This was the very first step done by the BISA team, where they were supposed to concentrate on the interactions among community members for its growth and strengthening. At this point, the program team identified the unique individuals who wanted to make a difference where they mingled with other's members' ideas and shaped an impact on the discussions through capacity development. The program staff stated that the process of generating and reinforcing the bond and sense of belonging among participants usually would take place for the first three to six months. In terms of building engagement among participants, the program team once in a while arranged relaxing activities such as a trip to religious sites or amusement parks. Local wisdom was taken into consideration when applying strategy to the programs.

²⁷ Derek Thompson, 2013, *Why Women Prefer Working Together (and Why Men Prefer Working Alone)*, accessed July 18th, 2021, retrieved from www.theatlantic.com.

2. Member's Active Participation

Making the new members comfortable in the group was a challenge to every community development. So, to activate the members' participation in every process of the BISA program, the program team would ask beneficiaries to sign a commitment letter stating their approval and willingness to play a part in each activity during the program. However, this commitment letter was not always applied in all areas since some adjustments were made in line with the types of community members. Another strategy to encourage the active participation of each member was by distributing monthly assistance in the form of groceries. Even so, the exact date of monthly distribution should not be known by the participants so that they would attend every meeting or project arranged by the team. Additionally, there was a worship control book as a habituation approach to developing an improved routine of worship. Those who performed the best based on the evaluation of the control book would be rewarded with a gift to make them felt appreciated and uplift their spirits of worship.

3. *Lack of Motivation*

The most difficult part in growing the community is actually to continue the enthusiasm/motivation to keep following the entire process up to the end. Accordingly, the program team needs to listen to their participants and tailor techniques to fit each person. One of the strategies arranged by the BISA team to keep the participants motivated during the program was by organizing sharing sessions from a successful person or other groups with similar backgrounds so that the participants could relate and get inspired from them. By allowing successful people to share their personal experiences with the participants, the motivation and engagement increased automatically. Participants started generating curiosity towards upcoming contents and learning. However, noticing that motivation was not permanent, motivating the participants was then done on a regular routine.

4. Monetization Model for the Community

One of the goals of empowering orphaned mothers is to set a path for poverty alleviation and in the long run, it is essential for achieving economic growth and social transformation. To fulfill this goal, the orphaned mothers as the BISA participants were acquainted with a set of new skills which would be beneficial for supporting their new businesses or current businesses. This set of new skills started from cooking skills in which the participants learned how to make various processed foods like assorted fried snacks and cakes, packaged snacks, and frozen foods that could be alternatives to their income sources.

One of the participants said that selling packaged snacks was more profitable than frozen foods because frozen foods would need a freezer to preserve their qualities and there would be an additional cost in terms of electricity cost. Another source of income that was also considered quite moneymaking was the cake orders that sometimes came in.

As a part of marketing skills, the participants were equipped with the product packaging knowledge so that the participants knew how their product packaging could create a lasting impression on the shelf and in the minds of their customers, aside from its main function to keep the products safe during shelf storage or shipment. Besides, the participants were given the knowledge and direct experiences on how to promote their products to prospective buyers, such as with participation in bazaar. The program team also prepared an online marketing training using social media like Facebook, Instagram, and WhatsApp to hit more customers beyond their local environments.

Along with the packaging and promotion skills, the participants were also trained to identify and classify their potential buyers so that they could maximize the sales and reach as many as possible target markets. Knowing who the competitors were and what they were offering, not to mention, was a part of the training sessions since it was a powerful tool to help a business minimized the risk and improved business performance.

Finally, financial report was valuable to keep track of business finance. In this respect, the participants were guided to record each sale and expense in the profit and loss statement occurring every day.

5. *Contents Experiments*

Mother empowerment in the BISA program is a holistic approach grounded in principles of spirituality, parenting, and economy. Spirituality is the intrinsic motivation that directs and guides behavior towards the construction of a broader personal meaning. Thus, it is so important for mental and physical well-being. In the BISA program, this spiritual aspect was embodied in several core activities, including fiqh, tahsin, and monotheism.

Speaking of parenting, each child needs a good environment in which they can learn and follow a good culture. In this sense, a single mother as the only parent of orphaned children needs to assist the growth and development of their children adjusted to their age levels. In line with the spirituality aspect, the principle of Islamic parenting has the objective of raising children who are expected to be successful both in this life and in the afterlife. To help single mothers on the journey to meet the goal, the BISA program was combined with the socialization of scholarship programs granted by Yatim Mandiri and external parties, sessions about the position of children in Islam, and the psychology of child development from an Islamic perspective.

From an economic point of view, the BISA program comprehended identification and recognition of self and environmental potential, practical financial management, simple manual bookkeeping, product packaging and basic marketing, and the virtue of infaq and alms. All of those contents were combined and held alternately so that the participants did not get bored.

Monitoring and Evaluation of BISA Program

Indicators of achievement for monitoring and evaluation of the BISA program can broadly be divided into three scopes based on the contents of the program:

a. *Spirituality*

Zakat is the third of the five pillars of Islamic faith, concerning the wealth and welfare of the society that promotes closing the gap between the poor and the rich. The efficient and systematic zakat utilization can magnify its prospect as an instrument of human development, particularly among Muslims. Accordingly, the optimum management of zakat funds is key to improving the quality and potential of every Muslim. In such a way, Yatim Mandiri specifies five measures of spirituality in assessing the BISA program:

1. Syari's Appearance

The identity of the person is embodied in the body by clothing, and the appearance of Muslimah is regarded as a representation of faith. Thus, the BISA participants were recommended to wear syar'i hijab as obliged in the Qur'an:

And tell the believing women to reduce (some) of their vision and guard their private parts and not expose their adornment except that which (necessarily) appears thereof and to wrap (a portion of) their headcovers over their chests and not expose their adornment (i.e., beauty) (An-Nur: 31, Saheeh International)²⁸

2. Regular Salah

Salah is the second pillar of Islam and is the obligatory Muslim prayer, repeated five times each day. It is one of the primary elements of success in the world and the hereafter commensurate to what is mentioned at the beginning of Surat Al-Mu'minin: *“Certainly will the believers have succeeded. They who are during their prayer humbly intent.”* (Al-Mu'minin: 1-2, Saheeh International)²⁹

In the Qur'an, there are about 35 verses that discuss zakat, 27 of which the word “zakat” is always adjoined to the word “salah”. This shows that zakat and salah have equal positions and it is also believed that whoever leaves zakat then has left the salah, and vice versa. Allah SWT said: *“And establish prayer and give zakat and bow with those who bow (in worship and obedience).”* (Al-Baqarah: 43, Saheeh International)³⁰

“... But if they should repent, establish prayer, and give zakat, let them (go) on their way. Indeed, Allah is Forgiving and Merciful.” (At-Tawbah: 5, Saheeh International)³¹ As to this criteria, the participants were equipped with a worship control book to help the program team examined their consistency and continuation in practicing salah.

3. Practising Sunnah

Practicing Prophet Muhammad's teachings, actions and sayings is essential for Muslims since the sunnah offers the principles that are needful to building an ideal society. Hence, the importance of the sunnah in the lives of Muslims today, cannot be underestimated. The sunnah provides Muslims with direction about how to follow a lifestyle that complies with the morals and values of the Islamic faith. In the BISA program, the participants were motivated to practice sunnah prayer and fast. Both practices were evaluated over the worship control book.

4. Understanding the Basics of Aqidah

The meaning of aqidah is the content of the pillars of faith, comprises: a) Faith with Allah; b) Faith with the angels; c) Believe in His books; d) Believe in His Apostles; e) Believe in the last day; and f) Believe in destiny, both good and bad. Referring to this, aqidah teaching played an integral part in the execution of the BISA program as it was believed that the participants with faith would live a good life and would, in turn, create a significant and positive impact on people around them.

5. Improved Qur'an Reading

“Those to whom We have given the Book recite it with its true recital. They (are the ones who) believe in it. And whoever disbelieves in it - it is they who are the losers.” (Al-Baqarah: 121, Saheeh International)³²

²⁸ Retrieved from <https://quran.com>.

²⁹ Ibid.

³⁰ Ibid.

³¹ Ibid.

³² Ibid.

In the spirit of the above verse, tahsinul Qur'an or improve the reading of the Qur'an is a manifestation of the faith of a Muslim. In other words, a Muslim who does not try to upgrade his/her Qur'an recitation, then his/her faith in the Qur'an as Allah's book should be questioned as good recitation is a mirroring of his/her belief in Allah's revelation. So, this factor was also used to measure the usefulness of the BISA program which was supported by zakat funds.

b. *Parenting*

The significance of parenting derives from its role as a buffer against adversity such as poverty or delinquent influences, so, it becomes important to count this essence on the appraisal of the BISA program. In this matter, there are three measures of parenting to be assessed in the BISA program:

1. Supporting Higher Education for Children

Most of the BISA participants only graduated from junior high or senior high school. A study reported that people whose parents did not hold a degree who entered the workforce straight out of high school were more likely to believe that a college degree was not worth the cost or that they did not need further education to pursue their desired career.³³

Among the many roots of global poverty, one seed is prominent: education. Indeed, not every person without an education is living in extreme poverty, but, most of those living in extreme poverty do lack basic education.³⁴ To this end, pursuing higher education is one of the smartest things to do if someone wants to fight poverty. Even though getting a degree is only one step on the road to fighting poverty, but, it is an important step to take.

The fact that the BISA participants were trapped in poverty would also be more likely to keep their children out of school, which means that their children would also have a greater chance of living below the poverty line, emphasized education factor to be one of the foremost aspects in evaluating the success of BISA program. To support higher education for those participants' children, the BISA team would have collaborated with the GENIUS team and also scholarship programs granted by Yatim Mandiri or external parties.

The main goal of this point is to promote education as the great equalizer which can unlock the door to jobs, opportunities, resources, and skills that orphaned families need to not just survive, but thrive. To put it simply, access to high-quality primary education and supporting child well-being is a solution to the cycle of poverty.

2. Understanding Basics of Islamic Parenting

Single mothers are the only ones charged with the responsibility to lead, guide, and take care of children. If left alone, the children can go either way depending on whom they meet and interact with. Hence, Yatim Mandiri pays serious attention to parenting, especially in the orphaned families, and pegged this as one of the indicators to be evaluated in the implementation of the BISA program. To help the BISA participants better understood their important roles, the BISA team elaborated on the position of children in Islam and inspirational Islamic stories in educating and guiding children for instance the story of Luqman al-Hakim.

³³ Anonymous, 2019, *Correlation between Parents' Education Level and Children's Success*, accessed July 21th, 2021, retrieved from degree.lamar.edu.

³⁴ Olivia Giovetti, 2020, *How Does Education Affect Poverty? It Can Help End It.*, accessed July 21th, 2021, retrieved from www.concernusa.org.

3. Involving Islamic Parenting Style

Islamic parenting style was also pinned to evaluate the accomplishment of the BISA program as parenting style could influence everything from how much the children weighed to how they felt about themselves. Scientists have published survey results showing that children who receive positive attention and care from their parents tend to have high incomes, high happiness levels, academic success, and a strong sense of morality.³⁵ As such, it was crucial to ensure that the type of parenting style was supporting healthy growth, development, and the future of the orphaned children. Viewed in this way, the psychology of child development as framed within the perspective of Islamic philosophy was taken into account.

c. *Economy*

The BISA participants came from different work backgrounds: janitor, housemaid, laundress, micro-business owners, and unemployed. Even so, the BISA program was arranged to empower single mothers economically by way of driving all participants to have their own businesses so that they could become financially independent. To get to this goal, the BISA program would be evaluated from the economy perspective using these seven points:

1. Having a Business

To help participants generate another source of income from the existing ones, each participant of the BISA program was given business capital in the form of soft loans or business assistance. The capital was addressed to all participants: those with existing businesses and without preceding businesses.

As discussed before that the nominal value of the capital varied from one participant to another depending on their types of business. Normally, the range would fall between IDR 1,500,000/person to 2,500,000/person, yet, it was adjustable in its execution, so, a beneficiary could receive under that range. A BISA participant of batch 2 in East Jakarta said that she received a capital of IDR 600,000 without repayment terms, and another participant from batch 1 revealed that she was granted a capital of IDR 2,000,000 without refund terms. Their contexts were slightly different from Surabaya participants who were liable to repayment terms. However, the BISA team carried out a business assessment on a weekly or monthly basis for both participants in East Jakarta and Surabaya.

Given the circumstances that there were differences in the capital distribution, the policy has somewhat created inequality among the participants as it could drive different results or impacts on their businesses. Therefore, the BISA team was highly recommended to consider enjoining two participants or more to build a group business, instead of an individual business. This is aimed to promote fairer dissemination of the capital, elevate more sustainable business, and accomplish a bigger impact on the participants' life. Noam Wasserman in the Founder's Dilemmas, who studied 10.000 technology and life sciences startups, found that the most stable way to start a company is a group of strangers, not coworkers, family, or friends, as strangers have fewer expectations of each other. There is no question of jeopardizing friendships

³⁵ Kobe University, 2016, *How Your Parenting Style Affects Your Child's Future*, accessed July 19th, 2021, retrieved from www.sciencedaily.com.

when they go wrong or in trouble. Therefore, companies created by friends are more likely to fail due to dependency reasons, related to people being overconfident and underprepared (Jones, 2021).³⁶

2. Ability to Manage Family Finance

In the matter of family finance, the BISA participants were introduced to basic money management which went into meeting the family's everyday expenses, handling unexpected bills, and saving for the future, not to mention the separation between business and family finances. Related to this measure, the evaluation would be followed up once a month to monitor the total savings of the participants in the previous month.

3. Basic Bookkeeping Skill

Basic bookkeeping skills covered profit and loss statements to record each sale and expense on day to day basis. This bookkeeping was made manually, so, each participant was supposed to have their own business finance record book so that the BISA team and the participants themselves could monitor the business progress, identify sources of income, and take necessary actions accordingly.

4. Conception of the Importance of Packaging and Marketing

The importance of product packaging and marketing in every business is undebatable and, therefore, they became an integral part of the training prepared for the BISA participants. Nevertheless, the employment of proper product packaging and marketing was not operative yet due to the factor of funds and team constraints for each program.

A BISA participant disclosed that once the program was over, she found it hard to join a bazaar to market her products because she had to be a member or part of a community to be able to participate in the bazaar. The magnitude of participating in bazaar events cannot be underrated since it has considerable benefits to the business owners, among others: 1) acquiring potential buyers (sales leads); 2) generating direct sales during the event; 3) boosting the business image and visibility; 4) targeting specific audience; 5) bettering the effectiveness and efficiency of marketing programs; 6) expanding the network; 7) observing the competitors; 8) viral marketing effect; and 9) direct learning from customers (Small Business Administration, or SBA, of the United States)³⁷. Therefore, the BISA team was supposed to attend bazaar events more frequently during the program period.

Meanwhile, to enable the participants to access and join bazaar events more easily after the program, it was strongly suggested that the BISA team creates a community for alumni of the BISA program so that they can have a formal organization in which they can exchange information on potential market access, events, and/or embrace collaboration among them to grab greater opportunities to achieve the common goals. To facilitate communication in the community, a Telegram or Facebook Group will be beneficial and essential as both applications can accommodate thousands of users.

³⁶ Celia Jones, 2021, *Memulai Usaha dengan Teman Sendiri: Untung atau Rugi?* accessed November 10th, 2021, retrieved from www.bbc.com.

³⁷ Anonymous, *9 Manfaat dan Keuntungan Anda Ikut Pameran dan Bazaar Produk*, accessed November 10th, 2021, retrieved from <https://markaz-organizer.com/>.

5. Increase in Business Revenue

Yatim Mandiri specified that after providing capital to the BISA participants, it was expected that their business income would escalate by 50%, and it was evaluated periodically. For this point, the measurement of the business growth through regular monitoring and evaluation can only be appropriately performed if the participants complete the bookkeeping which displays the financial transactions and information on the business on a day-to-day basis.

The evaluation found that less than 10% of all participants have experienced an increase in turnover of more than 50% after receiving the capital from the BISA program. Some factors causing the phenomenon were: 1) lack of motivation - most of the participants ran the businesses with the mindset of just to make a living or survive, and not to thrive; 2) market competition - products traded by the participants were categorized as homogeneous products and not the differentiated or unique ones; and 3) age constraint - the elder the participants, the less productive they became, yet, there were special cases as an exception.

To tackle the phenomenon, the BISA team could include benchmarking to the program. In this regard, benchmarking should be viewed as an activity of visiting other companies (or businesses) to improve the participants' understanding of good business practices. Eduardus Tandelilin (1997) outlined that benchmarking can be applied to all faces of a business. It can be applied to: 1) the basic products and services; 2) the processes that go into manufacturing those products; and 3) all process practices and methods that are in support of getting those products and services effectively to customers and meeting their needs.³⁸ By conducting the benchmarking activity, the participants are expected to earn numerous benefits, among others: 1) increased customer satisfaction, sales, productivity, quality, market performance, environmental awareness, and industrial competitiveness; and 2) the implementation of continuous improvement (Purwanto, et al., 2020)³⁹.

6. Loan Repayment

As mentioned in the earlier discussion that there were two kinds of capital provided by Yatim Mandiri for each of BISA participant: business capital with the installment conditions or soft loans and business capital without refund terms. For soft loans, the installments were supposed to have started in the third month after receiving the loans and been paid off in one year. For the repayments made by the participants, the BISA team would be responsible for recording them every month. The evaluation of the business progress suggested that businesses with soft loans earned better results than those without repayment terms.

7. Practicing Financial Discipline

To lead a feeling of self-empowerment and financial security, the BISA participants were educated on practicing financial discipline, particularly diversifying their savings and other spendings like alms. This aspect was indispensable to form a good habit of saving more money in the long run to live a prosperous financial life. Both daily savings and alms would be recorded on the financial recording book along with the loan repayments. In respect of alms,

³⁸ Eduardus Tandelilin, 1997, *Benchmarking*, *Jurnal Ekonomi dan Bisnis Indonesia*, Vol. 12 No. 2, 1997, accessed November 11th, 2021, retrieved from <https://jurnal.ugm.ac.id>.

³⁹ Agus Purwanto, et al., 2020, *Benefit of Benchmarking Methods in Several Industries: A Systematic Literature Review*, *Sys Rev Pharm* 2020; 11(8): 508-518, accessed November 11th, 2021, retrieved from www.researchgate.net.

the participants had to spare money on daily basis and gave it out to Yatim Mandiri once a month to be distributed to the needy. This good habit and other disciplines have made some participants level up and offer a sacrificed animal on Eid-al-Adha or even become a muzakki or zakat payer.

Outcomes

As the crystallization of the BISA program which embodied in a series of activities within a certain period, here are some changes following the completion of the program:

a. *Spirituality*

1. The transformation of a single mother into more Islamic Muslimah who is impassioned in committing to Islamic teachings:
 - a) wearing modest clothing;
 - b) performing salah at the beginning of the time;
 - c) practicing sunnah;
 - d) intensifying Qur'an recitation; and
 - e) eagerness to give charity.
2. The increased self and social awareness:
 - a) eagerness to change their lives and their families; and
 - b) higher levels of empathy among participants, tolerance, enthusiasm, motivation, and self-confidence.

b. *Parenting*

1. The harmonization of the relationship between mothers and children:
 - a) a mother acknowledges her role as a single parent;
 - b) a mother realizes the position and stages of child development in Islamic perspective and adjusts her parenting style according to the child's age; and
 - c) shaping excellent children who have outstanding achievements.
2. The establishment of a society with Islamic character.

c. *Economy*

1. The upgraded business skills: the ability to build a focused, planned, and sustainable business;
2. The improved family prosperity; and
3. The establishment of financial discipline: financial awareness and responsibility.

CONCLUSION

Analysis of the interview data obtained in this research shows that the empowerment of single mothers in the BISA program is led to attaining economic independence in the frame of Islamic-based prosperity, in which the orphaned families can generate new sources of income by opening new businesses or expanding their current businesses using the capital assistance granted by Yatim Mandiri. Based on this conclusion, it is recommended that:

1. The capital assistance sourced from zakat funds should be given to the BISA participants in the form of soft loans with no interest so that they can be more responsible for their businesses and financial management and achieve better outcomes. In addition, it is strongly suggested that the capital is utilized to establish group business, instead of individual business;
2. In terms of marketing strategy, the BISA team should engage in bazaar events more extensively. Besides, in this digital era, internet marketing or online marketing should be employed intensively and become the main strategy for any businesses run by the BISA participants to reach potential customers beyond local environments and to surpass the target of a 50% income increase;
3. For benchmarking purpose, BISA team should enable all participants to pay a visit to other small-medium enterprises with the similar backgrounds which will be valuable to gain a clear insight of successful businesses and learn practical business knowledge or best practices in business management that can be applied by BISA participants for improvements in their businesses; and
4. BISA team should establish a community for alumni of the BISA program where they can exchange information on potential market access, events, and/or embrace collaboration among them to take significant advantages to reach the common goals.

LIMITATIONS AND FUTURE RESEARCH

This study was a qualitative research that was carried out during the pandemic era and the imposition of restrictions on community activities, so the interviews with stakeholders to collect data and information could only be optimized by telephone. In this sense, the researcher could only complete data extraction from any resources and details made available by the staffs of Yatim Mandiri and any information shared by limited BISA participants, instead of executed data collection in the field. Moreover, the BISA program was already implemented in 47 different areas across Indonesia, yet, due to time and resource constraints, this research only focused on two locations: East Jakarta and Surabaya.

Despite those limitations, this research adds to the literature by further empirically validating well-known zakat utilization through the BISA program and by increasing our understanding on the role of single mothers in the orphaned families. Since this research data was only gathered from interviews with two sources: staffs of Yatim Mandiri and BISA participants, therefore, it is highly recommended to consider surveys and interviews with other stakeholders such as the Head of the neighborhood unit and the orphaned children to enrich data collection and minimize data bias in the same future studies.

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Impact of COVID-19 on the Stability of Islamic Banking: Using Linear Spline Mixed Effect Models

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Abstract. The appearance of COVID-19 pandemic in the past two years has affected banks and financial institutions in different aspects. One of these aspects, which could have important economic consequences, is the stability level of banks. While this phenomenon is new, and there is no comprehensive study in the literature to analyze the effects of the COVID-19 pandemic on the stability level of banks, this paper tries to do this purpose in the Islamic banking industry. We calculate the Z-Score stability index for 15 available Islamic countries during 2019Q1-2020Q4 and apply two statistical approaches: (i) hypothesis testing and (ii) linear spline mixed effect model. Specifically, Wilcoxon signed rank test in the first approach showed that there is a significant decline in the stability level after starting COVID-19 pandemic, while the stability has a significant non-decreasing pattern at the year before this pandemic. For the second approach, a linear spline mixed effect model including a cut-point function at the time of COVID-19 pandemic, is fitted. The results show that capital to asset, cost to income, return on equity and provisions of non performing finance to non performing finance ratios are the most important determinants of stability in Islamic banks over time and a significant decreasing pattern of average stability is obvious after starting COVID-19 pandemic by a spline cut-point.

Keyword: Covid-19 pandemic, Islamic banking stability, linear spline mixed effect model.

JES Classification: G21, C33, E44.

INTRODUCTION

Stability analysis is one of the popular fields of study in both Islamic and conventional banking systems. For measuring stability level in banks, researchers have used balance sheet variables and tried to combine these variables as an integrated index. Some of the works like Hanschel and Monnin (2005), Illing and Liu (2006) and Puddu (2008) combined different balance sheet variables with different weighting schemes and developed a stability index. But some other researches have used Z-score (De Nicoló et al, 2004) which contains two banking indicators: return on assets and capital asset ratio.

To analyze the performance and stability of Islamic banks before and after starting COVID-19 pandemic, we have used the Islamic banking data provided by Islamic Financial Services Board (IFSB) country data. The performance indicators are introduced in Table 1.

Table 1. The performance indicators of Islamic banks

CAR	Capital Adequacy Ratio
T1RWA	Tier 1 Capital to Risk Weighted assets
NPF	Non Performing Finance to Total Finance
PNPF	Provisions for Non Performing Finance to Non Performing Finance
ROA	Return on Assets
ROE	Return on Equity
NPM	Net Profit Margin
CTI	Cost to Income Ratio
CTAR	Capital to Assets Ratio
LAR	Liquidity Assets to Total Assets Ratio

For examining the effects of COVID-19 on the stability of Islamic banks, we tried to measure the stability levels for Islamic banks in different countries. Stability measuring in banking industry entered in new era by De Nicoló et al. (2004). They introduced *Zscore* stability index and calculated it for 500 largest financial firms worldwide to show that consolidation and conglomeration were not associated with higher level of firm's stability. For a representative bank the index is defined as follows:

$$Zscore_t = \frac{ROA_t + CTAR_t}{\sigma(ROA)}$$

Where ROA_t and $CTAR_t$, as introduced in Table 1, are the return on the asset ratio and the capital to asset ratio of a bank at a specific time, t . Also $\sigma(ROA)$ is the standard deviation of ROA_t 's over examining period of time. The best advantage of index is that this index could be easily calculated based on the accounting data of banks. The *Zscore* measures the number of standard deviations a return realization has to fall in order to deplete equity, under the assumption of normality of banks' returns. So, a higher *Zscore* corresponds to a lower upper bound of insolvency risk (Cihak and Hesse, 2008).

The remainder of the paper is organized as follows. The literature review and the proposed methodology of the paper are stated in Section 2. The statistical methodologies applied for the stability analysis along with the numerical results are given in Section 3. Specifically, Section 3 includes the clustering of Islamic countries based on their stability levels during 2019Q1–2020Q4, as well as statistical hypothesis testing of the stability decline as the first subsection. Also, the theory and results of fitting linear spline mixed effect model are given in the second subsection of Section 3. Finally, concluding remarks and future works are given in Section 4.

LITERATURE REVIEW

In the late 2019, by the appearance of COVID-19 pandemic all over the world, the concerns about banking stability, made researchers to study the degree of effectiveness of stability in banks from this pandemic and suggest some solutions to improve banking stability in the post pandemic era. Disemadi and Shaleh (2020) analyzed the problem of Indonesian debtors in carrying out their credit obligations after the spread of COVID-19, which has potential effects on the banking performance in credit management. They indicated that the new national economic stimulus policy is the solution for overcoming economic instability due to the spread of COVID-19.

Elnahass et al. (2021) considered 1090 banks from 116 countries for quarterly periods across 2019–20 and examined the impact of the pandemic on the global banking stability. They showed that the COVID-19 outbreak has had detrimental impacts on financial performance across various indicators of financial performance and financial stability. Korzeb and Niedziolka (2021) assessed the resilience of commercial banks operating in the Polish banking sector to the potential effects caused by the COVID-19 pandemic. They concluded that the largest banks in Poland are the most resistant ones to the consequences of the pandemic. Barua and Barua (2021) selected Bangladesh as a case study of an emerging economy and examines the possible impacts of the pandemic on the country's banking sector. Using a state-designed stress testing model, the paper suggested that all banks are likely to see a fall in risk-weighted asset values, capital adequacy ratios, and interest income at the individual bank and sectoral levels.

The same as conventional banking, in the Islamic banking literature, some researches tried to analyze the effects of COVID-19 pandemic on the performance of Islamic banking system. Rabbani et al (2021) proposed Islamic finance as a potential tool to help affected economies safely pass through the economic crisis resulting from the pandemic. This study identifies a four-stage COVID-19 model and proposes ten innovative Islamic financial services for each stage of the pandemic. Mansour et al (2021) tried to forecast the response of Islamic banks' stability to the COVID-19 pandemic over the post pandemic period ranging from 2019Q4 to 2021Q4 in nine Islamic economics. Using the bivariate VARX model, their results showed that the Islamic banks' response to the COVID-19 pandemic is not uniform across jurisdictions. Alharthi et al. (2021) used data from six Islamic banks and a binary logit method to explore the potential determinants of customers' satisfaction with the Islamic banking system and concluded the fact that both internal and external factors play key roles in customer satisfaction during the COVID-19 pandemic.

The above literature review shows that there is no comparative stability analysis before and after starting COVID-19 pandemic in the Islamic and not even conventional banking systems. In this paper, to study the impact of COVID-19 pandemic on Islamic banking stability, we have calculated the Z-Score stability index for 15 available Islamic countries during 2019Q1-2020Q4. For this purpose, we have applied two statistical approaches: (i) hypothesis testing and (ii) linear spline mixed effect model. In the first approach, we have performed the non-parametric Wilcoxon signed rank test to assess the significance of stability decline after the pandemic. In the second approach, to study the impact of different banking performance indicators on the stability, a linear spline mixed effect model including a cut-point function at the time of COVID-19 pandemic, is fitted. The results of the paper could help policy makers in the Islamic banking industry firstly to perceive the importance of COVID-19 effects on the stability of Islamic bank and secondly to minimize the stability loss of the pandemic by managing the bank's important balance sheet variables.

METHODOLOGY AND RESULTS

Clustering and Hypothesis Testing of the Stability

The quarterly time plot of for 15 available Islamic economic countries during 2019-2020 is given in Figure 1. According to this Figure, there is a large variation between paths for different countries with an overall slight decreasing pattern through time. Among Islamic countries, the highest or stability level belongs to Jordan, Saudi Arabia and United Arab Emirate with the average above 50 percent and the lowest level of stability belongs to Sudan, Afghanistan and Oman with the below 10 percent.

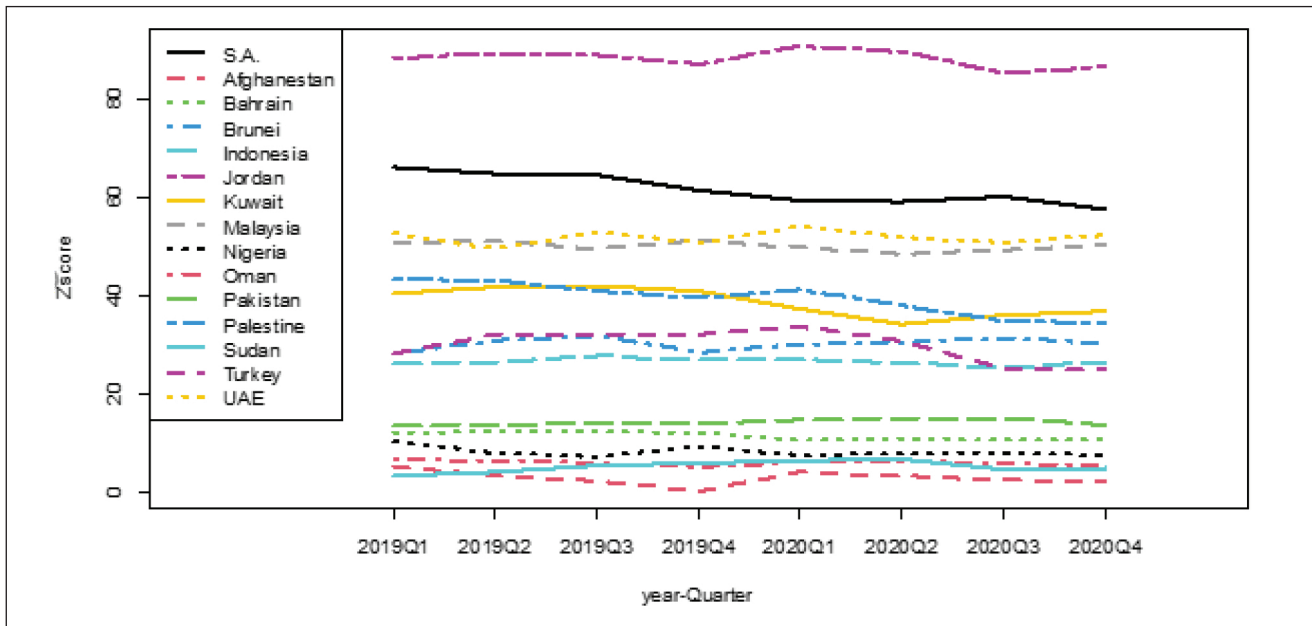


Figure 1. Quarterly time plot of Z-score during 2019-2020

To discover homogenous groups of countries regarding their Islamic banking stability, K-means clustering algorithm is applied (Daniel et al., 2014). Since the number of clusters should be supplied by the user to this algorithm, we have performed a Cross-Validation (CV) approach to choose optimal number of clusters for these data. The common optimality criterion for clustering is the ratio of within cluster variations (WSS) on the between cluster variations (BSS) which is expected to be as small as possible. The reason is that, we aim to build clusters with records that are similar to one another and dissimilar to records in other clusters, representing a situation where the between-cluster variation is large compared to the within-cluster variation. Figure 2, illustrates the CV plot of against different cluster numbers. This plot proposes $k = 4$ as an optimal number of clusters in these data.

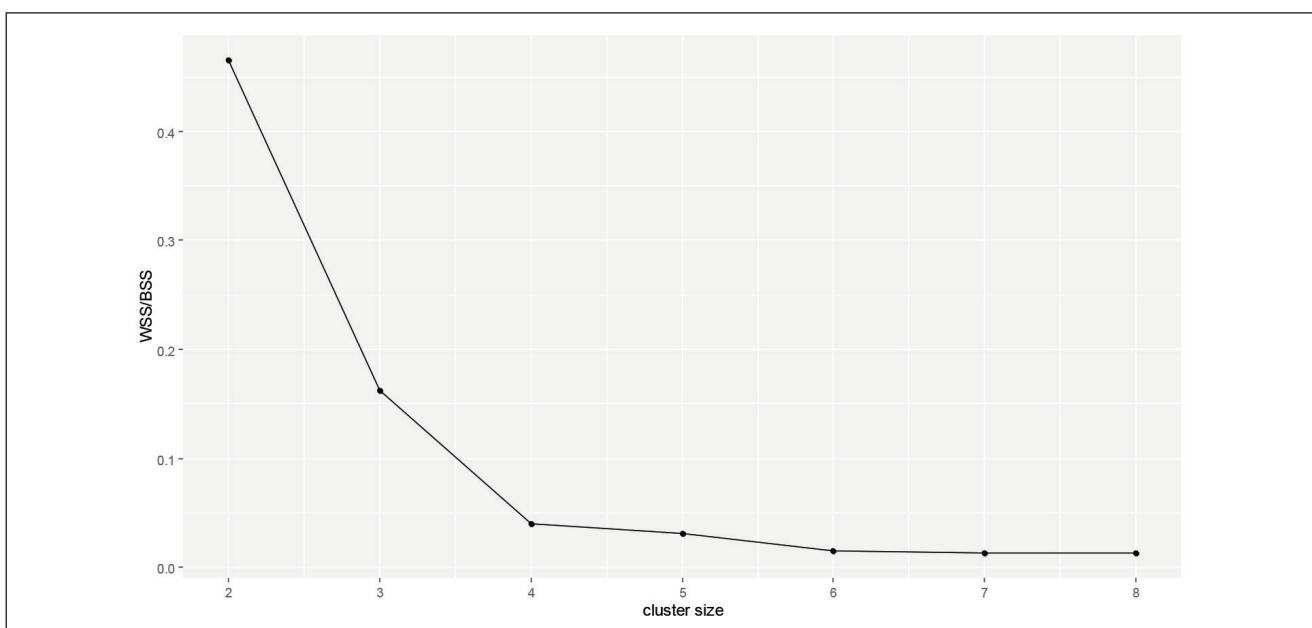


Figure 2. CV plot for cluster size determination

We have labeled the 4 clusters as, “High”, “Moderate”, “Low” and “Very Low” stability levels according to the cluster means of Z-score index. The cluster memberships of the countries are reported in Table 2. Also, the cluster centers through 8 quarters of 2019–2020 are sequentially plotted in Figure 3, which shows approximate cluster means of 60, 30, 12 and 6 for the in four groups of stability level.

Table 2. Cluster memberships of countries

Clusters	Countries
1: High Stability	“S.A.” “Jordan” “Malaysia” “UAE”
2: Middle Stability	“Brunei” “Indonesia” “Kuwait” “Palestine” “Turkey”
3: Low Stability	“Bahrain” “Pakistan”
4: Very Low Stability	“Afghanistan” “Nigeria” “Oman” “Sudan”

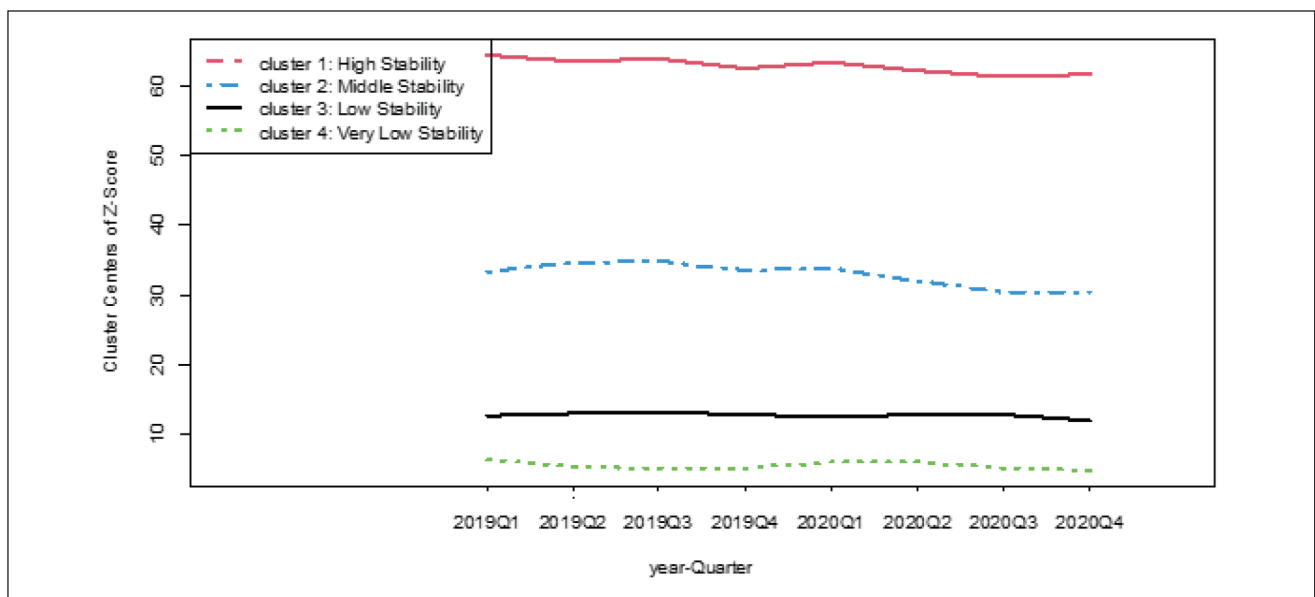


Figure 3. Time plot of cluster centers of Z-score during quarters of 2019-2020

Also, to study the impact of COVID-19 on the stability level of Islamic countries, we have calculated the changes, before and after starting COVID-19 pandemic as

$$\nabla Zscore_{iy} = Zscore_{iy}^{q4} - Zscore_{iy}^{q1}, \quad i = 1. \dots 15. \quad y = 2019.2020$$

Where $Zscore_{iy}^{q1}$, and $Zscore_{iy}^{q4}$ denote the $Zscore$ values of the i -th country at the 1st and 4th quarter of year y , respectively. We have performed the non-parametric **Wilcoxon signed rank** test for the following hypothesis:

$$H_0 : \text{median of } \nabla Zscore_{iy} \geq 0 \quad \text{vs} \quad H_1 : \text{median of } \nabla Zscore_{iy} < 0$$

Where, the null hypothesis shows increasing stability level during year y . The results of the above statistical hypothesis test are given in Table 2 for two years of 2019 and 2020, respectively as before and after starting COVID-19. According to the P-values, there is a significant decline in the stability level after starting COVID-19, while the stability has a significant non-decreasing pattern at the year before starting this pandemic.

Table 2. Results of Wilcoxon signed rank exact test for

Z-score variation ()	P-value of Wilcoxon signed rank exact test
Before Starting COVID-19 (2019Q4 vs 2019Q1)	0.1947
After Starting COVID-19 (2020Q4 vs 2020Q1)	0.0007629

Modelling the Islamic Banking Stability

To evaluate the rate of change in index through 8 quarters of 2019 and 2020, the influential factors on these changes, along with the possible trend change at the starting time of COVID-19 pandemic, we have implemented a Linear Spline Mixed Effect (LSME) Model. The reason to apply linear splines is their flexibility to accommodate many non-linear trends that cannot be approximated by simple polynomials in time. In this framework, the time axis would be divided into series of segments with piecewise linear trends, having different slopes but joined at fixed times. Locations where lines are tied together are known as knots. Resulting piecewise-linear curve is called a spline (Fitzmaurice et al., 2011).

Using splines to consider potential trend change after starting COVID-19, the following change- point function is included in our model:

$$(Time - 4)_+ = \begin{cases} 0 & \text{if } Time \leq 4 \\ (Time - 4) & \text{if } Time > 4 \end{cases}$$

Where, *Time* is the quarter number in a sequence of consecutive numbers from 1 to 8. Specifically, this change-time function takes zero value for the 4 quarters of 2019 (before starting COVID-19) and takes the quarter number (1 to 4) for the year 2020 (After starting COVID-19).

Also, in this model, a vector of 6 time-varying predictors,

$$X_{it} = (CTAR_{it} . CTI_{it} . LAR_{it} . PNPf_{it} . ROE_{it} . T1RWA)$$

is considered.

The model equation is as follows:

$$Zscore_{it} = \beta_1 + \beta_2 Time_{it} + \beta_3 (Time - 4)_+ + \sum_{(j=1)}^6 X_{ijt} + b_i + \epsilon_{it}$$

$$i = 1 \dots 15. \quad t = 1 \dots 8$$

Where, $b_i \sim N(0, \sigma_b^2)$ is the random intercept term which will induce correlation among repeated measurements of *Zscore* through 8 times of study. Also, $\epsilon_{it} \sim N(0, \sigma^2)$ is the random error term which is assumed to be independent of b_i . More specifically, the model could be decomposed into the following two sub-models:

$$Zscore_{it} = \begin{cases} \beta_1 + \beta_2 Time_{it} + \sum_{(j=1)}^6 X_{ijt} + b_i + \epsilon_{it} & \text{Before COVID19} \\ (\beta_1 + 4\beta_3) + (\beta_2 + \beta_3) Time_{it} + \sum_{(j=1)}^6 X_{ijt} + b_i + \epsilon_{it} & \text{After COVID19} \end{cases}$$

This means that the above two models have different intercept and time slopes before and after starting COVID-19. We have fitted the LSME models in R software using “lmer” function in the package “lme4” (Bates et al, 2014). Also, to have a model selection, we have implemented Backward elimination of random-effect terms followed by backward elimination of fixed-effect terms in our initial LSME model (equation (1)) via generic “step” function in the “lmerTest” package (Kuznetsova et al., 2017). The final optimal model includes the following terms:

$$Zscore_{it} = \beta_1 + \beta_3(Time - 4)_+ + \sum_{j \in \{1,2,4,5\}} X_{ijt} + b_i + \epsilon_{it} \quad i = 1. \dots .15 \quad t = 1. \dots .8$$

In fact, the statistically significant indices are $CTAR_{it}$. CTI_{it} . $PNPF_{it}$. ROE_{it} . Also, the change-point function is included as a significant term which shows the considerable impact of COVID-19 on the average $Zscore$. On the other hand, the optimal model would be,

$$Zscore_{it} = \begin{cases} \beta_1 + \sum_{j \in \{1,2,4,5\}} X_{ijt} + b_i + \epsilon_{it} & \text{Before COVID19} \\ (\beta_1 + 4\beta_3) + \beta_3 Time_{it} + \sum_{j \in \{1,2,4,5\}} X_{ijt} + b_i + \epsilon_{it} & \text{After COVID19} \end{cases}$$

The results of Maximum Likelihood Estimation of the above model is presented in Table 3. The results show that, the $Zscore$ index has two different patterns of change before and after starting COVID-19. Actually, a significant decreasing pattern of average $Zscore$ is obvious after starting this pandemic. Actually, passing through each quarter in 2020, the average $Zscore$ is 0.615 decreased.

Also, the capital to asset, cost to income, return on equity and provisions of non performing finance to non performing finance ratios are the significant determinants of stability in Islamic banks. More specifically, while the increasing of cost to income ratio leads to less stability, the 3 other ratios have a positive impact on the stability.

Table 3. Results of LSME model estimation

Parameters	Estimate	Std. Error	p-value
Intercept	11.675	6.377	0.085
$(Time - 4)_+$	-0.615	0.139	0.000*
CTAR	203.913	15.546	0.000*
CTI	-4.458	1.494	0.004*
PNPF	2.858	0.979	0.044*
ROE	14.332	1.802	0.000*
Random intercept Variance	506.536	22.506	
Random Error Variance	0.997	0.9985	
<i>AIC</i>	423.2417		

CONCLUSION

Stability analysis is one of the popular fields of study in both Islamic and conventional banking systems. For measuring stability level in banks, is a popular index which contains two banking indicators: return on assets and capital asset ratio to measure the probability of insolvency in the bank when the bank capital depleted by the negative return. By the appearance of COVID-19 pandemic all over the world, there is a concern about its impact on the financial stability. Since this phenomenon is new, and there is no comprehensive study in the literature to analyze the effects of the COVID-19 pandemic on the stability level of banks, this paper has tried to do this purpose in the Islamic banking industry.

To analyze the performance and stability of Islamic banks before and after stating COVID-19 pandemic, we have used the Islamic banking data provided by Islamic Financial Services Board (IFSB) country data. Then, we have calculated the stability index for 15 available Islamic countries during 2019Q1-2020Q4 and applied two statistical approaches: (i) Non-parametric hypothesis testing and (ii) linear spline mixed effect model, to evaluate the impact of COVID-19 pandemic on the Islamic banking stability.

The results of the non-parametric Wilcoxon signed rank statistical hypothesis test in the first approach, showed that there is a significant decline in the stability level after starting COVID 19, while the stability has a significant non-decreasing pattern at the year before this pandemic. For the second approach, a linear spline mixed effect model including a cut-point function at the time of COVID-19 pandemic, is fitted. The results have shown that, while capital to asset, cost to income, return on equity and provisions of non performing finance to non performing finance ratios are the most important determinants of stability in Islamic banks, there is a significant decreasing pattern of average stability after starting COVID-19 pandemic which is detected via linear spline with a cut-point at the starting time of pandemic.

The results of the paper could help policymakers in Islamic banking industry to change regulatory and supervisory guidelines for Islamic banks in such a way that the effects of COVID-19 pandemic are minimized. In these guidelines the current level of stability and its vulnerability by the pandemic should be considered. Specially, as results showed, Islamic banks should note that first their stability is more fragile during COVID-19 pandemic comparing with the previous years and second some banking ratios like cost to income and capital to asset ratio are important determinants of their stability. As a future work, it is recommended to apply machine learning algorithms, such as regression trees or neural networks, instead of linear splines to study and compare the stability of Islamic Banks before and after starting COVID-19 pandemic.

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Determination of Firm Value with Financial Performance as Moderating

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Abstract. This study aims to analyze the determination of company value with dividend policy as a moderator in the midst of the COVID-19 pandemic that hit many sectors. The population of all issuers registered in the Jakarta Islamic Index (JII) and the research sample are 26 companies using purposive sampling technique. The regression analysis tool uses multiple linear regression analysis with panel data and moderation analysis uses EVIEWS 7 as a regression tool. The results of the study found that EPS had a positive effect and DER had a negative effect on dividend policy. Dividend policy is able to strengthen the relationship between EPS and DER to firm value. Another finding shows that companies use debt strategies as tax avoidance to maximize profits and firm value. The results also show that companies in JII will reduce dividends and fulfill their main obligation to pay debts to maintain a position in JII and the maximum debt limit and maintain the image and image of the company as the actualization of Socially Responsible Investing (SRI).

Keyword: Dividend policy, firm value, Jakarta Islamic Index.

JEL Classification: B22, H22, G31.

INTRODUCTION

Background

Capital markets in several countries such as the People's Republic of China, Italy, South Korea, France, Spain, Germany, Japan, and the United States show that COVID-19 has a negative impact but in the short term it has an impact on the stock markets of countries affected by COVID-19 19, then the impact of COVID-19 on the stock market has a spill-over effect between Asian and European countries and American countries. However, there is no evidence that COVID-19 negatively affects these countries' stock markets any more than the global average.

The findings contribute to research on the economic impact of the pandemic by providing empirical evidence that COVID-19 has a spill-over effect on the stock markets of other countries. These results also provide a basis for assessing trends in international stock markets as the situation eases around the world (He et al 2020). The Islamic capital market in Indonesia has developed gradually over the past two decades since the launch of the sharia mutual fund product in 1997 to become an integrated part of the national financial industry structure. This development was followed by the emergence of the Jakarta Islamic Index (JII) in 2000 (Bappenas, 2021).

Among the many losses and problems that have arisen due to COVID-19, there is another interesting phenomenon to be explored more deeply, namely the Islamic stock market which actually grew during the COVID-19 pandemic. The Director of Development of the Indonesia Stock Exchange, Hasan Fawzi, in CNBC Indonesia said that despite the pandemic, demand and supply in the Indonesian Islamic capital market did not subside. In the midst of the COVID-19 pandemic that hit many sectors, the total fundraising through the Islamic capital market was recorded at more than Rp. 77 trillion. Sharia stocks continue to grow amid the pandemic. There are 46 new stock IPOs, 35 of which are sharia shares, then if you look at 709 listed shares, 451 are classified as sharia securities. The Indonesia Stock Exchange (IDX) recorded that sharia shares reached 63% amid the COVID-19 pandemic.

This is the reason IDX won the 2020 Global Islamic Finance Award (GIFA) as an award for the best Islamic capital market category from GIFA virtually. IDX data as of August 2020 shows that the Islamic stock market in Indonesia dominates with a percentage of the number of Islamic shares of 63% of the total shares listed on the IDX (MediaIndonesia.com, 2020).

One indicator of the development of a country's economy is the capital market. The capital market is said to be informationally efficient if the price of its securities reflects relevant information and is reflected in its share prices. The most important aspect in the capital market is the volatility of stock prices. The stock price describes an indicator of the success of the company's performance. If the aggregate stock price increases, investors will judge that the company is successful in managing its business. The company will try to improve the company's performance which is reflected in the value of the company. Value is important for the company because the main goal of the company is to increase the value of the company itself (Putri, 2014).

Firm Value is the market value of outstanding debt securities and company equity. A high company value shows the magnitude of the prosperity of the shareholders. Company value as proxied by price book to value (PBV) describes how much the market appreciates the book value of a company's shares. The value of the company can be seen from the company's ability to pay dividends. The company's decision to pay dividends is based on the dividend policy.

Dividend policy provides information about the performance and performance of a company, so that each company has its own policy in distributing dividends or holding dividends as retained earnings. Dividend policy can be seen from the dividend payout ratio. The Dividend Payout Ratio (DPR) determines the amount of retained earnings as a source of funding. The greater the dividend of the company, the investors will value a company well and will increase the value of the company. Things that can affect the size of a company's dividends are: the amount of profit earned by the company (Earnings Per Share) and the amount of company debt (Debt to Equity Ratio).

Earning Per Share (EPS) is a ratio that shows the company's ability to generate profits, so the amount of profit affects the company's dividend. This ratio is needed to determine the company's ability to generate earnings per share. Companies with large profits will make investors interested in investing their capital and will increase stock prices. Rising stock prices will increase the value of the company. Studies on various determinants of Islamic bank's performance have not shown concluding results. Rosyada (2017) and Marlina (2013) found there is a positive influence between EPS on firm value, while Dani (2015) found that there is a negative effect between EPS on firm value.

In addition to the profit factor, dividend policy is also influenced by the size of the company's use of debt. The use of debt can increase profits but can also increase the risk of profits. DER is one of the ratios used to measure the level of use of debt as a source of company financing. Information on increasing DER is received by the market as a bad signal that will provide negative input to investors in making decisions to buy shares, this will result in the company's stock price decreasing so that the value of the company will also decrease. Markonah, et al (2020) found there is a positive influence between DER on firm value, while Sukoco (2013) found that there is a negative effect between DER on firm value.

The profits obtained by the company are not entirely distributed to shareholders, but some are used as a source of financing for the company's capital in the form of retained earnings, namely profits that are not distributed as dividends. The company must check the suitability between the profits distributed to shareholders in the form of dividends and retained earnings for the company's needs. The company establishes a Dividend Policy to determine the proportion of profits to be retained or to be distributed to shareholders as dividends. If the profit distributed is getting smaller, it will result in the rate of profit growth and changes in the company's share price and company value. Effective financial management is very important for the survival and growth of the company (Attari, 2012).

Kim, J. et al. (2021) found there is a positive influence between dividend policy on firm value, while Chabachib et al. (2020) found that there is a negative effect between dividend policy on firm value. Dividend Policy as the main function of the company's financial management. Dividends are one of the reasons an investor invests. An investor before making an investment, will first assess how well the company is through the company's financial statements which will then see how high the company's profits, company debt and return on capital are.

Putri et al. (2021) found there is a positive influence between EPS on dividend policy, while Denasar (2016) found that there is a negative effect between EPS on dividend policy. Earning Per Share (EPS) determines whether the company is good or not. Companies that have high profits will provide high dividends to shareholders so that potential investors are interested in investing their capital. After obtaining profits, the company must make a decision to maintain profits and distribute profits (dividend) (Oladipupo, 2013). The greater the profit earned, the greater the dividends that will be obtained by shareholders.

Putri et al. (2021) found there is a positive influence between DER on dividend policy, while Islam et al. (2012) found that There is a negative effect between DER on dividend policy. Dividend Policy can also be influenced by the use of debt in the company as measured by DER. Optimal use of debt can increase the company's operational activities which will bring higher profits. However, the use of debt that is too large can reduce dividend payments because the company must pay off the interest and principal expenses. Companies cannot use as much debt as possible because the higher the risk of default.

This study aims to explore the determination of firm value by moderating dividend policy, the influence of these factors is able to explain firm value and how dividend policy moderates the relationship between variables in JII.

Objective

This study aims to analyze the determination of company value with dividend policy as a moderator in the midst of the COVID-19 pandemic that hit many sectors. The paper will be structured as follows. After the introduction, previous research related to the topic, the research methodology will discuss the data, model development and methods used. Research results and analysis that will cover all results in tables, graphs, etc. Conclusions and suggestions will discuss the explanation of findings from research questions and recommendations will discuss recommendations for practitioners, regulators and academics based on research findings.

LITERATURE REVIEW

Sari & Maryoso (2021, June). This study took samples from food and beverage industry companies listed on the Indonesia Stock Exchange for the period 2016-2019. Multiple Linear Regression analysis test and Classical Assumption test were used for data analysis techniques. The conclusions of this study are as follows: first, the variable (DER) has no significant and positive effect on share prices of food and beverage industry companies. Second, the variable (PER) has a significant and positive effect on share prices of food and beverage industry companies. Third, the variable (EPS) has a significant and positive effect on share prices of food and beverage industry companies. Fourth, the variables (DR), (PER) and (EPS) simultaneously have a significant and positive effect on the share prices of food and beverage industry companies listed on the Indonesia Stock Exchange for the period 2016–2019.

Ratnasari and Muniarty (2020) this study aims to analyze the effect of independent variables on the dependent variable. The sample in this study over the past 15 years, namely from the period 2004-2018. The results showed that DER has no effect and no significant effect on firm value, EPS has no effect and no significant effect on firm value, DER and EPS simultaneously have no effect and no significant effect on firm value. The influence of DER and EPS on Company Value is 36.4% while the remaining 63.6% is influenced by other factors not included in the research model.

Odiatma (2020). Dividend policy measures by list of High Dividend 20 Index of Indonesian Stock Exchange. Research samples are 308 non banking and finance companies with positive earnings and equity. Based on logistic regression analysis, result shows that return on equity, debt to equity ratio, and cash ratio have effect on dividend policy.

Purwanti (2020) Data analysis techniques using descriptive statistics and testing using the classic assumption test. Testing the research hypothesis using multiple linear regression test, simultaneous test (F test), partial test (t test), and coefficient of determination test (R2 test). The results showed that simultaneous profitability, capital structure, company size, and dividend policy significantly influence the value of manufacturing companies. Partially, profitability has a positive and significant effect on firm value, capital structure has a positive and significant effect on firm value, company size has a negative and significant effect on firm value, and dividend policy has positive and not significant effect on firm value.

Chabachib et al. (2020). Data are analyzed using multiple and bivariate regression analysis. The results show that ROA and firm size have a positive effect on corporate society awareness, while DER has no significant effect respectively. Profit gain, firm scope, and corporate social responsibility have a positive

effect on firm utility. It came into a conclusion that corporate social awareness can be used to mediate the influence on leverage and firm scope toward the firm value, but cannot be used to mediate the effect of profit gain on firm utility.

Okalesa et al. (2020) The data analysis technique used is multiple linear regression analysis by Smart PLS software. The results of this research indicate that the Size, DER, ROA and DPR variables have significant effect on PBV. The gap from this research shows that the higher the size of the Firm in a Firm, the higher the value of the Firm.

Susilo et al. (2020) This study found that CGPI, DER, and exchange rate have significant affected on SOEs Financial Performance that listed in Indonesia Stock Exchange and the simultaneously contributions with R-square of 0.975 and except firm size that is not significant. Finally, the results also indicate firms may have to these variables and financial performance was a significant impact on SOEs values, within the R-square of 0.874, even if SOEs are not doing business in our country and sustainability business.

Gitman and Zutter (2015), the value of the company provides an assessment of how investors see the company's performance. Companies are expected to earn relatively high returns on the risks they receive. Based on both definitions can be concluded that the value of the company is the fair value of a company that describes the perception or assessment of the success of a company that is always associated with stock prices.

Brigham and Ehrhardt (2014), corporate value is the main objective of managerial decisions taking into account the risks and times associated with earnings forecasts for maximizing the company's common stock price.

Khan et al. (2014) Earnings Per Share (EPS) is generally considered most important factor to determine share price and firm value. Shows that most of the individual investors take their individual investment decision based on the EPS. This paper attempts to provide empirical evidence on how EPS affect the share price movement.

METHODOLOGY

Data

This research method uses multiple regression analysis method with panel data and interaction test or commonly called moderated regression analysis which is supported by the EVIEWS 7 program. This research is a quantitative study that uses secondary data by processing data in the form of numbers from reports. company finances. The population in this study is all issuers registered in the Jakarta Islamic Index with sampling using purposive sampling based on certain considerations with a time span of 2017–2020 so that 26 samples meet the criteria. The research data is panel data with a span of 4 years (Palys, 2008).

Model Development

Panel data give more informative data, more variability, less collinearity among the variables, more degrees of freedom and more efficiency (Baltagi, 2008).

Method

This study will employ static panel data regression. There are three models, which could be used, namely, Fixed Effect Model (FEM) and Random Effect Model (REM). To determine the best model applied in this study, several tests need to be conducted, including Hausman test (to select between FEM and REM) and Chow test (to select between FEM and PLS). The fixed effect is an appropriate specification if we are focusing on a specific while the random effects model is an appropriate specification if we are drawing N individuals randomly from a large population (Baltagi, 2008). The hypotheses that arise are:

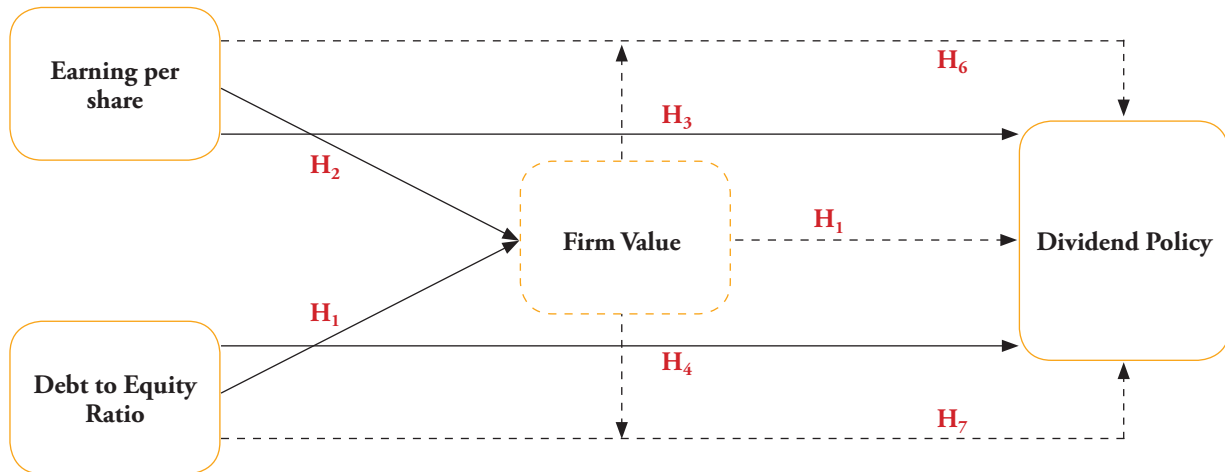


Figure 1. Research hypothesis

Hypotheses 1 : Earning Per Share (EPS) has a positive effect on Firm Value.

$H_0 : \gamma_{11} \leq 0$ there is no positive effect of EPS on Firm Value

$H_a : \gamma_{11} > 0$ there is a positive effect of EPS on Firm Value

Hypotheses 2 : Debt to Equity Ratio (DER) has a negative effect on Firm Value.

$H_0 : \gamma_{12} \geq 0$ there is no negative effect of DER on Firm Value

$H_a : \gamma_{12} < 0$ there is a negative effect of DER on Firm Value

Hypotheses 3 : Earning Per Share (EPS) has a positive effect on Dividend Policy.

$H_0 : \beta_{21} \leq 0$ there is no positive effect of EPS on Dividend Policy.

$H_a : \beta_{21} > 0$ there is a positive effect of EPS on Dividend Policy

Hypotheses 4 : Debt to Equity Ratio (DER) has a negative effect on Dividend Policy.

$H_0 : \beta_{22} \geq 0$ DER does not have a negative effect on Dividend Policy.

$H_a : \beta_{22} < 0$ DER negative effect on Dividend Policy.

Hypotheses 5 : Dividend Policy has a positive effect on Firm Value.

$H_0 : \gamma_{13} \leq 0$ Dividend Policy has no positive effect on Firm Value.

$H_a : \gamma_{13} < 0$ Dividend Policy has a positive effect on Firm Value.

Hypotheses 6 : Earning Per Share (EPS) has a positive effect on Firm Value which is moderated by dividend policy.

$H_0 : \gamma_{11}\beta_{21} \leq 0$ there is no positive effect on firm value moderated by Dividend Policy.

$H_a : \gamma_{11}\beta_{21} > 0$ there is a positive effect on firm value moderated by Dividend Policy.

Hypotheses 7 : Debt to Equity Ratio (DER) has a negative effect on firm value which is moderated by Dividend Policy.

$H_0 : \gamma_{12}\beta_{21} > 0$ there is a negative effect on firm value moderated by Dividend Policy.

$H_a : \gamma_{12}\beta_{21} \leq 0$ there is no negative effect of DER on firm value moderated by Dividend Policy

RESULTS AND ANALYSIS

Descriptive Analysis

Table 1. Results of statistical descriptive analysis

Variabel	N	Min	Max	Mean	Std. Dev
Nilai Perusahaan	104	0,050	4935,45	52,95	483,56
EPS	104	11,24	3028,81	473,93	592,55
DER	104	0,15	3,31	1,05	0,71
DPR	104	4,09	413,54	44,59	45,73

Source: Data processed

Based on Table 1, the number of samples is 26 with an N value of 104, the firm value variable has the lowest value of 0.050, the highest value of 4935.45 with an average of 52.95 and a standard deviation of 483.56. The earning per share variable has the lowest value of 11.24, the highest value of 3028.81 with an average value of 473.93 and a standard deviation of 592.55. The variable debt to equity ratio has the lowest value of 0.15, the highest value of 3.31 with an average value of 1.05 and a standard deviation of 0.71. And the dividend payout ratio variable has the lowest value of 4.09, the highest value of 413.54 with an average value of 44.59 and a standard deviation of 45.73.

Panel Data Regression Selection Test

Based on significant Hausman test in Table 2 with probability value of 0.0258, it can be concluded that FEM is better than REM. Meanwhile, based on significant Chow test with probability value 0.0000, it can be concluded that FEM is better than PLS. Therefore, the best static panel data model for this study is FEM.

Table 2. Best panel data model selection

Test	Model Tested	F Stat.	Prob.	Results
Hausman Test	REM vs. FEM	0.819780	0.0258	FEM
Chow Test	PLS vs. FEM	5.318325	0.0000	FEM

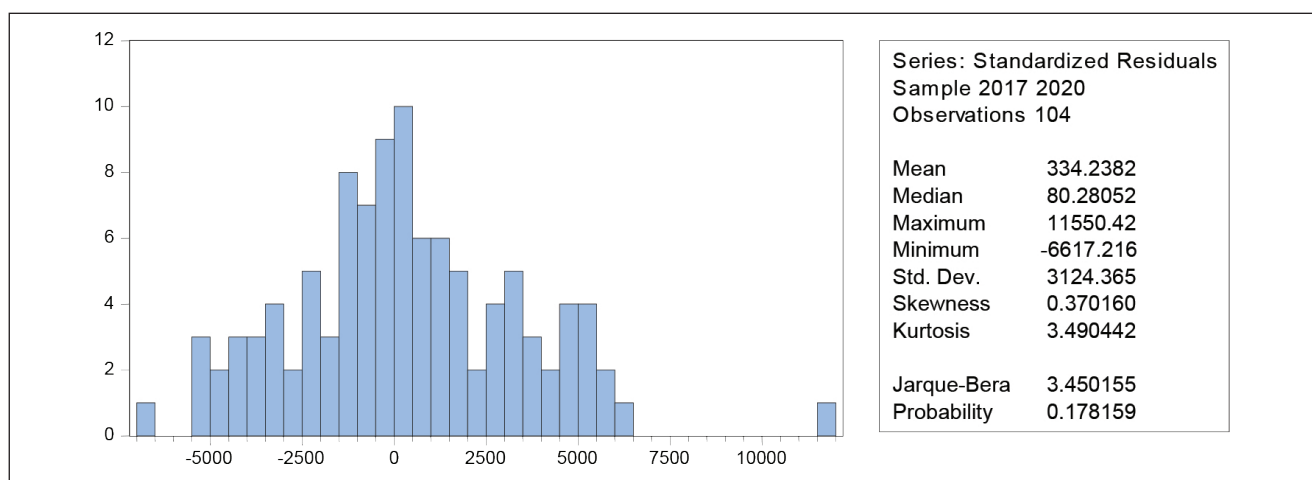
Source: Data processed

Classic Assumption Test

To strengthen the regression results obtained, the classical assumption was tested. According to Iqbal, there are five classical assumption tests used in linear regression analysis with the Ordinary Least Squared (OLS) approach including linearity test, normality test, multicollinearity test, heteroscedasticity test and autocorrelation test. The linearity test is almost not carried out on every linear regression model, because it is assumed that the model is linear. The normality test is basically not a BLUE (Best Linear Unbias Estimator) requirement and some do not require it as a mandatory requirement. The autocorrelation test only occurs in time series data, so data that are not time series or panel will be useless. Multicollinearity test needs to be done when linear regression uses more than one independent variable. While the heteroscedasticity test usually occurs in cross section data, where panel data is closer to the characteristics of cross section data. Because the data used by the researcher is panel data, so that not all the assumption tests in the OLS method are used, only 3 were tested in this study, namely the normality test, multicollinearity test and heteroscedasticity test. The following are the results of the classical assumption test as follows:

Normality test

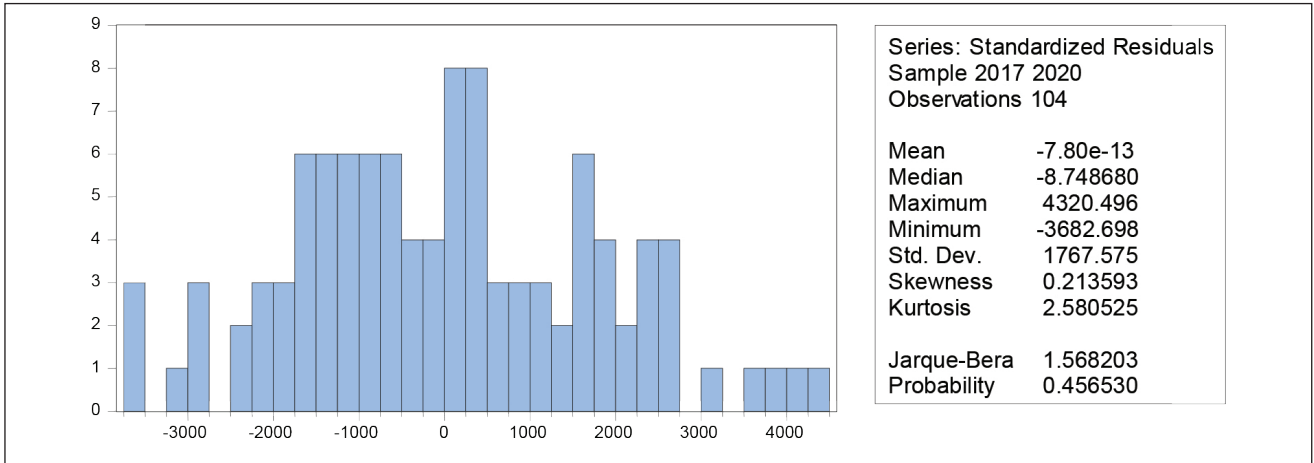
The normality test aims to test whether the regression results have a normal distribution or not. A good regression model is normally distributed or close to normal. The results of the tests that have been carried out by the two regression models can be seen below:



Source: Data processed

Figure 2. Results of model I normality test (without moderation)

Figure 2 shows a probability value of 0.178159 which is greater than the 0.05 level of significance. It can be concluded that the data is normally distributed.



Source: Data processed

Figure 3. Results of model II normality test (moderation)

Figure 3 shows a probability value of 0.45630 which is greater than the 0.05 significance level so that the data is normally distributed. It can be concluded that both regression model I and regression model II data are normally distributed.

Multicollinearity test

The multicollinearity test aims to determine whether or not there are similarities between the independent variables of a regression model. Good research is free from multicollinearity. To measure the occurrence of multicollinearity seen from the correlation coefficient of each independent variable. If the coefficient > 0.08 then in the regression model multicollinearity occurs. The results of the multicollinearity test of the two regression models are presented in the form of the table below:

Table 3. Multicollinearity test results model I

	Correlation	
	EPS	DER
EPS	1.000000	-0.149042
DER	-0.149042	1.000000

Source: Data processed

Table 3 shows that the absence of multicollinearity in the regression model is due to the correlation coefficient between the independent variables < 0.8.

The results of the multicollinearity test with moderating variables are presented in the form of a table below:

Table 4. Multicollinearity test results model II

	Correlation				
	EPS	DER	DPR	EPSXDPR	DERXDPR
EPS	1.000000	-0.149042	0.067563	0.769392	0.034633
DER	-0.149042	1.000000	-0.162960	-0.113296	0.467154
DPR	0.067563	-0.162960	1.000000	0.304889	0.656470
EPSXDPR	0.769392	-0.113296	0.304889	1.000000	0.227420
DERXDPR	0.034633	0.467154	0.656470	0.227420	1.000000

Source: Data processed

Table 4 shows that the absence of multicollinearity in the regression model is due to the correlation coefficient between the independent variables < 0.8 .

Heteroscedasticity test

To test the heteroscedasticity using the glejser test. If the probability value is < 0.05 , then there is heteroscedasticity, while if the probability value is > 0.05 , then it is free from violations of the heteroscedasticity assumption. The following are the results of the heteroscedasticity test of the two regression models below:

Table 5. Glejser test results model I

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-44.06806	119.5102	-0.368739	0.7133
EPS	0.184637	0.300826	0.613767	0.5412
DER	8.982254	66.95440	0.134155	0.8936

Source: Data processed

Table 5 shows the probability value of each variable is more than 0.05, it can be concluded that the regression model I in this study does not contain heteroscedasticity.

Table 6. Glejser model II test results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-44.23520	136.9246	-0.323062	0.7476
EPS	0.241117	0.388853	0.620072	0.5371
DER	-10.16530	104.0886	-0.097660	0.9225
DPR	-0.057785	0.535102	-0.107989	0.9143
EPSXDPR	-0.001033	0.001522	-0.678929	0.4993
DERXDPR	0.476307	0.964322	0.493929	0.6228

Source: Data processed

Table 6 shows the probability value of each variable is more than 0.05, it can be concluded that the regression model II in this study does not contain heteroscedasticity.

Panel Data Regression Analysis

Linear regression analysis of panel data in this study used the Fixed Effect method. The selection of the fixed effect method as the panel data analysis method was previously tested through the Chow test and the Hausman test with various considerations, so that finally the fixed effect method was chosen to test the panel data in this study. The following is the result of panel data estimation using a fixed effect model:

Table 7. Results of fixed effect model panel data estimation

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	25.71311	5.860006	4.387899	0.0000
EPS	0.040378	0.011130	3.627882	0.0005
DER	7.649127	2.199522	3.477631	0.0008

Source: Data processed

The results of panel data regression with the fixed effect model above obtained the following equation:

$$\text{The value of the company} = 25,731311 + 0,040378EPS + 7,649127DER + e$$

The results of the fixed effect panel data regression model II are presented in the table:

Table 8. Results of fixed effect panel data estimation model II

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	26.02969	4.764964	5.462726	0.0000
EPS	0.039070	0.012345	3.164882	0.0023
DER	-0.754182	2.077503	-0.363023	0.7176
DPR	-0.014272	0.024078	-0.592712	0.5552
EPS*DPR	0.002106	0.012188	0.172792	0.8632
DER*DPR	0.216831	0.050354	4.306170	0.0001

Source: Data processed

The results of panel data regression with the fixed effect model above obtained the following equation:

$$\text{The value of the company} = 26,02969 + 0,039070EPS - 0,754182DER - 0,014272DPR + 0,002106EPS*DPR + 0,216831DER*DPR + e$$

a. Hypothesis testing

This study tested the hypothesis by using multiple regression analysis method. This regression method relates the independent variable and the dependent variable. The test includes t test, F test and coefficient of determination.

b. t test (Partial)

The t test is used with the aim of knowing whether the independent variable has an effect on the dependent variable. The first t-test was used to see the effect of EPS, DER on DPR. The second t-test test is used to see the effect of EPS, DER, and DPR on firm value. The results of the t-test of independent variables on the moderating variable are presented:

Table 9. Test results of independent variables on moderation

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	40.97705	1.798605	22.78268	0.0000
EPS	0.007593	0.002167	3.503593	0.0008
DER	-6.813532	1.648466	-4.133257	0.0001

Source: Data processed

The results of the t-test to see the effect of the independent variable on the dependent variable are presented in the table:

Table 10. Test results of independent variables on dependent

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	29.66780	5.111602	5.804011	0.0000
EPS	0.036650	0.009199	3.984153	0.0002
DER	4.751726	1.782361	2.665972	0.0094
DPR	0.019742	0.007365	2.680755	0.0090

Source: Data processed

Based on the results of the above calculations, it can be seen that the calculated t value for the EPS variable is 3.984153 > the t table value is 1.70329 with a probability value of 0.0002 which is smaller than 0.05. It can be concluded that EPS has a positive and significant effect on firm value. DER has a t count of 2.556852 > t table value of 1.70329 with a probability value of 0.0094 which is smaller than 0.05, so DER has a positive and significant effect on firm value.

EPS of 3.503593 > t table value of 1.70329 with a probability value of 0.0008 which is smaller than 0.05. It can be concluded that EPS has a positive and significant effect on DPR. DER has a t count of -4.133257 > t table value of 1.70329 with a probability value of 0.0001 which is smaller than 0.05, so that DER has a negative and significant effect on DPR having t count is 2.680755 > t table 1.70329 with a probability value of 0.0090 which is smaller than 0.05, so that the DPR has a positive effect on firm value.

a. F Test (Simultaneous)

The F (simultaneous) test is useful to show whether the independent variables have a joint effect on the dependent variable. The following results of the F test are presented in the table:

Table 11. F test results (simultaneous)

R-squared	0.749371	Mean dependent var	424.9105
Adjusted R-squared	0.655803	S.D. dependent var	988.1618
S.E. of regression	229.8072	Sum squared resid	3960852.
F-statistic	8.008834	Durbin-Watson stat	1.916117
Prob(F-statistic)	0.000000		

Source: Data processed

Table 11 shows the F-Statistic of 8.008834 with a probability value of 0.0000 less than 0.05. It can be concluded that EPS, DER, and DPR together have a significant effect on firm value.

b. Coefficient of Determination (R^2)

The coefficient of determination is used to measure how far the independent variable can explain the dependent variable. The following is presented in the table:

Table 12. R^2 test results

R-squared	0.749371	Mean dependent var	424.9105
Adjusted R-squared	0.655803	S.D. dependent var	988.1618
S.E. of regression	229.8072	Sum squared resid	3960852.
F-statistic	8.008834	Durbin-Watson stat	1.916117
Prob(F-statistic)	0.000000		

Source: Data processed

Table 12 shows the results of testing the R^2 value of 0.749371, meaning that all independent variables, namely EPS, DER, and DPR, are able to explain the dependent variable, namely the value of the company is 74.93% while 35.07% is explained by other variables or factors outside the research.

c. Moderation Test

To test the effect of moderating variables used an interaction test called Moderate Regression Analysis (MRA). MRA or interaction test is a multiple linear regression in which the equation contains a relationship or interaction element (multiplication of two or more independent variables).

This multiple regression analysis test aims to determine how the influence between the independent variable, the moderating variable and the relationship between the independent variable and the moderating variable on the dependent variable. The following is presented in the table:

Table 13. Moderation test results (interaction)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	26.02969	4.764964	5.462726	0.0000
EPS	0.039070	0.012345	3.164882	0.0023
DER	-0.754182	2.077503	-0.363023	0.7176
DPR	-0.014272	0.024078	-0.592712	0.5552
EPS*DPR	0.002106	0.012188	0.172792	0.8632
DER*DPR	0.216831	0.050354	4.306170	0.0001

Source: Data processed

Table 13 shows the effect of the interaction of EPS*DPR on Y of 0.172792 which indicates a positive, meaning that the moderation of the DPR is able to strengthen the effect of EPS on firm value and the effect is not significant $0.8632 > 0.05$. The existence of the DPR as a moderator is a moderator.

The interaction effect of DER*DPR on Y is 4.306170 which indicates a positive, meaning that the moderating of the DPR is able to strengthen the effect of DER on firm value and the effect is not significant $0.0001 < 0.05$. The existence of the DPR as a moderator is a moderator.

RESULTS AND ANALYSIS

The Effect of EPS on Firm Value

The results of hypothesis testing indicate that EPS has a positive and significant effect on firm value. t count is 3.984153 > t table value is 1.70329 and coefficient is 0.036650 with a probability value of 0.0002, meaning that if earnings per share increases by 1%, the firm value will increase by 0.036650%. On the other hand, if EPS decreases by 1%, the value of the company will decrease by 15.07061%. The higher the EPS value will be encouraging because the greater the profit provided to shareholders (Fakhrudin, 2001). High EPS will attract investors and potential investors to buy company shares which will increase stock prices with rising stock prices it will increase the value of the company, conversely a low EPS will reduce investor interest in buying shares and will reduce share prices which can make the company value also decreased. It can be interpreted that the greater the earnings per share, the value of the company will increase (Erawati, 2012).

This is in accordance with the signaling theory which states that EPS is a signal or information to investors in investing their capital. A positive signal will make the value of the company increase and vice versa. The results of this study agree with research conducted by Hanipa Siregar (2017) which states that EPS has a positive and significant effect on firm value, the t -count value is 2.194 > t table 1.988 with a significant level of 0.035 < 0.05 so that EPS has a strong relationship. in line with the stock price. In line with Tri Marlina's research (2013) which also states that EPS has a positive and significant effect on firm value, the t -count value is 3.2453 > t -table 2.004 with a significant level of < 0.05 which indicates positive or unidirectional results.

The Effect of DER on Firm Value

The results of hypothesis testing in this study indicate that DER has a t count of 2.556852 > a t table value of 1.70329 with a probability value of 0.0094 which is smaller than 0.05. So that the debt to equity ratio has a positive and significant effect on firm value. Every 1% increase in DER will increase the value of the company by 2.556852%, and vice versa. This is not in line with the signaling theory which states that debt gives a negative signal to investors because high debt will lead to low firm value and will reduce investor interest in investing and the pecking order theory which assumes that profitable companies are companies that use less debt. Because debt can also increase profits for shareholders with tax savings. Companies with high debt will be deducted from interest costs in the tax burden so that interest costs reduce profit before taxes so that corporate taxes are low. The use of debt becomes leverage for the company because it encourages the amount of fixed share capital while profits increase due to business expansion and debt. So that the company will be more profitable and attract investors to invest which will result in the value of the company going up.

This is in line with research conducted by Tri Marlina (2013) which says that DER has a positive effect on firm value. The coefficient value is 1.2705 and the t value is 10.2199 > t table 2.004 with a probability of 0.000 < 0.05. Agree with research conducted by Zainal Abidin, et al (2015) which states that DER has a positive and significant effect on firm value. T count 3.243 > t table 2.0345 and sig 0.03 < 0.05. Research from Cheng and Tzeng (2011) and Gill and Obradovich (2012) and Khalid (2011) states that leverage (DER) has a positive and significant effect on firm value.

Effect of EPS on DPR

The results of hypothesis testing indicate that EPS has a significant positive effect on DPR, with a coefficient value of 0.007593 with a t-count value of 3.503593 > t-table value of 1.70329 and a probability value of 0.0008 which is smaller than 0.05. It can be interpreted that every 1% increase in EPS will increase the DPR by 0.007593%, on the contrary every 1% decrease in earnings per share will decrease the DPR by 0.007593%. A positive EPS value shows that the company is generating profits in good condition.

In accordance with the theory which states that the higher the EPS value, the greater the profit provided to shareholders which will later be distributed to shareholders as dividends (Werner, 2013). This research is in line with research conducted by Olivia Diantini and Ida Bagus Badjra (2016) which states that EPS has a significant positive effect on the DPR. The results of hypothesis testing show that the coefficient value is 1.079 and the t count is 10.609 with a significant level of 0.000 < 0.05, meaning that EPS shows a positive direction towards DPR.

The Effect of DER on DPR

The results of hypothesis testing in this study indicate that DER has a significant negative effect on DPR, obtained a coefficient value of -6.813532 has a t count of -4.133257 > t table value of 1.70329 with a probability value of 0.0001 which is smaller than 0.05 . every 1% increase in DER will decrease DPR by -6.813532, and vice versa.

In accordance with the pecking order theory which states that profitable companies use less debt and companies tend to seek funding sources that are minimal risk (Sudana, 2014). In contrast to the opinion of Brealey and Myres in Uremadu et al (2012) said that investors will be attracted to companies that make money to pay debts.

On the other hand, this theory says that investors prefer companies with less debt because they are more profitable. Not because of the low target debt ratio, but because the company only uses outside funds after the new funds are sufficient. So it can be said that the lower the DER value of a company, the better because it has a small risk so that it increases the DPR. This is supported by research conducted by Chatarina Dina Eka Wahyuni (2016) which states that DER has a significant negative effect on the DPR. From the research results, the coefficient value is -0.414 with a t-count value of -3.946 and a significant value of 0.0000, meaning that DER is opposite to stock prices. Supported by other research, Elsa Badria Fidiyanti, et al (2016) stated that DER had a significant negative effect on DPR, the t-count value was 1.106 with a significant level of 0.272. A positive t-count value indicates that EPS is in line with DPR.

The Influence of DPR on Company Value

The results showed that the DPR has a positive effect on firm value. DPR has a coefficient value of 0.019742 t count of 2.680755 > t table 1.70329 with a probability value of 0.0090 which is smaller than 0.05. Every 1% increase in DPR will increase the value of the company by 0.019742%, and vice versa. In accordance with the signal theory which states that dividends provide a signal in the form of information to investors to buy shares. Dividends are a positive signal for investors, because investors feel happy if the dividends distributed are high and will be interested in investing. This will increase the value of the company.

Agree with research by Maggee Senata (2016) which states that dividend policy has a significant positive effect with a t-count value of $4.543 > t$ table 1.9977 and a significant $0.000 < 0.05$. Another study by Rifandi Yoki Azis (2017) states that dividend policy (DPR) has a positive effect on firm value, the t-count value is 2.337 with a significance of $0.023 < 0.05$.

Effect of EPS on Firm Value Moderated by Dividend Policy

The results of this study indicate that DPR is a moderating variable of the effect of EPS on firm value. From the results of the moderated regression analysis that has been carried out, it shows that the effect of the interaction between the EPS and DPR variables is positive but not significant with a coefficient value of 0.002106 and a probability of 0.8632 . It can be interpreted that DPR strengthens the influence of EPS on firm value.

This is supported by research by Lutvi Eka Indriani (2017) which proves that EPS has a positive effect on firm value moderated by dividend policy. Dividend policy is able to strengthen the effect of EPS on firm value.

The Effect of DER on Firm Value Moderated by Dividend Policy

The results of this study indicate that DPR is a moderating variable of the effect of DER on firm value. From the results of the moderated regression analysis that has been carried out, it shows that the effect of the interaction between the EPS and DPR variables is positive and significant with a coefficient value of 0.216831 and a probability of 0.0001 . It can be interpreted that the DPR strengthens the influence of EPS on firm value. This is supported by research by Erlangga (2009) which proves that dividend policy is able to strengthen and weaken financial performance on firm value. Dividend policy is able to strengthen the effect of DER on firm value. However, it is different from research conducted by Ari Nurjanah and Titiek Suwanti (2018) which states that debt policy (DER) has a positive effect on firm value and dividend policy (DPR) is unable to moderate the effect of debt policy (DER) on firm value (PBV).

CONCLUSION

Conclusion

1. EPS has a positive effect on firm value. A high EPS indicates that the company is very effective in generating profits in the future. Companies with good performance will influence and attract investors because they are believed to be able to generate large profits. The higher the EPS, the higher the value of the company.
2. DER has a positive effect on firm value. A high DER will reduce the interest expense in taxes so that it will increase profits for the company. So the higher the DER, the higher the firm value.
3. EPS has a positive effect on the DPR. High EPS will produce large dividends for shareholders because the profits obtained will be distributed to shareholders in the form of dividends. The higher the EPS, the bigger the DPR.
4. DER has a negative effect on DPR. A high DER will reduce the amount of dividends to be distributed to shareholders because the company will prioritize its obligations to pay debts, so that the dividends to be distributed to shareholders will be small. The higher the DER, the lower the DPR will be.

5. DPR has a positive effect on firm value. A high DPR will attract investors because investors tend to like large dividends, so that dividends distributed to investors will affect the value of the company. The higher the DPR, the higher the value of the company.
6. EPS has a positive effect on firm value with DPR as a moderating variable. High EPS is a good signal for investors so that investors are interested in investing. After the moderation test was conducted, EPS had a positive and significant effect on stock prices by being moderated by the DPR, meaning that the emergence of the DPR strengthened the influence of EPS on firm value, so that the DPR strengthened the influence of EPS on firm value.
7. DER has a positive effect on firm value with DPR as a moderating variable. The emergence of DPR as a moderator strengthens the influence of DER on firm value because the company must choose whether to pay debts or distribute dividends.

Suggestions

Stock investment decisions pay attention to the company's financial performance through financial ratios that have a significant influence on company value to see the company's prospects in the future. Companies need to maintain company value to attract investors to invest. Tax avoidance policy can be implemented as a profit maximization strategy by taking into account the composition of the right capital structure to make it more in-depth and comprehensive, adding external factors that can affect firm value, extending research time, with a larger unit of analysis and sample.

For investors to be more careful in making decisions to invest in the company they run to avoid losses, it is better to consider the level of health and the benefits obtained and for customers to be more careful in making their investment decisions, it is hoped that customers can anticipate the risks that are often faced so that customers can trust their funds safely. Future researchers are expected to increase the research time because this study only takes 4 years. research and only used 3 variables.

For sharia stock market regulators, it depends on economic conditions. The regulators in particular are: the Indonesian Sharia Stock Index (ISSI) and the Government. It is necessary to synergize and carry out their respective functions to create a stable economy. The government can make laws and regulations to provide security and convenience for customers in transacting and investing or through fiscal policy in the economy, both from the tax sector and subsidies. In this case, the Indonesian Sharia Stock Index (ISSI) must also implement a strategy to increase the Indonesian banking market share. Supervise banks, and make monetary policy to maintain interest rate stability and control inflation.

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Obstacles for Applying the Ijarah Concept in the Libyan Industrial Development Bank

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Abstract. The current study attempts to know the obstacles to applying the Ijarah contracts in the Libyan Industrial Development Bank as financing tools for industrial companies. For this reason, the researcher conducted a qualitative study to achieve the goal of the study. This study relied on the personal interview as one of the most important tools used in collecting data related to the study, where he then put the interview questions, which consist of six accurate and quality questions for the success of the research. The answers of the participants confirmed that the Ijarah contract can be applied as a financing tool in the Industrial Development Bank in Libya with ease and smoothness. They also pointed out that many policies, tools, and standards must be changed in accordance with Islamic law in order to implement and activate the mechanisms of the Ijarah contract in the Industrial Development Bank in Libya. As an implication of this paper, it was indicated that banks have encountered difficulties in integrating the activities of leasing companies into their corporate businesses.

Keyword: Development bank, ijarah contract, Libya, obstacle.

INTRODUCTION

As an Islamic society that adheres to the teachings of Allah, People must obey Allah's orders in everyday life, especially in transactions. People who need funds can use financing services that have been provided by Islamic financial institutions, one of which is ijarah financing which is a contract to sell benefits made by someone with another person using the provisions of Islamic law. Ijarah financing has a different concept from the concept of credit at conventional banks, Ijarah financing is also said to be a driving force for the business sector because Ijarah financing has privileges compared to other types of Islamic financing. The specialty is that starting their business activities, entrepreneurs do not need to have capital goods first, but can lease them to Islamic financial institutions, so that entrepreneurs are not charged with the obligation to submit collateral, so it can be said that Ijarah financing is more attractive than other types of financing such as Mudharabah and Musharaka. Therefore, the researcher discusses how to apply and calculate Ijarah contracts in Islamic financial institutions.

Ijarah has taken many forms of modern contracts to support and finance various projects so that Islamic banks adopt the use of the two forms of financial Ijarah and operating Ijarah, so Islamic banks try to highlight the advantages of economic Ijarah contracts in financing companies in general, as they

work to reduce economic burdens by seeking to Ijarah capital assets (Sumarti 2018). For companies, it directly contributes to advancing the wheel of economic development by providing financing for operating companies and for those that are still in the process of being established.

Libyan Islamic banks play a major role in pushing for the use of Ijarah contract contracts to improve development and economic growth by providing the necessary liquidity for the development of existing Libyan companies and institutions (Gait and Worthington 2018), and encouraging the establishment of new projects and companies because of their great importance in spinning the wheel of development in the country, by drafting contracts Ijarah and working on setting the necessary conditions to be met by the lessor and the lessee (Abusloum, Ahmad, and Bello 2020). In addition, to its awareness of the importance of Ijarah contracts in mitigating the effects of inflation resulting from project financing, and thus contribute to protecting the investments made by these companies in periods of recession and economic boom, which is an addition to the Gross Domestic Product (GDP) (World-Bank 2020). It should be noted that the Industrial Development Bank in Libya is one of the banks that seek to implement Ijarah contracts as one of the most prominent financings means that most Libyan investors seek to obtain their own privileges.

The Islamic Development Bank in Libya is making great efforts, like other Libyan Islamic banks, in order to take advantage of the forms of Ijarah contracts to financially support industrial companies, by trying to issue special standards for Ijarah contracts in order to attract companies affiliated with the industrial sector in providing the necessary liquidity for the projects undertaken by these companies. And the conclusion of Ijarah contracts that contribute to advancing production and achieving development in Libya, and therefore, this study sheds light on the possibility of applying the Ijarah contract in financing industrial companies in the Development Bank in Libya.

It is clear from the study problem that the Industrial Development Bank lacks Islamic financing programs and mechanisms, especially the forms of lease contracts. The Industrial Development Bank website indicated that the bank did not fully succeed in activating Islamic financing mechanisms, especially the forms of lease contracts from 2014 to 2019.

The aim of this study is to find out the obstacles of implementing Ijarah concept in the development bank in Libya. This research will provide a comprehensive literature review of the research variables. The following sections will show the methodology used in this research. This paper will also discuss the findings of this research and include a conclusion.

LITERATURE REVIEW

Since 2009, many commercial banks in Libya have practiced Islamic banking (World-Bank 2020), whether through Islamic windows, establishing Islamic banking branches, or a complete transformation. The entry of Islamic banking services into the Libyan banking sector dates back to the first conference for Islamic financial services held in the academy of postgraduate studies sponsored by the Central Bank of Libya and a group of Libyan commercial banks, and then the Central Bank of Libya issued several publications in 2009 (Omar et al. 2019).

The first publication No. (9) was issued on 19/80/2009, which authorizes Libyan commercial banks to allow them to provide Islamic banking products, and it was called Alternative banking services, including *Murabaha and Musharaka*, as well as financial services that can be provided with other products such

as *Istisna'a*, Ijarah, and Salam after studying and developing their contracts. The second publication of Central Bank of Libya was Law No. (9) for the year 2010 was issued for Islamic banking, which stipulates the need to present Islamic banking transactions based on the Shariah Supervisory Boards which are required to verify their validity, and it served as its organizational chart, where it expanded by clarifying the conditions, requirements, and mechanisms of work in accordance with the provisions of the law of the products of Islamic banking. In the year 2011, the activity of Islamic banking stopped as a result of the security events that Libya witnessed (Albashir, Zainuddin, and Panigrahi 2018).

In the year 2012, the National Transitional Council issued Law No. (46) adding a special chapter for Islamic banking to the Banking Law No. (1) of 2005, and in the same year and on 02 / 01/2012 The Central Bank of Libya issues Resolution (3) and establishes the Advisory Committee for Islamic Banking that reports directly to the Governor of the Central Bank of Libya (Abudirbala and Mukhtar 2019). This committee issued a memorandum of rules and regulations regulating the practice of Islamic banking, and then there were developments in the course of Islamic banking in Libya, the most prominent of which was in 2013. General National Congress Resolution No. (1) of 2013 prohibiting dealing with interest, a law that obliges all personal and legal entities to stop dealing with interest, which forced the entire banking sector to switch to Islamic banking. In the same year, a decision was issued to establish a central Shariah board in the name of the Central Sharia Supervisory Board, in 2014, Islamic banking activity stopped as a result of security events, and in 2015 the Libyan House of Representatives issued Law No. (7) to amend Law No. (1) of the year 2014. In 2013, by amending the cancellation of interests for legal persons between them, starting from 01/01/2020, and in 2017 the work of the first Islamic bank in Libya began, and in 2018 the Advisory Committee of the Central Bank of Libya completed the preparation of the Islamic Banks Governance Guide (El-Brassi, Bello, and Alhabshi 2018).

However, there was no transformation in the sense of switching to Islamic banking completely, but rather a partial transformation process for some traditional banks through the establishment of Islamic windows that carry out the work of Islamic banks (Fargani 2018). The establishment of the first Islamic bank in Libya was announced through an IPO on the stock market. The opening of Islamic windows in Libyan commercial banks came as a step or nucleus for the transition to Islamic banking and away from traditional banking on the one hand, as it is a temporary step that is intended to be generalized to the entire work of government banks (Mahmoud, Khaliq, and Nabil 2020). What is meant by Islamic windows? Familiarity with the concept of Islamic windows requires identifying the idiomatic meaning of these windows, according to the angle of view of them, as some of them defined them as “allocating a part of space in the traditional branch in order to provide Islamic banking services in addition to the traditional services provided by this branch (Asbeig 2019).

In asset-based instruments, the total return of the Islamic financial institution is the difference between the cost of the asset to the institution and the amount that can be recovered from the sale or lease of that asset, and thus these instruments may involve exposure to market risk (price) with respect to the asset as well as credit risk with respect to With the amount owed by the party dealing with it, Islamic banks are based on jurisprudential foundations that represent the balance governing their business, including that they do not deal with usurious interests, neither by taking nor giving, and also that one of the features of Islamic banking is the sharing of risk between the providers of funds and the bank on the one hand, and between the bank and its users. Funds on the other hand, and the risk of leasing is one of the risks of ownership because the leased asset is still owned by the bank.

The risk here arises from the possibility of damage, obsolescence, depreciation of the asset, which the bank cannot transfer to the lessee, and the risk arises from the tenant's failure to pay the remaining installments of the asset. Or the lessee refuses to own the asset after the end of the lease contract and thus returns it to the bank that must sell it as soon as possible in compliance with the instructions of the monetary authority that prevent banks from The survival of the ownership of assets and notables with the bank for financing purposes.

The Libyan banking system is new to Islamic banking, as the beginning of the Libyan Industrial Development Bank was through an Islamic window that deals in the form of Murabaha to order purchases in some commodities such as cars, machines, computers, furniture, building materials, durable goods, and many banks. The commercial operating in Libya also joined the path of Islamic banking, so they submitted the form of Murabaha by purchase, including Jumhouria Bank, Sahara Bank, North Africa Bank, Al Wahda Bank and National Commercial Bank.

Development Bank in Libya

Funding in general, and financing granted by specialized banks in particular, plays an important role in the national economy, as it is the main source of financing for small and medium enterprises, which in turn contributes to achieving economic and social development in Libya (Mahmoud, Khaliq, and Nabil 2020). Besides, diversifying sources of income and the consequent provision of goods and services to the local market and export. As well as in providing opportunities for job seekers, and therefore the Development Bank has a major role in bringing about economic and social development, and the Libyan Development Bank has been looking forward since the date of its establishment based on Law No. (8) for the year: 1981 to establish a banking system that works to achieve sustainable development within the Libyan state through what it presented his activities and statistics with the aim of keeping pace with economic growth (Albashir, Zainuddin, and Panigrahi 2018).

The strategic objectives of the Libyan Development Bank appear in providing banking financial services, innovative, advanced financing, and investment operations of high quality, that meet the needs of customers, exceed their expectations, and keep pace with the distinguished modern banking industry. To achieve modern economic development, the development bank has the following objectives:

- Effective contribution to sustainable economic development to reduce the problem of unemployment, which contributes to achieving social development.
- Financing the necessary investments for productive projects in the industrial and service fields and other productive projects of economic feasibility.
- Providing technical and economic advice for productive projects financed directly or indirectly by the Bank; to maximize profits and achieve added value in the local national economy.
- Memorizing investment opportunities that contribute to expanding the economic base, contributing to modifying the map of the country's industrial settlement, diversifying sources of income for the citizen, and encouraging the geographical spread of projects in a way that contributes to increasing the growth of the gross domestic product.
- Attracting foreign participation in order to finance productive projects in accordance with the economic policy in force in the Libyan state.

Definition of Ijarah

The term “Ijarah” is generally used in Islamic banking. In terms of definition and context in banking, Ijarah is the transfer of usufructuary rights for an item with the payment of a rental fee without being followed by a transfer of ownership of the item. In short, Ijarah means renting something without the intention of owning it.

Obstacles to Applying Ijarah

Finance is the blood that flows in the arteries of economic institutions and helps them to challenge difficulties, encourage creativity and increase growth, and advance the wheel of development with all that results from it. Funding sources may differ from one stage to another according to the institution's need for that. The institution finds in front of it several alternatives for financing, from relying on its own sources (Lateef et al. 2017). The careful study of the source of financing and its characteristics, in addition to the time required to carry out the financing process, are the most important factors that lead to choosing the appropriate source of financing. Finance in Islam is, in short, the provision of resources from one person to another without a return or by deferring the return, and financing in the Islamic economy is distinguished from financing in general by its legal rules. Islamic finance serves the basic principles of Islamic economics (Nazal 2017).

Islamic finance is defined as “the provision of in-kind or monetary wealth with the intention of profiting from its owner to another person who manages it and disposes of it in return for a return permitted by Sharia provisions (Felix and Abubakar 2020).” Islamic finance is defined as “that a person provides something of financial value to another person, either as a donation or as a way of cooperation between the two parties, in order to invest it with the intention of obtaining profits to be divided between them at a percentage agreed upon in advance, according to the nature of their work and the extent of their contribution to capital and administrative and investment decision-making (Fauziah et al. 2019). It is noted on this definition that it does not refer to the legal framework of Islamic finance, in addition to its focus on the forms of participation only, while there are other methods that are not based on profit sharing, such as sales methods (Hikmah 2019).

The Ijarah contract is like the so-called sale that the Islamic legislation meant by explaining its special provisions according to what the nature of its contract in Islamic banks requires as a basic pillar, and it differs from the sale contract in that it is temporary, while the sale contract does not accept timing, but rather it is perpetual, because it entails the transfer of ownership of the property (Hikmah 2019). Thus, a Ijarah differs from a sale in that it is a sale of the benefits of the assets and not of the assets themselves.

There are several factors that hinder the implementation of the Ijarah contract, including:

1. Lack of awareness: We find that there is a weakness in the understanding of those working in the banking system with all that is included in the Ijarah contract in the banking system in terms of conditions, controls, and procedures, which reduces its effect on its implementation.
2. Risks: Any financing that faces risks, but the degree of risk varies from one form to another. The Islamic financing contracts are characterized by flexibility and depend mainly on trust and trust, which represent the basic obligations of the Islamic transaction and the obligation to pay the bank. Credit-related to the Ijarahd property from its maintenance and insurance.

3. Policies: The Central Bank's policies work on activating new contracts such as Ijarah and contracting that are in line with the required financing need, but we find that the percentage of Murabaha financing through banks is still more than 50%. This means that the policies are encouraging and not obligatory, and we do not find direct monitoring and statistics to assess the volume of Ijarah financing. The Shari'a standard of Ijarah and Ijarah Muntahia-e-ownership issued by the Accounting and Auditing Organization for Islamic Financial Institutions emphasized the necessity of applying the provisions of the tenancy to tenure-to-own.

And after the decision of the International Islamic Fiqh Academy regarding the Ijarah ending with ownership and the clarification of everything related to the controls regarding the property, the period, or the transfer of ownership, the picture became clear and clear and the parties benefiting from the decision (the non-interference in Islamic banking should be applied) economic activity by acquiring assets, equipment, factories and everything that can be included under the legally permissible form of Ijarah according to the agreement of jurists and the Academy of Islamic Jurisprudence (Bako and Aliyu 2018).

The study of Omar Miftah Al-Saadi (2015) attempted to identify the extent of application and success of financial leasing in Libyan banks, especially the Development Bank. The problem of the study lies in the inability of financial leasing to attract a large segment of clients in Libyan banks. The importance of the study is highlighted by identifying the role of financial leasing as one of the most prominent financing means in Libyan banks in the Development Bank. The study followed the descriptive analytical approach to describe and analyze financial leasing in Libyan banks. The study found many results, including that Libyan banks should expand granting financial leasing to industrial companies. The study recommended the necessity of applying the forms of leasing contracts, including operational leasing. The current study has benefited from this study in identifying the role of financial leasing in Libyan banks. However, this study differs from this study in shedding light on the impact of leasing contract formulas supporting financing industrial companies in the Industrial Development Bank in Libya.

METHODOLOGY

This study uses the qualitative approach, especially the descriptive analytical method, to describe and analyze the impact of Ijarah contract contracts in supporting the financing of industrial companies in the Industrial Development Bank in Libya. The descriptive-analytical approach contributes to the description, analysis and interpretation of phenomena in a statistical form so that the objectives of the study can be logically achieved.

The descriptive analytical method is one of the most prominent methods used in scientific research in order to conduct analysis and extract results in order to answer the questions of the study, and it is a method that researchers rely on to obtain adequate and accurate information depicting social reality and contribute to the analysis of its phenomena. The descriptive method is linked to a number of other approaches. The most important of which are the survey method and the case study method (Queirós et al., 2017).

The qualitative method is what the researcher found most appropriate for writing his research, clarifying the concepts of his interlocutor and absorbing his idea, as it became clear to the researcher that he needs more than one method and tool to collect and analyze data and information from primary and

secondary sources to know a mechanism for applying the Ijarah contract and how to use it in the Libyan Development Bank, which is compatible with the legal and legislative environment and the banking process. in Lybia.

When initiating the field study, the researcher will follow the generally accepted scientific steps, whether the field of defining the study population and its sample, methods of data collection and determining methods of analysis, as well as presenting the results that will be reached, and the primary data will be collected through personal interviews as a main tool for the study because it has no importance from Flexibility in the application and the possibility of obtaining more information.

Bryman (2017) defines the study population as “a group of research or study units for which data is intended, whether the unit is a human, a plant, or an inanimate object.” This procedure interviews a specific category of the research community that possesses specialization and scientific and practical knowledge, and they are responsible in the Industrial Development Bank in Libya, the subject of the study, to know their opinions about the study and the obstacles to applying the Ijarah contract in the Industrial Development Bank in Libya.

RESULTS AND ANALYSIS

The researcher used the interview technique with 5 employees in both the Central Bank of Libya and the Industrial Development Bank in Libya. The present section discusses the results obtained by the study participants. The interviews included six questions related to the axis of obstacles to applying the Ijarah contract. The demographics of the participants will be discussed and their answers reviewed and discussed about the interview questions.

Demographic Background

The demographics participating in the current study consist of 5 participants from the Industrial Development Bank in Libya. The participating samples were selected from 5 different departments: (Marketing Department, Human Resources Department, Customer Service Department, Banking Operations Department, and Risk Management Department).

One employee was chosen from each department in the Industrial Development Bank in Libya, so that the current study will get participants from each department. At the beginning of the interviews, several questions were asked to the participants about their personal data so that the current study could obtain reliable information from different employees. Table 1 below explains the demographic data of the participants in the current study.

Table 1. Participants backgrounds

No of Participants	Gender	Age	Experience	Department
1	Male	45 years old	18 years	Marketing
2	Male	51 years old	23 years	Human Resources
3	Female	30 years old	7 years	Customer Service
4	Male	48 years old	12 years	Banking Operations
5	Male	55 years old	28 years	Risk Management

Through the results shown in the previous table, it is clear that the current study investigated the selection of specialized and diverse samples from different departments to verify the reliability and validity of the expected answers. The previous table shows the sexual diversity in the participating samples, as it found one female and 4 male participants. It also shows that the ages of the participants ranged between the ages of 30 and 55 years, which confirms that the participants were of mature ages. On the other hand, it was found that most of the participants have appropriate practical experiences, whereby Azzam received the highest percentage of years of experience (28 years) and Malak got the lowest percentage of years of experience (7 years).

Data Analysis and Discussion

The first question

What are the expected obstacles in the application of the Ijarah contract?

Participants 1, 2, 3, 4, and 5 emphasized that one of the biggest challenges banks face today is identifying embedded Ijarah contracts. A typical Ijarah can require legal work to collect the appropriate data, but the process of determining the Ijarah itself does not provide much difficulty. Embedded Ijarahs, which refer to Ijarah assets provided within contracts for service, outsourcing, and maintenance, require additional work. Examples of contracts that may contain implied Ijarahs include:

- a. Storage Contracts - Although typically outsourced, these agreements may contain language that matches the definition of a Ijarah.
- b. Warranty Contracts - These types of services may also contain access to scanners or equipment, which may qualify as a Ijarah under the definition of the Standard.
 - Contracts of Transportation - Depending on the terms, vehicles used for transportation can qualify as a rental asset.
 - Data Storage Contracts - Like security contracts, these agreements can include built-in Ijarahs for each of the servers or the space that the servers occupy.

Participants, also indicated that under the new criteria, the classification of Ijarah contracts has been changed, along with their status on the balance sheet. Other common changes and challenges include:

- Definition of the Ijarah contract

How are initial direct costs determined?

- More comprehensive disclosure requirements
- Handling rental and non-rental components.

Second question

Will the bank face difficulty in marketing financing in the form of Ijarah to its customers?

Participants 1,2, and 3 said that entering the Ijarah market was not easy for banks because they had both internal and external barriers driven by market structure to overcome. Respondents indicated that banks faced difficulties in integrating the activities of Ijarah companies into their corporate businesses. Respondents reported that operating Ijarahs are provided by Ijarah companies that have specific market knowledge for the equipment assets they Ijarah.

While participants 4 and 5 stated that the bank will not face any difficulty in marketing the financing in the form of Ijarah, due to the similarity of the features of Ijarah financing to a large extent with the advantages of traditional Ijarah financing. However, unlike a traditional Ijarah, Sharia holds the lessee responsible for all damages, repairs, insurance, and depreciation of the Ijarahd asset. The lessor must also bear the risk of uncertainty associated with the useful life of the Ijarahd asset. Islamic financial institutions mostly rely on Ijarah, known as *ijara wa iqtina*, to meet financing needs in the real estate, retail, industrial, and manufacturing sectors. Ijarah has strong support from Sharia scholars and bears a close resemblance to traditional Ijarah.

Participants 1 and 2 also indicated that other than providing Sharia-compliant products and services, factors such as: providing products and services that meet the needs of the customer, low cost of borrowing, minimum requirements for opening an account, and service efficiency influence the development of Islamic banking services. The Libyan Industrial Development Bank should put these priorities at the forefront of its priorities and strengthen them. There should also be an amendment to the existing banking law. By doing so, they can also gain a large number of clients from both Muslims and non-Muslims. Above all, they should invest in branch expansion and thus enable the marketing of Islamic banking products at the grassroots level.

Third question

Do you think that financing in the form of Ijarah will expose the bank to high risks?

Among the participants 1, 2, and 5 from their point of view believe that for financial Ijarah, the Ijarah banks have limited exposure to the environmental and social performance of the lessee and also limited influence over the lessee's use of the fixed asset. However, the Ijarah bank may be affected by legal issues, disruption of the lessee's operations, and reputational concerns. With an operating Ijarah, the Ijarah bank is associated with the operation of the Ijarahd asset and can be directly responsible for any environmental and social impacts.

Participants 3 and 4 also indicated that fixed assets that can usually be Ijarahd include light equipment (such as passenger cars, light trucks, office equipment, furniture, and appliances) or heavy equipment (such as earthmoving tankers, large machinery, industrial equipment, cargo ships, heavy trucks, and aircraft). In some cases, Ijarah banks can own, maintain and operate the Ijarahd physical assets, known as an operating Ijarah. In other cases, Ijarah banks simply provide the necessary financing to the lessees, known as financial Ijarah. The environmental and social risks associated with Ijarah activities are generally negligible for most transactions but will be more significant if the fixed asset involves the use of heavy equipment and as a function of the industry sector. Improper operation or maintenance of equipment may affect the safety of the community or workers and result in pollution and potential environmental pollution.

Fourth question

Will the bank face a problem of liquidity to finance the purchase of capital assets when applying the Ijarah contracts?

Participants 2, 4, and 5 reported that Ijarah may be less expensive than buying for companies with low credit risk. In the event of financial distress leading to reorganization or liquidation, lessors tend to have safer claims than lenders. Thus, lessors may be willing to write Ijarah contracts to companies with

poor financial characteristics and less expensive loans offered by lenders, if such loans are even available. Accordingly, the bank will not face a problem of liquidity to finance the purchase of capital assets when applying the Ijarah contracts.

Participants 1 and 3 also indicated that the bank will face a few liquidity difficulties, but it will not be a major problem as there are other factors that may motivate banks to Ijarah assets instead of buying them. Often the causes are difficult to identify, so they cannot be easily incorporated into the numerical analysis. However, a sound rent analysis must start with quantitative analysis, and then qualitative factors can be considered before making the final rental or purchase decision.

Fifth question

The laws that are related to Ijarah and have not yet been developed to comply with the requirements and controls of Islamic Sharia, how do you think it can be dealt with?

Within this scope, participants 4 and 5 indicated that laws may also prohibit banks from Ijarah assets to clients, and thus, Islamic banks have no choice but to avoid Ijarah and implement it in the form of sale. Besides, the market for a vital instrument of the Islamic capital market such as Sukuk has not yet been regulated to the fullest extent due to various legal restrictions. Furthermore, many courts do not recognize Islamic law while dealing with disputes related to Islamic finance. Despite the severity of the legal challenges mentioned above, Islamic finance also faces internal challenges that may jeopardize its credibility and pose a more serious threat to its long-term success and survival.

While participants 1, 2, and 3 said that it is no secret that Islamic finance faces challenges related to the lack of proper and effective Shari'a governance and that the Islamic banking and finance industry regulates itself from its inception, without supervision or interference from truly independent authorities. Standardization of products can be handled by some of the existing regulatory bodies such as the Fiqh Academy or the Accounting and Auditing Organization for Islamic Financial Institutions after restructuring these authorities in a way that ensures professionalism, scholarship, integrity, and complete independence. After that, there is a need to put in place some mechanisms to make Islamic banks and financial institutions adhere to standardized products, preferably with the force of law; But if this is not possible, by blacklisting non-compliant banks.

Sixth question

The financial Ijarah contract entails the transfer of ownership risks from the lessor to the lessee, what do you think?

It was found through the opinions of participants 2 and 4 that certainly the risks of ownership are transferred from the lessor to the lessee, and this is one of the basics of Islamic law, as there are no guarantees of loss, because the Ijarah is based on profit and loss, and that the Ijarah is considered as selling and not Ijarah. Only, therefore, the entire ownership belongs to the lessee, and this does not relieve the responsibility of the lessor from any risks that follow the ownership.

While participants 1, 3, and 5 indicated that the finance Ijarah is a Ijarah agreement in which all the risks and rewards related to the ownership of the asset are transferred to the lessee from the lessor. In simpler words, transferring risk and reward means transferring control over the asset. Where the lessee is the person who has obtained an asset from the lessor for use and the lessor is the person who owns the asset and has handed over the asset to the lessee to earn rents.

Participants, also said that they believe that the operating Ijarah is a Ijarah, not a finance Ijarah. In short, a Ijarah agreement in which the risks and rewards associated with the asset are not transferred to the lessee and remain with the owner of the asset, i.e. the lessor. Although the lessor is the rightful owner of the asset and the owners are often responsible for bearing any loss and obtaining the economic benefits associated with the asset, but sometimes the risks and rewards associated with the assets are transferred to another person by the owner himself without transferring the title of ownership of the asset. This is the case with a finance Ijarah.

CONCLUSION

Through the current study, the researcher attempts to know the obstacles to applying the Ijarah contracts in the Libyan Industrial Development Bank as financing tools for industrial companies. For this reason, the researcher conducted a qualitative study to achieve the goal of the study. This study relied on the personal interview as one of the most important tools used in collecting data related to the study, where he then put the interview questions, which consist of six accurate and quality questions for the success of the research.

The answers of the participants confirmed that the Ijarah contract can be applied as a financing tool in the Industrial Development Bank in Libya with ease and smoothness. They also pointed out that many policies, tools and standards must be changed in accordance with Islamic law in order to implement and activate the mechanisms of the Ijarah contract in the Industrial Development Bank in Libya. They also stressed that there are some difficulties and obstacles that prevent the application of the Ijarah contract in the Industrial Development Bank in Libya, for example, that entering the Ijarah market was not an easy matter for banks because they have internal and external barriers driven by the market structure to overcome.

Respondents indicated that banks faced difficulties in integrating the activities of Ijarah companies into their corporate businesses. Respondents reported that operating Ijarahs are provided by Ijarah companies that have specific market knowledge for the equipment assets they Ijarah. Finally, the participants confirmed that there are rules governing the relationship of the Central Bank with the Industrial Development Bank in Libya, which is represented in the effort made by the Central Bank of Libya, which does not aim to add a new author to the Islamic library in the name of Sharia standards, but rather aims to be the unified Shariah reference standards for the implementation of operations in Industrial development, and this is the logical goal of making this effort, as is the case for the effort exerted in preparing accounting and auditing standards and controls for the Libyan industrial development.

It has been recommended that policies, tools, and standards must be changed in accordance with Islamic law in order to implement and activate the mechanisms of the Ijarah contract in the Industrial Development Bank in Libya. The changes in the policies and tools should be done according to the following:

- There is a request to rent out certain goods with clear specifications by the customer to a sharia bank.
- Contract between the bank and the customer to rent goods at an agreed rental price and rental period.

- Industrial Development Bank looks for the desired item to be rented by the customer.
- The Industrial Development Bank rents the goods from the owner of the goods.
- Islamic banks pay rent in full in advance.
- The goods are handed over from the owner of the goods to the sharia bank.
- Contract between bank and customer for lease.
- The customer pays the rent behind in installments.
- Goods are handed over from Islamic banks to customers.
- At the end of the period, the goods are handed back from the customer to the sharia bank, which will then be handed over to the owner of the goods.

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Factors Influencing the Effectiveness of Zakat Distribution among Asnaf in Labuan, Malaysia

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Abstract. The purpose of this paper is to identify the factors influencing the effectiveness of zakat distribution among the asnaf and how far does the factors affect the zakat distribution among the asnaf in Labuan. This study is based on questionnaire that will be handed out to volunteers asnaf respondents using Google form in Labuan. The findings from this study will reveal the relationship between the factors namely technology of zakat distribution, zakat information distribution and zakat centre management towards the effectiveness of zakat distribution among the asnaf in Labuan. Finally, the limitation, recommendation for future study will also be discussed in this paper. The sample size given is small that affect the generalization of findings. This empirical result may benefit the management of zakat institutions, particularly in Labuan. The management may change the strategies to achieve the effectiveness of zakat distribution. Furthermore, the findings could also be beneficial to policy makers as to cater the effectiveness of zakat distribution among asnaf the other area. The result of this study offers a new perception of the finding that could be interest by the zakat institutions with specific application on the zakat distribution to the asnaf. The result of this study provides evidence to the zakat institution management to provide more information which lead to produce better research for the institution.

Keyword: Technology of zakat distribution, zakat centre management, zakat distribution, zakat information distribution.

JEL Classification: E12, E14, E15.

INTRODUCTION

Until now, the role of the zakat institution as a body to help the asnaf has been less convincing and highlighted. One of the causes of this failure is the amount of zakat collection which is said to be small. It is critical for an organization's financial management to guarantee that it can achieve a set of objectives. As a result, from Embong et al. (2013), it says the meaning of zakat, which literally means "growth" or "purification," is a mechanism for eradicating poverty and inequities in Muslim society. This is because there are still some bad views of the zakat institution's distribution efficiency, in which one of the factors affecting the Muslim community's trust in carrying out the responsibility to pay zakat to the zakat institution (Wahid et al., 2017).

Hafiz and Zulkifli (2010) stated that there are 8 benefits in zakat which are seizing the love of property is human habit, giving help to those who are entitled to receive it, awakening the sense of responsibility of the poor, instilling compassion in the heart, giving birth to gratitude, reviving the feeling of love to live equally, strengthen the mind and strengthen faith and to preserve property from spending to the unprofitable, these are from the views of Hamka. Every Muslims must study the essential zakat information to comprehend and continue to fulfil this responsibility. It has been discovered that age is a factor that impacts zakat awareness and, as a result, has a favourable impact on zakat compliance behaviour (Tajuddin et al., 2017).

The lack of amount of zakat that can be collected by the religious department is due to two reasons, namely the first because of the non - compliance of some individuals to pay zakat, especially zakat for disputed property. The second cause is the occurrence of leaks for individuals who pay zakat, the payment is not channelled through the religious department but instead the payment is directly to the asnaf (Wahid, 2005). This causes the amount of zakat that can be collected by the religious department to decrease even though many individuals pay zakat. The command of obedience to pay zakat is so clear that there is an order in the Qur'an for the Islamic government or zakat institutions to take it by force for those who refuse to implement it. As Allah S.W.T says in the Qur'an which translates: *"Take from their wealth (zakat) to cleanse and purify them with it". [At-Taubah 9: 103]* which means any property that is clearly stated about the obligation of zakat through the hadith of the Prophet saw is obligatory to be obeyed without any reason.

In this study, we investigate the effectiveness of zakat distribution for the asnaf in Labuan and how does the factors affect the distribution of zakat. First, we will need to understand the meaning of the title "Factors influencing the effectiveness of zakat distribution among the asnaf in Labuan". What is the meaning of effectiveness of zakat distribution? Effectiveness means the extent to which something is successful in producing a required result. And what does distribution means? The word 'distribution' means the action of allocating something out among several receivers. and why is it that we target the asnaf in Labuan? This is because in a recent newspaper, MAIWP has allocated RM131.39 million in zakat per annum for Monthly Financial Assistance to the asnaf including *muallaf* and *ar-riqab* in Kuala Lumpur, Labuan, and Putrajaya (Bernama, 2021). This shows that Labuan is also one of the locations that need financial help to decrease the number of family in poverty. So, we have come up with specific objective for this study which are:

1. To identify the factors influencing the effectiveness of zakat distribution among the asnaf in the Federal Territory of Labuan.
2. To examine the relationship between the factors and the effectiveness of zakat distribution among the asnaf in the Federal Territory of Labuan.

This study is focused on the Federal Territory of Labuan because Labuan is one of the less developed places and has a low population of less than 100 thousand people compared to other places. Based on a study from Mohd Khalil (2020) there is an imbalance in the distribution and payment of income zakat among civil servants in East Malaysia. Limited evidence was found in the context of income zakat payments in East Malaysia, which required empirical investigation. Mohd Khalil (2019) said that there are a small number of civil servants who are less sensitive in the payment of income zakat even though they have qualified as income zakat payers. Thus, this study aims to examine the readiness of civil servants in the Federal Territory of Labuan in fulfilling the obligation to pay income zakat. A study from Paizin (2014) found that the federal territories have experience in the practice of corporatisation of zakat which has been operating since 1991 until now.

As a Muslim, zakat is distributed to the 8 categories of asnaf and from this study, we mainly discuss about the asnaf and focused on Labuan. Based on a report from the PPZ Labuan in 2020, they had reported that a total of RM 707,968,418 out of RM 756,004,918.93 Majlis Agama Islam Wilayah Persekutuan (2020) had been distributed to the asnaf through 28 types of schemes. This shows that PPZ Labuan distribution of zakat through the baitulmal is effective. In doing this study, several variables are used as factors that effects the zakat distribution, which is the effectiveness of zakat distribution, technology of zakat distribution, zakat information distribution and zakat centre management. These are the variables that is used to conduct the study. there are three factors that effects the distribution of zakat which is the technology of zakat distribution, the zakat information distribution and zakat centre management. These three factors show that they are related to the effectiveness of zakat distribution.

The variables that have been gather in this study are derived from previous studies. Which means that the independent variables are from the research of Mohd Khalil (2020). The readiness to collect income zakat through zakat institutions does not guarantee an increase in the number of income zakat payers, especially among civil servants in the Federal Territory of Labuan. Therefore, promotions and facilities have been carried out by the Zakat Collection Center (PPZ) such as the opening of zakat counters at banks and post offices, online facilities, as well as zakat deduction rebate incentives as one of the efforts to increase the amount of zakat collection.

This study is aiming to find the factors of effectiveness in the zakat distribution to help the zakat centre in Labuan to enhance their distribution and find out does the factors give a significant impact to the distribution of zakat. This could provide evidence to the zakat institution management to provide more information which lead to produce better research for the institution and the result of this study offers a new perception of the finding that could be interest by the zakat institutions with specific application on the zakat distribution to the asnaf the prophet Rasulullah ﷺ was very careful in distributing the zakat received by him to ensure that the zakat was received by those who are entitled. This is because even to this day, sometimes zakat is given to those that are unworthy. In this study, we want to find

out the factors of the effectiveness of zakat distribution. Rasulullah ﷺ said a hadith that translated: “O Qabishah, zakat is not halal (haram) except for three groups, (one of them) are those who complain of the poor and the confession should be witnessed by three men from his people who are smart.” [HR Muslim]

The structure of this paper begins with the background of the study covered in the introduction, followed by literature review and hypotheses development, a description of the proposed model and research instruments used, data analysis, and ends with conclusions and future research proposals.

LITERATURE REVIEW

Effectiveness of Zakat Distribution

The effective of zakat distribution means we want to see the how method of distributing zakat is effective to the asnaf. The authority is responsible for ensuring that the management of zakat distribution is carried out properly so that the distribution meets its objectives. Zakat distribution has four objectives: to address poverty, establish social justice, develop a society based on love, and cleanse the poor of any feelings of hatred or animosity toward the wealthy (Abu Bakar & Abd Ghani, 2011). Another article says that in order to execute zakat collection and distribution more efficiently and fairly, it is critical to thoroughly comprehend the whole zakat system, including zakat payers and zakat beneficiaries (Yusoff & Sorfina, 2012).

People often think of zakat as something not necessarily important. But in the 5 pillars of Islam, paying zakat is the fifth pillars that obligates one to pay the zakat for those who can afford it. As zakat can give a lot of benefit and get blessings. Often people will skip paying zakat because they do not see the importance and does not emphasize the zakat. A translation from the Quran, Allah S.W.T said: “*And keep up prayer and pay the poor -rate and obey the Messenger, that you may receive mercy*”. [An-Nur 18:56]

The surah above talks about those performing *solah* (praying) and paying zakat will receive mercy from Allah S.W.T. Those who pay zakat have already fulfilled their fifth pillar. By paying zakat, they will also purify the wealth they have. In a recent study done by Rahman (2010) stated that the effectiveness of zakat distribution can be measured in terms of improving the socio-economic status and it is based on the principles of *maqasid* shariah. Thus, once all terms in *maqasid* shariah are fulfilled, then the distribution of zakat will be improved tremendously. The study was made based on the *maqasid* shariah and Maslow’s hierarchy of needs theory where the two have similarities in fulfilling human rights (Rahman, 2010).

There is also a study in Kedah, where the failure to distribute zakat was due to the oppression of the poor. In this matter, the failure is due to the fact that zakat has been paid to those who should not have received zakat in Kedah. To solve the problem, the *sultan* of Kedah has granted the power to collect zakat falls on the head of state, similar to what has been done in the time of the previous caliphs (N. S. Muda, 2014). From a journal by Md Hairi Md Hussain, he associated the distribution of zakat with 2 things namely leadership and religious values. The values of the religion must be faith, belief, Islamic law, and morality. All these values are emphasized as they have been inculcated in previous leaders who have trust in carrying out religious demands. This indicates that the effectiveness of zakat distribution is affected by good leadership and high religious values (Hairi, 2009).

According to Wahid et al (2017), he found that the distribution of zakat to asnaf needs to be recorded and refined. This is because part of the zakat of the entire states were not recorded and have caused a gap between zakat collection and distribution of zakat became unbalanced. Therefore, based on this study, it is necessary to improve the efficiency in zakat collection management effectively and fairly.

From Abdul et al. (2014), she explains about *haddul kifayah* is the minimum base rate and liability to determine eligibility as an asnaf to receive zakat. Among the results of the previous study, it was found that the excess distribution was due to a group of asnaf who is not listed that is the *al-riqab* group or 'slave'. The *haddul kifayah* group needs to be carefully reviewed so that all asnaf groups can be identified and zakat can be distributed to them. Among other reasons is also because there is the rate of *haddul kifayah* is too low that could cause an excess of zakat distribution in certain places. There are also asnaf who are not listed because they have a minimum wage that exceeds the category of the poor, but their lives are very poor, difficult, and indeed in need of zakat assistance.

Based on Wahid et al. (2008), the distribution of zakat will be more efficient if it is centred at the mosque. From the study, he stated that all things must start from the mosque. If there is any matter related to zakat, then the problem can be solved from the mosque. The mosque should be the centre of anything that is related to Islam such as the state mosques and mosques that is always visited by people. This is because at the time of Rasulullah ﷺ, the Prophet preferred the mosque as the centre to perform all religious practices and this matter is known as localization. Secondly, each distribution of zakat must be clearly recorded in the account of the zakat institutions, so the problems relating to the excess or lack of distribution that of zakat is nil.

Technology of Zakat Distribution

In the modern world, technology is important in our modern lives. With a touch of a button, we will get what we want, or our work will be done in the blink of the eye. Nowadays, anything can be used with technology, including religious stuff. For instance, like doing charity, waqf and many more. Using technology is a way for some people to ease their life if they are too busy with their commitments. It is mandatory for someone to fulfil their responsibilities to pay zakat. As it is one of the 5 pillars in Islam. Using technology is not a bad idea and it can also save time.

Technology of zakat distribution meant for this study refers to the platform used for distributing the zakat. Nowadays, people usually used the internet as a platform to distribute information. The approach of utilizing technology in the management of zakat is not only applicable to the process of collecting zakat, but it may also be used to the process of distributing the zakat (Rachman & Nur Salam, 2018). Research that is conducted in Indonesia from Friantoro and Zaki (2019) has concluded that fintech is critical to assisting in the collection of zakat in Indonesia.

Today is the age of technology where many online applications have been created, such as fintech and blockchain technology. Fintech is financial technology while blockchain is a technology to enhance securities to protect data privacy. Like a traditional public ledger, the blockchain is a series of blocks that store a comprehensive list of transaction data. Each block contains a reference to the block before it, which is simply a hash value of the preceding block called parent block (Merks, 2019), while Leong (2018) says that the financial technology has the meaning of finance, technology management, and

innovation management are all topics covered in this cross-disciplinary course. Any novel ideas for improving financial service operations by offering technological solutions tailored to specific company conditions, with the potential to lead to new business models or even new enterprises.

Based on Abdul-Majid and Esrati (2018), they found that zakat centres have provided funds to be used on technology development. This aims to ensure the distribution and collection of zakat can be done more efficiently and effectively. Fintech and blockchain have offered a security system capable of safeguarding the trust of zakat money. The application of such technology has made it easier for zakat payers to pay their responsibilities.

It is known that paying zakat online is permissible as one is permissible to pay zakat online, as there is no need for the *ijab and kabul* agreement. The legal requirements for donating zakat are that it be done on purpose, that you have the right to possess the property, and that you have the ability to distribute and receive things (Wilayah, 2021).

From a study done by Sahidi and Shukri (2019), among the benefits of zakat blockchain is that it can make the process of distribution and collection of zakat more effective because all activities from collection and distribution can be scrutinized and re-investigated. This can help the distribution process become clearer. With this technology, any doubts from the contributors can be reduced and gain trust from them. It will also indirectly improve performance future zakat contributions. By using such technology can also meet the requirements of the *maqasid* shariah in all related matters zakat.

From K. Muda et al (2012), Selangor Zakat Board has shown the results of their study to make payments online. Where there is not much effect to the payer of zakat. Because of their atrocities, there is a weak relationship between the users of the zakat website and the level of consumer acceptance of online zakat payment. This shows that zakat payers need awareness to be able to trust zakat management technologies.

H1 : Technology of zakat distribution has positively influenced the effectiveness of zakat distribution among the asnaf in Labuan.

Zakat Information Distribution

Zakat information distribution is the method or the path that the information about zakat is known to the society. A research by Swandaru (2019) in Indonesia, Baznas (*Badan Amil Zakat Nasional*) created SiMBA (*Sistem Informasi Baznas*) as an online zakat system that has a beneficial influence on national zakat collection as well as the human development index, which is utilized as a proxy for zakat institution human resource management quality. The distribution of zakat to local *mustahiq* (asnaf) is prioritized in the study from Rahmatya & Wicaksono (2018) and the *amil* will be aided in determining *Mustahiq's* zakat eligibility. Transparency in zakat distribution can also be achieved by reports detailing the receipt and distribution of zakat to the public, particularly *mustahiq*. Among the importance of knowledge in religion has been stated in the Qur'an: "So that Allah S.W.T raises the rank of those who believe among you, and those who are given the knowledge of the Religion (from among you) to some degree". [*al-Mujadalah: 11*]

A knowledgeable person has a very high rank in Islam. Because every religious practice that they accomplished must be accompanied by knowledge because without knowledge, the practice can be useless or misguided. Seeking knowledge is very much guided in religion. A pious scholar is the heir

of the prophet. Because the scholars have the sciences of religion like Rasulullah ﷺ (Wilayah, 2016). *“Whoever takes a path to seek knowledge, then Allah S.W.T will make it easier for him to go to Heaven. Not one group gathered at in a house among the houses of Allah, read the Book of Allah S.W.T (the Qur’an) and study it among themselves but it will come down to them Sakinah (tranquillity), mercy is covered over them and sheltered by angels and Allah S.W.T will call them to the angels who are by His side”.* (HR Muslim)

Based on a study from Wahid et al (2007), it’s been discovered that zakat information is not comprehensible due to lack of awareness in the Muslim community. This is because a society that is lack of knowledge about zakat will not prioritize the payment of zakat. Among the influencing factors are gender, age, marital status, income, and education. Married and aged person have a higher awareness of zakat compared to the younger generations. The zakat institutions have made an initiative to deliver information more effectively about zakat to the single and the underage individuals so that they are more informed of zakat information.

Some of the effect found from the research by Faisol (2014) include an increase in information distribution, i.e., a large amount of zakat material that may be published and made available to all users. Second, boost zakat collection and payment online, since this will entice a large number of individuals to pay zakat at internet kiosks. third, increase the efficiency of service delivery. Hairi et al. (2012) shows that sharing sensitive information, such as zakat collection and distribution information, by zakat organizations is beneficial since it helps to minimize negative perceptions while also enhancing government transparency. This is due to the fact that transparency ensures that all parties have equal access to all information and helps to minimize negative perceptions caused by misconceptions.

A study from Winda et al. (2018), the effectiveness of information distribution will be easier in the present age, where we rely on technology all the time. Such as using the internet to finds administration, reports and information about institutions that generally give information regarding amil (zakat distributor), zakat and so on, they can improve the stage of the efficiency of the organization. With so much use of the convenience of the internet, the information can be spread more rapidly and amil boards will gain more trust from zakat payers.

From Paizin (2014) he said that direct technique of dakwah has shown to be effective enough to be used since it can reach huge audiences in offices and mosques all throughout the country. PPZ has conducted dakwah activities and the dissemination of zakat information throughout the year through speeches and the organizing of zakat seminars to discuss all zakat topics and difficulties.

H2 : Zakat information distribution has positively influenced the effectiveness of zakat distribution among the asnaf in Labuan.

Zakat Centre Management

The term zakat centre management refers to the zakat institutions handling the collection and distribution of the zakat funds. The amil is focused on this part of the study. which means anything that is related to the collection and distribution of zakat such as the PPZ and Baitulmal institutions. Rosadi (2017) says that definition of amil zakat is a person who collects or gathers property from the person who will issues zakat, records, or books, then allocates it to the person who is entitled to receive

zakat property. From Azizi@Hamizi et al (2011) he found that Amil has two major responsibilities: collecting zakat from zakat payers and distributing the cash to asnaf who are qualified. An amil must demonstrate devotion and sincerity for such a task to be carried out flawlessly.

Zakat is collected by the zakat institution such as PPZ Labuan and distributed by the baitulmal agency. The zakat institution has many their own functionality. Some people are confused of the function of zakat institution and baitulmal agency. People also know the term 'amil' which means individuals who are allocated to conduct all zakat-related duties, from collection to distribution. They are split into two categories: zakat collecting units and zakat distribution units, and they are also eligible to receive zakat. We would focus more on Amil in this study.

Hairullfazli and Azman (2011) stated that those who work in the zakat administration section (amil) receive zakat, as does the one who guards and keeps the zakat property, as well as the writers, counters, and distributors of zakat to eligible asnaf. The role of amil is not solely to collect zakat, but also to perform other directed tasks to ensure the perfection of zakat. There is also the role of distributing the zakat that is also called Amil but from a different institution which is the baitulmal. Radieah (2015) concluded that baitulmal institutions is a store treasury or property house that administers all the Muslim community's properties and financial resources. As a result, the major role of Baitulmal is to manage assets and money held by and entrusted to the Muslim community, such as zakat, wakaf, usyur, khaaraj, and other sources authorized by Islamic law to alleviate poverty and promote socioeconomic development.

The zakat centre is important in managing the distribution of zakat. This is because zakat centre serves as the intermediaries for the zakat payers and the *amil*. This means they will manage to distribute the zakat that is collected from the *amil* and give it to the eligible asnaf categories. The role of the zakat centre is very important because all the information about the total zakat that is collected, and this information will help the Baitulmal centre to distribute it easier due to the collected amount of zakat by the zakat centre. From Adnan (2017), he went through various criteria that will have an impact on the *amil* (zakat distributor) professionalism. The association is also responsible for controlling the behaviour of its members, which includes competency, full-time dedication, maintaining and improving skills. The formation of the *amil* profession is anticipated to boost the zakat movement, whether in the country or throughout the world. This criterion is what makes a professional *amil* that could contribute effectively to the socio-economy.

Ab Rahman et al. (2012) said that the ability of zakat collection centres to identify not only individuals who should pay zakat, but also to track down potential zakat payers, might be improved, resulting in a change in zakat administration. The authority must shift its zakat collection strategy away from waiting at counters and toward proactively conducting briefing sessions on the necessity of zakat for students, public and private sector workers, police, and military in training. This method may increase the awareness of zakat among future payers about the need of fulfilling their religious responsibilities. Individuals will more likely pay zakat to the formal institution of zakat collection if they are satisfied with the administration and distribution of zakat by the zakat institution.

Result from Wahid (2005) shows that satisfaction with the management of the zakat centre is positively related to the payment of zakat to formal institutions. Shahril et al. (2016) says, the ability to manage and administer the zakat collection should be at a high level. Zakat is a means for a Muslim country to improve its social and economic conditions. Zakat can also help to bridge the gap between the wealthy and the poor, as well as to ensure fairness and justice in economic distributions.

H_3 : Zakat centre management has positively influenced the effectiveness of zakat distribution among the asnaf in Labuan.

METHODOLOGY

Theoretical Framework

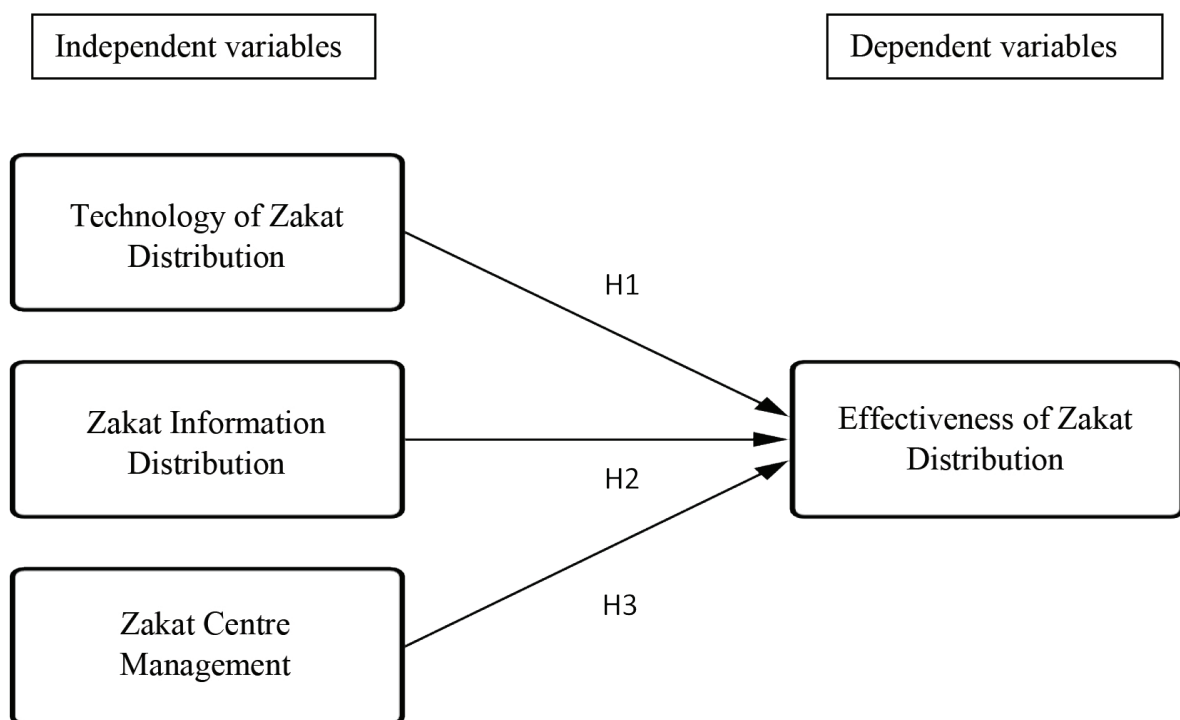


Figure 1. Research model

In line with the research model above, the following hypotheses are of value to be tested:

H_1 : Technology of zakat distribution has positively influenced the effectiveness of zakat distribution among the asnaf in Labuan.

H_2 : Zakat information distribution has positively influenced the effectiveness of zakat distribution among the asnaf in Labuan.

H_3 : Zakat centre management has positively influenced the effectiveness of zakat distribution among the asnaf in Labuan.

This study is a survey type of research with regards to the zakat industry in Labuan. A survey was conducted among the asnaf that are related to this study to gauge their perceptions on the effectiveness of zakat distribution in Labuan. This is done both through google form shared with the respondents. The design is also based on the choice of a sampling frame and availability of sources for the study. The data obtained were analysed using statistical analysis by employing the frequency and reliability test, factor analysis, linear regression, and correlation. The results of the tests explained the effectiveness of zakat distribution among the asnaf in Labuan.

The instruments of this study were derived from previous researchers' opinion. Section 1 of the questionnaire covers the 3 independent variables factors, namely technology of zakat distribution, zakat information distribution and zakat centre management in Labuan which consist of 15 items. Part 2 of the questionnaire covers the dependent variable i.e., effectiveness of zakat distribution in Labuan, consists of only 5 questions all together, in which, seeking the respondents' perceptions on the effectiveness of zakat distribution in Labuan. The units of analysis for this study are those individuals that are known as the asnaf in Labuan.

In section C, it covers the respondents' profiles such as gender, age, marital status, education levels, profession, monthly income, ethnicity, monthly zakat aid and type of zakat aid schemes. Out of this survey, this study got a total of 100 asnaf respondents in Labuan. Questionnaires were distributed to all 100 asnaf in Labuan listed in the asnaf categories. This is a self-administered questionnaire whereby the researcher distributed the google form link using multiple online platforms.

Data collected were analysed using the Statistical Package for Social Science (SPSS) software, version 25 for Windows. The main statistical tools for the study are descriptive statistics as measures of frequency counts. The analysis and presentation were categorized in few areas set out in the questionnaire, namely the technology of zakat distribution, zakat information distribution and zakat centre management as well as the effectiveness of zakat distribution in Labuan from the *baitulmal* institutions.

Descriptive statistics was performed to obtain the frequency of the nature of asnaf to show the central tendency of responses. Cronbach's alpha inter-item correlation was performed to test the general reliability of the study instruments used. Thus, for the purpose of this study, the reliability analysis (Cronbach's Alpha) was used to investigate the reliability between variables. The descriptive statistics analysis (frequency) was employed to describe the respondents and profiles.

The factor analysis was used to reduce a large number of variables to some smaller number by telling us which belong together, and which seem to say the same thing (Emory and Cooper, 1991). By factor analysis, these observable variables can be clustered into factors, each reflecting an underlying property which is commonly shared by a certain group of variables (de Vaus, 2002). It also helps to validate those respondents are able to distinguish between the various variables despite the similarity of the item questioned (Hair et al., 1998). Last but not least, the linear regression analysis is conducted to reveal how different factors (the technology of zakat distribution, zakat information distribution, zakat centre management) affect the effectiveness of zakat distribution in Labuan.

RESULTS AND ANALYSIS

This study uses SPSS to calculate the quantitative part of the study. we utilize several methods such as factors analysis, normality assessment, correlation, and regression.

Respondents' Profiles

Table 1. Respondents' profile

	Demographic	Frequency	Percentage (%)
Gender	Male	53	53
	Female	47	47
Age	Below 26	73	73
	26 – 30	11	11
	30 – 35	3	3
	35 – 40	5	5
	More than 40	8	8
	Marital status	Single	81
Married		19	19
Monthly income (RM)	Below 1000	49	49
	1000 – 1500	22	22
	More than 1500	29	29
Ethnicity	Malays	60	60
	Bajau	11	11
	Others	29	29
Education Level	PhD	1	1
	Master	2	2
	Degree	75	75
	Diploma	7	7
	Secondary school	15	15
Profession	Government sector	12	12
	Private sector	28	28
	Self employed	8	8
	Unemployed	18	18
	Student	34	34
Monthly zakat aid	Below 2000	20	20
	2001 – 4000	1	1
	4001 – 8000	4	4
	None	75	75
Type of Zakat aid scheme	Educational aid	26	26
	Asnaf development aid	9	9
	Society development aid	1	1
	None	64	64

Table 1 shows the respondents' profiles. It is found that male respondents dominated the highest percentage representing 53% compared to female respondents who only recorded 47% of the total respondents surveyed. Meanwhile, respondents aged under 26 years old has recorded the highest

percentage of 73% followed by the age group between 26–30 years old which is 11%. The age group between 30–35 years has the lowest percentage of 3% in this study. Based on the marital status, about 81% are single and the other 19% are married.

Furthermore, it was found that the group with “income below RM1000” has the highest respondent (49%) involved in this study. Those earning between RM1000 - 1500 (22%) fell in second place. While those earning RM1500 and above are about 29%. In term of ethnicity, respondents consist of 60% Malays, followed by other ethnics of 29%. The least is Bajau ethnic (11%). Most of the respondents are degree holders with a total of 75% and in second place is secondary school which is 15%, then the diploma is in third place with a total of 7%. Masters and PhD holders are 2% and 1% respectively.

Apart from that, student and private sector respondents have the highest percentage of 34% and 28% respectively. Then, the unemployed got a total of 18%, the government sector with 12% and the self-employed with 8%. Then, 75% respondents are not from the category of zakat recipients, whilst the zakat aid range below RM2000 are 20%, RM2001 to RM4000 is 1% and RM4001 to RM8000 is 4% each. Lastly, there were 64% respondents who were not receiving any zakat aid scheme, while 26% recipients under the educational zakat aid, 9% under the asnaf development aid scheme and only 1% recipient of society development aid.

From the perspective of asnaf or mustahiq, all 100 of them have answered the questionnaire. There are 2 questions under the variables of zakat information distribution and effectiveness of zakat distribution. 46 out of 100 respondents was very agree with the “Dissemination of zakat information through the internet is very helpful in the effectiveness of zakat distribution” and also 46 out of 100 respondents was agreeing to “I received zakat assistance without any delay”. which means that in the perspective of the respondents, zakat information from the internet is the most useful for them and the zakat institutions are very functional in distributing the zakat.

Factor Analysis

Table 2. Factor analysis for independent variables

ITEMS	FACTOR LOADINGS		
	Zakat centre management	Zakat information distribution	Technology of zakat distribution
AC5	.857		
AC4	.819		
AC3	.814		
AC2	.774		
AC1	.693		
AB2		.823	
AB5		.812	
AB1		.798	
AB4		.797	
AB3		.604	
AA3			.830
AA2			.803

ITEMS	FACTOR LOADINGS		
	Zakat centre management	Zakat information distribution	Technology of zakat distribution
AA1			.769
AA4			.713
AA5			Deleted (Loading is less than 0.6)
Variance explained	27.232	24.129	22.080
Eigen Value	8.433	1.475	1.109
KMO	90.7%		
	X ² = 1234.695		
Bartlett test	Df = 105 P-value = .000		
Cronbach Alpha	.934	.899	.874

The tested items refer to the independent variables' items were remained the same as reported in Table 2. It is because each item had a value of 0.60 and higher (Hair et al., 1998).

The results for reliability test are presented in Table 2 and Table 3. Black (1999) stated that "reliability is an indication of consistency between two measures of the same thing". To comprehend the relationship between the two groups of data, it is necessary to quantify the reliability of the data. The reliability of the factors needs to be determined in order to support any measures of validity that may be employed (Nunnally, 1967). All values ranged from .874 to .934. Nevertheless, the results for the tested items were as follows: zakat centre management .934 (5), zakat information distribution 0.899 (5), technology of zakat distribution .874 (4) and effectiveness of zakat distribution is .927 (5). Thus, items were believed reliable and valid. In conclusion, the employed items in this study were found to be reliable (Ramayah et al., 2003).

With respect to the Kaiser-Meyer-Olkin (KMO) measure, the combined items of the independent variables had a value of 0.907, indicating that the sampling adequacy was greater than 0.5 and therefore satisfactory. Bartlett's Test showed a χ^2 of 1234.695 with a significance level of 1 percent, where the total variance explained was 73.441 out of 3 components. KMO for the dependent variable, on the other angle, depicts a value of .927 which implied that the sampling was satisfactory. Bartlett's Test also found to be significant at 1 percent significance level. Pertaining to the outcome from the factor analysis, the items for independent variables and the dependent variable were aggregated in which factor loadings exceeded .60 were selected. Thus, the items are considered valid.

Table 3. Factor analysis for dependent variable

ITEM	FACTOR LOADING
	Effectiveness of zakat distribution
BA4	.934
BA5	.895
BA2	.885
BA1	.853
BA3	.841
Variance explained	77.812
Eigen value	3.891
KMO	.840
Bartlett test	X ² = 421.723 Df = 10 P-value = .000
Cronbach alpha	.927

Once the data were aggregated, the multiple regression was conducted to reveal how different factors affect the effectiveness of zakat distribution. This approach has been widely employed in the survey – based studies (Luarn and Lin, 2005; Ramayah et al., 2003). Aggregation of the research results allows combining of all items under one particular heading or label, which thus is easy to analyze using regression analysis.

Hypothesis Testing

In order to test the three proposed hypotheses, the authors employed a multiple regression. Table 4 presents the regression results of “technology of zakat distribution”, “zakat information distribution”, and “zakat centre management”. The R² was 0.640 indicating that 64% of the variation in effectiveness of zakat distribution could be explained by the three named variables and the F-value of 56.940 was significant at the 0.00 level.

Zakat centre management was positively related to the effectiveness of zakat distribution. On the other hand, technology of zakat distribution and zakat information distribution were negatively related to the effectiveness of zakat distribution. Consequently, H1, H2 and H3 were supported. These outcomes are consistent with previous studies (Ab Rahman et al., 2012; Faisol, 2014; Friantoro & Zaki, 2019; Shahril et al., 2016; Swandaru, 2019). Therefore, the more positive the zakat centre management, the more likely that zakat distribution is effective in Labuan. Thus, it is confirmed that zakat centre management had strong influence over the technology of zakat distribution and zakat information distribution to the effectiveness of zakat distribution. In addition, the study also showed that the greater the technology of zakat distribution and zakat information distribution, the more likely that zakat distribution will be less effective. This result contradicts with the findings of (Faisol, 2014; Friantoro & Zaki, 2019; Swandaru, 2019), where the two variables are of value to explaining the effectiveness of zakat distribution.

Multiple Regression

The study also employed tolerance and variance inflation factor (VIF) values to clarify the multicollinearity problem. Results of the study revealed no multicollinearity problem for technology of zakat distribution, zakat information distribution and zakat centre management since these variables were significant. The tolerance values for the variables are greater than 0.1, which means the results raise no multicollinearity

problem (Hair et al, 2006; Pallant, 2005). On the other angle, the VIF values are greater than 10 shows collinearity existed (Hair et al, 2006; Pallant, 2005). The VIF values for the present study were all below 10 and the tolerance values were all above 0.1, which could be concluded that there was no collinearity with the data of the study.

Table 4. Result of multiple regression

Constructs	Standardized β	T-value	P-value
Technology of zakat distribution	.143	1.618	.109
Zakat information distribution	.191	2.289	.024
Zakat centre management	.553	6.005	.000
F-value		56.940 (.000)	
R square		.640	
Adjusted R square		.629	

Note: *p <0.05; ** p<0.01

Table 5. Collinearity Statistics

Constructs	Tolerance	VIF
Technology of zakat distribution	.482	2.074
Zakat information distribution	.539	1.856
Zakat centre management	.442	2.263

CONCLUSION

The main objective of the study is to identify the factors influencing the effectiveness of zakat distribution among the asnaf in Labuan. This study employed 3 independent variables namely technology of zakat distribution, zakat information distribution and zakat centre management as the main framework to explain the relationship between independent variables and dependent variable. Besides, the effectiveness of zakat distribution was used as dependent variable in this study.

On top of that, this study provides intensive reviews on the factors influencing the effectiveness of zakat distribution among the asnaf in Labuan. (Ab Rahman et al., 2012; Faisol, 2014; Friantoro & Zaki, 2019; Shahril et al., 2016; Swandaru, 2019) Moreover, all hypotheses were supported. These results have managerial implications for zakat institutions and for researchers. To be specific, zakat institutions may opt to strengthen zakat centre management roles.

Pertaining to the technology of zakat distribution and zakat information distribution, zakat management as well as authority bodies could enhance the digital technology to the local community as to improve, and to create more awareness among the local community to adopt digital technology in their daily life. This is important as the local community in Labuan deemed to be less familiar on the usage of digital technology. It is also recommended that zakat institutions need to focus more on the students, because there are a lot of students did not receive any of the zakat aid, despite most of the students are asnaf category and in need of educational aids. Nonetheless, the unemployed group need to be focused on due to some of them maybe in need of financial aid to maintain their daily living expenses in Labuan.

The study admits two major flaws when it comes to limits. For starters, because the study was done in Labuan, our sample only included a specific user group: the asnaf. The findings might be applied to Malaysian zakat institutions. Second, the current study's factor model is confined to three exogenous variables, which inherently limit our study implications. For the benefit of future study, the first constraint may be solved by enlisting the help of other friends who would examine zakat distribution and, as a result, provide generalization of findings to zakat institutions. Finally, future studies may include a broader range of variables as predictors, including not just the three components discussed here, but also experience and personal traits, to give greater explanatory effectiveness of zakat distribution.

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Role of Zakat in Strengthening Social Protection during COVID-19 and beyond: An Evidence from Bangladesh and Turkey

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Abstract. Due to the COVID-19 which turned into a global pandemic at the end of the first quarter of 2020, restriction measures were taken all over the world. The restrictions initiated to end the health crisis had a broad impact on many areas, especially the economy. However, unfortunately, the crisis is going on. In this context, we examine zakat; a means to circulate wealth, as an Islamic social protection framework instrument. The authors provide an overview of poverty and vulnerability in COVID-19 and argue for institutionalizing zakat as a source of social protection for vulnerable groups. This paper discusses the role of the zakat institution in the provision of social protection in the two Asian nations- Bangladesh and Turkey and assesses different modalities of zakat. This study is based on a desk review of academic, peer-reviewed literature and reports published by international organizations and information provided online by governments and national Zakat Funds. Some findings from this research are improving coordination among state institutions is vital to enhance the role of Zakat Funds as providers of social protection and digitalization of zakat may be very effective in the collection and disbursement of Zakat Funds in this pandemic and beyond.

Keyword: Bangladesh, COVID-19, social protection, Turkey, zakat.

INTRODUCTION

Due to the COVID-19, which turned into a global pandemic at the end of the first quarter of 2020, various restriction measures were taken worldwide. The restrictions, which were initiated to end the health crisis, had a broad impact in many areas, especially in the economy, and continue to do so. Among the most apparent economic effects are shrinking economic activity and trade and increasing unemployment rates. In addition to the economy-related problems that the pandemic has caused, psychology-related concerns have also accelerated. As a result of adaptation problems to remote working, the stress of staying at home and general anxiety, loss of confidence, and mental breakdowns in terms of beliefs and values occurred (ILKE, 2021).

Expansionary monetary and fiscal policies were implemented to reduce the adverse effects of the pandemic on economies. Various actors such as governments, private sector agents, and non-governmental organizations (NGOs) have supported those in need. Among them, NGOs have faced concerns related to the risk of a decrease in donations and incomes, the protection of the health of volunteers and the development of their skills and meeting the increasing demands for aid and support during the pandemic period (ILKE, 2021). Hence, these concerns impose a threat on the social protection system.

Zakat as a means to redistribute wealth to those who are in need is a powerful instrument of Islamic social protection framework because it contributes to poverty alleviation and reduces vulnerability by providing income and consumption transfers (Ali, 2014; Hassan, 2010; Hassanain and Saaid, 2016; Ibrahim and Ghazali, 2014). The poor and marginalized sections of the population have been receiving income support, consumption goods, and other essential services such as health and education from zakat for centuries (Bilo and Machado, 2020).

Against this background, this paper discusses the role of zakat in providing social protection based on the examples of Bangladesh and Turkey. The authors provide an overview of poverty and vulnerability in COVID-19 and argue for institutionalizing zakat as a source of social protection for vulnerable groups. The findings are based on a desk review of academic, peer-reviewed literature and reports published by international organizations and online information by governments and national Zakat Funds.

The paper has been structured as follows: Section 2 provides an overview of the concept of social protection and discusses zakat in the Islamic social protection framework. Section 3 describe the methodology of this study. Section 4 comprehends the analysis of Zakat Funds in Bangladesh and Turkey, intending to present their main characteristics and role within the countries' social protection systems and also discusses on some of the common challenges based on the two cases analyzed. Section 5 concludes with critical messages.

LITERATURE REVIEW

This section outlines the key instruments of social protection in an Islamic framework and the place of zakat in it. This section aims to understand why zakat is the essential part of social protection in Islam and how zakat can enhance social protection. There are three sub-sections: Social Protection from conventional and Islamic perspectives, respectively, and zakat as an instrument of social protection.

Social Protection

In many countries, it is a constitutional obligation to provide a minimum standard of living for all. Building a social protection (SP) system is a regular task for a country to move towards a welfare state. While a robust SP system is crucial for any country, rich or poor, the priorities of selecting SP programs are different. For example, the aging population and rising international competition are the concerns in rich countries, so the SP system in these countries includes an active labor market policy, social insurance, and social assistance to address these concerns. In contrast, alleviation of poverty and providing income security for individuals are the concerns in poor countries. Even poor countries cannot allocate enough resources to address these concerns because of a lack of public resources (Holzmann and Jørgensen, 2001).

In the late 1980s and early 1990s, SP emerged as a critical response to the “safety nets” discourse (Devereux & Sabates-Wheeler, 2004). Then since the 2000s, SP has been a policy framework employed to address poverty and vulnerability in poor countries (Barrientos, 2010). He argues that countries with more vital social protection institutions are more resilient in the face of economic and social transformation.

According to Devereux and Sabates-Wheeler (2004), four measures of the SP interventions are: protective, preventive, promotive, and transformative. Firstly, protective measures provide relief from deprivation and are confined to narrowly targeted safety net measures. Secondly, preventive measures deal directly with poverty alleviation. Thirdly, promotive efforts enhance real incomes and capabilities through a range of livelihood-enhancing programs, i.e., microfinance and school feeding. Fourthly, transformative measures ensure social equity and inclusion, i.e., collective action for workers' rights or upholding human rights for the minority. There are potent synergies among these measures. For example, income transfers (school feeding schemes) can have both "protective" and "promotive" potential. Similarly, minimum wage legislation simultaneously raises incomes (which is "promotive") and enhances workers' rights and bargaining power in the labor market (which is "transformative").

The social and economic impact of COVID-19 has led to an unprecedented need for effective SP measures across the globe. Effective SP systems are vital to helping those living in poverty cope with crises and shocks, find jobs, and live healthier and more fulfilling lives.

An (Islamic) Social Protection Framework

Islam is a complete code of life where ensuring security is of paramount importance. Economic security is a prime part of social security in a way that without financial security, social security cannot be established. In terms of terminology, social security means protecting to meet the basic needs of every individual through society and state machinery (Hannan, 2002). The Qur'an [17:70] explains social protection as follows: "*Indeed, We have honored the progeny of Adam; provided them with transport on land and sea; given them for sustenance things good and pure; and conferred on them special favors, above a great part of our creation.*" [Tr: Abdullah Yusuf Ali]

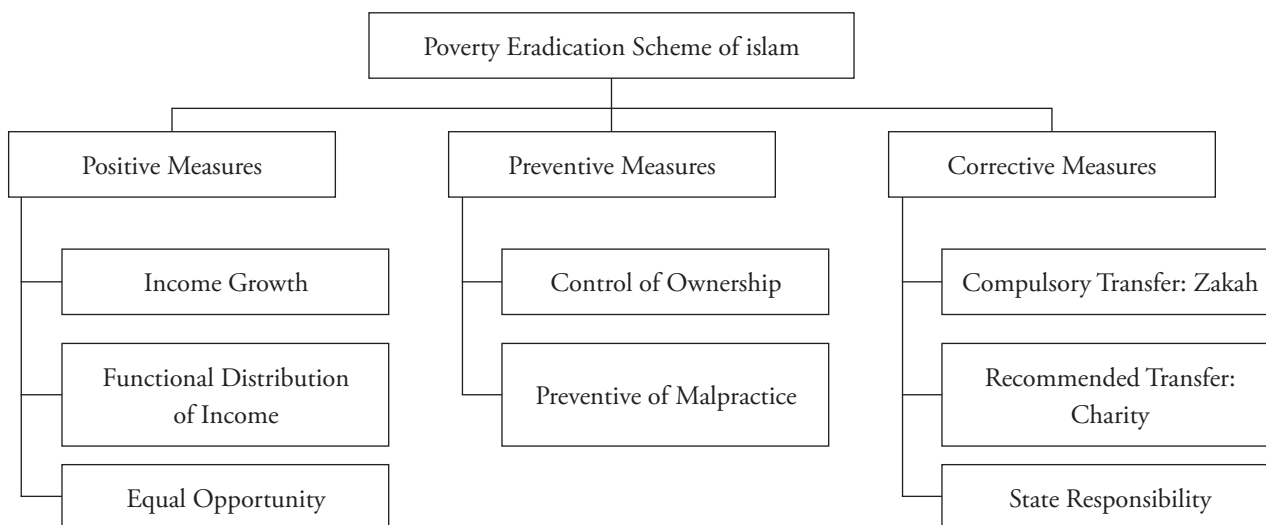
It is seen that the concept of social protection in the Qur'an is very comprehensive. It ensures the security of life and property and provides a pleasant environment for living with honor and dignity. It is understandable from the above discussion and earlier discussion in section 2 that alleviating poverty and reducing vulnerability are part and parcel of the social protection system in the conventional and Islamic framework. Therefore, the strength of social protection of any economy is associated with how comprehensive poverty alleviation is. In this context, it is pertinent now to discuss on poverty alleviation scheme of Islam under an Islamic social protection framework.

Islamic principles of poverty alleviation are based on the Islamic views of social justice and the belief in Allah Almighty. Islam defines poverty as a state whereby an individual fails to fulfill any of the five basic human requirements of life: (a) Religion, (b) Physical self, (c) Intellect or Knowledge, (d) Offspring, and (e) Wealth (Hassan and Ashraf, 2010).

In his book, "*Poverty Alleviation in Islam*," al-Qaradawi (2008) offers Islamic solutions to poverty at the three levels of responsibilities: individual, social, and state. Individual responsibility implies that a person must work to earn his livelihood if he has the ability and opportunity to work. Society and the state will facilitate this person to find an appropriate livelihood. In the context of social (Muslim Ummah) responsibility, the rich in the society will take responsibility for providing financial security for the poor. It can be done in the following ways: (1) spending for the nearest relatives; (2) preserving the rights of

the neighbors; (3) paying obligatory charity (Zakat); (4) giving voluntary charity (*Sadaqah*); (5) making perpetual charity (Waqf); and (6) others: Kaffara (fine), Mannot (promise). The responsibility of the Islamic state implies that the state must ensure the basic needs of all needy irrespective of religions, those who have no guardian or no way to earn. The sources of such state guardianship are as follows: (1) collecting zakat and distributing it; (2) other sources such as one-fifth of *Ganima, Fai, Kharaj, Jizya*, abandoned property, etc.; and (3) imposing a tax on rich if the amount of zakat and other sources are not sufficient to alleviate poverty.

The Islamic approach to poverty alleviation in Sadeq (1997) involves three distinct sets of measures: (1) positive measures, (2) preventive measures, and (3) corrective measures, as shown in Figure 1:

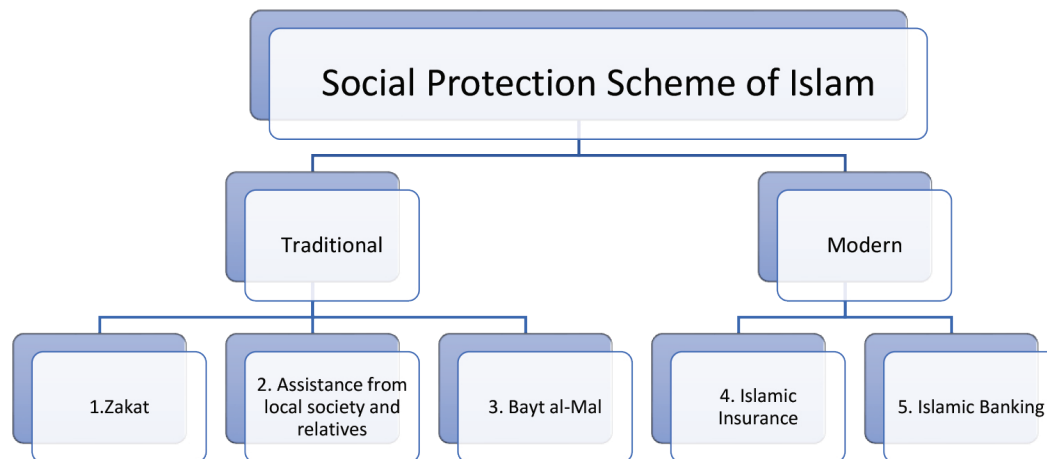


Source: Sadeq (1997).

Figure 1. Poverty alleviation scheme of Islam

The positive measures cover income growth, factor pricing through the functional distribution of income, which is just and fair, and providing equal opportunities to all. The preventive measures include the prohibition of practices that lead to income concentration and deprivation and limiting the ownership of such assets that may cause income concentration. The corrective measures include compulsory transfer payments through zakat and recommended transfers through charity. The state has a vital role in formulating, implementing, and enforcing such a poverty alleviation scheme of Islam (Sadeq, 1997).

From the above discussion, it is seen that zakat is the most important and famous system for social protection in Islam. The Islamic approach to social protection in Hannan (2002) involves five instruments, as presented in Figure 2:



Source: Hannan (2002).

Figure 2. Social protection scheme of Islam

First of all, zakat is not like any general tax or duty. It can only be used in specific tasks. It is the main foundation of social and economic protection. Secondly, assistance from local society and relatives is the informal but critical source of support for any weak and needy person from time immemorial. Islam has encouraged Muslims to practice *Qard al-Hasan* (interest-free loan), enhancing brotherhood and sense of fellow-feeling in society. Thirdly, if zakat and assistance from local society and relatives are not adequate for social protection, *Bayt al-Mal* emerges to achieve this purpose. *Bayt al-Mal* is the resource of the general people. The provision of social security from both Muslims and non-Muslims can be ensured from *Bayt al-Mal*.

Fourthly, Islamic insurance can emerge as social protection in this modern age in Islamic society and state. Notably, poor people are not covered in the conventional insurance system. If Islamic insurance can be adequately mobilized, it will reduce pressure on Zakat and *Bayt al-Mal*. Fifthly, Islamic banks can play an essential role in establishing social protection in the present age. Islamic banks can invest in youth and working-class based on *Mudarabah* to grow entrepreneurship. For this, large sums of money are not required. In this way, millions of children can be free from the jaws of unemployment and engage in productive work. Thus, it widely contributes to the enhancement of social protection.

Zakat and Social Protection

Zakat, the third pillar of Islam, has moral, social, and economic implications. Zakat washes away the greed and acquisitiveness of the rich, acts as a unique measure bestowed by Islam to abolish poverty from society, and prevents the sinister accumulation of wealth in a few hands (Mannan, 2014, p. 363). Recent literature on Islamic social finance has shown that zakat can contribute to achieving several sustainable development goals (SDGs); end poverty (SDG1), zero hunger (SDG2), good health and well-being (SDG3), quality education (SDG4), clean water and sanitation for all (SDG6), and reduced inequalities (SDG10) (Nurzaman et al., 2018).

As an instrument of the public finance system in Islam, Zakat was the prime source of revenue for the early Islamic state and any Islamic state (Mannan, 2014, p. 351-52). From his examination of the modern social security system and the heads of Zakat, Mannan (2014, p. 375-376) concludes that there is nothing original in modern social security schemes. He finds a very close similarity of the

Soviet social security system, the first in modern history, with the Zakat plan. To him, Islam, fourteen centuries ago, made sure that one of the primary functions of the state is to ensure ample provisions of social security by way of Zakat collection from the rich and the organization of social insurance on a massive scale (Mannan, 2014).

Mannan (2014) sees zakat as not the end but a means to an end that can play an essential role in any social protection framework of Islam because Zakat improves consumption, production, and distribution pattern of an Islamic economy. Being an uncompromising enemy of hoarding and obligatory tax on wealthy Muslims, two objectives of zakat are to remove the inequality of income and return purchasing power to the poor people, which can easily be achieved by the proper distribution of zakat to the poor and the needy.

If we look at the historical application of economics, we will see that poverty was eradicated easily by applying Islamic economic instruments such as zakat and waqf (Hannan, 2020). Likewise, in modern times, zakat is capable of alleviating hardcore poverty. For many years, non-governmental organizations (NGOs) and microfinance institutions (MFIs) have been conducting microfinance activities to alleviate poverty. However, these interest-based programs cannot alleviate hardcore poverty because it is almost impossible for poor people to repay a small loan with interest within the specified period, let alone channel the loan towards income-generating activities. In contrast, the zakat is an actual transfer of money; no longer refundable when it is given. In this context, Muslim scholars have said that zakat should be paid in a way that the Zakat recipient becomes self-sufficient (Hannan, 2020).

Finally, we can say that the zakat collection has enormous potential in the Muslim world, including Turkey and Bangladesh. If the potential amount of zakat can be collected and distributed every year to the poor and needy by giving them technical and vocational education, employment, and rehabilitation, absolute and hardcore poverty can be alleviated within a few years, thus ensuring social protection in the best possible way.

METHODOLOGY

This study is based on a desk review of academic, peer-reviewed literature and reports published by international organizations and information provided online by governments and national Zakat Funds. This is basically a comparative case study to know how and why zakat programs or policies fail to work in an institutional manner. For this, comparative case study approach is suitable which is used in “the analysis and synthesis of the similarities, differences, and patterns across two or more cases that share a common focus or goal in a way that produces knowledge that is easier to generalize about causal questions – how and why particular programs or policies work or fail to work” (Goodrick, 2014). Both qualitative and quantitative methods can be used in comparative case studies to understand “how the context influences the success of an intervention and how better to tailor the intervention to the specific context to achieve the intended outcomes” (Goodrick, 2014).

For this case study, we have chosen Bangladesh and Turkey. Both countries have been claimed to be unique for being ‘secular countries’ since independence. This lies in the fact that most of the majority Muslim countries at the time of independence were hardly considered as secular by Western standards. However, Mustapha Kemal Ataturk, honoured as the father of Turkey, and Sheikh Mujibur Rahman, honoured as the father of Bangladesh, were committed to establishing secularism as the ideological basis of state formation in Turkey and Bangladesh, respectively.

In fact, Sheikh Mujib considered Kemal Atatürk as his guru in this move towards secularism. Pramanik argues that Both leaders wrongly perceived that keeping religious considerations away from statecraft as in the ‘separation of church from the state’, would promote the cause of rapid modernization and development (Pramanik, 2017). So, Islamic instruments of social protection like zakat, waqf, Islamic financial and non-financial institutions have never received any attention while designing development policies in both countries. Hence, due to informal nature of zakat collection and distribution, the full potential of zakat as a tool for poverty alleviation remains untapped. In this study, we shall analyze the similarities, differences, and patterns of zakat collection and distribution of both countries to identify the challenges both countries faced in terms of institutionalization of zakat. We shall also analyze how better to tailor the institutionalization of zakat to the specific country context to achieve the intended outcomes such as poverty alleviation and vulnerability reduction.

RESULTS AND ANALYSIS

Bangladesh

Bangladesh has recently been termed globally as a model for poverty reduction by the World Bank because of her remarkable progress in reducing poverty and sustained economic growth. According to the Bangladesh Bureau of Statistics (BBS) estimation, poverty and extreme poverty declined from 31.5% and 17.6% in 2010 to 20.5% and 10.5% in 2019. However, the COVID-19 pandemic has threatened this apparent success (Khan, 2020).

A recent study (June 2020) by the Bangladesh Institute of Development Studies (BIDS) shows that another 16.4 million people in 2020 will fall below the poverty line due to the adverse impacts of the coronavirus pandemic. The Centre for Policy Dialogue (CPD), the independent think-tank, stated in June 2020 that Bangladesh’s national poverty rate would rise to 35% in 2020 from 24.3% in 2016. Earlier, an assessment by the South Asian Network on Economic Modeling (SANEM) in May 2020 indicated that this pandemic might double the poverty rate in the country from the existing 20.5% to more than 40%. These estimations suggest that the government will face a severe humanitarian crisis in the long run unless these current and new poor’s problems are not adequately addressed (Khan, 2020).

So far, Bangladesh has come up with a fiscal stimulus package equivalent to 3.6% of its gross domestic product (Tk 1.0 trillion in a GDP of Tk 27.77 trillion). Moreover, allocation in the social security sector has been increased from Tk. 81,865 crore in the revised budget of Financial Year (FY) 2019-20 to Tk. 95,574 crore in the proposed budget for FY 2020-21, which is 16.83% of the total budget and 3.01% of GDP. However, given the unprecedented nature of this global health-cum-economic crisis, Bangladesh’s fiscal package and budget allocation in FY 2020-21 might not be enough to meet the challenge at hand. Hence, economists suggest designing out-of-the-box policies to cope up with this crisis. In this background, the writers argue that zakat can be an essential instrument of poverty alleviation when the country has seen a substantial rise in the number of wealthy and financially solvent people (Khan, 2020).

Tough the government formed the zakat fund in 1982, operated by a board under Islamic Foundation, zakat has not been institutionalized yet in Bangladesh. Hence, collection in the Government Zakat Fund is very meager. This displays that the foundation has failed to earn the credibility and trust of wealthy people. The board’s Zakat collection has reached from Tk 1.51 million in the FY 1982-83 to

Tk 21.98 million in the FY 2004-05 and further increased to Tk 51.20 million in the FY 2018-2019. The board has spent Tk 198.15 million between FY 1982-1983 and FY 2016-2017 among the 827,255 Zakat beneficiaries. According to Mahabub Alam, director of the Zakat Board (Rahman, 2019), the amount of zakat could reach Tk 10 billion if the people who have a surplus income of more than Tk 35,000 to Tk 40,000 in a year gave their zakat to the fund. In a recent column in the Financial Express, Asjadul Kibria calculates that Zakat collection in Bangladesh should be at least Tk 600.0 billion in FY 19 (Kibria, 2020).

Experts observed that the size of the state-run Zakat fund is relatively small because of a severe lack of trustworthiness and acceptability of the fund among the mass people. Zakat fund has failed to launch any viable projects that can boost the people's confidence in this fund. The fund collection by the board is so meager though a tax rebate provision is in place for the Zakat payers, which means the council has failed to attract a large number of wealthy people to give zakat. The government is sacrificing a large amount of revenue by offering tax rebates for Zakat givers. Still, the fund has run dry for a long time, though financially able adult Muslims are increasing over the years (Muhammad Abdul Majid, a former chairman of the National Board of Revenue (NBR) in Rahman 2019).

The government's higher authority has a lack of focus on Zakat collection. The limited workforce is a significant challenge for raising a substantial amount of zakat. Currently, the board has only five officials. To address this challenge, the deputy commissioners (DC) are being directly involved by the board to raise the fund (Shamim Mohammad Afjal, director general (DG) of the Islamic Foundation in Rahman 2019). The board also has a lack of publicity and campaign.

In contrast, some voluntary organizations like the Centre for Zakat Management (CZM), Anjuman Mofidul Islam, Ahsanullah Mission, etc., have shown success to some extent in mobilizing and distributing zakat. Center for Zakat Management (CZM) was started in 1993 as a Zakat Forum (ZF). ZF was launched mainly with the active support of Rahimafrooz Bangladesh Ltd. Currently, CZM has the following eight programs: (1) *Jeebika* – Livelihood and Human Development; (2) *Mudareeb* – Micro Enterprise Development Program; (3) Genius – Scholarship Program for Undergraduate Students; (4) *Ferdousi* – Primary Healthcare Program; (5) *Gulbagicha* – Pre-primary Education and Nutrition Program; (6) *Insaniat* – Emergency Humanitarian Assistance Program; (7) *Dawah* – Advocacy and Awareness Building Program; and (8) *Naipunna Bikash* – Vocational Training for Unemployed Youth. With the prolific initiatives of the CZM, it has already been able to raise nearly Tk 300 million as Zakat fund since 2008 through its unique initiative and attractive schemes (Muhammad Abdul Majid, a former chairman of the National Board of Revenue (NBR) in Rahman 2009).

Hossain Zillur Rahman (2014 and 2018), conducting a rapid assessment of the *Jeebika Karnaphuli* project of CZM, claims that the Project provides a new financial empowerment model that has introduced a whole new category of program support, namely 'equity capital' based on the Zakat donation. Together with a stronger focus on community, a more supportive repayment culture, and a parallel program support package aimed at the social needs of the extremely poor, the *Jeebika Karnaphuli Mohora* Project model merits severe further attention as a new and potentially more transformative model of financial empowerment. The Project has demonstrated that the institutionalization of zakat can be an effective instrument of poverty alleviation.

Of late, there is a sign of progress towards the institutionalization of zakat. At the government level, Access to Information (a2i), the flagship program of Digital Bangladesh, has launched the first Crowdfunding FinTech Platform in Bangladesh titled 'Ek Desh' to disburse Zakat and Relief Payments Digitally. BRAC, Bidyanondo Foundation, the Rahimafrooz group, and the Islamic Foundation of Bangladesh, and thousands of volunteers have joined with 'a2i' in its drive for collecting large amounts of Zakat donations. At Nonprofit Organization (NGO) level, JAAGO Foundation has launched an online platform to collect 'Zakat for Education' (Khan, 2020).

It is said that awareness of zakat's role in poverty alleviation has increased in recent years among politicians, policymakers, and academicians. It has been a fact that zakat can be a safe and better option to assist millions of poor and vulnerable people. Hence, more NGOs and private organizations should come forward to organize zakat locally and nationally. Finally, the government of Bangladesh should not miss this opportunity of using zakat as a potent frontier in poverty alleviation through the institutionalization of Zakat (Khan, 2020).

Turkey

Poverty in Turkey was brought to the agenda in the 1950s when migration from rural to urban areas began due to the expansion of industrialization (Gümüş, Yardımcıoğlu and Altıntaş, 2019). However, in recent years, Turkey has emerged as a huge success story of poverty reduction. According to World Bank's 4.3\$ poverty line, reducing the poverty rate to 4.35% in 2009 from 30.3% in 2002 in Turkey (Ibid, 2019) is an outstanding achievement in poverty alleviation in less than a decade. Although the poverty rate has decreased, the number of the poor is more than 16 million in 2019. It has increased by nearly 1 million and reached over 17 million in 2020, corresponding to 20% of the population during the COVID-19 pandemic. In the following paragraphs, we would like to discuss what has been practiced in alleviating poverty in recent years by different agencies such as government and non-governmental organizations in connection with zakat as a potential instrument of social protection.

Turkish history of applying zakat as an instrument of social protection for the poor and needy is long and rich. For example, in the Ottoman Empire, Shariah law (Taklif Shar'i) was prevalent over customary law (Takalif Urf). Naturally, zakat played an essential role under the umbrella of social security of the Ottoman states (Sevinç and Bulut, 2020). The practice of Zakat in the Ottomans has been accepted as tax (Aykanat, 2015) based on the principle that the state was custody of individuals. Therefore it could collect Zakat (Sevinç and Bulut, 2020). The successful practice of Zakat under the Ottomans inspires Sevinç and Bulut (2020) to suggest that the Ottoman state can be taken as a role model for Turkey and other countries to practice zakat under the concept of tax after completing necessarily related regulations.

Though the first studies aiming to measure Zakat potential in Turkey were conducted by the end of the 1980s, a few studies calculating the Zakat potential of Turkey exist. Following Tabakoğlu and Turan (2017) and Kahf (1989), Sevinç and Bulut (2019) find that zakat's potential for Turkey is 2.8% of GDP and 0.83% of total wealth. According to a survey conducted in 2014 by the Presidency of Religious Affairs, an optimistic feature is found that 80% of people give zakat every year if their conditions are eligible (Zagralli, 2017). There is a tremendous potential for Zakat in Turkey despite the current lack of a formal Zakat fund (UNDP, 2018). Hence, these promising results indicate that Turkey can design Zakat collection and distribution strategies to reach its potential (Sevinç and Bulut, 2020).

The Turkish Religious Foundation (hereafter TDV), founded in 1975, among other activities, delivers the almsgiving (*Zakat* and *Fitrah*) to the poor and needy (Turan, 2008). Besides real estate, cash, and *Fitrah*, *zakat* is a part of the collection of donations by TDV, and TDV collects donations via online and SMS throughout the year. TDV distributes these to people in need as cash, shopping cards, food packages, and food for breaking the Ramadan fast (UNDP, 2018). Overall, in Turkey, *Zakat* is being utilized to respond to disaster programs, provide health and education support, offer Ramadan Packages and *Zakat* for refugees (UNDP, 2018).

There are 3.5 million Syrian refugees in Turkey, and their access to the Turkish financial system is restricted. In Lebanon, Aid-Tech, a fintech company, uses blockchain technology to provide the Irish Red Cross's donations to Syrian refugees. The study of UNDP (2018) suggests that blockchain technology can be implemented as a secure and innovative system to ensure a proper system of *Zakat* collection as well as distribution. To blend Islamic finance with crowdfunding through Blockchain technology, UNDP's AltFin Lab provides technical expertise and advisory support in collaboration with a *Zakat* collection institution to pilot a blockchain-based *Zakat* distribution to assist Syrian refugees in Turkey (UNDP, 2018).

Although every Muslim must give *zakat* throughout the year, performing it during the holy month of Ramadan is even more virtuous. Moreover, there is *Fitrah*, where the accepted amount to be paid is the equivalent of the value to feed a person for one day. Each year, the Presidency of Religious Affairs announces the minimum amount of *Fitrah* in Turkey. During Ramadan, in harmony with fasting and *zakat*, special packages for the needy are prepared in supermarkets, vast chain stores (UNDP, 2018). Customers of these stores, associations, and *waqfs* purchase, collect and deliver these packages to underserved community members during Ramadan (UNDP, 2018).

From the above discussion, poverty in Turkey could be resolved entirely via a potential *Zakat* fund. Gümüş, Yardımcıoğlu, and Altıntaş (2019) suggest that considering *zakat* as an essential means to reduce poverty, the government should establish a *Zakat* fund to collect and distribute *zakat* appropriately.

It is to be noted that the COVID-19 induced economic difficulties may reduce the amount of aids, particularly in those that are not mandatory. However, *zakat* is subject to a different evaluation at this point. Of course, although it will decrease when there is a decrease in the income of the people, it will not fall as much as voluntary donations. And this reality may direct us to a separate *Zakat* institution, not like the current ones that collect every type of donation within the framework of their functioning.

In recent years, Turkey has accelerated its efforts regarding the Islamic finance sector. Mainly to contribute to the sector's development and financial stability, Participation Bank Directorship is established as a unit under Central Bank on February 3, 2021 (Central Bank of the Republic of Turkey, 2021). In addition, Participatory Finance Department was established under Presidency on February 6, 2021, to develop strategies in the field of participation finance in line with the policies determined by the President, to monitor the implementation of the decisions, and to report the results to the President (Anatolian Agency, 2021). Also, to make Istanbul a regional and global financial center, the Istanbul Finance Center (IFC) Project has been undertaken, and currently, 40% of it has been completed (Emlak Konut, 2021).

These latest Islamic finance in Turkey will undoubtedly improve its position in both the national and international arena. Within this context, Turkey might host independent Zakat institutions as a part of the Islamic social finance sector. Via these new institutions, it might be possible to increase the decreasing rates of aids or zakat and reach the Zakat potential of Turkey by establishing trust between the institutions and people.

Analysis

The type of collection, organizational structure, and political motives can determine zakat's role in providing support to the poor and vulnerable. This section looks at some of the zakat's main challenges and opportunities by pointing out the main commonalities and differences across the two countries analyzed.

Financing – Zakat as fiscal space for social protection

Hayrettin Karaman, a prominent Turkish jurist, argues that zakat, under its perfect functioning, can be emerged as the most effective medium of social justice (Zagralli, 2017). However, the extent to which zakat can be used to finance social protection measures depends not only on the way it is collected and administered but also on its geographic and political conditions. The complete accomplishment of the fruits of zakat can only be achieved under an Islamic economy with a Zakat institution supervised by an official state control rather than leaving it only to private charitable initiatives and NGOs (Zagralli, 2017).

In Turkey and Bangladesh, two secular Muslim majority countries, zakat has not been considered an instrument of social protection. Zakat being a voluntary charity in both countries, constitutes a relatively small part of the national social protection systems. Even in Turkey, there is neither a separate Zakat institution nor a state-run Zakat fund. Voluntary aids and zakat are mainly collected and donated to those in need by the third sector institutions such as foundations/awqaf and associations.

On the other hand, in Bangladesh, though there is a national Zakat board, it is observed that most of the Muslim population prefers to administer zakat themselves or to give to private organizations. The size of the state-run Zakat fund is relatively small because of a severe lack of trustworthiness and acceptability of the fund among the mass people. However, some private organizations in Bangladesh have been functioning very well.

Zagralli (2017) argues that by introducing a new institutional structure of zakat centrally, the Presidency of Religious Affairs can play an intermediary role between payer and recipients of zakat and among charitable organizations to lead an increased Zakat base as well as awareness and concern for the needy among the whole society. He thinks that the addition of the zakat institution also does not pose a challenge to the Presidency of Religious Affairs; instead, it is the case for the implementation of all provisions concerning faith and worship of the religion of Islam.

Declining trends of aids and donations due to lack of trust and transparency

Expansionary monetary and fiscal policies were implemented to reduce the adverse effects of the COVID-19 pandemic on economies. Not only governments but also different organizations such as non-governmental institutions have provided support to those in need. Non-governmental organizations (NGOs) are actors in solving the COVID-19 problems and have also had significant concerns during

the pandemic. NGOs have faced troubles under three headings: 1) the risk of decrease in donations and incomes, 2) the protection of the health of volunteers and the development of their skills, 3) meeting the increasing demands for aid and support during the pandemic period (ILKE, 2021, p. 79-80). While aid related to religious duties maintains its importance in the total aid of citizens, this type of aid continues to decline since 2004 in Turkey (Aytaç and Çarkoğlu, 2019). In 2019, the rate of those who gave zakat decreased by 5 points compared to 2015. While this rate was 40% in 2004, it decreased to 28% in 2015 and 23% in 2019.

Religious aids (Zakat, etc.) and annual per capita aids and donations overall have decreased in real terms compared to 2015 (Aytaç and Çarkoğlu, 2019). Although there might be many reasons for the low donations to third sector institutions, those critical are economic contraction and lack of trust. In recent years, low growth rates, exchange rate shock, increasing inflation, and unemployment rates have been observed. It is very typical and expected that once economic conjuncture weakens, it will reflect donation rates.

However, if “giving culture” is established in a country, then if collected donations are low, there would be a considerable amount of assistance in a populous country like Turkey. Providing this culture through existing institutions doesn't seem easy, as it has not been provided via existing ones. Undoubtedly, ensuring such a culture is possible if there is trust between institutions and people. According to TUSEV 2019 Report, the most crucial factor affecting donations is trust (Aytaç and Çarkoğlu, 2019). And to have trust between them, the most critical issue is transparency. Transparency can be provided if the aid that is collected from people and that will be distributed are openly reported. And if the donor already determines classes, they should be considered when collected aids are distributed.

Although economic difficulties may decrease the amount of aids, this might cause a decline, particularly in those not mandatory. However, zakat is subject to a different evaluation at this point. Of course, although it will decrease when there is a decrease in the income of the people, it will not fall as much as voluntary donations. And this reality may direct us to a separate Zakat institution, not like the current ones that collect every type of donation within the framework of their functioning.

Selection of beneficiaries – Ensuring that those most in need receive zakat

Though the Qur'an establishes the eight categories for those who should receive zakat, it is seen that the selection is at the discretion of the Funds' administrators. Zagralli (2017) states that the Turkish Presidency of Religious Affairs offers transparency and accountability for all its actions in this Zakat system, including selecting beneficiaries. In Turkey, third sector institutions such as foundations and awqaf function in many different areas, such as protecting the environment, natural life, and animals; protecting children; protecting rights and advocacy; and humanitarian aid.

In Bangladesh, the government's higher authority has a lack of focus on Zakat collection. The limited workforce is a significant challenge for raising a substantial amount of zakat. The selection of beneficiaries of the state-run Zakat Fund in Bangladesh is ultimately made on an ad-hoc basis and nepotism. Private Zakat bodies like the Center for Zakat Management (CZM) have succeeded in mobilizing and disbursing zakat in a standardized management process. Since 2008, CZM has been successfully prospering the livelihood of over 400,000 people. So, it is said that CZM has been inclusive in terms of the selection of beneficiaries.

Integrating zakat into the broader national social protection system

In Bangladesh, though there is a state-run Zakat fund, zakat has not been a part of poverty reduction strategy and social protection due to the lack of comprehension by the policymakers and lack of political will. Bangladesh shows that better coordination with other government institutions could help to ensure that the most vulnerable are indeed reached. Moreover, the selection of beneficiaries and administration of resources is often not transparent, and it is difficult to obtain up-to-date information. An independent audit institution could help in increasing the transparency and accountability of Zakat Funds.

In Turkey, Zakat and other aids and donations that are collected are distributed to various groups who are in need; hence third sector institutions contribute to the reduction of poverty within the country. In addition, some institutions help those in need abroad – Africa, the Balkans, etc. Zakat is already a part of aid and donations among these institutions; however, if it is a separate institution, it may more affirmatively contribute to the social protection system. In this case, the Presidency of Religious Affairs can integrate zakat into the broader national social protection system by coordinating among these institutions to collect and distribute Zakat (Zagralli, 2017).

Digitalization of zakat

An electronic database can be advantageous to ensure the efficiency of the beneficiary selection procedure and enhance the inclusivity of people in need transparently. Moreover, the importance of digitalization cannot be overemphasized during this COVID-19 pandemic when social distancing is very vital to contain the pandemic. Thus, the digitalization of zakat can help ensure that those most in need are reached through a readily accessible database. Anyone can check clear criteria for the selection of beneficiaries very quickly. It is worth noting that Bangladesh and Turkey have introduced a crowdfunding platform to disburse zakat and payments of relief digitally to prevent the further spread of the Coronavirus by ensuring social distancing and other precautions through digital disbursement of funds.

In Turkey, the Red Crescent receives zakat through credit/debit card payment and other digital payment methods (<https://www.kizilay.org.tr/>). Similarly, Zakat Foundation in Turkey collects zakat through digital payment methods and disburses to educate the refugees (<https://www.zakat.org/our-work/where-we-work/turkey>). UNHCR is actively working in Turkey for the Syrian refugees. In the UNHCR Zakat program 2019 launch report, it is seen that through digital payments, UNHCR makes fulfilling Zakat obligations (UNHCR, 2019).

In Bangladesh, on May 15, 2020, 'Ek Desh,' the first Crowdfunding FinTech Platform in the country, was launched to disburse Zakat and Relief Payments Digitally. The a2i Programme of the ICT Division developed the platform to ensure the amount donated will reach the underprivileged population of the country. The Prime Minister's Emergency Relief Fund for COVID-19, the Islamic Foundation, BRAC, Bidyanondo Foundation, Center for Zakat Management, Centre for the Paralysed (CRP), and Sajeda Foundation is incorporated in this platform (A2I website, 2020). Hence, it is easier for Zakat payers to donate to such institutions through their websites.

Refugee zakat

Turkey and Bangladesh are two host countries among the Muslim world for refugees, with the primary destination for Syrian and Rohingya refugees. Centering this refugee crisis, the diplomatic relationship between Turkey and Bangladesh has significantly improved. Both countries are sharing their experiences in handling refugees. Especially, Turkey has been providing aid for Rohingya and technical assistance since the beginning of this crisis (Kamruzzaman and Kamaci, 2021).

Various local and international NGOs have been taking Zakat initiatives to help the refugees. UNHCR established the Zakat Fund for Refugees in 2019 (UNHCR, 2021a) and disbursed zakat in cash and goods to over 1.6 million people, including refugees in 10 countries in 2020 (UNHCR Islamic Philanthropy Annual Report, 2021b).

As an international humanitarian organization, the Zakat Foundation of America (ZFA) has been working for the last 20 years to serve the global communities of emergencies. ZFA has provided food packages, medical treatment, mosquito nets, blankets, cooking equipment, and tarps for temporary shelter to the number of Rohingya refugees. For child victims of Syria's traumatic war, ZFA provided life-changing psychological and rehabilitation treatment in Turkey (Zakat Foundation of America, 2021).

Similarly, local Zakat-based NGOs are also working to help refugees. For example, the Center for Zakat Management (CZM) in Bangladesh came forward to stand by the Rohingya Muslims immediately and launched relief for the Rohingyas' program in Bangladesh. Under this program, CZM has distributed food relief, synthetic tarpaulin, and synthetic floor mats to 10900 families. CZM has set up two primary health camps and served more than 12000 patients. Six thousand nine hundred pieces of men's and women's clothes have been distributed, and ten sanitary latrines and eight tube wells have been made available in the refugee area (CZM, 2017).

CONCLUSION

Zakat has played an essential role in providing social assistance for centuries. Though Zakat Funds are increasingly more institutionalized and are part of many countries' social protection systems, this is not the case in Bangladesh and Turkey. However, zakat is a voluntary act of charity providing cash, food, health, and education services to the poor in these countries. This paper discussed the Zakat Funds in Bangladesh and Turkey. Several key messages can be taken away from these case studies:

1. The institutionalization of zakat does not follow one-size-fits-all solutions; it should be country-specific. In Bangladesh, the government Zakat body has lacked the workforce and is ineffective in collecting and disbursement. In contrast, the Turkish Religious Foundation (TDV), a government body, has played a significant role in poverty alleviation by delivering almsgiving (*Zakat* and *Fitrah*) to the needy.
2. Implementing an efficient collection system is also crucial to increase funding. For this, the context-specific mechanisms must develop by carefully evaluating both advantages and disadvantages of the system. Most importantly, earning people's trust is a must to increase funding in the government Zakat funds.

3. Improving coordination among state institutions is crucial to enhance the role of Zakat Funds as providers of social protection. For this, databases must be shared, and all relevant stakeholders collaborate.
4. Predictability of contributions is deemed central for the effectiveness of programs as regular and adequate transfers are essential to bringing people out of poverty. So, the potential of using Zakat Funds as a significant source to increase fiscal space for social protection is minimal when funds are volatile due to a voluntary Zakat collection system.
5. In this pandemic time, the digitalization of zakat through crowdfunding platforms has been a pioneering technology solution to the financial sector to disburse Zakat (charity) funds.
6. Zakat-funded schemes have shown to be important mechanisms to support new poverty-reduction strategies. Indeed, as stated in this paper, the provision through Zakat Funds does not shift responsibilities away from the state. Zakat and traditional state-provided social protection should complement each other, yet the former should not replace the latter.
7. To raise awareness about zakat, it is important to launch educating services to Muslims about the zakat that includes the rulings of zakat in the Qur'an and the hadith, for the payers, for the recipients, and all the stakeholders in the society.
8. To increase the Zakat base and *Sadaqah* and other types of charities, Zakat bodies should act as a source of information regarding correct religious doctrine and practice and engage in public dialogues.
9. Zakat requires social engagement and not just an institutional aspect. So, launching a worldwide social movement for the collection and disbursement of zakat is very vital.
10. Future research should focus on coverage and targeting analysis by investigating who is not yet covered by zakat (and other state-provided services) and where they live. Likewise, it is relevant to analyze whether or not some vulnerable groups have less access to zakat than others (e.g., religious minorities and refugees).

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The Zakat Management Towards the Islamic Digital Economy in the Post Pandemic Era: Malaysia Experience

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Abstract. The management system is an indispensable mechanism in the institution from time to time to meet current needs. Zakat is an instrument of muamalat that must be carried out by Muslims because it is one of the pillars of Islam that must be fulfilled. Therefore, zakat requires systematic and comprehensive management to facilitate the business to run smoothly and quickly. Nowadays, there is no denying that the world has entered the digital era in conducting all affairs in Malaysia. Therefore, zakat needs to be implemented dynamically based on an innovative management system to be able to provide solutions in resolving management issues. This indicates the need for management efforts towards the development of the digital economy based on Islamic principles. This study aims to reveal a progressive zakat management system both in terms of collection and distribution through the approach of structuring the Islamic digital economic system in Malaysia. Data were collected using descriptive qualitative methods, namely analyzing documents from library studies, journals and websites of zakat institutions in Malaysia. The results show that zakat should be carried out through a digital management system that is a current need online based on Islamic principles. The implication of this study, allows Muslims to implement the payment and distribution of zakat with the facilities available in zakat institutions, to provide the welfare of Muslims more quickly and accurately through online based on the Islamic digital economic system.

Keyword: Comprehensive, dynamic, Islamic digital economy, zakat management system.

INTRODUCTION

All matters involving quality management need a progressive and innovative system. The implementation of a management system on an issue will yield good results if it can be implemented dynamically. This means that all issues that arise can be resolved through an ideal management system. Naturally, terms and conditions need to be implemented to establish a management system. Changes in the management system are subject to current needs and situations that facilitate all stakeholders. Syed Azauddin (2005) argues that the main agenda in management practice is to achieve goals, vision and mission. One of the things that need to be noticed is the management system in the governance of zakat that needs to be fulfilled by Muslims. Zakat is one of the pillars of Islam that must be implemented to obtain the perfection of Islam for its adherents. Inline over time, zakat needs to use a comprehensive management system, so that it can be a guide for the implementation of either collection or distribution. Collection of zakat is a payment made by the *muzakkil*/zakat giver, while distribution is the giving of zakat to the *asnaf*/zakat recipients. The zakat management system will indeed change from time to time according to the situation and needs. Therefore, the existence of this system is necessary to respond to current challenges in the management system.

Zakat is a muamalat instrument that can bring prosperity to Muslims in social and economic terms. The role of zakat must be played for social and economic needs so that the attitude of help can be felt together among the Muslim community. The origin of the implementation of zakat gives social meaning to fellow Muslims who take care of each other in the structure of life. Then economists took the initiative that zakat can be linked to the economy to provide well-being. Patmawati (2008) states that zakat is a major instrument that plays an important role in strengthening the economic position of Muslims as well as ensuring justice and social stability through reducing the income gap among the community. Thus, this aims to explain the role of zakat for Muslims in living life on this earth.

In the era of Industrial Revolution 4.0 (IR 4.0), digital information and big data (Big Data) serve as the “main ingredients” that drive the new economy. The community prefers facilities to use the access as well as new opportunities, but there are also some concerns. The Malaysian Digital Economy Corporation (MDEC) as the agency mandated to digitize the country needs to fulfil its responsibility to integrate society into a unified digital platform (www.hmetro.com.my/pks/2020). Nur Syahidah (2017) has argued that the digital economy is not something new to today’s globalized world. However, the structuring of the digital economy in a planned and sustainable manner in the national development plan is something new in recent years. From the perspective of the current Islamic economy, the digital economy segment debates a lot about the use of technology and digital in the aspects of Islamic banking and finance. This aspect is important because it involves the capital generation and investment at the international level, especially between countries that adopt a conventional economic system and countries that offer an Islamic economic system. The use of digital needs to be implemented in the zakat management system, so that zakat institutions, zakat givers and *asnaf* can together succeed in zakat being carried out quickly and accurately.

Zakat management in Malaysia is implemented by bodies or institutions located in any state, there are 14 zakat institutions established to represent 13 states and 3 Federal Territories represented by a zakat institution (Eza et al., 2014). Usually, that is carried out every year is by face to face between the institution and the Muslims either collection or distribution. The systematic method of collection and distribution of zakat implemented by zakat institutions in Malaysia can further enhance the integrity in fund management to help those in need (Nurul Hidayah, 2020). In 2020, the current situation does not allow the payment of zakat to be implemented face to face due to the spread of the COVID-19 Pandemic. Therefore, a safe method is needed for Muslims to remain in paying zakat comprehensively and innovatively. Also, the distribution of zakat conducted by the zakat institution can be implemented by the provisions of the Standard Operating Procedure (SOP) to ensure safety from the spread of COVID-19 Pandemic. Therefore, this study aims to explain the practice of the zakat management system in Malaysia, so that the function of zakat can be beneficial to the community in need during a pandemic through digital means to facilitate the administration of zakat is implemented comprehensively.

By 2020, there have been many challenges facing the public, related to the COVID-19 Pandemic (Setiyawan et al., 2020). This pandemic is a coronavirus from Pandemic carried by the global coronavirus disease 2019 pandemic with the stem from the acute respiratory syndrome coronavirus or also known as SARS-Cov-2 (Huang 2020). The spread was detected in mid-December 2019 in the city of Wuhan, Hubei, China, and the World Health Organization (WHO) has recognized it as a pandemic on March 11, 2020 (WHO 2020a). This situation causes all religious activities to be implemented according to

the current situation. Next, the post-the spread of this Pandemic, among the religious activities that must be carried out transparently is the management of zakat, under any circumstances. Zakat is very useful to provide the well-being of the people in the current economy which is affected by the effects of the COVID-19 Pandemic. It is also necessary to explain this pandemic from an Islamic perspective and refer to the principles of Syariah to link with the zakat management system peacefully and securely.

LITERATURE REVIEW

Background Theory

Zakat is muamalat instrument that needs to be well managed through systematic management according to the current situation to respond and adapt to the digital era. This will provide ease in managing zakat funds quickly and accurately. However, the status of zakat needs to be studied through several disciplines, to enable the management system to be implemented professionally. According to Hairunnizam et al. (2017) that zakat management in Malaysia is related to human behaviour in the zakat management system which consists of *amil*, *asnaf* and zakat payers. This study uses statistical and econometric approaches in basic theory in economics as commonly used in analyzing the behaviour of economic agents. Mohamad Amin (2017) stated that the Syariah management agenda is a discipline on how Syariah affairs in organizations, especially Islamic Financial Institutions (IFI), are administered comprehensively and systematically. Therefore, it is necessary to develop and expand the zakat management system following the requirements of Syariah and adapt to the latest times, to lead to dynamic management.

Adibah (2017) also thinks that management is the basis for the best management of an organization. While Syariah management is the backbone of the work to ensure that zakat institutions are administered with the best. Azman (2017) is of the view that the need for transformation and improvement of zakat management needs to be done continuously and managed effectively so that the actual objectives are achieved. Nazifah (2017) argues that good management has a high impact on the performance of an institution because it involves the process of making decisions and implementing those decisions. The transformation process takes part in managing the zakat fund for future convenience.

Previous Studies

From time to time, zakat management is faced with the situation and information available at that time. In this era of globalization, zakat management must be done with current equipment such as the internet, moreover if there is damage in the environment that does not allow the payment agreement and distribution is done face to face. The Internet is the most important tool in the era of globalization because it can spread information quickly, especially related to zakat (Mohd Faisol, 2014). The use of the internet as widespread information to promote zakat services through websites. E-Zakat has been initiated by the government in integrating internet applications system, it is also an online transaction used to support how zakat organizations deliver services, in the aspect of collection and distribution of zakat funds (Shawal, 2009).

In Malaysia, zakat management is subject to state jurisdiction. Through the powers given, the state government has set up an Councils and the Islamic Religious Department which is specifically responsible for managing Islamic religious affairs for their respective states (Sayyin, 1994).

From 1990 until now, most of the State Islamic Religious Councils (Majlis Agama Islam Negeri-Negeri (MAIN)) have established their respective subsidiaries to manage the collection and distribution of zakat. For example, the Federal Territory established the Zakat Collection Center (Pusat Pungutan Zakat/PPZ), Selangor established the Pusat Zakat Selangor (PZS) which was later renamed the Lembaga Zakat Selangor (LZS) in 2006 and Negeri Sembilan established the Pusat Zakat Negeri Sembilan (PZNS) in 1998 (Sayin, Suyurno, & Hashim, 2008). *Amil* which is often said in conjunction with the collection of zakat, it should be noted that in Malaysia *Amil's* real job is dedicated to collecting zakat *fitriah* while another zakat must be submitted directly to the office or Zakat Center (Khafidz, 2017). The presence of *Amil* during Ramadan is intended to make it easier for Muslims to pay zakat while performing *tarawih* prayers in addition to the fixed number of *fitriah* factors and does not require difficult calculations (Khafidz, 2017). This is different for more complex property zakat so it may need the help of other officers due to the need for balance sheets and so on.

After the collection has been implemented, zakat will be distributed to the eight *asnaf* groups that have been determined by Allah (Jani, Paizin, Abdullah, & Rosele, 2016). These groups are Fakir, Miskin, *Amil*, *Muallaf*, *Al-Riqab*, *Al-Gharimin*, *Fi Sabilli Allah* and also *Ibn-Sabil*. The zakat distribution target is also known by the terms *Ahl Al-Zakat*, *Ahl Al-Istihqaq*, *Ahl Al-Masraf* and *Mustahiq Al-Zakat*. However, the term commonly used is *Al-Masarif* as stated in its concept in verse 60, surah Al-Taubah (Mujaini, 2005). The distribution of zakat must meet the Maqasid Syariah to ensure that the distribution of zakat given complies with the requirements and wisdom of fulfilling zakat. The word [*innama*] in surah Al-Taubah signals that the distribution cannot be carried out arbitrarily to the detriment of other *asnaf* (Mujaini, 2005).

In ensuring that the distribution system can run well then the Zakat Office is an entity that will play a very important role. The distribution of the assistance system has already been determined by the respective states according to the *asnaf*. For example, for fakir *asnaf* who live in Selangor, they are eligible to receive distribution or assistance in terms of finance and food monthly. However, it is different in Sarawak which does not offer much for the poor *asnaf*. However, the aspect of collection and distribution of zakat received more attention than the COVID-19 Pandemic. The Pandemics refer to epidemics that strike in a larger scope and are not limited to a particular community or district, so in preventing the epidemic, the zakat collection system in Malaysia has been changed according to the suitability during the Pandemic (Suhaimi, 2020).

Jabatan Wakaf, Zakat dan Hajj (JAWHAR) from the Prime Minister's Department has issued an official statement that all MAIN and Agensi Mengurus Zakat (AMZ) in Malaysia will optimize the method of paying zakat *fitriah* online. However, do not forget also for those who are not skilled in using technology. In addressing the problem, the zakat party still appointed *Amil*, but it was implemented to a minimum. The locations of zakat *fitriah* payment identified by MAIN and AMZ are appropriate and take into account the elements of safe social imprisonment (Astro, 2020). In ensuring that the payment directly with *Amil* does not cause harm, then JAWHAR has made it mandatory that *Amil* and the payer must be in good health. If the payer is confirmed positive or has just recovered from COVID-19 or falls into the category of Patients under Investigation (PUI) or Person under Surveillance (PUS) must make zakat payment by representative only. All these initiatives that have been formed are a way to prevent this epidemic from becoming more widespread.

METHODOLOGY

Data Collection

Each of the problems studied in this paper uses descriptive qualitative methods through library studies from primary and secondary sources and field studies. According to Taylor and Bogdan (1984) qualitative data in the form of descriptive, in the form of oral or written words about human behaviour that can be observed. Through this method, then the management of zakat in Malaysia is studied through observation and analysis from websites, newspapers, and scholarly writings, such as books and journals. While the field study is sourced from management issues faced by the community to pay and receive zakat during the transmission through newspapers and websites of zakat institutions. The COVID-19 Pandemic is studied through the library method by taking sources from the Quran, Hadith and history as well as the book of Usul al-Fiqh as the primary source, while journals and other papers, as well as newspaper letters that are observed as secondary sources. The Digital Economic was studied through observations from websites, journals, scholarly books, and newspapers. Of course, all the data collected will be analyzed in the document to produce the actual purpose of the study.

Document Analysis

Further, the collected data will be analyzed to find a solution to contemporary issues in the management of the zakat post-COVID-19 Pandemic Era. Jasmi (2012) argues that data collection through document analysis can provide information relevant to the issues and problems studied. The analysis of this document produces a zakat management mechanism carried out by zakat institutions in the states of Malaysia through various online innovations and also through collaboration with banking institutions.

RESULTS AND ANALYSIS

Zakat is one of the pillars of Islam and is a component of Fiqh related to the economy in the well-being of Muslims. Therefore, zakat needs to be well managed, progressive and innovative, so that it can help economic problems in line with the requirements of Sharia. Efficient zakat management whether collection and distribution will make it easier for zakat institutions and the community to pay zakat accurately. In certain situations, usually, the implementation of zakat management is done face to face, it is no longer feasible as usual. This is due to Post the COVID-19 Pandemic Era which needs to be severed in various ways, including social distance.

In line with time ago, those who demand that the zakat management system be made digitally and do not require face-to-face meetings as is customary before. This zakat management system will provide facilities for institutions to perform tasks both in terms of collection and distribution. This matter is following the Maqasid Syariah, which refers to the preservation of the soul and property. Souls will not be vulnerable to the transmission of the COVID-19 Pandemic, as zakat management is done online. While the property will be maintained continuously, where the zakat fund will run either collection or distribution, even in the face of any situation. The online collection and distribution model also facilitates the community to fulfil the obligation to pay zakat and the asnaf will receive zakat immediately. Mohd Faisol (2014) views the need for the dissemination of zakat management through

the website from the aspect of strategy that can achieve goals quickly and save time and energy. The use of the latest technology in this global era needs to be done by the Muslim community, even if there is no divine philosophy (Mohd Nor & Siti Fatahiyah, 2004). The current zakat management system needs to be digitized to facilitate all matters to be carried out professionally.

Zakat Management System

In the management of zakat, the government plays a role in collecting and distributing zakat whether real or intangible property for several reasons. Firstly, some individuals do not pay zakat. If the government does not intervene in this issue, then the *asnaf* of the poor and needy will not be able to fulfil their rights. Secondly, the government that distributes zakat, then the dignity of the poor and needy will be well protected and preserved compared to the rich who distribute directly. Thirdly, if the distribution of zakat is carried out by individuals, then will arise certain attitudes that will contradict the concept of distribution. Fourthly, the government that knows the public interest, such as certain *asnafs* such as *muallaf* converts, *fi sabilillah* and so on. Fifthly, it should be known that zakat is a source of finance for the Islamic country. Therefore, the government needs to take note and take actions in the management of zakat. However, he also opined that the government's right to collect and distribute zakat was subject to conditions, namely that the government accepted Islam as an ideological basis, carried out Islamic law and the social structure was based on Islam (Qaradawi, 2000).

Contemporary issues in the administration of zakat which is one of the problems that require *Ijtihad Asri/modern diligence* that can adapt to current needs. This means that the zakat management system needs to be developed innovatively with constant reference to shariah principles. Hasan & Ezani (2006) are of the view that zakat institutions are not enough to be managed based on traditional principles but more than that to achieve the level of professionalism of zakat institutions. Muhsin (2013) stated that IT systems have been seen as a medium of communication and information that plays an important role in disseminating information and promoting zakat. The need for a zakat management system based on the latest technology for zakat institutions is an important matter, which is believed to lead to ease in resolving all matters properly.

COVID-19 Pandemic from Islamic View

The virus is mostly transmitted between people like influenza, through respiratory droplets from coughing or sneezing (WHO 2020b, 2020c). Also, the virus spreads easily to a person without any symptoms, it may be able to spread before the appearance of symptoms (CDC 2020a). The expected time between the appearance of infection and the onset of symptoms is usually within five days, but will usually occur in the range of two to fourteen days (CDC 2020b). The statement of this virus transmission system leads to an Islamic view, which is very similar to *Taun* disease.

Taun has been defined by Islamic scholars, according to al-Harbi (1985) epidemic is *Taun* and also a disease that covers the general. Ibn Al-Arabi (1997) states in Sharh al-Tirmidhi: Named as *Ta'un* because its calamity covers the general and death occurs quickly due to it. So similar diseases are also included (*Taun*).

From the COVID-19 Pandemic transmission system, it has been identified that it is a virus that spreads rapidly and is categorized as an infectious disease resulting in large-scale death. It is these characteristics that conclude that in terms of lessons from COVID-19 like *Taun* in terms of its transmission. In

the hadith related to the transmission of the epidemic of the *Taun* narrated by Muslims, no: 2218 is an authentic hadith that meanings: *In this hadith: Habib ibn Abi Thabit said: We are in Medina, has reached news about the Taun that spread in Kufa. Ata' ibn Yasar and other companions said to me; Indeed, Rasulullah SAW said: When you are in the area of the earth it happens (Taun), then do not go out of it (escape from it). When Taun occurs in other areas, then do not enter the area.* This hadith shows that in fact, *Taun* disease is a contagious disease similar to the COVID-19 Pandemic. One should be able to save oneself and others by confinement (quarantine) so as not to infect or infect diseases that are categorized as contagious. This, also based on the method of *La Darar wa La Dirar*.

Islamic scholars have already stated that Islamic Syariah was created for the benefit of man in this life and the hereafter. al-Ghazali (1997) and al-Shatibi (2003) argue that benefits are divided into basic needs (*daruriyyah*), convenience and space (*hajiyyah*) and perfection (*tahsiniyyah*). *Daruriyyat* is a must-have for the benefit of religion and the world. When that thing disappears, human problems will be difficult to realize, and will even cause damage, chaos and ruin. Syariah orders are intended to safeguard the welfare, it can be understood that sharia aims to prevent and eliminate damages.

In the hadith mentioned above which means: “*There should be neither harming (darar) nor reciprocating harm (dirar)*”. In other words, the meaning of this hadith is that there is no harm and it is not allowed to harm others. One is not allowed to harm oneself and others. This act of harm should not be done either by committing a destructive act or retaliating with damage. If destructive and harmful acts are not allowed, then the benefits will always be well taken care of. In principle that harm is illegal to do. The word harm in the hadith is expressed in general through *nahi* “la” which means nothing. This covers all things that cause damage and harm. While welfare is in principle permissible therefore preventing damage is essential to enforce welfare.

The method of fiqh of *La Darar wa La Dirar* is also a prohibited principle in the consumption of food and drink that is illegal. As a result of this intake will have a detrimental effect on human beings either on themselves or others. Adverse effects of illegal food and drink intake can be seen nowadays which can be detrimental to health. Allah says in surah al-A'raf 7: 157 which means: *And makes unlawful to them impure things.* This verse shows that bad things (*al-Khaba'ith*) are forbidden to take. Ibn Jauzi (2013) says *khaba'ith* is everything that is disgusting to eat, such as snakes, bats, rats and *hasharat* (various insects that live on land). All of these fall into the category of illegal to eat, as there are many harms and will cause harm.

This post Pandemic Era situation has implications for the management of zakat so it is necessary to take innovative initiatives to provide a facility based on the fiqh of *La Darar wa La Dirar*, which is not exposed to something as dangerous as this pandemic era. Social distance and no face to face should always be applied to prevent the spread of this epidemic. At the same time, the modern age has entered the digital era that does not require encounters. So, it is very appropriate for zakat management to be implemented online to facilitate business and protect the soul from being infected by a pandemic.

Zakat Management in Malaysia Post Pandemic Era

Zakat institutions in Malaysia practice different administrative structures according to their respective states. In some states, collection and distribution are governed by different entities, the impact of privatization and corporatization activities, but the state council and *baitulmal* still have an important role in managing zakat (Shawal and Hasan, 2007).

Contemporary issues in zakat management become one of the problems that require *Ijtihad* fiqh, especially post-the COVID-19 Pandemic. Therefore, this problem requires the method of fiqh of *Darurat* as a legal basis. The use of *Darurat* fiqh methods in the current situation that allows zakat management to be implemented face to face can not be continued due to emergencies, among the issues of zakat management.

Method of Zakat Payment Based on Digital

The method of zakat payment in 2020, all State Islamic Religious Council (Majlis Agama Islam Negeri/MAIN) and Zakat Management Agency (Agensi Mengurus Zakat/AMZ) in Malaysia will optimize the method of payment of zakat fitrah online to facilitate payers to fulfil their obligations faster and safer (Astro, 2020).

The law on online zakat transactions has not been specifically discussed by fiqh scholars in the past. Today, the question has arisen about the validity of the zakat agreement online. Therefore, it is necessary to look back at the concept of *Aqad* in fiqh (Zulkifli, 2020). The general meaning of the contract is to include the sale and purchase agreement or exchange of ownership, marriage, oath, vow and peace agreement. While the specific meaning of the contract means the bond between the parties involved in the transaction with the occurrence of *ijab* (supply) and *qabul* (acceptance) which carries the implications of Sharia (Al-Jurjani, 1995; Al-Mawsu'ah al-Fiqhiyyah, 1983). This online transaction is specifically related to the Islamic scholars' discussion of transactions through writing (*al-Ta'aqud bi al-Kitabah*). Islamic scholars have differed on the validity of transactions through writing:

The opinion of jumhur fuqaha Malikiyyah, Hanabilah and some Shafi'iyah state that: A written transaction is an absolute valid contract whether the two meet or not. However, it is excluded from the marriage contract because it has its special conditions (al-Dusuqi, 2015; Ibn Qudamah, n.d.). The opinion of *wajh* in Shafi'iyah explains that: Transactions through writing do not occur except for those who are unable to transact through speech. (al-Nawawi 2006; al-Nawawi 1991).

The apparent opinion according to the Hanafiyyah madhhab explains that: Transactions in writing are valid if the two parties do not meet with each other. However, if the two parties meet, then there is no need for written transactions because the speech comes first and is stronger than writing (Al-Bulkhi, 2000; al-Babarti, 2019).

Zulkifli (2020) explains that Islamic scholars have agreed that intention is a valid condition of zakat worship. According to the Syafi'e school, intention is obligatory with the heart and is not required to be uttered. In problems related to zakat online, the issue of intention is considered resolved with the act of paying (*muzakki*) transferring money through transactions or online facilities based on the instructions given by pressing the button or special icon found in the website or online application. The legitimacy of giving zakat is required by the transfer process. The transfer takes place after the completion of the zakat payment transaction online either directly or within the stipulated period. The process of confirmation and agreement between both of *Ijab* and *Qabul* transactions in the electronic contract is the same as the other contracts in the fiqh discussion as long as it meets the main conditions namely: Each content of the agreement or transaction details are the same and do not differ from one party to another the occurrence of the process of *Ijab* and *Qabul*. Payment of zakat should be done online based on the method of fiqh, among others:

The method of “الكتاب كالخطاب” (Writing is the same as conversation). There are differences of opinion in this regard among the Islamic scholars of the four sects, but what is taken here is the *jumbuh* view that should conduct business between two parties or enter into a written contract, because it is more rational and should be practiced in terms of online transactions based on methods of this fiqh.

The method of “الوسائل لها حكم الغايات أو المقاصد” (All *wasilah* or ways, for him the law is based on the goal to be achieved). Fulfilling zakat which is one of the main pillars of Islam is the biggest *maqasid* (purpose) in terms of religious preservation. Therefore, the *wasilah* that facilitates and can achieve the purpose of performing zakat worship among others is through online zakat payment transactions and the use of the latest technology, and it coincides with this method.

The method of “العبرة في العقود للمقاصد والمعاني لا للألفاظ والمباني” (Things taken into account in the covenants are the meaning and significance to be achieved, not the forms and expressions). Based on this method, zakat transactions that only require intention and transfer have been considered valid and completed by using the facility through online when payment is completed.

The 116th Federal Territory Islamic Law Consultative Committee Meeting held on 01 April 2019 has decided that it agrees on the law of zakat payment online. Therefore, the law of paying zakat online is valid and *sunnah* be following Islamic law (<http://efatwa.muftiwp.gov.my> 2019). The following is a list of rates and methods of paying Zakat Fitrah via online as in Table 1.

Table 1. Rates and methods of payment of zakat fitrah in 1441H/2020M for all states in Malaysia

Bil	States	Rates of Fitrah (RM)	Method of Payment
1	Johor	1. 7.00 2. 10.00	1. Online payment: i. Zakat Johor Payment by Online - Fastpay via https://fitrah.maij.gov.my - Registered users via https://epayment.maij.gov.my ii. Website of Johor Payment by Online – https://onlinepayment.johor.gov.my/ ; and iii. Application of SnapNPay
2	Kedah	1. 5.00 2. 7.00 3. 14.00 4. 21.00	1. Amil of fitrah appointed; or 2. Online payment: i. Website of Jom Zakat - https://jom.zakatkedah.com.my/ ; ii. Website of Asnaf Care - https://asnafcare.com.my/ ; and iii. Application of Zakat On Touch (ZOT) - http://bit.ly/zotkdh (Android dan IOS)
3	Kelantan	1. 7.00* *(However, the payment of fitrah at the rate of RM14.00 and RM21.00 based on the price of rice eaten is encouraged)	1. Amil of fitrah appointed; or 2. Online payment: i. Financial Process Exchange (FPX) via https://zakat.e-maik.my/ ; ii. Website of bank Agents (16 bank); iii. QR Code; iv. Application of MyMaik eZakat Payment; and v. SMS
4	Melaka	1. 7.00 2. 14.00	1. Amil of fitrah appointed; or 2. Online payment: i. Website of izakat.com ; and ii. QRPay Bank Muamalat

Bil	States	Rates of Fitrah (RM)	Method of Payment
5	Negeri Sembilan	1. 7.00	1. Amil of fitrah appointed **; or 2. Online payment: i. Portal of Zakat Payment via www.zakatns2u.biz ; ii. Application of ZakatN9; iii. Application of SnapNPay; and iv. JomPAY **(Amil requirements are only given to PBMalNS officers according to the decision of the management)
6	Pahang	1. 7.00	1. Payment of FPX online via https://ezakat.muip.gov.my/zakatfitrah
7	Perak	1. 7.00 2. 14.00 3. 21.00	1. Amil of fitrah appointed; or 2. Online payment: i. FPX via www.maiamp.gov.my ; ii. QRPay Maybank; iii. Application of SnapNPay; and iv. Application of GoPayZ
8	Perlis	1. 7.00	1. Amil of fitrah appointed; or 2. Online payment: i. Application of SnapNPay
9	Pulau Pinang	1. 7.00 2. 16.00	1. Amil of fitrah appointed; or 2. Online payment: i. Application of SnapNPay; ii. JomPAY; iii. QR Code; iv. Application of GoPayZ; and v. FPX
10	Selangor	1. 7.00 2. 14.00 3. 21.00	1. Amil of fitrah appointed; or 2. Online payment: i. FPX via Portal of eZakatPay in link: https://fpx.zakatselangor.com.my/ ; ii. Application of e-dompot GoPayZ; iii. Application of e-dompot Boost; iv. QR Code; v. Website of bank Agents (9 buah bank); vi. Portal MyEG; and vii. Pos Online
11	Terengganu	1. 7.00	1. Amil of fitrah appointed; or 2. Online payment: i. FPX via link http://www.maidam.gov.my/index.php/ms/ ; and ii. Application of SnapNPay
12	Sabah	1. 6.00 2. 7.50	1. Amil of fitrah appointed; or 2. Online payment: i. Website of bank Agents; ii. Portal MyEG; iii. Application of SnapNPay; and iv. JomPAY
13	Sarawak	1. 7.00	1. Amil of fitrah appointed; or 2. Online payment: i. Portal of TBS Customer (Baitulmal Kamek); ii. Application of Tabung Baitulmal Sarawak; iii. Portal MyEG; iv. Maybank2U; and v. Application of SnapNPay

Bil	States	Rates of Fitrah (RM)	Method of Payment
14	Wilayah Persekutuan	1. 5.00 2. 7.00	1. Amil of fitrah appointed; or 2. Counter of PPZ-MAIWP; or 3. Online payment: i. Via Portal of PPZ fitrah.zakat.com.my; ii. Website of bank Agents (14 banks); iii. PayHalal; iv. Portal MyEG; v. U-Mobile; and vi. Pos Online

Source: Jabatan Wakaf, Zakat, and Hajj, Jabatan Perdana Menteri, 20 April 2020

Method of Distribution of Zakat

Zufkilfi (2020) says with the distribution of zakat, that should facilitate the provision of zakat assistance to the needy especially those affected by the COVID-19 Pandemic, although each application still has to comply with the prescribed procedures. The usual rules must not be binding to facilitate the delivery of aid (<https://www.sinarharian.com.my/article/93262/BERITA/Nasional>).

Indeed, the Movement Control Order (MCO) mobilized by the Malaysian Government to break the COVID-19 Pandemic chain has affected the economy, especially for the low-income group. Therefore, zakat management must be done professionally and progressively so that it can provide welfare to the community.



Source: www.zakatselangor.com.my/agihan-zakat/permohonan-zakat, 30 April 2020

Figure 1. Application process for zakat assistance

Referring to Flow Chart 1, it has been stated that the process of applying zakat assistance at LZS, which is a method of distributing zakat to *asnaf* of recipients of zakat (*mustahiqqin*). Forms can be obtained through the LZS website. The distribution application approval process is: LZS receives the completed application form from the applicant; Zakat applications will be reviewed based on the rate of *had kifayah* and information is included in the Zakat Distribution System; An investigation process will be conducted on the application; Applicant approved / rejected; Applicants are classified according to *asnaf* of *fakir* or *miskin*, and If *asnaf*, appropriate zakat assistance will be given (www.zakatselangor.com.my).

CONCLUSION

Zakat management requires a progressive and innovative method of management when faced with contemporary issues such as the post-the spread of the COVID-19 Pandemic. The zakat management system needs to be transformed to suit current needs and provide facilities on behalf of Islamic institutions and communities. Therefore, institutions need to develop a comprehensive management concept, so that zakat funds can be well managed and can reach the right targets. Online service promotion strategies will help collection and distribution to be done quickly.

The use of information technology in managing zakat needs to be developed according to the current situation and this global era. Khadijah et al. (2012) have conducted a study in LZS with the finding that the use of the LZS zakat website to some extent affects the payment of zakat online. This shows that the online payment system is very efficient and makes the payment of zakat very easy. Besides, this is very necessary as zakat is one of the means to lead towards the development of the Islamic digital economy. All-State Islamic Religious Councils (Majlis Agama Islam Negeri/MAIN) and Zakat Management Agencies (Agensi Mengurus Zakat) optimize the method of paying zakat fitrah online to make it easier for payers to fulfil their obligations more quickly and safely (Bernama, 2020).

In any case, zakat is therefore a way to prosper the economy affected by this pandemic. Therefore, the usual face-to-face payment method needs to be replaced with an online payment method based on “*There should be neither harming (darar) nor reciprocating harm (dirar)*” (*La Darar wa La Dirar*) to maintain the SOP in order to break the COVID-19 pandemic chain. At the same time, of course, zakat administration is still implemented because zakat law is *wajib*. It is a reference in all religious affairs, especially in the face of dangerous situations that can be avoided at any time.

Islamic Scholars, information technology experts, management experts, economists, the government whether central or state and zakat institutions play an important role in developing zakat fund management based on Islamic digital economy, so that zakat can remain implemented in any situation, especially in the pandemic era. The Muslim community also plays a social role in taking care of each other, helping each other through the use of zakat funds to achieve mutual well-being.

Recommendation

Zakat institutions in the states of Malaysia need to be bold in developing an online management system that is easily understood by the Muslim community so that the facility can be used properly without any difficulty when referring to the website. Zakat institutions are amils who must know about this online system so that they can explain to the Muslim community that they need an in-depth explanation of these online usage guidelines. Amil needs to be efficient in managing collection and distribution so that all matters are carried out clearly and informed. The collection needs to be disclosed to the public as a report, while the distribution needs to identify who is the *asnaf* who is entitled to zakat.

Muzakki/zakat givers must be confident and without hesitation in using the online zakat payment offered by the institution, because it has been confirmed to be true in terms of sharia. Thus, this payment system is easier, faster and saves time. Many *muzakki* who use this system will have more and more zakat funds collected to be distributed to recipients/*asnaf*. While the recipient side, also need confidence in using the online system provided must fill in the application form with actual information.

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Outbound Tourism Analysis for Developing Halal Tourism in Indonesia

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Abstract. The growth of global Muslim population and the increasing visiting intention encourage the development of halal tourism. This study aims to analyze the development of halal tourism in terms of demand. This study explored potential countries to be the target market for the development of halal tourism in Indonesia. Secondary data used in this study was in the form of qualitative data related to outbound tourism from various sources. Data analysis employed a marketing approach with segmentation, targeting, positioning, which were developed into a strategy for developing halal tourism. The results of the study indicate that the potential countries to become market targets of halal tourism include the United Arab Emirates, Kuwait, Malaysia, Qatar, and Egypt. Thus, the development of halal tourism can be oriented towards outbound tourism from these countries. The outbound tourist destination is expected to be transferred to Indonesia to increase the number of foreign tourists.

Keyword: Halal tourism destination, outbound tourism, tourism.

JEL Classification: M31, Z32, Z33.

INTRODUCTION

Halal tourism development is one of Indonesia's tourism development strategies. Halal tourism arises as a result of the Muslim community's awareness of halal products (Hamdan et al., 2013). The development of halal tourism has been on the rise, one of the reasons is triggered by the significant annual increase in Muslim populations around the world (Bhuiyan et al., 2011). Muslim tourists are some of the fastest-growing market segments, and their needs cannot be ignored by the tourism industry (Battour et al., 2014).

Indonesia is one of the countries that have a big prospect in the development of halal tourism. This is supported by numerous awards in the realm of world halal tourist destinations given to Indonesia. In 2019, Indonesia was ranked first as the Best Halal Tourism in the World according to the Global Muslim Travel Index (GMTI) ahead of 130 other participating countries. Around 20% or 14.92 million foreign tourists who come to Indonesia are Muslim tourists (Kemenkraf, 2021). When viewed from environmental and cultural perspectives, Indonesia has prospects related to the development of halal tourism.

When compared to other OIC countries, Indonesia is one of the countries that compete with Malaysia as the best halal tourist destination. Both countries are in the top position in the 2019 Global Muslim Tourism Index (GMTI). Based on data obtained from GMTI, Indonesia has a similar index with Malaysia as the country with the best halal tourist destination, which is 78 points. Then, they are followed by Turkey with an index of 75 points, Saudi Arabia with an index of 72 points, the United Arab Emirates with an index of 71 points, and Qatar with an index of 68 points. The index is based on an assessment of the readiness of access, communication, environment, and services. The high points obtained by Indonesia indicate that Indonesia's readiness for halal tourism is very good. Thus, the development of halal tourism in Indonesia is worthy of study.

Halal tourism is not limited to tourism for religious purposes, nor is it limited to Muslim countries (Carboni et al., 2014). Therefore, countries may develop halal tourism to increase Muslim tourist visits. There have been many studies on halal tourism. Battour (2018) examines the appropriate terminology in halal tourism. The results show that the needs of Muslim tourists related to halal tourism include Muslim-friendly hotels, halal food, Islamic applications, Halal-friendly airports, halal holidays, halal tourism websites, halal health facilities and services, halal cruises, and halal swimwear. The implications related to halal tourism are also discussed in the study. Battour and Islamil (2015) discuss the concept of halal tourism and the components that make up the industry. Some effective ways to access halal tourism market are by making halal food widely available, and having Muslim-friendly hotels and airports. These are considered as starting point and can be used as promotional tools to promote the destination to be suitable for Muslims. A similar study was also conducted by El-Gohary (2016). In addition, a study conducted by Satriana and Faridah (2018) related to the opportunities and challenges of halal tourism elaborates that an annual increase in Muslim tourists is both an opportunity and a challenge for the tourism sector to develop halal tourism.

Some researchers have studied halal tourism in Indonesia. Paramarta et al. (2021) present a conceptual review of tourism in Indonesia showing the concept of halal tourism from the food product described by the Indonesian Ulema Council (MUI). Jaelani (2017) describes that the tourism industry has contributed to economic growth in Indonesia. Widagyo (2015) points out that the success of potential tourism prospects lies in effective promotion and marketing plans. The Middle East market is considered attractive for Indonesia. Since joining the Arab countries, the consumption level and the number of visits have been quite high.

Several studies of halal tourism have been carried out from the perspective of countries that will develop halal tourism, with concepts, potentials, strategies, and challenges as themes. These studies are more supply-oriented. Research-oriented towards the country of origin of tourists or demand is still rarely done. This study filled the gap by conducting a study of potential countries that can send more Muslim tourists to Indonesia.

This study also analyzed domestic tourists as a comparison of the performance of foreign halal tourists. This study analyzed potential countries that can be the target market for the development of halal tourists in Indonesia. The results of this study are expected to be inputs for the development of halal tourism in Indonesia. For policymakers, by studying the potential and prospects of foreign tourists, this study can be an investment in the development of halal tourism in Indonesia.

LITERATURE REVIEW

Demand in Tourism

Tourism is generally regarded as a special type of service trade, of which the gravity method is used to analyze the movement of tourists at the beginning of the model (Durden & Silberman, 1975). Eilat and Einav (2004) show that the important factors in tourism demand based on the gravity model are differences in price elasticity, exchange rates, destination risk, common borders, and language. Meanwhile, another most frequently applied theoretical model supporting tourism demand is consumer theory (Morley, 1992), which assumes that individual utility comes from visits to different destinations as well as from consumption of other goods. Tourism demand in the consumer demand is usually done by modeling tourism flows between each origin-destination pair, and for each pair to be independent of other flows. Pearce (1995) reviews various types of tourism models that show the nature of the interaction between supply and demand.

Halal Tourism

Halal tourism is a tourist object or behavior based on Islamic law, which is not limited to the religious purpose used by Muslims when conducting tourist activities (Carboni et al., 2014), including halal products and services (Moshin et al., 2016). However, based on World Travel Market (WTM) (2007) report, halal tourism, as religious tourism, adapts to Islamic teachings ranging from behavior to how to dress. The concept of halal tourism is often interchangeable with Islamic tourism since these two things have similarities in perception. Zamani and Henderson (2010) define halal tourism and Islamic tourism as the same concept, which was extended to targeting non-Muslim tourists for Islamic tourism. In addition, Islamic tourism is seen as a way of fulfilling religious obligations (Duman, 2011). In practice, the use of the term Islamic tourism gives the impression that the service or product is only for Muslims, although non-Muslims may also consume the product or tourism activities (El-Gohury, 2016).

The increasing number of tourists with religious motivation has also attracted the attention of stakeholders to develop Sharia-based tourism (Timothy & Olsen, 2006). The tourism industry admits that there has been an increase in interest in halal tourism that can then be followed up with the development of halal tourism products guided by Islamic Sharia. Based on the research results of Samori et al. (2015), it is worth noting that the development of the Halal tourism concept should be based on Islamic Sharia (Al-Quran and Sunnah of the Prophet). There are opportunities for Muslim and non-Muslim countries in developing halal tourism by opening the halal tourism market to attract Muslim tourists and meet the basic needs of Muslim tourists for a profitable tourist segment.

Halal Tourism Characteristics

Halal tourism is generally regarded as a tourism product that provides accommodation services following Islamic law (Chandra, 2014). Halal tourism is currently considered a growing market as it attracts many Muslim tourists who wish to comply with Islamic law (Oktadiana et al., 2016). However, in practice, there are no special standard requirements for halal tourism. Among the important needs of halal tourism related to the needs of Muslim tourists are in terms of fulfilling religious obligations such as prayer, modesty in dress, and halal food and drinks (El-Gohary, 2016). In terms of halal tourism, it is important to provide materials that are following Islamic values during the trip, including halal food,

halal entertainment, gender segregation, and nonalcohol. Another important point is the facilities such as prayer rooms, halal certificates for food and soft drinks, as well as swimming pools and spas that are separated by gender (Suharko et al., 2018).

Stephenson (2014) classified the elements of halal tourism related to accommodation into two dimensions, concrete and abstract. The principles of halal tourism in the hospitality industry cover a wide range of services, such as human resource management (uniforms and personal ethics) and marketing, as well as other facilities (e.g., no nightclubs). On the other hand, cultural and social activities in a tourism destination are seen as important issues to be considered by tourism management organizations to create a halal-friendly environment and image (Han et al., 2018). Thus, in general, the characteristics of halal tourism include the prohibition of alcohol and nightclub, no haram food and drinks, separate facilities for men and women, and proper toilets in the room (El-Gohary, 2016). Several studies have shown Muslim tourists are attracted by halal tourism facilities and services, such as non-alcohol and Halal food and beverages, friendly and welcoming locals, separate baths and beaches for men and women, separate dining areas for women and families, prayer rooms, as well as prayer mats in hotels and restaurants (Kim & King, 2015; Nassar et al., 2015).

Target Market

Targeting is a strategy in determining the target market by determining the target segments and evaluating the potential and attractiveness of each segment (Agustini, 2003). Targeting strategies are needed to gain a competitive advantage and achieve cost-effective marketing (Tsiotsou & Vasioti, 2006). In conducting evaluations related to targeting in market segments, it is necessary to examine the segments and their expected profitability, including those related to growth, substitute products, suppliers, size, and structural attractiveness of each segment by taking into account their resources and strategic objectives.

Targeting can also be interpreted by assessing the profitable market share (Kotler et al., 2013). Targeting involves various things such as finding the right segment to offer a product, making standard offers and concentrating on one thing and different from another (Kegan & Bhargava, 2010). In general, companies will have several choices in determining the target market, including using undifferentiated, differentiated, concentrated, and micro marketing (Tsiotsou et al., 2012; Tsiotsou & Vasioti, 2006). Differentiated marketing is one of the most commonly used market targeting approaches in tourism. Targeting a well-defined tourist segment in tourism development will bring many benefits. First is the development of new tourism products that focus on the needs and wants of certain tourism segments; Second is the effectiveness of marketing program design to reach certain tourism segments; and Third, a more efficient and effective allocation of marketing resources for tourism has been determined (Chandra & Menezes, 2001).

The Development Halal Tourism in the World

The development of halal tourism is mostly carried out by Muslim countries, considering the need for the Muslim community for halal tourism is increasing every year. Malaysia as a Muslim-majority country has the highest index score for halal tourists according to the Mastercard-Crescent index. Henderson's research (2016) states that the reason behind the rise of halal tourism in Malaysia is the country's high interest in halal tourism which is driven by government regulations related to tourism

licensing in carrying out tourism activities that must be based on Islamic Sharia. Meanwhile, the development of halal tourism in Iran is focused on religious tourism, i.e., 'Mashhad'. This is based on the reason that one of the goals of halal tourists in doing tourism is regarding religious tourism so that tourism development efforts carried out by Iran are related to the expansion and improvement of infrastructure, which includes park maintenance, public arts, projects, and many other beauty projects in Mashhad to attract more tourists (Shirazi, 2017).

The development of halal tourism has been carried out by several countries in the world, both Muslim and non-Muslim countries. Thailand is one of the non-Muslim majority countries that develops halal tourism. The development of halal tourism in Thailand is carried out with halal branding carried out by the country. In addition, Thailand as the largest exporting country in halal-certified food and products in the Southeast Asia region is also one of the forms of occurring development (Nawawi et al., 2018). Similar to Japan, with the majority of the population being non-Muslim, Japan is also a destination country for halal tourism.

The potential and success that exists in Japan have the country won the World Halal Tourism Award as "World Best Non-OIC (Organization of Islamic Conference) Emerging Halal Destination" in 2016 (Japan Halal Association, 2016). One form of development carried out by Japan is providing various halal facilities as well as encouraging several Japanese tour companies to launch halal tour packages for Muslim tourists (Yusof & Shutto, 2014). The development of halal tourism is also often done by developing more halal-friendly destinations for Muslim tourists. Han et al.'s (2019) study states that there are five attributes explored in the development of halal tourism in South Korea, i.e., the social environment, local residents and staff, food and beverages, facilities, and services. The five attributes were confirmed as valid halal-friendly attributes in South Korea which succeeded in attracting Muslim tourists.

Henderson (2016) stated that in the cases of Malaysia as a Muslim majority country and Singapore as a Muslim minority country, destinations with either a majority or minority Muslim community has a competitive advantage related to halal food for tourists which is likely to be strengthened. This is a currently implemented form of development. The attention given to the availability of halal food in the promotion of the country's tourism is a trigger for the presence of halal tourists.

This study summarizes the various developments of halal tourism in the world with a focus on research in Indonesia. Some related studies such as by Mohsin et al. (2016) which discuss raising awareness about the growing halal tourism market segment and identify the basic needs of the halal tourism segment. The analysis expands on the growing interest in halal tourism as by Battour & Ismail (2016) which is more focused on Indonesia.

Halal Tourism Era Pandemic COVID-19

The development of tourism in the era of the COVID-19 pandemic has decreased drastically. Based on a report from the UNWTO, tourist visits, especially foreign tourists, are estimated to fall by 93% in 2020 (UNWTO, 2020). The many economic sectors involved in the tourism industry have an impact on the decline in the tourism industry outside of sectors related to travel and accommodation. Several sectors supporting other tourism activities were also affected (Awirya, 2020). The decline in tourist visits in general also has an impact on halal tourism in particular.

The decline in the number of visits was triggered by the ban on all incoming and outgoing flights. All countries and destinations related to halal tourism are taking part in the temporary ban on flight movements. The prohibition and suspension of inbound and outbound flights caused a lot of direct and indirect losses to all countries with halal tourism destinations. These losses will hurt Halal travel companies through the management of tourist destinations, airlines, hotels, travel agents, and restaurants due to the temporary closure. This situation arose as a result of a decrease in the number of visits by local and international visitors (KNEKS, 2020).

The condition of halal tourism during the pandemic has also been studied by Musfiro et al. (2020), who stated that the halal tourism sector in Indonesia is one of the sectors affected by COVID-19. This is because the key to the development of the halal tourism sector is centered on the number of arrivals from Muslim tourists. Therefore, government policies ranging from large-scale social restrictions to lockdowns can cause such a large impact on reducing the number of tourist arrivals. The study also stated that the hospitality business, especially related to halal tourism in Indonesia, experienced a decline in tourist visits. The number of rooms occupied by tourists fell to 50%. Thus, this causes hotel turnover to drop to 50%. According to data from the Indonesian Hotel and Restaurant Association, 1,642 hotels in 31 provinces in Indonesia were forced to experience temporary closures.

If it is based on other countries, the COVID-19 pandemic also has bad implications for the tourism sector, especially halal tourism in Malaysia. Various forms of tour packages that had to be canceled were able to affect losses to hotels and airlines. This can reduce the number of foreign tourist visits to halal tourist destinations in Malaysia. The loss reported to the Malaysian government was 3.37 billion in 2020 (Dzulkifly, 2020). In particular, Malindo Air in Tan (2020) stated that various government policies were able to cause a decline in airline passengers by around 20%. The Malaysian Hotel Association also estimated a loss of RM560.72 million due to a decline in the number of incoming tourists.

Meanwhile, Kuala Lumpur also experienced the same thing. Various kinds of losses stemmed from the cancellation of a large number of bookings which in particular were able to cause a loss of RM24.91 million. This loss continued to increase in line with the increase in booking cancellations by various tourists. This loss was also experienced by employees where 16% of the total employees experienced salary deductions and another 20% experienced unpaid leave (Mahalingham, 2020). The adherence of Muslim tourists to various government regulations regarding temporary travel bans makes the recovery process for the halal tourism industry take longer time. Various strategies have been carried out to re-target Muslim tourists. Musfiro et al. (2020) stated that the recovery strategy for the halal tourism sector from the COVID-19 pandemic consists of 3 stages, i.e., the Emergency Response Phase, Recovery Phase, and Normalization Phase. The existence of this strategy is expected to increase the enthusiasm of the community in enlivening halal tourism.

METHODOLOGY

Data

This study relied on secondary data based on outbound tourism of member countries of the OIC (Organization of Islamic Cooperation) in the analysis. The indicators were the number and spending of outbound tourism. The five OIC member countries that are considered potential based on the performance of the number of visits and spending performance were analyzed, especially concerning the performance of outbound tourism in these countries. This study also included Indonesia for the comparative analysis.

Data Analysis

There are several stages in this research. The first part is a descriptive analysis explaining the development of tourist visits from OIC member countries to Indonesia, especially regarding tourism expenditure of OIC member countries and tourist visits from OIC member countries to Indonesia. Some concerns include the growth of expenditure and tourist visits. The analysis was strengthened by a quadrant approach that considers tourist's expenditure as well as the performance of tourist visits to Indonesia to determine the most potential countries to be the market target of halal tourism in Indonesia. The second part is a deeper analysis of five potential countries to become target market for the development of halal tourists in Indonesia. The third part is in the form of a follow-up analysis related to the capture of halal tourist targets based on three stages of analysis (Tsiotsou et al., 2012). It was complemented by a proposed strategy for developing halal tourism in Indonesia. A more detailed explanation is shown in Figure 1.



Source: Pyo (2015) as modified from Tsiotsou et al. (2012)

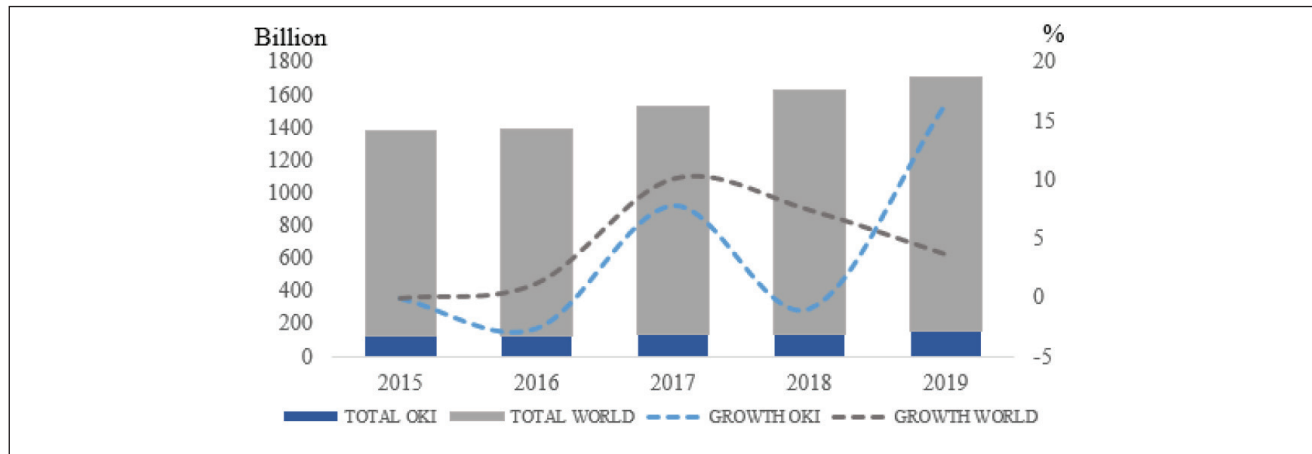
Figure 1. Analytical framework for halal tourism marketing in Indonesia

Figure 1 describes the four stages of the analytical tool. The first stage is segmentation. This stage was carried out by looking at categories based on the growth rate of expenditure and the number of tourist visits. It describes the ability of potential tourists and the highest share of tourists' origin countries to Indonesia as a representation of interest. The second stage is targeting. This stage was carried out by observing the distribution of outbound tourism from the five OIC countries with the highest average expenditure to the five countries with the highest demand or called outbound destination countries. The third stage is positioning. This stage was carried out by selecting the appropriate potential halal tourist destinations in Indonesia and similar to the original country's halal outbound tourism. The fourth stage is to develop a strategy for foreign markets based on the results of the analysis in the previous session. The elaboration of this session was carried out based on an explanatory approach. The explanatory approach seeks to test hypotheses by paying attention to the causes and effects of the relationship between the variables in the study (Halicioglu & Ferda, 2008).

RESULTS AND ANALYSIS

Descriptive Analysis

At the beginning of the descriptive analysis, the highest total expenditure from the five OIC countries and the expenditure growth is described in Figure 2.

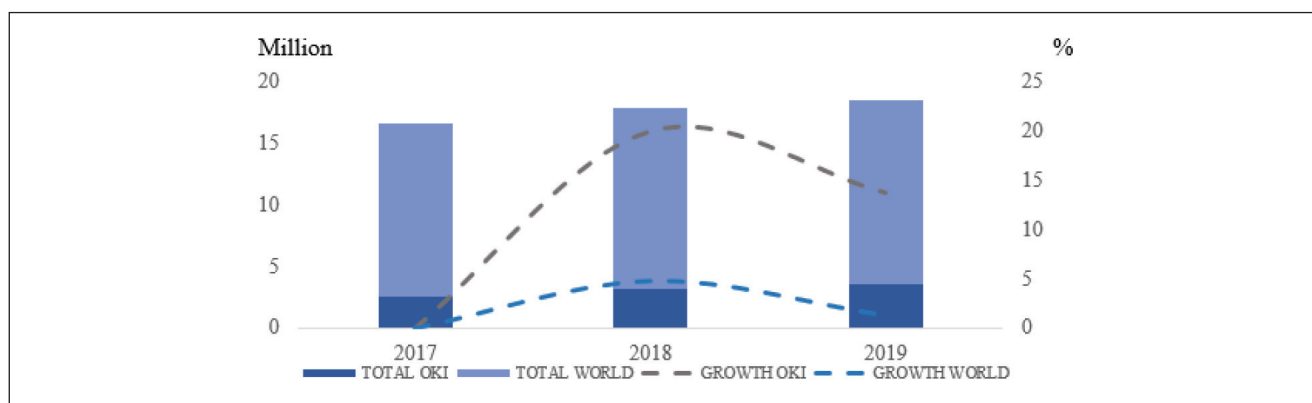


Source: World Bank

Figure 2. OIC expenditure value and growth

Tourism development for OIC member countries has existed for a long history. In 1981, the third Islamic Summit Conference was held in Mecca in harmonizing the development of various fields, one of which is communication and tourism. In 2000, the priority for development was those related to international tourism. Hence, tourism development, especially halal tourism is important since it is the goal of developing the OIC countries.

Figure 2 depicts the contribution of the OIC country's outbound tourism expenditure to the world. In general, the contribution of the OIC member countries' tourism expenditure is around 10% of the total world tourism expenditure. Although the value is still small, the growth of outbound tourism expenditures in the OIC countries at the end of 2019 had increased dramatically. This indicates the great potential of outbound tourism visits by OIC countries to various tourist destinations, including halal tourism.

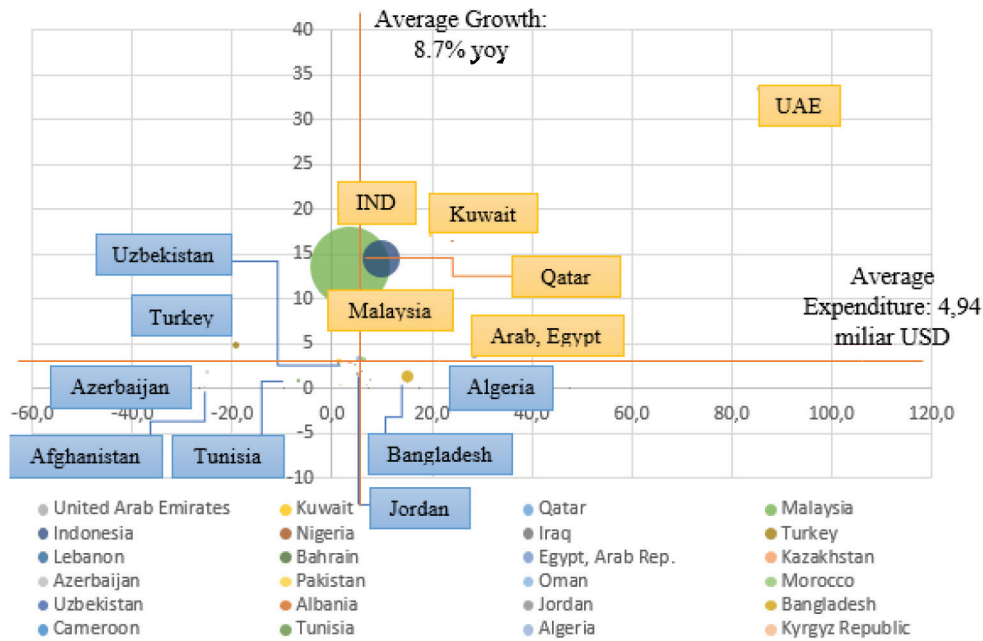


Source: Statistics Indonesia

Figure 3. Number and growth of the tourist from OIC member countries to Indonesia

Figure 3 delineated the contribution of the OIC member countries in foreign tourist visits to Indonesia of around 20-26% of the total foreign visits. This indicates that the OIC member countries offer great potential in increasing the number of foreign tourist visits to Indonesia. The number of foreign tourist visits to the OIC member countries tends to increase in 2019 by around 4 million visitors. The high interest in tourist visits to Indonesia in this OIC member country is an opportunity for the development of Indonesian tourism by inviting potential foreign tourists.

Target Market Analysis



The size of the circle indicates the number of visits to Indonesia
 Source: Processed Data from World Bank & Statistics Indonesia

Figure 4. Tourist expenditure quadrant, Indonesian inbound foreign tourist (2019)

Figure 4 shows that the potential countries with the highest tourism expenditure and the number of tourist visits to Indonesia are United Arab Emirates, Kuwait, Malaysia, Qatar, and Egypt. Thus, these five countries serve as the basis for selecting potential countries in marketing analysis. In addition, we also included the performance of Indonesia’s outbound tourism as a comparison.

In more detail, the potential five selected countries can be described in the following table:

Table 1. International tourism expenditures (2015–2019)

No	5 Countries OKI	Expenditure (Billion)				
		2015	2016	2017	2018	2019
1	United Arab Emirates	16.637	17.127	17.644	18.004	33.372
2	Kuwait	13.148	13.232	13.722	14.318	17.131
3	Indonesia	9.800	9.932	10.945	13.171	14.462
4	Malaysia	11.599	11.399	12.145	13.207	13.685
5	Qatar	11.641	12.152	12.284	11.754	12.528
6	Arab, Egypt	3.636	4.351	2.419	2.897	3.718

Source: Worldbank

Table 2. Number of tourist visits to Indonesia (2015-2019)

No	5 IOC Countries	Number of tourist visits to Indonesia (person)				
		2015	2016	2017	2018	2019
1	United Arab Emirates	10315	9016	8387	7100	9065
2	Kuwait	8306	6368	5760	5551	5762
3	Malaysia	1431728	1541197	2121888	2503344	2980753
4	Qatar	1595	1856	1859	2104	1989
5	Arab, Egypt	12972	19948	20345	18075	21354

Source: Statistics Indonesia

Based on Table 1, it can be seen that the OIC country's outbound tourism spending which has the potential for the development of halal tourism in Indonesia tends to experience a relatively stable increase. However, the UAE experienced around 85% growth in 2019. This shows that the need for halal tourists is increasing every year. When compared to outbound tourism countries, Indonesia is also one of the countries with a fairly large total tourist spending. The growth of tourist spending in Indonesia from 2015 to 2019 increased by 47%. This significant increase indicates that the need for halal tourists in Indonesia is increasing. The large amount of tourist spending will have an economic impact on the community, both directly and indirectly (Nurhidayati & Fandeli, 2011).

Meanwhile, in Table 2, if it is based on the number of visits to Indonesia from the potential Five OIC countries, the average number of visits has increased every year. The highest number of visits came from Malaysia. The amount of tourist spending and the number of tourists who come from the five OIC countries can be used as a basis for measuring how big the countries' role is in the growth of halal tourism in Indonesia. Geographic, demographic, and psychographic phenomena can be used as the basis for segmentation (Kotler et al., 2013). In addition, tourist spending has become a determining factor in influencing the choice, destination, and main travel motivation of tourists (Yuan et al., 2013; Raluca & Gina, 2003).

Based on Tables 1 and 2, we can see the potential of OIC country tourists by looking at the value of expenditure and tourist visits to Indonesia which can be used to target tourists to Indonesia. The attraction of foreign tourists to Indonesia is usually associated with the religious and cultural diversity that Indonesia has (Jaelani, 2017). The cultural and religious heritage that is owned by the diversity of tribes, ethnicities, languages, and customs is a potential in tourism development. Thus, the polarization of Muslim culture and religious practices in Indonesia is often an attraction for tourists to visit halal tourism in Indonesia. In addition, halal products offered by Indonesia such as food, especially typical traditional foods, are also often the reason why tourists visit Indonesia (Soeroso & Susilo, 2014).

The increasing number of foreign tourists visiting Indonesia will have a good impact on the growth of the tourism industry which can then be a contributor to economic growth through increasing tourism foreign exchange as previously stated (Hariyani, 2018). This will be an opportunity for Indonesia to attract and retain foreign tourists who have visited Indonesia and based on the characteristics of each tourist. By looking at the number of tourists spending and visits that are influenced by various factors, these can be used as a motivation in developing halal tourism.

Marketing Analysis

Segmentation

The first stage of marketing analysis was making a segmentation analysis as a continuation of the quadrant analysis in the previous session. Segmentation at this stage was a more detailed analysis of five countries, which are considered likely to be the marketing targets for halal tourism in Indonesia.

Table 3. International tourism expenditures in 2019

No	5 OIC Member Countries	Total Expenditure (Billion USD)	Number of Visit to Indonesia (Person)
1	United Arab Emirates (UAE)	33372	8542
2	Kuwait	17131	5369
3	Indonesia	14462	-
4	Malaysia	13685	2749732
5	Qatar	12528	1881
6	Egypt	3718	20078

Source: World Bank

Table 3 shows that the United Arab Emirates is one of the countries with the highest tourist expenditure with a total expenditure of 33372 billion USD and 8542 foreign tourist visits to Indonesia in 2019. The United Arab Emirates has long been recognized as the global Islamic economic capital that relies on halal tourism as the core of the country's economic plan (Al-Hammadi et al., 2019). Therefore, UAE tourists already have the standard of halal products they want to consume.

Meanwhile, Kuwait and Qatar are the next countries with a total expenditure of USD 17171 billion and USD 12528 billion, and 5369 and 1881 tourist visits in 2019, respectively. Another potential country is Egypt. Although the total tourist expenditure is relatively small, only USD 3.718 billion, this country is considered potential because the number of tourist visits to Indonesia reached 20078 visitors in 2019. The number of tourist visits from Egypt can be used as capital for the development of halal tourism in Indonesia.

Another very important country in supporting the development of Indonesia's halal tourism industry is the neighboring Malaysia, which undoubtedly accounts for the majority of Muslim tourists to Indonesia of up to 2749732 visitors in 2019. In addition, the total tourism expenditure from Malaysia reached USD 13685 billion.

If we include the expenditure of Indonesian tourists, the total expenditure is greater than the total expenditure of tourists from Malaysia, Qatar, and Egypt. Thus, the development of halal tourism must also pay attention to the needs of domestic tourists in Indonesia, including efforts to bring outbound tourists in Indonesia to become inbound tourists.

Targeting

The next stage is targeting. Targeting was done by looking at outbound tourism destinations in five potential countries. Outbound tourism destination countries can be a benchmark for the development of halal tourism in Indonesia. Table 4 shows that some of the potential outbound tourism countries visit the United States, Western Europe such as England and Switzerland in addition to neighboring countries. Therefore, the development of halal tourism destinations in Indonesia can be directed to compete with existing outbound tourism destinations.

Table 4. Distribution of outbound tourism in five OIC member countries

Country of Origin for Outbound Tourism	Destination Country of Outbound Tourism
UAE	United States , India, Germany, United Kingdom , and Switzerland .
Kuwait	United States , Spain, Cyprus, Turkey, and Switzerland .
Malaysia	Switzerland , United Kingdom, France, Italy, and Austria.
Qatar	UAE, Saudi Arabia, United Kingdom , Bahrain, and Kuwait.
Egypt	Africa, Syria, UAE, France, and Italy.

Source: Ministry of Tourism of Each Country

Positioning

The third stage in marketing analysis is positioning. The positioning is done by considering the choice of the destination country (outbound tourism), which is used as a competitive objective for the development of halal tourist destinations in Indonesia. This is important considering that positioning relies heavily on assessing the needs of the targeted segment (Johnson, 1987). Thus, the halal tourism destination to be developed has a clear positioning in targeting certain targets and competing with other destinations. Table 5 shows the proposed positioning of alternative tourism destination development in Indonesia. Some areas that have the potential to be developed as halal tourism with a relatively strong positioning include Jakarta and Surabaya for city tourism and Yogyakarta for royal culture and historical heritage. For nature tourism, Malang, Bandung Raya, Lake Toba (North Sumatra), Flores Island, and Sumba Island (East Nusa Tenggara) can be developed. However, several other areas can also be developed by taking into account the positioning aspect that is oriented to the interest of outbound tourism from the five potential countries.

Table 5. Positioning – Destinations visited by outbound tourism from 5 potential countries

Destination Countries	Examples of Tourist Destination	Proposed Positioning of Halal Tourism Destinations in Indonesia
United States	a. Metropolis b. Skyscrapers	a. Jakarta, b. Surabaya (big city destination)
United Kingdom	a. Parliament Building b. Historic Building c. Stone	a. Yogyakarta; b. Cirebon (West Java), (Palace)
Switzerland	a. Mountain b. Lake	a. Malang (East Java), Bandung Raya, b. Toba Lake (North Sumatra), c. Flores, Sumba (East Nusa Tenggara)

Source: Processed Data

Meanwhile, when compared to Indonesian tourists, the destinations for domestic tourists based on visits in 2019 were East Java, West Java, Central Java, DKI Jakarta, and Banten, which amounted to 18%, 17%, 13%, 7%, and 4%, respectively, of the total tourists. Overall, the island of Java dominates the tourist destinations of the archipelago. This is in line with the proposed positioning of halal tourist destinations by outbound tourism in Indonesia, most of which are on the island of Java. Considering that the island of Java is one of the islands with higher economic development, this will have a higher impact on development related to the halal tourism industry. Therefore, it is not surprising that Java Island becomes a destination for halal tourists.

However, the COVID-19 pandemic has changed the landscape of the tourism industry, especially halal tourism in Indonesia. Various social restriction policies to mitigate the spread of COVID-19 can cause temporary stagnation in the halal tourism industry. Various forms of halal tourism activities must be stopped with an indefinite time limit. This causes huge losses for people in the tourism sector. Musfiro et al. (2020) in their research stated that the halal tourism sector in Indonesia is one of the sectors affected by COVID-19. The study also stated that the hospitality business, especially related to halal tourism in Indonesia, experienced a decline in tourist visits. The number of rooms occupied by tourists fell to 50%. This causes hotel turnover to drop by up to 50%. According to data from the Indonesian Hotel and Restaurant Association, 1,642 hotels in 31 provinces in Indonesia were temporarily closed.

The sharp decline in the tourism industry in Indonesia requires strategic steps to increase tourism, especially regarding halal tourism after the COVID-19 pandemic. The opening of tourism in major tourist destinations such as Bali is expected to be the first step for the return of tourism. Hopefully, halal tourism will also develop along with the opening of tourism. Retargeting outbound tourism from OIC countries is important to revive halal tourism in Indonesia.

CONCLUSION

This study indicates that the development of halal tourism can be targeted at tourists from the UAE, Kuwait, Malaysia, Qatar, and Egypt. Only Malaysia has sent a relatively large number of tourists to Indonesia. Therefore, the potential for increasing halal tourism in Indonesia is still wide open. Tourist destinations favored by outbound tourism from these countries besides neighboring countries are the United States and Western Europe such as England and Switzerland. Therefore, efforts to develop halal tourist destinations can be sought to provide a positioning that competes with these tourist destinations. Several areas in Indonesia that have the potential to be developed to fulfill the positioning include Jakarta and Surabaya for big city tourism, Yogyakarta and Cirebon for Cultural, heritage, and historical tourism, as well as Malang (East Java), Bandung Raya (West Java), Lake Toba (North Sumatra), Flores and Sumba Islands (East Nusa Tenggara) for nature tourism.

This study is still limited to descriptive analysis. Hence, further research can cover inferential testing. The deepening of the analysis based on tourism data including the tourism satellite accounts of each potential country can also be carried out. Therefore, it is possible to vigorously develop halal tourism on the basis of more comprehensive data and research support.

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Social Protection for Redressing Poverty, Vulnerability, and Exclusion in Kano State, Nigeria

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Abstract. Nigeria is home to the leading number of extremely poor people, overtaking India in 2018. It fares poorly in multi-dimensional poverty measures, with high inequality across regions. Kano State is largely populated by Muslims with an alarming rate of 48.2% and 50.1% on severe poverty and destitution respectively. The foremost drive of social protection is to reduce poverty, economic shocks, and vulnerability thus the need of this study. This study examines the need for social protection to redress poverty, vulnerability, and exclusion in Kano State, Nigeria. Data for the study was primary data drawn from Kano Metropolis. The data were analyzed using Chi-square. The findings of the study show that the Kano State government has the political will to adopt social protection and can afford it. However, the Kano State government has an issue of low coverage and off-beam targeting for its current social programs. Thus, the paper concludes that redressing poverty, vulnerability, and exclusion requires a gradual, incremental approach. The study, therefore, recommends that the Kano state government should pass social protection into law and institutionalize it through robust legal frameworks for public policy and a strengthened institutional framework can go a long way in redressing poverty, vulnerability, and exclusion in the state.

Keyword: Kano state, social exclusion, social protection.

JEL Classification: I30, I38, I39, H55

INTRODUCTION

Nigeria's extreme poverty rate is high and increasing. Despite its middle-income status, almost four out of ten Nigerians; 40 percent of the total population, or practically 83 million people lived below the national poverty line of 137,430 nairas (\$381.75) per person per year in 2019 according to the National Bureau of Statistics (NBS). Measured at the international poverty line of US\$ 1.90 per day, according to World Bank 2018 Nigeria is home to the leading number of extremely poor people, overtaking India in 2018.

Nigeria fares poorly in multi-dimensional poverty measures, with high inequality across regions. Based on a 2019 report by the Oxford Poverty and Human Development Initiative (OPHI), 53.3 percent of Nigerians are categorized as multi-dimensionally poor. The Multidimensional Poverty Index (MPI) uses 10 indicators to live poverty in three dimensions: education (years of schooling and faculty attendance), health (child mortality and nutrition), and living standards (electricity, sanitation, drinking water, floor, cooking fuel, and assets).

Nigeria is Africa's most populous nation and largest economy, but it faces key challenges in poverty reduction. Recent poverty estimates put the poverty rate at one-third of the population, with poverty concentrated in rural areas. Nigeria has 86.9 million of its population living in extreme poverty – the largest globally according to World Bank, 2018. Growth and poverty reduction are concentrated in urban areas. In rural areas close to 70% live below the poverty line, compared to 30% in urban areas according to World Bank, 2014. And strong regional variations between North and South and across the six geopolitical zones.

A large portion of the population has an average or high vulnerability to poverty, making them highly vulnerable to shocks. Determinants of vulnerability to poverty include unemployment, aging, household size, number of wives, and educational attainment. The poor are primarily engaged in agriculture. According to Olaniyan et al. (2012), Nigerians experience at least 18 different kinds of shocks, ranging from lifecycle-, to health-, to security risks. Death of a household head is the most prevalent shock nationally and is experienced more often by the extremely poor. Extreme poor also experience higher than average rates of death of a spouse, physical harm, personal theft, and robbery by force, among others.

The foremost drive of social protection is to reduce poverty, economic shocks, and vulnerability, which in turn, helps to determine the country-specific social protection design requirements. However, improving national social protection systems is a major task for all governments, and formalization of this concept into public, government-led measures for shielding persons from deprivations, limiting exposure to shocks and risks, and reducing vulnerabilities is a more recent phenomenon.

The Kano state of Nigeria is a commercial and agricultural state largely populated by Muslims. The state is endowed with mineral resource deposits. It has been projected to be a megacity with more than 20 million inhabitants by the end of the year 2020 according to Kano State Government (2020). Oxford Poverty and Human Development Initiative (2016) reports that the rate of those who are vulnerable to poverty in Kano state is 11.9%, the rate of those in severe poverty is 48.2% and the rate of destitution is 50.1%. In this report, a person is identified as multidimensionally poor (or 'MPI poor') if they are deprived in at least one-third of the weighted indicators.

Weighted indicators are grouped into three dimensions; education (school attendance and years of schooling), health (child mortality and nutrition), and standard of living (electricity, sanitation, water, floor, cooking fuel, and assets). In a situation whereby a person is deprived in 20-33.3% of the weighted indicators, they are considered 'Vulnerable to Poverty, and if they are deprived in 50% or more (i.e. $k=50\%$), they are identified as being in 'Severe Poverty'. Those identified as 'Destitute' are deprived in at least one-third of more extreme indicators; two or more children in the household have died (rather than one), no one in the household has at least one year of schooling (rather than five years), the household practices open defecation, the household has no assets (rather than no more than one).

According to the UNDP Development Report (2018), Kano State has an HDI value of 0.447 compared with a national average of 0.513 and life expectancy at birth of 49 years for males and 53 years for females. Education and health standards are low: less than 20% of children have basic literacy skills. Approximately 50% of children of primary school age attend primary schools and fewer than 4 in 10 children complete basic education. There is a need for social protection to redress poverty, vulnerability, and exclusion in Kano state, Nigeria.

This research, therefore, made a case for social protection to redress poverty, vulnerability, and exclusion in Kano State, Nigeria. This is to create a new dimension of studies as most studies on social protection in Nigeria were mainly focused on Nigeria as a whole, there was, however, not adequate attention given to the study of social protection at the State level and to religious belief, which this work seeks to address. In an attempt to determine the need for social protection to redress poverty, vulnerability, and exclusion in Kano State, Nigeria research hypotheses were formulated in the null form to guide the study. These are:

H₀₁ : Kano State government doesn't have the political will to adopt social protection;

H₀₂ : Kano State government cannot afford social protection; and

H₀₃ : Kano State government has an issue of low coverage and off beam targeting for its social programs.

The remaining parts of the paper were arranged four; section two presented a review of literature on the subject matter of the study, section three explained the methodological approach of the study, section four shows the results and their discussion while Section five presented the summary and conclusions of the study.

LITERATURE REVIEW

Social Protection

Social protection means a set of programs and policies designed to protect individuals and households from shocks, stresses, and risks, vulnerability, and to reduce poverty. According to National Social Protection Policy (2017), it is "...a mixture of policies and programs designed for people and households throughout the lifecycle to stop and reduce poverty and socio-economic shocks by promoting and enhancing livelihoods and a life of dignity." And according to UNICEF (2012), it is the set of public and private policies and programs aimed at preventing, reducing, and eliminating economic and social vulnerabilities to poverty and deprivation.

Therefore, it is often defined as a broad set of all public and personal arrangements and instruments that provide income or consumption transfers to the poor, protect the vulnerable against destitution, and enhance the social status and rights of the deprived; with the overall objective of reducing the economic and social vulnerability of the poor and deprived groups. However, social protection, social security, social insurance, social assistance, social safety net, and social welfare relates and contributes to each other but cannot be used interchangeably.

Social protection covers a range of different programs and schemes, regardless of whether they are contributory or non-contributory. It comprises social insurance, social assistance, and labor market interventions. And social security is used to describe contributory schemes, which are mainly concentrated in the regulated sector of the economy. Whilst social assistance is a non-contributory program designed to target the most vulnerable individuals and households, even if they can also be quasi universally targeted, such as universal old-age pensions or child benefits e.g. food transfers, school feeding, emergency-related interventions (such as the distribution of food vouchers in crisis areas), etc.

Impacts of social protection

The impacts of social protection include:

1. Build trust in government
2. Economic reform
3. Economic resilience
4. Human capital development
5. Livelihoods (People use social protection benefits to support enterprises and labor market participation)
6. Poverty reduction
7. Risk management (Protects people from shocks and directly supports well-being)
8. Social cohesion Andrés M. (2017) and Bastagli et al., (2016)

Social Protection Floors

Social protection floors are nationally defined sets of basic social security guarantees. These should ensure, as a minimum, that over the life cycle, beat need have access to essential health care and basic income security, alongside securing effective access to goods and services defined as necessary at the national level according to International Labour Office (ILO) 2011. Therefore, national social protection floors (SPFs) should comprise at least the following four social security guarantees, as nationally:

1. Access to essential health care, including maternity care;
2. Basic income security for children, providing access to nutrition, education, care, and any other necessary goods and services;
3. Basic income security for persons of active age who are unable to earn sufficient income, especially in cases of sickness, unemployment, maternity, and disability; and
4. Basic income security for older persons.

Universal access to essential health care and income security at least at a nationally defined minimum level is the best option. However, the progressive achievement of higher levels of protection within comprehensive social protection systems is what the Islamic economic system entailed.

Islamic Economic System

Economic development and growth, alongside social justice, are the foundational elements of an Islamic financial system. In Islam, the property is not a means of exclusion but inclusion in which the rights of the poor in the income and wealth of the rich are redeemed. Thus, Islam introduced financial inclusion to close the gap between the poor and the rich through fair distribution of income. According to Ibraheem (2017), pillars of financial inclusion are risk-sharing (or asset-linked) financing and redistributive instruments. Risk-sharing financing comprises of Small-Medium Enterprises (SME), Micro-Finance (MF) (e.g. Murabaha, Musharikhah), and Micro-Insurance (Takaful) whilst redistributive instruments include Zakah, Sadaqah, Waqf, and al-Qard al-Hassan.

The two pillars of financial inclusion complement each other in poverty reduction. According to Ibraheem (2017), the structured approach to enhancing Islamic financial inclusion to extreme poverty include Zakah, Sadaqat, Waqf, and Collective risk-sharing through collective support during the crisis;

concerning above poverty line Qard-al-Hassan, Zakah, Waqf, Micro-Finance (Murabaha, Musharikah) and Micro-Takaful; and, concerning low income: Hybrid Solutions (Applications with market-based solutions) and Micro-Small-Medium Enterprises (MSME).

Zakah means worshiping Allah by giving that which He has enjoined of various sorts of Zakah to those that are entitled to them, consistent with the rules approved in Sharee'ah. Zakah is one of the main financial obligations which each Muslim has got to pay once in a year if he has attained or possessed a minimum prescribed amount by Sharee'ah, which varies for the different categories according to Ibraheem (2017). It is assumed that Zakah is an antipoverty instrument. Nonetheless, Zakah is not a mere charity but also a very effective tool of the fiscal policy of the Islamic economy. The obligation of the Zakah isn't limited to the Muslims living within the Islamic state only but also an obligatory duty of the Muslims living out of the Islamic state.

By the payment of Zakah, the rich share their wealth with the poor and thus the process of concentration of wealth is checked and fair distribution ensured. Zakah may be a significant source of financing to satisfy private and public expenditure and a big tool to scale back poverty, unemployment, and inflation. It is also one among the means of achieving "social security", but in Islam, Social Security isn't limited solely to Zakah, rather it's also achieved by other means, such as Sadaqah (charity), Waqfs, war booty, and stipends from the Bayt al-Maal (Muslim treasury).

Sadaqah isn't limited to giving a part of wealth or material possessions but any virtuous deed is additionally allowed and each Muslim is inspired to offer in it according to Ibraheem (2017). Noting the sweetness of Islam, Sadaqah could also be given to one's ascendants and descendants; it's going to tend to those that are rich and people who are strong and able to earn, it may be spent on those who are near and those who are far, it may be given to unbelievers and Idol worshipers.

Waqf means freezing the capital or property and donating its benefits for the sake of Allah, and not disposing of it by selling, giving or inheriting, or in any other way, so that any income or earnings are to be disposed of within the manner dictated by the one that initiated the Waqf, Ibraheem (2017).

Al-Qard al-Hassan means a specific contract on transferring specified material goods or possessions to another party on the condition that a similar possession will be given back in return according to Ibraheem (2017). It is benevolent and spiritual to help the poor to become part of economic activities through empowerment or creation of new jobs in a dignified and cost-effective manner, and also, to reinforce harmony among poor and rich segments. And social justice is guided and engineered by Islamic tenets.

Islamic Guide for Social Protection

Islam is established on individual and collective responsibility. The divine message of prophets first calls to the oneness of Allah then gravitated towards the marginalized and oppressed in society thanks to its generous ideals that broke the chain of exploitation and oppression. It then calls on every individual in society to materialize these ideals to preserve social institutions and order through Tawheed, Taqwa, Quranic Morals, Sunnah of mutual benefit, Maslaha (Wellbeing) addressed by Sharee'ah and Relinking with Evanescence.

Tawheed is that the inseparable oneness concept of monotheism in Islam. It means attributing Oneness to Allah and describing Him as being One and Unique, with no partner or peer in His Essence and Attributes. Also, it is a system aimed at realizing the oneness of Allah in human relations and institutions. Allah has stressed our duty to establish and maintain His moral and social order to preserve Tawheed. A true believer is required to be the pillar supporting the establishment of rights and justice. Therefore, to love Allah is to fulfill our responsibilities in maintaining Tawheed's through supporting the well-being of His creations.

Taqwa is an Islamic term for being conscious and cognizant of Allah, piety, fear of Allah. It means doing that which Allah has enjoined and avoiding that which He has forbidden. This is the source of morals in Islam. It requires the believer to be fully aware and attentive of the consequences of his actions, whether it concerns himself, Allah, or any of His creations. This should not only focus on our consciousness of Allah, but it should also include a subsisted concern and compassion for His creations. The violation of human dignity implies a violation of human's responsibility to create the conditions for the improvement of human prosperity and the common good (Maslaha).

So, every believer must be formed by the quality of justice and ensure that it is translated through his/her interactions. Hence, adopting the Quranic moral qualities should go hand in hand with doing good and contributing to humanity's general well-being. A moral Muslim should play an active role in improving the welfare of the community, nation-building, and human development at large.

According to Kamali (2009), the Sharee'ah is predicated on the benefits of the individual and that of the community, and its laws are designed to protect these benefits and facilitate improvement and perfection of the conditions of human life on earth. Ibraheem (2017) explains that it has been expressly stated by Allah that everything found in the Quran and the Sunnah is for the wellbeing (maslaha) of the populace. He shows mankind what they must do to achieve well-being. Allah says: "...He (The Prophet) enjoins them to follow virtue and forbids them from evil: he makes pure things lawful for them and impure things unlawful. He relieves them of their burdens and frees them from the shackles that bound them. For this reason, those alone who believe in him and support him and succour him and follow the light that has been sent down with him shall attain "success" (Q7:157).

Islam is a complete system of life that gives its own social, political, and economic systems to guide humanity. It intends to preserve the security of the individual and society. The Allah knows what means to guarantee the safety of religion (din), life (nafs), dignity (nasl), intellect ('aql) and wealth (mal), He says: "Does He who created not know, while He is the Subtle, the Acquainted? (Q67:14), thus establishes laws to guide, social order and the safety of humanity.

Death is a reality and a calamity that every living will face. Remembering death changes man's outlook on life. Man looks at life more seriously and this world and its pleasures become less significant. It helps to melt the guts, deters one from sin, stops one from enjoying this world, and makes disasters look bearable. However, death has been moved away from reality, many don't want to be reminded of it thus 'go wild' in life enjoyment. The consequence of this estrangement is religiously thoughtful; man will imagine that life is perpetual and disregard the Giver of life, Allah. Hence, the relationship with His creations will be a programmed and industrialized reality. When a man remembers death, he realizes that this life is a temporary abode meant to please Allah by doing many good deeds and by worshipping Him alone without associating with any partners.

Social Exclusion

A social exclusion means the shortage, or denial of resources, rights, goods, and services, and therefore the inability to participate within the normal relationships and activities, available to the bulk of individuals during a society, whether in economic, social, cultural, or political arenas. It affects both the standard of lifetime of individuals and therefore the equity and cohesion of society as an entire” according to the World Bank 2018, whilst social inclusion means “the process of improving the terms for people and groups to require part in society and therefore the process of improving the power and opportunity and dignity of these disadvantaged supported their identity to require part in society”.

Social exclusion is contrived by weaknesses associated with life course cycle (such as maternity and old-age); physical inability to figure or to be productive thanks to a disability, injury, or illness; limited human capabilities (i.e. inadequate levels of education, skills, and health); legal norms and rights; the lack of public policies and institutions to market equitable and inclusive access to productive assets, resources and opportunities, including access to land, finance, and markets; and therefore the inability of societal institutions to uphold and enforce the rule of law and accountability, counteract corruption and clientelism, and to attenuate bureaucratic hassle and administrative obstacles.

Many times, physical inability or disability is that the result of the interaction between impairment and barriers in attitudes and surrounding environments, which hinders a person’s effective participation in society on an equal basis with others, not that there’s no ability in disability. Persons with disabilities include those that have long-term physical, mental, intellectual, or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others. - CRPD (Convention on the Rights of Persons with Disabilities).

It is quite natural that man’s life shouldn’t be freed from direct and indirect trials during which he must twiddling my thumbs and call upon Allah. Believers are expected to endure many trials throughout their lives. Among the trials are disabilities; sensory, intellectual, physical, psychosocial, etc. Allah says: *“And certainly, We shall test you with something of fear, hunger, loss of wealth, lives and fruits, but give glad tidings to As-Saabiroon (the patient)...”* Q2:155-157.

Allah tests man with hardship and also affluence to validate the sincerity of the religion. He tests people living with disabilities through their disabilities and tests believers on whether being fair to them or exclude them. Social exclusion deprives individuals of identity, dignity, security, and other basic rights. It results in loss of income; opportunities for access to services. it can cause conflict, limited social cohesion, and loss of GDP. Any move to socially exclude an individual is an injustice.

Islam is a religion of compassion and justice, a faith that teaches perfect morals and forbids bad conduct, a faith that grants man his dignity if he adheres to the laws of Allah. Man is an honored creature and has an honorable status in Islam. Allah says: *“And indeed we’ve honored the Bani (children) of Adam, and that we have carried them ashore and sea, and have provided them with At-Tayyibaat (lawful good things), and have preferred them above many of these whom we’ve created with a marked preferment”* Q17:70. There is often little question that Islam has given man, from conception till death, an honorable status with social protection, as there are texts which urge believers to respect, care and honor man regardless of age, gender, weaknesses associated with life course cycle, color, race, etc.

CONCLUSION

Redressing poverty, vulnerability, and exclusion require a gradual, incremental approach. Social exclusion spans multiple dimensions and social protection can have a positive impact across dimensions of exclusion as it addresses most drivers of exclusion and contribute to addressing outcomes of exclusion. However, gaps in coverage, insufficient benefits, and barriers to access that affect some social groups quite others render social protection less effective in reducing inequalities and leaving no one behind.

Also, disability mainstreaming is an important goal and is dynamic to poverty alleviation. It is a strategy for making persons with disabilities concerns and experiences an integral dimension of the design, implementation, monitoring, and evaluation of policies and programs; and a means to ensure that disability inequality is not perpetuated and that all persons with disabilities equitably participate in and benefit from our interventions; and an approach to achieve inclusion on all levels.

On financing social protection, there are various avenues through which a state can finance its social protection. The most promising and sustainable avenue for Kano State is through its system of domestic revenue mobilization. In Kano, social protection is affordable. Whether the government invests in social protection is primarily a matter of finding the political will to do so. And Zakah, Waqf, and Qard-al-Hassan could play a catalyst in enhancing access to finance through proper institutional framework and governance, and integration of those institutions with the reminder of the economic and financial system.

Since Kano state is largely populated by Muslims, then, when teachings of Islam are practiced to the full, the heart of the individual is dedicated to society and his complete submergence in it. However, to weigh individual, public and political will, thus to establish an unvarying, righteous public opinion, is difficult without proselytization and persuasion. It is when everyone truly recognizes his or her rights and responsibilities that a cohesive and strong public opinion would emerge, put right the idiosyncrasies and take out the ill-formed.

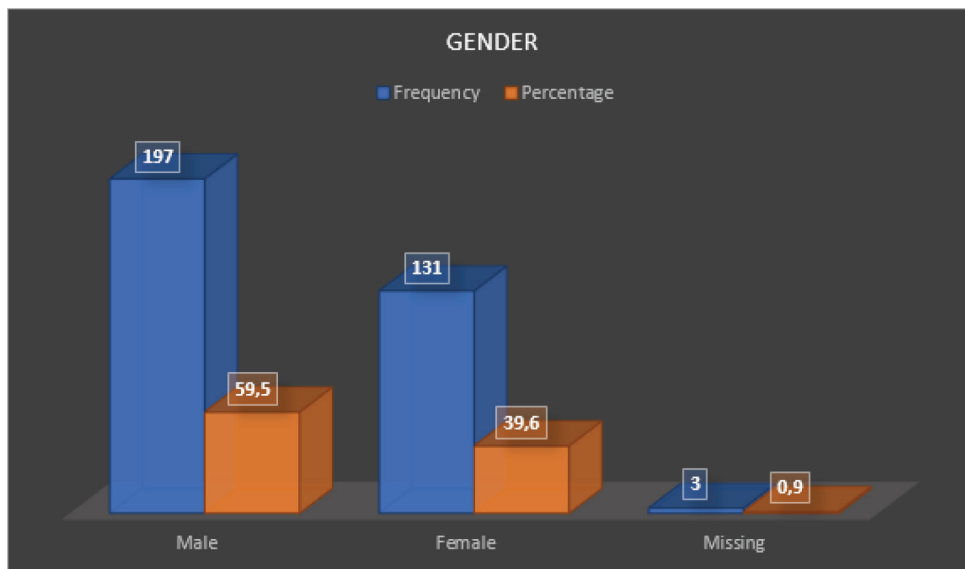
METHODOLOGY

The design of the study is descriptive research method. The descriptive design is found to be suitable because it addresses major objectives and research questions proposed in the study adequately. The population of this study is residents of Kano State, Nigeria. The researcher sampled a total of three hundred and fifty respondents from stakeholders in Kano Metropolis which include academicians, civil servants, social workers, artisans, entrepreneurs, unemployed, people with disabilities, students, aged people of Kano State. Primary data were employed in this research. The collection of data was through the use of a structured questionnaire administered to the sampled respondents using random sampling techniques.

At the end of questionnaire administration, three hundred and thirty-one questionnaires were returned. It, therefore, serves as 100% of the questionnaires administered. The data were analyzed using the Chi-square method of statistical analysis.

RESULTS AND ANALYSIS

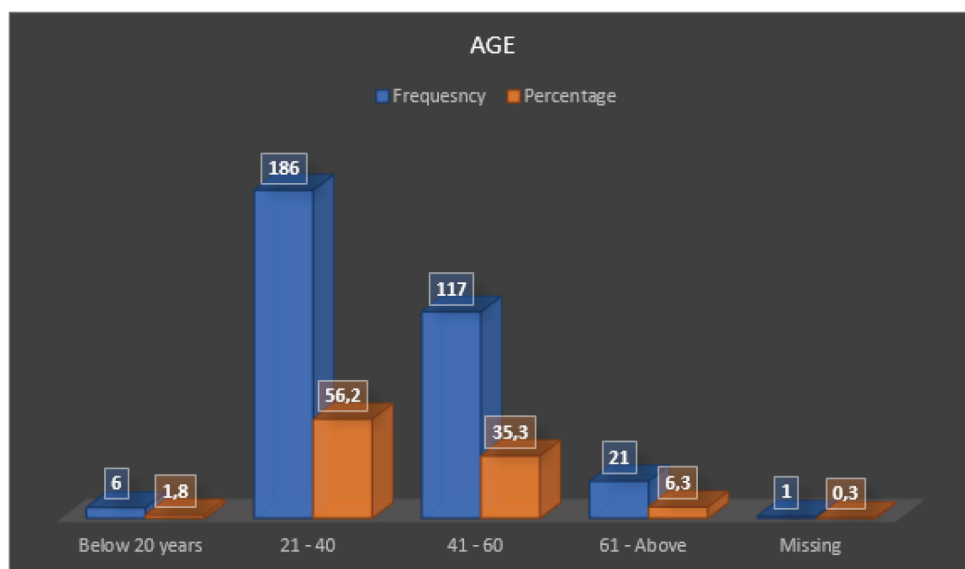
The analysis in Figure 1 shows frequencies and percentages of male and female respondents for this survey. The proportions of male respondents are over the proportions of females. In Islam, males are the protectors of females and are expected to provide for the needs of the family, hence the information provide will be of high quality from practical experience. Also, females aren't disregarded for being a part of the key household members that share responsibilities in some cases.



Source: Field Survey, 2021.

Figure 1. Gender

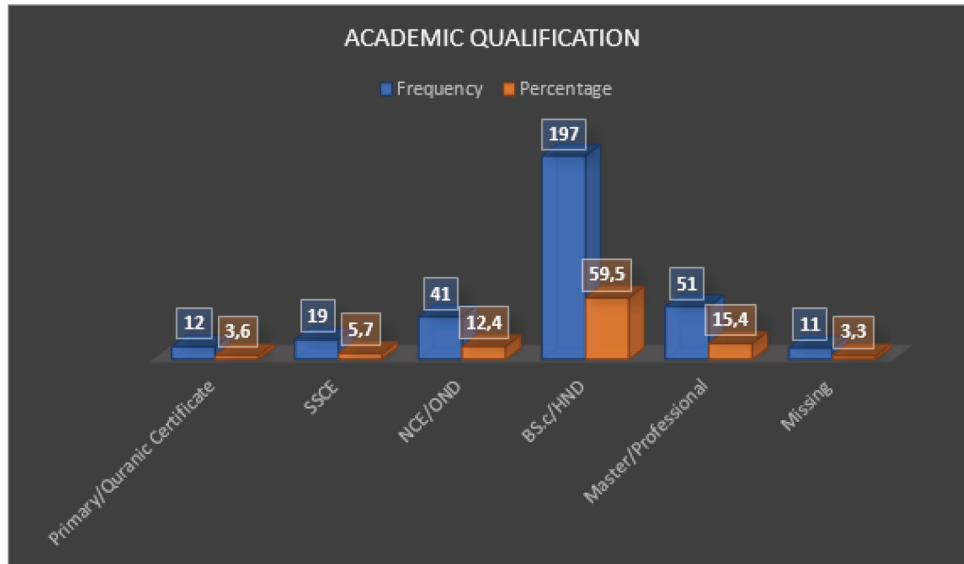
The age representations within Figure 2 show that respondents through this survey are mainly independent segments of the economy 21- 40 and 41- 60. Between 20 – 60 years are mainly working-class groups that know up-to-date issues, hence their responses are reliable.



Source: Field Survey, 2021.

Figure 2. Age

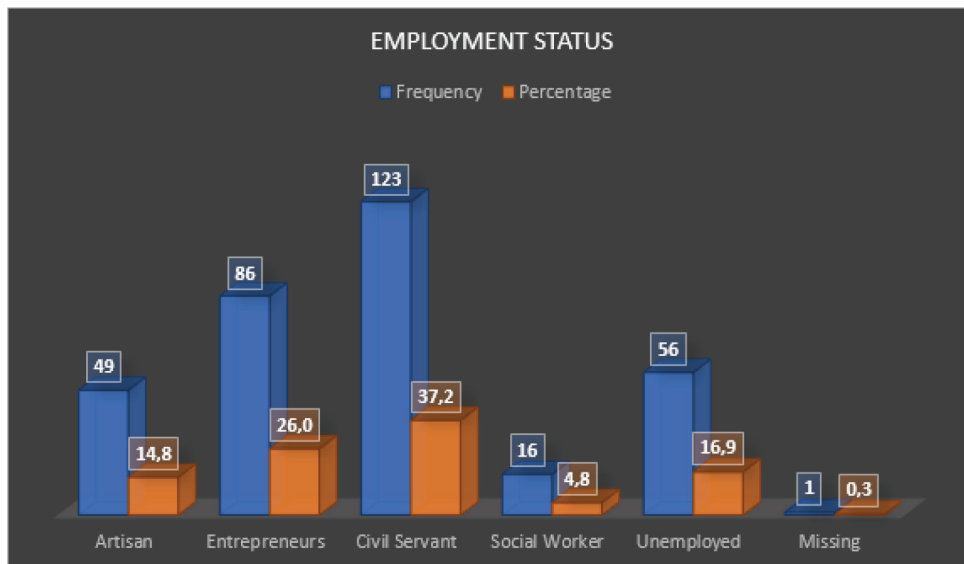
The analysis shows that 59.5% of respondents have Higher National Diploma or Degree, hence there is a relatively more educated segment of the economy in the sample selected, which suggests that educated respondents are going to be skilled to provide credible answers. This suggests that data collected from this selected group is rich in quality.



Source: Field Survey, 2021.

Figure 3. Academic qualification

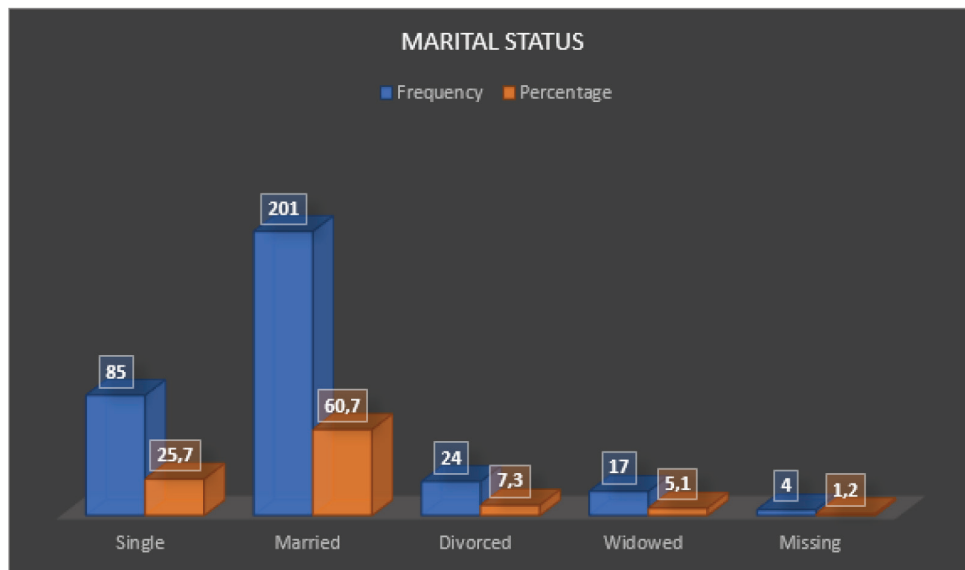
Since the proportion of employed respondents is 83% then respondents were mainly employed. The analysis shows that unbiased answers are expected and makes the results reliable.



Source: Field Survey, 2021.

Figure 4. Employment status

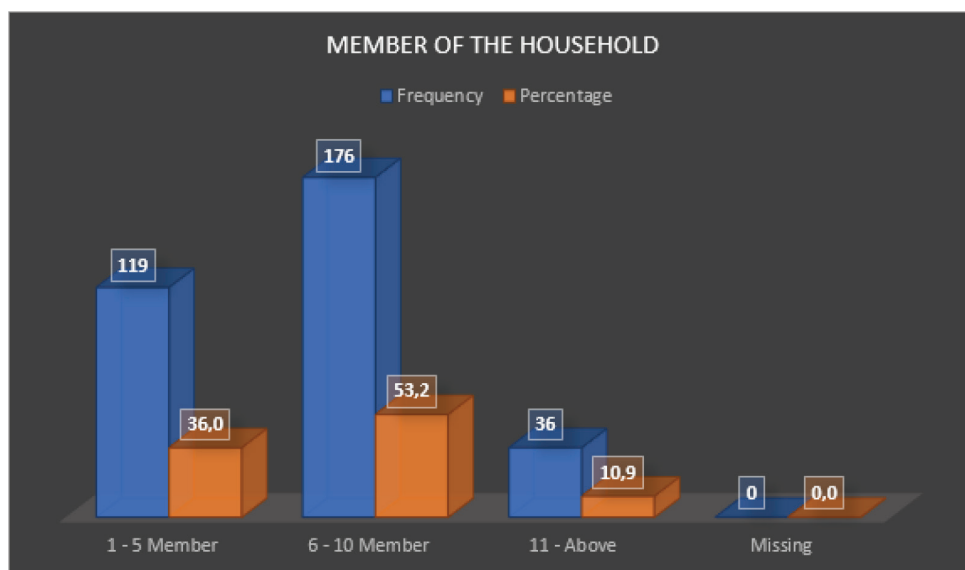
Figure 5 shows that 60.7% of respondents are married, follow by 25.7% representing single. This suggests that respondents are mainly those who take responsibility for the family and people under the sponsorship of parents or others. This shows how rich the results of this survey are going to be for considering other segments of the economy.



Source: Field Survey, 2021.

Figure 5. Marital status

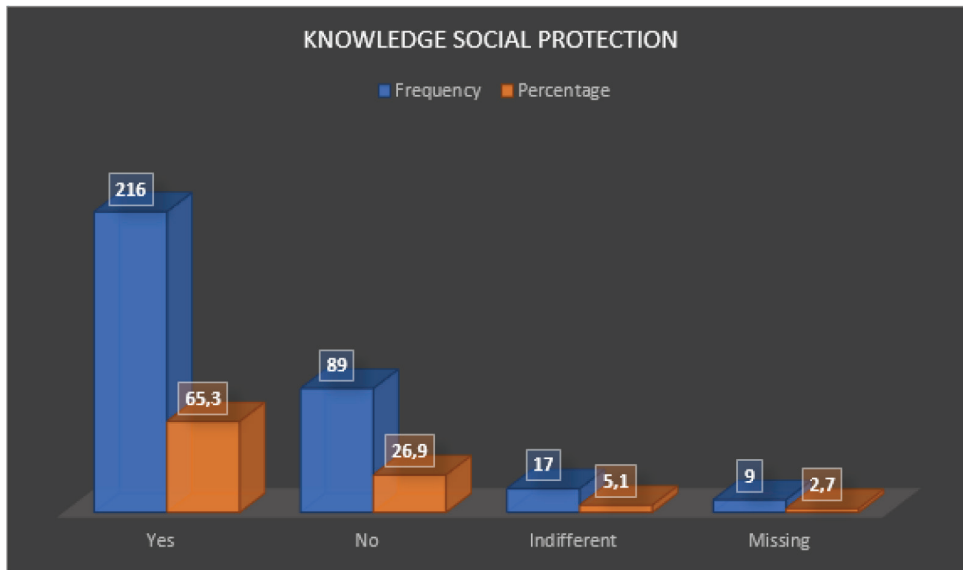
Figure 6 shows that 45 respondents have between 1 -5 members in his/her household that represents 44.6% of total respondents. This suggests that a minimum of every respondent has experience of family settings and what it takes to take care of a family.



Source: Field Survey, 2021.

Figure 6. Member of the household

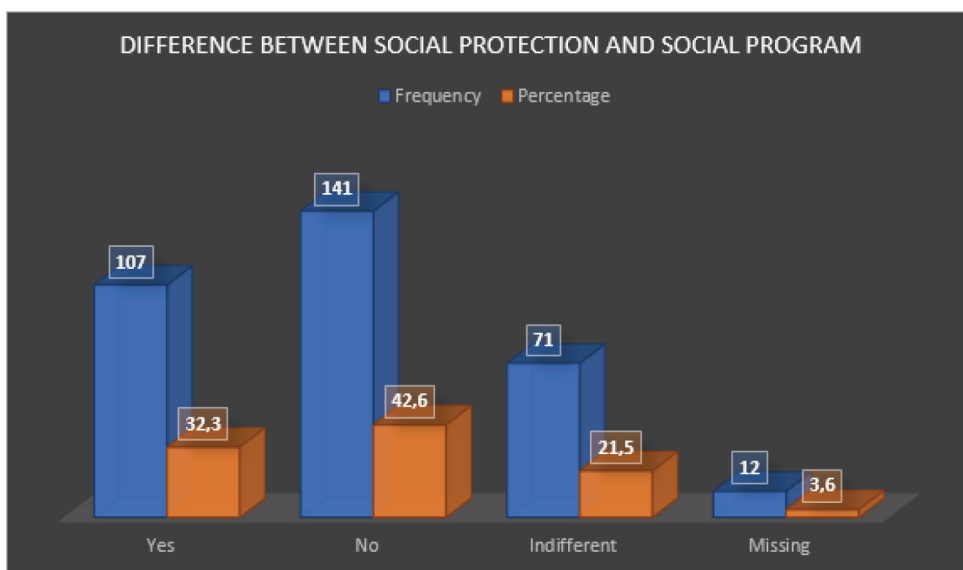
Respondents were asked if they know what's meant by social protection. Most of the respondents representing 65.3% choose within the Figure 7 'Yes'. However, further comment by the respondents shows that the majority of those who responded 'Yes' misunderstood social protection for a social program in their definition. Hence the researcher concludes that the majority have the thought of what social protection is.



Source: Field Survey, 2021.

Figure 7. Knowledge social protection

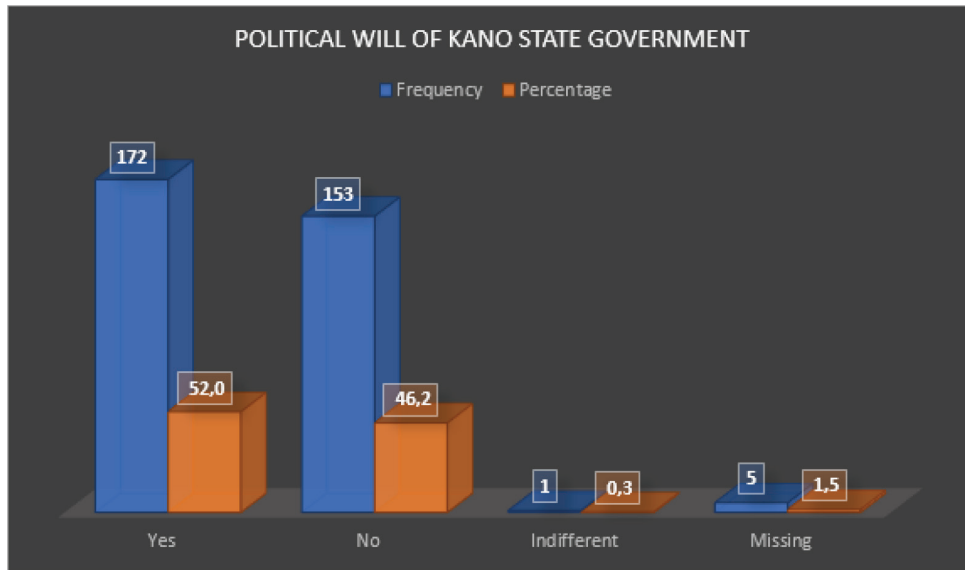
Respondents were asked if they know the difference between social protection and social programs. Most of the respondents representing 42.6% choose within the Figure 8 'No'. Hence the researcher concludes that most respondents don't know the difference between social protection and social programs.



Source: Field Survey, 2021.

Figure 8. Difference between social protection and social program

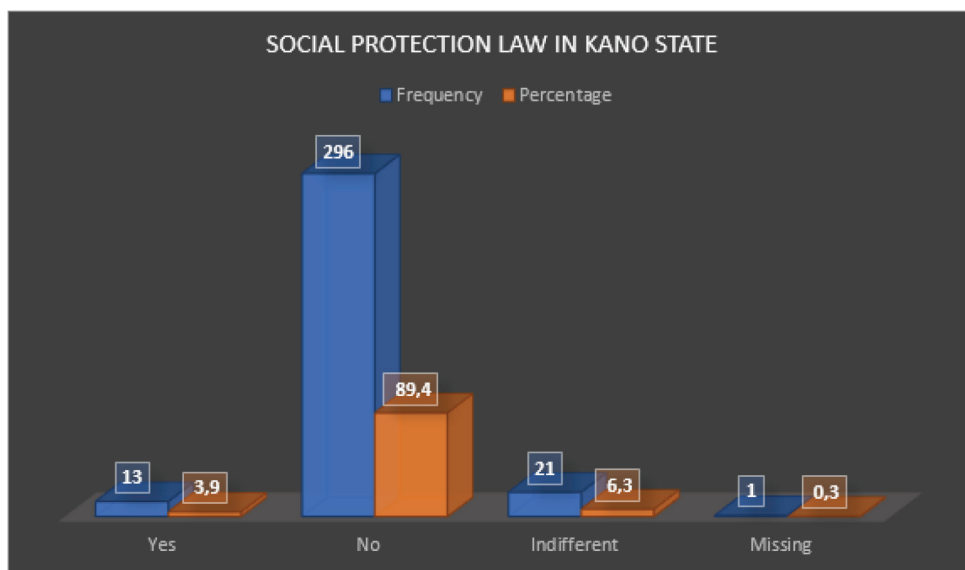
Figure 9 shows that 172 respondents representing 52% believe that the Kano government has the political will to adopt social protection. Respondents' comments show that the government is investing in many social programs and has stated his readiness to adopt initiatives that will alleviate poverty within the state. Hence, the researcher concludes that the Kano government has the political will to adopt social protection.



Source: Field Survey, 2021.

Figure 9. Political will of Kano State government

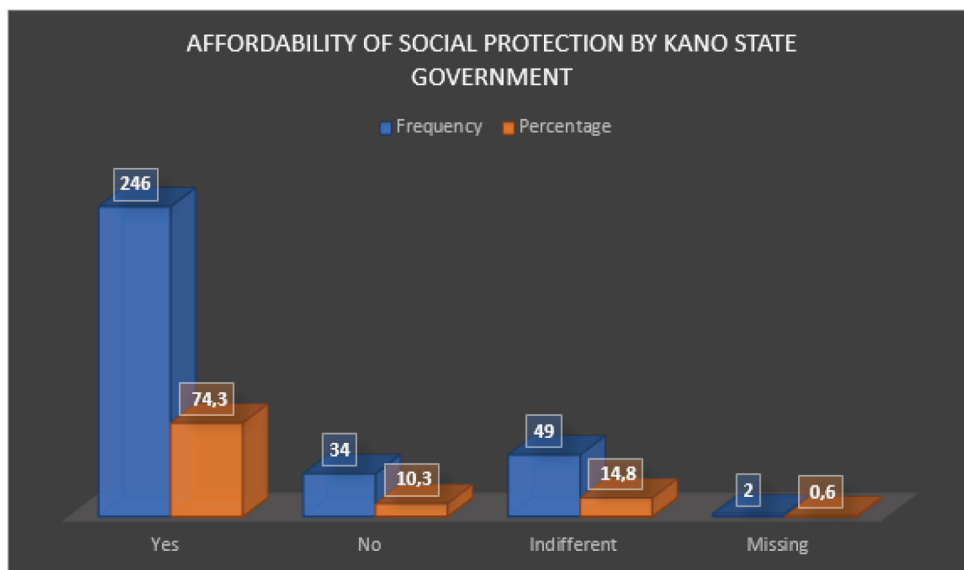
Figure 10 shows that 296 respondents representing 89.4% agreed that social protection has not been passed into in the Kano government. Respondents' comments on why social protection has not been adopted show that civil societies are still pressing for the domestication of social protection within the state whilst the government is considering funding. Hence, the researcher concludes that the Kano government has not passed social protection into law.



Source: Field Survey, 2021.

Figure 10. Social protection law in Kano State

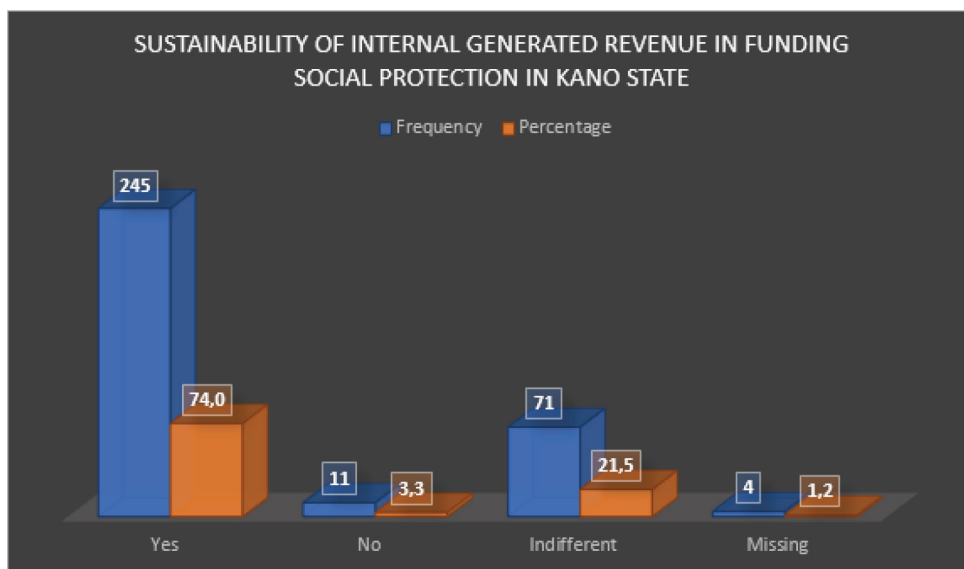
Figure 11 shows that 246 respondents representing 74.3% agreed that the Kano government can afford social protection. Respondents' comments on 'how can government fund social protection?' suggest financing social protection through internally generated revenue and federal allocation. Hence, the researcher concludes that the Kano government can afford social protection.



Source: Field Survey, 2021.

Figure 11. Affordability of social protection by Kano State government

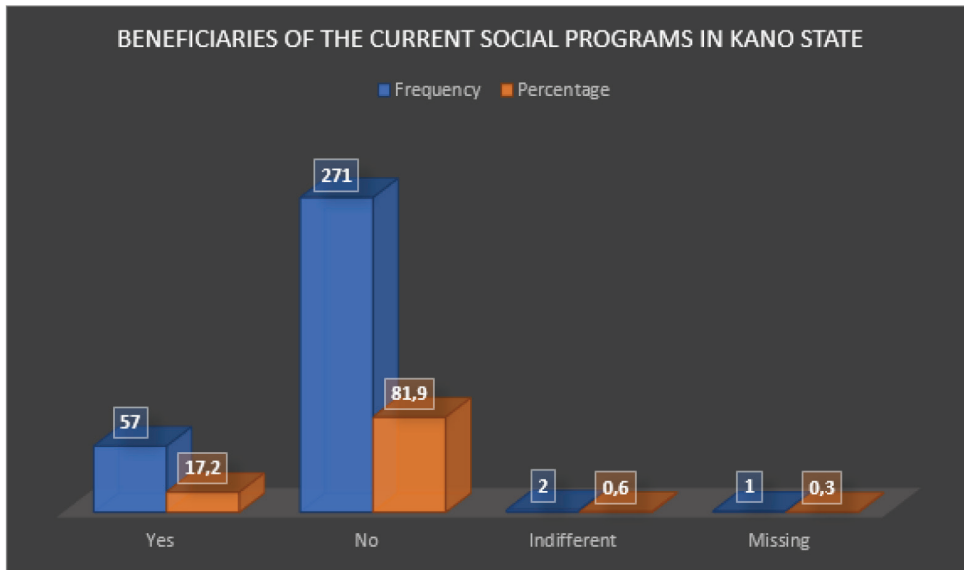
Figure 12 shows that 245 respondents representing 74% agreed that the system of domestic revenue mobilization is promising and sustainable for social protection in Kano state. Hence, the researcher concludes that the system of domestic revenue mobilization is promising and sustainable for social protection in Kano state.



Source: Field Survey, 2021.

Figure 12. Sustainability of internal generated revenue in funding social protection in Kano State

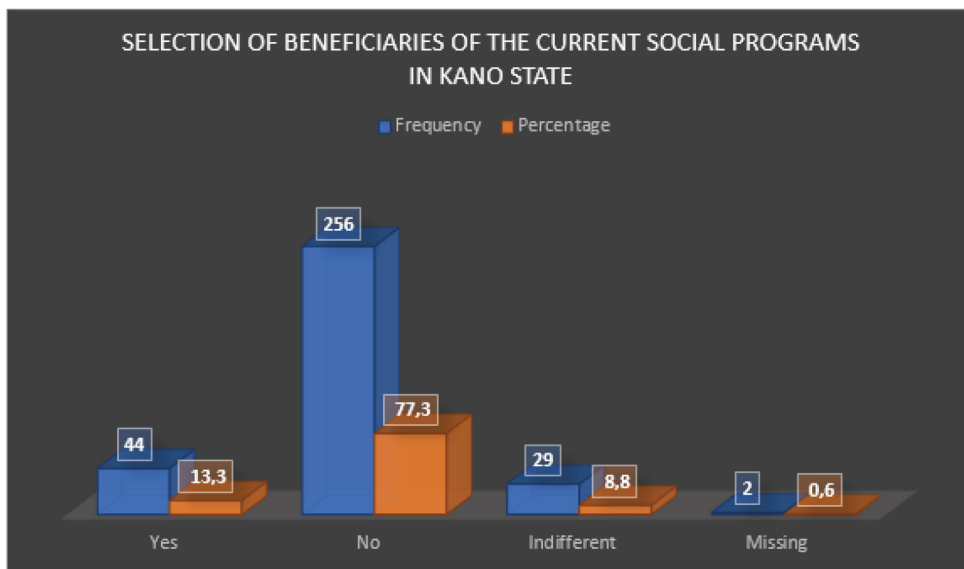
Respondents were asked if they had ever benefited from government social programs and 81.9% of Figure 13 chooses "No", hence, the researcher concludes that most of the respondents aren't beneficiaries of state social programs.



Source: Field Survey, 2021.

Figure 13. Beneficiaries of the current social programs in Kano State

Figure 14 shows that 77.3% of respondents equally choose “No” to verify that they are unaware of how the government selects beneficiaries for social programs. Hence, the researcher concludes that the selection of participants for the government’s social programs is not transparent enough.



Source: Field Survey, 2021.

Figure 14. Selection of beneficiaries of the current social programs in Kano State

Test of Hypotheses

1st hypothesis

Kano State government's political will to adopt social protection was tested using questions 3 and 4 of the questionnaire. The observed and expected frequencies were as follows:

Table I: Observed and expected frequencies of response to question 3 and 4

	Observed			Expected	
	Q 3	Q 4	Totals	Q3	Q 4
Yes	172	13	185	94.834	90.166
No	153	296	449	224.5	218.83
Totals	325	309	634		

$$\chi^2 = 62.7887 + 70.62 + 22.77171 + 22.77171 = 178.9486$$

Source: Field Survey, 2021.

In Table 1 Chi-Square Tests result, after comparing 178.9486 to a critical value for α of 5% of 3.841 α of 10% of 2.706 the null hypothesis is rejected since the Calculated value is > the Critical Value.

2nd hypothesis

Affordability of social protection by the Kano State government was tested using questions 5 and 6 of the questionnaire. The observed and expected frequencies were as follows:

Table 2: Observed and expected frequencies of response to question 4 and 5

	Observed			Expected	
	Q 5	Q 6	Totals	Q5	Q 6
Yes	246	245	491	256.493	234.51
No	34	11	45	22.5	21.493
Totals	280	256	536		

$$\chi^2 = 0.429226 + 0.51494 + 5.877778 + 5.87778 = 12.6997$$

Source: Field Survey, 2021.

In Table 2 Chi-Square Tests result, after comparing 12.6997 to a critical value for α of 5% of 3.841 α of 10% of 2.706 the null hypothesis is rejected since the Calculated value is > the Critical Value.

3rd hypothesis

Issue of low coverage and off beam targeting of the current social programs provided by the Kano State government was tested using questions 5 and 6 of the questionnaire. The observed and expected frequencies were as follows:

Table 3: Observed and expected frequencies of response to question 4 and 5

	Observed			Expected	
	Q 7	Q 8	Totals	Q7	Q 8
Yes	57	44	101	52.752	48.248
No	271	256	527	263.5	251.75
Totals	328	300	628		

$$\chi^2 = 0.34215 + 1.451906 + 0.213472 + 0.213472 = 2.221001$$

Source: Field Survey, 2021.

In Table 3 Chi-Square Tests result, after comparing 2.221001 to a critical value for α of 5% of 3.841 α of 10% of 2.706 the null hypothesis is accepted since the Calculated value is < the Critical Value.

Decisions

It can be empirically deduced that the probability of the chi-square test statistic (chi-square = 178.9486) was $p = 8.81279E-41$, less than the alpha level of significance of 0.05. Hence, the researcher rejects the null hypothesis and concludes that our data support the research hypothesis. This tells us statistically that the Kano State government has the political will to adopt social protection;

1. It can be empirically deduced that the probability of the chi-square test statistic (chi-square = 12.6997) was $p = 5.61680E-04$, less than the alpha level of significance of 0.05. Hence, the researcher rejects the null hypothesis and concludes that our data support the research hypothesis. This tells us statistically that the Kano State government can afford social protection; and
2. It can be empirically deduced that the probability of the chi-square test statistic (chi-square = 2.221001) was $p = 3.16972E-01$, greater than the alpha level of significance of 0.05. Hence, the researcher accepts the null hypothesis and concludes that our data support the research hypothesis. This tells us statistically that the Kano State government has an issue of low coverage and off-beam targeting for its social programs.

After a presentation of the data obtained, the conclusion was finally based on the outcome obtained from both the question asked and tested hypotheses. The hypothesis revealed the fact that the Kano State government has had the political will to adopt social protection and can afford social protection but has an issue of low coverage and off-beam targeting for its current social programs.

To end with, the research question answered and hypotheses tested were carried out on the data for the study was primary data drawn from Kano Metropolis through the research questionnaire fill by three hundred and thirty-one respondents sampled from the population of the study.

CONCLUSION

In the light of the summary of the main findings of the study, the resulting conclusions are drawn:

1. Kano State government has the political will to adopt social protection;
2. Kano State government can afford social protection; and
3. Kano State government has an issue of low coverage and off beam targeting for its current social programs.

In the light of the conclusions of the study, the following recommendations are proffered. The following recommendations are made because of the foregoing discussions:

1. Passage of social protection into law and institutionalization through robust legal frameworks because public policy and a strengthened institutional framework can go a long way in redressing poverty, vulnerability, and exclusion
2. Breed of political and public will to social protection in Kano State.
3. Increased awareness and participatory levels of social protection in Kano State.
4. To embark on high-level advocacy by Civil Society Organizations and Media
5. To understand that social protection is essential to the attainment of poverty reduction, removal of difficulties for economic participation of disadvantaged and low-income segments.
6. Commitment to financing social protection without undermining fiscal sustainability
7. To consider developing hybrid solutions, through integrating different modes, i.e. Qard-al-Hassan and Waqf or Qard-al-Hassan and Zakat or other combinations
8. To scale up funding for social protection programs through budgetary increase and, or donor assistance.
9. Ensuring a level playing field for Islamic Microfinance, SME, and Micro-Takaful. The lack of Sharee'ah-compliant micro-finance services is constraining financial inclusion to a proportion of the population of Kano State.
10. Development of common systems for targeting, monitoring and evaluation, payment, and information management.
11. Involving major stakeholders in the implementation of social programs
12. Inter-linkages between social protection and other services require the promotion of improved institutional coordination among a variety of sectors, actors, and programs.
13. Legislative framework to protect investments made so far.

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A Comparative Analysis of Return Rates in Islamic and Conventional Banks in Pakistan

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Abstract. It is often argued that the Islamic banks (IBs) behave like conventional banks (CBs) in terms of their operations, and they do not offer the actual share in profit and loss, as committed. It is argued that instead of the profit rates, their returns are very similar to conventional banks. If so, then the profit offered by IBs should be highly correlated to the interest rates (IR) offered by the CBs. This study was aimed to analyze the long run relationship between Islamic Banks Rates on saving and term deposit accounts and the interest rate offered by conventional banks on similar kind of accounts. The study applies the Autoregressive Distributed Lag- bound testing approach to explore the long run relationship. The study uses monthly data covering the period from January 2008 to October 2017. The Results show that the evidence of no long run relationship are stronger than the evidences for long run relationship on returns offered by Islamic and conventional banks.

Keyword: Conventional banks, interest rates, Islamic banks, profit rates.

INTRODUCTION

The banking and financial services have changed the way of doing business and running economy. The banks have become essential part of modern life and without banks, it becomes very hard to manage an economic system today. 1975, the entire banking and financial sector around the globe was operating on interest (Riba). It was a big challenge for Muslims because it contradicts with the explicit injunction of Quran and Sunnah (Tahir et al., 2012). Feeling the needs of Muslim Communities, Islamic Banking evolved to provide interest free and Shariah complaint solutions for the Muslim clients. However, after a half century of development of Islamic banks, there are still many ambiguities and doubts related to Shariah compatibility.

One ambiguity emerges from the way of distribution of returns of Islamic Banks to their customers. Islamic Banks claims that they opt profit and loss sharing mechanism to collect the deposits from public, contrary to the conventional banks who give fixed return in the form of interest. The interest is strictly prohibited in Islam and other major religions of the world. However, in practice Islami Banks keep a portion of the actual profit in a pool named Profit Equalization Reserve (PER) and Investment

Risk Reserve (IRR). The purpose of PER and IRR is to smooth the Profit Rates admissible to the clients. If the smoothening occurs by making the returns of commercial banks as benchmark, there would be very little difference in the commercial and Islamic banks.

If PER is used to smoothen the returns around the interest rates offered by commercial banks, the profit rates would have long run relationship between them. The aim of this study is to test the existence of long run relationship between the returns of Islamic banks and commercial banks.

Pakistan is a Muslim majority country having more than 97 percent Muslims. The constitution of Pakistan urges to create the Shariah compatible financial system which will replace existing interest based financial system. This goal can be achieved only if the emerging Islamic Banking System is genuinely different from conventional banking system and this difference is observable to ordinary customer. Therefore, it is important to see if the returns of two kinds of institutions differ significantly from each other. Therefore, this study attempts to explore the nature of relationship between returns of two kinds of banks.

LITERATURE REVIEW

Various studies had been conducted in the past to explore the nature of relationship between Islamic and conventional banks. Some of these studies are summarized as under. Bacha (2004) analyzed the Granger causality between profits of Islamic banking and conventional banking in Malaysia. His study concludes that interest rate offered by the conventional banks are strongly related with the Islamic banks. He used time series data from January 1997 to July 2003. The study showed that change in conventional banks rate of interest and total deposit Granger cause to the change in Islamic banks return rates and total deposit.

Chong & Liu (2009) analyzed the data from Malaysia and argue that despite the theoretical difference, there is no difference between returns of Islamic and Commercial banks. But there is only difference theoretically. They found that there was no Granger causality if there is change in CB or Islamic investment rates. He suggested that conventional deposits are correlated with Islamic deposit in Malaysia. He concluded that con-integration shows there is long run relationship between Islamic and conventional banks and finance companies.

It was noticed in India that banks which are owned by state are more profit efficient than private banks (Ray and Das 2010). It was also found that efficiency in profit was low in small banks whose assets size was up to 50 billion.

Many studies indicate that there is no difference in Islamic banking and conventional banking profitability (Ariss 2010). The sample of Banks in different 13 countries from 2000-2006, it was noticed that IBs share their more assets in financing activities than CBs. Along with that Islamic bank are less competitive banks than conventional banks. Results demonstrated that profitability increase significant with the market share, but it does not affect higher profitability of Islamic banks.

The interest rate has positive significant effect on deposits of banks in non-Muslim countries, whereas it has negative impact in Muslim countries. Muslims doesn't care on interest rate increase or decrease (Mushtaq and Siddiqui, 2016). Inflation has positive and significant influence in Muslim countries while have insignificant impact in non-Muslim countries.

A study found that when there is any change in interest rate it is negatively impact on Islamic Banking deposits in Malaysia Sukmana and Kassim, (2010). Usman and Kashif, (2012) examined that there is difference in profitability of Islamic banks and conventional banks. They concluded that there is high profitability in Islamic banks over conventional banks in Pakistan from 2007-2009. The sample was selected of three Islamic and three conventional banks. Bader et al., (2008) suggested that there is no significant difference in Islamic or conventional banking in profitability and efficiency using DEA. He used forty-three Islamic Banks and thirty-seven Conventional banks over the period of 1990 to 2005 in 20 countries. Berger, Hunter, and Timme (1993) suggested that if the banks are efficient then their profitability may improve.

Awan. A (2009) analyzed the performance of Islamic banking and conventional banking talking the data from 2006-08. For this purpose, they selected 6 Islamic and 6 conventional almost similar size banks. The banks were selected from KPMG survey 2007. The study suggested that Islamic banks profitability is different than selected conventional banks. Moin (2008) Examine and evaluated the performance of Meezan bank with 5 conventional banks in Pakistan. F-Test and T-Test technique are used to determine the significance of two types of banks. The data was taken from 2003-2007. The study concluded that Meezan Bank is less profitable than conventional banks, less risky and less efficient than other five conventional banks during the period. However, Meezan Bank is improving over time converging with the performance the 5 conventional banks.

Hanif. M (2011) analyzed and compared the performance of Islamic and conventional banks operating in Pakistan. The sample of 22 conventional and 5 Islamic banks were used for this purpose. The external factors including the customer perception and behavior about Islamic banking were used in both banks and for internal factors credit, solvency and liquidity risk indicators were used. To know the solvency Bank-o-meter model was used. The study suggested that in profitability and liquidity the conventional banks are leading while in solvency mainstream and credit risk the Islamic banking dominates. For conventional banks the size, products and services are motivating factors while in Islamic banking shariah compliance is the motivating factor.

METHODOLOGY

To examine the long run relationship between IBs profit rates with CBs interest rates, we apply Auto Regressive Distributive Lag Bound testing approach (ARDL). The data we used is monthly based data from January 2008-October 2017.

Empirical Models and Data

The core objective of the study is to analyze the relationship between Profit Rates of Islamic Banks and Conventional Banks interest rates. The PR that IBs offer to their clients could be classified into many categories. Given any Conventional Bank interest rate and profit rate of Islamic banks; the two will have long run relationship if the two series are cointegrated. Cointegration can be tested by any cointegration test e-g Johnsen co-integration test Engle and Granger tests, Autoregressive Distributive Lag (ARDL) test etc. The Engle and Granger tests is applicable when underlying series are non-stationary. We may have stationary series instead. Therefore, using ARDL can get rid of this problem. We would use ARDL co-integration because it is robust to the stationarity of underlying series.

Model Specification

We investigate the relationship of Islamic banks return on deposit profit rate and conventional banks return interest rates and their long run relationship. To examine dynamic relationship between mention variables, we use ARDL model developed by Pesaran et al.. (2001). This ARDL co-integration test in the literature is also known as Bound co-integration test. To investigate short run and long run relationship between stated indicators and we follow this model and Angel Granger co-integration model.

$$IBPR = f(CBIR)$$

IBPR : epresents Islamic Banks Profits Profit Rates to Depositors,

CBIR : Conventional banks Interest Rate to Depositors

$$IBPR_t = f(CBIR_t)$$

Where $IBPR_t$ is the *IB* profit rates and $CBIR_t$ is the Conventional Banks Interest Rates and t denotes time.

Estimation Techniques

To know the relationship between IBs with CBs interest rate, we will use Vector Error Correlation Model (VECM) form of Autoregressive Distributed Lag Model (ARDL), which is capable to find short run and long run relation between underlying variables.

The ARDL equation is given as below:

$$\Delta IBPR_t = \phi_0 + \sum_{i=1}^m \vartheta_i \Delta IBPR_{t-1} + \sum_{i=0}^m \pi_i \Delta CBIR_{t-1} + \theta_1 IBPR_{t-1} + \theta_2 CBIR_{t-1} + \varepsilon_t$$

The parameter of the model show the short run dynamics of the above model, whereas the parameters represent long run relationship could be tested.

Thus, the hypothesis of the model is:

$$H_0 : (\theta_1, \theta_2) = 0 \text{ (there is no long – run relationship)}$$

$$H_1 : \theta_1, \theta_2 \neq 0 \text{ (there is long – run relationship)}$$

This hypothesis can be tested by usual F-statistics and the critical values are provided by Pesaran.

Sample Selection

We use monthly data for the period of January 2008–October 2017. The Sample of the study will be five Islamic Banks and four Conventional Banks. We take all five Islamic banks, and the Conventional banks are selected in such a way that their assets profile matches with the Islamic banks in the sample. Banks are selected after analyzing the report of KPMG survey 17 September 2015. The source of data includes the websites of IBs and CBs website and from head offices of selected IBs and CBs in Pakistan. To analyze the competitiveness of return on deposits we will use the following banks.

Islamic Banks	Conventional Banks
Meezan Bank Limited	Askari Bank Ltd
Dubai Islamic Bank Limited	Bank of Khyber Conventional
Bank Albarakah	Soneri Bank
Bank Islami Limited	Summit Bank
Bank of Khyber	

Dependent Variables

Profit rate of Islamic banking is a dependent variable. We considered CBs interest rates are integrated to each other, So there is positive relationship, and the expected signs are positive.

Islamic banks profit rate

Profit mean the excess amount generated from original capital (AAOIFI Shariah Standard 47). Profit rate is important factor which Islamic banks pay to their depositors on different type of accounts in banks. There are saving accounts (SA), Term deposit accounts (TDA).

- Saving account (SA).** SA is more flexible and less profitable because a customer can deposit and withdraw his amount at any time.
- Term Deposit Account (TDA).** TDA is more profitable account which ranges from monthly, quarterly, semi-annually and annually.

In our research we used two types of account, Saving account and one-year Term Deposit Account. Because these two accounts are most common in all banks. Profit rate is determined at the end of year that how much profit is being earned by the banks and how much is offered to their depositors?

Independent Variables

Interest rates of conventional banks

Interest rate of different selected CBs are considered knowing that how much interest rate banks offer to their depositors on their deposits in the banks? SA and TDA accounts were taken because these both accounts were common in all selected banks. These are the predefined rates offered to the depositors in different CBs.

RESULTS AND ANALYSIS

In this chapter we will discuss long run relationship of Profit Rates of Islamic Banks with IR of selected CBs from 2008 to 2017. To check long run relationship, we apply ARDL technique and for Average equality test to check the average rate of return of Islamic and conventional banks. First, we will check long run form and bound test.

Long Run Relationship of Profit Rate of Islamic Banks with Conventional Banks Interest Rates

We will discuss the long run relationship of IBs with different CBs interest rates. As we have taken two types of Accounts from Islamic and Conventional Banks; Saving accounts and one-year Term Deposit Account.

Long run relationship of Islamic banks profit rates with conventional banks interest rates on saving account deposit

Variables	SA Meezan	SA Khy Isl	SA Barak	SA Islami	SA Dubai
SA Khy Cn	1.62	0.63	1.58	1.58	1.70
SA Askari	0.73	0.56	0.66	0.91	0.71
SA Soneri	1.87	1.90	0.72	1.08	1.07
SA Summit	1.44	5.68***	10.98***	1.71	2.43
Critical Bound.		I (0)		I (1)	
10%		3.02		3.51	
5%		3.62		4.16	
1%		4.94		5.58	

Note : P-value in parenthesis ***= Significant at 1%, **= Significant at 5% and *= Significant at 10%

In row 1, there is a series of Islamic Banks name, Whereas, in column 1 there is the series of Conventional Banks name. In column 2 row 2 summarizes the relationship between Meezan Banks Saving Account with the Khyber Bank Saving Account Conventional Banks, while applying the ARDL Bound Test, F-Statistics was 1.62, which is less than the lower bound I(0) of which was 3.02 of significant level 10 %. Therefore, the statistics inform us that there is no Long Run Relationship between SA Meezan and SA Khy Cn on Saving Accounts. Similarly, in whole column 2 the relationship of Meezan Banks was tested with all 4 conventional banks. There result shows that in whole column there is no long run relationship of Meezan Bank on Saving Account with CBs in the series.

In column 3 row 2 to 5 summarizes the Long Run Relationship of Saving Account Khyber Islamic with Conventional Banks interest rates, the value of F-Statistics shows that there is no long run relationship of SA Khy Is with CBs interest rates from row 2 to 4 in the same column. But in column 5 in row 3 shows that the F-Statistics Value is 5.68 which is higher than the upper bound limit of I (1) at 1% level of significance. Which means that there is significantly Long-Run Relationship between SA Khy Is with Summit Bank (SA Summit).

In column 4 row 2 to 5 summarizes the long run relationship of Saving Account Bank Al Barakah (SA Barak) with different CBs. Result shows that there is no Long Run Relationship of Bank Al Barakah with CB except SA Summit in row 5 whose F-Statistics Value is 10.98 which mean there is significant strong relationship between SA Barak and SA Summit.

In column 5 SA Islami and 6 SA Dubai row 2 to 5, there is no significantly Long Run Relationship of both Islamic Banks (Bank Al Islami and Bank Dubai Islami) with the CBs as the F-Statistics values is lower than lower bound I(0).

Long run relationship of Islamic banks profit rates with conventional banks interest rates on term deposit

Variables	TD Meezan	TD Khy Isl	TD Barak	TD Islami	TD Dubai
TD Khy Cn	3.61*	1.20	2.79	4.19*	5.39**
TD Askari	1.02	1.40	1.42	2.85	1.15
TD Soneri	10.87***	17.03***	1.31	2.85	1.51
TD Summit	5.19**	20.00***	2.33	7.08***	1.87
Critical Bound.	I (0)				I (1)
10%	3.02				3.51
5%	3.62				4.16
1%	4.94				5.58

Note: P-value in parenthesis ***= Significant at 1%, **= Significant at 5% and *= Significant at 10%

In row 1, there is a series of IBs name, Whereas, in column 1 there is the series of CBs name. In column 2 row 2 summarizes the relationship between Meezan Banks One Year Term Deposit Account (TD Meezan) with the One Year Term Deposit Account of CBs, while applying the ARDL Bound Test, F-Statistics is 3.61, which is more than the upper bound I(1) of which was 3.51 of significant level 10%. Therefore, the statistics inform us that there is Long Run Relationship between TD Meezan and TD Khy Cn (Khyber Bank Conventional) on One Year Term Deposit Accounts. Similarly, in whole column 2 the relationship of Meezan Banks was tested with all four CBs. There result shows that in whole column there is $\frac{3}{4}$ banks have significantly long run relationship of Meezan Bank on TD with CBs in the series except Askari Bank (TD Askari).

In column 3, row 2 shows the relationship between Bank of Khyber Islamic with the CBs on Term Deposit Account, in first two rows, the F-Statistics value of two CBs (TD Khy Cn and TD Askari) is less than the lower bound value of significance level at 10%. Which means there is no Long Run Relationship of TD Khy Cn with these two banks, but in row 4 and 5 in the same column, the F-Statistics value is greater than the upper bound value I(1) of two CBs name (TD Soneri and TD Summit) at 1% level of significance, which means there is strong Long Run Relationship of Bank of Khyber Islamic with these two banks.

In column 4, row 2 to 5 shows the relationship between Bank Al-Barakah with other pairs in the series of CBs. The value of F-Statistics is less than the lower bound value of 10 % level of significance I (0). Which means that TB Barak have no significance long run relationship with any CB in the series.

In column 5 and 6, the relationship of (Bank Al Islami and Bank Dubai Al Islami) with the CB, F-Statistics values shows that in column 5 (TD Islami) have long run relationship with TD Khy Cn and TD Summit CB and in column 6 (TB Dubai) have significantly Long Relationship with only TD Khy Cn, and there is no Long Run Relationship with the rest of the CBs.

CONCLUSION

The comparison profit rates of Islamic Banks with interest rates offered by Conventional Banks from 2008 to 2017 shows that:

- On Saving Account, IBs have no major long run relationship with CBs interest rates except Saving Account Khyber Islamic and Saving Account Bank Al-Barakah significantly have long relationship with Saving Account Summit Bank.
- On Term Deposit Account, IBs have significantly long run relationship with CBs interest rates except TD Barak and TD Dubai has only long run relationship with TD Khy Cn.
- In the study it was revealed that the profit rates of Islamic Banks are significantly different from the Conventional Banks. This reveals that there is no long run relationship of Islamic banks with the conventional banks and study supports the claim of Islamic Banks in Pakistan that they are not following conventional banks in distribution of profit rates.

Recommendation

One major objection on Islamic Banking was that Islamic banks are following Conventional Banks on profitability. The finding of the study suggests that there is no long run relationship between Islamic Banks and conventional banks. General public needs no worry on that issue and being a Muslims there is need to prefer Islamic banks.

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Determinants of the Weak Role of Baitul Maal in Baitul Maal Wa Tamwil (BMT) in Indonesia

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Abstract. *Baitul Maal Wa Tamwil (BMT)* is an ideal model of Islamic microfinance with *Baitul Maal* being able to provide benefits to help improve the welfare of the poor through Islamic social finance. However, the role of *Baitul Maal* is still weak, so it is not in line with the performance indicators of sharia microfinance which should be able to provide effective, efficient and high-quality services to the poor with a wide reach. This study aims to find out the problems that cause *Baitul Maal* in *BMTs* in Indonesia to be weak and propose alternative solutions to increase the role of the *Baitul Maal*. This study employs Analytic Network Process (ANP) and Delphi methods, with two groups of experts as respondents, including academics-regulators and *BMT* practitioners. From this results, it is known that factors becomes a problems in *Baitul Maal* of *BMT* in Indonesia are unprofessional human resources, institutions do not have good governance and a vision and mission that is not clear and measurable, the government has not provided full support on Islamic social finance, and community who have not been properly educated so that literacy is still low. For the proposed solution by making Standard Operational Procedure (SOP) to create human resources who have competency and good quality (Good Amil Governance), because when human resources develop it will have a positive impact on improving and optimizing institutions by giving attention to improvements in institutional governance (Good Governance). The balance between human resources and good institutions will help increase public trust in institutions and make it easier to carry out educational and literacy programs about *BMT* to the community.

Keyword: BMT, Islamic social finance, problem and solution.

JEL Classification: L31, D04, B00.

INTRODUCTION

Background

Indonesia with its biggest Muslim majority in the world has a potential to develop the sharia-based economy. Hence, preferably Indonesian community will tend to choose dealing with Islamic social finance (ISF) in accordance with their belief. The practice of IMFI in Indonesia was for the first time signaled with the appearance of the first Islamic microfinance, which operates based on the sharia principles, established by Muslim community, which is *Baitul Maal Wa Tamwil (BMT)* as Islamic microfinance institution (IMFI) in Indonesia. *BMT/IMFI* is potential to be the best model for the fund mobilisation in the community with an additional value in Islamic finance and to effort developing and improving the construction of community economy (Adnan & Ajija, Arshad et al. 2015).

BMT was getting well-known both domestically and internationally and was recognized as a genuinely and distinctively Indonesian institution (Darsono et al., 2017). *BMT* in implementation is based on the objectives of *Maqashid Shariah*, as Alkhan & Hassan (2020) in their study convey the data and empirical analysis showing that the goals of the IMFI are based on the main aspects of *Maqashid Shariah*, namely: 1) Reducing poverty, 2) Increasing the economy, 3) Improving the social condition of the community, 3) Distribution and circulation of wealth, and 5) Increasing the intellectual level of society. *Maqashid Shariah* is a form of obedience in carrying out sharia principles including the distribution of *zakat-infaq-sadaqa* and *waqf* and benefits in its management by the division.

Baitul Maal is to achieve the goal of *Maqashid Shariah* the welfare of the world and the hereafter (Wibowo, 2020). Wulandari and Kassim (2016) with additional chairman and shari'ah supervisory in Central BMT (Pusat Koperasi Syariah states *BMT* as IMFI, also provides capital for the community who runs a micro business through ISF with Islamic social instruments that is *zakat-infaq-sadaqa* and *waqf* which maintained by a division of *Baitul Maal* and provides a loan without any surplus or it is called a loan of virtue with referring to the sharia principles The problem of poverty alleviation in Indonesia is about the sustainable construction which takes side on the underprivileged community and the presence of ISF will greatly help the sustainability (Ascarya, 2016).

A lot of studies prove that IMFI as *BMT* can help the growth of economy sustainably, reduce the imbalance, improve the community's life quality, offer the opportunity to the micro business members to play a significant role in the economic construction among are Samer et al. (2015) stated that IMFI can improve the underprivileged community's and middle-class community's prosperity in social economy. Meanwhile Ascarya (2020) *BMT/IMFI* can even play a significant role in handling the social-economic impact of Covid-19 pandemic effectively, with integrating the ISF and Islamic social finance as a short-term recovery effort and a long-term sustainability. As well as Rozzani et al., (2015) stated IMFI has social mission with the potential of Islamic microfinance to towards the poverty alleviation and the country's economy construction through the fund management of *zakat-infaq-sadaqa* and *waqf* to empower and supervise the active poor community to be independent and develop, thus it is expected that in the future a *zakat* receiver can be a *zakat* payer.

BMT as one of IMFI's forms in microfinance business model is an applicative, ideal and appropriate model to the business character in shariah microfinance sector in Indonesia, however in its implementation *BMT* in Indonesia has not entirely applied the ideal model. It is recorded that out of the total of 76 *BMTs* which have been Nadzir of cash *waqf*, only 30 *BMTs* which have a great asset in *Baitul Tamwil* reflecting from the essembly of Islamic social finance (ICF) namely *zakat-infaq-sadaqa* and *waqf*. Like *BMT* Beringharjo which has the ICF asset as much as 135.00 with its ISF asset as much as 2.37, while *BMT* Itqan has the ICF asset as much as 39.04 with its ISF asset as much as 4.71 greater than the ISF asset of *BMT* Beringharjo (Ascarya, 2018b).

However, in this role the division of *Baitul Maal* is still weak and it has not similar with the indicator of Islamic microfinance performance which is supposed to provide an effective, efficient and highly-qualified service to active poor with a wide scope (Wasiaturrahma et al., 2020). In addition, Indonesia as a country with the greatest Muslim majority in the world has a potential to improve the ISF. Accordingly, Ascarya & Rahmawati (2014) stated if the money *waqf* is managed more productively, its benefits can provide some contribution to the micro business doer and destitute-poor-needy community so that it enables an access for funding.

In line with the mention need, this study becomes important because *BMT* has also faced the problem of vision and mission drift and it is not accordance with the purpose of *BMT* to provide profitable micro financial services sustainably to active poor (Armendáriz et al., 2011 and Sakti et al., 2019) which becomes a hindrance causing the weak role of *Baitul Maal* division and has also faced insolvency risk for *BMT* (Ascarya, 2017a). This is become a research gap to be conducted to figure out the problems and proposed alternative solution in order to pursue the lagging of *Baitul Maal* division and with the principles of economy and Islamic finance which is inherently social orientated, through moral construction, stable business and sustainability, impacting to the decrease of corruption and dishonesty rate in the economy (Tatiana et al., 2015) with on the objective of *Maqashid Shariah* as an effort to dismiss the poverty and enhance the community's prosperity in Indonesia.

Objective

This study aims to identify the problem factors causing the weak role of the *Baitul Maal* division in *BMT* in Indonesia and to propose alternative solutions as an effort to increase the role of the *Baitul Maal* division in *BMT* in Indonesia.

The rest of this paper will be organized as follows. The second chapter will discuss theories in *Baitul Maal Wa Tamwil (BMT)* as Islamic microfinance institution (IMFI) *Maqashid Shariah* and followed by the previous studies. The third chapter will explain the methods used in this study, namely Delphi and Analytic Network Process (ANP). Chapter four will present the result and discussions, while the fifth chapter will provide the conclusion of the study and the recommendation for stakeholders and further study.

LITERATURE REVIEW

Background Theory

Islamic microfinance

Islamic micro finance is a combination of Islamic finance and microfinance that provides various microfinance services such as microfinance through musyarakah, murabahah, ijarah, qardh hasan etc. (Ascarya, 2017b). As Obaidullah & Khan, (2011) in their book on theories and concepts about sharia microfinance, stated Islamic microfinance through Islamic social instruments (such as *zakat*, *infaq*, *sadaqa* and *waqf*) is a powerful poverty alleviation tool, especially in the capital aspect. When various banking regulations and other macro-finance institutions assess that micro-enterprises are not bankable to meet the criteria for capital recipients, it is difficult for micro-enterprises and the poor to develop. ISF carry out social mission by prioritizing the poorest of the poor in terms of capital as an effort to improve welfare and provide empowerment in order to realize the economic independence of Muslims.

The character of Islamic microfinance on ethics or morals is in accordance with the profile of the poor and micro-enterprises who need to take sides. So that Islamic microfinance is one of the best tools in fighting poverty, because in the implementation of microfinance the poor are empowered, educated to be independent and maintain their own business (Ginanjar & Kassim, 2020) and their better understanding about the financial inclusion agenda as well as the financial guidelines and regulations issued by the relevant authorities. In methodology, a total of 34 managers of Baitul Maal

wat Tamwil (BMTs. As Tamanni & Liu (2017) stated that appearance of the Islamic microfinance movement globally is the main reason for the problem of poverty, where almost half of the 1.6 billion Muslims live in poverty.

Therefore, Islamic microfinance is a combination of microfinance and Islamic finance, by implementing practices and models that are in accordance with the principles of Islamic finance. Islamic microfinance provides services that are empathetic and cooperative and prioritize services for micro needs and the poor community.

Baitul Maal Wa Tamwil (BMT)

The beginning of *Baitul Maal Wa Tamwil* presence is named after *Baitul Maal*, which is derived from Arabic, in which *bait* means home and *al-Maal* means property. *Baitul Maal* means a home which receives some entrusted fund of *zakat-infaq-sadaqa* and *waqf* to be managed and distributed in accordance with the sharia principles. Meanwhile, *Baitul Tamwil* is derived from *bait* which means home, and *-Tamwil*, which means funding. *Baitul Tamwil* is a home that runs a funding activity to develop the productive business, especially for the micro-business doer by encouraging the saving activity and supporting their economic activity funding (Darsono et al. 2017).

Baitul Maal Wa Tamwil (BMT) is one of Islamic microfinance institution (IMFI) in Indonesia in a legal form of cooperation. BMT, which was established by Teknosa Expertise Service Cooperation on the 4th of July 1984, is the first cooperation operating based on the sharia principles where this IMFI is a microfinance service that implements sharia finance principles whose developments experience a long process since it was initiated by Prophet Muhammad SAW, who inherited the basic principles resourcing from Al-Qur'an and Hadist (Subagyo, 2015). BMT was established as a part of financial industry sectors and economic growth (Sari & Cokrohadisumarto, 2019).

Meanwhile Masyita & Ahmed (2013), state that BMT in some regions is called *Baitul Qirad* (BQ), which is translated as commercial home functioning similar to sharia cooperation in Indonesia and focus more only on running only commercial activity, BQ is licensed under the surveillance of Cooperation and Micro-to-Middle Business Ministry. Furthermore, encouraged by the awareness of the necessity of fixation in community's economy, the presence of *Baitul Maal* is deemed necessary to widen its function, not only as only a social institution that distributes the fund of *zakat-infaq-sadaqa* and *waqf*, but also the fund which can be developed as a capital for the community to run their business activity so that it can improve the community's economy condition (Mislal et al., 2016).

Thus, it can be concluded that BMT where the IMFI is a strong instrument in alleviating poverty, especially in the aspect of capital funding. When other various regulations of banking and Macro-Finance Institutions consider that this micro business is not bankable to meet the criteria of the capital receiver in which it gets the micro-business doer and the underprivileged community in a difficult position to develop. Capital funding for the underprivileged community is formed by providing *Qardh Hasan* or loan of virtue without any margin to help the development of their self-business in the micro-business doer area and the underprivileged community who is united, managed, and distributed by the *Baitul Maal* division (Amran et al., 2014). Hence, BMT has a commercial function which is conducted by the *Baitul Tamwil* division and has a social or empowerment function which is executed by the *Baitul Maal* division in the legal form of cooperation.

Each *BMT* has a name displayed on the office name board and various operational statuses. Some publish a name with attaching the status of legal entity as Islamic Finance Service Cooperation, as Islamic Saving and Loan Cooperation, and Islamic Saving and Loan Unit of certain cooperation. However, for some of *BMT*, which still arrange the process of legal entity or various considerations, they still call themselves *BMT* (Darsono et al., 2017). In this era, the definition of *Baitul Maal* in the terminological context of *BMT* is narrower in meaning. *Baitul Maal* has two functions, namely social function, which is conducted by the *Baitul Maal* division, and business function, which is conducted by the *Baitul Tamwil* division. *Baitul Maal* raise and distribute the fund of *zakat-infaq-sadaqa* and *waqf* and other social funds, while the *Tamwil* division has a business function which generates profits operated based on Islamic Sharia (Ascarya, 2018b).

The role of *Baitul Maal* on *BMT* in Indonesia is expected to help the underprivileged community to be independent and productive by funding them through the fund of *zakat-infaq-sadaqa* and *waqf*. *Baitul Maal* also conducts empowerment (training, capital funding, and investment) and development (such as social programs, preach, and protecting Islam) from asnaf. Meanwhile, social funds besides *zakat* can be managed and used in accordance with its function as in Sharia for the general community's benefit (Ascarya, 2018a).

Zakat was determined 1400 years ago by Allah to humankind through Rasulullah SAW to eliminate poverty and helping to achieve the growth of the underprivileged community. The social economy is also an obligation for the rich (Al-Mamun, Haque, & Jan, 2019). Meanwhile, the *waqf* is referred to as charity which is voluntary and does not have any special requirement. Anybody can conduct a *waqf* in any amount and anytime, and for this *waqf*, the reward can bear endlessly until the one conducting the *waqf* passes away. Indonesia, with its Muslim majority, which is developing rapidly, has a quite significant potential for an *waqf* to be utilized more productively and help the microfinance to access the funding, technical supervision, and development of business through capital strengthening (Ascarya & Rahmawati, 2014).

Maqashid syariah

In the Arabic dictionary, *Maqshad* and *Maqashid* are derived from a root, *Qashd*. *Maqashid* is a word referring to plural, the singular form of it is *maqshad*, which means goal or target, while Sharia is a path to the water, or it can be translated as a path leading to the source of life (Sahroni & Karim, 2017). Terminologically, Fauzia & Riyadi (2015), explain that the definition of *Maqashid Syariah* from some past Ulama (Islamic scholars) as follows:

- a. Al-Imam Al-Ghozali: "A protection towards the meaning and purpose of sharia is a fundamental effort to survive, keep a hold of destructive factors and encourage the realization of prosperity."
- b. Al-'Allamah "Ilal al-Fasi: *Maqshid Syariah* is "a goal or secret of Allah SWT in every His sharia law."
- c. Al-Imam Al-Syatibi: "*Al-Maqashid* is divided into two: the first is related to the God as the sharia creator, and the second is related to the mukallaf"
- d. Ahmad Al-Rasyuni: "*Maqshid Syariah* is goals which have been determined by sharia to achieve for the sake of human benefits."
- e. Abdul Wahab Kallaf: "the general purpose when Allah SWT determined His laws is to realize the human benefits with the fulfillment of *dharuriyah*, *hajjiyah*, and *tahsiniyah* needs."

Maqshid Shariah then becomes an essential goal in Sharia economic as Chapra (2008) has elaborated five principles of *Maqshid Shariah* which are explained in detail with the priority order as follows: 1) Safeguarding the Faith; 2) Safeguarding the Life; 3) Safeguarding the Intellect; 4) Safeguarding the Posterity, and 5) Safeguarding the Wealth. In this case, the Islamic community has to get equal income and wealth, optimum growth, and the disappearance of poverty. As a result of some theories above, it can be concluded that *Maqshid Shariah* is a goal that expects the achievement in a certain benefit for humankind not only for their world prosperity but also their hereafter prosperity.

Previous Studies

Research on the benefits, potentials, opportunities, and challenges of *BMT* as an IMFI has been widely carried out. However, until now, there has been almost no research that specifically explores the role of the *Baitul Maal* division. Yumna & Clarke (2019), examines the advantages and benefits of Islamic social finance as a form of increasing service expansion in the financial aspect of IMFI for the poor as an effort to improve their economic welfare. Islamic social finance in *BMT* also lays a role in solving the problems of the poor who *default* in payments because one of the challenges of *BMT* is regarding limited funding sources for micro-enterprises and the poor (Wulandari & Kassim, 2016) with additional chairman and shari'ah supervisory in Central BMT (Pusat Koperasi Syariah).

M. N. A. Osman (1991) stated that Islamic social finance (ISF), if managed and invested properly, can answer the problems of the poor, especially in terms of funding, so that ISF will be a systematic, efficient and sustainable process for poverty alleviation. On the other hand, Asfarina et al. (2019) re-estimating the potential of *zakat* in Indonesia based on classical and contemporary fiqh approaches. His research shows that the potential for *zakat* based on the classical fiqh approach is IDR 69.57 trillion, equivalent to 0.56% of optimistic GDP, and IDR 13.26 trillion or equivalent to 0.11% of GDP, under a realistic scenario.

Meanwhile, based on the contemporary fiqh approach, the potential for *zakat* is IDR 216.54 trillion or equivalent to 1.75% of GDP, optimistic, and IDR 74.87 trillion or equivalent to 0.60% of GDP, a realistic scenario. So the estimated potential for *zakat* is still much higher than the recorded *zakat* collection. Under the realistic scenario (0.11% of GDP), the classical approach is the closest to the actual 2018 *zakat* collection, which is 0.05% of GDP. This can indicate that most Muslims in Indonesia follow the classical fiqh approach in calculating their obligation to pay *zakat maal*. Meanwhile, based on the 2019 BAZNAS PPID data, the National *zakat* Statistics released the distribution realization figure of Rp. 8.69 trillion.

The data above shows that the potential for collecting ISF in *BMT* in Indonesia can still be developed and is very promising. Even from the social and moral aspects, the existence of *BMT*, which has a social function, is a medium for anyone to provide benefits to people in need. So that this research is fundamental to do, even though many serious challenges must be faced and efforts need to be made to solve them in a structured and comprehensive manner as a concerted effort from all parties involved starting from practitioners, regulations, authorities, and IMFI themselves.

The following are some studies that have been conducted in other countries, namely, Suhaimi et al. (2014), Raimi et al. (2014), Shaikh et al. (2017), Wulandari (2019), Sutrisno & Haron (2020), Khamis et al. (2018), Samer et al. (2015), Azha et al. (2013), Saad et al. (2016) Mahat et al. (2015), Alim (2015), dan Irfan (2020). As Noor et al. (2015) and Kurt et al. (2020) found that religious and spiritual

factors affect commitment and awareness in donating. The use of ISF is also expected to increase financial inclusion and social inclusion as characteristics of *BMTs* that carry out Holistic Financial Inclusion to maintain sustainability, independence, funding, change mindsets, increase income and provide assistance to the poor (Ascarya et al. 2018).

The most critical aspect of Holistic Financial Inclusion based on the objective of *Maqshid Shariah* is to maintain wealth, which is 28.7%. Because wealth will protect from poverty and poverty will maintain faith, all of this is in line with the goals of ISF (Ascarya, Rahmawati, & Tanjung, 2016). Most researchers believe that Islamic commercial finance, if integrated with Islamic social finance, will provide a more comprehensive and sustainable reach of welfare. As (Ascarya, 2017b) stated, the integration between Islamic social finance and Islamic commercial finance is beneficial not only for *zakat* recipients and *mawquf alayh* but also for medium-sized *mawquf alayh* micro-enterprises can also feel the benefits, especially in terms of financing that is cheaper and more resilient to crisis finance.

Based on previous studies, it has been agreed that *BMT* as an IMFI in Indonesia has financial inclusion (*Tamwil*) and social inclusion (*maal*), which if both are well integrated it will maintain the sustainability of *BMT* so that it has a broader reach as an effort to improve the welfare of the poor and stability micro and more resistant to shocks or crises. *BMT* can reach the poor from the poorest by implementing Islamic principles that refer to the objectives of *Maqshid Shariah*. Therefore, the researcher also included the objective variable of *Maqshid Shariah* in this study. Previous research also agreed on funding problems due to a lack of support from the government. Even though in terms of funding, *BMT* has IMFI, which will help overcome the funding problem if its management is optimized. However, the problems in the *Baitul Maal* division itself have not been fully agreed upon. The role of the *Baitul Maal* division is still weak, not as much developed as the *Baitul Tamwil* division.

METHODOLOGY

Data

This study uses a qualitative approach with primary data sources obtained from practitioner and expert respondents through in-depth interviews from West Java, Central Java, Lampung, and Semarang. Respondents of *BMT/LKMS* practitioners were 7 *BMTs*, all of whom were incorporated as KSPPS and could serve as examples for *BMT-BMT* in Indonesia with their success in developing not only their *Baitul Tamwil* division (business) but also their *Baitul Maal* division (social), including:

1. *BMT* Benteng Mikro Indonesia (BMI) which has a vision and mission as defense for micro-enterprises whose services have covered all parts of Indonesia with a financing model that is specifically for micro-enterprises, without collateral (mutual trust), business base, business assistance and business growth. BMI also uses a scheme with 5 empowerment service instruments in the form of alms, loans, financing, savings and investments through a culture of saving and ZISWAF to create benefits in the economic, educational, health, social and spiritual fields.
2. *BMT* Itqan, which was founded in 2007, has the main mission of empowering the poor by adopting a grameen bank financing pattern that is modified into a sharia pattern. *BMT* Itqan every year has increased assets not only from *Baitul Tamwil* assets (business) but also Islamic social finance assets (ziswaf) which are managed and distributed by the *Baitul Maal* division. *BMT* Itqan also implemented an integrated KPI between the *Baitul Tamwil* division and the *Baitul Maal* division (in-depth interview).

3. Ibaadurrahman *BMT* which is the largest *BMT* in Sukabumi with the advantage of serving small (very micro) customers with a ball pick-up system. *BMT* Ibaadurrahman is also trusted by the Ministry of Cooperatives to manage funds from the Revolving Fund Financing Institution (LPDB) whose platform reaches 5 billion. In addition, *BMT* Ibaadurrahman also won the trust of the Ministry of Cooperatives for the People's Economic Financing Project (P2ER) program of 15 million/term but with a limited segment, namely students, teachers, staff and the community around the pesantren. This is because the initial presence of *BMT* was a Pesantren Cooperative or better known as Kopontren (in-depth interview).
4. *BMT* UGT Sidogiri, is the oldest *BMT* that was established in 1995 and has now become one of the largest *BMTs* in Indonesia. Its success in integrating business (tamwil) and social (maal) functions has made.

BMT UGT Sidogiri one of the fastest growing *BMTs* in Indonesia. This can be seen from the development of member savings, member savings, member financing, cooperative assets, cash turnover, zakat and social funds (CSR) which are always increasing. The zakat funds and CRS funds are channeled to programs that can create jobs in poor villages, so as to reduce crime rates. Such programs may be an example for other *BMTs* in increasing their role in helping the referral poor. In addition, *BMT* UGT Sidogiri is growing rapidly because of the partnership factor. The following are partners that are seen as helping the growth of *BMT* UGT Sidogiri, namely:

- a. Institutional partners (Sidogiri Islamic Boarding School, Assignment Teacher Affairs and Sidogiri Islamic Boarding School, Sidogiri Santri Alumni Association, Sidogiri Islamic Boarding School Cooperative, Sidogiri *BMT*-MMU Cooperative, Sidogiri Agro Cooperative, BPR Syariah UMMU Bangil, LAZ & L-KAF Sidogiri, Bulletin SIDOGIRI, Sidogiri Library and Tazkia Institute, Bogor).
- b. Sharia Banking Partners (Bank Syariah Mandiri, Bank Panin Syariah, Bank BNI Syariah, Bank BRI Syariah, Bank Muamalat Indonesia, Bank Bukopin Syariah, Bank Danamon Syariah and Bank BCA Syariah).
- c. Non-Banking Partners (INKOPSYAH *BMT* Jakarta, PT Permodalan *BMT* Ventura, LPDB-KUMKM, PT Asuransi Takaful Keluarga Indonesia, PT Value Stream Indonesia, PT Negakom Indonesia, ABSINDO, PT Andelink Duta Indonesia, PT Nurani Travel and PT Asyki).

BMT UGT Sidogiri which has also expanded in 10 provinces in the country, namely East Java, West Java, DKI Jakarta, Lampung, Riau, West Kalimantan, East Kalimantan, South Kalimantan and Bali (Bin Mislan Cokro Hadisumarto et al., 2016).

5. TAMZIS *BMT* is the oldest *BMT* which was established in 1992 and has now become one of the largest *BMTs* in Indonesia. *BMT* TAMZIS Wonosobo has expanded its branch offices in the following areas, namely Yogyakarta, Jakarta, Bandung, Banyumas, Magelang, Klaten, Semarang and until now continues to expand to other cities in the country. *BMT* TAMZIS has received awards from several parties, namely:
 - a. Winner of the most orderly category in membership registration from the Indonesian Ministry of Cooperatives and SMEs in 2014.
 - b. 2nd Rank, The Best Islamic Microfinance, from Karim Business Consulting in 2013.
 - c. Islamic Microfinance Standard, from PMBT Indonesia in 2013.

- d. 100 Big Indonesian Cooperatives, from the 2012 Opportunity and Market Info Magazine.
- e. Cooperative achievement district level 2002.
- f. National achievement cooperative in 2001.

BMTTAMZIS does not only focus on business and financing, but this institution also has an active *Baitul Maal* targeting the poor through education, health, economic empowerment, agriculture/livestock and disaster care programs (Bin Mislan Cokro Hadisumarto et al. 2016).

6. *BMT Binama*, which is 27 years old, and is one of the oldest *BMTs* in Indonesia, has a vision and mission to become an institution that has strategic value for the economic development of the ummah. *BMT Binama* which has spread in 6 (six) Cities/Regencies namely Semarang, Kendal, Batang, Ungaran, Magelang and Demak with total assets of more than 111 billion. So that this does not only make *BMT Binama* exist but its existence has provided benefits to the wider community, and helped realize government programs by providing employment (<https://BMTbinama.co.id/>).
7. *BMT Surya Abadi*, which was established in 2001 in Seputih Banyak District, Central Lampung Regency, is one of the LKMS that was established as an alternative and solution for the surrounding community who have been stuck with the usury (interest) system so that the community returns to a system that is in accordance with Islamic law. so that now *BMT Surya Abadi* has won the trust of the community and various parties who find it helpful in improving their standard of living through services and products using the sharia system. This makes people feel satisfied not only outwardly but also inwardly. The increase in the number of depositing and financing members has been counted as at least more than 22,920 members as of December 31, 2018 (Marlina, 2020).

The Delphi method requires a minimum of 6-12 FGD respondents from each group, so that 2 (two) experts were selected, 5 (five) *BMT* practitioners and 5 other respondents consisting of zakat and waqf institutions. As O.Nyumba et.al (2018) there are no critical assessment of the application of the technique. In addition, there are no readily available guidelines for conservation researchers. Here, we reviewed the applications of focus group discussion within biodiversity and conservation research between 1996 and April 2017. We begin with a brief explanation of the technique for first-time users. We then discuss in detail the empirical applications of this technique in conservation based on a structured literature review (using Scopus stated the number respondents per FGD/In-Depth Interview could range from 3 to 21 respondents with a median of 10 respondents).

The ANP method also requires at least one FGD with 6-12 respondents. And selected 7 (seven) experts, 7 (seven) *BMT* practitioners to fill out the ANP questionnaire. As Saaty & Vargas (2006), stated that ANP method requires at least one regular FGD/In-Depth Interview with 6–12 respondents. We will have two In-depth/FGD from *BMT* practitioner and expert with 7–14 respondent per group for Delphi and ANP, as can be seen in Table 1.

Table 1. Respondents delphi and ANP

No	Expert Panel	In-depth/FGD	Delphi	ANP	Background
1	<i>BMT</i> Practioner	9	7	7	Major <i>BMTs</i>
2	Expert	9	7	7	Academician, Regulator
3	Others	5	0	0	<i>Zakat</i> & <i>Waqf</i> Institutions
	Total	23	14	14	

Model development

Model development in this study refers to the development of the ANP model problems and solutions. Its begins with analyzing the problem (decomposition) by making a summary of research problems that have been validated to practitioners and experts by in-depth interview to structure complex problems into a network of clusters, sub-clusters and elements with variables problem solutions and definitions, where it becomes the red tape of research, as can be seen in Table 2.

Table 2. Variable definitions problem and solutions

Problems are all aspects that are intended to be problems related to the not yet optimal role of the <i>Baitul Maal</i> division in <i>BMT</i> originating from internal and external institutions.
Solutions are all aspects that are intended as proposals in the future as a solution to optimize the role of the <i>Baitul Maal</i> division in <i>BMT</i> .
Maqashid Sharia Islam (2014), Wibowo (2020), Isnaeni <i>et al.</i> (2018), Alkhan & Hassan (2020). Optimization of the role of the <i>Baitul Maal</i> division must be in accordance with sharia objectives.
Human Resources (HR) Zarqan & Paramadina (2020), Nilai, Perusahaan, Syaiful, & Ipb (2015) Qualified and intelligent human resources and understand sharia principles.
Institutions Ascarya <i>et al.</i> (2016), Ascarya <i>et al.</i> (2016). Good governance, measureable vision and mission, Social oriented institutions
Government Pusat Kajian Strategis - Badan Amil <i>Zakāt</i> Nasional & Departemen Ekonomi dan Keuangan Syariah - Bank Indonesia (2018), Asfarina <i>et al.</i> (2019) as well as including optimistic and realistic scenarios with different assumptions. Under the classical fiqh approach, the potential amount of zakat was calculated based on the zakatable assets that have been agreed upon by all scholars, including only zakat on savings. Meanwhile, using the contemporary fiqh approach, the zakat potential was calculated based on a new classification of zakatable assets agreed by contemporary scholars after considering the issue of economic development, including professional (household, Huda (2012). Regulation, Dualism of authority zakat BAZNAS and Ministry of Religion.
Society Ginanjar & Kassim (2020) and their better understanding about the financial inclusion agenda as well as the financial guidelines and regulations issued by the relevant authorities. In methodology, a total of 34 managers of Baitul Maal wat Tamwil (BMTs, Ascarya <i>et al.</i> (2016). Literacy, education Islamic Social Finance, trust, service donor.

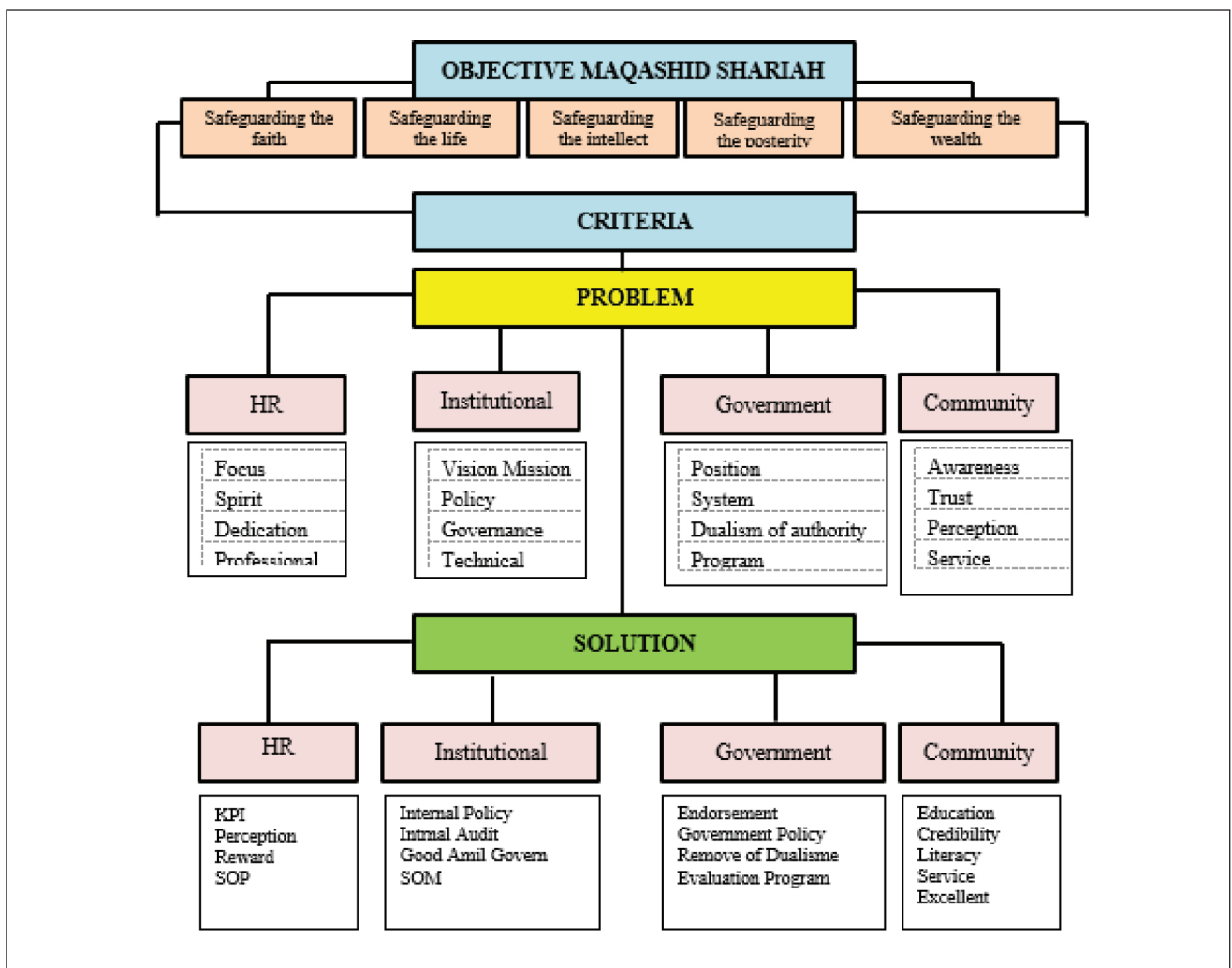
Source: Author's Compilation

After finding the research red tape, then compiling the complexity of the problem so that it is more structured and applied to the development of ANP model (as can be seen in Figure 1.) with break down the problem into two clusters including the Maqashid Syariah objective cluster and the problem solution cluster with a specific description as follows:

1. Criteria Objective *Maqashid Shariah* consists of 5 clusters, namely (1-Safeguarding the faith, 2-Safeguarding the life, 3- Safeguarding the intellect, 4- Safeguarding the posterity, 5- Safeguarding the wealth).
2. Criteria problem consists of 4 clusters (1-human resources, 2-institutional, 3-government, 4-community), from the HR cluster problems consists of 4 elements (1-focus, 2-spirit, 3-dedication, 4-professional), from the institutional sub-cluster problems consisting of 4 elements (1-vision and

mission, 2-policy, 3-governance, 4-technical), from the government sub-cluster problems consisting of 4 elements (1-position, 2- system, 3-dualisme of authority, 4-programs), from the community sub-cluster problems consists of 4 elements (1-awareness, 2-trust, 3-perception, 4-service).

- Criteria solution consists of 4 clusters (1-human resources, 2-institutional, 3-government, 4-community), from the HR cluster solution consists of 4 elements (1-key performance indicator, 2-perception, 3-reward , 4-standard operational procedure), from the institutional sub-cluster solution consisting of 4 elements (1-internal policy, 2-internal audit, 3-good amil governance, 4-standard operational management), from the government sub-cluster solution consisting of 4 elements (1-endorsement , 2-government policy, 3-remove of dualism, 4-evaluation program), from the community sub-cluster solution consisting of 4 elements (1-education, 2-credibility, 3-literacy, 4-service excellent).



Source: Author's Compilation

Figure 1. Development of ANP model

After the development model is validated to the respondent then researcher made a pair-wise questionnaire (comparison) which was designed based on the ANP framework model which was made simple so that the answers to the questionnaire did not deviate from the goal and were consistent.

After the ANP model has been validated, then a questionnaire is prepared using questions in the form of pairwise comparison questions between clusters and the cluster elements themselves, to determine which one is more priority between elements and clusters. From this pairwise comparison it will be known how big the difference is through a numerical scale of 1–9, as can be seen in Table 3.

Table 3. Comparison of verbal and numeric scales

Verbal Scale	Numeric Scale
	≥ 9.5
Much More Greater Influence	9
	8
Much Greater Influence	7
	6
Greater Influence	5
	4
Slightly Greater Influence	3
	2
Equal Influence	1

Source: Saaty & Vargas (2006)

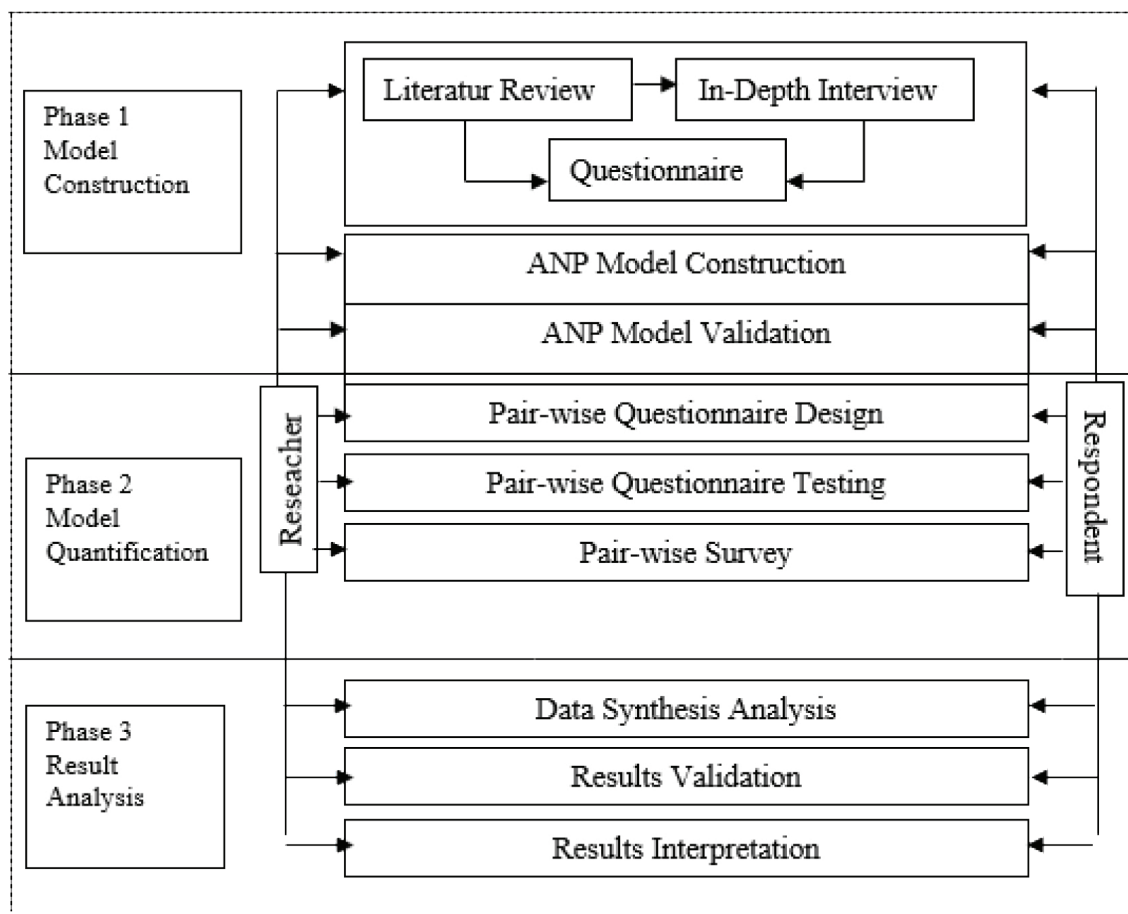
Then the results from the questionnaire enter the synthesis process in the ANP by compiling or combine the parts into a single unit. Due to complex and crucial decision situations, or forecasting, or resource allocation often involves too many dimensions for humans to synthesize intuitively, we need a way to synthesize more dimensions. Synthesis in ANP helps measure and synthesize many factors in model development network.

Method

Delphi was originally developed by Norman Dalkey and Olaf Helmer at the Rand Corporation, a research institute in Santa Monica, California, USA in the 1960s to predict the impact of technology on warfare and is considered a method of decision making (Ascarya & Sakti, 2020). Meanwhile (Brady, 2015) stated the Delphi method is a promising method that can be used in qualitative research by providing a pragmatic and more inclusive way to build theory as a result of anonymous dialogue, so this method needs to be considered for use by policy makers, social researchers, community practitioners.

Delphi is a method related to the use of expert opinion. An important component of the Delphi technique is the process of communicating with a group of experts, and providing feedback. The steps of the Delphi method include forming a team to conduct and monitor a particular subject, selection of panelists among experts, development of rounds, transmission to panelists and preparation of reports with analysis. It is very important that all participants understand the purpose of this discussion, otherwise the panelists may answer incorrectly or inconsistently. Questionnaire respondents should be well informed by researchers in appropriate areas of expertise. The minimum number of participants depends on the research model. The result of the Delphi sequence is the opinion of experts. while the panel's point of view is summarized statistically based on the majority vote (Yousuf, 2007).

Analytic Network Process (ANP) is a general theory used to measure the priority scale of individual ratios. This method also has advantages compared to other methods in terms of decision making because the criteria for problems in research can be made wider, sharper, comparisons are more objective, and predictions are more accurate (Saaty & Vargas, 2006). Problems in economics and finance are not all related to things that can be measured, but social, behavioral, and relationships between social-economic actors. This cannot be measured through a quantitative approach. So that research that cannot be achieved or measured by numerical or numerical means the research used is a qualitative approach with the ANP model. Where the ANP model can bridge the shortcomings of the quantitative approach. ANP is a flexible research model to answer various problems. ANP can capture the influence of feedback, combine tangible and intangible values, and produce indicators of positive and negative effects that can be weighted and compared qq(Ascarya, 2013).



Source: Ascarya 2014

Figure 2. Step of research of ANP method

RESULTS AND ANALYSIS

Delphi Results

Table 4. Rater agreement of delphi results

CLUSTER	Rater Agreement Kendall's Coefficient of Concordance (W)					
	Practitioner	p-value	Expert	p-value	All	p-value
<i>Maqshid Shariah</i>	0.769	0.000***	0.443	0.014**	0.448	0.000***
Human Resources Problem	0.443	0.025**	0.084	0.624	0.204	0.035**
Institutional Problem	0.259	0.142	0.331	0.073*	0.264	0.011**
Government Problem	0.167	0.319	0.241	0.168	0.129	0.145
Community Problem	0.627	0.004***	0.706	0.001***	0.426	0.000***
Human Resources Solution	0.755	0.001***	0.363	0.054*	0.500	0.000***
Institutional Solution	0.380	0.046*	0.331	0.002***	0.406	0.000***
Government Solution	0.361	0.055*	0.608	0.005***	0.423	0.000***
Community Solution	0.743	0.001***	0.282	0.116	0.458	0.000***

***:significant at the 0.01 level; **:significant at the 0.05 level; *:significant at the 0.10 level

The best results obtained from *BMT* practitioners where they all had a convergence opinion on 7 (seven) clusters of 9 (nine) clusters. As for the opinions of practitioners who have not converged on institutional and government issues. While the expert opinion where they all have a convergence opinion in 6 (six) clusters from 9 (nine) clusters. For the all respondents *BMT* practitioners and expert the results of W show 90% convergence, therefore it can be concluded that the results of W with 90% convergence for all respondents have been tested, validated the cluster and its elements so that they can be included in the ANP model or network for further evaluation (Saaty & Vargas, 2006).

Table 5. ANP Result on criteria objective maqashid sharia

Criteria Objective	Respondent				
	Practitioner	Expert	All	Priority	
<i>Maqashid Shari'ah</i>	Safeguarding the faith	0.0214	0.0181	0.0197	1
	Safeguarding the life	0.0155	0.0177	0.0165	2
	Safeguarding the intellect	0.0152	0.0128	0.0140	5
	Safeguarding the posterity	0.0143	0.0146	0.0144	4
	Safeguarding the wealth	0.0144	0.0156	0.0150	3
Inconsistency	0.000***	0.014**	0.000***		
Kendall's W	0.769***	0.443**	0.448**		
X ²	21.53	12.41	25.08		
p-Value	0.000	0.014	0.000		

Table 5 shows the results of the ANP criteria objective to select best elements of *Maqashid Shari'ah*. According to the results of the all respondents, out of the 4 objective clusters, the most important goals are 1) Safeguarding the faith (0.0197); 2) Safeguarding the life (0.0165); 3) Safeguarding the wealth (0.0150); 4) Safeguarding the posterity (0.0144) and 5) is Safeguarding the intellect (0.0140). In this cluster of objectives, there are differences between practitioner and expert respondents in the third, fourth and fifth elements. For practitioner respondents, the third most important element is

Safeguarding the intellect, Fourth is Safeguarding the wealth and Fifth is Safeguarding the posterity. Meanwhile, expert respondents tended to the third most important element, namely Safeguarding the wealth, fourth Safeguarding the posterity and fifth Safeguarding the intellect.

Tabel 6. ANP results on criteria main problem

Criteria Main Problem	Respondent				
	Practitioner	Expert	All	Priority	
<i>Cluster Problem</i>	Human Resources	0.0264	0.0275	0.0270	1
	Institutional	0.0150	0.0166	0.0158	3
	Government	0.0140	0.0126	0.0133	4
	Community	0.0263	0.0249	0.0256	2
	Inconsistency	0.000***	0.000***	0.000***	
	Kendall's W	0.597***	0.712***	0.647***	
	X ²	12.55	14.95	27.19	
	p-Value	0.005	0.001	0.000	

Table 6 shows the results of the ANP criteria main problem to choose the best sub-cluster. According to the results of the all respondents, from the 4 sub-clusters of the main problems that are in the ranking of the most important problems are 1) Human Resources Problems (0.0270); 2) Community Problems (0.0256); 3) Institutional Problems (0.0158); and 4) Government Problems (0.0133), and in this cluster there is no difference between groups of respondent.

Tabel 7. ANP results on element of sub-cluster problem

Element of Cluster Problem	Respondent				
	Practitioner	Expert	All	Priority	
<i>Human Resources</i>	Focus	0.0184	0.0186	0.0185	
	Spirit	0.0202	0.0197	0.0199	
	Dedication	0.0215	0.0199	0.0207	
	Professional	0.0226	0.0238	0.0232	1
<i>Institutional</i>	Vision and Mission	0.0233	0.0224	0.0228	2
	Policy	0.0203	0.0166	0.0184	
	Governance	0.0199	0.0220	0.0209	
	Technical	0.0191	0.0212	0.0201	
<i>Government</i>	Position	0.0197	0.0213	0.0205	
	System	0.0195	0.0205	0.0200	
	Dualism of authority	0.0207	0.0179	0.0192	
	Program	0.0223	0.0225	0.0224	4
<i>Community</i>	Awareness	0.0209	0.0211	0.0210	
	Trust	0.0213	0.0242	0.0227	3
	Perception	0.0177	0.0160	0.0168	
	Service	0.0229	0.0213	0.0221	5
Inconsistency	0.000***	0.007***	0.000***		
Kendall's W	0.322**	0.394**	0.253**		
X ²	33.83	41.38	53.16		
p-Value	0.003	0.000	0.000		

Table 7 Shows the results of the ANP elements of clusters problem to select the most important problems in more detail that must be addressed by the *Baitul Maal* division in *BMT* as an effort to optimize its role. In the combined results of practitioner and expert respondents for the problem elements in the 5th most important rank, namely: 1) The HR sub-cluster is in the professional element (0.0232); 2) Institutional sub-cluster is in the element of vision and mission (0.0228); 3) The community sub-cluster is on the element of trust (0.0227); 4) The government sub-cluster is in the program element (0.0224); 5) the community sub-cluster is in the service element (0.0221).

There are differences between practitioner and expert respondents in the sub-cluster elements of this problem. For practitioner respondents, the 4 most important rankings are: 1) the institutional sub-cluster is in the vision and mission element (0.0233); 2) The community sub-cluster is in the service element (0.0229); 3) The HR sub-cluster is in the professional element (0.0226); 4) The government sub-cluster is in the program element (0.0224). Then for expert respondents, the 4 most important rankings are: 1) Community sub-cluster is on the element of trust (0.0242); 2) HR sub-cluster is in the professional element (0.0238); 3) The government sub-cluster is in the program element (0.0225); 5) Institutional sub-cluster is in the element of vision and mission (0.0224).

Table 8. shows the results of the ANP cluster main solution to select the best sub-cluster. According to the all results of the respondents, out of the 4 sub-clusters the solutions that are in the ranking of the most important solutions are 1) Institutional solutions (0.0225); 2) HR Solutions (0.0220); 3) Community solutions (0.0198); and 4) Government solutions (0.0155). In this cluster there are differences between expert and practitioner respondents. For practitioner respondents, the ranking of the most important solutions are 1) HR Solutions (0.0236); 2) Institutional solutions (0.0217); 3) Community solutions (0.0193); and 4) Government solutions (0.0156). Then the expert respondents ranked the most important solutions as 1) Institutional solutions (0.0234); 2) HR Solutions (0.0206); 3) Community solutions (0.0204); and 4) Government solutions (0.0154).

Tabel 8. ANP results on cluster main solution

Cluster Main Solution	Respondent			Priority
	Practitioner	Expert	All	
Human Resources	0.0236	0.0206	0.0220	2
Institutional	0.0217	0.0234	0.0225	1
Government	0.0156	0.0154	0.0155	4
Community	0.0193	0.0204	0.0198	3
Inconsistency	0.000***	0.000***	0.000***	
Kendall's W	0.210**	0.422**	0.302**	
X ²	4.41	8.87	12.69	
p-Value	0.220	0.031	0.005	

Tabel 9. ANP results on element of sub-cluster solution

	Element Cluster Solution	Respondent			Priority
		Practitioner	Expert	All	
Human Resources	Key Performance Indicator	0.0203	0.0220	0.0211	
	Perception	0.0216	0.0198	0.0207	
	Reward	0.0154	0.0146	0.0150	
	Standard Operational Prosedure	0.0248	0.0241	0.0245	1
Institutional	Internal Policy	0.0207	0.0180	0.0193	
	Internal Audit	0.0217	0.0154	0.0183	
	Good Amil Government	0.0205	0.0242	0.0223	5
	Standard Operational Management	0.0179	0.0233	0.0204	
Government	Endorsement	0.0214	0.0246	0.0229	3
	Government Policy	0.0197	0.0261	0.0227	4
	Remove of Dualism	0.0219	0.0150	0.0181	
	Evaluation Program	0.0184	0.0151	0.0167	
Community	Education	0.0241	0.0237	0.0239	2
	Credibility	0.0207	0.0195	0.0201	
	Literacy	0.0166	0.0186	0.0176	
	Service Excellent	0.0210	0.0191	0.0200	
	Inconsistency	0.000***	0.003***	0.000***	
	Kendall's W	0.271	0.548	0.234	
	X ²	28.53	57.64	48.36	
	p-Value	0.018	0.000	0.000	

Table 9 shows the results of the ANP elements from the solution sub-cluster to select the most detailed solution that must be addressed by the *Baitul Maal* division in *BMT* as an effort to optimize its role. Results of practitioner and expert respondents shows, 5 (five) rankings of the most important solutions are: 1) SOP elements (0.0245); 2) Elements of education (0.0239); 3) Elements of government support (0.0229); 4) Elements of government policy (0.0227) and ranked 5) Elements of Good Amil Governance (0.0223). In this solution element cluster there are differences between expert and practitioner respondents. For practitioner respondents, the 4 (four) rankings of the most important solutions are: 1) SOP elements (0.0248); 2) Elements of education (0.0241); 3) The element eliminates dualism (0.0219); 4) Elements of government policies (0.0227) and ranked 5) Internal audit elements (0.0217). Then for expert respondents, 4 (four) rankings of the most important solutions are: 1) Elements of government policy (0.0261); 2) Elements of government support (0.0246); 3) Elements of Good Amil Governance (0.0242); 4) SOP elements (0.0241).

Finally, from table 4-9 show overall respondents including *BMT* practitioner and expert have come to agreement on criteria objective Maqashid Sharia and criteria main problems-elements and main solution-elements solution. However, there is a difference in the main solution, where the *BMT* practitioner agree that the most important is the human resources solution, because for social institutions, the performance is measured by the quality of human resource inputs. so it is very necessary to have effective training/courses for HR, especially regarding market management because in this era of disruption there is a change in the market situation and also changes in mustahik and muzakki service. The

application of KPI (Key Performance Index) is important to overcome employee attitudes, especially time management and professionalism. Through competent and up-to-date HR and experts in time management, finance, market and strategic management in accordance with Sharia compliance, so hopefully will increase the role of *Baitul Maal* in BMT.

Meanwhile respondent expert (academicians, regulator) choose the most important is the institutional solution, because is important for institutions to understand the vision and mission of BMT, which is to help micro and small communities. Currently, more BMTs in Indonesia are developing *baitul tamwil*, so it is necessary for institutions to study the concept of *Baitul Maal* as a whole. And if the funds in the BMT are used for social purposes, it will provide a return to the Baitul Tamwil.

Analysis

For the Criteria Objective of *Maqshid Shariah* (see Figure 3) all respondents including BMT practitioners and expert, agreed that the most important priority is safeguarding the faith in this case is reflected by religiosity, which views that eternal life is the afterlife, so that working as a social worker and being a community service is one form of devotion as a creature of Allah SWT, is no longer limited to just doing his job as a *Baitul Maal* division officer by applying the moral values of tolerance, mutual care and other good values. *Maqshid Shariah* as a Islamic finance goal which is also supported by Ascarya et al. (2018), (Wibowo, 2020), (Islam, 2014) Ascarya et al. (2017), Isnaeni et al. (2018), Alkhan and Hassan (2020).

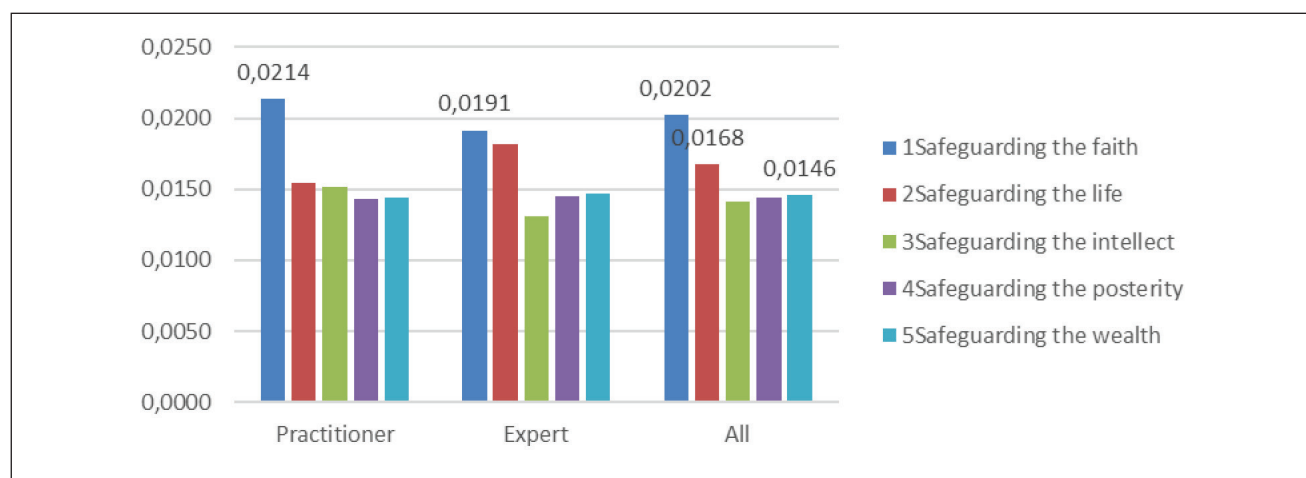


Figure 3. The priority of criteria objective *maqshid shariah*

Meanwhile, on the priority of Main Problem (see Figure 4) all respondents agreed that the highest result was the Human Resources sub-cluster (0,0270). Human resources in the *Baitul Maal* division in management are still not focused, they are still holding concurrent positions with the *Tamwil*/business division, the quality and quantity are still low. Islam integrates individual and collective development which aims to develop the institution as a whole so that human resources are important in supporting the success of an institution. When many problems arise on the HR side, it will greatly affect the success and improvement of the institution. The above is supported by many researchers such as Osman et al. (2011), Nilai et al. (2015), Zarqan & Paramadina (2020).

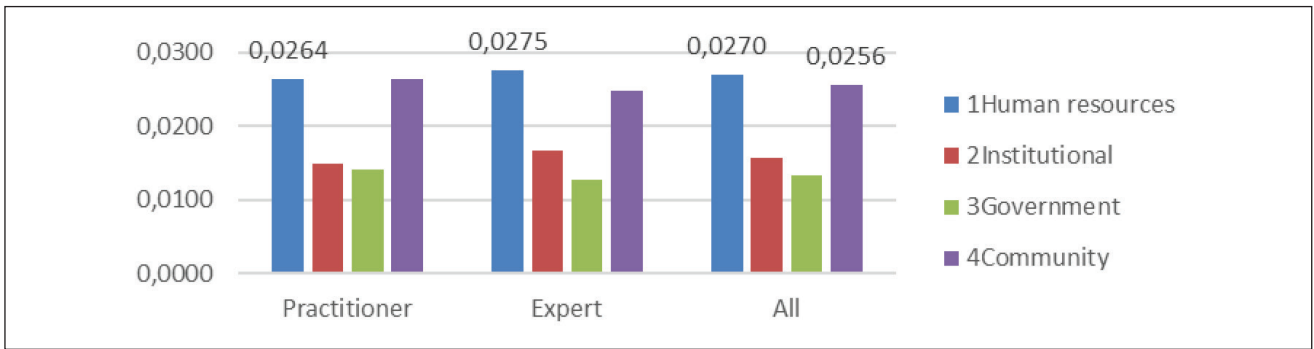


Figure 4. The priority of main problem

As the results of the Priority of Main Problem above, all respondents agree that the most important problem is in the HR problem sub-cluster. In this case, the priority results on Element of Sub-Cluster Problem, practitioner and expert respondents still tend to indicate HR problems (see Figure 5) namely in the professional element Institutions (0.0232) managed by unprofessional human resources will affect the performance appraisal, improvement and development of individuals and institutions. This should not happen because if you are carrying out your duties or work in an unprofessional, not serious and negligent manner, it is included in the wrongdoing as stated in the Qur'an (18:87-88). This is supported by many researchers such as Osman et al. (2011), Nilai et al. (2015), Zarqan & Paramadina (2020).

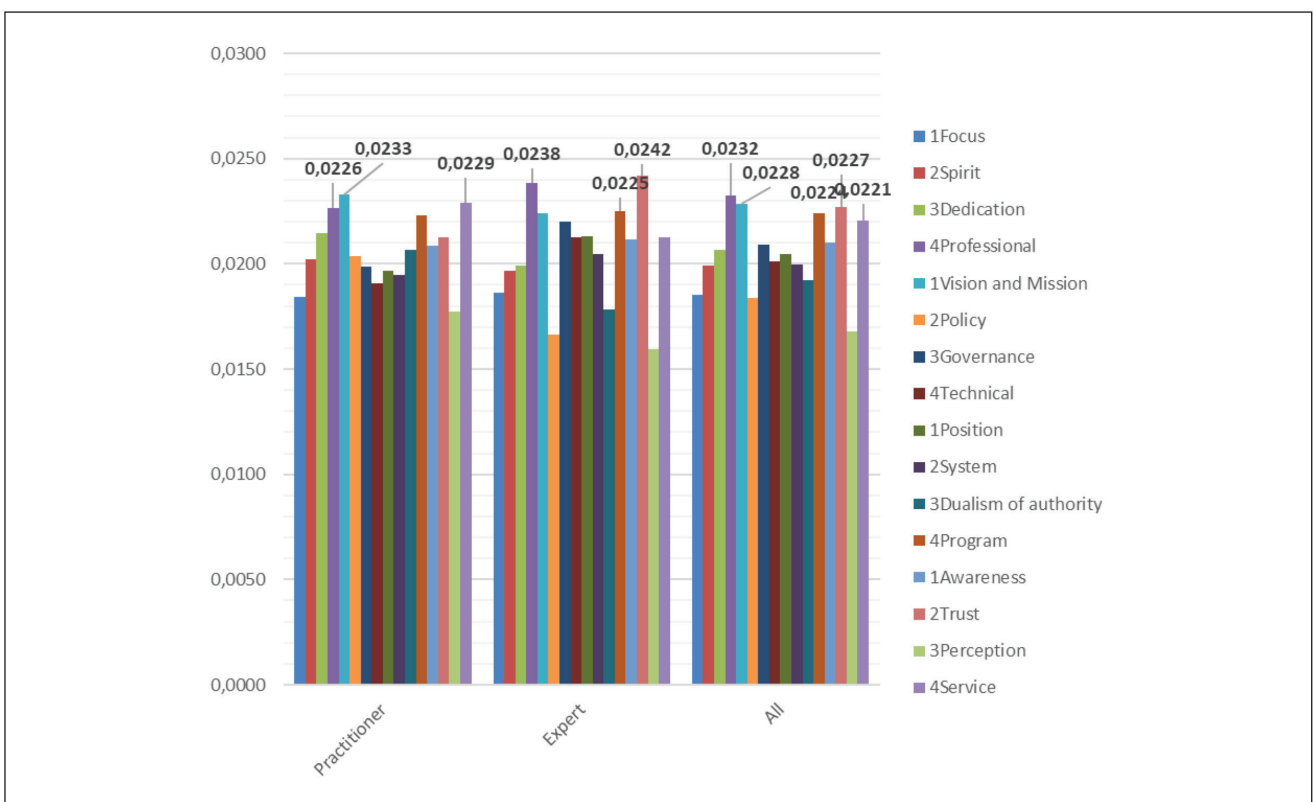


Figure 5. The priority results on element of sub-cluster problem

Meanwhile, the results on Cluster Main Solution (see Figure 6), all respondents including *BMT* practitioner and expert agreed that the highest result was an institutional solution (0,0225). In this case, the institution can make internal policies by rearranging the vision and mission with realistic and measurable goals and directly related to Key performance indicator, formulating policies derived from the vision and mission, controlling the development of the vision and mission including making measurements of the achievement of the vision and mission.

Conduct internal audits by regularly reviewing strategic plans, formulating policies and procedures according to management evaluation results, periodic reviews of measurement standards such as fund management audits, sharia compliance audits, performance audits and implementing sound management Good Amil Governance and commitment to develop by making improvements to standards quality of services that have been determined, build networks, develop IT systems and avoid competition between UPZ (*unit pengelola zakat*) and other social institutions with differentiation. And make Standard operational management to develop recruitment standards, report standardization and data base for mustahik and muzaki. Which are also supported by Ascarya et. al (2017), Ascarya et al. (2016), Ascarya (2017), Sari & Bin Mislan Cokrohadisumarto (2019).

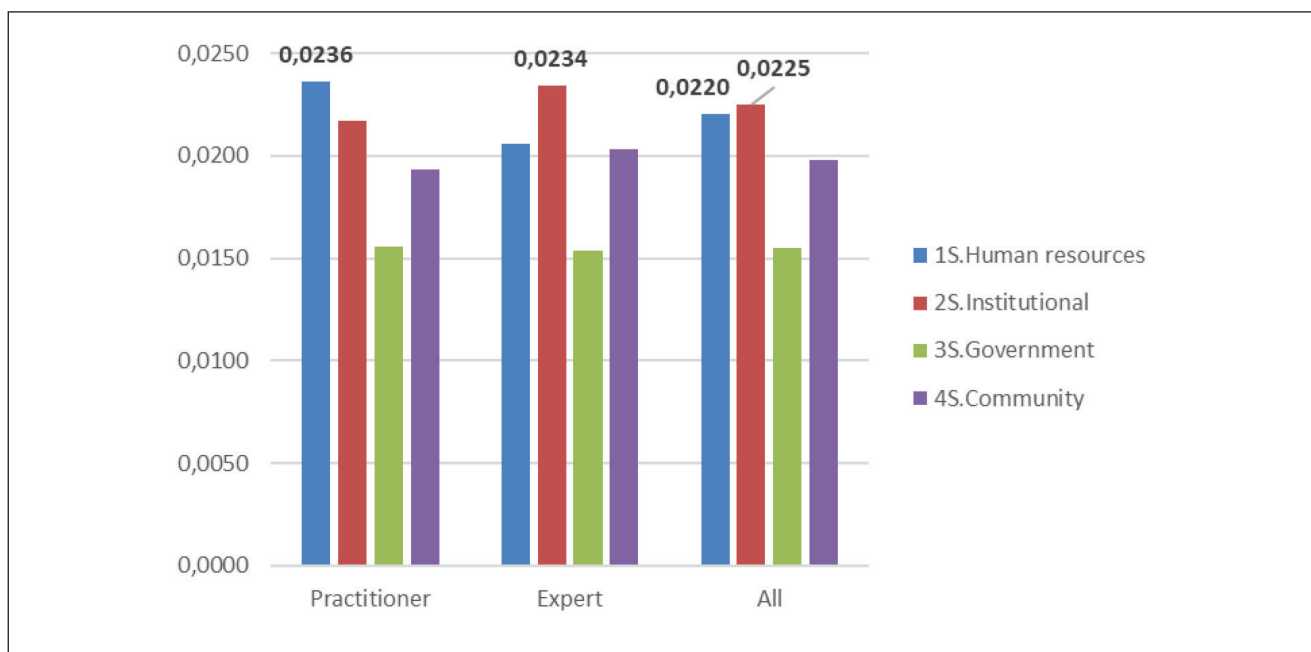


Figure 6. ANP results on cluster main solution

Meanwhile, all respondents agreed that the highest result for element of sub-cluster solution, namely the Human Resources solution with the Standard Operating Procedure (SOP) element (see Figure 7). The SOP includes the management of internal institutional quality management, conducting performance audits and performance evaluations on a regular basis, making guidelines for amil code of ethics, service excellence, which is linked to Key Performance Indicators (KPI) in accordance with the objectives and vision and mission. Where the KPI is integrated between the *Tamwil* division and the *Baitul Maal* division. Because a developing and sustainable *BMT* is an integrated *BMT* between the *Tamwil* division.

To manages commercial finance and the *Baitul Maal* division which manages Islamic social finance. In the SOP, the *Baitul Maal* division's HR quality standards are made for those who are elected as *Baitul Maal* division managers must take the amil certification. That way the *Baitul Maal* division's human resources are more competent and qualified. In addition to making SOPs for the progress and development of individual human resources, institutions should also pay attention to the welfare of human resources, pay attention to the career path of amil and give rewards to amil who excel. work is not just looking for material things but also work is worship to get a reward in the hereafter. Solutions in order to optimize Islamic microfinance institutions in the perspective of Islamic economics that lead to improvements in internal institutional management are agreed upon by many researchers Ascarya (2017), Sari & Bin Mislan Cokrohadi Sumarto (2019), Chapra (2011) high leverage and ultimately the crisis. Unwinding gives rise to a vicious cycle of selling that feeds on itself and leads to a steep decline in asset prices accompanied by bank failures and economic slowdown. Risk-sharing along with the availability of credit for primarily the purchase of real goods and services and restrictions on the sale of debt, short sales, excessive uncertainty (gharar, Tafti et al. (2012).

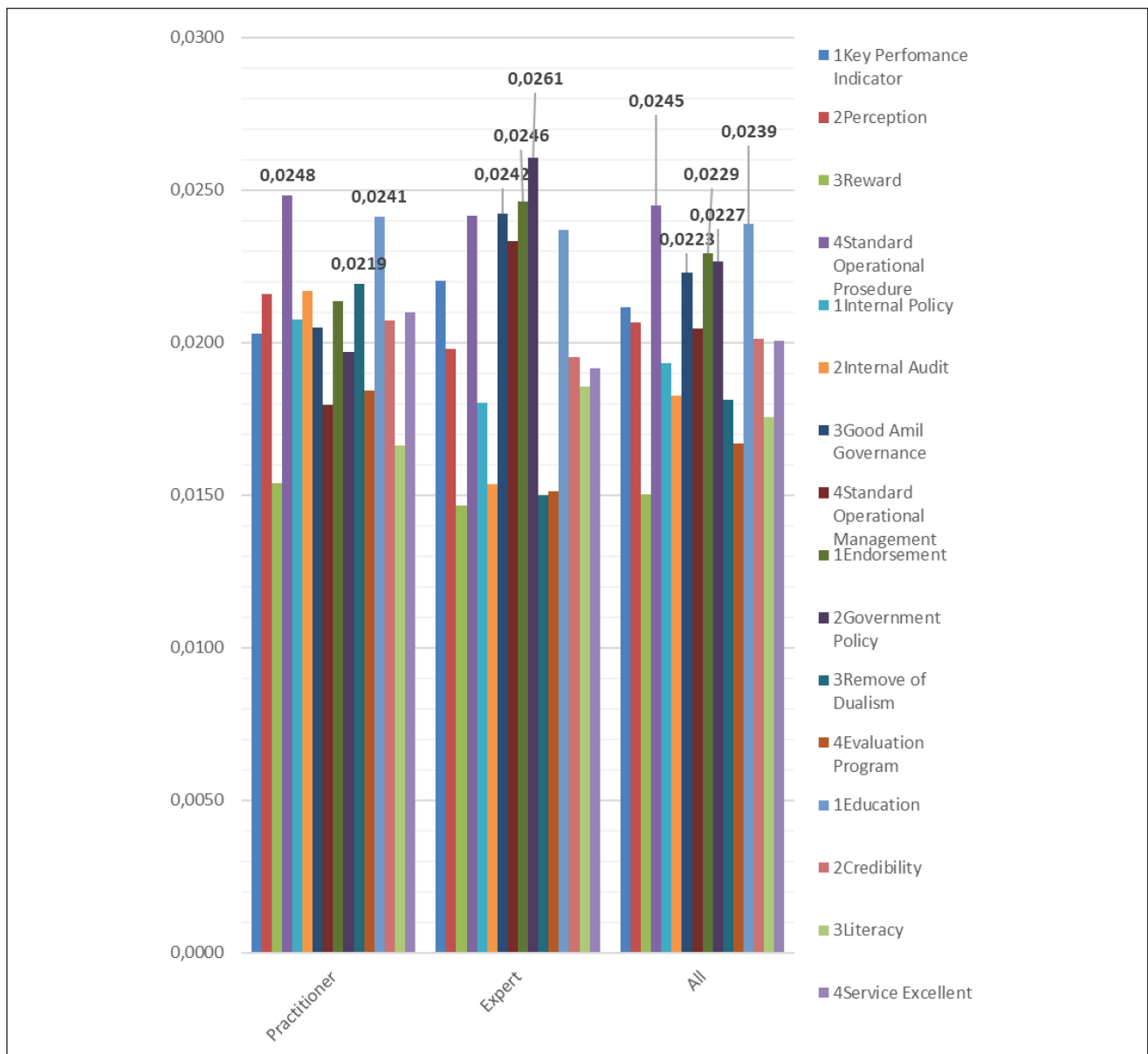


Figure 7. ANP result on element sub-cluster solution

CONCLUSION

Conclusion

The results showed that the most preferred determinant of the weak role of the *Baitul Maal* division at *BMT* in Indonesia by all respondent first is unprofessional human resources (HR) from cluster HR problem, marked by HR who are not focused because manajement are managed part-time because also work too in Baitul Tamwil, understanding mindset of function of the Baitul Maal, low enthusiasm/not animate in carrying out social tasks, and low dedication. In this section the proposed solution that are preferred by all respondent are make Standard Operational Procedure (SOP) to form human resources who have good quality and competency standards (Good Amil Governance).

In addition, second followed by institutions problem, that did not have good governance, the vision and mission is too simple/too ideal, has not been directly linked to Key Performance Indicator (KPI), there is no measuring instrument for achieving the vision and mission, lack of facilities and infrastructure to achieve goals, social and commercial conflicts of interest, leadership crisis and violations of sharia and regulatory compliance, ineffective & inefficient in the management process, weak data base and IT system, non-standard reports, inaccurate financial reports, hampered and less effective ziswaf management. For this institutional problem, the proposed solution should make internal policies by rearranging the vision and mission of *Baitul Maal* which is combined with the overall *BMT* vision and mission with realistic goals and measuring the achievement of the vision and mission.

Institutions implementing Good Governance, commitment to development, making improvements to the service quality standards that have been set, building networks, avoiding competition between UPZ/OPW and other social institutions with differentiation, segmentation and target markets. Afterwards, institution conduct internal audits by regularly reviewing strategic plans, formulating policies and procedures according to management evaluation results, periodic reviews of measurement standards such as fund management audits, sharia compliance audits, HR performance audits. So that when human resources develop, it will have a positive impact on improving and optimizing the institution while still paying attention to improvements in terms of institutional governance (Good Governance).

Meanwhile third problem is government, where it is emergence of regulatory problems, government synergy with social institutions does not run on the same track, even overlaps and collides. Government programs are not well structured, programs are only exemplary and less innovative, lack of diversification of government programs. The proposed solution to this government problem is strengthening supervision of regulatory compliance, eliminating dualism of authority and dualism of operators, making policies of cooperation with educational/da'wah institutions to add ziswaf curriculum in education and providing political support and social funds.

Fourth is community problem which can be seen from still weak public literacy regarding Islamic social finance, especially zakat. So that it affects public awareness in paying zakat obligations, especially for those who are already able because they don't know how to emit their obligations, then the level of public trust in social institutions is still low, due to the lack of donor services with outreach. For community solution is by carrying out Islamic economic education and literacy by building collaborations with community leaders, the Mosque Prosperity Council mingles with recitations at the Mosque/Ta'lim Council so that social capital is built and make people are not skeptical of *BMT* and get trust from the community.

In the objective criteria of maqashid sharia as the goal of sharia principles, all respondents agreed that safeguarding the faith is the most important which is reflected by religiosity, that eternal life is the afterlife, social work and being a community service is one of devotion as an obligation from Allah SWT as his servant. Not limited to running a job as an employee in a company with the aim of world profit but also for the hereafter.

As a comparison we can see the management of microfinance institution in other countries, among are findings of Kurt et al. (2020) stated that religion or spirituality can have a distinctive effect on the sustainability of a microfinance institution in Turkey. Spirituality can increase emotional intensity, intimacy and positive reciprocal service to each other so that an emotional bond is formed in an institution that is not only limited to working professional relationships. This will have a good impact on improving the institution. Then findings of Arshad et al. (2015) that in microfinance management in Malaysia that the development of human resources assets has an impact on the development of microfinance institutions. By starting to implement entrepreneurship education at universities, prospective entrepreneurs are equipped with entrepreneurial education and do not make the wrong choice of what business to develop and are more socially responsible. Then microfinance institutions build strategic collaborations starting with micro-enterprises, scholars and academics so that they are expected to reduce income inequality, increase community welfare and strengthen the national economy. In addition AlMaimani & Johari (2015) stated that microfinance in Oman in the financial aspect of Islamic banks through multi-service products can be an asset in terms of providing support for microfinance institutions so that they can develop and prosper by using sharia principles.

If we look at the comparison of microfinance management in other countries, we can see that microfinance can develop with the cooperation, support and complementarity between microfinance institutions, governments and Islamic banks and foster religiosity in every social activity.

Recommendation

Researcher recommends to several group, with the aim that the results of this study can be a reference for increasing the role of the *Baitul Maal* division in Indonesia in the future, wich is as follows:

1. Recommendation for *BMT* practitioners are to prepare young generations by forming sharia cadres to build developing *BMTs* with the latest version according to the era of technology and digitalization, because there are relatively few skilled human resources and provide a complete understanding of balancing between *Baitul Maal* and Baitul Tamwil and does not become two separate things, but becomes a unified whole. Where none of the two functions are prioritized because the two functions must be equally developed and optimized for their roles.
2. Recommendation for expert (academics, regulator) because *BMT* was born and grew naturally from the side of social movements, so that *BMT* is not too close to the scientific method, academics can help *BMT* re-find its identity by carrying out historical reconstruction to define its work, because there is distortion in the field so that the more developed is Baitul Tamwil (business). Especially in the current era of disruption and collaborating with *BMT* practitioners to take action in research that strengthens *BMT* in the context of Islamic finance and make universities a place to conduct microfinance riset.

3. Recommendation for the government is to provide full filling in Islamic social microfinance program and activity, starting from *PBMT* for the National level as an *BMT* movement in Indonesia, then *PUSKOPSYAH* for the City level, and *GAKOPSYAH* for the regional level. The government can also include Islamic social program into the school curriculum program to the university. Because at this time *Baitul Maal* is interpreted narrowly so that acceleration becomes insignificant.
4. This research only emphasizes three criteria, which are the objectives of Maqashid Sharia, problems and solutions to human resources, institutions, government and society, thus limiting the findings and conclusions of this study. Therefore, the further researchers should include all criteria, not only problems and solutions, but also internal and external strategies. Future researchers should also consider comparative studies on *BMT*/microfinance management in other countries.

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The Impact of Covid-19 to the Islamic Banking Efficiency: Comparison between Full-fledged and Sharia Business Units

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Abstract. Over the past two years, the COVID-19 pandemic has affected the banking industry, both conventional and Islamic. In the current sustainable era, increasing efficiency is one of the goals to be achieved by banks. This study aims to measure Islamic banking efficiency, especially during the COVID-19 pandemic in 34 banks in Indonesia over 6 years, from 2015 to 2020. The DEA results are also used to identify input or output variables that must be improved if the DMU needs to improve efficiency in form of potential improvement. The results showed that COVID-19 had an impact on Islamic banking efficiency, also confirmed by Return to Scale (RTS) which was included in the Decreasing Return to Scale (DRS) category, but sharia business units (UUS) are more affected than full-fledged Islamic banks (BUS). In addition, the most important variable performance to be improved by Islamic banks during the pandemic is efficiency on input variables. To rank the best Islamic banks, the super-efficiency model is also used.

Keyword: Covid-19, DEA, efficiency, Islamic bank.

JEL Classification: C14, G20, G21.

INTRODUCTION

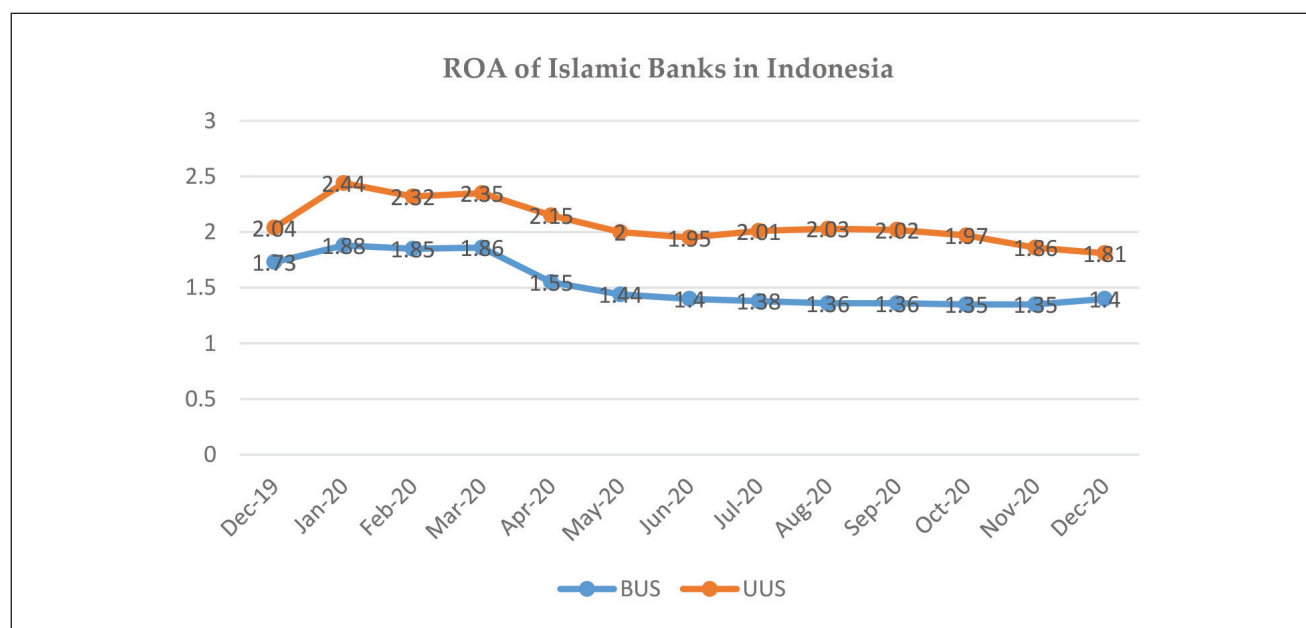
Background

The banking industry in general aims to serve people with surplus and deficits to improve their standard of living (Julia & Kassim, 2020). Various countries currently have implemented a dual banking system mechanism where there is a conventional banking system and a sharia banking system in the banking industry (Yunita, 2020). A sharia banking system (also called Islamic banking) defines as an entity that collects funds from the community in the form of financing or others, to improve the living standard of the community. In Indonesia, Islamic banking began its operation in 1992 with the enactment of the Banking Act No. 7/1992, and at the same time, Bank Muamalat was set up as the first bank in the country which operate according to Alquran and Sunnah. Islamic banking seeks to develop the economy by increasing real economic activities that remain in accordance with sharia principles (Muneeza & Mustapha, 2020).

Various policies issued by governments in various countries aim to maximize banking efficiency so that they can be more optimal in realizing financial prosperity and economic equity, especially in the era of the COVID-19 pandemic, where most countries in the world are affected (Jamaruddin & Markom, 2020). COVID-19 has become a global challenge and has had devastating consequences in terms of pandemics, economic and social problems (Shahabi et al., 2020), including in the banking industry.

The impact of COVID-19 on the banking industry sector was initiated by the large number of business owner customers who had difficulty paying their obligations to banks, resulting in bad loans. The increase in the ratio of non-performing loans (NPL) and funding freezes are one of the direct impacts of COVID-19 in the banking industry (Baldwin & Weder, 2020), including in this case Islamic banking industry. Based on data from the Indonesian Banking Statistics, as of November 2020, the NPL (Non Performing Loans) ratio for conventional banking reached 3.15% (Otoritas Jasa Keuangan, 2020a), while in the Sharia Banking Statistics in December 2020, the NPF (Non-Performing Financing) ratio for Islamic banking was up to December 2020 reached 3.13% (Otoritas Jasa Keuangan, 2020b).

Apart from the NPF, the impact of COVID-19 on the banking sector, especially Islamic banking, can be seen from the profitability ratio or return to assets (ROA). The profitability ratios of full-fledged islamic banks and Sharia business units experienced an increasing trend from 2019 to the first quarter of 2020. However, the trend of both began to decline in April 2020, coinciding with the spread of the COVID-19 outbreak in Indonesia. From the picture below, the downward trend seems to continue until the end of 2020.



Source: OJK Sharia Banking Statistics, 2020)

Figure 1. ROA of full-fledged Islamic banks and sharia business units Dec-19 to Dec-20

Efforts that were then made by the government and the banking sector to maintain efficiency in their performance included providing relaxation to banking customers (Jaelani & Hanim, 2020), either through the restructuring process, increasing the financing period, or providing a grace period of 3-6 months in the future. for customers affected by COVID-19 (Habibah, 2020).

Islamic banks have implemented several restructuring policies (Iskandar et al., 2020), however, restructuring is not abolition, but provides leeway to pay off debts or financing payments, so that these funds are not recorded as bad loans. In the Islamic banking system, this restructuring policy follows the principle of granting suspensions to problematic customers, as stated in the Al-Quran Surah Al-Baraqa verse 280.

Studies comparing the efficiency and performance of BUS and UUS in Indonesia have been carried out by several researchers (Hilman, 2018; Hersugondo, et.al 2021; Kusuma & Atahau, 2019) This study has differences compared to previous research. This study aims to see the level of Islamic banking efficiency, both full-fledged Islamic banks (BUS) and sharia business units (UUS), in the last six years, especially in 2020 whether the COVID-19 pandemic has an impact on both conventional and sharia banking industries. The analysis is then continued by comparing which Islamic banks are more severely affected and what causes it.

Objective

This research has several objectives. Among them are measuring the level of efficiency of Islamic banking in Indonesia, in this case, full-fledged Islamic banks and sharia business units during the 2015-2020 period. In addition, it also analyzes the potential improvement of the slack value between the original data and the projected data. This is done to identify input or output variables that need to be improved in order to produce efficient banking performance. Finally, to see the ranking of efficient banks, this study uses a super-efficiency model approach which was first developed by Andersen & Petersen (1993).

LITERATURE REVIEW

Background Theory

Covid-19 on banking industry

The pandemic has hurt the economic and financial sectors, several financial institutions including banks have reported losses or decreased profits caused by the increased depreciation of credit scores related to COVID-19. This has resulted in the attention of countries in the world shifting from the problem of the spread of disease to focusing on the economic and financial consequences for the nation and society (Rusydiana, 2021).

From January 2008 to December 2019 before the pandemic, financial crises in the financial sector occurred several times. It was recorded in 2008 as a global financial crisis that had a major impact on the stability of the financial sector including banking, however, the capital of the banking industry, especially Islamic banking, was still able to survive (Yunita, 2020). The occurrence of the COVID-19 pandemic then had a negative impact in the form of a very severe economic crisis and had an impact on changes in the structure of the global economic order (Shahabi et al., 2020).

The shocks that occurred around the world as a consequence of the measures taken to contain the virus have severely hampered the economic and financial sectors. Funds channeled from financial institutions to community businesses, as well as corporations, are affected. The existence of regional quarantine also causes banking products not to be distributed properly (Aisyah et al., 2020). This causes the financial system to erode, including conventional bank interest rates, because many banks have to lower

their loan interest rates. As a result of this pandemic, the financial sector, including banking financial institutions, as one of the industries predicted to be affected, needs to develop innovations that can increase the efficiency of its performance (Afandi, 2020).

Concept of efficiency

In this current sustainable era, increasing efficiency is one of the goals to be achieved by banks. Many studies have been highlighted the level of efficiency of financial institutions, where efficiency is used as an indicator to measure and evaluate bank performance. According to KBBI, efficiency is the accuracy of the way (business, work) in carrying out something (by not wasting time, effort, and costs). In management theory, organizational performance is judged by how well an organization can minimize costs and create maximum profits. The Efficiency concept comes from the micro-economic concept, namely the producer theory. Producer theory tries to maximize profits or minimize costs from the manufacturer's perspective. In the producer theory there is a production frontier curve that describes the relationship between input and output of the production process (Ascarya and Yumanita 2007). The Production Frontier Curve is described as follows.

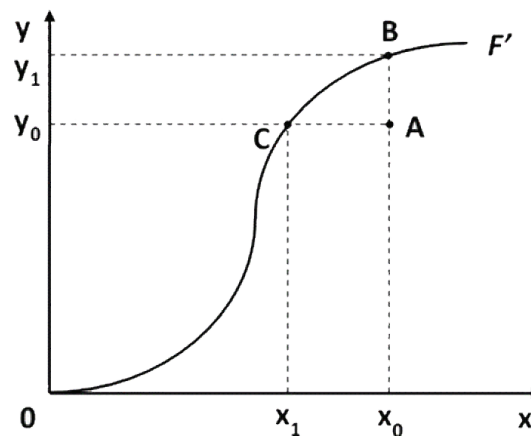


Figure 2. Production frontier curve

There are two types of efficiency, namely economic efficiency and technical efficiency. Economic efficiency has a macroeconomic picture, while technical efficiency has a microeconomic picture. Technical efficiency measurements are used to measure operational relationships in the process of using inputs into output. The DEA Term refers more to the definition of technical efficiency, namely the relationship between input and output in a business unit (Rusydia 2013). Using a mathematical equation, the formula of DEA is drawn as follows (Ascarya and Yumanita, 2006).

$$\text{Efficiency of DMU} = \frac{\sum_{k=1}^p u_k y_{kj}}{\sum_{i=1}^m v_i x_{ij}}$$

Whereby:

DMU = decision making unit

n = number of DMU observed

m = different inputs

p = different outputs

μ_k = average output

v_i = average input

x_{ij} = number of input i consumed by DMUj

y_{kj} = number of output k produced by DMUj

Previous Studies

In most developing countries, the increasing caseload of the COVID-19 pandemic coupled with barriers to vaccination resulted in the withdrawal of some macroeconomic support. Following a 3.5 percent contraction due to the COVID-19 pandemic in 2020, global economic activity is gaining momentum for improvement but is still far below pre-pandemic projections. In addition, the recovery is also uneven, many poor countries are still unable to cope with the pandemic, and there are still many economic uncertainties in the future (The World Bank, 2021).

The largest output losses occur in countries that depend on tourism and commodity exports and for those with limited policy space to respond. Many of these countries entered the crisis in dire fiscal situations and with less capacity to scale up health care policy responses or support livelihoods, so income inequality is likely to increase significantly due to the pandemic, with nearly 95 million-plus people estimated to have fallen below the extreme poverty threshold by 2020 (International Monetary Fund, 2021).

Hilman (2018) measured the effectiveness of the implementation of the spin-off business unit into Sharia commercial banks (BUS) that have been carried out by some Islamic banks in Indonesia. The results show that the growth rate of BUS business activity is better than Sharia Business Unit (UUS), but in terms of profitability and efficiency level of UUS is better than BUS. Next, Hersugondo, et.al (2021) compared Islamic commercial banks (BUS) and Islamic banking units (UUS) with the stochastic frontier analysis (SFA) method during 2014–2018. The result showed that both BUS and UUS always experienced an increase in efficiency every year with the average level of efficiency of BUS being 0.43994, while the average rate of efficiency of UUS is slightly higher at 0.47654. Then, research conducted by Kusuma and Atahau (2019) compared the efficiency level of BUS and UUS in the period of 2012–2017.

METHODOLOGY

Method

Data envelopment analysis (DEA) was originally developed by Charnes, Cooper & Rhodes (1978) and later expanded by Banker, Charnes, & Cooper (1984) to measure the productivity and efficiency of business units. This allows for multiple outputs (weighted) and multiple inputs (weighted) in measuring productivity or efficiency, usually referred to as a weighted output level resulting from a given input. In the efficiency literature, DEA is widely used to measure technical efficiency, including the efficiency of financial institutions (Sharma et al., 2013).

In this paper, Islamic Banking efficiency is calculated by comparing the approach developed by Charnes, Cooper & Rhodes (hereinafter CCR) with the assumption of Constant Return to Scale (CRS) and the approach of Banker, Charnes, & Cooper (hereinafter, BCC), which is based on assuming a return to scale (VRS) variables. The intermediation approach was adopted to reflect the activities of Islamic banks.

A business unit is said to be efficient if it can produce maximum output for a certain level of input, or if it can minimize costs for a certain level of output. Ozcan (2008) divides efficiency into several aspects: technical efficiency, scale efficiency, cost efficiency, and allocation efficiency. The process of converting

inputs into outputs is known as technical efficiency. Since this idea deals only with the internal technical relationship between inputs and outputs, a firm is considered economically effective if it can reduce production costs to produce a given output, while remaining within standard technology and market price levels.

Data

This study focuses on analyzing the efficiency of 30 banks (both conventional and syariah) in Indonesia, in the 2015 to 2020 period. The data used on this study obtained from OJK's website, financial report, and annual report of each banks. There is several limitation of this study, where the data used doesn't capture earliest conditions. This study haven't considered a merger of 3 state-owned (BUMN) sharia bank, and other issues related to bank changes. The input variables used in this study are fixed asset, labor cost, dan third-party-funds, whereas output variables used are total financing and operating revenues. The selection of input-output variables is in line with Sufian (2007), Ascarya & Yumanita (2008), and Rusydiana & Marlina (2019). Then, an analytical tool used to measure the efficiency of Islamic banks is MaxDEA 8 and Banxia tools. To see the ranking of efficient banks, this study uses a super-efficiency model approach with banxia frontier tools. The efficiency score should range between zero and one. The radial distance from the projected production limit to the considered DMU is reflected in the efficiency score (Kamarudin et al., 2017).

RESULTS AND ANALYSIS

Results

Before analyzing the value of Islamic banking efficiency in Indonesia, an overview of the data used in this study will be presented. Table 1 presents descriptive statistics of the input and output variables of Islamic banking in Indonesia, for the 2015–2020 period.

Table 1. Statistic descriptive (in million)

Variables	Mean	Max	Min
Input			
Fixed asset	644.896	8.512.185	372
Personnel cost	413.260	2.977.208	945
Third party fund	9.667.875	84.334.054	40.162
Output			
Total financing	10.038.908	125.990.338	5.066
Operational income	2.292.401	66.581.777	31.277

Since the DEA analysis method Based on the input variable, Third Party Funds (TPF) is the variable with the largest number, far above other variables. The average Third Party Funds (TPF) of banking in Indonesia is Rp. 9.667.875 with the largest value of Rp. 84.334.054 and the smallest of Rp. 40.162. Meanwhile, based on the output variable, the amount of total financing has an average value that is greater than operating income, which is Rp. 10.038.908. The largest value of the variable amount of total financing is Rp. 125.990.338, and the smallest value is Rp. 5,066.

This discussion will show the efficiency level of 34 Islamic banks in Indonesia during the 2015-2020 period using the Data Envelopment Analysis (DEA) method. The results of the DEA measurement will be displayed through an efficiency score with a range of 0-1. A score of 1 describes the ability of Islamic banks to manage their funds optimally. Meanwhile, if the efficiency score is further away from 1 it can be indicated that Islamic bank is inefficient or has not managed its funds optimally. The value of Islamic banking efficiency after data processing can be seen in the following table:

Table 2. Indonesian Islamic banking efficiency score

DMU	Constant Return to Scale (CRS)					
	2015	2016	2017	2018	2019	2020
Aceh Syariah Bank	0,20	0,24	0,35	0,36	0,35	0,35
BPD NTB Syariah	0,92	0,31	1,00	0,66	0,43	0,45
Muamalat	0,47	0,49	0,47	0,39	0,39	0,38
Victoria Syariah	0,48	0,50	0,44	0,42	0,41	0,43
BRI Syariah	0,51	0,49	0,45	0,50	0,52	0,60
BNI Syariah	0,44	0,41	0,41	0,40	0,38	0,34
BSM	0,69	0,67	0,64	0,70	0,69	0,74
Jabar Banten Syariah Bank	0,42	0,47	0,42	0,43	0,45	0,44
Mega Syariah	0,43	0,48	0,47	0,47	0,51	0,34
Panin Dubai Syariah	0,59	0,54	0,47	0,49	0,64	0,68
Syariah Bukopin	0,52	0,53	0,49	0,53	0,57	0,86
BCA Syariah	0,48	0,47	0,48	0,50	0,51	0,46
BTPN Syariah	0,30	0,31	0,32	0,35	0,35	0,36
Maybank Syariah Indonesia	0,99	0,83	0,47	1,00	1,00	0,00
UUS Danamon Indonesia	0,73	0,70	0,69	0,67	0,85	0,95
UUS Permata	0,19	0,21	0,26	0,26	0,23	0,20
UUS Indonesia International Bank	1,00	1,00	1,00	0,99	1,00	0,78
UUS CIMB Niaga	0,53	0,61	0,60	0,82	0,89	0,84
UUS OCBC NISP	0,64	0,47	0,78	0,40	0,85	0,52
UUS Sinarmas	0,40	0,41	0,44	0,43	0,30	0,30
UUS BTN	0,24	0,23	0,25	0,38	0,28	0,28
UUS BPD DKI	0,51	0,69	0,51	0,71	1,00	0,62
UUS BPD DIY	0,58	0,56	0,60	0,79	0,78	0,63
UUS BPD Jawa Tengah	0,50	0,32	0,50	0,62	0,64	0,43
UUS BPD Jawa Timur	1,00	1,00	0,26	0,36	0,44	0,46
UUS BPD Sumatera Utara	0,59	0,43	1,00	1,00	0,40	0,36
UUS BPD Jambi	0,94	1,00	0,68	0,84	1,00	0,95
UUS BPD Sumatera Barat	0,54	0,60	0,73	0,52	0,46	0,39
UUS BPD Riau-Kepri	0,15	0,14	0,09	0,17	0,21	0,21
UUS BPD Sumsel-Babel	0,29	0,20	0,27	0,26	0,31	0,35
UUS BPD Kalsel	0,15	0,12	0,13	0,15	0,07	0,06
UUS BPD Kalbar	0,80	0,66	0,63	0,61	0,72	0,80
UUS BPD Kaltim-Kaltara	0,35	0,35	0,31	0,22	0,36	0,38
UUS BPD Sulsel-Sulbar	0,12	0,10	0,13	0,13	0,14	0,20
Average	0,52	0,49	0,49	0,52	0,53	0,48

Variable Return to Scale (VRS)							
DMU	2015	2016	2017	2018	2019	2020	RTS
Aceh Syariah Bank	0,32	0,25	0,43	0,45	0,44	0,44	Decreasing
BPD NTB Syariah	1,00	0,75	1,00	0,94	0,51	0,54	Decreasing
Muamalat	0,61	0,64	0,60	0,50	0,49	0,48	Decreasing
Victoria Syariah	0,48	0,52	0,45	0,42	0,41	0,44	Increasing
BRI Syariah	0,65	0,62	0,58	0,65	0,69	0,78	Decreasing
BNI Syariah	0,56	0,53	0,54	0,53	0,50	0,45	Decreasing
BSM	0,95	0,95	0,99	1,00	1,00	1,00	Decreasing
Jabar Banten Syariah Bank	0,49	0,55	0,50	0,49	0,53	0,52	Decreasing
Mega Syariah	0,47	0,55	0,55	0,55	0,60	0,39	Decreasing
Panin Dubai Syariah	0,65	0,61	0,55	0,57	0,70	0,75	Decreasing
Syariah Bukopin	0,57	0,59	0,55	0,57	0,61	0,95	Constant
BCA Syariah	0,55	0,54	0,55	0,56	0,58	0,51	Decreasing
BTPN Syariah	0,30	0,32	0,34	0,37	0,38	0,40	Decreasing
Maybank Syariah Indonesia	1,00	0,86	0,59	1,00	1,00	0,77	Increasing
UUS Danamon Indonesia	0,79	0,74	0,72	0,69	0,88	0,99	Constant
UUS Permata	0,20	0,22	0,28	0,29	0,25	0,22	Decreasing
UUS Indonesia International Bank	1,00	1,00	1,00	1,00	1,00	0,88	Constant
UUS CIMB Niaga	0,54	0,62	0,62	0,95	1,00	1,00	Constant
UUS OCBC NISP	0,75	0,59	0,86	0,44	0,92	0,60	Increasing
UUS Sinarmas	0,42	0,44	0,47	0,45	0,32	0,33	Increasing
UUS BTN	0,26	0,28	0,31	0,53	0,38	0,38	Decreasing
UUS BPD DKI	0,52	0,71	0,52	0,71	1,00	0,63	Decreasing
UUS BPD DIY	1,00	1,00	1,00	1,00	1,00	0,68	Increasing
UUS BPD Jawa Tengah	0,51	0,32	0,54	0,70	0,74	0,47	Increasing
UUS BPD Jawa Timur	1,00	1,00	0,26	0,36	0,45	0,48	Increasing
UUS BPD Sumatera Utara	0,59	0,45	1,00	1,00	0,41	0,37	Increasing
UUS BPD Jambi	0,98	1,00	0,69	0,85	1,00	1,00	Constant
UUS BPD Sumatera Barat	0,55	0,62	1,00	0,53	0,47	0,40	Increasing
UUS BPD Riau-Kepri	0,18	0,16	0,10	0,18	0,21	0,21	Decreasing
UUS BPD Sumsel-Babel	0,31	0,21	0,28	0,27	0,32	0,36	Increasing
UUS BPD Kalsel	0,67	0,53	0,25	0,24	0,24	0,19	Increasing
UUS BPD Kalbar	0,83	0,68	0,65	0,62	0,73	0,81	Constant
UUS BPD Kaltim-Kaltara	0,39	0,41	0,34	0,24	0,37	0,38	Increasing
UUS BPD Sulsel-Sulbar	0,15	0,15	0,17	0,16	0,17	0,21	Increasing
Average	0,59	0,57	0,57	0,58	0,60	0,56	

UUS Indonesia International Bank obtained the highest average efficiency score based on the CRS assumption, with a score of 0.962. The DMU with the lowest average efficiency value is dominated by the UUS of Regional Government Bank (BPD), where the UUS BPD Riau-Kepri, UUS BPD South Kalimantan, and UUS BPD South Sulawesi-Sulbar are the lowest with an average efficiency score below 0.2. Meanwhile, based on the VRS assumption, BSM obtained the highest average efficiency score with a score of 0.962, slightly superior to UUS Indonesia International Bank with a score of 0.961. Based on this assumption, UUS BPD Riau-Kepri and UUS BPD Kaltim-Kaltara are still the lowest with an efficiency score below 2.

None of the DMUs managed to obtain maximum efficiency values consistently from 2015 to 2020. Based on observations in the 6-year research period, the average efficiency values of Indonesian BUS and UUS fluctuated every year. Interestingly, there is a similar pattern in the assumptions of CRS and VRS, where the average efficiency of BUS and UUS decreased in 2016, relatively stagnant until 2017, increasing in 2018 and 2019, then both experienced a significant decline in 2017. 2020.

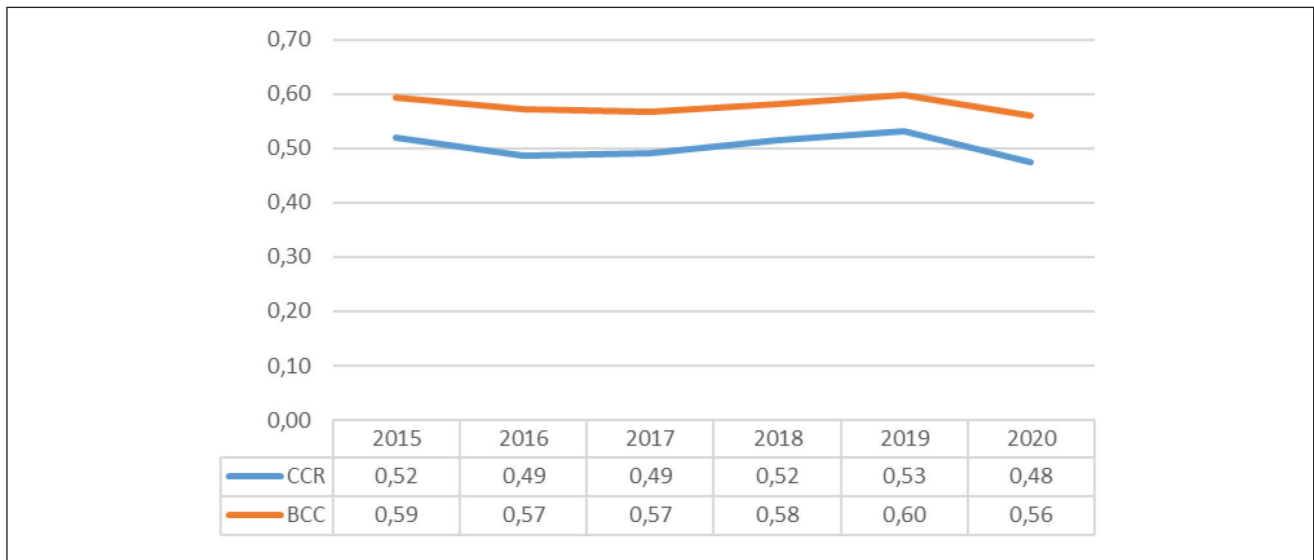


Figure 3. Comparison of CRS and VRS models

Efficiency comparison of BUS and UUS

Furthermore, efficiency analysis is carried out by comparing the efficiency levels of BUS and UUS. Comparisons are made by looking at the average value of UUS and BUS efficiency during the study period.

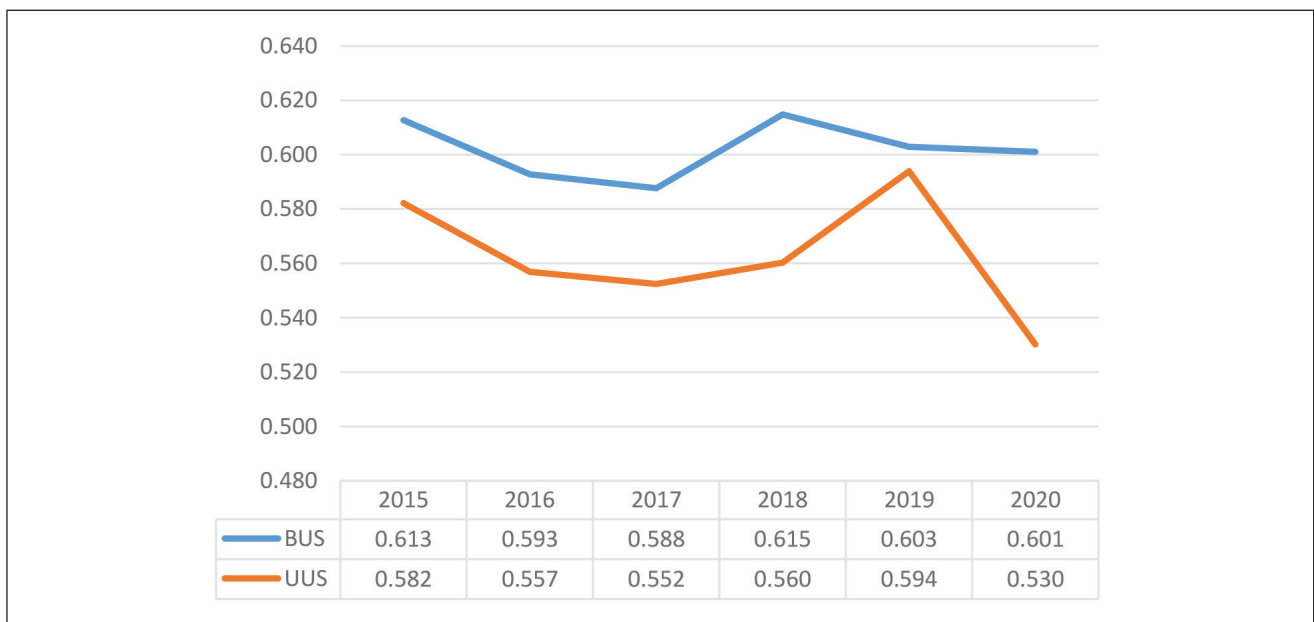


Figure 4. Comparison of the BUS and UUS

Based on Figure 4, it can be seen that the average value of BUS efficiency is higher than UUS. Both showed almost the same fluctuation pattern from 2015 to 2018. However, BUS experienced a gradual decrease in efficiency from 2018 to 2020. Meanwhile, UUS experienced a fairly high increase in efficiency value from 2019 but experienced a very significant decrease in the year 2020.

Several previous researchers also found similar results, where BUS was considered more efficient than UUS, including Hersugondo et.al (2021) and Kusuma & Atahau (2019). Hilman (2018) also found that the growth rate of BUS business activity is better than UUS. BUS is much better when compared with the development of financial performance UUS. Where the development over the last 10 years (2007 s.d. 2016)

Efficiency comparison of government and private BUS and UUS

The next analysis will compare the efficiency performance of government-owned and private BUS and UUS, from 2015 to 2020. The comparison is made by looking at the average efficiency value of BUS and UUS each year.

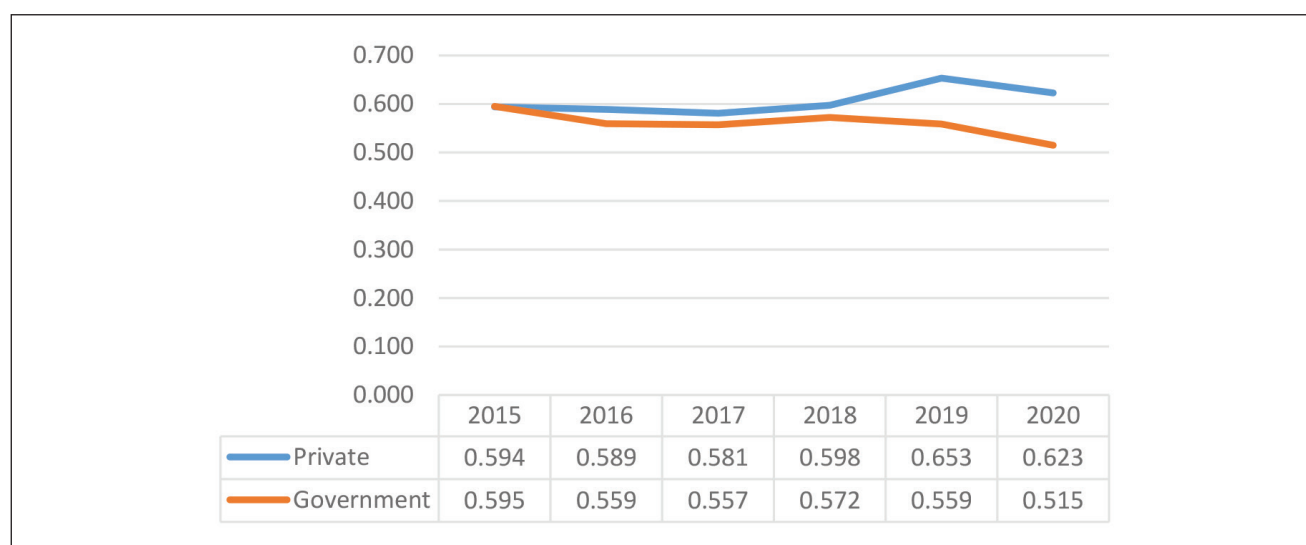


Figure 5. Comparison of the efficiency of government and private Islamic banks

Based on Figure 5, it is known that the efficiency value of privately owned BUS and UUS is higher than the government. This result line with Kamarudin et al. (2016), Maity (2020), Alemu (2016), where the efficiency level of private banks is considered better than government-owned banks. The average efficiency value of private BUS and UUS is slightly higher and shows almost the same pattern as the government until 2018. In 2019 private BUS and UUS experienced an increase, while the government BUS and UUS decreased. Furthermore, both of them experienced a decrease in efficiency values in 2020.

Potential improvement

Besides being able to produce efficiency values, the DEA method can also produce potential improvements or the level of improvement needed to achieve optimal efficiency values. So it can be known which variables need to be optimized. Analysis of potential improvement is carried out using

the last year of observation and is carried out separately from previous years, to describe the real value that must be achieved. The results of the measurement of potential improvement can be seen in the following graph:

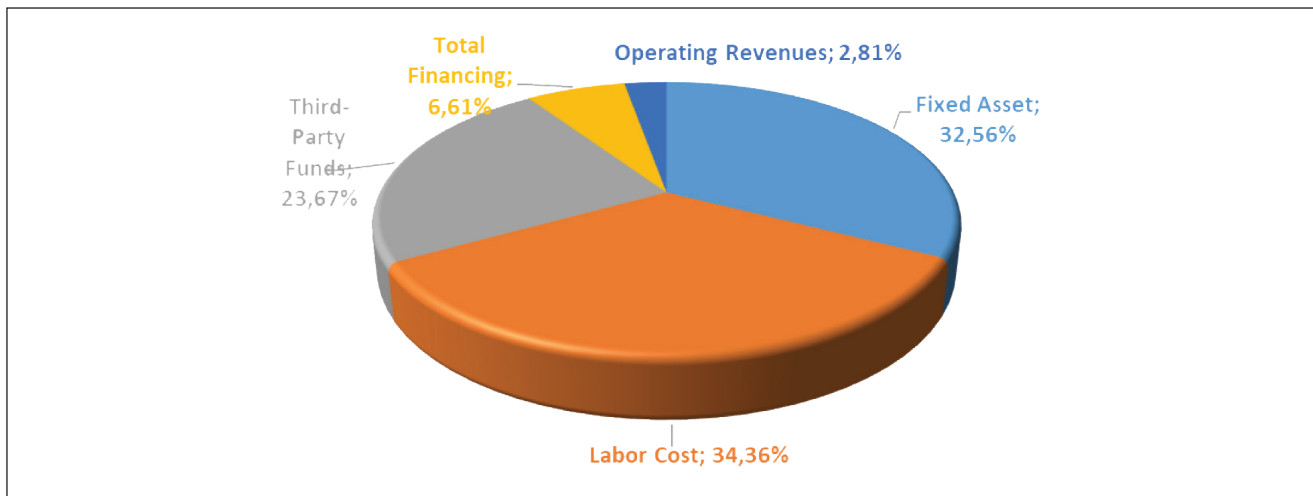


Figure 6. Potential improvement analysis

Based on the analysis of potential improvement, it can be seen that the main cause of inefficiency is not optimal yet for input variables with a total of 90.59%. The inefficiency caused by the input variable is very dominant. These results are in line with the research of Kusuma & Atahau (2019) where the input variable is the main source of inefficiency for BUS and UUS. The specific variable that causes inefficiency in the input variable is the not yet optimal of labor cost, amounting to 34.36%. The amount of labor costs depends on the amount of labor used. In BUS and UUS, the increase in the number of workers is often not matched by the capabilities possessed, thereby reducing productivity (Sutawijaya & Lestari, 2009).

Robustness test

To find out which DMU is the “best of the best” among several DMUs that get the maximum efficiency value, SuperDea analysis is performed. The analysis was carried out by reprocessing all data using the banxia frontier tools.

**Tabel 3. Super efficiency of Islamic banking
Constant Return to Scale (CRS)**

DMU	Score	Rank	DMU	Score	Rank
Maybank Syariah 2018	3,00	1	BPD NTB Syariah 2017	1,24	8
Maybank Syariah 2019	3,00	1	UUS BII 2016	1,19	9
UUS BPD Sumut 2017	2,50	3	UUS BPD Jatim 2016	1,05	10
UUS BPD DKI 2019	2,04	4	UUS BPD Jatim2015	1,05	11
UUS BPD Jambi 2019	1,57	5	UUS BPD Sumut 2018	1,02	12
UUS BII 2015	1,48	6	UUS BII 2017	1,02	13
UUS BPD Jambi 2016	1,43	7	UUS BII 2019	1,01	14

Variable Return to Scale (VRS)

DMU	Score	Rank	DMU	Score	Rank
Maybank Syariah 2018	3,00	1	BPD NTB Syariah 2017	1,19	16
Maybank Syariah 2019	3,00	1	UUS BII 2017	1,19	16
BSM 2020	2,99	3	UUS BPD DIY 2015	1,12	18
UUS BPD Jambi 2020	2,99	3	UUS BPD DIY 2018	1,11	19
UUS BPD Sumut 2017	2,97	5	UUS BPD Jatim 2016	1,10	20
UUS CIMB Niaga 2019	2,94	6	UUS BII 2018	1,07	21
UUS BPD Sumbar 2017	2,81	7	UUS CIMB Niaga 2020	1,03	22
UUS BPD Jambi 2019	2,20	8	Maybank Syariah 2015	1,03	22
UUS BPD DKI 2019	2,14	9	UUS BII 2015	1,03	22
UUS BII 2019	1,51	10	BSM 2018	1,02	25
UUS BPD Jambi 2016	1,44	11	UUS BPD DIY 2016	1,02	25
UUS BPD Jatim 2015	1,39	12	UUS BII 2016	1,01	27
UUS BPD Sumut 2018	1,36	13	UUS BPD DIY 2017	1,00	28
BPD NTB Syariah 2015	1,28	14	UUS BPD DIY 2019	1,00	28
BSM 2019	1,21	15			

The results of the SuperDEA analysis show that BUS Maybank Syariah Indonesia in 2018 and 2019 achieved the highest score, both on the CRS and VRS models. This means that the performance of BUS Maybank Syariah Indonesia in 2018 and 2019 is the most efficient compared to other Islamic Banks, from 2015 to 2020. This can also be a reference for other Islamic Banks that are not yet efficient to refer to Maybank Syariah Indonesia. 2018 & 2019 in order to achieve optimal efficiency.

Analysis

Based on the results of research on Indonesian Islamic banking efficiency in the 2015 to 2020 research period, several findings can be used by further researchers for academic purposes and by regulators as one of the considerations in making a policy. The first finding is shown by graphs of CCR and BCC scores which show a timeline of the average development of Islamic banking efficiency levels from year to year and tables of CCR and BCC which show the value of Islamic bank efficiency each year.

Both graphs and tables show that 2020, which is the year COVID-19 began to spread into a pandemic throughout the world, had an impact on Islamic banking efficiency in general, both BUS and UUS. This is in accordance with research from (Shahabi et al., 2020) which states that developments in the banking industry indicate that the role of banks in the financial sector has changed a lot as well as changing customer preferences and demands.

Currently, due to the pandemic and various applicable restrictions, customers are more interested in using a digital operating system to carry out their banking-related activities. Financial technology is an innovation that allows banks to be more efficient in providing services to their customers. Various innovations need to be carried out by banks to facilitate their customers and increase their declining efficiency level. In the long term, increased customer engagement enables banks to be more efficient and cost-effective.

In response to reduced efficiency in banking, authorities around the world are implementing various relief measures to support banks and to ensure the flow of credit to the real economy while maintaining bank resilience. The steps taken are for example by providing direct support to borrowers in the form

of public guarantees for bank loans, state subsidies, a moratorium on debt payments, or encouraging restructuring loans. This effort was carried out to provide flexibility in financial integrity requirements to help overcome the challenges of banking efficiency during the COVID-19 pandemic (Feyen et al., 2021).

The next finding from this research is the result of the comparison of the level of banking efficiency between the categories of full-fledged Islamic banks (BUS) and sharia business units (UUS). BUS in 2019 got a score of 0,603 and decreased in 2020 to 0,601. Likewise, UUS experienced a score of 0,594 and sharply decreased to 0,530 in 2020. This data shows that both types of Islamic Banks, BUS and UUS, experienced a decrease in efficiency during the COVID-19 pandemic. However, if the two scores in 2020 are compared, it will be found that BUS has a higher score, meaning that BUS in terms of efficiency is better than UUS during the pandemic.

The difference between these two types of industry is basically the point of Sharia compliance requirements, which refers to the provision of products that are permitted by Sharia. Also related to bank independence where BUS bank is relatively more independent than UUS. The policies of UUS largely depend on the parents' bank. This is different from BUS which has independence in decision making hence they are quicker in terms of policymaking (Kusuma & Atahau, 2019).

In addition, Islamic banking needs to protect every transaction carried out from things that are prohibited in Islamic law, such as usury, gambling, and obscenity (Jamaruddin & Markom, 2020). Several studies have stated that Islamic banking is not only able to be more efficient during this pandemic, but also has the potential as an alternative sustainable banking system. BUS relatively has a larger size than UUS in terms of total assets. The larger the size of the company the greater the DEA scores which indicates that the bank is more efficient (Ahmad & Luo, 2010). It can be concluded that it does not mean BUS is not affected during the COVID-19 pandemic, but that the impact is less than that of UUS.

The third finding, this study also compares the level of efficiency between state-owned and private-owned Islamic banks to see how the performance of the two in the last six years, especially during the COVID-19 pandemic in 2020. The results show that at the beginning of the research period (2015), both government-owned dan private Islamic Banks has almost the same score of 0,59. As time goes by, both of these Islamic Bank types showing the gap. Islamic private banks remain stable and show increasing until 2019, while government-owned Islamic banks show a decrease in 2019. However, from 2019 to 2020, or during the COVID-19 pandemic both of them showing the decrease, but government-owned Islamic banks experienced a more drastic decrease in efficiency compared to private Islamic banks.

Basically, Islamic private banks and government-owned can freely apply various innovations to develop their financial services, but the influence of banking services on their market share may be different, where the system in private banks allows Islamic banks to do more efforts and development (Nazaritehrani & Mashali, 2003). This finding can be a consideration for both types of banking to continue to make improvements to achieve better efficiency scores in the future.

The fourth finding of this study is related to the potential for improving Islamic banking efficiency. Through efficiency analysis, this study provides information about the potential for improvement through sensitivity analysis. The graph and the potential improvement table contain the results of the sensitivity analysis of each bank in the 2020 dataset. The table shows the amount of slack (difference

in the gap between the efficient projected value and the original value of the data) for each controllable input and observation output for each bank. The slack variable is used to identify sources of inefficiency. If a variable tends to be low, the bank is not fully efficient because inputs can be reduced without reducing output. Slack is calculated by comparing the inputs and outputs of each bank with the inputs and outputs of an efficient bank reference data set. This efficient reference bank is a bank that operates under the same conditions as the bank being compared but has an efficiency of 1 and a gap of 0.

The variable that contributes the most to the decrease in efficiency scores so that it needs to be considered for banks to be efficient are all variables included in the input variables. Input variables cause 90,59% inefficiency with the details: Labor cost of 34,36%, Fixed asset of 32,56%, and third-party funds of 23,67%. Islamic banks need to optimize the uses of these variables, according to that number to achieve efficient performance.

The last finding is related to Return To Scale (RTS) which is used as an indicator to describe how well the Islamic bank's ability to produce its output. In the relationship between production factors or inputs with the level of production or output, RTS describes the response of output to a proportional change in input. In this case, the majority of Islamic banks in 2020 studied experienced a Decreasing Return To Scale (DRS) condition, which indicates that an increase in all inputs the same amount causes a disproportionate increase in total output, this occurs when the increase in output is smaller than the added input. This result also indirectly confirms the results of the first finding which shows a decrease in the efficiency level of all banks in 2020 or during the COVID-19 pandemic.

Thus, the level of efficiency still needs to be improved in all banks after facing a decline in 2020 both in full-fledged Islamic banks and sharia business units, state banks, and private banks. The entire banking industry must continue to make efficiency efforts by adjusting to variables that still have a large enough slack value, in accordance with the table showing potential improvement.

CONCLUSION

Conclusion

The results of this study show that the average efficiency score of all Islamic banks in Indonesia included in the 2015-2020 observations fluctuated throughout the study period. However, in 2020, the average efficiency score decreased both calculated by CRS and VRS frontier, wherein 2019 the average efficiency score achieved was 0.53 (CRS) and 0.60 (VRS), then decreased in 2020 to a score of 0.48 (CRS) and 0.56 (VRS). This can be explained because the Islamic banking industry is affected by COVID-19, where the impact on Islamic banking is caused by inefficiency and not an optimal use of input variables.

Based on the DEA analysis, COVID-19 has more impact on the efficiency level of the sharia business unit (UUS) than full-fledged Islamic banking (BUS), where UUS gets a score of 0.53 and BUS gets a score of 0.60. In addition, private Islamic banks are relatively more efficient than state-owned banks. This happens because many government banks are in the form of BPD. This study also provides a classification of the potential for improvement for each input and output variable. The results of the analysis show that Islamic banks in Indonesia need to minimize the input variable of the labor cost to achieve optimal efficiency values because the main cause of inefficiency in Islamic banking is the input variable.

Recommendation

Recommendations for practitioners include the need to improve the quality of human resources in Islamic banking and provide innovation in banking products in order to provide more varied choices for customers so that financing distribution can be more optimal. Islamic Banking in Indonesia also need to optimize the labor cost by 34,36%, fixed asset by 32,56%, and thir-party funds by 23,67% to achive the efficient perfomance. Recommendations for academics include continuing to update Islamic banking efficiency information and data, especially in 2021 because the pandemic period is still not over so that further research is expected to produce solutions to improve efficiency performance, with various updates that are appropriate to the situation. Recommendations for regulators are the need to improve Islamic banking quality from all aspects, especially efficiency.

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Determinant Factor of Cash Waqf Intentions among Indonesian Society

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Abstract. This study examines variables Attitude, Subjective Norm, Perceived Behavior Control, Trust in Fundraiser, Islamic Religiosity, Waqf Literacy on Behavioral Intention variables in money waqf. This study uses a quantitative approach. Data collection is conducted using questionnaires with a non-probability sampling method, namely convenience sampling. This study involved samples from provinces in Indonesia. The analysis used is structural equation modeling (SEM). The research sample was 436 samples from several islands in Indonesia. Variable Attitude, Subjective Norms, Perceived Behavior Control, and Waqf Literacy positively influence behavioral intention in donating money. Meanwhile, Trust in Fundraiser and Islamic Religiosity variables do not influence behavioral intention to donate money. The results suggest that it is crucial for money waqf institutions to increase public trust and the societal religiosity that needs to be questioned. It is directly proportional to the literacy waqf it has. Money waqf management institutions also need to improve information and understanding of cash waqf to increase their desire to donate cash waqf. Waqf Literacy is a variable that has recently been studied to test its effect on Behavioral Intention in donating money. Likewise, the samples in this study are people with diverse demographics from several islands in Indonesia.

Keyword: Behavioral intention, cash waqf, waqf literacy.

JEL Classification: G23, G53, J1.

INTRODUCTION

Waqf is considered an essential Islamic public financial instrument to fulfill many government-funded services, such as education, health services, food and shelter, and transportation (Mohsin, 2013). In the past, the scope of waqf was generally understood to include only immovable assets such as mosques, tombs, and other buildings and lands. Thus, the mindset developed is that waqf is only provided by the

rich and those who own land or buildings (Tovianto, 2009). However, the Islamic Fiqh Academy has recently emphasized that waqf assets are not limited to permanent property but can also be transferred, such as cash waqf (Mahamood, 2007).

Aldeen et al. (2020) found that cash waqf is popular because of its flexibility, allowing all Muslim segments to participate in activities cash waqf regardless of the amount of money given. In addition, it is more practical to distribute benefits among a broader segment of beneficiaries, is less complicated for management, and makes it easier to take advantage of the daily needs of the beneficiaries. In addition, cash waqf also has excellent potential as an instrument for the social and economic development of the Muslim community, both from a perspective and for spiritual and social welfare, such as building mosques, houses, and land development (Suhaimi, 2012).

The potential for cash waqf in Indonesia reaches 3 trillion if collected properly. However, until 2021, the figure cash waqf collected IDR 244,097,990,021 (www.BWI.id). This is influenced by the low level of literacy about waqf as a whole. The overall National Waqf Literacy Index (ILW) score of 50.48 is in a low category consisting of the Basic Waqf Understanding Literacy Value of 57.67 and the Advanced Waqf Understanding Literacy Value of 37.97. (BWI, 2020)

According to Mohsin (2009), some donors are reluctant to give cash waqf or waqf to mutawallis because they lack trust and prefer to manage it themselves. The potential of cash waqf huge will be realized when the people have the confidence to surrender their wealth to a representative, both in physical form and money to Nazhir (Huda et al., 2015; Huda et al., 2017) because Nazhir is the person most responsible for the wealth of waqf he holds.

In terms of research on cash waqf in general, Aldeen et al. (2020) regretted that most journals on cash waqf only examined the implementation of cash waqf in terms of its potential and effects. However, no previous research has thoroughly discussed cash waqf. This is in line with Kasri and Chaerunnisa (2021). They state that research on cash waqf in Indonesia is still rarely conducted. It still focuses on aspects such as the role of waqf in alleviating poverty.

Researches behavior cash waqf Manyin the Malaysian context have been carried out. As Thaker et al.'s (2016) research shows, subjective attitudes and norms positively impact the intention of micro-entrepreneurs to use the model ICWME-I in Malaysia. Osman et al. (2016) found that the relationship between norms attitude and intention to give cash waqf was insignificant. However, on the other hand, Osman et al. (2016) found a positive relationship between subjective norm and perceived behavioral control on intention cash waqf.

However, the authors see that research in the context of behavior that affects cash time in the Indonesian context is limited to a specific sample. Kasri and Chaerunnisa's research (2021) examines the effect of knowledge, trust, and religiosity playing a positive role in explaining the intention to donate cash waqf online. But, the research has a sample of Indonesian millennial Muslims only. Likewise, the behavior research cash waqf researched by Witjaksono et al. (2019), which identifies and analyzes the influence of the factors of Knowledge, Attitudes, Subjective Norms, Behavioral Control, Religious Commitment, and Trust on behavior cash waqf, that only limited to the sample of Sharia Bank customers. Who does cash waqf through Islamic banking?

Thus, the authors are interested in examining intention behavior cash waqf with a larger sample and various demographic backgrounds, especially in Indonesian society. The author also adds the variable literacy waqf, which affects the intention cash waqf. Waqf Literacy is a research novelty variable in cash waqf that differs from previous research, which uses the knowledge variable (Witjaksono et al., 2019; Alifiandy & Sukmana 2020; Kasri and Chaerunisa 2021;) to determine the depth of information they have about cash waqf.

Huston (2010) states that financial knowledge is an integral dimension of, but not equivalent to, financial literacy. The Organization for Economic Co-operation and Development (OECD) (2014) defines financial literacy as knowledge, understanding of financial concepts and risks, and skills, motivation, and confidence to apply this knowledge and understanding to decisions in various financial contexts. This is in line with Amagir et al.'s (2018) argument that financial knowledge, attitudes towards money, and financial behavior are part of the construct referred to as 'financial literacy.' Thus, the authors chose the waqf literacy variable, which was adopted from the financial literacy variable, because it also contained a dimension of knowledge.

LITERATURE REVIEW

Concept of Variable Intention

It is well recognized in Islam that intention precedes the making and implementation of any decisions, in particular, those of a voluntary nature. Qardawi (1988) states that intentions play an essential role in implementing worship in Islam, including behaviors such as sadaqah or waqf. In Islam, every worship that is not accompanied by intention will not get a good reward from Allah (Allah) (Qardawi, 1988).

Intention itself is defined as a subjective possibility or indication of an individual to perform a behavior. The intention is to capture the motivational factors that will influence individual behavior because it shows how hard individuals try. The effort they plan to carry out in carrying out the behavior (Ajzen, 2005).

While later meta-analyses have confirmed that the critical relationship between intention and behavior has been confirmed in later meta-analyses (Armitage & Conner, 2001; Sheeran, 2002), intention can only find expression in behavior if people are free to decide whether to perform the behavior or not. (Ajzen, 1991). Therefore, TPB represents an extension of the Action Reasoning theory (Fishbein & Ajzen, 1975), which is considered inadequate for dealing with behavior in which people have incomplete volitional control of behavior (Ajzen, 1991).

TPB further shows that the intention to engage in the behavior is influenced by several subjective positions: one's attitude towards the behavior perceived behavioral control, and perception of subjective norms (Ajzen, 1991). Thus, the intention is assumed to be a direct antecedent of behavior (Farkas & Gubik, 2013). Malebana (2014) offers critical insight into the understanding underlying the behavioral intention process. In physiological studies, the presence of intention is a predictor of planned behavior.

In the context of cash waqf, the intention of cash waqf is defined by Osman (2014) as an individual's intention to donate money voluntarily. Based on this definition, the intention of the cash waqf is the motivation and intention of a person to make cash waqf in a waqf institution.

Attitude Variable Concept

Attitude based on the Theory of Planned Behavior (TPB) is determined by a combination of behavioral beliefs, namely individual beliefs about the positive and or negative consequences of performing a behavior with outcome evaluation. Namely, the individual's subjective assessment of each consequence will result in performing a behavior (Ajzen & Fishbein, 2007).

Shneor & Munim (2019) found attitude and subjective norms positively related to the intention to participate in crowdfunding by making financial contributions. As evidenced by previous studies, social or subjective norms strongly influence people's attitudes towards particular objects or behaviors (Agarwal, 2019; Bananuka et al., 2020; Pham et al., 2020).

Musa and Salleh (2018) show that the essential variables influencing entrepreneurs' intention to make cash waqf are awareness and attitude. In the context of intention to pay zakat, Saad et al.'s (2020) research introduce a new dimension related to attitude toward zakat evasion, moral reasoning, and attitude toward ethnic diversity. It examines its relationship with the intention to pay zakat.

Recent research in the context of millennial Muslims in Indonesia conducted by Kasri and Chaerunnisa (2021) found that religiosity was the most substantial factor in influencing attitudes, while knowledge was the minor significant factor influencing attitudes then influenced the intention to engage in online cash waqf. Previous research on cash waqf in Malaysia, Osman (2014), Mutalib et al. (2019), and Berakon et al. (2021) have found that the attitude variable significantly affects the intention of young intellectuals to participate in cash waqf.

H_1 : Attitude has a positive effect on behavioral intention.

The Concept of Subjective Norm Variables

Based on the Theory of Planned Behavior developed by Ajzen (1991), the subjective norm is defined as "subjective norm refers to the perceived social pressure to perform or not to perform the behavior." The subjective norm is a function based on beliefs called normative beliefs; normative beliefs are beliefs about agreeing or disagreeing with a person or group of people who are essential to the individual towards a behavior (salient referent beliefs). In addition, normative beliefs consist of the Strength of the belief, namely the Strength of belief in the views of the relevant people towards behavior and motivation to comply, namely the motivation to meet the expectations of the relevant people.

The subjective norm in previous studies has been proven to be a determinant of behavioral intention (Hameed et al., 2019; Muhamad et al., 2019; Agarwal, 2019; Bananuka et al., 2020). In the context of donations, Chen et al. (2019) found that the intention to donate time or material donations (Niswah et al., 2019) is strongly influenced by subjective norms.

H_2 : Subjective norm has a positive effect on behavioral intention.

The Concept of Perceived Behavior Control Variables

Perceived behavior control is a characteristic of the Theory of Planned Behavior developed by Ajzen (1991). This is different from the previous theory, namely the Theory of Reasoned Action (TRA). It includes a component that considers situations where a person has less control over behavior, which can differ according to various situations and actions. Therefore, Ajzen (1991) defines perceived behavioral

control, or can also be called behavioral control, as something that refers to the ease or difficulty felt by individuals in carrying out particular behaviors and is assumed to reflect past experiences and obstacles that can be anticipated.

There is a relationship between perceived behavioral control with cash waqf behavior. As already mentioned in the Theory of Planned Behavior, the perception of behavioral control directly influences behavior. Ajzen (2005) said that when behavior control conditions are solid and convincing, individuals have clear information about the behavior in question so that behavioral control strengthens motivation and can directly determine behavior. This statement is supported by the research results conducted by Terry & O'Leary (1995), which found that perceptions of behavioral control influence and can predict behavior.

H₃ : Perceived behavior control has a positive effect on behavioral intention.

Trust in Fundraiser Variabel Variable Concept

In Islamic marketing studies, trust plays an essential role in business relationships. Trust can be built when a sense of personal connection has been created (Choi et al., 2014). Trust will reduce uncertainty (Kim et al., 2009), and trust positively affects purchase intention. It will also affect the world of mouth (Sichtman, 2007).

The role of trust in determining the success of charitable organizations has also been widely discussed in the previous literature (Sargeant and Lee, 2002a, 2002b; Taniguchi and Marshall, 2014). Sargeant and Lee (2002a) show that trust plays a positive role in influencing donation behavior. Research (de Jager, 2017; Burnett, 1992; Sargeant and Lee, 2004; Hou et al., 2017; Saxton, 1995) finds that failure to maintain people's trust can lead to negative consequences, including decreased donations, image damage, or even collapse. The organization. In line with Mohsin (2009), some donors are reluctant to give waqf or cash waqf to mutawallis due to lack of trust and prefer to manage it themselves.

In the context of Islamic banking, Usman (2015) finds that trust has a significant effect on decisions to use Islamic bank services. If in a mutually beneficial business, trust has a very crucial role. Of course, that role will be more dominant in philanthropic issues. In Islam, trust is also termed as al-Amanah. This is an essential concept for Muslims. The verse shows that al-'amanah or Amanah is related to religious rewards and punishments. It is related to faith (faith). If a person fails to fulfill his mandate, then he will sin. As a result, he will not be trusted (Aji et al., 2020).

Shukor (2018) shows that trust in waqf institutions depends on the integrity and reputation of the waqf institution. Sargeant et al. (2006) showed that trust and donation behavior have a related relationship. Kasri and Chaerunisa (2021) show that knowledge, trust, and religiosity play a positive role in online cash waqf intentions among Indonesian millennials.

H₄ : Trust in fundraisers has a positive effect on behavioral intention.

Concept of Islamic Religiosity Variables

Early research on religiosity showed that religiosity is a multidimensional concept that combines aspects such as aspects of cognition, tradition, experience, and behavior (Fukuyama 1961; Glock and Stark 1965). Religiosity is described as a belief in God (McDaniel & Burnett, 1990), also part of the practice of a belief (Arnold et al., 2004).

Religion can determine the values and attitudes of society and individuals (Fam, Waller, & Erdoan, 2004). Religiosity is considered one of the fundamental cultural forces and significantly influences behavior (Delener, 1994; Essoo & Dibb, 2004; Sood & Nasu, 1995). According to Johnson, Larson, De-Li, and Jang (2000), individuals with a higher level of religiosity will maintain a pattern of behavior based on sanctions originating from their religion.

Emmons and Paloutzian (2003) mention that each religion has a unique tradition of giving and places it on altruistic nurturing about charity. Perkins (1992) showed that solid religiosity beliefs motivate one's generosity behavioral intentions. Kasri et al. (2013) found that religion is considered the most potent motivator for charitable giving in Indonesia because donors believe that helping others is an obligation in Islam.

Concerning the relationship between religiosity and waqf behavior, many previous researchers such as Kasri and Chaerunisa (2021), Rizal & Amin (2017), Osman et al. (2016), Sakti et al. (2016), and Shukor et al. (2017), show that religiosity plays an essential role in increasing providing behavioral intentions for cash waqf.

H₅ : Religiosity has a positive effect on behavioral intention.

Waqf Literacy Variable Concept

More (2003) states that individuals are said to be financially literate if they can demonstrate the competence obtained from the knowledge they have learned because literacy is obtained through practical experience with the integration of the knowledge gained. In other literature, financial literacy can be defined as a combination of awareness, knowledge, skills, attitudes, and behaviors needed to make sound financial decisions and ultimately achieve prosperity (OECD INFE, 2011).

The benefits of financial literacy are further supported by research by Lusardi and Mitchell (2007), which shows that those knowledgeable in finance tend to make better financial decisions. According to Vitt (2004), the decision-making process of obtaining good financial literacy aims to develop knowledge, behavior, and positive attitudes. Lusardi and Mitchell (2007) state that when a person's financial literacy is insufficient, individuals will have difficulty following through on their plans. Thus, financial literacy can influence a person's behavior (Hung et al., 2009).

The difference between financial education and financial literacy, according to Potrich (2016), education is the process of developing abilities that facilitate people to make decisions and manage their finances successfully, while financial literacy is the capacity to use the knowledge and abilities acquired. In other words, the focus of financial education is knowledge. In contrast, financial literacy involves knowledge, behavior, and individual behavior in financial matters.

Based on the National Strategy of the Financial Services Authority (OJK) on Indonesian Financial Literacy, people can be said to be literate if they have knowledge and beliefs about institutional finance, products, and services, as well as skills in understanding the features, benefits, risks, rights, and obligations of financial products (Otoritas Jasa Finance, 2017). This is in line with the OECD (2012), Atkinson and Messy (2012), and Agarwalla et al. (2013) stated that financial literacy is focused on three dimensions: financial knowledge, financial attitudes, and financial behavior.

H₆ : Waqf literacy has a positive effect on behavioral intention.

Relationships between variables

Based on the six hypotheses described previously, Attitude, Subjective Norm, Perceived Behavior Control, Trust in the fundraiser, Islamic Religiosity, Waqf Literacy are thought to affect Behavioral Intention in cash waqf. For this reason, this research has a framework as below:

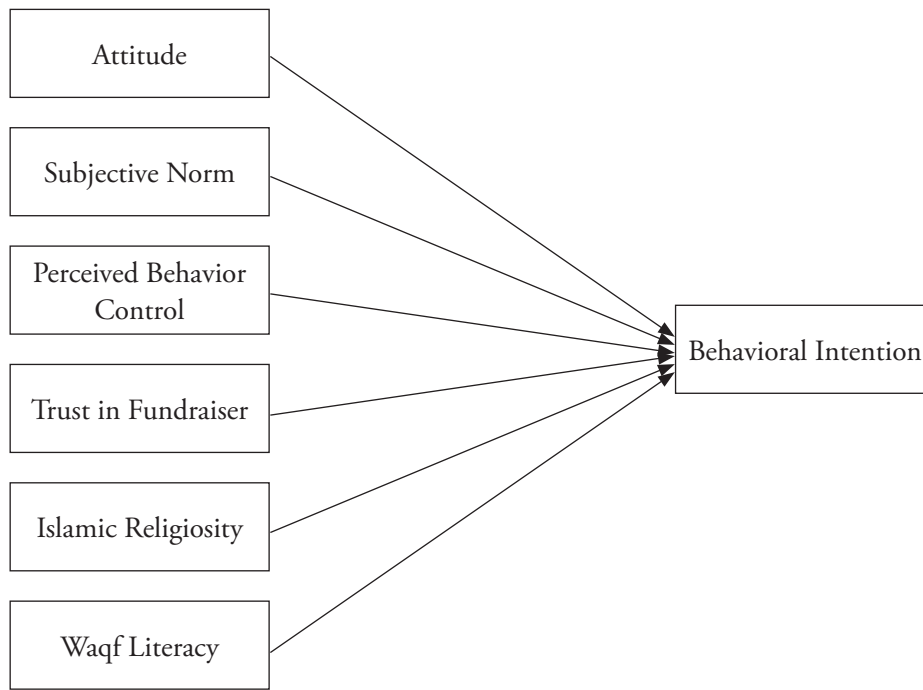


Figure 1. The framework of the study

METHODOLOGY

This study uses the criteria of a Muslim sample and living in Indonesia. The survey was conducted online, starting from March 22, 2021, to April 14, 2021. 438 respondents filled out the questionnaire, but only 436 respondents filled out complete data. Respondents came from Indonesian citizens domiciled in the islands of Papua, Sumatra, Kalimantan, Sulawesi, Java, Lombok, Jakarta, Banten and West Nusa Tenggara.

The sampling technique used was the non-probability sampling method, namely convenience sampling, by only providing an opportunity for some members of the population to be selected as sample members. The analytical method used to test the hypothesis is structural equation modeling (SEM). PLS-SEM is a superior method in social science problems. It is suitable for large and small samples and standard data (Hamdollah and Baghaei, 2016). To meet the needs of this study, researchers need a sample ranging from 30–100 because it uses the Partial Least Square-Structural Equation Modeling (PLS-SEM) analysis method (Ghozali, 2014).

The questionnaire as a whole has a statement of 4 items from the attitude variable adopted from the Aji (2021) and Baber (2020) (2020) research, four items from the subjective norm variable adopted from the Aji (2021) and Baber (2020) (2020) research, three items from the perceived behavioral control variable adopted from Baber’s (2020) (2020) research, four items from the Trust in Fundraiser variable adopted from Usman’s research (2020) and Aji et al. (2020), six items from the Islamic variable

religiosity adopted from Rizal and Amin's research (2017), ten items of the Waqaf Literacy variable adopted from Baskoroputra's research (2019). On the way, there were 2 statement items from the Islamic Religiosity variable that was invalid, so they were discarded, and we reprocessed them.

RESULTS AND ANALYSIS

Results

This study consists of 34.4% male respondents and 65.6% female respondents. In total, the description of the respondents is described in Table 1 below:

Table 1. Respondent demografy

No	Karakteristik Demografik	Total	Percentage
1	Gender		
	Male	150	34.4%
	Female	286	65.6%
2	Age		
	< 20	1	0.2%
	<20	80	18.3%
	>50	78	17.9%
	20-30	122	28.0%
	31-40	125	28.7%
	41-50	30	6.9%
3	Education		
	Diploma/ Bachelor (S1)	229	52.5%
	Doktor (S3)	23	5.3%
	Master (S2)	120	27.5%
	SMA/SMK	63	14.4%
	SMP	1	0.2%
4	Income		
	<Rp1.000.000	134	30.7%
	>Rp10.000.000	45	10.3%
	Rp1.000.000 - Rp3.000.000	76	17.4%
	Rp3.000.000 - Rp5.000.000	70	16.1%
	Rp5.000.000 - Rp7.000.000	58	13.3%
	Rp7.000.000 - Rp.10.000.000	53	12.2%
5	Region		
	Bali dan Nusa Tenggara	4	0.9%
	Jawa	406	93.1%
	Kalimantan	2	0.5%
	Papua	2	0.5%
	Sulawesi	4	0.9%
	Sumatera	18	4.1%

Source: Researcher, 2021

Assessment measurement model (outer loading)

Convergent and discriminant validity testing was tested using loading factors (FL), average variance extracted (AVE), and values composite reliability (CR)(Cheah et al., 2018). The decision value for each measure varies. The FL value must be greater than or equal to 0.70 or more than 0.50, and alpha and CR values between 0.60 and 0.70 are acceptable (Hair et al., 2017). The acceptable AVE value must be 0.50 or greater (Cheah et al., 2018) by comparing the value cross-loading for each construct in the relevant rows and columns (Hair et al., 2017).

Table 2. The variable indicators

Variables		Loading Factors	CR	AVE
Attitude (X1)			0919	0738
A1	Money is a good idea	0877		
A2	Waqf money is preferable	0856		
A3	I believe money waqf will provide benefits for myself	0849		
A4	I am optimistic about the money waqf movement	0855		
Subjective Norm (X2)			0918	0737
SN1	Some people I know think that I have to donate money	0871		
SN2	Some people I know agree that if I donate money	0.832		
SN3	People who can influence my behavior encourage me to donate money	0847		
SN4	My family and friends advised me to donate money for	0883		
Perceived Behavior Control (X3)			0892	0733
PBC1	I think that I will donate money	0.869		
PBC2	The decision to donate money is entirely in my control	0872		
PBC3	The option to fully donate money is in my control	0827		
Trust (X4)			0956	0845
T1	I believe the cash waqf management agency will act honestly	0931		
T2	I believe the money waqf management agency will keep its promises and commitments	0938		
T3	I believe the facilities owned by the money waqf management agency can be relied upon	0926		
T4	I believe that the money waqf management institution guarantees the privacy of its users.	0881		
Islamic Religiosity (X5)			0891	0671
IR1	Money waqf recommended in Islam	0789		
IR3	Cash waqf is one way to "spend" assets in the way of Allah SWT	0.880		
IR5	In Islam, money waqf is a voluntary redistribution of wealth waqf	0803		
IR6	Money gives a multiple of my reward in the hereafter	0801		
Waqf Literacy (X6)			0944	0630
W11	I understand, in general, the concept of cash waqf including movable property waqf	0.729		
W12	I know the legal basis of cash waqf	0789		
W13	I know that Nazir must manage waqf management	0775		

	Variables	Loading Factors	CR	AVE
W14	I know that the management of waqf money must be managed productively	0682		
W15	I know that the management of waqf money must collaborate with LKS PWU (Islamic Financial Institution for Money Waqf Management)	0743		
W16	I know the procedures for becoming a waqf	0822		
W17	I know the procedures for waqf at LKS PWU (Islamic Financial Institution for Money Waqf Management)	0866		
W18	I know my own ability to become waqf	0834		
W19	I know my own ability to produce waqf	0860		
W110	I know the benefits of the management of cash waqf funds for the economy.	0817		
Behavioral Intention (Y)			0922	0797
BI1	I have the intention to donate money in the future	0895		
BI2	I recommend others to donate money	0876		
BI3	I will often donate money in the future	0907		

Table 2 illustrates that all grades *loading factor* is in the range of 0.5 up to 0.7, except for the deleted items for lower factor load, and further analysis was carried out. The values of all constructs indicate the validity, consistency, and accuracy of a good measurement model. According to the specified criteria, discriminant validity was then tested using the *Hetrotrait - Monotrait (HTMT) ratio* (Franke and Sarstedt, 2019). As shown in Table 2, all ratios are within <0.9. These values are found in this range and are described in Table 2.

Table 3. Discriminant validity (HTMT ratios)

	1	2	3	4	5	6	7
1 Attitude							
2 Behavioral Intention	0.791						
3 Islamic Religiosity	0.828	0.645					
4 PBC	0.747	0.612	0.567				
5 Subjective Norm	0.720	0.679	0.644	0.507			
6 Trust	0.558	0.510	0.572	0.436	0.531		
7 Waqf Literacy	0.384	0.626	0.396	0.452	0.477	0.375	

Assessment of the structural model

The estimation of the structural model was carried out through analysis by *boosting*.

Table 4. Test of the hypothesis

Hypothesis	Beta	P Values	Decision
Attitude -> Intention	0.351	0.000	Positive influence
Subjective Norm -> Intention	0.147	0.001	Positive influence
PBC -> Intention	0.119	0.008	Positive influence
Trust in Fundraise -> Intention	0.041	0.298	There is no influence
Islamic Religiosity -> Intention	0.032	0.543	There is no influence
Waqaf Literacy -> Intention	0.295	0.000	Positive influence

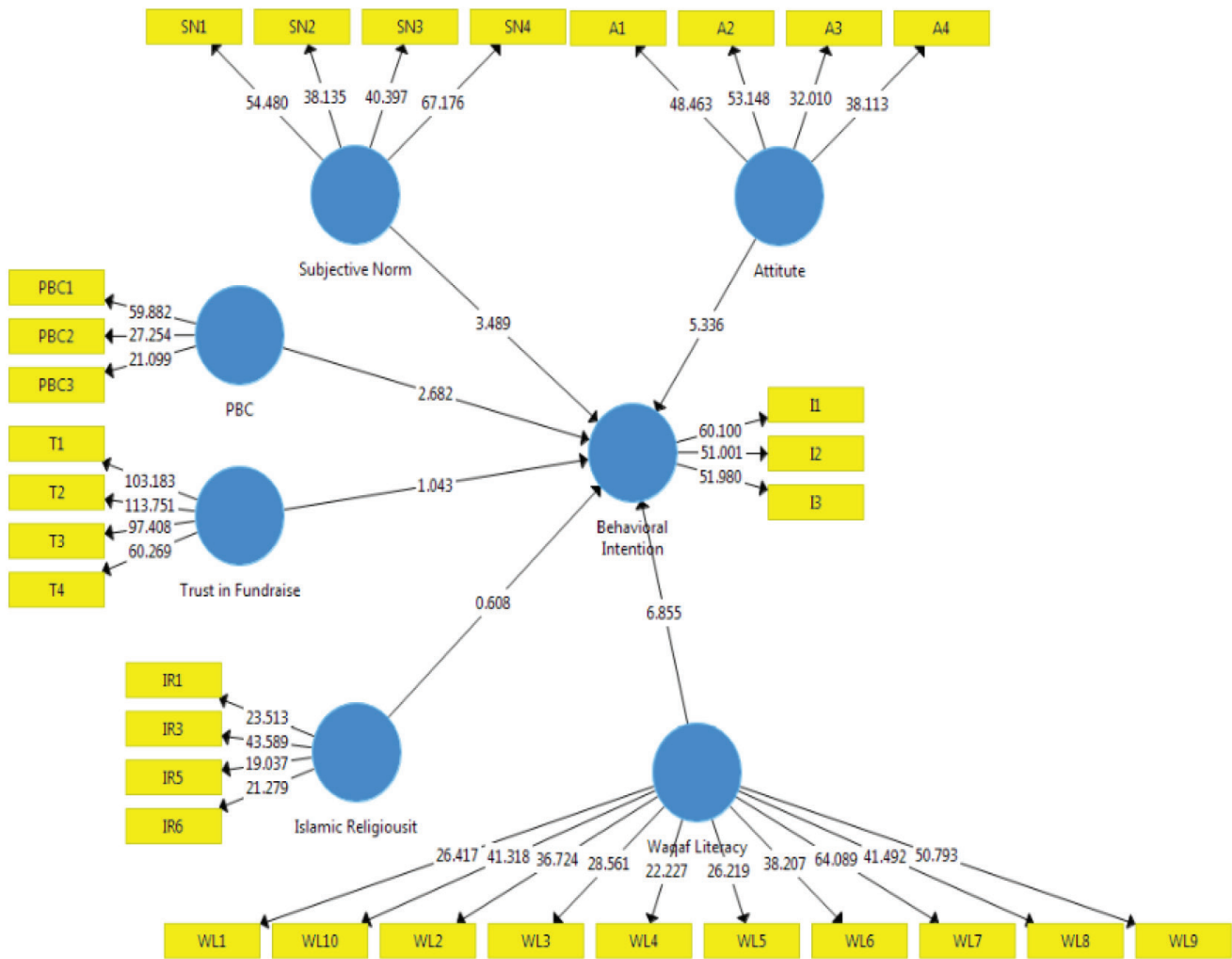


Figure 2. Hypothesis testing model

Testing results show Attitude ($\beta = 0.351$, p -value = 0.001), PBC $\beta = 0.119$, p -value = 0.008), Subjective Norm ($\beta = 0.147$, p -value = 0.001) and Waqf Literacy ($\beta = 0.295$, p -value = 0.000) have a positive effect on Behavioral Intention on 5% probability rate. The results of testing the variables of Islamic Religiosity ($\beta = 0.032$, p -value = 0.543) and Trust ($\beta = 0.041$, p -value = 0.298) show that there is no significant effect on behavioral intention. The value of R2 show all independent variables have contributed to the dependent variable of 60.2%. The value of R2 shows the change in the response variable for the endogenous variables. In addition, the higher the value of R2 will meet predictive accuracy (ranging from 0 to 1) (Hair et al., 2017).

Analysis

In general, the estimation results found that 4 out of 6 hypotheses were accepted (Figure 2). Based on the findings, acceptance of the first hypothesis (H1) indicates a positive and significant effect of attitude on the intention to donate through cash waqf among Muslim communities in Indonesia. This is in line with previous research by Osman (2014), Pitchay et al. (2015), Mutalib et al. (2019), Witjaksono et al. (2019), Alifiandy & Sukmana (2020), Kasri and Chaerunisa (2021), that there is an influence of attitude on intention in the context of cash waqf.

Furthermore, the results of the second hypothesis (H2) indicate a positive and significant effect of subjective norms on the intention to donate through cash waqf among the Muslim community in Indonesia. This is following previous research by Witjaksono et al. (2019), Pitchay et al. (2015).

The third hypothesis (H3) shows a positive and significant effect of perceived moral control on the intention to donate through cash waqf among the Muslim community in Indonesia. This is following previous research by Osman et al. (2016). However, what is interesting in this study is that the fourth hypothesis (H4), the variable Islamic Religiosity, does not affect intention. This is in line with the research results by Aji et al. (2021) that Muslim Instrictic Religiosity does not affect online infaq intentions. However, this contradicts the research results by Osman (2016), Kasri, and Chaerunisa (2021), which state that the Islamic religiosity factor affects the intention to donate cash waqf.

The results of this study show us that being a religious Muslim does not also mean having a solid behavioral intention to donate in the form of cash waqf. This could also be related to the Trust in Fundraise variable hypothesis, which both did not affect intention. In addition, waqf is not required in Islam or is voluntary, so Muslims who have high religiosity do not have solid behavioral intentions in giving cash waqf. Several studies have shown that many Muslims avoid paying obligatory zakat (Abdullah and Sapiei, 2018; Andam and Osman, 2019). Thus, avoiding voluntary ones such as waqf is much more likely, as there is no sin in not doing so.

Interestingly the sixth hypothesis (H6) Waqf Literacy significantly affects intention. This is in line with Baskoroputera's (2019) research, which is interesting to develop indicators or dimensions of Waqf Literacy.

CONCLUSION

Conclusion

Based on the findings in the field, it can be seen that the variables Attitude, Subjective Norm, Perceived Behavior Control, and Waqf Literacy have a positive influence on behavioral intention in cash waqf. Trust in Fundraise, and Islamic Religiosity do not affect behavioral intention in cash waqf.

Recommendation

According to the findings and analysis, waqf institutions should incorporate more Islamic values into their cash waqf products and communicate religious messages about the benefits of cash waqf to the Indonesian people through their websites and social media accounts. In addition, waqf institutions must be more transparent and accountable to maintain and increase trust in their organizations. This study found that the Trust in Fundraise variable and the Islamic Religiosity variable did not affect behavioral intention in cash waqf.

According to the study results, there was a positive influence of the subjective norm variable on the intention of cash waqf. That indicates that it is necessary to maintain and improve related indicators of subjective norm variables, including the influence of family encouragement, close friends in cash waqf. Also, the positive influence of the attitude variable on the behavioral intention of cash waqf, we can make a lesson that an optimistic attitude towards the cash waqf movement included in this attitude variable must be maintained and improved. In addition, the government, in particular, must increase

the dissemination of knowledge about waqf, or waqf literacy, through appropriate campaign programs, primarily through social media, which is often and increasingly used by the people of Indonesia. Thus, it is hoped that the increase in literacy will make the Indonesian people more interested in cash waqf donations.

Further researchers can continue this study with a more prominent sample size coverage, a more comprehensive range of sample groups (diverse people with different ages, professions, and income levels), or a more comprehensive range of observations (covering all provinces in Indonesia, including urban and rural areas). In addition, our recommendation for further research is to improve the current model design and use different analytical tools. In addition, because this study uses a model built entirely from previous research, future research can expand by including additional variables or involving interactions between existing variables. Such a study would shed additional light on the study and implementation of cash waqf in Indonesia and other Muslim countries.

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Determinant Performance of Islamic Equity Funds in Indonesia

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Abstract. One of the issues that have an impact on the growth of Islamic Equity Funds is financial risk tolerance. While it is a fundamental issue that is directly related to Islamic Equity Fund's manager performance. If investment managers perform better to cultivate Islamic Equity Funds, then the intention in investing within Islamic Equity Funds will be increased. This research aims to determine and provide information about Islamic Equity Funds' performance in Indonesia. It used quantitative statistical analysis to investigate the influence of stock selection skills, market timing ability, fund size, fund age, expense ratio, and portfolio turnover towards the Islamic Equity Funds performance. This study used annual data over the periods 2015-2020 which was obtained from the prospectus of each Islamic Equity Fund, Central Bank Indonesia (BI), and Statistics Indonesia (BPS). The result indicates that stock selection skill and expense ratio have a positive significant impact on the performance of Islamic Equity Funds, while market timing ability, fund age, and fund size have not a significant impact but the result revealed positive values. Otherwise, the portfolio turnover has a negative significant impact on Islamic Equity Funds' performance. Hence, it can be inferred that the higher investment managers ability to select its portfolio stock, the better return will be obtained and it can be inferred that the expense ratio of an equity fund reflects how much it pays for portfolio management, administration, marketing, and distribution, among other things.

Keyword: Islamic equity funds, Sharpe ratio, Treynir-Mazuy ratio

JEL Classification: D53, E44, G15, G23.

INTRODUCTION

Background

Islamic Equity Funds have grown significantly in Indonesia over the last few years. From 2015 to 2020, The Net Asset Value has risen around 5,7% in tandem with the rising number of Islamic Equity Funds listed on the Indonesian stock exchange (Financial Services Authority, 2021). According to Pew Research Center (*Pew Research Center*, 2020), Indonesia is home to the world's biggest Muslim population, about 219,960,000 people, or 82% of the total population. This fact is equitable that the presence of Islamic Equity Funds is a necessity for Indonesian people and should be the choice for investment by the public.

Islamic Equity Funds should be viewed as a viable option for investors who previously invested in conventional ones. Many investors invest in Islamic Equity Funds for spiritual reasons, while others regard them as socially responsible investments. Others may invest in Islamic Equity Funds to diversify their portfolios (Zouaoui, 2019). However, until the end of the 2020 fiscal year, the number of investors in Islamic Equity Funds only reached 376 thousand investors, or only 0.1% of the total population. In contrast to other countries, Islamic Equity Funds become most of the people's choice, such as Malaysia, an investor in Islamic equity funds have reached 40% of the total population (Bareksa, 2019).

Financial risk tolerance is one of the issues which affects the growth of Islamic Equity Funds (Widyastuti et al., 2019). It is a fundamental issue that is directly related to Islamic Equity Fund's manager performance (Aljaed et al., 2019). If investment managers perform better to cultivate Islamic Equity Funds, then the intention in investing within Islamic Equity Funds will be increased (Ali et al., 2015). The research on the performance of Islamic Equity Funds is critical in explaining how investment managers should select and develop their investment strategies (Zouaoui, 2019). Therefore, this research aims to determine and provide information about Islamic Equity Funds' performance in Indonesia.

Tan (2015), Papadamou et al., (2017), Rao et al., (2017), and Zouaoui (2019) determined that the performance of investment managers is affected by two abilities: stock selection skill and market timing ability. Islamic equity funds can succeed if managers develop both selectivity and market timing methods (Zouaoui, 2019). The first is stock selection skill, which is the capacity of investment managers to select the appropriate portfolio, the ability to forecast the price fluctuations of specific portfolio stocks (Kabir Biplob, 2017; Low, 2012; Omri et al., 2019). The second is market timing ability, which refers to an investment manager's ability to accurately allocate stocks at the right time (Rao et al., 2017). Market timing refers to the distribution of assets among various forms, which is typically confined to stocks and short-term government debt. The effective market timing ability increases the length of equities in the portfolio before the market rises and lowers the weight before the market goes down (Pilbeam & Preston, 2019).

To accord the empirical work, this research used a measure elaborated by Treynor-Mazuy and added extra variables. Therefore, to determine Islamic Equity Funds performance, certain variables can be considered such as fund age, fund size, expense ratio, and portfolio turnover. Fund age is the number of years since its inception (Amman et al., 2018). The longer investment managers have been established, the better its efficiency (Bai et al., 2019). Furthermore, the period of equity fund will provide investors with a clear image of success, has a longer lifespan, a proven track record, and provide investors with a better overview of results (Kiyamaz, 2018).

Fund size is determined by their total net assets value. The size of assets will provide versatility, enhance bargaining leverage, and lead to the creation of an economic ladder, which has a significant effect on performance (Nguyen et al., 2018). Expense ratio is a comparison of one year's operating expenses to one year's average net asset value (Deb, 2019; Nguyen et al., 2018; Z. Rao et al., 2017). Deb (2019) divided the expense ratio of equity funds into three categories: high, medium, and low expense ratio.

Islamic Equity Funds with the lower expense ratio perform better than the higher one. Then expense ratio has an important role in equity funds performance. Portfolio turnover shows the investment managers' strategy to carry out activities of buying and selling portfolios with high frequency. It shows

the high trading activity of the equity fund, the greater the portfolio turnover rate, the greater the potential return (Rehan, 2020). High trading activity refers to an investment manager's efforts to maximize profits by making deals at the proper time (Cai & Lu, 2019). Investment managers with an active investment style define the performance of an equity fund better than managers with a passive investment style (Kaur, 2018).

Mohamad and Ashraf (2015) "ISSN": "0927538X", "abstract": "This study investigates the determinants of return performance of Islamic equity indices (IEIs investigated Islamic Equity Funds' performance using the Treynor ratio and compared them to their conventional counterparts in various countries. Omri et al., (2019) demonstrated that Islamic Equity Funds outperform conventional equity funds over time due to lower global market risk, fewer capital withdrawals, lower volatility, and investor commitment. Hence, the majority of research on Islamic Equity Funds compares Islamic and conventional counterparts.

Objective

Unlike previous research, to fill the gap, this research aims to evaluate the influence of stock selection skills (Kabir Biplob, 2017), market timing ability (Pilbeam & Preston, 2019), fund size (Basso & Funari, 2017), fund age (Kaur, 2018), expense ratio (Hoepner et al., 2011) and portfolio turnover (Rusmita et al., 2019) towards the Islamic Equity Funds performance. Expected by both Islamic Equity Funds investors and investment managers, so the variable is determined based on later conditions. The paper is organized as follows: Section 2 summarises the relevant literature, while Section 3 explains the data and methodology. Section 4 discusses model results, and Section 5 concludes and provides policy recommendations.

LITERATURE REVIEW

Background Theory

Investment refers to the deferral of individual or institution present consumption for the sake of efficient production for a set length of time (Hartono, 2017). Whereas Sunariyah (2011) defines an investment as a financial transaction in which one or more assets are purchased with the expectation of receiving a return in the future. Assign to the above terminology, it can be concluded that investment is the process of creating capital into various assets over some time to reap future advantages.

The portfolio theory

Considering a consumer with a specific amount of income, the consumer typically faces two major financial decisions. First, how should current consumption be distributed among goods and services. Second, how to choose between different assets to invest in. The consumption-saving decision and the portfolio selection decision are two complementing consumer concerns (Constantinides & Malliaris, 1995). The modern portfolio theory was developed by Harry Markowitz (1952). A portfolio is a collection of assets in which an investor chooses to invest (Petters & Dong, 2016). Selecting the portfolio optimally is a difficult problem that necessitates forecasts on the existing state of the assets under consideration (Seetharaman et al., 2017) huge ethnic diversity, coming from different part of the world. This study aims to gain insights and information into the factors that affect investment planners, financial advisers and individuals need to consider improving their choice of the portfolio and

its performance. People's investment decisions and hence their portfolio, which hitherto has not been tested. Furthermore, it intends to identify the factors that drive investors to choose one investment over another and determine how they make their investment portfolios. The survey was modelled using the smart-pls statistical package (PLS-SEM). Portfolio theory suggests that investors are rational and would construct portfolios that provide the best feasible anticipated return for a given amount of risk.

Capital Asset Pricing Model (CAPM) theory

The Capital Asset Pricing Model (CAPM) is a mathematical model that describes the relationship between systematic risk and expected return for assets, especially equities (Pilbeam & Preston, 2019). The CAPM model is commonly used in finance to price volatile securities and generate predicted returns for assets based on risk and cost of capital (Constantinides & Malliaris, 1995). The Capital Asset Pricing Model (CAPM) was used by Sharpe (1964) to analyze how the relationship between a portfolio return (R_p) and the market portfolio return (R_m). By making a simple regression equation where the dependent variable is the return of an asset and the independent variable is the return of the market portfolio, it will be known how the influence or relationship between the return from the market portfolio and the return of a particular asset will be.

Islamic equity funds

According to Widjaja & Ramaniya (2009), equity funds are a form of investment provision that was established to assist investors who want to engage in the capital market without active interference in capital market procedures, administration, and analysis. This is because equity funds in the form of collective investment contracts and equity funds in the form of corporations are managed by investment managers who have equity fund investors. According to the Capital Market Law number 8-year 1995 article 1, paragraph 27: "Equity funds is a vehicle used by an investment manager to gather funds from the public for investment in a securities portfolio. Similarly, with other means of investment, equity funds in addition to producing a certain profit rate (return) also contain elements of risk that should be considered (Sunariyah, 2011). Terminologically, Islamic Equity Funds is one of the various types in Islamic Equity Funds. It is administered according to Islamic law's terms and principles (Alam et al., 2017). Islamic Equity Funds will not engage in portfolio stocks issued by firms whose management or goods are contrary to Islamic standards (Widyastuti et al., 2020).

The Sharpe ratio

William Sharpe (1966) developed a risk-adjusted performance measure which is commonly used to evaluate a portfolio and investment manager's performance. Sharpe demonstrated that the performance of investment managers may be assessed using a simple theoretically relevant metric that considers both average return and risk. This measure excludes the detection of performance disparities caused purely by objectives differences. Even when performance is measured in this way, there are disparities amongst funds, and these differences do not appear to be completely temporary (Sharpe, 1994). The Sharpe ratio is similar to the Treynor technique that calculates the risk premium per unit of total risk, however, it employs portfolio total risk instead of systematic risk (Tan, 2015) a relief was experienced in related markets following the crisis period. During this 5-year 10-month period, in which the relevant quantitative easing continued, Johannesburg Stock Exchange (JSE).

The Treynor-Mazuy ratio

The ability of investment managers to select the appropriate portfolio is referred to as a stock selection skill. It refers to the manager's ability to predict the price movements of stock investments (Kabir Biplob, 2017; Low, 2012; Omri et al., 2019). The Treynor Mazuy ratio is considered as the standard model to assess fund managers ability to choose stocks and time the market (Rao et al., 2017) whereas for analyzing market timing ability, the Treynor and Mazuy (1966). This ratio was introduced by Treynor and Mazuy (1966). They developed a market timing model, added a quadratic element to the Jensen equation, the square of the market risk premium, and quantified the effects of market timing strategies (Oliveira et al., 2018) 1966; Henriksson & Merton, 1981. Considering investors' profit from both market rise and market fall situations, an investment manager which advocates market timing ability, organizes the portfolio to have a comparatively high beta during a market rise and a generally low beta during a market collapse (Kabir Biplob, 2017).

A significant positive assessment of the coefficient associated with the quadratic term indicates that the fund manager created value to the portfolio by devising a profitable market timing strategy (Rao et al., 2017) whereas for analyzing market timing ability, the Treynor and Mazuy (1966). Depending on whether the overall stock market is growing or decreasing, investment managers can alter the makeup of their portfolios. If investment managers anticipate the market will decline, they will alter their portfolios' allocation from riskier to fewer volatile equities. If an investment manager believes the market is about to crash, they will shift their portfolio in the opposite direction (Tan, 2015) a relief was experienced in related markets following the crisis period. During this 5-year 10-month period, in which the relevant quantitative easing continued, Johannesburg Stock Exchange (JSE).

Fund age

The use of fund age in terms of testing the factor affecting equity funds' performance firstly was conducted by (Golec, 1996). The study explained that fund age is used to know an investment manager's experience, prestige, and the loyalty of its investors. Deb (2019) argued that Funds that have outlasted the industry's competitors for a while should do well. They will almost likely attract stronger managers and demand greater fees.

Fund size

Fund size is defined as the amount size of assets assessed by the net assets value of the Islamic Equity Funds. It will provide flexibility, increase bargaining power and facilitate the creation of economic scale which can impact on reducing costs in equity funds' performance (Nguyen et al., 2018). Firms with a large board size can perform monitoring and supervisory functions more effectively because of the greater shared information (Naveed et al., 2020). Basso & Funari (2017) explained that the importance of including fund size in equity fund performance evaluations derives particularly when the analysis is centered on the perspective of financial investors. Several studies have shown a correlation between size and performance negatively (Phillips et al., 2018). Hassan et al., (2020) show evidence that Islamic investments outperform conventional equity funds when fund size is limited. On other hand, Rokhim & Octaviani (2019) found that there is a negative sign of fund size effect on all types of Islamic Equity Funds in Indonesia.

Expense ratio

The expense ratio is considered to be an important issue in the equity fund industry (Rao et al., 2017). Livingston et.al (2019) argued that expense ratio has a significant impact on equity funds' performance. Equity funds managed by a single manager usually have considerably more concentrated portfolios, perform significantly better, and have higher cost ratios than funds managed by many managers (Goldman et al., 2016). Then, the expense ratio is always related to the performance of equity funds. Furthermore, the cost ratio paid by equity funds is published for the investor to be aware of it to provide transparency to the charges imposed by equity funds. It can be used to measure the amount of investment value issued by investment managers in managing equity funds (Kaur, 2018).

Portfolio turnover

Othman et al., (2018) the portfolio turnover, the fund size and the fund age of Islamic equity funds (IEF explained that portfolio turnover is the frequency of assets purchased and sold divided by the year's average Net Asset Value (NAV). Rehan (2020) defined the portfolio turnover as a financial ratio that shows the organization's efficiency in terms of how much income or revenue it generates by using its assets. The portfolio turnover firstly was introduced by Grinblatt & Titman (1989) which is not subject to survivor-ship bias, is used in conjunction with a sample that contains the actual (net and Droms & Walker (1996) expense ratios, portfolio turnover, and load/no-load status. The data base consists of investment results of 151 equity mutual funds in continual operation over the 20-year period from 1971 to 1990. Variations of the cross-section/time series model are employed to explore the interactions among the nature of the funds (load or no-load to assess the equity fund performance. These were the first large-scale studies to look at the multivariate connection between investment performance and portfolio turnover. The high portfolio turnover indicates that investment managers accurately forecast market developments such as different current concerns, and equity funds with high turnover result in improved performance. However, equity funds with low turnover perform adversely (Grinblatt & Titman, 1989) which is not subject to survivor-ship bias, is used in conjunction with a sample that contains the actual (net.

Muamalat contracts regarding Islamic equity funds

According to DSN MUI Fatwa No. 20/DSN-MUI/IV/2001 Regarding Guidelines for the Implementation of Islamic Mutual Fund Investment, Islamic Equity Funds are Mutual Funds that operate according to the provisions and principles of Islamic Jurisprudence, both in the form of contracts between investors as property owners (sahib al-mal/ Rabb al-Mal) with the Investment Manager as the representative of the shahib al-mal, as well as between the Investment Manager as the representative of the shahib al-mal and the investment users. Islamic Mutual Funds must contain muamalah contracts that are permitted by Islamic law. The principle in contracting must also follow the law that has been determined by Allah SWT. As mentioned in the holy Qur'an Surah An-Nisa verse 29.

يَا أَيُّهَا الَّذِينَ ءَامَنُوا لَا تَأْكُلُوا أَمْوَالَكُمْ بَيْنَكُمْ بِالْبَاطِلِ إِلَّا أَنْ تَكُونَ تِجَارَةً عَنْ تَرَاضٍ مِّنكُمْ وَلَا تَقْتُلُوا أَنْفُسَكُمْ إِنَّ اللَّهَ كَانَ بِكُمْ رَحِيمًا

29. O you who have believed, do not consume one another's wealth unjustly but only [in lawful] business by mutual consent. And do not kill yourselves [or one another]. Indeed, Allah is to you ever Merciful.

According to DSN MUI Fatwa No. 20/DSN-MUI/IV/2001, regarding guidelines for the implementation of Islamic Mutual Funds article 2 paragraph 1 mentioned the mechanism for Islamic Mutual Funds activities. The mechanism that focuses on operations is as follows: (1) Between investors and investment managers, it is carried out using a wakalah system. The wakalah contract system in Islamic Mutual Fund transactions is that the investor gives a mandate to the investment manager to carry out investments for the benefit of the investor, in accordance with the provisions contained in the prospectus. (2) Between investment managers and investors, the mudharabah system is carried out.

The characteristics of the mudharabah system in Islamic Mutual Fund transactions are described in the DSN MUI Fatwa No. 20/DSN-MUI/IV/2001 concerning guidelines for the Implementation of Islamic Mutual Fund Article 2 Paragraph 2: First, the distribution of profits between investors (sahib al-mal) represented by investment managers and investors is based on the proportions that have been agreed by both parties through investment manager as a representative and there is no guarantee of certain investment results to investors. Second, investors only bear the amount of funds that have been given. Finally, the investment manager acts as a representative and does not bear the risk of loss on his investments as long as it is not due to his negligence (gross negligence/tafrith).

Previous Studies and Hypothesis Development

Tan (2015) explains selectivity ability as the ability of investment managers to take advantage of undervalued assets while developing market timing abilities to forecast future market fluctuations. Zouaoui (2019) argued that Islamic Equity Funds' performance is influenced by stock selection skills. Mohammad & Ashraf (2015) suggested that the stock selection is used to comply with Islamic Equity Funds' performance. Ashraf (2013) found that overall, stock selection skill has a positive result in the Saudi Arabian equities. In contrast, conventional equity funds generally reflect a negative stock selection skill. Chen & Lai (2014) suggests a substantial connection between stock selection and equity fund performance. Proficient investment ability results in positive stock selection and as a result, high returns.

Oliveira et al., (2018) explained that investment managers were more effective in selecting undervalued assets in the crisis period than in the pre-crisis period, with a statistically significant and positive parameter being equal in both times. As a result, the more an investment manager's skill to choose portfolio stocks, the greater the return achieved. This suggests that the stock selection skill variable has a favorable influence on the performance of Islamic equity funds. According to the evidence above, the researcher proposes the first hypothesis.

H₁ : Stock selection skill has a significant positive impact on Islamic Equity Funds performance.

Merti et al., (2017) demonstrated that market timing ability has a positive significant influence on the performance of Islamic Equity Funds. The ability to time the market has an impact on the performance of equity funds because market timing abilities are a direct way to find out what portfolio management strategies are being applied by investment managers. Meanwhile, Gusni et al., (2018) demonstrated that market timing skill has no significant impact on the performance of equity funds. On the contrary Sari et al., (2019) indicated that market timing ability affects Islamic Equity Funds performance significantly in Indonesia for the period 2011-2014. The rationalization for this hypothesis, if the investment manager can provide a higher market return, it will adjust portfolio risk in advance of market movements and generate the market timing ability to have a positive impact on Islamic Equity Funds performance. Hence, the second hypothesis for market timing ability is as follows

H₂ : Market timing ability has a positive significant impact on Islamic Equity Funds performance.

Sukmaningrum & Mahfud (2016) conducted a study using fund age as an independent variable toward equity funds in Indonesia, the result indicates that fund age give a positive effect significant on the equity funds' performance. Rao et al., (2017) whereas for analyzing market timing ability, the Treynor and Mazuy (1966) investigated the research on equity fund performance and attributed fund age as an independent variable, the findings revealed a significant influence between equity fund performance and fund size. Kiymaz (2018) observed the performance of Chinese equity funds from 2000 to 2013, using the Sharpe ratio and fund age. Fund age was shown to be considered significant in explaining cross-sectional variance in fund performance. The period of an equity fund will provide investors with a clear image of equity fund success, has a longer lifespan, a proven track record, and provide investors with a better overview of results (Kiymaz, 2018). If the investment manager has more experience than younger managers, then the older equity fund will perform better. This suggests that the fund age has a significant influence on the performance of Islamic Equity Funds. According to the evidence and rationalization above, the third hypothesis for fund age is as follows.

H₃ : Fund age has a significant positive impact on Islamic Equity Funds performance.

Kaur (2018) investigated the correlation between fund size and equity fund performance in India. The findings indicated that fund size had a negative influence on equity fund performance. Chen & Lai (2014) indicated that fund size was significant towards Islamic Equity Funds in the three regressions, the negative sign of those coefficients was consistent with the literature. Also, Devi & Sudirman (2021) highlighted a negative influence of fund size on equity funds, stating that as fund size grows, it becomes more difficult for fund managers to successfully manage operational activities of funds. Moreover, Rokhim & Octaviani (2019) found that the form of fund size harms Islamic Equity Funds performance in Indonesia. According to Hoepner et al., (2011), determining the impact of fund size on Islamic Equity Fund performance could provide further insight into the attractiveness of active Islamic Equity Fund performance. According to the facts presented above, the fourth hypothesis regarding fund size is as follows.

H₄ : Fund size has a negative significant impact on Islamic Equity Funds performance.

According to Rehan (2020), the investment returns of Islamic Equity Funds are higher than those of conventional funds, while the expenses of conventional funds are higher than those of Islamic Equity Funds. Marzuki & Worthington (2015) conducted a research comparison between Conventional Equity Funds and Islamic Equity Funds' performance in Malaysia. According to the findings, both conventional and Islamic Equity Funds have a strong favorable association between expense ratio and equity funds' performance. Meanwhile, Nguyen et al., (2018) confirm that the expense ratio was a statistically positive significant influence on the equity funds' performance. Goldman et al., (2016) indicated that expense ratio has a negative impact on equity funds' performance (which is intuitive). Whether large or small expenses are committed, it would have an impact on the investment returns provided to investors. This suggests that the expense ratio has a positive impact on the performance of Islamic Equity Funds. According to the facts presented above, the fifth hypothesis for expense ratio is as follows.

H_5 : Expense ratio has a positive significant effect on Islamic Equity Funds performance.

Equity funds with a high portfolio turnover imply that their investment managers buy and sell entire portfolios regularly (Marzuki & Worthington, 2015). The high portfolio turnover might be regarded by investment managers as a sign of their efforts to add value to the fund's portfolio by spotting undervalued or overvalued assets and making market timing purchase and sell decisions. (Mingo-lópez & Matallín-sáez, 2013). Galagedera et al., (2018) investigate the resource management (included expense ratio and portfolio turnover) toward equity funds' performance in the United States, the result revealed that resource management has a positive significant effect on equity funds' performance. Kiyamaz (2018) found that portfolio turnover affects equity funds' performance significantly. Also, Sari et al., (2019) showed that there is a positive significant effect between portfolio turnover and Islamic Equity Funds.

Amman et al., (2018) examined the effect of portfolio turnover on equity fund performance in Finland, the result indicates that portfolio turnover has no significant effect on equity funds' performance. Investment managers with active investing techniques will outperform managers with passive investing styles in terms of Islamic Equity Funds performance. This shows that the portfolio turnover has a positive influence on equity fund performance and implies that Islamic Equity Funds with a high portfolio turnover outperform those with a low portfolio turnover. Based on the evidence and rationalization above, the sixth hypothesis for the portfolio turnover is as follows.

H_6 : Portfolio turnover has a positive significant impact on Islamic Equity Funds' performance.

Conceptual Framework

Based on the concept built before, we can construct the theoretical framework of this study, which is given in the picture below.

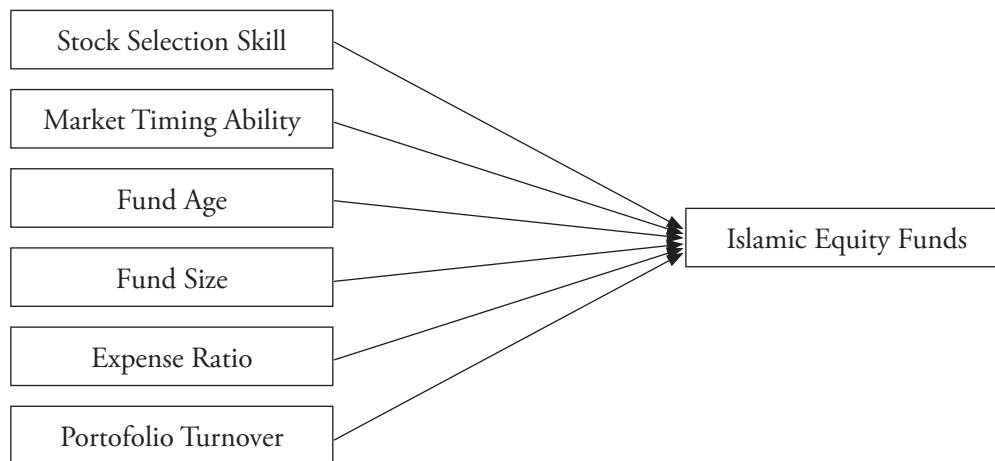


Figure 1. Conceptual framework of the study

METHODOLOGY

Data

This research involves quantitative statistical analysis. According to Punch (1993) cited by Syahrums & Salim (2012), quantitative research is a systemic analysis of phenomena using quantifiable data and statistical, mathematical, or computational tools. This study was used empirical data and analyzed by panel data regression and the result is expected could provide any evidence related to which instruments effectively affecting the Islamic Equity Funds performance. This research's data were obtained from the prospectus of Islamic Equity Funds as well as official websites such as BPS (Statistics Indonesia), BI (Central Bank of Indonesia), Pasar Dana, and Financial Service Authority.

Overall, this research involved panel data and the E-Views 9 software package was used for analysis. Also, this study occupied the population from Islamic Equity Funds registered on the Indonesian Stock Exchange (IDX). Equity funds are a good choice for investors because they have a higher potential for investment value who understand the risks as well as the potential for larger investment value increases (Zouaoui, 2019). The secondary data obtained from the annual report of Islamic Equity Funds published by the Financial Service Authority (OJK) The research sample is selected using the purposive sampling method. According to Suharyadi (2016), purposive Sampling is defined as a method of selecting a sample based on certain considerations and focusing on a specific purpose.

Operational Definition of Variables

Dependent variable

Islamic Equity Funds performance is measured using the Sharpe ratio. Sharpe ratio, as opposed to the systematic risk represented by a beta factor, quantifies the overall risk of a portfolio using standard deviation. Sharpe proposed the reward-to-variability ratio (Kabir Biplob, 2017). This ratio effectively shows the risk premium return on total risk per unit of risk.

The formula is as follows:

$$\text{Sharpe Ratio} = \frac{R_p - R_f}{\sigma_p}$$

Where:

R_p = return of the portfolio

R_f = risk-free rate

σ_p = standard deviation of the portfolio's excess return

Independent variable

a. Stock selection skill and market timing ability

Alexandri (2015) argued that stock selection skill refers to an investment manager's ability to choose and construct a portfolio of assets that are projected to produce future returns. Ramayanti & Purnamasari (2018) explained that market timing ability refers to the ability of investment managers to make adjustments for asset portfolios to anticipate changes or movements in general market prices.

The formula is as follows:

$$R_p - R_f = \alpha + \beta_1(R_m - R_f) + \beta_2(R_m - R_f)^2 + \varepsilon_p$$

Where:

R_p = Return on portfolio

R_m = Return from the stock market.

R_f = Return for risk-free assets.

α = Intercept which is an indication of stock selection skill

β_1 = Excess market return or slope regression coefficient when the market is down (bearish)

β_2 = Regression coefficient which is an indication of the market timing ability

ε = random error

b. Fund age

To account for the influence of fund age on performance, all models contain a variable fund age that is calculated through research periods minus inception date (in years) (Ringov, 2017). Newer funds may experience much greater costs during their inception period, fund age may have a factor in determining performance. This is because of the marketing costs, as well as the fact that the first cash flows will put a heavier strain on the funds' transaction costs. (Asad & Siddiqui, 2019).

The formula is as follows:

$$Fund\ age = Re_p - I_d$$

Where:

Re_p = Research Period

I_d = Inception Date

c. Fund size

Equity Fund wealth can be recognized by Net Asset Value (NAV). The larger the company's economies of scale, the more the size of the company (Boo et al., 2017). Fund size is taken from financial statements within the annual prospectus of Islamic Equity Funds.

$$Fund\ size = Ln (NAV)$$

Where:

NAV = Net Asset Value

Ln = Log Natural

d. Expense ratio

According to Rao et al., (2017), Livingston et al., (2019), and Maftukhah (2020), equity funds are classified into three types of fees to be paid: The first is the management fee paid to investment advisors. The second is costs other than administrative costs originating from record provisions keeping and transaction services to shareholders. The third is the cost known as the 12-b fee which is a regulation issued by the Securities Exchange Commission (SEC) which regulates the costs allocated to advertising, marketing, and distribution services. The expense ratio compares equity funds' operational costs to the total expense handled. This ratio compares the annual expenses incurred by investors. (Nguyen et al., 2018).

$$Expense\ Ratio = \frac{Te_t / NAV}{N}$$

Where:

TE = Total Expense

t = Periods

NAV = Net Asset Value

N = Number of periods

e. Portfolio turnover

Portfolio turnover measures the level of activity of investment managers in buying and selling assets which can describe changes in portfolio content as an effort to anticipate market changes (Devi & Sudirman, 2021). Portfolio turnover is measured by the smallest assets purchased and sold in comparison to average net asset values (Marzuki & Worthington, 2015).

$$Portfolio\ turnover = \frac{\min(Ag_{buys}\ or\ Ag_{sells})}{NAV} \dots \text{(Borochin \& Yang, 2017)}$$

Where:

Min = minimum

Ag_{buys} = Average of buying portfolio

Ag_{sells} = Average of selling portfolio

NAV = Net Asset Value

Model Development

The model developed in this study is as follows

$$\gamma(SR)_{it} = \beta_0 + \beta_1 X_1 (SS)_{it} + \beta_2 X_2 (MT)_{it} + \beta_3 X_3 (Age)_{it} + \beta_4 X_4 (Size)_{it} + \beta_5 X_5 (ER)_{it} + \beta_6 X_6 (TR)_{it} + \varepsilon_{it}$$

Where:

SR = Sharpe Ratio (Islamic Equity Funds performance)

$SIZE$ = Fund Size

SS = Stock Selection Skill

ER = Expense Ratio

MT = Market Timing Ability

TR = Portfolio turnover

AGE = Fund Age

ε = random error

Data Analysis Method

Panel data regression estimation model

Basuki & Prawoto (2016) explained that panel data regression is a form of regression that makes use of a panel or data pool made up of time series and cross-section data. The panel regression process needs to go through all of the phases of obtaining the best model estimate. The panel data model should be estimated in three ways: the common effect model, the fixed effect model, and the random effect model. These are used to choose the optimal model for panel data regression. The tests used to identify those three models are Chow test, Hausman test, and Lagrange Multiplier Test.

Then, according to Winarno (2015), the coefficient of determination (R^2) is a metric used to assess the appropriateness or correctness of the relationship between the independent and dependent variables in a regression equation. The value of the coefficient of determination ranges from 0 to close to 1. The T statistic test is used to determine whether or not an independent variable influences the dependent variable. Deciding with a significance level of $\alpha = 0.05$. If the significance level t is more than 0.05, H_0 is accepted; if the significance level t is less than 0.05, H_0 is rejected (H_1 is accepted) (Winarno, 2015).

RESULTS AND ANALYSIS

Results

Descriptive statistics

Descriptive statistics is the analysis to describe the data phenomena comprising mean, maximum, minimum, and standard deviation (Basuki & Prawoto, 2016). In other words, descriptive statistics are used to understand the data distribution characteristics. The following table shows panel data statistics from the entire sample of this study with total of 90 observations consisting of 15 investment managers within 6 years.

Table 1. Descriptive statistics

	Y1	X1	X2	X3	X4	X5	X6
Mean	-0.188078	-0.009825	-18.84962	7.700000	1.91E+11	0.040807	1.535389
Median	-0.131706	-0.009000	-2.23650	8.000000	8.65E+10	0.039500	1.025000
Max.	0.923174	0.726000	343.455	14.00000	1.59E+12	0.114000	10.04000
Min.	-4.049849	-0.530000	-144.900	1.000000	1.18E+09	0.017400	0.080000
Std. Dev.	0.513036	0.111278	171.2685	3.326604	2.74E+11	0.015162	1.497454
Skewness	-4.772739	1.923183	-6.819726	-0.061434	2.499400	1.799062	2.889375
Kurtosis	37.15275	27.71749	56.68854	1.976624	10.27543	8.642649	14.55021
Observe	90	90	90	90	90	90	90

Table 1 displays the various variable descriptions utilized in this investigation. Islamic Equity Funds performance (Y1) which is measured by Sharpe Ratio obtain a mean value of about -0,188078, median -0,131706, the maximum value 0,923174, the minimum value -4,049849, and the standard deviation about 0,513036. With this result, it is clear that the best performance of Islamic Equity Funds in this

research period was recorded at 0,923174. Stock selection skill (X1) which is measured using Treynor-Mazuy ratio, shows that the capacity of investment managers of Islamic Equity Funds to select assets to create a portfolio that is projected to produce the expected return in the future varies across the 2015–2020 timeframe.

Market timing ability (X2) which was also measured using the Treynor-Mazuy ratio, suggests that Islamic Equity Funds in Indonesia have a substantial difference in their capacity to select the optimal moment to acquire or sell stocks and shares from an Islamic Equity Funds portfolio. The expense ratio (X5) which is seized from the prospectus of each Islamic Equity Funds, indicates that the expense ratio of Islamic Equity Funds in Indonesia has various percentages. In general, the higher the expense ratio obtained, the higher the costs will affect the Islamic Equity Fund's performance. Moreover, portfolio turnover is the most appropriate indicator in measuring the aggressiveness of equity fund management by the Investment Manager. The greater the portfolio turnover indicates the more aggressive portfolio management by the Investment Manager and vice versa.

Panel data regression estimation model

Before doing the Hausman test, the Chow test was used to select an appropriate model from the Fixed Effect Model (FEM) and the Common Effect Model (CEM). The following hypotheses were tested:

H_0 : *Common Effect*

H_1 : *Fixed Effect*

If H_1 is accepted and the probability value is less than 0,05, the fixed effect model (FEM) is the appropriate model to use. If the probability value is greater than 0,05, H_1 is rejected, and the common effect model (CEM) is the best alternative. The results of the likelihood ratio test to determine whether to employ a fixed effect model or a common effect model are shown in the table below:

Table 2. Results of likelihood ratio test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	0.974950	(14,69)	0.4874
Cross-section Chi-square	16.244985	14	0.2986

Based on the likelihood ratio test findings, the probability value of cross-section F is greater than 0,05, implying that the common effects model (CEM) is the appropriate model to use for this research. Because the common effect model is the appropriate model for this research, the Hausman test is not examined (Basuki & Prawoto, 2016).

Multicollinearity test

The correlation coefficient between the independent variables can be used to detect multicollinearity. If the correlation coefficient value is $< 0,8$, it can be concluded that there is no multicollinearity (Gujarati, 2009). According to table 3, the result of the correlation coefficient value indicates that there is no variable with a correlation value more than 0,8 so it can be concluded that multicollinearity problems are not detected.

Table 3. Results of multicolleration test

	X1	X2	X3	X4	X5	X6
X1	1.000000	-0.109105	0.070723	0.021539	-0.087235	-0.073749
X2	-0.109105	1.000000	0.140152	0.066497	0.099898	0.090836
X3	0.070723	0.140152	1.000000	0.262925	0.035998	0.262504
X4	0.021539	0.066497	0.262925	1.000000	-0.252884	-0.208272
X5	-0.087235	0.099898	0.035998	-0.252884	1.000000	0.633840
X6	-0.073749	0.090836	0.262504	-0.208272	0.633840	1.000000

Heteroskedasticity test

The heteroskedasticity test determines whether there is a variance inequality between the residuals of one observation and the residuals of another observation in the regression model. White heteroskedasticity-consistent standard errors and covariance can be used to calculate the Heteroskedasticity test. White (1980) proposed a test for heteroskedasticity of unknown form using the matrix approximation as a starting point. The following table shows the result of heteroskedasticity-consistent standard errors & covariance:

Table 4. Results of white heteroskedasticity-consistent standard error & covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.139586	0.099254	1.406360	0.1634
X1	-0.238550	0.675288	-0.353257	0.7248
X2	-1.69E-05	7.60E-05	-0.221678	0.8251
X3	-0.012397	0.012197	-1.016398	0.3124
X4	2.91E-14	8.91E-14	0.327088	0.7444
X5	0.693813	2.644994	0.262312	0.7937
X6	0.120442	0.081148	1.484222	0.1415

According to table 4, the result of heteroskedasticity-consistent standard errors & covariance indicates that there is no variable with a probability value less than the level of significance (0,05). So, it can be concluded that heteroskedasticity problems are not detected.

F-Statistic test

The F-statistics test is used to assess the influence of all independent variables on the dependent variable at the same time. The level of significance is 5%. The regression equation is used to test the effect of all independent variables such as stock selection skill, market timing ability, fund age, fund size, expense ratio, and portfolio turnover towards Islamic Equity Funds performance as the dependent variable.

Table 5. F-Statistic test results

F-statistic	2.740063
Prob(F-statistic)	0.017684

According to table 5, the F-statistical probability result is 0,017648 or less than 0,05. As a result, it is possible to infer that all independent factors in this research had a substantial effect on the dependent variable at the same time.

Adjusted (R²) square

According to Winarno (2015), the coefficient of determination (R²) is a metric used to assess the appropriateness or correctness of the relationship between the independent and dependent variables in a regression equation. The value of the coefficient of determination ranges from 0 to close to 1.

Table 6. Coefficient of determination test results

R-squared	0.165329
Adjusted R-squared	0.104991

The obtained coefficient of determination is 0,165329. This indicates that the sum of all independent variables' contributions to explaining the dependent variable is 16.5 percent. It may be inferred that the remaining 83,5% is explained by factors outside of the model.

T-Statistic test

The T-test statistic was used to see if the independent factors could explain and affect the dependent variable (Winarno, 2015). Independent variables are considered to be significant if the probability value is less than the significance threshold, which is less than or equal to 0.05.

Table 7. T-Statistic test results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.349873	0.210682	-1.660668	0.1006
X1	1.216197	0.469124	2.592485	0.0113
X2	-1.86E-05	0.000307	-0.060596	0.9518
X3	-0.002430	0.017360	-0.139974	0.8890
X4	7.85E-14	2.05E-13	0.382665	0.7029
X5	9.249924	4.500161	2.055465	0.0430
X6	-0.130467	0.047449	-2.749639	0.0073

Table 7 shows the t-test result in this research. According to the estimation of the t-test through the Common Effect Model, not all hypotheses are empirically supported. Only three variables are significant with the probability value less than 0,05, there are stock selection skill (X1) towards Islamic Equity Funds performance with probability value 0,0113, expense ratio (X5) towards Islamic Equity Funds performance with probability value 0,043, and portfolio turnover (X6) towards Islamic Equity Funds performance with probability value 0,0073.

Robustness Test

To further substantiate the findings on Islamic Equity Funds' performance, as well as to provide more light on the issues under consideration, we perform additional analyses. We employ the Treynor Ratio developed by Jack Treynor (1965) which calculates the excess return above the risk-free investment for each unit of market risk and calculates risk-adjusted return based on systematic risk. It is an alternative ratio to measure Equity Funds' performance.

$$Treydor\ Ratio = \frac{Rp - Rf}{\beta}$$

Where:

Rp = return of the portfolio

Rf = risk-free rate

β = Beta or the systematic risk of the portfolio.

The results are presented in Table 8.

Table 8. T-Statistic test results using Treynor ratio

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.012159	0.043138	-0.281854	0.7788
X1	-0.195449	0.075796	-2.578608	0.0117
X2	-7.59E-05	4.97E-05	-1.528687	0.1301
X3	0.004943	0.003441	1.436498	0.1546
X4	-7.72E-15	4.25E-14	-0.181900	0.8561
X5	-0.091942	0.831351	-0.110593	0.9122
X6	-0.007615	0.008406	-0.905848	0.3676

According to table 8, the results reconfirm that stock selection skill has a significant impact on Islamic Equity Funds' performance. In agreement with the original result, the coefficient of market timing ability and portfolio turnover revealed negative. Otherwise, the coefficient of expense ratio revealed a negative and insignificant effect on Islamic Equity Funds' performance. While there are a few dissimilarities, the results, in general, do not upend the previous finding.

Analysis

Panel data regression analysis aims to determine the effect of Stock Selection Skill, Market Timing Ability, funds age, funds size, expense ratio, and portfolio turnover partially towards the performance of Islamic Equity Funds in Indonesia. The outcomes of panel data regression use the common effect model (CEM).

The following regression equation is obtained:

$$\gamma_{it} = \beta_0 (-0.349873) + \beta_1 X_{1it} (1.216197) + \beta_2 X_{2it} (-0.000018619) + \beta_3 X_{3it} (-0.002430) + \beta_4 X_{4it} (0.0000000785) + \beta_5 X_{5it} (9.2499) + \beta_6 X_{6it} (-0.13047) + \varepsilon_{it}$$

Where:

γ_{it} = Islamic Equity Funds performance

$\beta_4 X_{4it}$ = Fund size

$\beta_1 X_{1it}$ = Stock selection skill

$\beta_5 X_{5it}$ = Expense ratio

$\beta_2 X_{2it}$ = Market timing ability

$\beta_6 X_{6it}$ = Portfolio turnover

$\beta_3 X_{3it}$ = Fund age

The stock selection skill (X1) has a probability value of 0,0113 and a regression coefficient of 1,216. The significance level is lower than 0,05 (0,0113 < 0,05). This finding suggests that stock selection skill (X1) has a positive significant impact on the performance of Islamic Equity Funds. Therefore, the hypothesis which proposed stock selection skill has a positive significant impact on the performance of Islamic Equity Funds is accepted. This study is in line with the research conducted by, Omri et al., (2019) and Zouaoui (2019) who denoted that Islamic Equity Funds performance is influenced by stock selection skills, which is the capacity of investment managers to select the

appropriate portfolio. Besides, it supports research carried out by Ferson & Mo (2016) about there is a significant effect of selectivity skills towards equity funds' performance and confirm research written by Mohammad & Ashraf (2015) "ISSN": "0927538X", "abstract": "This study investigates the determinants of return performance of Islamic equity indices (IEIs, Mustofa & Kusumawardani (2016), Putri et al., (2016) and Sari et al., (2019) mutual funds syariah selected by investors because it is cheap, easy and \"managed by the experts\". This research analysed do stock selection skill, market timing ability, Turnover ratio and Cashflow can influence the performance of equity mutual funds syariah in Indonesia. The data used in this research are data on financial statements, Net Asset Value (NAV who declared that the Islamic Equity Funds performance is effected by stock selection skills which measured by Treynor-Mazuy ratio. Hence, it can be inferred that the higher the investment manager's ability to select its portfolio stock, the better the return obtained (Tan, 2015) a relief was experienced in related markets following the crisis period. During this 5-year 10-month period, in which the relevant quantitative easing continued, Johannesburg Stock Exchange (JSE). Overall, the data indicate that the stock selection skill variable has a positive significant influence on the performance of Islamic Equity Funds.

Market timing ability (X2) has a probability value of 0,9518 and a regression coefficient of -0,000018619, the p-value is more than 0,05 (0,9518 > 0,05). This result shows that market timing ability has no significant effect on the Islamic Equity Funds Performance. Therefore, a hypothesis that proposed market timing ability has a positive significant impact on the performance of Islamic Equity Funds is rejected. This study is related to the work of Ahsraf (2013) and Zouaoui (2019) who conducted a study regarding market timing ability performance of Islamic Equity Funds by using the Treynor-Mazuy model.

The finding of this study is contrary to the previous study conducted by Mansor et al., (2015), Merti et al., (2017), and Pillbeam & Preston (2019) where those research indicated that market timing ability has a positive significant effect on the Islamic Equity Funds performance. Market timing ability has an impact on the success of equity funds since it is a direct method to learn about the portfolio management tactics used by investment managers (Rao et al., 2017). Besides, it supports research carried out by Gusni et al., (2018) and Juniar & Rachmah (2018) who found that market timing ability has no significant effect on Islamic Equity Funds performance in Indonesia.

Fundamentally, the investment managers of Islamic Equity Funds in Indonesia not only optimize return (yield) but also ensure that the transactions are conducted following Sharia compliance. As a result of this potential, market timing theory is believed to be difficult to apply to Islamic Equity Funds (Anita, 2013). This irrelevance of investment managers' timing abilities may be ascribed to the fact that the flow of funds to Islamic Equity Funds is consistent since investors are less sensitive to market performance and selection skills of investment managers with a long-term perspective (Ashraf, 2013).

The probability value of Fund Age (X3) is 0,8890, and the regression coefficient is -0,002430. The probability value of fund age is hence greater than 0,05 in this case. This study indicates that the fund age (X3) has a negative and insignificant influence on the performance of Islamic Equity Funds. The results of this study are in line with the opinion of Bai et al., (2019), equity funds with a longer lifespan will have a longer track record, then it will be able to give a better performance for its investors. The age of the equity fund reflects the experience of the manager's investment in managing the equity fund.

The longer the age of the equity fund, the investment manager will be more experienced in managing the portfolio (Bani Atta & Marzuki, 2019). This seems to be consistent with the findings of Asad and Siddiqui (2019), who discovered that fund age had a positive result on equity fund performance. Fund age is indeed important, however, that does not mean that equity funds that have a long life will always be better than new equity funds. Therefore, previous performance by investment managers of Islamic Equity Funds is not a guarantee that it will be reproduced in the future. As a result, the idea that suggested fund age having a beneficial influence on Islamic Equity Fund performance is denied.

Fund size (X4) has a probability value of 0,7029 and a regression coefficient of 0,0000000785, it can be concluded that the probability value of the fund age variable is more than 0,05. This result shows that fund size (X4) has no significant effect on the Islamic Equity Funds Performance. This study is in line with the opinion of Nguyen et al., (2018), who explained that fund size is defined as the amount size of assets of Islamic Equity Funds. It will provide flexibility, increase bargaining power and facilitate the creation of economic scale which can impact on reducing costs in case of impact positively on equity funds' performance.

The larger the asset is managed, the more flexibility, bargaining power, and the ease with which economies of scale may be created resulting in cost savings and generated negative influence on equity performance (Bai et al., 2019). However, the result of this study revealed a positive effect between fund size towards Islamic Equity Funds' performance. Instead of the result shows that there is no significant impact between size and performance.

This finding is contrary to Chen Lai (2014), Kaur (2018), and Rokhim & Octaviani (2019), who found that fund size has a negative significant effect on Islamic Equity Funds. Also, the results of this study contradict the research results of Dharmastuti & Dwiprakas (2017), Asriwahyuni (2017), and Savitri (2019). On the other hand, these results support research conducted by Hermawan & Wiagustini (2016), Phillipps, et al., (2018), and Gusni et al. (2018) who concluded that the size of a fund has no direct impact on equity funds' performance.

This suggests that the size of the equity fund has no impact on the investment manager's success in managing the equity fund, and so instead of neither or nor. Because of this minor effect, the equity fund's size cannot be utilized as a guide for investors considering equities funds. Based on the results shown above, it can be inferred that large funds tend to not correlate with higher performance, it is possible to conclude that the performance of an Islamic Equity Fund does not always correlate with a large size, but it could be the result of a large investment activity well planned and executed by the investment manager so that people trust their funds. Therefore, it is possible that equity funds which have a small net asset value can produce a good performance. As a result, the hypothesis that proposed fund size has a negative substantial influence on Islamic Equity Fund performance is rejected.

Expense ratio (X5) has a probability value of 0,043 and a regression coefficient of 9,2499, the significance value is less than 0,05 ($0,043 < 0,05$). This finding suggests that the expense ratio (X5) has a favorable and significant impact on the performance of Islamic equity funds. This study is in line with the research conducted by Rehan (2020) who explained the role of expense ratio in the way to cultivate the returns on investment of Islamic Equity Funds. An equity fund's expense ratio indicates how much it pays for portfolio management, administration, marketing, and distribution, among other things (Naveed, Khawaja, et al., 2020).

The lower the expense ratio, the more efficient and effective the Investment Manager is in carrying out its duties as an investment manager of equity funds (Sukmaningrum et al., 2016). Besides, the result supports research carried out by Marzuki & Worthington (2015) who discovered a strong positive connection between fund costs and fund performance in both conventional and Islamic Equity Funds and confirm research written by Nguyen et al., (2018) who stated that expense ratio had a statistically positive significant impact on equity fund performance. As a result, the hypothesis that suggested expense ratio has a positive influence on the performance of Islamic Equity Funds is accepted.

According to the result of this study, the portfolio turnover (X6) has a probability value of 0,0073 and a regression coefficient of -0,13047; the significance value is less than 0,05 ($0,0073 < 0,05$), but the regression coefficient result is revealed negative. This finding suggests that the portfolio turnover (X6) has a negative and significant impact on the performance of Islamic Equity Funds. This study is aligned with the research ideas from Livingston et al., (2019) who mentioned that equity funds with more active strategies and greater turnover rates have significantly wider performance than equity funds with lower portfolio turnovers or more passive methods.

The high portfolio turnover might be regarded by investment managers as a sign of their efforts to add value to the fund's portfolio by spotting undervalued or overvalued assets and making market timing purchase and sell decisions. (Mingo-lópez & Matallín-sáez, 2013). Also, this result of this study is contrary to the research conducted by Kiyamaz (2018) Kaur (2018), and Da Silva et al., (2020) who discovered that portfolio turnover has a major influence on the performance of equity funds. Besides, it supports research carried out by Carhart (1997) and Wu (2014) about the portfolio turnover has a negative and considerable influence on equity fund performance. Also, Rao (2011) and Satrio & Mahfud (2016) found that portfolio turnover has a negative influence and is not statistically significant. Equity fund performance is strongly and negatively connected to equity fund expense and portfolio turnover. According to Carhart (1997), refers to their research, portfolio turnover has a negative significant influence on equity funds' performance. Wu (2014) discovered that equity funds with a greater turnover and fee ratio have poorer fund returns.

Moreover, the study discovered that underperforming funds had a greater portfolio turnover, implying that turnover is one of the deciding factors in fund performance. Furthermore, high turnover funds have the highest expenditure, while low turnover funds have the lowest. Rao (2011) proposed that increasing the portfolio turnover would result in improved fund performance, suggesting that large portfolio turnover percentages do not always boost fund performance over a lengthy period. According to Chow et al., (2011) the larger the turnover, the better the performance.

However, turnover has a substantial negative impact on performance in the portfolio with the lowest performance. That is, the larger the turnover, the worse the performance of the lowest-performing stock funds. This indicates that for low-performance fund managers, more trading means moving from bad to worse. Also, Satrio & Mahfud (2016) argued that portfolio turnover arise more costs from the activity of buying and selling portfolios managed by investment managers. The more investment-making transactions, the higher the turnover rate and will appear. In the end, the turnover fee will have a significant effect on the potential profit of the funds invested. As a result, the hypothesis that the suggested portfolio turnover has a beneficial influence on Islamic Equity Fund performance is rejected (H6 is not supported).

CONCLUSION

Conclusion

According to the overall result of this study, it can be concluded that every investor has a similar objective of investment such as maximum returns, risk exposure, return on investment, and capital cost. As a result, the return on investment can differ significantly from the return in the market and can differ based on the investor's area. The investment managers always covering some decisions in managing their funds that affect simultaneously investors' behavior to do an investment in Islamic Equity Funds. The diversity of financial assets in a portfolio is referred to as portfolio diversification (bank deposits, savings certificates, treasury bills, stocks, bonds, equity funds). Then, it can be concluded that Islamic Equity Funds is a diversified portfolio of financial assets. Islamic Equity Funds with a considerably greater portfolio concentration, both across and within industries, tend to have a lot higher portfolio concentration. Investment managers managing client funds to invest in portfolios need to know the risks and returns of their clients. Diversifying the portfolio of an equity fund will reduce risk because the investment managers must deviate from Net Asset Value (NAV) in various types of securities.

A systematic approach is required to reduce risk and, to the greatest extent possible, eliminate the negative impact that emotion, behavior, and excessive fees and taxes have on overall investment performance, while also defining how investment opportunities and investment managers will be identified. The capital Asset Pricing Model (CAPM) is related to the Treynor-Mazuy ratio. Whereas the Treynor-Mazuy model needs Exceed Portfolio Return (EPR) and Excess Market Return (ERM) which are adopted from CAPM. Also, CAPM has a relationship in terms of Sharpe ratio which describes the relationship between systematic risk and expected return for assets, particularly stocks. CAPM is widely used throughout finance for pricing risky securities and generating expected returns for assets given the risk of those assets and cost of capital.

In case, the Sharpe ratio is similar to the Treynor ratio that calculates the risk premium per unit of total risk. However, it employs portfolio total risk instead of systematic risk. Market timing ability affects the performance of Islamic Equity Funds because it is a direct way to find out what portfolio strategies are being applied by investment managers. This irrelevance of investment managers' timing abilities may be ascribed to the fact that the flow of funds to Islamic Equity Funds is consistent since investors are less sensitive to market performance and selection skills of investment managers with a long-term perspective. Equity funds with a longer lifespan will have a longer track record, then it will be able to give a better performance for its investors. The longer age of equity funds, the more experienced investment manager in managing a portfolio. Fund age is indeed important; however, it does not mean that equity funds that have a long life will always be better than new equity funds.

In this study, the Net Asset Value of a fund is used to determine the fund size. of Islamic Equity Funds. It will provide flexibility, increase bargaining power and facilitate the creation of economic scale which can impact on reducing costs in case of impact positively on equity funds' performance. According to the findings of this study, the performance of Islamic Equity Funds is unaffected by fund size. A great performance does not always mean that the Islamic Equity Funds must have a large size, but it could be the result of well plan activity and execution by the investment managers. As a result, there is a chance that equity funds with a low net asset value can outperform.

Based on the result of this study, the expense ratio affects Islamic Equity Funds' performance. It can be inferred that the expense ratio of an equity fund reflects how much it pays for portfolio management, administration, marketing, and distribution, among other things. The lower the expense ratio, the more efficient and effective the Investment Manager is in carrying out its duties as an investment manager of equity funds. Islamic Equity Funds with more active strategies and greater portfolio turnovers have significantly wider performance than equity funds with lower portfolio turnovers. The high portfolio turnover might be regarded by investment managers as a sign of their efforts to add value to the fund's portfolio. The more investment managers turnover the transactions, the higher the turnover fee will appear. In the end, the turnover fee will have a negative significant effect on the potential profit of the funds invested.

Limitation and Suggestion

Some insights that are useful for further study, as well as recommendations for investment managers, are listed: For the Islamic Equity Funds investment managers, this study's conclusions can be mentioned in scholarly evaluations on the elements impacting the performance of Islamic Equity Funds. This study can provide a result for stock selection skills and market timing ability using the Treynor-Mazuy ratio, but there is still room for improvement and deepening.

Hopefully, further study can examine the determinant analysis of Islamic Equity Funds performance using Jensen's Alpha ratio and Treynor ratio. To provide another result of determinant analysis of Islamic Equity Funds, measuring stock selection skill and market timing ability can be used Henriksson model (1984). Able to try measure portfolio turnover using Modified Portfolio Turnover and capable of researching other forms of Islamic Equity Funds such as Islamic Money Market Funds, Fixed Income Islamic Equity Funds, Mixed Islamic Equity Funds, Islamic Indexed Funds, Sukuk Equity Funds, Protected Islamic Equity Funds, Islamic Equity Funds based on foreign Islamic securities, etc.

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