

Cash Waqf Behavior: Explaining Financial Consciousness and The Moderating Role Of Religiosity

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Keywords

*Behavioral Finance,
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Abstract

The role of cash waqf in empowering the economy of Muslims needs to be continuously improved. This study assesses individuals' behavior towards cash waqf from a behavioral finance perspective by proposing four elements of financial consciousness: financial locus of control, financial capability, financial willingness, and financial sophistication in encouraging cash waqf behavior. This study also investigates the moderating role of religiosity as a Muslim-specific internal factor. Data was collected from a questionnaire of 337 Muslim government employees in the Ministry of Religious Affairs of Indonesia. The Partial Least Square was used to analyze the data. The findings show that financial locus of control, financial capability, financial willingness, financial sophistication, and religiosity have a significant positive influence on individual behavior towards cash waqf. The findings also suggest that religiosity moderates the financial locus of control, as well as financial sophistication, on cash waqf. This implies that initiatives to increase Muslim participation in cash waqf should be embedded in behavioral finance patterns through a combination of financial consciousness and religiosity.

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1. Introduction

Muslim participation in cash waqf has been widely investigated using various approaches, such as consumer behavior approaches through the theory of reasoned action and the theory of planned behavior (Huda *et al.*, 2021; Iqbal *et al.*, 2019; Razak *et al.*, 2021); psychological approaches (Baqutayan, 2020; Baqutayan *et al.*, 2018); and sociodemographic approaches (Arsyianti *et al.*, 2018). However, the overall investigation remains incomplete since no studies use behavioral finance approaches. This gap needs to be addressed because cash waqf is an instrument that can be utilized to increase legitimate investment sources (Hosseini *et al.*, 2014). Thus the decision to spend in cash waqf can be seen subjectively as a financial or investment decision, as although investors do not always expect a financial profit, they do expect to contribute to the pleasure of Allah. This expectation drives individuals to consider how to make the best financial decisions (Abidin *et al.*, 2021), including the decision to spend money on cash waqf.

Cash waqf has widely developed into investment and funding patterns, such as cash waqf linked to sukuk and cash waqf with shariah crowdfunding (Deloitte Indonesia Perspectives, 2021). Since launching a new series in 2021, cash waqf linked to sukuk has recorded total sales of IDR 24.141 billion (Bank Indonesia, 2021). One of the mass cash waqf programs initiated by the Ministry of Religious Affairs of Indonesia – the Cash Waqf Movement for Civil Servants – managed to collect IDR 4.6 billion in cash waqf funds between 2020 and 2022; these funds are allocated for educational scholarships and empowerment programs, as well as to optimize the use of waqf land (BWI, 2022c).

However, amid the rapid development of cash waqf initiatives, its acquisition performance has not yet recorded significant success. The Indonesian Waqf Board reports that the potential for cash waqf in Indonesia reaches IDR 180 trillion annually, but that acquisitions until March 2022 only reached IDR 1.4 trillion (BWI, 2022b), less than half of its potential. This may be due to low levels of community awareness of cash waqf. Many Muslims consider waqf to be the same as a general donation or zakat (Saptono, 2019), while the lack of transparency in cash waqf also affects public trust (Mutmainah *et al.*, 2021). This is reflected by Indonesia's low waqf literacy index, with a score of 50.48 (Indonesian Waqf Agency, 2020). Waqf performance in Indonesia only shows a sufficient score on the 2022 National Waqf Index, although this is an improvement on the 2021 score, which was categorized as low (BWI, 2022a). A survey conducted by the National Shariah Financial Economics Committee similarly revealed that households still have limited understanding of key shariah concepts such as shariah insurance, zakat procedures, and waqf instruments (KNEKS, 2019).

Using a behavioral finance perspective, this study proposes a new approach to encourage individual participation in cash waqf. This approach was adopted by Philip *et al.* (2018) who first introduced multidimensional financial consciousness.

Financial consciousness complements the understanding of traditional financial literacy, which deliberately considers the characteristics and circumstances of individuals (Philip *et al.*, 2018), and helps them to make better financial decisions and increase their financial well-being (Visano & Ek-Udofia, 2017). For Muslims, it will also hold them accountable for safeguarding wealth, understanding trust requirements regarding who has rights to assets, and distributing those assets among entitled parties (Umarji, 2021). In Muslim majority countries, the application of financial consciousness leads to greater contributions to the utilization of Islamic social finance for purposes such as poverty alleviation (Umar *et al.*, 2022). Therefore, it is necessary to grow this sector, especially considering that Indonesia has been found to be the most generous country in the world thanks to its high level of individual philanthropy (Charities Aid Foundation, 2021; Widiastuti *et al.*, 2022).

This study also sheds light on the role of religiosity as a Muslim-specific internal factor. Islamic religiosity has been associated with virtuous giving as a form of individual journey to achieve salvation or *falah* (Asutay *et al.*, 2023). Religiosity also helps Muslims make good personal financial decisions (Lestari *et al.*, 2021). We therefore argue that religiosity will moderate the financial consciousness of Muslims with their actual behavior towards achieving *Maqasid shariah* through spending their wealth for philanthropic aims such as cash *waqf*.

Based on this background, the purpose of the study is to examine how multidimensional financial consciousness and religiosity affect individuals behaviour regarding cash *waqf*, including by exploring the moderating effect of religiosity. This study will focus on assessing the cash *waqf* behavior of Muslim civil servants of the Ministry of Religious Affairs of Indonesia based on two rationales. First, since their salaries are guaranteed by the government, we assume that civil servants have sufficient wealth to spend on cash *waqf*. Second, since our objective is not to analyze the behavioral intention as in consumer behavior studies, we then select respondents who already have basic knowledge of cash *waqf* (due to awareness raising initiatives directed at civil servants) to construct a behavioral finance perspective on their decision to invest in cash *waqf*. This study will thus make at least a twofold contribution. First, this study will be the first to assess the social finance behavior of individuals towards cash *waqf* using a behavioral finance perspective. Second, this study will provide feedback on whether the cash *waqf* program organized by the government is successful in shaping the cash *waqf* behavior of civil servants.

2. Literature Review

2.1. Cash Waqf Behavior

The term ‘cash *waqf* behavior’ in this study is explained by behavioral finance

theory. Behavioral finance theory is used to study the influence of psychology and other social factors in analyzing certain financial phenomena (Musse *et al.*, 2015). This theory argues that individuals sometimes lack rational judgment and only follow their emotions when making a financial decision, which may lead to becoming entangled in excessive debt, investing in high-risk assets, or failing to save sufficient amounts for retirement (Nga *et al.*, 2010). With regard to donation making, behavioral finance has been used to explain donation behavior in two ways: (1) impulsive, as a quick form of giving that involves limited analysis with rapid and emotional feedback, and (2) intentional, as a covert donation that defies the pull of an expedient and pleasurable donor experience and is more accountable to the recipient and the outcomes (Karlan *et al.*, 2019). Li and Feng (2021) note that donors' behavior affects subjective perception, which is associated with the amount, frequency, and procedure of donation. For Muslims, this behavior may result in a reduction of the percentage of wealth they are willing to distribute or donate. At the same time, this helps remove some obstacles to donating while yet preserving the discretionary freedom of potential donors to make donation choices (Karlan *et al.*, 2019).

Cash waqf is defined as an Islamic social finance tool in the form of money or securities that are gathered, managed, and invested by Nazhir (caretakers) in various productive and halal business sectors, with the condition that the capital cannot be reduced for alms, while the profit can be rolled out and contribute in various social benefit program (Hafith *et al.*, 2021). Individuals who donate cash waqf engage in prosocial activities by making a certain level of sacrifice to help others without expecting anything in return (Andreoni *et al.*, 2021). The behavioral finance approach assumes that cash waqf donors will be subject to behavioral biases when faced with a decision to accept and use a donation platform (Theerthaana & Manohar, 2021). For Muslims, this bias could be related to social desirability bias (Ahmad *et al.*, 2023) based on their beliefs and religiousness (Jamal *et al.*, 2019). Hence, using the behavioral finance approach, cash waqf behavior can be interpreted as individuals' Islamic social finance activities to manage and make decisions about how their money is spent and distributed through cash waqf. This definition also confirms the role of Muslims as Kalifa; because Muslims believe that Allah is the true owner of their wealth, they must use that wealth in a way that pleases Allah (Umarji, 2021). Cash waqf activities operate in an Islamic social finance ecosystem that includes actors and all stakeholders who participate (Varga & Hayday, 2016), creating a healthy economic equilibrium (Jouti, 2019).

2.2. Multidimensional Financial Consciousness

The basic human consciousness has been explained by social learning theory (Bandura, 1969) as the anticipatory behavioral control (Kotchoubey, 2018) which results in recursive dynamic activity between humans and the surrounding

environment (Olsen, 2014). This theory describes how individuals learn behavior by observing the behavior of others and then imitating and modeling that behavior (Lajuni *et al.*, 2018).

In the behavioral finance context, human consciousness regarding personal finance can evoke a sense of agency in controlling one's actions and the ability to influence the financial situation around oneself (Visano & Ek-Udofia, 2017). By developing this concept, Philip *et al.* (2018) introduced four elements of financial consciousness: financial locus of control, financial capability, financial willingness, and financial sophistication.

2.2.1. Financial Locus of Control

Philip *et al.* (2018) describe the financial locus of control as the extent to which individuals believe that what they do prescribes their financial results. Individuals who exercise an internal locus of control are assured that what happens in their lives is under their control (Arifin *et al.*, 2019), while individuals who exercise an external locus of control are assured that there are powers out of their control affecting their lives, such as fortune, chance, or destiny (Griffin & Moorhead, 2013). Islam sees the locus of control as *mujahadah an-nafs*, which is defined as an attitude of genuine struggle against selfishness and personal desires, including in terms of managing money or property (Parmitasari *et al.*, 2020).

Huda *et al.* (2012) and Sadallah *et al.* (2022) find that locus of control as part of perceived behavioral control has a simultaneously significant influence on zakat behavior. Arsyianti *et al.* (2018) adds that external locus and internal locus motives influence charity-giving behavior.

2.2.2. Financial Capability

Financial capability is defined as the ability of individuals to effectively manage their finances and make wise financial decisions (Philip *et al.*, 2018). Financial capability shows that people can protect themselves from current and future financial instability to achieve financial freedom (Çera *et al.*, 2021). Financially capable individuals possess a range of financial knowledge and abilities, as well as the confidence and drive to acquire affordable financial services (Banerjee *et al.*, 2017).

In shariah context, Saputra and Rahmatia (2021) found that Muslim financial capability is reflected in individuals' choices of Islamic financial products, their ways of budgeting and managing money, and their plans for short-term and long-term financial strategies. Improving financial capability should include improving individual behavior and strengthening institutions' access to financial opportunities (Sherraden *et al.*, 2022). Arsyianti *et al.* (2018) found that low-income households feel financially burdened by regular charitable giving, suggesting that their financial capability contributes to their charitable behavior.

2.2.3. Financial Willingness

Financial willingness is the extent to which a person is motivated to be actively involved in making financial decisions and to take action on those decisions (Philip I, 2018). Financial willingness encourages individuals to alter their financial behavior to achieve stronger financial conditions, such as by increasing income or reducing debt and expenses (Fiksenbaum *et al.*, 2017). Financially conscious individuals usually have a high level of risk-taking willingness and strong moral values (Németh & Zsótér, 2019).

Eling *et al.* (2021) found positive influences between the willingness of financial risk-taking with the tenancy of life insurance and long-term care insurance. In the context of Islamic social finance, there is a similar type of product called takaful. Lotz and Fix (2014) found that individuals' financial willingness moves positively when making fund contributions that avoid unethical businesses, even if they tend to receive lower annual returns for these funds. Berry and Yeung (2013) confirm that ethical investors have more willingness to invest in moral financial performance, indicating that financial willingness correlates with financial activities that uphold social values, such as endowment activities through cash waqf.

2.2.4. Financial Sophistication

Financial sophistication refers to individuals' ability to avoid financial mistakes (Calvet *et al.*, 2009). Individuals have different levels of financial sophistication in using the various types of financial products and to perceive the impact of decisions on financial results (Philip *et al.*, 2018). Neumuller and Rothschild (2017) argue that individuals who are highly unsophisticated in making financial decisions do not have a basic understanding of financial assets. The lack of financial sophistication is also one of the causes of financial planning failure, particularly for retirement (Kim & Hanna, 2015).

Financial sophistication is also closely related to individuals' use of financial technology (Philip *et al.*, 2018). Financial sophistication, together with personality traits, affects individuals' participation in financial situations activities (Akhtar *et al.*, 2018). It is also argued by Lusardi *et al.* (2014) that to administer assets and debt responsibly, individuals must be financially sophisticated. For Muslims, this includes sophistication in managing their wealth for both economic (i.e., investment, savings, credit) and social (i.e., donations, zakat, waqf) purposes.

2.3. The Moderating Role of Religiosity

Individuals have different levels of religious values; this is known as religiosity (Muslichah & Sanusi, 2019). In Islam, religiosity is a package of laws, obligations, and commitments that are directly derived from the Qur'an and Hadits (Halstead, 2007). This includes having a belief in or demonstrating respect for God, as well as engaging in actions related to that belief, such as participating in regular worship and other socio-religious activities within the community (Adeyemo & Adeleye,

2008).

Religiosity plays a significant role in how people behave both privately and publicly (Muslichah & Sanusi, 2019). Helms and Thornton (2012) found that households with high religious values will have good charity behavior; this behavior is similar to the spirit of Islamic social finance that uses philanthropy-based instruments. Farouk *et al.* (2018) also found that Muslims are more willing to volunteer to pay zakat to carry out their religious obligation.

Religiosity has also been linked to each dimension of financial consciousness in several studies. For example, Iles-Caven *et al.* (2020) found that differences in religious belief and activity is related to differences in the locus of control. With a more internal locus of control, people will show more belief in religious values and behave consistently following those values, while those with a more external locus of control will show more tendencies to use their religion to achieve non-religious purposes, such as communal spirit and social support (Coursey *et al.*, 2013). Differences in religiosity also shape different financial capabilities, as shown by Sachitra and Siong-Choy (2019) regarding farm owners in Sri Lanka. Financial capability and stability help religious people to control their financial situation such as having a savings account and endowment, or giving and receiving financial donations (Holleman *et al.*, 2022). Furthermore, León and Pfeifer (2017) reveal that religiosity is closely related to financial willingness, especially in risk-taking, where Muslims have more willingness to spend their money on non-risky assets such as property. Pericoli (2020) also proves that Muslims are more willing to avoid extreme wealth, eliminate exploitative practices, and strike a balance between encouraging the increase of wealth and allocating resources for social good. Moreover, Nelson (2017) explains that religious crises can hinder the sophistication of financial behavior. In the pursuit of financial success, people sometimes give up excess consumption, instead allocating their wealth to philanthropic endeavors or other activities that benefit society.

2.4. Research Framework

Based on the above explanation and supported by prior studies, we propose that the multidimensional financial consciousness (i.e., financial locus of control, financial capability, financial willingness, and financial sophistication) can be a basic impetus for Muslims to allocate their financial spending towards social activities such as cash waqf. Furthermore, by considering Muslims' religiosity, we argue that religiosity has a moderating interaction, influencing each dimension of financial consciousness and cash waqf behavior.

Based on the model framework visualized in Figure 1, nine hypotheses are proposed:

H1: Financial locus of control affects cash waqf behavior

H2: Financial capability affects cash waqf behavior

H3: Financial willingness affects cash waqf behavior

H4: Financial sophistication affects cash waqf behavior

H5: Religiosity affects cash waqf behavior

H6: The relationship between financial locus of control and cash waqf behavior is moderated by religiosity

H7: The relationship between financial capability and cash waqf behavior is moderated by religiosity

H8: The relationship between financial willingness and cash waqf behavior is moderated by religiosity

H9: The relationship between financial sophistication and cash waqf behavior is moderated by religiosity.

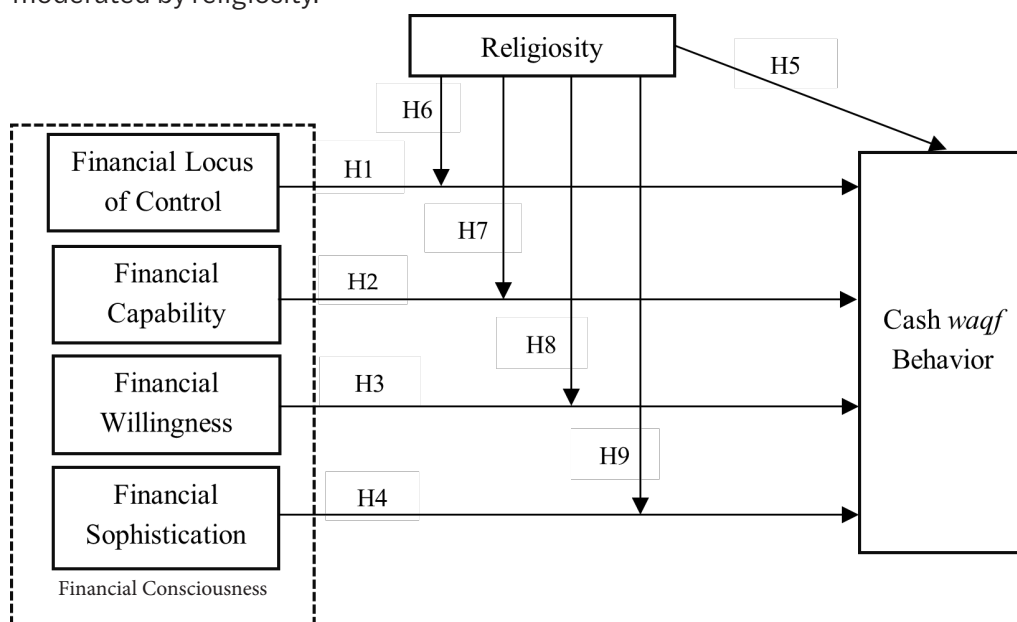


Figure 1. Research model

3. Methodology

3.1. Data and Instrument

This study employs primary data from 337 Muslim government employees of the Ministry of Religious Affairs of Indonesia (including contract employees) who participated in awareness raising activities regarding cash waqf. These respondents were selected to ensure a certain level of religious practices of all respondents, as they work in institutions that uphold religious values.

The data was collected from a structured questionnaire. The first section of the questionnaire assesses the demographic of respondents and information about cash waqf. The next section assesses the measurement of the variables, where cash waqf behavior is measured by the Islamic social finance framework adopted by Hadiyan *et al.* (2021). Financial locus of control, financial capability, financial willingness, and financial sophistication is measured by the Financial Consciousness Index, developed by Philip *et al.* (2018). Religiosity is measured by iman, Islam, and ihsan, adapted from Mahudin *et al.* (2016). Response for each indicator generated by 5 Likert scale (1 = Strongly Disagree/Never; 2 = Disagree/Rarely; 3 = Neutral/Sometimes; 4 = Agree/Often; 5 = Strongly Agree/Always). The validity and reliability of the instrument were confirmed by a pilot test involving 20 respondents, with the results shown in Table 1.

Table 1. Validity and reliability instrument

Construct	Item	Pearson Corr.	α	
Cash waqf behavior (CWB): Muslim behavior in spending and distributing their money through waqf funds (Hadiyan <i>et al.</i> , 2021; Karlan <i>et al.</i> , 2019; Li and Feng (2021))	CWB1	The accessibility of cash waqf made me interested in adopting it.	0.903**	0.895
	CWB2	I understand the accessibility criteria of the beneficiary.	0.816**	
	CWB3	I opt for cash waqf since it applies the simple Islamic term.	0.851**	
	CWB4	Cash waqf transactions comply with shariah.	0.795**	
	CWB5	I believe the waqf institution is efficient in disbursing cash waqf funds.	0.882**	
The extent to which individuals believe that what they do prescribes their financial results (Philip <i>et al.</i> , 2018)	LOC1	My action determines my financial ability to donate in cash waqf.	0.676**	0.837
	LOC2	I have control over my spending in cash waqf.	0.879**	
	LOC3	I can increase my budget to spend in cash waqf based on my commitment.	0.793**	
	LOC4	My understanding of financial matters determines my ability to spend money on cash waqf.	0.781**	
	LOC5	My charity will be more driven by unforeseen events outside my control.	0.817**	
The ability of individuals to effectively manage their finances and generate wise financial decisions (Philip <i>et al.</i> , 2018)	FC1	I budget my charity spending and stick with it.	0.762**	0.829
	FC2	I pay attention to my finances when I have important spending in cash waqf.	0.766**	
	FC3	I am confident to buy cash waqf without burdening my financial condition.	0.676**	
	FC4	I have enough in my saving account to buy cash waqf.	0.597**	
	FC5	Even in a bad economic condition, I was still able to buy cash waqf.	0.799**	
	FC6	After a year, I can still buy cash waqf with more money in my account than today.	0.850**	
Financial willingness: The extent to which a person is motivated to be actively involved in making financial decisions and to take action on those decisions (Philip <i>et al.</i> , 2018)	FW1	I would be willing to buy cash waqf of at least 2.5% of my income.	0.772**	0.828
	FW2	Even though I have to pay the obligatory zakat, I am still willing to set aside my money for cash waqf.	0.883**	
	FW3	I have the willingness to spend my money on cash waqf regularly.	0.759**	
	FW4	I would be willing to budget my money for cash waqf in my future financial plans.	0.830**	

Financial sophistication: How the individual understands the impacts of decisions on their financial outcomes (Philip et al., 2018)	FS1	I know how to buy cash waqf through my banking account.	0.654**	0.751
	FS2	I would typically purchase cash waqf through a digital channel.	0.861**	
	FS3	I did a thorough calculation of how much money I would distribute in cash waqf.	0.701**	
	FS4	I search on the internet about cash waqf schemes for distributing my funds.	0.567**	
	FS5	I look for professional advice before donating in cash waqf.	0.746**	
Religiosity: A combination of the physical aspect or human activity (Islam), the mind or understanding of God (iman), and the spirit or actualization of virtue and goodness (ihsan) (Mahudin et al., 2016)	REL1	I endeavor for both worldly affairs and the hereafter as advised by Prophet Muhammad.	0.737**	0.879
	REL2	I avoid actions that will be punished in the afterlife.	0.646**	
	REL3	I teach my family about Allah's greatness.	0.838**	
	REL4	I would be more humble if I have more knowledge.	0.865**	
	REL5	I feel horrible doing forbidden things even though I know other people do too.	0.723**	
	REL6	I am pleased with what I have.	0.779**	
	REL7	I try to prioritize my Aql (rationality) over my Nafs (lust).	0.770**	

** Significant at 1%; * significant at 5%.

Table 1 shows that all items in each construct generate a significant Pearson correlation at 5% and 1%, indicating the validity of all items in the instrument. Furthermore, the value of Cronbach Alpha (α) of each variable greater than 0.70 confirm the reliability of the instruments (Ghozali, 2016).

3.2. Method

This study uses Partial Least Squares - Structural Equation Modeling (PLS-SEM) as an analytical method. This method was chosen to accommodate the complexity of the model which includes the moderating construct and the reflective indicators that are suitable to be measured by PLS (Hair et al., 2014). The PLS measurement is evaluated in two steps. First, evaluate the validity and reliability of constructs in the measurement model through convergent validity, discriminant validity, and construct reliability. Second, evaluate the goodness of fit of the structural model through the R-square and Q-square. The structural model also generates the path coefficients to test the hypothesis, including the moderating effect hypothesis. A moderating test is also performed through Multi-Group Analysis (MGA) to confirm the result. All assessments are processed with SmartPLS version 4.0.

4. Result and Discussion

4.1. Descriptive Results

The initial result generated the respondents' demographic information (see Table 2). The largest groups of respondents are aged between 36 and 50 years old (65%), female (55.5%), and married (78.3%). Respondents also predominantly hold bachelor's degrees in educational backgrounds (57.3%) and work as administrators at the Ministry of Religious Affairs of Indonesia (35.3%). The

majority of the respondents have an income between IDR 5,000,000 and IDR 9,999,999 per month (62.9%). Most live in Jakarta (52.5%).

Table 2. Demographics of respondents (N=337)

	Criteria	f	%
Age (in years)	21 - 35	81	24.0
	36 - 50	219	65.0
	Above 50	37	11.0
Gender	Female	187	55.5
	Male	150	44.5
Marital Status	Single	55	16.3
	Married	264	78.3
	Divorce/ Widow	18	5.3
Education Level	High school or equivalent	29	8.6
	Diploma	18	5.3
	Bachelor Degre	193	57.3
	Master/ Doctoral or above	97	28.8
Position	Administrator	119	35.3
	Functional	108	32.0
	Academic, Teacher, Lecturer	52	15.4
	Echelon	21	6.2
	Contract Employee	37	11.0
Monthly income from any source (before tax)	Bellow IDR 5,000,000	19	5.6
	IDR 5,000,000 to IDR 9,999,999	212	62.9
	IDR10,000,000 to IDRp14,999,999	92	27.3
	Above IDR 15,000,000	14	4.2
Domicile	Jakarta	177	52.5
	Banten	43	12.8
	West Java	95	28.2
	Central Java	3	0.9
	Yogyakarta	11	3.3
	Lampung	1	0.3
	Maluku	1	0.3
	North Sumatra	4	1.2
	South Kalimantan	2	0.6

Additional information was also collected to obtain predictions of future cash waqf behavior by asking respondents' willingness to spend money on cash waqf annually.

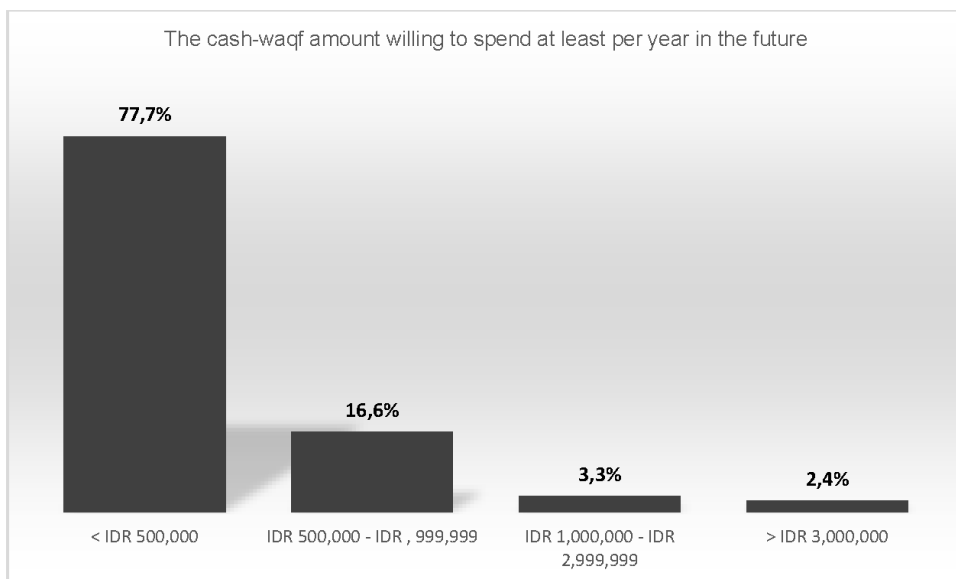


Figure 2. Respondent's future cash waqf behavior

Figure 2 show that 77.7% of respondents are willing to spend no more than IDR 500,000 per year on cash waqf, while 16.6% of respondents consider allocating IDR 500,000 to IDR 999,999 a year for cash waqf. Furthermore, 3.3% of respondents are willing to spend IDR 1,000,000 to IDR 3,000,000 a year in cash waqf, with just 2.4% of respondents willing to donate over IDR 3,000,000 towards cash waqf annually.

For the descriptive statistic, we categorized our respondents into three criteria as follows: 'high' if the mean scores are greater equals 0.5 standard deviations of the mean score ($x \geq \text{mean} + 0.5 \text{ SD}$); 'low' if the mean scores are less equals to 0.5 standard deviations of the mean score ($x \leq \text{mean} - 0.5 \text{ SD}$); and 'moderate' if the mean scores are in between ($\text{mean} - 0.5 \text{ SD} \leq x \leq \text{mean} + 0.5 \text{ SD}$). The descriptive statistic result is presented in Table 3, with the following acronyms: financial locus of control (LOC), financial capability (FC), financial willingness (FW), financial sophistication (FS), religiosity (REL), and cash waqf behavior (CWB).

Table 3. Descriptive statistic of variables

Variables	High		Moderate		Low	
	f	%	f	%	f	%
CWB	109	32.3	132	39.2	96	28.5
LOC	96	28.5	162	48.1	79	23.4
FC	75	22.3	181	53.7	81	24.0
FW	74	22.0	191	56.7	72	21.4
FS	88	26.1	180	53.4	69	20.5
REL	109	32.3	160	47.5	68	20.2

Based on this categorization, we found that the majority of respondents have

moderate cash waqf behavior (39.2%), moderate financial locus of control (48.1%), moderate financial capability (53.7%), moderate financial willingness (56.7%), moderate financial sophistication (53.4%), and moderate religiosity (47.5%).

Furthermore, to expand the descriptive analysis finding, we carried out cross-tabulation and Pearson's chi-square tests. Each criterion on the explanatory variable is linked to the criteria on cash waqf behavior. The result is shown in Table 4. From the total of 337 respondents, we revealed a general finding that the majority of the respondent with a low, moderate, and high locus of control perform low, moderate, and high cash waqf behavior, respectively. A similar result was found in the financial capability and financial sophistication categories. Otherwise, in the category of financial willingness, the majority of respondents with moderate financial willingness show a high level of cash waqf behavior, while the majority of respondents with low and moderate financial willingness show consistent results at the low and moderate levels of cash waqf behavior. As for religiosity, the majority of respondents with low, moderate, and high religiosity also perform low, moderate, and high cash waqf behavior, respectively. All these cross-tabulation results are significant at 5%.

Table 4. Cross-tabulation Result (df = 4; n = 337)

Level	CWB						λ^2	p
	Low		Moderate		High			
LOC								
Low	61	63.5%	11	8.3%	7	6.4%	194.405a	0.000
Moderate	32	33.3%	97	73.5%	33	30.3%		
High	3	3.1%	24	18.2%	69	63.3%		
FC								
Low	65	67.7%	13	9.8%	3	2.8%	205.032a	0.000
Moderate	31	32.3%	102	77.3%	48	44.0%		
High	0	0.0%	17	12.9%	58	53.2%		
FW								
Low	62	64.6%	9	6.8%	1	0.9%	195.187a	0.000
Moderate	34	35.4%	102	77.3%	55	50.5%		
High	0	0.0%	21	15.9%	53	48.6%		
FS								
Low	62	64.6%	7	5.3%	0	0.0%	248.196a	0.000
Moderate	33	34.4%	107	81.1%	40	36.7%		
High	1	1.0%	18	13.6%	69	63.3%		
REL								
Low	58	60.4%	10	7.6%	0	0.0%	204.272a	0.000
Moderate	37	38.5%	89	67.4%	34	31.2%		
High	1	1.0%	33	25.0%	75	68.8%		

4.2. SEM-PLS Result

The measurement model evaluation will first review in the SEM-PLS stages with an overview of the model shown in Figure 3.

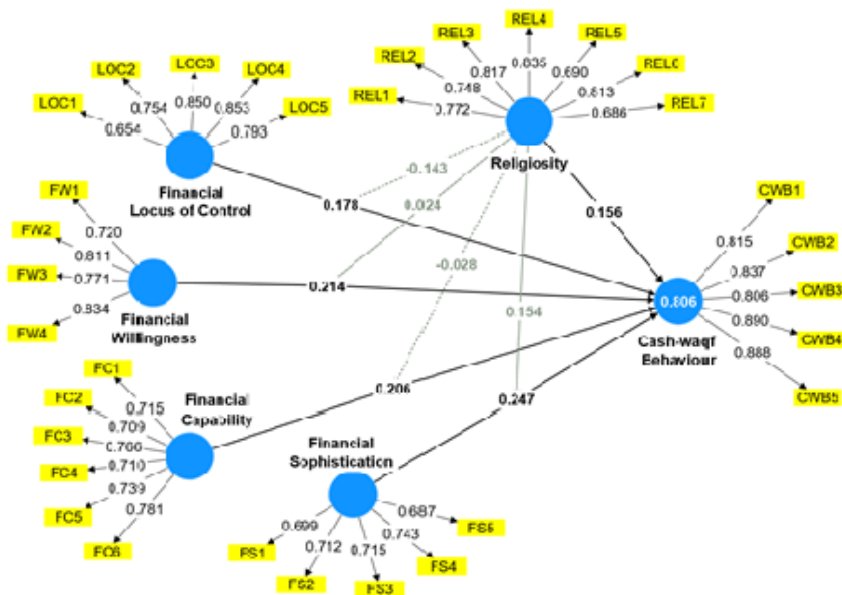


Figure 3. Valid measurement model

For this exploratory research study, the cut-off value for validity and reliability of the measurement model followed recommendations by Hair *et al.* (2010). The outer loadings should be above 0.6; the average variance extracted (AVE) should be above 0.5; the composite reliability (CR) should be above 0.7, and Cronbach's alpha (α) should be above 0.7. As for this model, the summary of validity and reliability results in Table 5 demonstrates that all items in the measurement model are statistically valid and reliable.

Table 5. Validity and reliability result of measurement model

Constructs	Items	Loading	AVE	α	CR
Cash waqf Behavior	CWB1	0.815	0.719	0.902	0.927
	CWB2	0.837			
	CWB3	0.806			
	CWB4	0.890			
	CWB5	0.888			

Financial Locus of Control	LOC1	0.654	0.615	0.842	0.888
	LOC2	0.754			
	LOC3	0.850			
	LOC4	0.853			
	LOC5	0.793			
Financial Capability	FC1	0.715	0.543	0.832	0.877
	FC2	0.709			
	FC3	0.766			
	FC4	0.710			
	FC5	0.739			
	FC6	0.781			
Financial Willingness	FW1	0.720	0.617	0.793	0.865
	FW2	0.811			
	FW3	0.771			
	FW4	0.834			
Financial Sophistication	FS1	0.699	0.506	0.756	0.837
	FS2	0.712			
	FS3	0.715			
	FS4	0.743			
	FS5	0.687			
Religiosity	REL1	0.772	0.590	0.883	0.909
	REL2	0.748			
	REL3	0.817			
	REL4	0.835			
	REL5	0.690			
	REL6	0.813			
	REL7	0.686			

We also assess the discriminant validity through the Fornell-Larcker criterion. Table 6 shows that the model has good discriminant validity since the square root AVE is greater than the variance between the construct and other constructs in the model (Hair *et al.*, 2014).

Table 6. Discriminant validity (Fornell-Larcker Criterion)

Construct	CWB	LOC	FC	FW	FS	REL
CWB	0.848					
LOC	0.779	0.826				
FC	0.700	0.720	0.737			
FW	0.785	0.776	0.789	0.821		
FS	0.760	0.685	0.764	0.764	0.794	
REL	0.769	0.718	0.681	0.732	0.815	0.817

Note. Diagonals represent the square root of the AVE while off-diagonals represent correlations

The next step is evaluating the structural model by first assessing the R-square. The R-square value is described as high (0.75), moderate (0.50), or weak (0.25) for endogenous latent variables (Hair *et al.*, 2014). Further, the Q-square is assessed through the PLS-predict procedure in SmartPLS. A Q-square value above zero indicates that the model has predictive capability (Hair *et al.*, 2014).

Table 7. R-Square and Q-Square (Cross-validated redundancy)

Construct	R Square	Q Square
CWB	0.801	0.793

The result presented in Table 7 indicates that the R-square value in this model is high (0.801). This findings means that the exogenous latent variables (i.e., financial locus of control, financial capability, financial willingness, financial sophistication, and religiosity) can explain the endogenous variable (cash waqf behavior) by 80.1%. In contrast, the remaining 19.9% was explained by other variables outside the research. Furthermore, the Q-square value of 0.793 > 0 indicates the good predictive capability of the model (Hair et al., 2014).

4.3. Hypothesis Testing Result

Once the structural model has been evaluated, the path coefficient results can be analyzed to find the relationship between variables and test the hypotheses. This stage is performed by the procedure of bootstrapping using 1,000 subsamples with the model visualized in Figure 4.

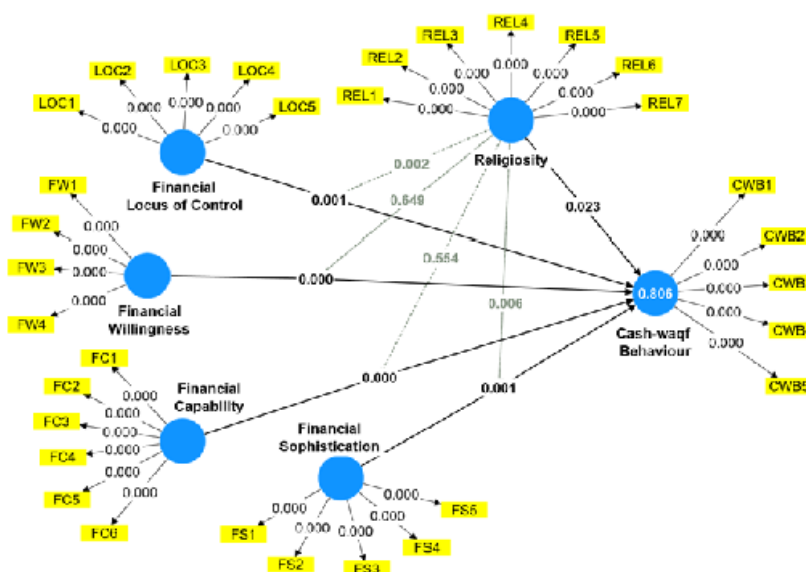


Figure 4. Bootstrapping of the structural model

The hypotheses proposed were then tested by analyzing the t-statistic value and p-value. The t-table value is determined at 1.96 for the 95% confidence level (two-tailed) or significant at 5%. Hypotheses are accepted if the t-statistic > 1.96 and the p-value < 0.05 (Ghozali & Latan, 2015). The same prerequisites were also used for the moderating testing through a two-stage calculation method as provided by

SmartPLS (Henseler & Chin, 2010). The hypotheses testing results summarized in Table 8.

Table 8. Hypothesis testing result

	Hypothesis	Path Coeff.	T-stat.	p	Conclusion	Decision
H1	LOC → CWB	0.178	3.477	0.001	Significant	Accepted
H2	FC → CWB	0.206	4.419	0.000	Significant	Accepted
H3	FW → CWB	0.214	4.403	0.000	Significant	Accepted
H4	FS → CWB	0.247	3.372	0.001	Significant	Accepted
H5	REL → CWB	0.156	2.285	0.023	Significant	Accepted
H6	LOC*REL → CWB	-0.143	3.078	0.002	Significant	Accepted
H7	FC*REL → CWB	-0.028	0.592	0.554	Not Sig.	Rejected
H8	FW*REL → CWB	0.024	0.455	0.649	Not Sig.	Rejected
H9	FS*REL → CWB	0.154	2.756	0.006	Significant	Accepted

Table 8 shows that all direct relationships have a t-statistic value greater than 1.96, resulting in a significant relationship at the 0.05 level. Specifically, the predictors of financial locus of control (LOC), financial capability (FC), financial willingness (FW), financial sophistication (FS), and religiosity (REL) have a significant positive influence on cash waqf behavior (CWB). This finding indicates that multidimensional financial consciousness along with religiosity significantly influences cash waqf behavior. Therefore, hypotheses one through five (H1, H2, H3, H4, and H5) are accepted.

For the moderating effect, the negative significant coefficient found in the relationship of LOC*REL to CWB indicates that religiosity negatively moderates the relationship between financial locus of control and cash waqf behavior. Hence we accept hypothesis six (H6). The interaction variables of FC*REL also show a negative, though insignificant, association with CWB. Hence we reject hypothesis seven (H7). Religiosity fails to moderate the relationship between financial capability on cash waqf behavior. Furthermore, FW*REL has a positive insignificant effect on CWB, indicating that religiosity cannot moderate the influence of financial willingness on cash waqf behavior. Hence, we also reject hypothesis eight (H8). On the other hand, the finding shows that FS*REL has a positive significant effect on CWB, indicating that religiosity moderates the influence of financial sophistication on cash waqf behavior. Thus we accept hypothesis nine (H9).

To confirm the results of the moderating effect, we also ran MGA procedures by examining significant differences in the level of religiosity across all the relationships of variables. MGA procedure in SmartPLS can only compare two different groups. Since this study divided religiosity into three groups (high, moderate, and low), hence the analysis was carried out in three different comparisons, as presented in Table 9.

Table 9. Multi-group analysis result

Relationship	High v.s Low		High v.s Moderate		Moderate v.s Low	
	Coeff. Diff.	p	Coeff. Diff.	p	Coeff. Diff.	p
LOC → CWB	-0.322	0.040	-0.162	0.183	-0.159	0.260
FC → CWB	-0.104	0.465	-0.008	0.959	-0.096	0.429
FW → CWB	0.085	0.602	-0.131	0.270	0.216	0.135
FS → CWB	0.244	0.081	0.195	0.050	0.049	0.693

MGA results for the relationship between financial locus of control and cash waqf behavior showed a significant negative difference between high vs. low religiosity ($p < 0.05$). However, insignificant differences were found for high vs medium and medium vs low religiosity. Furthermore, the relationship between financial capability and cash waqf behavior showed an insignificant difference for all categories: high vs low, high vs medium, and medium vs low. A similar non-significant effect was also found in the relationship between financial willingness and cash waqf behavior across all categories. Meanwhile, in the relationship between financial sophistication and cash waqf behavior, there is a positive difference between high vs. low religiosity ($p < 0.1$) and high vs. moderate ($p < 0.05$). The MGA findings confirm that religiosity moderates the relationship between financial locus of control (negatively) and financial sophistication (positively) on cash waqf behavior.

4.4. Discussion

Our findings reveal that four elements of multidimensional financial consciousness have a significant positive effect on cash waqf behavior. The first element, financial locus of control was found positively influence cash waqf behavior. Since the financial locus of control consists of internal and external locus of control, the positive finding show that most respondent has an internal locus of control, which enables them to be highly involved in cash waqf behavior. This finding is also supported by the descriptive statistics result that respondents with a high financial locus of control tend to show high cash waqf behavior. Prior studies also confirm that locus of control may affect individual behavior (Ajzen, 2002; Arifin *et al.*, 2019; Cobb-Clark, 2015; Ida & Dwinta, 2010). A high locus of control can wisely improve individual financial behavior (Parmitasari *et al.*, 2020). This is a crucial beginning point for evaluating how people perceived their control in making financial decisions regarding cash waqf expenditure. It is anticipated that people will act more spontaneously if they feel more in control (Philip *et al.*, 2018), and this action is also expected to apply to cash waqf purchases. Muslim donors with high control of their finances also have high incentives for cash waqf charity behavior (Osman *et al.*, 2015), thus encouraging them more frequently donate to cash waqf.

The second element, financial capability, was also found to have a positive influence on cash waqf behavior. The higher the financial capability, the higher

the level of cash waqf behavior, and vice versa. This finding is supported by the descriptive statistics result that respondents with high financial capability tend to show high cash waqf behavior. Muslims with high financial capability (e.g., having more sources for taking on loans) may be more motivated to achieve their social welfare through charity giving (Arsyianti *et al.*, 2018). Financial capability also enables people to practice and gain competency so they can become involved in financial institutions (Johnson & Sherraden, 2007); this might include Islamic social finance institutions, especially through cash waqf. In addition, since cash waqf funding is invested in low-risk assets, this finding is in line with the argument of Sherraden *et al.* (2022) that higher financial capability correlated with higher low-risk financial behaviors. Investment in cash waqf is even free from risk because it is intended not to seek profit but to support and provide for the welfare of the entire community and get a reward in the hereafter (Mafaza *et al.*, 2020).

Financial willingness, as the third element, also has a significant positive effect on cash waqf behavior. This result refutes the findings of Moche *et al.* (2020), which showed that financial willingness as a framework for economic consequences reduces the individual's desire to donate due to the loss of opportunity cost. Our findings support evidence that high financial willingness leads to high involvement in cash waqf spending and vice versa. It is also supported by the descriptive statistics result that respondents with high financial willingness tend to show moderate-to-high cash waqf behavior. In addition, as found by Ishak *et al.* (2022), donor preferences in charitable giving are influenced by inner drives that shape that behavior. This statement supports our findings, because within the financial consciousness framework, this inner drive is brought by financial willingness, which motivates individuals to make decisions (Philip *et al.*, 2018).

For the fourth element of financial consciousness, financial sophistication, we also find a significant positive effect on cash waqf behavior. Muslims with high financial sophistication will participate more in cash waqf behavior. This finding is supported by the descriptive statistics result that respondents with high financial sophistication tend to show high cash waqf behavior. Individuals with a high level of financial sophistication are also better able to choose low-cost investments (Lusardi *et al.*, 2014), suggesting that they are good at maintaining their income to spend on cash waqf. Neumuller and Rothschild (2017) found that financial sophistication, which is proxied by educational attainment, is associated with optimal savings rates, investment choices, and welfare. This supports our findings, since cash waqf behavior is part of investment activities and wealth distribution for welfare which is connected with financial sophistication.

Furthermore, this study finds that religiosity has a strong positive influence on cash waqf behavior. More religious individuals will have more incentive to engage in cash waqf. This finding is supported by the descriptive statistics result that indicates respondents with high religiosity tend to show high engagement

in cash waqf behavior. This finding is also in line with the study by Helms and Thornton (2012) who found that religiosity affects individual charitable behavior, as well as the study by Kasri and Ramli (2019) who found that religious beliefs have a positive influence on attitudes toward donating money. For more religious Muslims, participating in cash waqf or other forms of Islamic social finance is a way of demonstrating their faith, in that the closer they are to God, the more they seek God's love by making endowments (Baqutayan *et al.*, 2018).

The results of testing the moderating effect of religiosity reveal interesting findings that religiosity negatively moderates the effect of financial locus of control, and the positively effect of financial sophistication, on cash waqf behavior. If one's level of religiosity increases, then the level of one's side of locus of control (which is predicted as external locus of control since the coefficient is negative) will contribute more to enhancing cash waqf behavior, and vice versa. This finding also supports several other studies which found that individuals with an internal locus of control will have stronger religious attitudes (Iles-Caven *et al.*, 2020; Mohammadi & Honarmand, 2007) than individuals with an external locus of control. In contrast, a higher level of religiosity leads to a stronger association between financial sophistication and cash waqf behavior. More devout Muslims are more financially sophisticated, so have more ability to avoid making financial errors (Calvet *et al.*, 2009). They will analyze carefully before choosing the best option to distribute their wealth, such as paying cash waqf through Internet banking or buying cash waqf-linked sukuk instead of traditional waqf. By having more financial sophistication, they better understand the impacts of the decisions they made (Philip *et al.*, 2018), increasing their trust in Islamic finance institutions. Eventually, this will lead them to participate sustainably in cash waqf endowment.

Unfortunately, religiosity cannot be proven to moderate financial capability and financial willingness on cash waqf behavior, either through path coefficient analysis or MGA. One plausible reason may be that religiosity obscures individual perceptions of their financial capability and financial willingness to spend money on cash waqf. Muslims with high levels of religiosity may no longer consider the magnitude of financial capability they have to spend on cash waqf; instead, they believe that their wealth belongs entirely to Allah and that Allah will guarantee their fortune. Thus they will donate their assets to cash waqf without hesitation and believe that this action will not harm their financial situation. In other words, for Muslims who are very religious, financial willingness may also not be their main motivation for donating to cash waqf. This willingness is driven more by their motives to gain the pleasure of Allah, not by their personal financial goals.

5. Policy Recommendations

To maximize the potential of cash waqf, several efforts can be made. First, by leveraging the Muslim locus of control, cash waqf initiatives can be carried out with

a higher level of involvement from potential donors. For example, by offering cash waqf savings that permit the fund's distribution to be determined directly by the donor (e.g., for mosque construction or school repairs). Thus donors can choose waqf allocations that can specifically enhance economic and social improvement in their own neighborhoods. It is recommended that cash waqf saving schemes collaborate with shariah banks and offer a minimum deposit requirement that needs to be paid every month (e.g., IDR 100,000/month). Donors are then given the option to endow the money for certain periods: six months, one year, or longer. When the period has ended, according to the initial agreement, donors can apply for the waqf funds to be distributed for the designated purpose and location. Through this initiative, Muslim donors would have control over managing the distribution of their waqf funds. Additionally, cash waqf has the potential to be used as a tool for environmental protection, through green cash waqf. Muslims who have a highly internal locus of control may be interested in contributing to the green cash waqf because they believe that they can influence sustainability through safeguarding the environment and earth.

Secondly, to take advantage of the financial capability and willingness of Muslims, it is recommended that cash waqf products are developed into various investment and other financing channels, such as cash waqf crowdfunding, cash waqf insurance, and cash waqf securities. It is even possible to develop a cash waqf linked to a pension fund. The diversity of product choices for cash waqf can increase Muslim financial willingness to buy cash waqf. At the same time, it will encourage Muslims with higher financial capability to increase their investment portfolio in cash waqf.

Lastly, in line with the Muslims' financial sophistication, many cash waqf initiatives can be done through the digital channel. The Government of Indonesia, especially the Financial Services Authority (OJK), Bank of Indonesia, and Ministry of Religious Affairs could conduct several low-cost programs by utilizing digital advertising and the BWI Indonesian Waqf Board website, or even hire waqf ambassadors and influencers. Specifically, the Ministry of Religious Affairs could also open up more programs to ignite the religiosity of Muslims so that cash waqf instruments can be chosen as alternative forms of investment and spending. Potential activities could include widening the scope of cash waqf programs for civil servants by working together with other ministries and institutions; maximizing the role of the Office of Religious Affairs at the local level for awareness raising on cash waqf; utilizing recitations at mosques to increase waqf literacy; giving incentives for fundraisers; and providing hard and soft skill coaching for nazhirs, including standardization and certification of competencies, as well as providing attractive incentives.

In general, policymakers must seriously consider the financial consciousness of Muslims in Indonesia in order to formulate impactful cash waqf programs, especially during the post-COVID-19 economic recovery, where cash waqf could

be an useful solution to support economic growth and increase people's welfare.

6. Conclusion and Limitations

This study shows that behavioral finance theory can be successfully applied in assessing cash waqf behavior. Several factors must be considered in building the cash waqf behavior of Muslims: financial locus of control, financial capability, financial willingness, financial sophistication, and religiosity. Religiosity not only directly enables cash waqf behavior but also stimulates elements of financial consciousness, especially regarding the financial locus of control and financial sophistication, to assist decision-making in distributing Muslim wealth through cash waqf.

This study finds that the cash waqf program for civil servants, organized by the Ministry of Religious Affairs of Indonesia, has a significant impact on encouraging positive cash waqf behavior among civil servants. For the benefit of society, it is recommended that other ministries and institutions implement similar awareness raising programs.

Furthermore, this study provides new opportunities for further empirical research to investigate the various factors that determine cash waqf behavior from a behavioral finance perspective. This study confirms religiosity as the most important factor for Muslim financial behavior, so further research should develop a religiosity index that considers this financial aspect.

Despite its importance, our study is not without its limitations. With the considerations that we have previously stated, the respondents of this study were limited to government employees of the Ministry of Religious Affairs. However, expanding the criteria for respondents might provide a broader analysis of the degree of religiosity of the respondents. In addition, since this study uses a subjective scale, it is unable to capture objective information, such as respondents' total net assets (as a measure of financial capability) or the number of financial platforms with which respondents are registered (as a measure of financial sophistication).

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