Determinant of Zakat Payment Behavior in Indonesia: Socio-Economic and Social-Influence Approach

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Abstract:
Indonesia, as a Muslim country with the obligation to pay zakat, still has obstacles that are less than optimal in the collection of zakat. Socio-economic and environmental conditions cause suboptimal zakat collection. This study aims to analyze socio-economic and socio-influencers who are influential in determining zakat payments in Indonesia. The data used is from the Indonesian Family Life Survey (IFLS) 2007 and 2014. The method used is Ordinary Least Square (OLS), which uses a robust model with no intercept. The results of the study show that socio-economic and socio-influencers have a positive effect on increasing zakat payments in Indonesia
***Keywords**: IFLS, Socio-economic, Socio-influencer, Zakat*

A. INTRODUCTION

Islam mandates that Muslims must fulfill the social obligation of paying zakat. Zakat aims to improve welfare, reduce poverty, and reduce income inequality (Cokrohadisumarto et al., 2020; Kasri & Sosianti, 2023). As Muslims, we must pay zakat to purify and cleanse our property and soul. (Kasri & Sosianti, 2023; Rahmat & Nurzaman, 2019).

The development of zakat experiences a positive trend every year. In 2022, we collected Rp. 22 trillion in national zakat to alleviate national poverty by 1.76%. In the first semester of 2023, we have reached Rp. 14.7 trillion (Baznas, 2024). The development of this positive trend has still not reached the potential level of the national zakat collection (Durohman et al., 2023, 2024; Kasri & Sosianti, 2023). The collection of zakat that does not reach the collection potential is caused by the community paying more taxes than zakat because of the absence of sanctions (Al Mubarok et al., 2021; Athief et al., 2022; Durohman et al., 2024).

The collection of zakat that is not optimal, accompanied by the importance of zakat in the development economy, requires an analysis of zakat payment behavior. The socio-economic approach can influence individual decision-making in paying zakat (Harmani et al., 2023; Maulana, 2020; Muthi'ah et al., 2021). Research conducted (Durohman et al., (2023) using socio-economics can explain individual behavior in paying zakat. On the other hand, the income level as a determinant of the ability to pay can affect the payment of zakat (Durohman et al., 2023; Maulana, 2020). Socio-economics describes age, home ownership, income, gender, marital status, employment status, and education level that can affect an individual's decision to pay zakat.

On the other hand, the religious level of the community that reflects a commitment to religion, behavior, and character ownership affects the determination of zakat payments (Durohman et al., 2023, 2024; Kasri & Sosianti, 2023; Lehrer, 2004). Environmental conditions that influence the increase in religious levels also impact the determination of zakat payments (Yeni & Mukhibad, 2020). Thus, social influence also affects Muslim behavior in paying zakat. Based on this background, the researcher aims to analyze the role of socio-economics and socio-influencers in influencing zakat payments. The use of socio-economics and socio-influencers can illustrate Muslim individuals' behavior in performing zakat.

B. RESEARCH METHODOLOGY

DATA

The secondary research data is from the Indonesia Family Life Survey (IFLS) 2007 and 2014. The data types used in this study are cross-section data and longitudinal panel data. The reason for using two data types is to estimate two different models.

METHODOLOGY

This study aims to discover the characteristics of individual Muslim decisions in zakat through socio-economic and socio-influencer approaches. Socio-economics is a general description of social and economic conditions. (Durohman et al., (2023, 2024) used socio-economic variables: age, gender, number of household members, home ownership, place of residence, loans, education, marital status, income, occupation, and religiosity. Scio-influencer is a general description of social influence in the environment to pay zakat. Social-influence can affect the community's ability to make national payments. The research conducted explained that social influence can have a positive effect on contributing to crowdfunding. Modifying the meaning of social-influencer with IFLS5 (2014) data, the socio-influencer variable consists of following ta'lim and Islamic education. On the other hand, researchers adopt the use of zakat from Durohman et al., (2023), (2024); Maulana, (2020).

The purpose of this study is to ensure the use of two models. The first model aims to determine the influence of socio-economy and socio-influencers that can consistently influence the determination of zakat payments using IFLS4 (2007) and IFLS5 (2014).

Socio-influencer variables are proxied by Islamic education

$$\ln\_zakat_i = \beta_1 age_i + \beta_2 age_i^2 + \beta_3 Gender_i + \beta_4 numhh_i + \beta_5 hown_i + \beta_6 place_i + \beta_7 educ_i + +\beta_8 statmar_i + \beta_9 inc_i + \beta_{10} loan_i + \beta_{11} occp_i + \beta_{12} relic_i + \beta_{13} ischool_i + \epsilon_i$$

The second model explains the influence of socio-economics and socio-influencers on the determination of zakat payments using IFLS5 (2014). The study adds the variable following ta'lim to the socio-influencer proxy.

$$\ln\_zakat_{it} = \beta_1 age_{it} + \beta_2 age_{it}^2 + \beta_3 Gender_{it} + \beta_4 numhh_{it} + \beta_5 hown_{it} + \beta_6 place_{it} + \beta_7 educ_{it} + +\beta_8 statmar_{it} + \beta_9 inc_{it} + \beta_{10} loan_{it} + \beta_{11} occp_{it} + \beta_{12} relic_{it} + \beta_{13} talim_{it} + \beta_{14} ischool_{it} + \epsilon_{it}$$

The method used in this study is Ordinary Least Square (OLS) by adding a robust model. Researchers use robust methods in statistics and econometrics to generate estimates and inferences that remain valid even if some classical assumptions of regression models, precisely assumptions about homoscedasticity (constant error term variance), are not met. On the other hand, the research model does not include intercepts or constants, which means that the model forces the regression line through the origin point (0.0).

$$\hat{\beta}_{robust} = (X^T W X)^{-1} X^T W y$$

Information

$\hat{\beta}_{robust}$: the vector of robust parameter estimates

X : design matrix of the regression model (independent variables)

y : response vector (dependent variables)

W : weight matrix used to give different emphasis to observations based on their robustness against classical assumptions. These weights can be calculated using appropriate methods such as Huber, biweight, or Tukey.

Table 1. Variable Definition

Variables	Information	Notation
	Dependent variable	
Zakat	Total Zakat Payment (Rupiah)	Zakat
	Socio-economic	
Age	Total age	age
Age^2	Age square	age^2
Gender	Dummy 1 = Male 0 = Female	Gender

Variables	Information	Notation
Household size	Number of household members	numhh
Home ownership	Dummy 1 = own home 0 = otherwise	hown
Place of resident	Dummy 1 = urban 0 = rural	place
Pendidikan	Duration of education	educ
Marital status	Dummy 1 = married 0 = otherwise	statmar
Income	Total revenue (Rupiah)	Inc
Loan	Dummy 1 = has loan 0 = otherwise	loan
Occupation	Dummy 1 = self employed 2 = work 3 = unpaid family worker 4 = freelancer	occp
Religiosity	Dummy 1 = Religious 0 = otherwise	relic
	Socio-influencer	
Ta`lim	Dummy 1 = more than 1 time 2 = once a month 3 = otherwise	talim
Islamic school	Dummy 1 = have been in Islamic education 0 = otherwise	ischool

D. RESULTS AND DISCUSSION

Researchers generate estimates and inferences that remain valid even if some classical assumptions of regression models, precisely assumptions about homoscedasticity (constant error term variance), are not met by using robust methods in statistics and econometrics. Based on the OLS method analysis, it is explained that socio-economics and socio-influencers significantly influence the determination of zakat payments in Indonesia. This result can be seen from the probability values of the first and second models, which are significant with an alpha rate of 5%.

The age variables in models (1) and (2) were significantly positive for zakat payments. In model (1), the probability value 0.000 is less than the alpha value of 5%. Increasing the age of the Muslim community will increase the opportunity to pay zakat by 5.2%. In model (2), the probability value 0.000 is less than the alpha value of 5%. Increasing the age of the Muslim community will increase the opportunity to pay zakat by 4.5%. This condition is in line with the relationship between age square and significant zakat payments in models (1) and (2). The probability value of 0.000 is less than the alpha value of 5%. Thus, increasing the age of Muslim individuals will increase the chances of paying zakat. The research conducted explained by Durohman et al., (2023), (2024); Harmani et al., (2023) age positively impacts zakat payment behavior in Indonesia.

Table 2. Results of Zakat Determinant Analysis

Variables	Model 1			Model 2		
	Coeff.	t-statistic	Prob.	Coeff.	t-statistic	Prob.
age	0,052	20,18	0,000*	0,045	17,01	0,000*
age^2	0,000	17,88	0,000*	0,000	17,52	0,000*
Gender	0,993	12,68	0,000*	0,821	0,083	0,000*
numhh	0,342	24,91	0,000*	0,335	21,47	0,000*
hown	1,788	15,78	0,000*	1,732	14,72	0,000*
place	0,768	9,30	0,000*	0,705	7,87	0,000*
educ	0,170	20,74	0,000*	0,197	23,06	0,000*
statmar	1,010	23,70	0,000*	1,165	25,33	0,000*
Inc	8,900	3,60	0,000*	8,730	3,98	0,000*
loan	1,069	13,52	0,000*	1,257	14,39	0,000*
occp	0,927	25,70	0,000*	0,948	23,49	0,000*
relic	1,673	18,36	0,000*	1,588	16,64	0,000*
talim	-	-	-	0,401	4,39	0,000*
ischool	0,431	4,58	0,000*	0,440	4,39	0,000*
F-statistic		8370			6901	
Prob (F-statistic)		0,000*			0,000*	
R-Square		0,953			0,954	

A significant positive relationship occurred in gender correlations and zakat payments in models (1) and (2). The probability value in models (1) and (2) is 0.000 less than the alpha value of 5%. In model (1), the coefficient value of 0.993 shows that men can pay zakat by 99.3% compared to women. In model (2), the coefficient value is 0.821, which shows that men can pay zakat by 82.1%. This result shows that men have a high chance of paying zakat because there is a

responsibility to pay zakat at a reasonable level. Liao et al., (2015) explained that men and women have different social backgrounds and cultural conditions, so they show different behaviors. The results of gender have a positive influence on zakat payments in accordance with research conducted by Durohman et al., (2023), (2024).

The number of family members significantly positively influences increasing zakat receipts in Indonesia in models (1) and (2). The results are seen from the significant value in both models of 0.000 less than the alpha value of 5%. The coefficient values in models (1) and (2) of 0.342 and 0.335 explain that an increase in the number of household members of 1% can affect the receipt of zakat by 34.2% and 33.5%. Many households tend to have greater economic capacity and responsibility, so the amount of zakat the family pays is large. The research conducted by Durohman et al., (2023), (2024) explained a significant positive influence between the number of family members and the increase in zakat payments.

People with homeownership can affect the payment of zakat, as seen from the probability value in models (1) and (2), which is smaller than the alpha value of 5%. he coefficient values in models (1) and (2) of 1.788 and 1.732 show that Muslim people who own their own houses have the opportunity to increase zakat by 178% and 173%. Muslim communities that own homes describe better economic capabilities. Thus, Muslim people who own houses tend to have the opportunity to increase their zakat obligations. This result is in line with research conducted by Durohman et al., (2023), (2024); Maulana, (2020).

Place of residence has an influence on zakat payments. This can be seen from the significance value in models (1) and (2) of 0.000 which is smaller than the alpha value of 5%. The coefficient values in models (1) and (2) of 0.768 and 0.705 explain that the urban environment can increase zakat payments by 76.8% and 70.5%. Households living in urban areas tend to spend more zakat than households living in rural areas. This explained that the residence factor plays an important role in determining the amount of zakat one has, perhaps due to differences in income, access to financial facilities, awareness, and lifestyle between urban and rural areas. This analysis is important to understand the geographical factors that influence zakat payments and to formulate effective policies for zakat collection in various regions. Afifah, Kurniawati, et al., (2021) explained that the environment influences people's decisions to pay zakat because of easy access to zakat services, an excellent social environment, and good collection strategies.

Education affects the payment of zakat, which can be seen from the significant value. The significant value in models (1) and (2) is 0.000 less than the alpha value of 5%. In models (1) and (2), coefficient values of 0.170 and 0.197 are obtained, which means that the level of education will increase the chance of

paying zakat by 17% and 19.7%. A high level of education will correlate with the level of awareness of the environment and obligations in various ways that will contribute to the determination of zakat payments (Durohman et al., 2023, 2024; Maulana, 2020).

The status of marriage also significantly affects the payment of zakat. The result can be seen from the probability value in models (1) and (2) of 0.000, which is smaller than the alpha value of 5%. The coefficient values of 1.010 and 1.165 explain that marital status contributes to the payment of 101% and 116.5% of zakat. People with marital status are more responsible and more aware of paying zakat.

Income significantly affects zakat payments, as seen from the probability values in models (1) and (2). Models (1) and (1) have a probability value 0.000 less than the alpha value of 5%. The coefficient values in models (1) and (2) of 8,900 and 8,730 mean that the revenue contributes to increasing zakat payments by 89% and 87.3%. Zakat is calculated based on a certain percentage of an individual's income or wealth. Therefore, the higher a person's income, the greater the amount of zakat that must be paid. Individuals with higher incomes have greater economic ability to fulfill zakat obligations (Maulana, 2020).

Loan ownership can affect the payment of zakat. Models (1) and (2) have a probability value of 0.000 less than the alpha value of 5%, interpreted as having a significant relationship. The coefficient values in models (1) and (2) of 1.069 and 1.257 show that loan ownership contributes to zakat by 106.9% and 125%. Loan ownership shows that individuals have access to capital for productive ventures, which ultimately increases income and increases zakat calculations (Durohman et al., 2023, 2024).

The occupation variable is significant for the payment of zakat with a probability value of 0.000 less than the alpha value of 5% in models (1) and (2). The coefficient values of 0.927 and 0.948 can be interpreted as occupation contributing to 92.7% and 94.8% zakat payments. Individuals with a good level of employment will reflect income, so the proportion of zakat obligation will be high. (Durohman et al., 2023, 2024). Setia & Zulkifli, (2018) good corporate governance can motivate to pay zakat.

The level of religion can affect the payment of zakat, as seen in the probability values of models (1) and (2). The probability values of models (1) and (2) of 0.000 are smaller than the alpha value of 5%, indicating significant influence. The coefficient values of models (1) and (2) of 1.673 and 1.588 mean that the individual's religious level will affect the payment of zakat by 16.73% and 15.88%. Individuals who are obedient to religion will have the responsibility and awareness of paying zakat (Aligarh, 2021; Diningtyas, 2011; Durohman et al., 2023, 2024). On the other hand, individuals who have a religious level will have basic knowledge of the obligation of zakat (Ghaouri et al., 2023).

Individuals who have undergone Islamic education will influence the decision to pay zakat. The analysis showed that models (1) and (2) were significant, with a probability value 0.000 less than the alpha value of 5%. The coefficient values in models (1) and (2) of 0.431 and 0.440 show that individuals with Islamic education experience contribute to increasing zakat by 43.1% and 44%. Individuals with experience in Islamic education have knowledge about zakat, which increases responsibility and awareness in paying zakat (Arilia & Anwar, 2019).

Individuals who actively participate in Islamic religious associations are influential in the payment of zakat. The results of this analysis can be seen from the probability value of the talim variable of 0.000, which is smaller than the alpha value of 5%. The value of the talim variable coefficient of 0.401 shows that the talim variable contributes to increasing zakat payers by 40.1%. Individuals actively participating in religious activities will have basic knowledge of zakat and a supportive environment.

A strategy is needed based on research showing that socio-economics significantly influences the determination of zakat payments in Indonesia. Strategies for increasing zakat payments by considering socio-economic factors are

1. Education and Awareness: Conduct an intensive education campaign about the importance of zakat and its impact on social welfare. Focus on education about Islamic law related to zakat and the social benefits of zakat.
2. Religious Education: Develop programs that touch on aspects of zakat, including zakat calculations, obligations, and moral values around zakat. This program can be aimed at various age groups and socio-economic backgrounds.
3. Partnership with Religious Institutions: Collaborate with religious institutions to convey messages about zakat directly to pilgrims. Support from religious leaders can increase compliance with zakat among their people.
4. Policy and Incentive Socialization: Informing about specific policies or incentives that can encourage zakat payments, such as tax deductions or public recognition of compliance in paying zakat.
5. Use of Technology: Utilizing technology to make it easier to calculate and pay zakat. Mobile applications or online platforms can help individuals calculate the right amount of zakat based on their financial situation.

On the other hand, the strategies that can be used to increase zakat payments when viewed from socio-influencers are

1. Community and Network Formation: Building a community or network that supports the practice of zakat. This can be done through regular meetings, social events, or online forums where individuals can share their zakat-related experiences, knowledge, and motivations.

2. Use of social media and technology: Leveraging social media platforms and technology to reach a wider audience with messages about zakat and sustainability. Visual content, inspirational stories, and success stories from projects supported by zakat can increase individual awareness and motivation to contribute

E. CONCLUSION

The analysis results in this study show that the model (1) socio-economic and socio-influencer approaches consistently have a significant positive effect in influencing the determination of zakat payments in Indonesia. The same result is in the model (2) by adding individual variables who diligently participate in religious activities to influence increasing zakat payments. The strategies carried out to increase zakat payments by looking at socio-economic factors are providing education and awareness, developing religious education programs, collaborating with religious institutions to convey messages about zakat, socializing policies and incentives, and utilizing technology to facilitate the calculation and payment of zakat. On the other hand, the strategy to increase zakat payments based on socio-influencer factors is to build a community or network that actively supports zakat practices and use social media platforms and technology to reach a wider audience with messages about zakat.

REFERENCES

Afifah, I., Kurniawati, & Agus Hendra Gunawan, H. (2021). Faktor-Faktor dalam Meningkatkan Minat Muzaki Berzakat Melalui BAZNAS Provinsi Bali. *Jurnal Maisyatuna*, *2*(3), 12–21. https://doi.org/https://doi.org/10.53958/mt.v2i3.124

Al Mubarok, M. A., Iman, N., & Hariadi, F. W. (2021). Rekonstruksi Undang-Undang Nomor 23 Tahun 2022 Tentang Pengelolaan Zakat (Analisis Hukum Ekonomi Syariah). *MUSYARAKAH:Journal of Sharia Economics*, *1*(1), 62–79.

Aligarh, F. (2021). Survei Tentang Faktor-Faktor Penentu Kepatuhan Membayar Zakat Di Masa Pandemi. *Filantropi: Jurnal Manajemen Zakat Dan Wakaf*, *2*(1), 38–52.

Arilia, L., & Anwar, Moch. K. (2019). Pengaruh Religius dan Demografi Santri Pondok Pesantren Jagad'Alimussiry Terhadao Minat Membayar Zakat Melalui Lembaga Amil Zakat. *Jurnal Ekonomi Islam*, *2*(2), 62–71. http://jurnalmahasiswa.unesa.ac.id/index.php/jei/

Athief, F. H. N., Rachman, M. A., Rizki, D., Hakim, L., & Mohd Noh, M. S. Bin. (2022). Taxation policy and regulation efficiency on increasing zakat collection: countries comparison analysis. *Journal of Islamic Accounting*

and Finance Research, *4*(2), 301–326. https://doi.org/10.21580/jiafr.2022.4.2.14168

Baznas. (2024). *Outlook Zakat Indonesia 2024*. www.baznas.go.id;

Bin-Nashwan, S. A., Abdul-Jabbar, H., & Aziz, S. A. (2021). Does trust in zakat institution enhance entrepreneurs' zakat compliance? *Journal of Islamic Accounting and Business Research*, *12*(5), 768–790. https://doi.org/10.1108/JIABR-09-2020-0282

Cokrohadisumarto, W. bin M., Zaenudin, Z., Santoso, B., & Sumiati, S. (2020). A study of Indonesian community's behaviour in paying zakat. *Journal of Islamic Marketing*, *11*(4), 961–976. https://doi.org/10.1108/JIMA-10-2018-0208

Diningtyas, A. (2011). Faktor-Faktor yang Mempengaruhi-Kesediaaan Karyawan Zakat Profesi Melalui Pemotongan Gaji (Studi Kasus Direktorat Jenderal Perbendaharaan Negara Departemen Keuangan Republik Indonesia). *Media Ekonomi*, *19*(3), 69–92.

Durohman, H., Andrian Sutisna, F., Anugrah, M. Y., & Baharuddin, A. Z. (2024). Socio-Economic Determinants of Individual Muslim Zakat Payment Behavior in Indonesia: Analysis of Indonesia Family Life Survey (IFLS) Dataset. *JISEL Journal of Islamic Economic Laws VII*, *7*(1), 86–106. https://journals2.ums.ac.id/index.php/jisel/index

Durohman, H., Fajar Adrian Sutisna, & Muhammad Yuka Anugrah. (2023). Socio-Economic Determinants of Individual Muslim Zakat Payment Behavior in Indonesia. *Journal of Islamic Economics and Finance Studies*, *4*(2), 257–277. https://doi.org/10.47700/jiefes.v4i2.6715

Ghaouri, M., Kassim, S., Othman, A., & Zakariyah, H. (2023). Behavioural Intention of Zakat Participants Towards the Zakat Fund in Morocco. *ISRA International Journal of Islamic Finance*, *15*, 36–53. https://doi.org/10.55188/ijif.v15i1.484

Harmani, Basri, Y. Z., & Arafah, W. (2023). Determinant of Interest in Paying Zakat with Age as a Moderating Variable (Study on Minang Society). *APTISI Transactions on Management (ATM)*, *7*(2). https://doi.org/10.33050

Kasri, R. A., & Sosianti, M. W. (2023). Determinants of The Intention to Pay Zakat Online: The Case of Indonesia. *Journal of Islamic Monetary Economics and Finance*, *9*(2), 275–294. https://doi.org/10.21098/jimf.v9i2.1664

Lehrer, E. L. (2004). Religion as a Determinant of Economic and Demographic Behavior in the United States. *IZA Discussion Paper*.

Li, Y.-Z., He, T.-L., Song, Y.-R., Yang, Z., & Rongting, Z. (2017). Factors impacting donors' intention to donate to charitable crowd-funding projects in China: a UTAUT-based model. *Information, Communication & Society*, *21*, 1–12. https://doi.org/10.1080/1369118X.2017.1282530

Liao, L., Luo, L., & Tang, Q. (2015). Gender diversity, board independence, environmental committee and greenhouse gas disclosure. *The British Accounting Review*, *47*(4), 409–424. https://doi.org/https://doi.org/10.1016/j.bar.2014.01.002

Maulana, R. (2020). Perilaku Individu dalam Berzakat: Pengaruh Income dan Elastisitasnya. *EQUILIBRIUM*, *8*. http://journal.iainkudus.ac.id/index.php/equilibrium

Muthi'ah, S., Syauqi Beik, I., & Endri, D. (2021). Analisis Faktor Penentu Tingkat Kepatuhan Membayar Zakat (Studi pada BAZNAS DKI Jakarta). In *Iltizam Journal of Shariah Economics Research* (Vol. 5, Issue 1). www.pusat.baznas.go.id

Rahmat, R. S., & Nurzaman, M. (2019). Assesment of zakat distribution. *International Journal of Islamic and Middle Eastern Finance and Management*, *12*(5), 743–766. https://EconPapers.repec.org/RePEc:eme:imefmp:imefm-12-2018-0412

Setia, M., & Zulkifli. (2018). Pengaruh Penerapan Corporate Governance (GCG) dan Budaya Organisasi Pengelola Zakat Terhadap Motivasi Pembayaran Zakat Penghasilan di DIY. *Jurnal Kajian Bisnis*, *26*(1), 48–68.

Yeni, A., & Mukhibad, H. (2020). Muzakki`s Intention in Paying Zakat. *AFEBI Islamic Finance and Economic Review*, *5*(1).