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The Impact Of Macroeconomic Variables On Zakat Collection: The Case in Lembaga Zakat Selangor

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Abstract

Zakat is the third pillar in Islam which forms social security for the poor and needy. Zakat also develops a balanced economic growth through redistribution of wealth in society, wealth purification and for spiritual development. Zakat is among the most important elements of wealth management that are so dynamic and recognized as one of the proper methods to measure economic growth. Macroeconomic variables such as growth domestic product (GDP), consumer price index (CPI) and unemployment rate are among the best measures for the economic condition of a country. Thus, proper Zakat fund management should be carried out to address wealth accumulation during good economy and also zakat collection shortages during bad economy such as in the financial crisis. Consequently, the objective of this paper is to examine the relationship between zakat collection in Selangor and macroeconomic variables such as GDP, CPI and unemployment rate. Quarterly data is used to show seasonal fluctuations or changes in zakat collection in relation to changes in macroeconomic variables. This study applies time series analysis to assess the state of zakat collection under the influence of macroeconomic factors. The findings suggest growth domestic product (GDP) is positive and significantly correlated with Zakat collection (ZC) at 1% significant level. This means the higher the GDP the higher the amount of Zakat collection and vice versa. Consumer price index (CPI) and unemployment rate are not significantly correlated with Zakat collection (ZC). These results implicate the need for Lembaga Zakat Selangor particularly to have proper financial planning in zakat collection such as bigger savings during good economy (higher GDP) to cover the increasing demand from the existing and potential beneficiaries (Asnaf) during crisis period (lower GDP) such as Covid-19.
Keywords: Zakat collection, macroeconomic variables, GDP, CPI, unemployment rate

1. Introduction

This study discusses the impact of macroeconomic variables on zakat collection. Quarterly data is used to show seasonal fluctuations or changes in zakat collection in relation to changes in macroeconomic variables The analysis on relationship between zakat collection in Selangor and macroeconomic variables such as GDP, CPI and unemployment rate are discussed in result and discussion. The structure of this study as follows: section 1 introduces the research background and describes the meaning of zakat literally and practically and overview of zakat management in Lembaga Zakat Selangor (LZS). Section 1 also addresses the problem of this study and establishes the objective of the study. Next, section 2 discusses literature review relevant for this study. Theoretical background is defined to support the research. Section 3 discusses the methodology and data used for this study. Information about data and statistical test is discussed in this section. The results and discussion for this study is summarised in section 4. Lastly, section 5 summarizes the contribution of this study and addressed recommendations for future research.

1.1. Research background

Literally, zakat means to cleanse, to purify and to grow. Technically zakat is where a Muslim contributes his or her wealth by specific requirements to the qualified beneficiaries (*Asnaf*). Zakat also becomes an obligatory action to every Muslim and the main objective is to eradicate poverty, to balance economic growth and to minimize social problems. Zakat especially improves the living standard of the poor and needy (Ridhwan, M.Pimada and Asnawi, 2019; Suprayitno, 2020). Zakat fund will generate and boost economic activities through the increasing individual's purchasing power which creates a chain effect on production and consumer demand (Zaman, Kamarudin and Ahmad, 2017).

Furthermore, zakat is an instrument fund that is so dynamic that it is recognized as one of the proper methods to measure economic growth which means when people pay zakat, the level of economic growth will be higher and vise versa (Sarea, 2012). It is considered as an effective divine tool for alleviation of poverty because Islam looks upon poverty as religious and social problems since poverty pushes a person to lowliness, sin, and crime (Hassan, 2006). This is especially true if zakat collection and distribution are managed efficiently and channeled for productive and sustainable means. In Malaysia, Zakat collection and distribution are managed by zakat institutions as fund collectors and distributors (Amil) in each state of Peninsular Malaysia including Sabah and Sarawak. Lembaga Zakat Selangor is among the highest zakat collector in Malaysia since Selangor is the center for business activities. There are 27 branches of Amil (zakat collector) in Selangor and the number of Muslims also is a major percent among the robust population in Selangor. However, awareness of the importance of fulfilling the obligation to pay zakat among Muslims of Selangor is still not satisfactory even though the amount of zakat collection increases every year (Mohamed, Ibrahim, Zaidi & Kamaruzaman, 2019). In 2019, Lembaga Zakat Selangor (LZS) recorded the highest zakat collection amounting to RM855.1 million which increased by 7.18% compared to the year 2018 collection of RM793.7 million. Zakat distribution in Selangor reported an increase over the years which reflects the growth of zakat collection. Year 2019 recorded the highest amount of zakat distribution amounting to RM868.3 million which increased by 4.42% from the year 2018. The result shows that Lembaga Zakat Selangor (LZS) had achieved the target as one of the great and excellent zakat organizations through good economic factors that affect their zakat collection.

Zakat plays an important role in economic development especially to eradicate poverty. Poverty issues have become an economic obstacle all over the world and cause multidimensional and enormous (Ahmed, Johari and Abd Wahab, 2017). In alleviating the problem of poverty, Islam promotes a solution that is precise and effective, which is making it compulsory for qualified Muslims to give zakat. The performance of zakat collection cannot be denied has increased from year to year (Ahmad and Wahid, 2005). Zakat collection determines zakat distribution because a huge zakat collection benefits zakat recipients. On the other hand, some macroeconomic factors such as Gross Domestic Products (GDP), Consumer Price Index (CPI) and Unemployment rate can post a challenge to the amount of zakat collection. These macroeconomic variables are manipulated by the difference in demand and supply in the market. Thus, it can influence economic development. An increase (decrease) in GDP will expand (contract) the economy hence, will increase (decrease) household and business income. An increase (decrease) in inflation rate will decrease (increase) household and business income too. Thus, productivity growth in economy sectors will influence household and business income. As household and business income is connected to the economic condition, the Gross Domestic Product (GDP) and inflation of a country is likely to influence zakat collection

(Yusoff, 2011). In short, any changes in these macroeconomic factors will either increase or decrease zakat collection (Yusoff, 2006). Therefore, the objective of this study is to analyze the impact of macroeconomic variables on zakat collection.

2. Literature review

According to Sarif and Kamri (2009), some contemporary Islamic economics suggest that zakat be used as a source for income generators to make the poor more economically independent. Therefore, zakat collection and distribution should be properly managed by the Islamic states (*Amil)* to avoid any misapplication. In this context, zakat is a religiously-motivated economic instrument through which the surplus wealth of society is taken out to satisfy the essential needs and encourages entrepreneurial behavior among those who are not fortunate enough to have wealth of their own. Thus, zakat is one of the tools under wealth distribution planning to address some major socio-economic problems such as poverty alleviation, unequal distributions, weak economic growth and social problems.

According to Wahab (2012), GDP is one component of national income that provides information about the economy of a country. An increase in GDP will increase the value of zakat received. The positive influence of GDP on the amount of zakat is in accordance with the existing theory of Nurcholis (2005) who suggested that if GDP increase, the ability to pay will also increase. Thus, it will increase the amount of zakat. Economists used GDP in determining whether an economy is growing or experiencing a recession. Increasing economic growth will increase national income. This will increase the amount of zakat due to an increase in the number of assets of the zakat mal. Based on the discussion above, the following hypothesis is proposed:

H_{1a}: There is a positive and significant relationship between GDP and zakat collection.

Inflation is a sustained rise in the general price level. A high inflation rate will increase the living cost and the living standards of people in a particular country, therefore maintaining a low and stable inflation rate has become one of the challenges in the macroeconomic management of most countries. According to Idris and Bakar (2017); N. Grengory (2007) rising inflation rate will increase the price of goods continuously. Thus, under the Demand-Pull Theory of inflation (Keynes, 1936), which explains that rising inflation will increase the price of goods so that the value of the currency will decrease and ultimately will reduce peoples' purchasing power. The negative influence of inflation on zakat collection showed that inflation had a significant effect on the amount of zakat collected. Fluctuating of inflation rate will influence people's income and decisions in allocating funds to pay zakat (Afendi 2018). Based on the discussion above, the following hypothesis is proposed:

H_{1b}: There is a negative and significant relationship between Inflation rate and zakat collection.

Philip curve (1985) theory indicates that inflations have an inverse relationship with unemployment rate. Higher inflation is associated with lower unemployment and vise versa. For example, when demand for labor is low and unemployment is high, workers are reluctant to accept lower wages than the prevailing rate, and as result, the wages rate will fall. In such a situation, individual income will decrease. Therefore, lower unemployment rate exists at the expense of higher inflation and vise versa (Macharia and Otieno, 2017). Rising in unemployment rate will decrease the people's income and influence individual decision to pay zakat. Therefore, amount of zakat will decrease. Based on the discussion above, the following hypothesis is proposed:

H_{1c}: There is a negative and significant relationship between Unemployment rate and zakat collection.

Zakat institution plays a role as a fund manager and as fund managers they also should have financial planning in managing cash inflows (collection) and cash outflows (distribution) but for the purpose of public welfare (*Maslaha*). During good economy, it is expected that Zakat collection will increase and the money will be distributed to beneficiaries (*Asnaf)* accordingly. During bad economy, it is expected that Zakat collection will decrease and the number of beneficiaries (*Asnaf)* will increase due to unemployment and increasing cost of living. Therefore increasing the inflation rate will decrease an individual income due to increasing price in goods and hence will decrease the amount of zakat collected (Armina, 2020). An income is connected to economic conditions. The bad economic condition will decrease the income and likely to influence zakat collection (Saadillah and Firmansyah, 2019). Thus, Zakat institution should have some reserves to cater unexpected demand from those who are greatly affected by the economic crisis. This financial planning process is mentioned in surah Yusuf (47-48*): [(Yûsuf (Joseph)] said: "For seven consecutive years, you shall sow as usual and that (the harvest) which you reap you shall leave it in ears, (all) - except a little of it which you may eat. (47) "Then will come after that, seven hard (years), which will devour what you have laid by in advance for them, (all) except a little of that which you have guarded (stored) (48).* Allah SWT stresses the importance of good financial planning where people must keep and save their abundant wealth in the seven-period of good harvest and be prepared for the seven periods of dreadful years. Shariah has incorporated measures such as zakat to maintain a balanced society while waqaf and wasiyyah to ensure healthy circulation of wealth, value preservation and protection from prohibited activities.

The obligation of Zakat is mandatory on every Muslim who possesses the minimum *Nisab* (exemption limit or criterion of Zakatability) of wealth that enjoys growth or is a result of a growth process, whether the person is man, woman, young, old, sane, or insane (Qaradawi, 1999). The beneficiaries (*Asnaf)* of Zakat are mentioned in *surah Taubah* (verse 60): *The alms are only for the poor and the needy, and those who collect them, and those whose hearts are to be reconciled, and to free the captives and the debtors, and for the cause of Allah, and (for) the wayfarer; a duty imposed by Allah. Allah is Knower, Wise.*

Zakat institutions should manage Zakat collection efficiently to provide sustenance to the economically unfortunate beneficiaries (*Asnaf)*.To be efficient, Zakat institution is expected to practice financial planning process especially in collecting and distributing Zakat to the needy beneficiaries (*Asnaf*). The significance of zakat is largely attributed to its effectiveness as a distribution tool in the process of wealth circulation and social security (Ismail and Hussain, 2017). Therefore, effective management of zakat collection and distribution is very important to improve the quality of life and alleviate poverty of recipients. Another study by Wahid, Ahmad, Mohd Nor and Abd Rashid (2017) suggests that the inefficiencies of zakat distribution might be seen through the amount of surplus fund of zakat undistributed every year and the institution not able to distribute the zakat fund to the eight *Asnaf* as well as not distributed based on the priority of *Asnaf.*

3. Methodology and data

Lembaga Zakat Selangor (LZS) is chosen as sample data due to its highest total zakat collection and distribution achieved compared with other states in Malaysia. Furthermore, LZS is situated in the Klang Valley area which is highly populated and being the center for economic activities and contributes the highest to Malaysia's gross domestic product (GDP). Secondary data of total zakat collection from 2001- 2018 (17-years) is taken from LZS's annual reports. Macroeconomic data such as GDP, Inflation and Unemployment rate for 17-year period are taken from the Department of Statistics Malaysia. Quarterly data is used to show seasonal fluctuations or changes in zakat collection in relation to changes in macroeconomic variables.

Time series analysis is performed to see how a given asset, security, or economic variable changes over time. In this study, it is used to examine how the changes associated with zakat collection compare to shifts in macroeconomic variables over the same time period. The linear trend analysis is used to test whether there is an overall significant increase (or decrease) in the zakat collection as the GDP, CPI and unemployment rate increase (decrease). The ordinary least square (OLS) regression method is conducted to examine the relationship between dependent variable and independent variables (Banker and Natarajan, 2008; Banker *et al*., 2010). By using the zakat collection as the dependent variable, the following baseline regression model is estimated:

$$\mathrm{ZC} = \alpha + \beta_1(GDP_t + CPI_t + UNEMP_t + \varepsilon_t) \quad (1)$$

Where:

ZC	= Zakat collection
GDP	= Gross Domestic Product
CPI	= Consumer Price Index
UNEMP	= Unemployment rate

Multicollinearity problem will be tested and confirmed using the Vector Inflation Factor (VIF) test in the first step of analysis. According to Henseler et al. (2009), if the VIF values of the variables are less than 5, this indicates absence of multicollinearity issue. In this study, the VIF value of the variables is less than 5 and that indicates no multicollinearity issue.

For the second step, multiple time series regression analysis frameworks is applied based on the Ordinary Least Square (OLS) estimation method to examine the relationship of all the explanatory and control variables (GDP, CPI, UNEMP) to the dependent variable (ZC).

4. Result and discussion

Multicollinearity problem has been tested using Variance Inflation Factor (VIF) as shown in Table 1.

Table 1: Multicollinearity Test Vector Inflation Factor

Variable	**VIF**	**1/VIF**
GDP	1.340	0.748
CPI	1.020	0.979
UNEMP	1.340	0.746
Mean VIF	1.230	

The VIF values for the GDP, CPI and UNEMP variables show a value which are less than 5 and therefore indicates these 3 variables having no multicollinearity issue.

4.1. Determinants of zakat collection

Table 2 shows the OLS regression analysis on the determinants of zakat collection. Only Gross Domestic Product (GDP) is positive and significantly correlated with Zakat collection (ZC) at 1% significant level. Consumer Price Index (CPI) and unemployment rate are not significantly correlated with zakat collection (ZC).

Table 2. Determinants of Zakat Collection

Variable	Model 1
C	**17.062**
	(12.825)
GDP	**9.440*** **
	(3.444)
CPI	**-2.281**
	(13.040)
UNEMP	**0.536**
	(1.232)
L2ZC	
R-squared	0.113
Adjusted R-squared	0.073
F-statistic	2.874**

Durbin-Watson stat	2.558
Obs	72.000

Note: ***, **, * indicates significance at 1%, 5% and 10% levels respectively.
Figure in parentheses () are standard error.

Therefore, H_{1a} that proposes there is a positive and significant relationship between GDP zakat collection and macroeconomic variables is supported in Model (1). This is consistent with Saadillah and Firmansyah (2019) and Senawi, Mat Isa, Kamarul Zaman and Husain (2018). Inflation rate and Unemployment rate are not significantly correlated with zakat collection. This may be due to the frequency of the quarterly data used. Table 3 summarizes the findings:

Table 3. Findings

H_{1a}	There is a positive and significant relationship between GDP and zakat collection.	Supported
H_{1b}	There is a positive and significant relationship between Inflation rate and zakat collection.	Not supported
H_{1c}	There is a negative and significant relationship between Unemployment rate and zakat collection.	Not supported

5. Conclusion

In this study, Inflation rate and Unemployment rate maybe are not important determinants for zakat collection in a short time period. The findings indicate that only GDP has a positive significant relationship with zakat collection. This means when there is an increase (decrease) in GDP, the impact on zakat collection will increase (decrease). For quarterly data analysis, only GDP has a significant impact on zakat collection but CPI and unemployment rate show a negative insignificant effect on zakat collection.

Based on the result of this study, the quarterly data analysis shows a consistent relationship between GDP and zakat collection. The significant impact of GDP on zakat collection shows that LZS should aware of economic factors that can affect zakat collection performance to provide sufficient funds to the economically unfortunate beneficiaries (*Asnaf)* especially during the crisis period.

Thus, LZS as an Amil should have proper financial planning to prepare for the worst-case scenario such as financial crisis and pandemic covid-19 crisis. Thus, as suggested by surah Yusuf (verse 46-47), LZS can plan for bigger savings during good economy to cover the increasing demand from existing and potential *Asnaf* during the crisis period. As suggested by financial planner, if we fail to plan then, we plan to fail. Therefore, it is important to have a proper and effective financial planning as zakat largely attributed to its effectiveness as a distribution tool in the process of wealth circulation and social security. Future studies should include other macroeconomic variables such as interest rate and exchange rate.

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