

CHAPTER 1

INTRODUCTION

1.1 Background of Study

Islam is a complete religion, which teaches Muslims how to practice shalat and how to support others through giving by zakat. Zakat is often mentioned in the Holy Qur'an after the word shalat, which means that zakat is as important as shalat. This definition implies that Islam needs Muslims to follow Allah by shalat and to support one another economically through paying zakat. "Zakat," which simply means "that which purifies" or "alms," is the act of sharing. A set part of one's income for charity, usually for the poor and needy. In Islamic concepts, Zakat is the most appropriate methodology to solve social problems, such as poverty. Zakat is seen through sharing a percentage of wealth with qualified recipients. According to the laws and instructions of the Syariah, zakat is the responsibility of a Muslim who can afford to pay.

Zakat institutions and management have grown rapidly in Malaysia. A great deal of progress has been achieved by increasing the amount of zakat collected across the country. Statement on the collection of zakat for all states in Malaysia provided by State Islamic Religions Council (SIRC) and other zakat institutions, shows a significant increase in the amount of zakat received. For example, the collection of zakat at the national level for 2016 amounted to RM2.63 billion. This number increased to RM2.92 billion in 2017 and increased again to RM3 billion in 2018. In 2019, the zakat

The collection amounted to RM3.37 billion and decreased in 2020 to rm2.93 billion due to many people losing their source of income, being laid off and businesses beginning to decline, resulting in unstable household income. As a result, the Zakat Institution has stepped forward earlier in providing zakat assistance to people affected by the COVID-19 pandemic. The findings of the study show that individuals who are eligible to receive zakat are increasing due to the pandemic. (JAWHAR, 2019) (Shaharin et al., 2021)

The imposition of zakat is to purify one's property and oneself. Allah says, "Take off their wealth alms to purify and cleanse them thereby" (Qur'an 9:103). If a wealthy person is used to paying Zakat, Islam assumes that his infatuation with money will

be reduced and that it will ultimately benefit him and society. Avarice is the worst ethical trait that can contribute to too many social issues (Hasan, 1987).

Nevertheless, most of the Zakat institutions in Malaysia do not yet have the proper way to manage the collection and distribution of Zakat. A good model of forecasting is therefore necessary. Forecasting will allow the Zakat institution to reliably estimate the Zakat collection and then better distribute within the same year. Moreover, by knowing the predicted value of collecting Zakat in advance, it can help the management plan a better strategy to distribute zakat money accurately as per collection (Ahmad Ubaidillah and Sallehuddin, 2013)

In Malaysia, all issues relating to the administration of zakat fall within the control of the States through the State Islamic Religious Counters (SIRC's). Due to the demand for more efficient and effective collection and distribution of zakat funds in Malaysia, some of the Religious Councils have formed an institution which is responsible for

collecting and distributing part of zakat in every states, starting with Pusat Pungutan Zakat (PPZ), Wilayah Persekutuan in 1991, followed by Pusat Zakat Selangor, Pahang and Pulau Pinang in 1995, and lastly Pusat Pungutan Zakat Negeri Sembilan and Melaka in 2000 (Ahmad, Sanep, Hairunnizam Wahid, 2006). It was followed by Tabung Baitulmal Sarawak in 2001 and the latest was Pusat Zakat Sabah that has been corporatized in 2007. Thus, the main objective of this study is to analyze the zakat collection and predict the trend of Pusat Pungutan Zakat (PPZ), Pusat Zakat Selangor (PZS), Pusat Zakat Negeri Sembilan (PZNS), and MAIPk using ARIMA and Holt's forecasting methods.

This research is organized as follows: in Chapter 2 we set up literature reviews on forecasting models in zakat collection future value. Chapter 3 discussed the further methodology and Chapter 4 have been highlighting the results of this study. Lastly, Chapter 5 outlined the conclusion and recommendation of the research.

1.2 Problem Statement

Zakat institutions need to be efficient in distributing zakat according to the amount of zakat collection in the current year. Zakat institutions are responsible to distribute the collected zakat in the same year and cannot hold or invest the zakat. Zakat surplus should be decreased to represent zakat institutions productivity in performing their duties. However, the studies show that the amounts of zakat surplus fluctuate with some years of overspent and other years of underspent. For example, the collection and distribution of zakat from RM394.1 million of the zakat funds raised in 2011 in Lembaga zakat Selangor (LZS) was only distributed RM324.2 million. Which leaves

RM69.9 million as zakat surplus in 2011. For 2012, the amount of zakat fund surplus increased to RM106 million but continuously decreasing to RM118.5 million, RM59.3 million and RM29.6 million for year 2013, 2014 and 2015 respectively. It shows a decreasing trend which show the zakat institution become more efficient. While the value of the undistributed zakat fund was negative in 2016 and the value of distribution exceeded the allocation, the figure increased in 2017 to RM140.6 million. In addition, for year 2018 and 2019 are negative RM36.2 and RM 13.2 respectively (MAIS, 2020)

The accuracy in zakat distribution can be increased if zakat institutions can accurately forecast the amount of zakat collection. An informal interview with one of the zakat officers from LZS reveals the organization does practice predicting the collection of zakat but only using a simple method of prediction. Therefore, there is a need for this research to be carried out to come out with better forecasting methods like ARIMA and Holt-Winters exponential smoothing.

According to Saad et al. (2016), the concept of al-Fauran (prompt) was practiced by Prophet Muhammad (PBUH) by which the zakat funds collected were promptly distributed. This means that the zakat funds collected were distributed as soon as possible in the interests of the Muslims (asnaf) who were in need at that time. During the time of the Prophet Muhammad (PBUH), the zakat fund was distributed in the same area where it was collected. Amil who had been appointed as zakat collector, immediately distributed all the zakat funds after they had been collected, leaving no surplus or balance. It seems that the zakat funds collected at that time were quickly and efficiently distributed to the recipients. In the early days of Islam, the zakat fund was immediately distributed. There was no surplus of zakat funds at that time. This is

because it was easy to identify deserving zakat recipients for the distribution of zakat funds.

Al Parisi (2017) observed that previous studies have shown that there are few studies on predicting the collection of zakat in Indonesia. Nevertheless, forecasting work will help policymakers determine the extent to which zakat potential can be reached in the long run and as an indicator of what should be done to achieve the maximum zakat potential.

1.3 Research Objective

The objectives of this study are:

- i. To model the zakat collection in LZS, PZNS, and PPZ using SARIMA and Holt-Winters exponential smoothing methods.
- ii. To model the zakat collection in MAIPk using ARIMA and Single Exponential Smoothing methods.
- iii. To identify the best fit model using in-sample and out-of-sample zakat collection data for these zakat institutions in Malaysia.
- iv. To forecast the future value 2020 zakat collection using the selected model.

1.4 Research Question

The purpose of this study is to answer the questions that arise below:

- i. How to analyze the model of SARIMA and Holt-Winters exponential smoothing in LZS, PZNS, and PPZ?
- ii. How to analyze the model of ARIMA and Single Exponential Smoothing in MAIPk?
- iii. What is the best fit model for the zakat collection of these zakat institutions?
- v. What is the forecast value of 2020 of the zakat collection using the selected model?

1.5 Scope and Limitation of the Study

The scope of the study focused on the prediction of zakat collection for the year 2020. The Seasonal-ARIMA and Holt-Winters exponential smoothing models used to forecast zakat collection for Lembaga Zakat Selangor (LZS), Pusat Zakat Negeri Sembilan (PZNS) and Pusat Pungutan Zakat (PPZ). The monthly data from January 2010 until December 2018 were used for in-sample data and January 2019 until December 2019 for out-of-sample data. MAIPk has no monthly data, hence the modelling process used the normal ARIMA and Single Exponential Smoothing models using yearly data from 1991 to 2014 for modelling process and 2015 to 2019 for validation purposes. The Minitab 19 Statistical Software and Microsoft Excel were used to analyze the data from the zakat collection.

1.6 Significant of Study

In general, this study allowed zakat institutions in Malaysia to improve the efficiency of zakat distribution more accurately using the prediction of zakat collection. All the zakat beneficiaries (asnaf) especially the poor and needy can receive more equitable and timely financial aid from zakat institutions if zakat institutions can project accurately the amount of zakat to be distributed. This study aims to model the zakat collection of LZS, PZNS, PPZ, and MAIPk using Holt-Winters, Single exponential smoothing, SARIMA, and ARIMA models. This study also has potential significance as follow:

- i. The findings of this study would help zakat institutions to improve the process of zakat distribution.
- ii. The analysis of the zakat collection forecast indirectly manages the fluctuating surplus or shortage of zakat.