

Halal Tourism and Foreign Exchange Reserves in Indonesia: Error Correction Model

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Abstract

This study aims to look at how the number of tourists and the exchange rate affects Indonesia's foreign exchange reserves before and after the implementation of halal tourism from 2010 to 2019 (monthly). The Paired t-Test model was used to look at the differences in Indonesia before and after halal tourism. By examining the short and long-term effects of tourist numbers and currency rates on foreign exchange reserves using the Error Correction Model. Halal tourism, according to the research, helps Indonesia's foreign exchange reserves. The exchange rate has a negative impact on foreign exchange reserves in this situation. Meanwhile, the number of international visitors has a favourable impact on both short- and long-term foreign exchange reserves. It demonstrates that the tourism sector, particularly halal tourism, can be one of the supporting sectors in increasing the country's foreign exchange, encouraging the government to implement policies to support its tourism industry.

Keywords:

Halal tourism, exchange rate, foreign exchange reserves, error correction model

How to Cite:

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INTRODUCTION

The era of globalisation has made every country cooperate in politics, economy and socio-culture. In the economic field, cooperation can be carried out through international trade, which occurs because of the limited resources of each country, so there are export and import activities as a means of meeting these limitations (Ichsan, 2014). International trade is also positively correlated with the service industry in the tourism sector (Chaisumpunsakul & Pholphirul, 2018). In international trade, every country needs financing to make transactions. One of the funding sources is foreign exchange reserves (Uli, 2016).

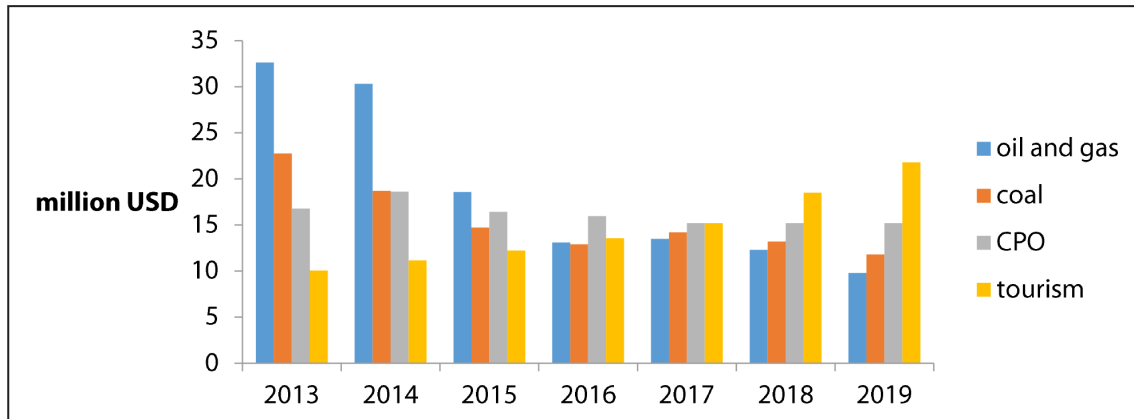
Deposits of foreign currency with central banks and monetary authorities are known as foreign exchange reserves (Hariadi et al., 2020). Foreign exchange reserves, according to Nurjanah and Mustika (2021), are reserves held by the central bank in foreign currency units to cover financial obligations arising from international transactions (reserve currency). A country's international finances will become stronger as a result of its substantial foreign exchange reserves, which means the value of the country's currency will strengthen. As previously stated by (Kaligis et al., 2017). The variable foreign exchange reserves and the exchange rate have a one-way (unidirectional) causal relationship, which means that changes in foreign exchange reserves affect the exchange rate. It demonstrates that Bank Indonesia's participation in the foreign currency market through foreign exchange reserves has an impact on the stability of the rupiah exchange rate.

Exports are one aspect that can have an impact on the country's foreign exchange reserves. One of the international commerce activities that plays a significant part in the economy of a country is export (Maranata et al., 2021). Since the term tourist spending is calculated as export revenue, tourism has been deemed an export product that is a mean international commerce service. The tourism industry's growth will contribute to a country's economic growth (Tiurma et al., 2014), as well as considerably to the country's foreign exchange profits, bolstering foreign exchange reserves (Afdi, 2015). Because of its expanding contribution to long-term economic growth, inbound tourism has expanded in importance enormously (Rasool & Maqbool, 2021). The tourism industry has a favorable impact on the community by improving community income, expanding employment possibilities, distributing development, and raising government revenue (Budi et al., 2017).

Based on Figure 1, we can see that tourism in Indonesia has advantages compared to other sectors, namely the oil and gas, coal, and CPO (crude palm oil) sectors. Therefore, the tourism sector is projected to have the highest growth rate compared to other sectors as the country's foreign exchange earnings. It makes tourism the primary target for the government in improving the economy. Tourism can be described as the act of traveling from one location to another for the aim of achieving a specific goal. Tourism is defined by the United Nations World Tourism Organization as "persons traveling to and staying in regions outside their typical environment for not more than

one year for leisure, business, and other objectives” (Aji et al., 2020). Furthermore, because tourism has ties to a variety of businesses, such as insurance and transportation, it can help to grow other supporting industries (Afdi, 2015).

Figure 1. Foreign Exchange Receipts from Major Sectors



Source: Work Report of the Ministry of Tourism and the Central Bureau of Statistics, Indonesia (2020)

The halal tourist trend is one of the many developments that have occurred in the growth of tourism. A halal tourist destination is a geographical area in one or more administrative regions with interconnected tourist attractions, religious and public institutions, tourism amenities, accessibility, and communities that support the fulfillment of a statement based on the sharia concept (Mardianto et al., 2019). Halal tourism will become a competitive service business for non-Muslim destinations in the future, according to Battour & Ismail (2016). Halal tourism is a new trend in tourism management that is attracting more Muslim tourists to both Muslim-majority and non-Muslim nations every year (Satriana & Faridah, 2018). Part of this trend is the concept of tourism items paired with a halal idea based on Islamic values that can provide to the demands of Muslim tourists (Wibawa et al., 2021).

Halal tourism is a concept that complements traditional tourism, meaning that it is suitable for both Muslim and non-Muslim visitors. Those are intended to become the country's identity that implements it, and visitors who visit can feel safe and comfortable during their trip (Aji et al., 2020), to be a favorite destination (Moshin et al., 2020), and to perform as a halal-friendly destination (Al-Ansi & Han, 2019). Some of the countries that have implemented halal tourism are Thailand and Malaysia. Malaysia has built the concept of halal tourism starting in 2006 and even has a unique institution to handle halal tourism, namely the Directorate General of Sharia Tourism built-in 2009. For Thailand, although most of the population is non-Muslim, the Thai government has designed halal tourism. In 2005, it succeeded in developing its tourism performance, especially in the culinary and hospitality fields. In addition, the Thailand Muslim friendly destination application has also been provided to access the location of the nearest restaurant and mosque (Peristiwa, 2020).

The halal tourism segment in Indonesia has been developed since 2015. It is managed by the Ministry of Tourism of the Republic of Indonesia. In 2018, the halal tourism market experienced growth reaching 18%, with foreign exchange earnings reaching more than 40 trillion rupiahs, so the Ministry of Tourism has selected ten provinces for halal tourism development, some of which are Nusa Province, West Southeast, Aceh, Riau Islands and West Sumatra (Wibawa et al., 2021). Indonesia's participation in the Islamic Cooperation Organization (OIC) is also one way of developing its economic performance by offering a tourism sector with a halal tourism concept to increase foreign exchange reserves. In addition, Indonesia's achievements won 12 awards from 16 categories contested at the 2016 World Halal Tourism Awards in Dubai. Indonesia's achievements which won second place as a world halal tourist destination can also strengthen Indonesia to continue to develop its halal tourism performance (Global Muslim Travel Index, 2017).

Indonesia's achievements are still below the ranks of the world's first halal tourist destinations for eight consecutive years among OIC countries (Global Data Muslim Travel Index, 2017). The government regulations regarding the development of halal tourism have not been resolved, and there are still tourism products and businesses that have not been certified halal. Therefore, more superior performance is needed for Indonesia in developing the tourism sector to attract the attention of foreign tourists to make their tours of Indonesia. Based on this background, the authors are interested in examining the effect of the number of tourists and the exchange rate on foreign exchange reserves in Indonesia before and after the implementation of halal tourism (Hendratono & Puspitasari, 2018).

Indonesia is a country that applies an open economic system, which allows export and import activities between countries, both in the goods and services sector. In carrying out these transactions, Indonesia requires foreign exchange reserves as a source of financing, where the exchange rate also affects the position of the foreign exchange reserves. *Foreign exchange* is a foreign currency that functions as a means of financing in international trade transactions, which must be accepted and recognised by the international community. Foreign exchange reserves can be monetary gold, special drawing rights, reserve position in the fund, and other claims reserved by the central bank (Ichsan, 2014).

The Keynesian theory explains that a country's exchange rate depreciates (foreign currency strengthens, while domestic currency weakens), so it can relatively cause the price of goods-goods the domestic export becomes cheaper. In contrast, the cost of goods imports become more expensive. This condition led to an increase in exports and a decrease in imports. If exports are more significant than imports, it will cause a surplus in the balance of payments, increasing its foreign exchange reserves. Therefore, according to Keynesian theory, the relationship between exchange rates and foreign exchange reserves is negative, assuming *Ceteris Paribus* (Nopirin, 2017). The exchange rate and the building of foreign exchange reserves have a link (Lee & Yoon, 2020). Furthermore, international tourism is viewed as an exogenous component of aggregate demand by Keynesians, which

has a beneficial impact on earnings and employment, resulting in greater growth rates (Majeed & Mazhar, 2021).

Indonesia can obtain foreign exchange reserves through various international transaction activities through the tourism service sector, namely through the number of foreign tourists visiting. This tourism sector activity will positively impact foreign exchange reserves, which affect state income. Halal tourism has emerged as a new trend and a requirement for Muslim and non-Muslim countries alike (Adinugraha et al., 2021). Halal tourism has risen in popularity and become a recent phenomena in the tourism business, and countries all over the world should seize this chance. As a result, it is clear that there are several potential to apply the Halal Tourism concept. This market sector is predicted to increase rapidly due to the growing Muslim population and Muslim travelers (Chandra, 2014). Sharia tourism is another term for halal tourism. This tourism concept is defined as a tourism activity that incorporates Islamic principles in all aspects and is built on Islamic norms (Ramadhany & Ridlwan, 2018). Another viewpoint was that halal tourism is a type of tourism that is approved by Islamic principles (Nurjaya et al., 2021). According to Preko & Mohamed (2021), Islamic principles or traits were the most important components that attracted Muslims to a tourism location and provided value to the area (halal food, separate prayer facilities, Islamic dress code, and place of worship).

According to the Mastercard Crescent Rating Global Muslim Travel Index (2019), the concept of halal tourism is based on several basic needs of Muslim tourists when travelling, including; a). Halal food is an essential service, so there is no doubt when consuming local food and drinks; b). Prayer facilities, namely mosques complete with ablution facilities, make it easier for Muslims; and c). There is no Islamophobic sentiment, meaning there is a guarantee of security and safety when Muslim tourists travel to a particular place.

Halal or Islamic tourism has been a popular research topic in recent years in the United States, Malaysia, Indonesia, Turkey, Iran, Saudi Arabia, and Japan, among other countries and situations (Suban & Madhan, 2021). According to GMTI 2019, Indonesia ranked first among halal-friendly tourist destinations in 2019. The Muslim population in Indonesia is the world's largest, accounting for 90% of the total population. Indonesia, on the other hand, is not a Muslim-majority country. The Muslim population in Indonesia is the world's largest, accounting for 90% of the total population. Indonesia, on the other hand, is not a Muslim-majority country. There is a specific type of Islamic religious group based on the history of Islam's spread in Indonesia. As a result, because Indonesia has the world's largest Muslim population, it is the best place to conduct this research in order to identify their halal tourist requirements (Wibawa et al., 2021).

Jaelani (2017) examines the halal tourism industry in Indonesia, states that Indonesia has good economic prospects in the halal tourism industry, which is intended for Muslim tourists and non-Muslim tourists. This application is expected to realise Indonesia as the world's halal tourism mecca to increase government revenue significantly.

Therefore, Indonesia must make improvements in the field of tourism promotion and services. Jailani's research only focuses on the prospects of the halal tourism industry. In contrast, the author's research adds a variable of foreign exchange reserves in seeing halal tourism.

Peristiwo (2020) finds that the tourism industry's positive impact in the economies of Indonesia and Malaysia, especially in foreign exchange earnings and employment opportunities, has risen. Furthermore, Afdi (2015) states that the number of tourists visiting Indonesia in the long and short term has a positive and significant influence on net exports. This study has similarities with the author's research, but the author sees the number of tourists on foreign exchange reserves. Nizar (2012) found that tourism growth (tourism foreign exchange and number of tourists) and exchange rates had a positive reciprocal causality relationship. This study differs from the author's research, where the author sees the relationship between the number of tourists and the exchange rate and foreign exchange reserves in the short and long term.

Darsana & Swantara (2015) found that the number of tourist arrivals, income from the trade, hotel, and restaurant sectors affected user fees in Gianyar Regency. Research conducted by Henderson (2015) in developing halal tourism in their countries to increase state income is also very concerned about the needs of Muslim tourists, especially for the availability of halal food and worship facilities. Previous research focused on the concept of halal tourism, in contrast to the authors who looked further at the impact of halal tourism on foreign exchange reserves. Hendratono & Puspitasari (2018) study the same thing, namely tourism in Indonesia which analyzes the influence of tourism on exports and imports in Indonesia. The difference between this study and the author's research can be seen from the effects of tourism, where the author looks at the impact of the number of tourist arrivals and exchange rate on foreign exchange reserves. In contrast, previous research only looks at local revenue, export, and import effects.

The Keynesian approach has explained the relevance between foreign exchange reserves and the tourism economy, which demonstrates that international tourism is one of the variables that can increase income, in this case through the country's foreign exchange reserves obtained from visiting tourists (Afdi, 2015). In addition, tourism receipts in the balance of payments are located in the current account and are considered foreign exchange flows. The entry of foreign tourists (inbound) causes foreign exchange from the country's tourism to increase, so foreign reserves (foreign reserves) will increase. Likewise, on the contrary, the existence of outbound tours will reduce foreign exchange reserves (Nizar, 2012). Several previous studies only examined halal tourism concepts descriptively, without further analyzing the effect on foreign exchange reserves. In addition to this, previous studies examine the impact of the number of tourists on national income. In this study, the author tries to fill the gap from previous research by further exploring the effect of halal tourism on the country's foreign exchange reserves in the short and long term.

The goal of this research is to determine the contribution of the tourism sector to foreign exchange reserves in Indonesia before and after the implementation of halal tourism, as well as the effect of the exchange rate and the number of foreign tourists on foreign exchange reserves in Indonesia over the short and long term. The government can be encouraged to boost the attractiveness of the tourism sector in Indonesia by understanding the impact of halal tourism, the effect of the number of tourist arrivals, and the exchange rate on foreign exchange reserves. Following the explanation of the purpose and earlier research in the introduction, the analysis employed in the methods follows. Continue to talk about the regression results and make a conclusion.

METHODS

This study uses the Paired Sample t-Test approach to compare the averages of two groups, which means a sample with the same subject but experiencing two different measurements (before and after an application) for the data period 2010-2019. This method was proper to know the tourism sector's contribution to foreign exchange reserves before and after the implementation of halal tourism. In addition, this study also uses time series analysis with the Error Correction Model (ECM) approach. This model can see the effect of variables in research for the short and long term using Eviews ten software to aid data processing.

The data used in econometrics must be stationary, especially for time series data. To determine if the data or variable will tend to return to a fixed long-term trend over time, a test of stationary data is required. The stationary test of data utilizing the Augmented Dickey-Fuller Test was used in this investigation (ADF-Test). The minimum and maximum AIC (Akaike Information Criterion) values are used to establish the ADF test's optimal lag. Stationary tests are performed on all variables, starting with a constant (drift) and trend.

Using Error Correction Model (ECM), a derivative of the Ordinary Least Square (OLS) regression model, divides the equations of the cointegrated variables into two equations, namely long-term and short-term. It follows the research objectives of the authors who want to see the long-term and short-term effects between variables. In addition, ECM can analyse long-term economic phenomena, examine the consistency of empirical models, and avoid spurious regressions (Engle & Granger, 1987). The initial formula for the Error Correction Model (ECM) is as follows:

$$Y = F(X_1, X_2, X_3) \tag{1}$$

The formula (1) then formed into the Ordinary Least Square (OLS) multiple regression model as follows:

$$Y_t = \beta_0 + \beta_1 X_{1t} + \beta_2 X_{2t} + v_t \tag{2}$$

Then the Error Correction Term (ECT) is included as part of the Error Correction Model (ECM) as follows:

$$DY_t = \beta_0 + \beta_1 DX_{1t} + \beta_2 DX_{2t} + \beta_3 ECT_{t-1} + v_t \quad (3)$$

So, in general equation (3) can be written as equation below:

$$DFER_t = \beta_0 + \beta_1 DER_t + \beta_2 DFNT_t + \beta_3 ECT_{t-1} + v_t \quad (4)$$

Where *DFER* is foreign exchange reserves or a dependent variable that many foreign currency assets reserved by the Central Bank of Indonesia for the period 2010 to 2019 (monthly), which are measured in US Dollars; *DER* is the exchange rate of the rupiah against the US Dollar; *DFNT* (halal tourism) is the number of foreign tourists visiting Indonesia from 2010 to 2019 (monthly); β_0 are the constant; $\beta_1, \beta_2, \beta_3$ are the coefficient of the estimated of independent variables and *v* is the error term, and period *t*.

RESULTS AND DISCUSSION

Finding out whether there has been a change or difference in the conditions of tourism in Indonesia after the implementation of halal tourism, a different test was carried out with the Paired Test. After being tested, the results show differences before and after the performance of halal tourism in Indonesia. The changes that occur are more tourists visiting Indonesia. It is made clear from the positive coefficient of difference test of Paired t-test.

Table 1 explains that the average value before the implementation of halal tourism is equal to 102370583.9, and after the performance of halal tourism, it became 117672933.7, so there was a descriptive increase. The variance results are much different, respectively 1.78 and 7.41, with the number of observations used as many as 60, so that the degree of freedom (df) is 60-1 is 59. In addition, there is a descriptive Pearson correlation of 0.42 which means that there is a relationship for each variable. Based on the value of t count, which is equal to 9.5114 is greater than the t table value of 2.0000, which means that H0 is rejected and H1 is accepted, which means that foreign exchange reserves in Indonesia before the implementation of halal tourism are not the same as after the performance of halal tourism. Or in other words, the implementation of halal tourism contributes to foreign exchange reserves in Indonesia.

Table 1 shows that by using the Paired Test, the result is that the implementation of halal tourism contributes to Indonesia's foreign exchange reserves. This study's test shows that implementing halal tourism on foreign exchange reserves in Indonesia is different from some previous studies. This research contrasts to the analysis of Kusumaningrum et al. (2017), which states that the implementation of halal tourism in South Korea is based on Korean interests. The South is constructing an image of a Muslim-friendly country to increase people's income and investment through the halal tourism program. Jaelani (2017), which examines the halal tourism industry in Indonesia, states that Indonesia has good economic prospects in the halal tourism industry, which is aimed at both Muslim and non-Muslim tourists.

Table 1. Result of paired t-Test

	Before	After
Mean	102370583.9	117672933,7
Variance	1,78731E + 14	7,41924E + 13
Observations	60	60
Pearson Correlation	0.423873871	
Hypothesized Mean Difference	0	
Df	59	
t Stat	-9.511415505	
P (T <= t) one-tail	8,11311E-14	
t Critical one-tail	1.671093032	
P (T <= t) two-tail	1,62262E-13	
t Critical two-tail	2,000995378	

Table 2 shows that foreign exchange reserves, exchange rates and halal tourism are not stationary at the level (the ADF value is greater than the critical value), meaning that it rejects H1 and accepts H0, so the next stage is needed carry out testing.

Table 2. Result of Unit Root Test with Augmented Dickey-Fuller (ADF) at level

Variable	ADF statistics	ADF critical value			Prob	Decisions
		1%	5%	10%		
FER	-3.0250	-4,0376	-3,4483	-3.1493	0.1299	Not Stationary
ER	-1.8249	-4,0376	-3,4483	-3.1493	0.6865	Not Stationary
NFT	-1.6461	-4.0460	-3.4523	-3.1516	0.7679	Not Stationary

Based on Table 3, at first difference, all variables, foreign exchange reserves, exchange rates, and halal tourism, are stationary, so they qualify for the ECM test. Table 4 shows a long-term relationship between variables because the residuals are stationary at the 1%, 5% and 10% levels.

Table 3. Result of Unit Root Test (ADF) at first difference

Variables	ADF statistics	ADF critical value			Prob	Decisions
		1%	5%	10%		
FER	-9.1469	-4,0376	-3,4483	-3.1493	0.0000	Stationary
EE	-8,7096	-4,0376	-3,4483	-3.1493	0.0000	Stationary
NFT	-5,0648	-4,0460	-3.4523	-3.1516	0.0003	Stationary

Table 4. Result of Cointegration Test

Variable	ADF value	ADF Critical Value			Prob.	Decision
		1%	5%	10%		
Residual	-10,569	-4,0383	-3.4480	-3.1495	0.0000	Stationary

Table 5 shows that the exchange rate variable has a significant t-statistic value at $\alpha = 5\%$ and a probability of 0.1018 with a coefficient of -1391.5, which means that in the long run, the exchange rate has a negative correlation but insignificant effect on foreign exchange reserves in Indonesia. The number of foreign tourists who in the long-run has a significant t-statistic value at $\alpha = 5\%$ and a probability of 0.0000 (less than 0.05), and a coefficient of 42.2639, meaning that the variable number of foreign tourists has a positive effect on foreign exchange reserves in the long term.

Table 5. Long Run Estimation on Foreign Exchange Reserves

Independent variables	Coefficient	t-statistics	Prob
C	8857	6183	0.0000
ER	-1391.5	-1.6493	0.1018
NFT	42.2639	6.6838	0.0000

ECT value, which is significant and has a negative value, is one of the requirements for the ECM model to be valid. In Table 6, the ECT value of -0.0786 is obtained, which is significant at $\alpha = 5\%$, and a probability of 0.0030 (less than 0.05), which means that the ECT coefficient is significant in this model, so that the independent variables used in this study has a significant effect on the dependent variable in the short and long term. It is also supported by the F-statistic probability value of 0.0000.

Table 6. Short-run estimation on Exchange Reserves

Independent variables	Coefficient	t-statistics	Prob
C	6614	2.6101	0.0103
DER	-5096.2	-4,1272	0.0001
DNFT	6.6617	2.1954	0.0301
ECT(-1)	-0.0786	-3.0338	0.0030

The value of the error correction term is negative and significant. It means the model has a long-run equilibrium. The exchange rate variable has a negative relationship, and the number of foreign tourists has a positive relationship to foreign exchange reserves in the short run. All variables are significant in this study, the coefficient is -5096.2 and 6.6617, and the probability is 0.0001 and 0.0301.

Based on Table 7, the normality test shows that the Jarque-Bera is 2.2674 with the probability of significance is 0.3218 (> 0.05), which means the data is normally distributed. The VIP values of the variables are 1.0202 and 1.0413, respectively, meaning less than 10, so there is no multicollinearity in this model—next, the Prob. The Chi-Square from Obs * R-Squared is 0.6146 (> 0.05), meaning no heteroscedasticity in the model and the Prob. Chi-Square is 0.4493, more significant than 0.05, so there is no autocorrelation problem in the model. After knowing the results of the classical assumption test, it is known that nothing has been violated, then the regression results are not biased in this ECM modelling, and continue to the analysis.

Table 7. Classical Assumption

Normality			
Jarque-Berra			Probability
2,2674			0.3218
Multicollinearity			
Independent Variables			Variance Inflation Factor (VIP)
Exchange rate			1.0202
Halal Tourism			1.0413
Heteroscedasticity			
F-statistics	1,6886	Prob. F (20,38)	0.6232
Obs * R-Squared	5.0210	Prob.Chi-Square (20)	0.6146
Scaled explained SS	5.3776	Prob.Chi-Square (20)	0.5462
Autocorrelation			
F-statistics	0.3022	Prob. F (2,113)	0.4654
Obs*R-Squared	0.6332	Prob. Chi-Square (2)	0.4493

Foreign exchange reserves are influenced by the exchange rate, which has a negative value in both the short and long term but is only significant in the short term. In contrast, the number of foreign tourists has a positive and significant short and long-term impact on Indonesia's foreign exchange reserves. Furthermore, the ECT variable is significant and valid, indicating that the variables used in this study have an impact on foreign exchange reserves in both the short and long term.

Exchange rates have a negative and significant relationship in the short term with foreign exchange reserves. A more substantial exchange rate can reduce foreign exchange reserves in Indonesia. It follows Keynes's theory which states that when a country experiences depreciation (foreign currency strengthens, while the domestic currency weakens), it can relatively cause the price of goods—goods the domestic export becomes cheaper. In contrast, the price of goods—imports become more expensive. This condition led to an increase in exports and a decrease in imports. If exports are more significant

than imports, it will cause a surplus in the balance of payments, increasing its foreign exchange reserves.

The relationship between the exchange rate and foreign exchange reserves is similar to several theories, as evidenced by research from Sayoga & Tan (2017) and Andriyani et al. (2020), who discovered that the exchange rate had a negative and significant effect on Indonesia's foreign exchange reserves. Furthermore, this study contradicts research from (Kaligis 2017), which discovered that the exchange rate has a positive and significant effect on Indonesia's foreign exchange reserves. However, Murni et al., 2021 found that foreign tourists have no effect on foreign exchange reserves. That result has not supported this research.

For the variable number of tourists, The number of foreign tourists has a significant effect in the short and long term, with the coefficient being both positive. These results are in line with research (Afdi, 2015), where the number of foreign tourists visiting Indonesia has a positive and significant impact on Indonesia's export and import growth in the long run, thereby increasing foreign exchange reserves. Research from Adinugraha (2018) explains that the implementation of halal tourism has a good influence on improving the welfare of a region or country. Battour et al. (2021) discussed the impact of halal tourism on a sustainable economy. From an economic aspect, the success of halal tourism is an excellent first step towards a sustainable economy and contributes to the economy in the long term. So halal tourism can be used as a prospect for entrepreneurs in developing their industry by introducing their products to Muslims and non-Muslim (Battour et al., 2021). Wibawa et al. (2021) discover that the characteristics of halal tourism can be used in tourism bureau marketing strategies. As a result, the characteristics of halal tourism had a significant positive impact on the compelling destination image, as well as the country's economy.

Previous research indirectly explains the link between halal tourism and foreign exchange reserves by examining its impact on economic growth. The strategy for transforming halal tourism into a destination of choice for tourists worldwide is supported by this study's findings, which show that halal tourism has a positive impact on foreign exchange reserves. It implies that for a country's foreign exchange reserves to be strengthened, expanding and supporting the halal tourism industry is necessary.

CONCLUSIONS

Based on the discussion discussed accordingly regarding the implementation of halal tourism on Indonesia's foreign exchange reserves by paying attention to exchange rate movements. The implication of the halal tourism implementation contributes to foreign exchange reserves in Indonesia. The exchange rate has a negative and significant effect in the short term but not significant in the long term on foreign exchange reserves, meaning that the strengthening of the rupiah currency will have a negative impact on foreign exchange reserves in Indonesia. The number of foreign tourists has

a positive and significant impact on foreign exchange reserves both in the short and long term.

There are various recommendations for the government based on the findings of this study, including improving the government's performance in raising the attractiveness of the tourism sector. Halal tourism, a novel concept in the tourism industry, is predicted to grow in popularity as more appealing ideas and promotions are developed to entice foreign visitors to visit the country. As a result, tourist attractions must be adequately maintained and clean and meet Muslim tourists' needs. By asking influencers and state content makers to work in the near term, the government may use the digital realm to promote tourism. Meanwhile, tourism development and tourist attractions based on current trends can attract foreign tourists in the long run while maintaining existing cultural values. It is hoped that by incorporating other characteristics, future researchers will gain a more comprehensive understanding of halal tourism. Furthermore, the researchers can make recommendations, even to the government. It is intended that policies implemented by the monetary authority will build foreign exchange reserves while maintaining exchange rate stability.

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