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Transportation facilities and means have developed very rapidly and become the basic needs of the community from time to time. This development ultimately requires the availability of capable and adequate transportation facilities and infrastructure in the form of the availability of good facilities. In general, the movement of the number of flight passengers at Sultan Hasanudin Airport tends not to be stationary on average because in certain times the movement forms an uptrend pattern. In addition, the number of flight passengers at Sultan Hasanudin Airport has an irregular pattern with varying increases and decreases. To forecast fluctuations in the number of flight passengers at Sultan Hasanudin Airport in the coming period, it can be done by time series analysis. The Triple Exponential Smoothing method or commonly referred to as Winter Exponential Smoothing is one of the Time Series methods that is suitable for handling seasonal data such as the number of domestic passengers at Sultan Hasanuddin Airport Makassar. The analysis step of the Triple Exponential Smoothing method is model identification, parameter estimation by trial and error, then is the calculation of the initial value of data smoothing, trends, and seasonality with a length of one season L = 12 and the last is to calculate the error value using MAPE and RMSE. The best model is obtained from a combination of parameters $\alpha = 0.9$; $\beta = 0,1$; and $\gamma=0.1$ which results in the smallest forecasting error using RMSE with a value of 56,674.56 and MAPE with a value of 56,674.56. Using a forecasting model:

$$F_{t+m} = (0.9\,\frac{X_t}{L_t} + (0.1)(S_{t-1} + b_{t-1}) + 0.1\,(S_t - S_{t-1}) + (0.9)b_{t-1}m)\;0.1\left(\frac{X_t}{S_t}\right) + (0.9)l_{t-1}$$

So the forecasting results are obtained that look close and not too far from the previous year's data so that it can be used as a reference for the management of the aircraft company to make the right decisions and anticipate a surge in the number of passengers.

Keywords: passenger plane, triple exponential smoothing, time series, forecasting.

1. Introduction

Transportation facilities and means have developed very rapidly and become the basic needs of the community from time to time. This development ultimately requires the availability of capable and adequate transportation facilities and infrastructure in the form of the availability of good facilities. In addition, there is also a form of effort to develop air transportation is the improvement of services to passengers at the airport. The number of passengers will affect the level of service at the airport, so when there is a surge in passengers, anticipation is needed so that the services provided continue to run well so that they can provide comfort for passengers. The number of flight passengers at Sultan Hasanudin Airport has an irregular pattern with varying increases and decreases. To forecast fluctuations in the number of flight passengers at Sultan Hasanudin Airport in the coming period, it can be done by time series analysis. Forecasting is a technique to estimate values or data in the future by paying attention to past data and current data, one of which can be done using time series analysis (Aswi & Sukarna, 2006).

Data on the number of airplane departure passengers at Sultan Hasanuddin Airport Makassar forms a curve whose pattern shows trends and seasonality. One of the time series methods used to perform forecasting is Exponential Smoothing. Through this research, it is expected to be able to provide an overview of the results of the forecast of the number of aircraft passengers at Sultan Hasanuddin Airport Makassar so that it can be known how much the number of passengers increases at certain times. Therefore, researchers are interested in studying the forecasting of the number of domestic flight passenger departures at Sultan Hasanuddin Airport Makassar using the Exponential Smoothing method, namely Triple Exponential Smoothing or commonly referred to as Holt-Winter Exponential Smoothing.

Based on the characteristics of data containing seasonality, forecasting is carried out using the Triple Exponential Smoothing method where this study will obtain the right model for the results of forecasting the number of aircraft departure passengers at Sultan Hasanuddin Airport Makassar.

2. Forecasting (Forecasting)

Forecasting comes from the word divination, which is a condition to predict what will happen in the future (Putri, 2012). Forecasting is basically the process of compiling information about past events in sequence to predict future events (Frechtling, 2002: 8)**.** In general, forecasting is used to predict something that is likely to happen in the future based on past events. The steps in performing the forecasting method are collecting data, selecting and selecting data, choosing the best forecasting model, using the selected model to perform the problem, evaluating the final results. The forecast can be based on various ways, one of which is by using the Triple Exponential Smoothing method. Forecasting is expected to minimize the influence of uncertainty on a problem.

3. Time Series Analysis

Time series or Time Sequence is a series of observations recorded in sequence against a variable taken based on the same and fixed time intervals. In addition to being recorded based on the time dimension, data can also be recorded based on another dimension, namely the space dimension. Observational data must be independent or correlated with each other. Time series analysis has a combination of several components, such as trend, cycle, seasonal, and residual (Hyndman et al, 2008). Time series analysis method (Wei, 2006) time seriesThe right one can be selected based on consideration of the type of data pattern, so that the method that matches that type of data pattern can be tested.

4. Exponential Smoothing

Exponential Smoothing forecasting is a method in the time series that uses exponential weighting of past data. In this case, the Exponential Smoothing method is divided into three, namely Single Exponential Smoothing which is used for stationary data smoothing, does not have trends and seasonal variations so it only uses one parameter, namely alpha (α), Double Exponential Smoothing which is used in smoothing data that contains trends but does not have seasonal variations, has two smoothing parameters, namely alpha (α) and beta (β), and Triple Exponential Smoothing is exponential smoothing which aims to smooth data containing trends, and seasonal variations using three smoothing parameters, namely alpha (α), beta (β), and gamma (γ). Some of the advantages of using the exponential smoothing method are that it greatly reduces the problem of storing data, so there is no need to store all historical or partial data; only recent observations, recent predictions, and a constant value must be stored. (Makridakis et al, 1999). This is because this method has advantages over other methods, namely the exponential smoothing method is simple, intuitive and easy to understand. That is, although simple, it is very useful for short-term forecasting from long time series data (Suwandi, 2015). The general forms that are often used to calculate forecasts with the exponential smoothing method are as follows:

$$F_{t+1} = \alpha X_t + (1 - \alpha) F_t \quad (1)$$

5. Triple exponential smoothing/holt-winter exponential smoothing

Triple Exponential Smoothing method is a method in time series based on three smoothing equations, namely one for stationary, trend, and seasonal using three smoothing parameters, namely α, β, γ, each of which is between 0 – 1. The forecasting value can be found with the equation according to (Bossarito, 2018):

Seasonal Smoothing:

$$l_t = \gamma(\frac{X_t}{S_t} + (1-\gamma)l_{t-1} \quad (2)$$

level smoothing:

$$S_t = \alpha \frac{X_t}{l_{t-1}} + (1-\alpha)(S_{t-1} + b_{t-1}) \quad (3)$$

Trend smoothing:

$$b_t = \beta\,(S_t - S_{t-1}) + (1-\beta)b_{t-1} \quad (4)$$

Forecasting:

$$F_{t+m} = S_t + b_t m + l_{t-L+m} \quad (5)$$

Information:

S_t : overall smoothing in the t-th period

S_{t-1} : Overall smoothing in the t-1 period

B_t : Smoothing the trend in the T-th period

B_{t-1} : Smoothing the trend in the T-1 period

L_t : seasonal smoothing in the T-th period

F_{t+m} : forecasting on the period to t+m

X_t : actual data in the t-period

α : Smoothing constant

β : trend smoothing constant

C : smoothing constant for seasonality

L : Seasonal length (number of months/quarter in 1 year)

m : the number of future periods to be forecasted.

6. Forecasting Accuracy

The accuracy of forecasting depends largely on the model that will be used to perform forecasting. If the model used is appropriate, the forecasting for future periods will be accurate. In this study, Average Error or Root Mean Square Error

(RMSE) and Mean Absolute Percentage Error (MAPE) were used. The formula for calculating RMSE and MAPE is as follows:

$$\mathrm{RMSE} = \sum_{i=1}^{n} \frac{(Y_i - Y_n)^2}{N} \tag{6}$$

$$\mathrm{MAPE} = \frac{100}{n} \sum \frac{|A_t - F_t|}{A_t} \tag{7}$$

The following are the forecasting result criteria based on the MAPE value is shown in Table 1:

Table 1. MAPE Criteria Value (Putro et al, 2018)

MAPE value	Criterion
<10%	Excellent
10% - 20%	Good
21%-50%	Enough
>50%	Bad

7. Methodology

7.1 Data Sources

The data on the number of aircraft departure passengers at Sultan Hasanuddin Airport used in this study is secondary data obtained from the Central Statistics Agency (BPS). This data is data time series in the form of monthly data from January 2017 to October 2023 as many as 82 data.

7.2 Research Variables

The variable observed in the data on the number of air passengers at Sultan Hasanuddin Airport Makassar is the variable number of passengers departing flights at Sultan Hasanuddin Airport which is time series data with monthly periods.

7.3 Data Analysis Techniques

1. Input and Plot data on the number of passengers departing aircraft at Sultan Hasanuddin Airport Makassar to help in observing data patterns.

2. Conduct descriptive analysis and identify Time Series patterns whether the plot contains elements of trend or seasonality.

3. Determination of Initial Value (Initialization)

The initial value is the value used to infer the initial value. If periodic series data does not exist to meet the coefficient, then to determine the value can be done by calculating the predicted value by analogy with several methods. In this study, the length of one season s = 12 and the calculation of the initial value of smoothing data, trends, and seasonality as follows.

The formula for determining the initial value at the smoothing level is as follows:

$$S_l = \frac{1}{l}(x_1 + x_2 + \cdots + x_n) \quad (8)$$

And the formula for determining the initial value on smoothing trend patterns is as follows:

$$b_l = \frac{1}{l}\left(\frac{y_{l+1} - y_1}{l} + \frac{y_{l+2} - y_2}{l} + \cdots + \frac{y_{l+i} - y_l}{l}\right) \quad (9)$$

Next formula for determining the initial value on smoothing the seasonal pattern of the additive model:

$$I_k = (y_k - S_l) \quad (10)$$

Determination of initial values on smoothing seasonal patterns of multiplicative models:

$$I_k = \frac{y_k}{S_l} \quad (11)$$

Information:

S_l: Initial value of smoothing level

b_l: nilai awal smoothing level pola trend

I_k: Initial value of smoothing level of seasonal pattern

l : seasonal length (12 months)

y_i : declares the data to -1,

4. Determination of parameter values. To obtain the forecast value using the triple exponential smoothing method, alpha (α), betta (β), and gamma (γ) values are required which are optimized based on the minimum MAPE. In the exponential smoothing method, α value can be determined freely, meaning that there is no sure way to get the optimal α value. The method used to estimate model parameters is by simulation (trial and error), which simulates the range of α, β, and γ values in the interval (0 and 1)

5. Calculation of Triple Exponential Smoothing method

After getting the initial value, it is continued with the calculation of Triple Exponential Smoothing which requires the initial value of smoothing data, trends, and seasonality, calculations based on equations (2), (3), and (4).

6. The selection of the best model (RSME and MAPE) is seen from the smallest forecast error by taking into account the RMSE and MAPE calculation values. The smaller the error obtained, the better forecasting (6), (7)

7. Forecasting the next period using equation (5)

8. Results and discussion

8.1 Description of Domestic Passenger Data

Descriptive data is carried out with the aim of providing an overview of initial information on the data on the number of passengers departing on domestic flights at Sultan Hasanuddin Airport Makassar. The data collected in this study began in the period January 2017 – October 2023. The following data are shown in Table 2.

Table 2. Descriptive Statistics of Passenger Data on Domestic Flight Departures Sultan Hasanuddin Airport Makassar

Maximum Value	Minimum Value	Mean	Standard Deviation
437,365	6,663	246,903	92,391

From Table 2, it is known that the highest number of domestic flight departure passengers at Sultan Hasanuddin Airport Makassar occurred in July 2017 with 437,365 passengers and the least number of passengers occurred in May 2020, which was 6,663 passengers. Every year, the average number of passengers departing domestic flights is 246,903 and the standard deviation value is 92,391.

The output results for the plot of passenger data on Passengers Departing Domestic Flights Sultan Hasanuddin Airport Makassar from 2017-2023 which were completed with Microsoft excel can be seen in Figure 1.

Initial identification through the depiction of time series plots is carried out with the aim of evaluating the diversity of data. Based on the results of the output plot obtained, it appears that the data has a pattern that tends to always increase and decrease constantly and periodically. However, the diversity or deviation of data does not seem constant because the value of data tends to be very low, namely in the 2020 period.

Figure 1 shows that from the beginning of 2017 to the middle of 2018 fluctuated greatly, where during the Eid al-Fitr and last year holidays, the number of passengers was more than the number of passengers in ordinary months. Then at the end of 2018 the number of passengers began to decline until May 2019 and a significant decrease occurred from April 2020 to May 2020. This is due to restrictions on the number of passengers during COVID-19 conditions. At the end of 2020, the number of passengers slowly increased due to conducive conditions.

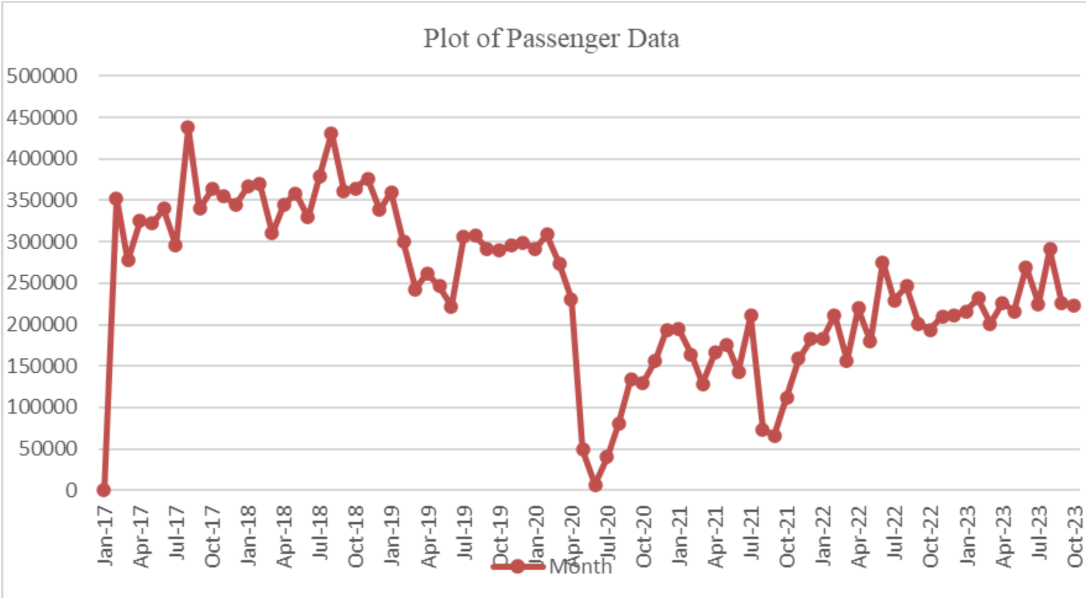

Figure 1. Plot Data of Passengers Departing Domestic Flight at Sultan Hasanuddin Airport Makassar.

8.2 Determination of Initial Value

Triple exponential smoothing requires the initial value of smoothing data, trends, and seasonality. The following is the calculation of the initial value of smoothing data, trends, and seasonality with a length of one season L = 12. The length of one season can be aged by the number of months or quarters in a year so that in this study the length of one season is determined as much as L = 12 because the data on the number of passengers departing domestic flightsat Sultan Hasanuddin Airport Makassar shows the number of months in a year. From the equation (8) and (9) obtained the initial value of smoothing level (St) is 343,170 and the initial value of trend smoothing (bt) is 1,410.

It is known that the initial value of smoothing level (S12) is 343,170 and from equation (11) obtained the initial value of seasonal smoothing for the 1st period to the 12th period is as shown in Table 3.

Table 3. The Initial Value of Seasonal Smoothing

No.	Month	Data	I_k
1	January 2017	352,303	1.03
2	February 2017	277,667	0.81
3	Maret 2017	324,880	0.95
4	April 2017	321,736	0.94
5	May 2017	339,579	0.99
6	June 2017	295,404	0.86
7	July 2017	437,365	1.27
8	Agustus 2017	339,820	0.99
9	September 2017	363,580	1.06
10	October 2017	355,451	1.04
11	September 2017	344,065	1.00
12	December 2017	366,189	1.07

8.3 Determination of Documentation Parameters

The next step is to make changes to the parameters by combining the values of α, β, γ to find out the effect if the parameter value is changed (Table 4).

Table 4. Combination of Parameters with Trial and Error

Parameters		
β = 0.1	α = 0.1	α = 0.1 α = 0.3 α = 0.6 α = 0.9
α = 0.1	γ = 0.1	β = 0.1 β = 0.3 β = 0.6 β = 0.9
α= 0.1	β = 0.1	γ = 0.1 γ = 0.3 γ = 0.6 γ = 0.9

8.4 Calculation with Triple Exponential Smoothing and Forecasting Method

After obtaining the initial value of data smoothing, trend, and seasonality, the calculation of data smoothing, trend, and seasonality for the period 71 to 82 was carried out using the parameters obtained by trial and error. By using α=0.1; β= 0.1;

γ= 0.1, then the smoothing of data, trends, and seasonality for the period 71 to 82 is shown in Table 5:

Table 5. Smoothing and Forecasting Value by Using α= 0.1; β=0.1; γ=0.1 for the 71st to 82nd period.

Period	Number of Passengers	Data retrieval (St)	Trend loading (bt)	Seasonal Smoothing (lt)	Ft+m forecast; t=82; m=12
71	211,856	186,468.20	3,702.14	1.12	208,909.48
72	216,028	189,623.71	3,647.48	1.17	222,421.50
73	231,757	194,247.20	3,745.08	1.15	220,616.00
74	201,365	200,551.46	4,001.00	0.91	178,316.38
75	226,555	205,567.30	4,102.48	1.06	215,846.35
76	215,723	211,068.06	4,242.31	0.97	202,235.97
77	269,015	220,710.37	4,782.31	1.02	21,074.27
78	224,500	226,280.74	4,861.12	0.96	216,919.01
79	290,973	233,429.05	5,089.84	1.16	264,773.15
80	225,558	238,188.25	5,056.77	0.96	228,728.64
81	223,066	240,278.97	4,760.17	1.03	254,043.27
82	229,951	241,323.94	4,388.65	1.09	2671,046.08

8.5 Determination of MAPE and RMSE

After smoothing and forecasting the data, the next step is to determine MAPE and RMSE. The following calculation seeks MAPE and RMSE for forecasting the period 71 to the 82nd period (Table 6).

Table 6. Calculation Finding MAPE and RMSE for Forecast Period 71 to 82.

Period	Number of Passengers	Forecast	$X_t - F_t$	$\lvert X_t - F_t \rvert$	$(X_t - F_t)^2$
71	211,856	208,909.48	2,946.52	2,946.52	8,681,975
72	216,028	222,421.50	- 6,393.50	6,393.50	40,876,804
73	231,757	220,616.00	11,141.00	11,141.00	124,121,770
74	201,365	178,316.38	23,048.62	23,048.62	531,238,877
75	226,555	215,846.35	10,708.65	10,708.65	114,675,196
76	215,723	202,235.97	13,487.03	13,487.03	181,900,062
77	269,015	215,074.27	53,940.73	53,940.73	2,909,601,961
78	224,500	216,919.01	7,580.99	7,580.99	57,471,372
79	290,973	264,773.15	26,199.85	26,199.85	686,432,373
80	225,558	228,728.64	- 3,170.64	3,170.64	10,052,951
81	223,066	254,043.27	- 30,977.27	30,977.27	959,591,076
82	229,951	271,046.08	- 41,095.08	41,095.08	1,688,805,709

MAPE and RMSE calculations were performed by comparing forecasting results for the 71st to 82nd periods of the test set.

The next step is to make changes to the parameters by combining the values of α, β, γ to find out the effect if the parameter value is changed. A combination of α, β, γ values is also performed to see the best model of the smallest MAPE and RMSE values (Table 7).

Table 7. Combinations of α, β, γ Parameter Values for Smallest MAPE and RMSE.

Parameter		MAPE	RMSE
β = 0,1 γ= 0,1	α = 0.1	7.04	71,393.05
	α = 0.3	5.93	60,603.79
	α = 0.6	4.24	56,086.24
	α = 0.9	2.91	56,674.56
α = 0,1 γ= 0,1	β = 0.3	6.43	67,501.66
	β = 0.6	7.58	77,370.91
	β = 0.9	14.74	603,785.94
α = 0,1 β = 0,1	γ= 0.3	6.80	70,599.30
	γ= 0.6	6.61	72,722.59
	γ= 0.9	7.74	102,283.50

The smallest MAPE and RMSE are obtained when α=0.9; β=0.1; γ=0.1. The constraint for each value is two numbers after the comma. with a MAPE value of 2.91 and an RMSE value of 56,674.56. Based on the Mape criteria value table (Putro et al, 2018) shows that this value is very good so that it can do forecasting that has a high security value. The calculation of Data Smoothing, Trend, Seasonality, and Forecasting for the 71st to 82nd Period is shown in Table 8.

Table 8. Calculation of Data Smoothing, Trend, Seasonality, and Forecasting for the 71st to 82nd Period with α=0.9; β=0.1; γ=0.1

Period	Number of Passengers	Smoothing data (S_t)	Smoothing trend (b_t)	Smoothing Seasonal(l_t)	Ft+m forecast; t=82; m=12	Error
71	211,856	209,325.67	1,380.15	1.01	201,535.61	10,320.39
72	216,028	203,580.77	667.65	1.06	224,461.56	- 8,433.56
73	231,757	223,572.36	2,600.04	1.03	209,711.64	22,045.36
74	201,365	246,307.19	4,613.52	0.81	183,239.73	18,125.27
75	226,555	240,941.89	3,615.64	0.94	237,028.73	- 10,473.73
76	215,723	237,544.63	2,914.35	0.91	222,822.59	- 7,099.59
77	269,015	279,185.05	6,786.96	0.95	228,182.79	40,832.21
78	224,500	257,710.10	3,960.77	0.88	252,192.89	- 27,692.89
79	290,973	237,236.75	1,517.35	1.24	324,656.99	- 33,683.99
80	225,558	226,926.87	334.63	1.00	238,696.18	- 13,138.18
81	223,066	211,598.04	- 1,231.72	1.06	241,565.24	- 18,499.24
82	229,951	219,175.04	- 350.84	1.04	219,727.98	10,223.02

By using parameters with a value of α=0.9; β=0,1; γ=0.1, the smoothing equation model is obtained as follows:

1. Smoothing Level S_t

$$0.9\ \frac{X_t}{L_t} + (0.1)(S_{t-1} + b_{t-1})$$

2. Trend Smoothing (b_t)

$$b_t = 0.1\ + (S_t - S_{t-1}) + (0.9)b_{t-1}$$

3. Seasonal Smoothing (l_t)

$$l_t = 0.1\ \left(\frac{X_t}{S_t}\right) + (0.9)\ l_{t-1}$$

4. Forecasting (F_t)

$$F_{t+m} = \left(0.9\ \frac{X_t}{L_t} + (0.1)(S_{t-1} + b_{t-1}) + (0.1)(S_t - S_{t-1}) + (0.9)b_{t-1}m\right) 0.1\ \left(\frac{X_t}{S_t}\right) + (0.9)l_{t-1}$$

By using these four equations, the forecast of the number of domestic departure passengers is obtained as follows (Table 9, Figure 2):

Table 9. Per practice number of domestic departure passengers 12 months

Month	Forecast
November 2023	220,498.36
December 2023	232,645.68
January 2024	224,171.91
February 2024	176,593.89
Maret 2024	205,289.01
April 2024	197,713.10
From 2024	205,971.90
June 2024	190,578.29
July 2024	267,707.74
Agustus 2024	215,489.42
September 2024	228,679.39
October 2024	224,631.48

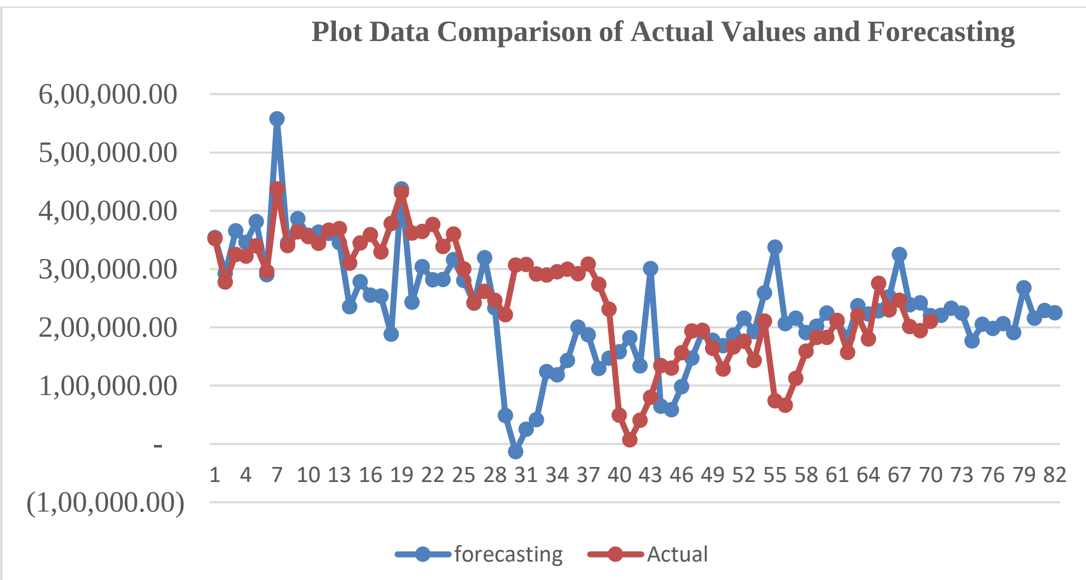

Figure 2. Data Smoothing Plot and Forecasting the Number of Domestic Departing Passengers

Furthermore, a comparison of the number of passengers departing from domestic passengers was previously carried out, namely November 2022 - October 2023 and Novermber 2023 - October 2024 to see whether the number of passengers departing domestic passengers tends to increase or decrease (Table 10). The following is a comparison of the number of domestic departure passengers at Sultan Hasanuddin Airport Makassar.

Table 10. Comparison of Number of Domestic Departure Passengers January 2017-October 2023 and Novermber 2023 - October 2024

Month	Actual (Previous period data)	Forecast
November	211,856	220,498.36
December	216,028	232,645.68
January	231,757	224,171.91
February	201,365	176,593.89
Maret	226,555	205,289.01
April	215,723	197,713.10
May	269,015	205,971.90
June	224,500	190,578.29
July	290,973	267,707.74
August	225,558	215,489.42
September	223,066	228,679.39
October	229,951	224,631.48

In Table 10, it can be seen that the number of domestic departure passengers for Novermber 2023 – October 2024 is not much different from the number of passengers departing domestically, namely November 2022 – October 2023. So that the shape of the data plot in Figure 3 shows a model that is not much different even almost the same.

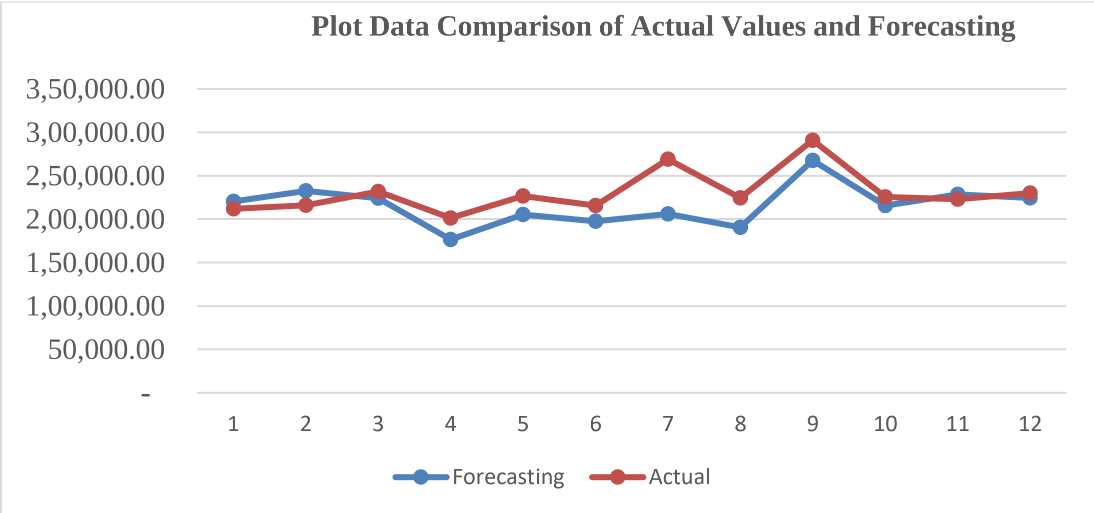

Figure 3. Comparative Plot of Data Smoothing and Forecasting of the Number of Domestic Departing Passengers

Based on the forecasting results, the number of passengers departing domestic flights at Sultan Hasanuddin Airport Makassar using the Triple Exponential Smoothing method decreased with an average decrease of 14,698 for 12 months. The forecasting results of domestic departure passenger data in the next year tend to be lower than the actual data in the previous 12 months. The results of forecasting passengers departing domestic aircraft can provide good information for the management of aircraft companies to make the right decisions and anticipate a surge in the number of passengers.

9. Conclusions

a. Data on the number of domestic departure passengers at Sultan Hasanuddin Airport Makassar contains trend and seasonal factors so that it can be predicted using the exponential smoothing method, namely triple exponential smoothing with a combination of parameters $\alpha = 0.9$; $\beta = 0.1$; and $\gamma = 0.1$ with MAPE of 2.91 and RMSE of 56,674.56 which shows the best combination of parameters because it produces the smallest MAPE and RMSE and has a high accuracy value for forecasting.

b. The smoothing and forecasting model of the Triple Exponential Smoothing method for d Number of passengers departing domestic flights data at Sultan Hasanuddin Airport Makassar obtained is as follows:

Level Smoothing (St):

$$S_t = 0.9\ \frac{X_t}{L_t} + (0{,}1)(S_{t-1} + b_{t-1})$$

Trend Smoothing (b_t)

$$b_t = 0.1\ (S_t - S_{t-1}) + (0.9)b_{t-1}$$

Seasonal Smoothing (l_t)

$$l_t = 0.1\ \left(\frac{X_t}{S_t}\right) + (0.9)l_{t-1}$$

Forecasting (F_t)

$$F_{t+m} = (0.9\ \frac{X_t}{L_t} + (0.1)(S_{t-1} + b_{t-1}) + 0{,}1\ (S_t - S_{t-1}) + (0{,}9)b_{t-1}m)\ 0.1\ \left(\frac{X_t}{S_t}\right) + (0{,}9)l_{t-1}$$

c. The large number of domestic departure passengers is strongly influenced by seasonal influences so that the resulting forecasting value is not much different from the value in the previous data.

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