Interpretation:

1. What is the best model for the export data? How do you define best?

Based on the review of the data, and the type of data being explored: Error, Trend, Seasonal algorithm “ETS AAA” is the preferred method over autoregressive integrated moving average “ARIMA”. ARIMA is based on assumptions that residuals are uncorrelated and normally distributed. If this doesn’t occur, then forecast intervals are incorrect. “ETS AAA” doesn’t face the same limitations of looking at correlations in data, linearity and stationarity. Also ETS provides an automatic way of selecting the best method. ETS MASE of .55 provides a better value of greater than 0 but less than one.

To define best fit, the model that proves the best prediction of error, robust to outliers, good indicator of central tendency and provides the best measure of goodness is the best fit.

1. Which forecast model is the best fi? How do you define it  
   Based on the review of the different forecast models, Holt’s-Winters multiplicative method was chosen among the others. Mean absolute scaled error was “.52” and the mean error was “17434.11”. The seasonal component is expressed in relative terms (percentages) and the series is seasonally adjusted by dividing through by the seasonal component.” Also when seasonal variations are changing proportional to the level of series multiplicative method is preferred. The best fit for forecast is the model that provides the best time series review for your given data and the predication of bias and error in the data.
2. More than one model may be equally good. How do you choose among equally good models?  
   Based on observation and analysis of the data, any model that provides trend analyses, seasonal interpretation (additive/multiplicative) and greater interpretation of potential error is the one chosen. The model that produces the more accurate forecast with a low U1 statistic between 0 and 1 indicate greater forecasting accuracy while taking into account potential forecasting bias that is captured by Mean Error “ME”

Recommendation to Chulwalr Prime Minister:

Model for export data

<https://en.wikipedia.org/wiki/Goodness_of_fit>

<http://robjhyndman.com/talks/RevolutionR/6-ETS.pdf>

<https://en.wikipedia.org/wiki/Autoregressive_integrated_moving_average>

<https://powerbi.microsoft.com/en-us/blog/describing-the-forecasting-models-in-power-view/>

<http://anunexaminedlifeexamined.blogspot.com/2015/02/ets-versus-arima-models.html>

Forecast model

<https://www.otexts.org/fpp/7/1>

<https://www.otexts.org/fpp/7/2>

<https://www.otexts.org/fpp/7/3>

<https://www.otexts.org/fpp/7/4>

<https://www.otexts.org/fpp/7/5>