Untitled

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2023-08-13

library(tidyverse)

## Warning: package 'tidyverse' was built under R version 4.1.3

## Warning: package 'ggplot2' was built under R version 4.1.3

## Warning: package 'tibble' was built under R version 4.1.3

## Warning: package 'tidyr' was built under R version 4.1.3

## Warning: package 'readr' was built under R version 4.1.3

## Warning: package 'purrr' was built under R version 4.1.3

## Warning: package 'dplyr' was built under R version 4.1.3

## Warning: package 'stringr' was built under R version 4.1.3

## Warning: package 'forcats' was built under R version 4.1.3

## Warning: package 'lubridate' was built under R version 4.1.3

## -- Attaching core tidyverse packages ------------------------ tidyverse 2.0.0 --  
## v dplyr 1.1.0 v readr 2.1.4  
## v forcats 1.0.0 v stringr 1.5.0  
## v ggplot2 3.4.1 v tibble 3.2.0  
## v lubridate 1.9.2 v tidyr 1.3.0  
## v purrr 1.0.1   
## -- Conflicts ------------------------------------------ tidyverse\_conflicts() --  
## x dplyr::filter() masks stats::filter()  
## x dplyr::lag() masks stats::lag()  
## i Use the ]8;;http://conflicted.r-lib.org/conflicted package]8;; to force all conflicts to become errors

library(readxl)

## Warning: package 'readxl' was built under R version 4.1.3

library(lubridate)  
library(xts)

## Warning: package 'xts' was built under R version 4.1.3

## Loading required package: zoo

## Warning: package 'zoo' was built under R version 4.1.3

##   
## Attaching package: 'zoo'  
##   
## The following objects are masked from 'package:base':  
##   
## as.Date, as.Date.numeric  
##   
##   
## ################################### WARNING ###################################  
## # We noticed you have dplyr installed. The dplyr lag() function breaks how #  
## # base R's lag() function is supposed to work, which breaks lag(my\_xts). #  
## # #  
## # Calls to lag(my\_xts) that you enter or source() into this session won't #  
## # work correctly. #  
## # #  
## # All package code is unaffected because it is protected by the R namespace #  
## # mechanism. #  
## # #  
## # Set `options(xts.warn\_dplyr\_breaks\_lag = FALSE)` to suppress this warning. #  
## # #  
## # You can use stats::lag() to make sure you're not using dplyr::lag(), or you #  
## # can add conflictRules('dplyr', exclude = 'lag') to your .Rprofile to stop #  
## # dplyr from breaking base R's lag() function. #  
## ################################### WARNING ###################################  
##   
## Attaching package: 'xts'  
##   
## The following objects are masked from 'package:dplyr':  
##   
## first, last

library(zoo)  
library(tseries)

## Warning: package 'tseries' was built under R version 4.1.3

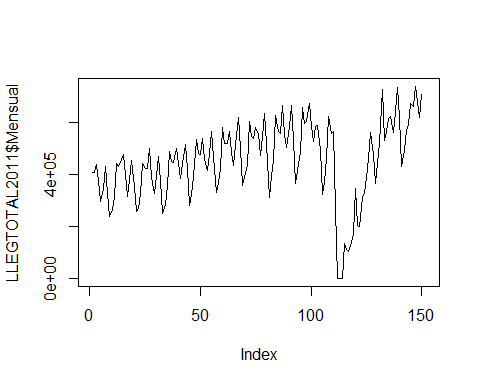
## Registered S3 method overwritten by 'quantmod':  
## method from  
## as.zoo.data.frame zoo

library(forecast)

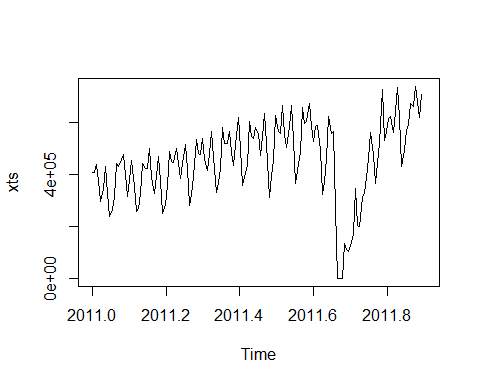
## Warning: package 'forecast' was built under R version 4.1.3

setwd("C:/Users/ivanh/OneDrive/Desktop/MEA INTEC/8 TRIMESTRE/MODELOS PREDICTIVOS/TAREA 1")  
  
library(readxl)  
LLEGTOTAL2011 <- read\_excel("LLEGTOTAL2011.xls")  
View(LLEGTOTAL2011)  
  
library(readxl)  
LLEGTOTALOG <- read\_excel("LLEGTOTALOG.xls")  
View(LLEGTOTALOG)

plot(LLEGTOTAL2011$Mensual, type="l")



library(tseries)  
xts <- ts(LLEGTOTAL2011$Mensual, frequency = 167, start = c(2011,01,01))  
plot(xts)



attach(LLEGTOTALOG)

## The following object is masked from package:datasets:  
##   
## euro

mod5 <- (lm(lnmensual ~ tsdolar+lnpasaje+lnhbr+lngtRD+lngtpuntacana+lngtcaribe+lneuro))  
u <- mod5$residuals  
yhat <- mod5$fitted.values  
  
summary (mod5)

##   
## Call:  
## lm(formula = lnmensual ~ tsdolar + lnpasaje + lnhbr + lngtRD +   
## lngtpuntacana + lngtcaribe + lneuro)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -4.0076 -0.2502 0.0195 0.2840 1.2485   
##   
## Coefficients:  
## Estimate Std. Error t value Pr(>|t|)   
## (Intercept) -8.28540 4.37996 -1.892 0.06057 .   
## tsdolar -0.35481 0.07324 -4.844 3.29e-06 \*\*\*  
## lnpasaje 1.70187 0.39787 4.277 3.45e-05 \*\*\*  
## lnhbr -0.95030 0.58339 -1.629 0.10554   
## lngtRD -0.14074 0.51685 -0.272 0.78578   
## lngtpuntacana 2.29857 0.18837 12.202 < 2e-16 \*\*\*  
## lngtcaribe -0.07964 0.24413 -0.326 0.74473   
## lneuro 2.20921 0.73382 3.011 0.00309 \*\*   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 0.5942 on 142 degrees of freedom  
## (2 observations deleted due to missingness)  
## Multiple R-squared: 0.6853, Adjusted R-squared: 0.6698   
## F-statistic: 44.18 on 7 and 142 DF, p-value: < 2.2e-16

attach(LLEGTOTALOG)

## The following objects are masked from LLEGTOTALOG (pos = 3):  
##   
## Acumulado%, dolar, dolarcan, euro, gtbach, gtbav, gtcabarete,  
## gtcapcana, gtcaribe, gtcasacampo, gtmer, gtpuntacana, gtRD,  
## gtsamana, gtsosua, gtterrenas, HBRP, hotelesbaresyrest,  
## interanual%, lnbach, lndolar, lneuro, lngtbav, lngtcabarete,  
## lngtcapcana, lngtcaribe, lngtcascampo, lngtmer, lngtpuntacana,  
## lngtRD, lngtsam, lngtsosua, lngtterr, lnhbr, lnmensual, lnpaquetes,  
## lnpasaje, Mensual, mensualP, Paquetes turísticos, Pasaje al  
## exterior, pasajeP, PTURP, TIEMPO, tsdolar

## The following object is masked from package:datasets:  
##   
## euro

mod6 <- lm(lnmensual ~ tsdolar + pasajeP + PTURP + HBRP + lngtRD + lngtpuntacana + lngtRD + lngtcaribe + lneuro)  
u <- mod6$residuals  
yhat <- mod6$fitted.values  
  
summary(mod6)

##   
## Call:  
## lm(formula = lnmensual ~ tsdolar + pasajeP + PTURP + HBRP + lngtRD +   
## lngtpuntacana + lngtRD + lngtcaribe + lneuro)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -4.1013 -0.2012 0.0289 0.2739 1.3555   
##   
## Coefficients:  
## Estimate Std. Error t value Pr(>|t|)   
## (Intercept) 1.075180 4.177076 0.257 0.7972   
## tsdolar -0.347861 0.078043 -4.457 1.68e-05 \*\*\*  
## pasajeP 0.009517 0.003735 2.548 0.0119 \*   
## PTURP -0.019513 0.015963 -1.222 0.2236   
## HBRP 0.319430 0.194887 1.639 0.1034   
## lngtRD -1.237565 0.527864 -2.344 0.0204 \*   
## lngtpuntacana 2.638199 0.201168 13.114 < 2e-16 \*\*\*  
## lngtcaribe -0.020302 0.234789 -0.086 0.9312   
## lneuro 1.521330 0.713488 2.132 0.0347 \*   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 0.6137 on 141 degrees of freedom  
## (2 observations deleted due to missingness)  
## Multiple R-squared: 0.6667, Adjusted R-squared: 0.6478   
## F-statistic: 35.25 on 8 and 141 DF, p-value: < 2.2e-16

attach(LLEGTOTALOG)

## The following objects are masked from LLEGTOTALOG (pos = 3):  
##   
## Acumulado%, dolar, dolarcan, euro, gtbach, gtbav, gtcabarete,  
## gtcapcana, gtcaribe, gtcasacampo, gtmer, gtpuntacana, gtRD,  
## gtsamana, gtsosua, gtterrenas, HBRP, hotelesbaresyrest,  
## interanual%, lnbach, lndolar, lneuro, lngtbav, lngtcabarete,  
## lngtcapcana, lngtcaribe, lngtcascampo, lngtmer, lngtpuntacana,  
## lngtRD, lngtsam, lngtsosua, lngtterr, lnhbr, lnmensual, lnpaquetes,  
## lnpasaje, Mensual, mensualP, Paquetes turísticos, Pasaje al  
## exterior, pasajeP, PTURP, TIEMPO, tsdolar

## The following objects are masked from LLEGTOTALOG (pos = 4):  
##   
## Acumulado%, dolar, dolarcan, euro, gtbach, gtbav, gtcabarete,  
## gtcapcana, gtcaribe, gtcasacampo, gtmer, gtpuntacana, gtRD,  
## gtsamana, gtsosua, gtterrenas, HBRP, hotelesbaresyrest,  
## interanual%, lnbach, lndolar, lneuro, lngtbav, lngtcabarete,  
## lngtcapcana, lngtcaribe, lngtcascampo, lngtmer, lngtpuntacana,  
## lngtRD, lngtsam, lngtsosua, lngtterr, lnhbr, lnmensual, lnpaquetes,  
## lnpasaje, Mensual, mensualP, Paquetes turísticos, Pasaje al  
## exterior, pasajeP, PTURP, TIEMPO, tsdolar

## The following object is masked from package:datasets:  
##   
## euro

mod7 <- lm(lnmensual ~ tsdolar + lnpasaje + lnpaquetes + lnhbr + lngtRD + lngtpuntacana + lngtRD + lngtcaribe + lneuro + lngtbav +lngtcabarete + lngtcapcana + lngtcascampo + lngtmer + lngtsosua + lngtsam + lngtterr +lnbach)  
u <- mod7$residuals  
yhat <- mod7$fitted.values  
  
summary(mod7)

##   
## Call:  
## lm(formula = lnmensual ~ tsdolar + lnpasaje + lnpaquetes + lnhbr +   
## lngtRD + lngtpuntacana + lngtRD + lngtcaribe + lneuro + lngtbav +   
## lngtcabarete + lngtcapcana + lngtcascampo + lngtmer + lngtsosua +   
## lngtsam + lngtterr + lnbach)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -2.84818 -0.21367 0.01855 0.23402 1.75375   
##   
## Coefficients:  
## Estimate Std. Error t value Pr(>|t|)   
## (Intercept) -3.34271 7.32774 -0.456 0.64908   
## tsdolar -0.39424 0.08193 -4.812 4.32e-06 \*\*\*  
## lnpasaje 1.27072 0.40862 3.110 0.00233 \*\*   
## lnpaquetes -5.59018 0.91981 -6.078 1.44e-08 \*\*\*  
## lnhbr 0.22051 1.45085 0.152 0.87945   
## lngtRD -1.17864 0.56690 -2.079 0.03970 \*   
## lngtpuntacana 2.82570 0.28888 9.782 < 2e-16 \*\*\*  
## lngtcaribe 0.07254 0.26146 0.277 0.78190   
## lneuro 5.61790 0.87535 6.418 2.76e-09 \*\*\*  
## lngtbav -0.46845 0.31717 -1.477 0.14226   
## lngtcabarete -0.15696 0.31250 -0.502 0.61639   
## lngtcapcana -0.27738 0.21697 -1.278 0.20353   
## lngtcascampo 0.24531 0.25546 0.960 0.33881   
## lngtmer 0.49022 0.45314 1.082 0.28147   
## lngtsosua 1.10763 0.45852 2.416 0.01719 \*   
## lngtsam 0.67499 0.43208 1.562 0.12083   
## lngtterr -0.05458 0.28539 -0.191 0.84866   
## lnbach -0.07260 0.50366 -0.144 0.88562   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 0.516 on 122 degrees of freedom  
## (12 observations deleted due to missingness)  
## Multiple R-squared: 0.7927, Adjusted R-squared: 0.7638   
## F-statistic: 27.45 on 17 and 122 DF, p-value: < 2.2e-16

library(stargazer)

##   
## Please cite as:

## Hlavac, Marek (2022). stargazer: Well-Formatted Regression and Summary Statistics Tables.

## R package version 5.2.3. https://CRAN.R-project.org/package=stargazer

stargazer(mod5,mod6,mod7, type = "text")

##   
## ============================================================================================  
## Dependent variable:   
## ------------------------------------------------------------------------  
## lnmensual   
## (1) (2) (3)   
## --------------------------------------------------------------------------------------------  
## tsdolar -0.355\*\*\* -0.348\*\*\* -0.394\*\*\*   
## (0.073) (0.078) (0.082)   
##   
## lnpasaje 1.702\*\*\* 1.271\*\*\*   
## (0.398) (0.409)   
##   
## lnpaquetes -5.590\*\*\*   
## (0.920)   
##   
## lnhbr -0.950 0.221   
## (0.583) (1.451)   
##   
## pasajeP 0.010\*\*   
## (0.004)   
##   
## PTURP -0.020   
## (0.016)   
##   
## HBRP 0.319   
## (0.195)   
##   
## lngtRD -0.141 -1.238\*\* -1.179\*\*   
## (0.517) (0.528) (0.567)   
##   
## lngtpuntacana 2.299\*\*\* 2.638\*\*\* 2.826\*\*\*   
## (0.188) (0.201) (0.289)   
##   
## lngtcaribe -0.080 -0.020 0.073   
## (0.244) (0.235) (0.261)   
##   
## lneuro 2.209\*\*\* 1.521\*\* 5.618\*\*\*   
## (0.734) (0.713) (0.875)   
##   
## lngtbav -0.468   
## (0.317)   
##   
## lngtcabarete -0.157   
## (0.312)   
##   
## lngtcapcana -0.277   
## (0.217)   
##   
## lngtcascampo 0.245   
## (0.255)   
##   
## lngtmer 0.490   
## (0.453)   
##   
## lngtsosua 1.108\*\*   
## (0.459)   
##   
## lngtsam 0.675   
## (0.432)   
##   
## lngtterr -0.055   
## (0.285)   
##   
## lnbach -0.073   
## (0.504)   
##   
## Constant -8.285\* 1.075 -3.343   
## (4.380) (4.177) (7.328)   
##   
## --------------------------------------------------------------------------------------------  
## Observations 150 150 140   
## R2 0.685 0.667 0.793   
## Adjusted R2 0.670 0.648 0.764   
## Residual Std. Error 0.594 (df = 142) 0.614 (df = 141) 0.516 (df = 122)   
## F Statistic 44.179\*\*\* (df = 7; 142) 35.254\*\*\* (df = 8; 141) 27.447\*\*\* (df = 17; 122)  
## ============================================================================================  
## Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01