EviewsR Package created by Sagiru Mati

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1 About EviewsR

EviewsR is an R package that can run Eviews program from R Markdown.

2 Installation

EviewsR can be installed using the following commands in R.

```
install.packages("EviewsR")

          OR

devtools::install_github('sagirumati/EviewsR')
```

3 Setup

To run the package successfully, you need to allow Eviews program to run on Eviews startup. This can be set by clicking on `options, General Options, window behaviour` and ticking `run program on Eviews startup` as shown below:

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            OR

devtools::install_github('smatiacademy/EviewsR')
```

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4 Usage

Please load the EviewsR package as follows:

```
```{r EviewsR}
library(EviewsR)
```
```

Then create a chunk for Eviews as shown below:

```
```{eviews EviewsR1,eval=T,echo=T,comment=NULL,results='hide'}
  'This program is created in R Markdown with the help of EviewsR package
  %path=@runpath
  cd %path
  wfcreate(page=EviewsR) EviewsR m 1999 2020
  for %y Created By Sagiru Mati Northwest University Kano Nigeria
  pagecreate(page={%y}) EviewsR m 1999 2020
  wfsave EviewsR
  next
  pageselect Sagiru
  genr y=rnd
  genr x=rnd
  equation ols.ls y c x
  freeze(EviewsR_OLS,mode=overwrite) ols
  EviewsR_OLS.save(t=csv, r=r7c1:r10c5) EviewsROLS
  EviewsR_OLS.save(t=csv) EviewsRtable
  freeze(EviewsR_Plot,mode=overwrite) y.line
  EviewsR_Plot.save(t=png) EviewsR_Plot_color
  EviewsR_Plot.save(t=png,-c) EviewsR_Plot_nocolor
  exit
```
```

The above chunk creates an Eviews program with the chunk's content, then automatically open Eviews and run the program, which will create an Eviews workfile with pages containing monthly sample from 1999 to 2020. The program will also save an Eviews workfile named `EviewsR` in the current directory.

We can *dynamically and reproducibly* fetch the Eviews graph object we created with the Eviews chunk using the following R chunk:

For the color graph object:

```
knitr::include_graphics("tools/EviewsR_Plot_color.png")
```

or the black and white graph object:

```
knitr::include_graphics("tools/EviewsR_Plot_nocolor.png")
```

we can also include the results of the OLS generated by the Eviews chunk using the following R chunk;

For the OLS result only:

```
olsResult=read.csv("tools/EviewsROLS.csv")
knitr::kable(olsResult)
```

Variable	Coefficient	Std..Error	t.Statistic	Prob.
	NA	NA	NA	NA
C	0.480025	0.033905	14.157800	0.0000
X	0.009925	0.060301	0.164585	0.8694

or the entire OLS output:

```
olsTable=read.csv("tools/EviewsRtable.csv")
knitr::kable(olsTable,format = "html")
```

Dependent.Variable..Y

X

X.1

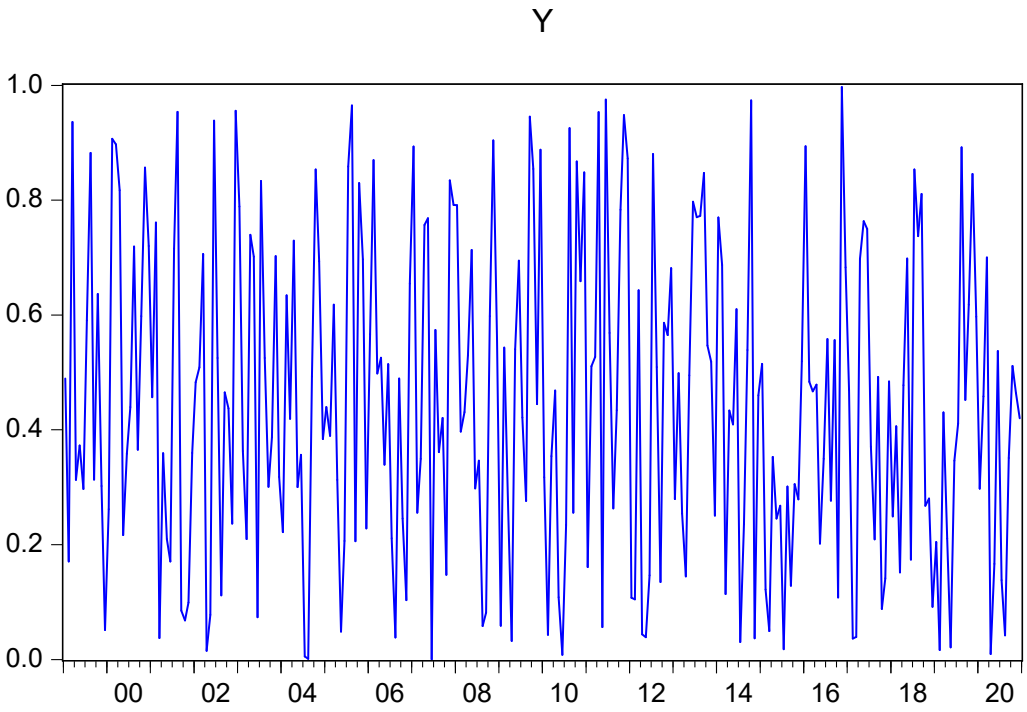

Figure 1: Eviews graph object with colour

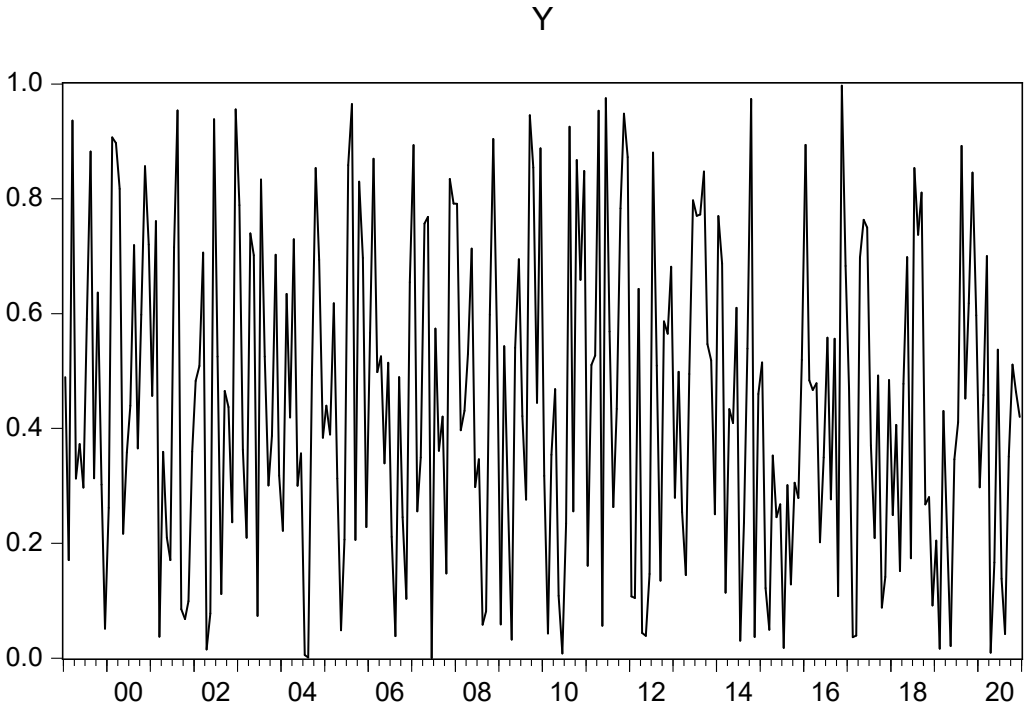

Figure 2: Eviews graph object without colour

X.2

X.3

Method: Least Squares

Date: 11/01/21 Time: 20:52

Sample: 1999M01 2020M12

Included observations: 264

Variable

Coefficient

Std. Error

t-Statistic

Prob.

C

0.480025

0.033905

14.15780

0.0000

X

0.009925

0.060301

0.164585

0.8694

R-squared

0.000103

Mean dependent var

0.484811

Adjusted R-squared

-0.003713

S.D. dependent var

0.282646

S.E. of regression

0.283170

Akaike info criterion

0.322007

Sum squared resid

21.00851

Schwarz criterion

0.349098

Log likelihood

-40.50495

Hannan-Quinn criter.

0.332893

F-statistic

0.027088

Durbin-Watson stat

1.817012

Prob(F-statistic)

0.869398

Please visit my Github for a better explanation and example files.

```
import_kable=function(wf="",page="",table_name=""){

  fileName=basename(tempfile("EVIEWS", ".", ".prg"))
   save_path=tempfile("EVIEWS",".")
  # file_name=basename(tempfile("EVIEWS","."))
  # file_name=table_name
  save_path_file=basename(save_path)
  # dir.create(save_path)


  wf=paste0('%wf=',shQuote(wf))
  page=paste0('%page=',shQuote(page))
  table_name.csv=paste0(table_name,".csv")
  table_name=paste0('%table_name=',shQuote(table_name))
  save_path=paste0('%save_path=',shQuote(save_path))


  eviews_code=r'(%runpath=@runpath
  cd %runpath
  open {%wf}

  if %page<>"" then
  pageselect {%page}
  endif

  {%table_name}.save(t=csv) {%table_name})'

   # path=here()
  path=getwd()
writeLines(c(wf,page,table_name,save_path,eviews_code,"exit"),fileName)
  system2("EViews",paste0("run(q)",shQuote(paste0(path,"/",fileName))))
  k=kable(read.csv(table_name.csv,allowEscapes = T,header = T,check.names = FALSE),booktabs=T,caption =
kable_styling(latex_options =c("basic","hold_position"))%>%
row_spec(0,bold = T) %>%
column_spec(1,bold = T)
    return(k)
```

```
  on.exit(unlink(c(fileName,table_name.csv),recursive = T))

}

import_kable("eviewsr1",table_name = "SAGIRU")
```

Table 1: Caption

header 1	α_t	**B**	**C**	**D**
R-squared	0.001747	Mean dependent var	NA	0.501108
Adjusted R-squared	-0.002063	S.D. dependent var	NA	0.301776
S.E. of regression	0.302087	Akaike info criterion	NA	0.451347
Sum squared resid	23.909290	Schwarz criterion	NA	0.478437
Log likelihood	-57.577770	Hannan-Quinn criter.	NA	0.462233

Table 1

```
chunkKable=kable_styling(chunkKable,latex_options = c("basic","hold_positon","scale_down")) %>%
footnote(general="insert footnote here", general_title = "",footnote_as_chunk=T,threeparttable=T,escape=
row_spec(0,bold=T)
chunkKable
```

```
chunkKable
y="insert footnote here"
kable(y,format=ifelse(knitr::opts_knit$get("rmarkdown.pandoc.to")=="docx","pandoc","latex"),booktabs=T,
```