Euro, Dólar, Real e Ibovespa

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Exemplo em R para visualizar Euro, Dólar, Real e Ibovespa.

```
library(tseries) # adf.test, kpss.test, bds.test, get.hist.quote, portfolio.optim, surrogate, arma, gar
#install.packages("forecast")
library(forecast)
```

```
## Loading required package: zoo
##
## Attaching package: 'zoo'
##
## The following objects are masked from 'package:base':
##
##     as.Date, as.Date.numeric
##
## Loading required package: timeDate
## This is forecast 6.2
```

```
# En el paquete forecast tiene un modelo auto ARIMA.
#install.packages("fArma")
library(fArma) #ARMAFIT, RSFIT
```

```
## Loading required package: timeSeries

## Warning: package 'timeSeries' was built under R version 3.2.3

##
## Attaching package: 'timeSeries'
##
## The following object is masked from 'package:zoo':
##
##     time<-
##
## Loading required package: fBasics
##
##
## Rmetrics Package fBasics
## Analysing Markets and calculating Basic Statistics
## Copyright (C) 2005-2014 Rmetrics Association Zurich
## Educational Software for Financial Engineering and Computational Science
## Rmetrics is free software and comes with ABSOLUTELY NO WARRANTY.
## https://www.rmetrics.org --- Mail to: info@rmetrics.org
```

```
#install.packages("fGarch")
library(fGarch) #GARCHFIT formula ~arma (2,1) + garch (1,1) # ~ AltGr + 4
#install.packages("outliers")
library(outliers) #: outlier, rm.outlier, scores, chisq.out.test # para detectar outliers o datos an?ma
```

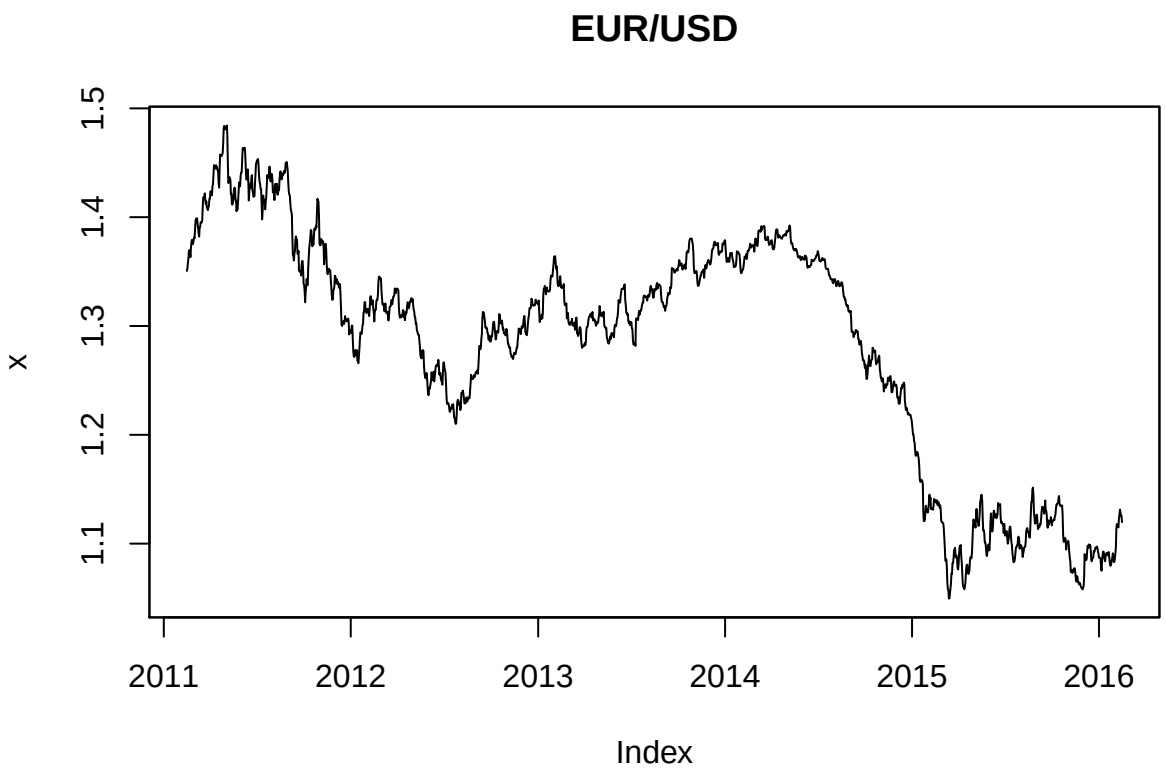
```
##
## Attaching package: 'outliers'
##
## The following object is masked from 'package:timeSeries':
##
##     outlier
```

```
#install.packages("zoo")
library(zoo)
#setinternet2() #esto abre el puerto de internet



con <- url("http://www.oanda.com")
if(!inherits(try(open(con), silent = TRUE), "try-error")) {
  close(con)
  x <- get.hist.quote(instrument = "EUR/USD", provider = "oanda",
                      start = Sys.Date() - 1000)
  plot(x, main = "EUR/USD")
}
```

```
## time series starts 2011-02-15
```



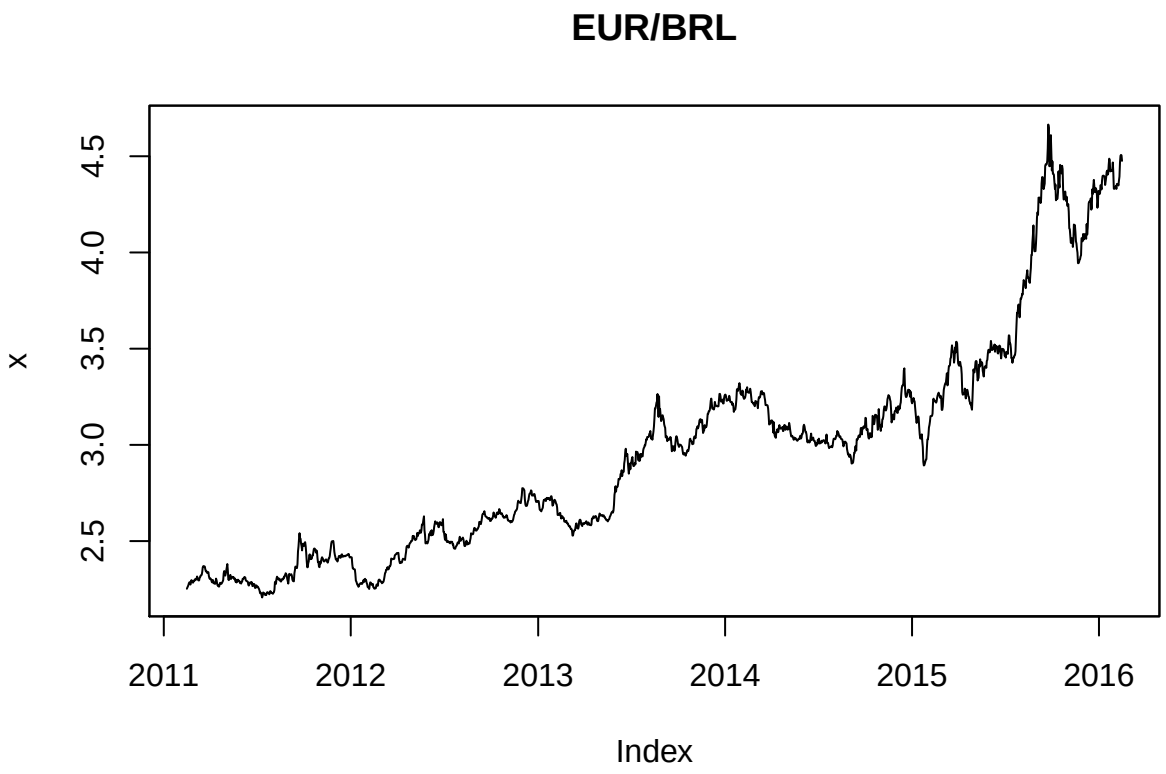

```
# http://www.inside-r.org/packages/cran/tseries/docs/get.hist.quote

moneda1 <- "EUR/BRL"

con <- url("http://www.oanda.com")
```

```
if(!inherits(try(open(con), silent = TRUE), "try-error")) {
  close(con)
  x <- get.hist.quote(instrument = moneda1, provider = "oanda",
                      start = Sys.Date() - 1000)
  plot(x, main = moneda1)
}
```

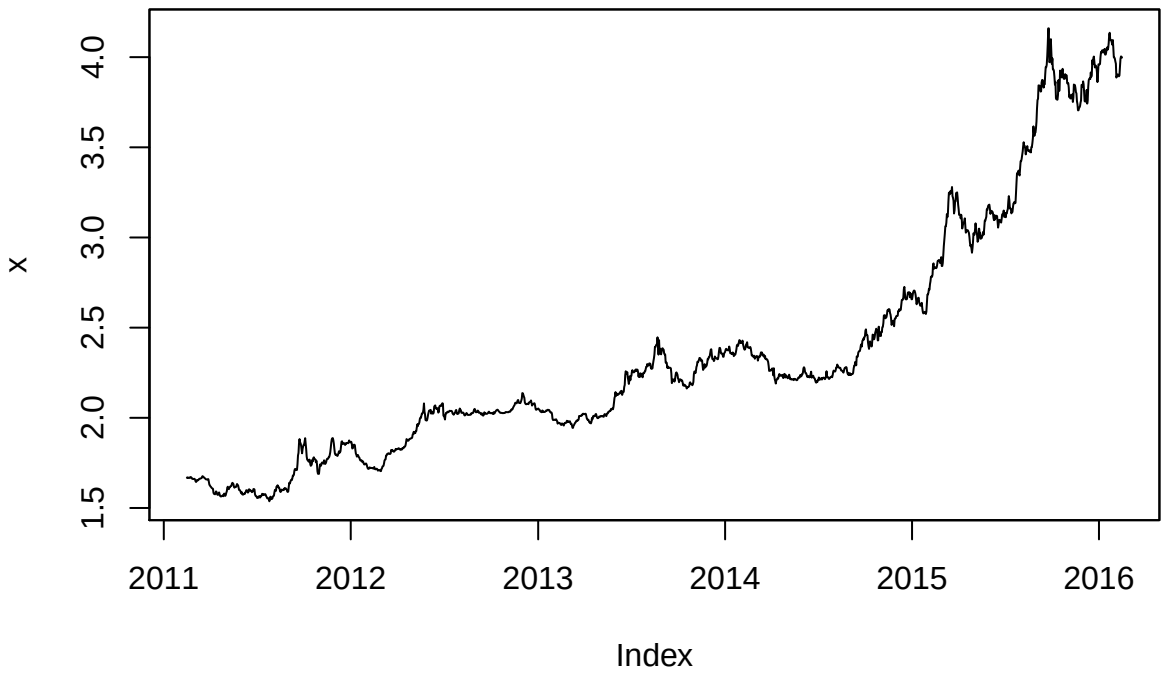
```
## time series starts 2011-02-15
```




```
moneda2 <- "USD/BRL"

con <- url("http://www.oanda.com")
if(!inherits(try(open(con), silent = TRUE), "try-error")) {
  close(con)
  x <- get.hist.quote(instrument = moneda2, provider = "oanda",
                      start = Sys.Date() - 1000)
  plot(x, main = moneda2)
}
```

```
## time series starts 2011-02-15
```




```
stock.name <- "^BVSP"
stock.description <- "IBOVESPA"

## lectura de los datos hist?ricos del ^BVSP
stock.name <- get.hist.quote(instrument=stock.name, quote="AdjClose")
```

```
## time series starts 1993-04-27
```

```
# BVSP time series starts 1993-04-27
# http://finance.yahoo.com/q?s=%5EBVSP

series.name <- stock.name

str(series.name)
```

```
## 'zoo' series from 1993-04-27 to 2016-02-15
##   Data: num [1:5660, 1] 24.5 24.3 23.7 24.1 24.1 ...
##  - attr(*, "dimnames")=List of 2
##   ..$ : NULL
##   ..$ : chr "AdjClose"
##   Index:  Date[1:5660], format: "1993-04-27" "1993-04-28" "1993-04-29" "1993-04-30" ...
```

```
summary(series.name)
```

```
##       Index               AdjClose
##  Min.   :1993-04-27   Min.   :   23.7
##  1st Qu.:1999-01-12   1st Qu.:10475.5
```

```
##  Median :2004-09-25   Median :23238.0
##  Mean   :2004-09-26   Mean   :30654.5
##  3rd Qu.:2010-06-17   3rd Qu.:53351.5
##  Max.   :2016-02-15   Max.   :73517.0
```

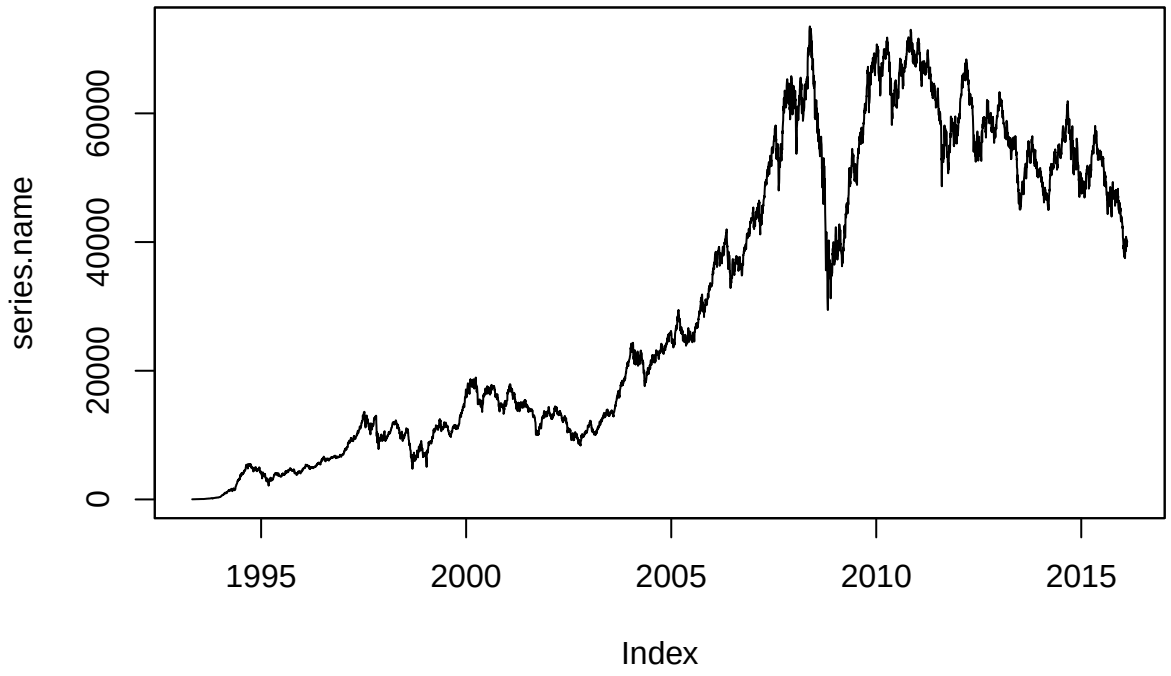
```
start(series.name)
```

```
## [1] "1993-04-27"
```

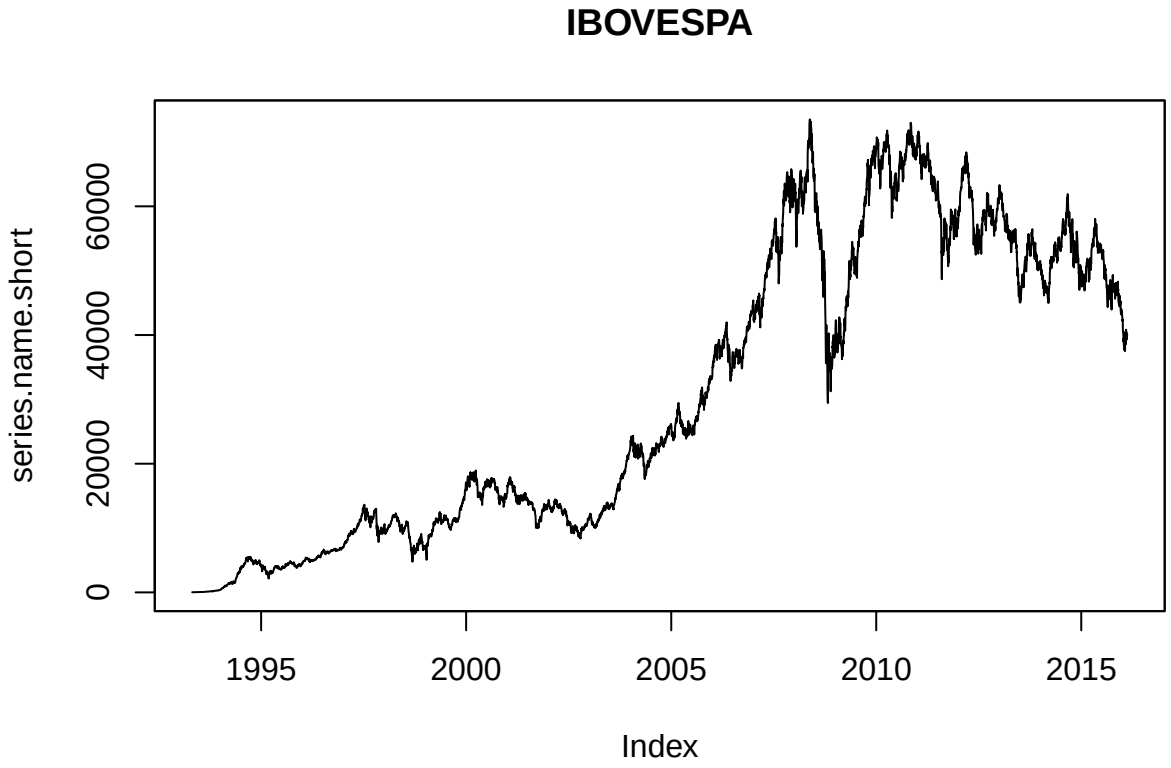
```
end(series.name)
```

```
## [1] "2016-02-15"
```

```
plot(series.name)
```




```
series.name.short <-window(series.name,start=as.Date("1980-01-01"),end=as.Date("2016-02-15"))
plot(series.name.short, main="IBOVESPA")
```


IBOVESPA
series.name.short
0
20000
40000
60000
1995
2000
2005
2010
2015
Index