Importing and Managing Financial Data in R

***getSymbols()***

In the **quantmod** package.

QQQ <- getSymbols(Symbols = “QQQ”, src = “yahoo”, auto.assign = F)

In the code above, QQQ is stored as an XTS object.

Other data sources (src) include:

Alpha Advantage “av” requires registration to get API key

FRED “FRED”

***Quandl()***

In the **Quandl** package.

GDP <- Quandl(code = “FRED/GDP”, type = “raw”)

In the code above, GDP is stored as a data frame object. Quandl() does not have an auto assignment option (i.e. you must assign the output of Quandl() to a variable).

The type parameter can be used to control the object type returned: raw (data frame), ts, zoo, xts, timeSeries

The main xts constructor takes a number of arguments. The two most important are x for the data (x must be a vector or matrix) and order.by for the index (order.by is a vector which must be the same length or number of rows as x, be a proper time or date object, and be in increasing order).

Example: data <- rnorm(5)

dates <- seq(as.Date(“2016-01-01”), length = 5, by = “days”)

smith <- xts(x = data, order.by = dates)

smith\_core <- coredata(smith)

smith\_index <- index(smith)

as.xts() is a workhorse function that converts objects to xts