

Import and Export data in R/RStudio

First step to learning how use R/RStudio is to learn how to import and export data. Here we are going to show several options that are most common for working with financial data. Financial data can be mainly three types: time series (many observations of one objects through time), cross-sectional (observations of many objects at single point in time) and longitudinal (combination of the two).

Setting up your working directory

After installation R creates a working directory in you system. However it is more convenient to set up your own working directory. It is important, because in this folder R will look for getting data and also will use it to export files:

```
# Check what is current woring directory  
getwd()  
# Set working directory  
setwd("C:\\Users\\petko\\Desktop\\R Data")
```

Importing data in R

There are two main ways to import your data into R. First we are going to show how to do it with the clipboard. Using the clipboard is faster and it is great for small amounts of data that is not very complex. First you have to copy your data and then use this code:

```
#Input data from Clipboard  
my_data=read.table(file="clipboard",header=FALSE)
```

The traditional way to import data is to use .csv files from MS Excel. It is more suitable for larger and more complex data sets. We prefer to use .csv instead of .xlsx files, because .xlsx files may have more than 1 sheet and this can produce errors when inputting information in R. To import .csv file use this code:

```
8
9 #Input data from .csv
10 set50=read.csv(file="set50.csv",header=TRUE,sep=",")
11
```

Export data from R/RStudio

After you are finished working in R it is usually necessary to export your results or modified data in order to be used in MS Excel or Power Point or something else. To export your data from R into a .csv file use:

```
11
12 #Output data using .csv
13 log.set50=log(set50)
14 write.csv(log.set50,file="logset50.csv")
15
```

Authors

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Plamen Patev is a researcher and academic teacher with strong interest in investment field. His research area is active portfolio management, investment risk management, portfolio selection. His background is a perfect combination between academia and investment practice. He has been teaching for most than 20 years in Europe and now in Taiwan. His courses in Portfolio Selection and Portfolio management, Investment Management and Corporate Finance are well recognized among investment professionals. Plamen has rich experience in asset management industry. He has served as a Head portfolio manager, CEO, CFO and Chairman of board of several investment and asset management companies in Eastern Europe. Plamen successfully unites research, education and investment practice: Real problems of investment practice are scrutinized and are a base for deep research projects; the results from research directly are applied in teaching activities.

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