# R-Code Visualizing of IR

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#### Overview

Here we do the visualization. The mathematical formulas and setting of the parameters are done in separate files. Use the cache option in Markdown to safe computation time.

- 1. Calculate Sentiment
  - 1.1. 1 month Sentiment (survey regarding expectations for one month)
  - 1.2. 6 month Sentimen (survey regarding expectations for six months)
- 2. Import Data
  - 2.1. Sentix

### Functions and Parameters separate

```
source("parameters.R")
source("functions.R")

## Loading required package: cccp

## Loading required package: Rglpk

## Loading required package: slam

## Using the GLPK callable library version 4.47

## Loading required package: timeSeries

## Loading required package: timeDate

## Financial Risk Modelling and Portfolio Optimisation with R (version 0.4-1)
```

## **Data Import**

#### Sentix

```
load(file.path(folderData, "Sentix", "SentixCalculated"))
head(sentix[[1]])
           Datum P+ Pn P- I+ In I- G+ Gn G-
                                               P_disp
                                                         I_disp
                                                                   G disp
## 803 2001-02-23 3 17 11 5 7 9 8 24 20 0.3978495 0.6619048 0.4947210
## 802 2001-03-02 9 23 19 14 10 8 23 33 27 0.5207843 0.6733871 0.6074052
## 801 2001-03-09 15 29 6 13 13 5 28 42 11 0.3955102 0.5311828 0.4429012
## 800 2001-03-16 13 10 23 3 10 15 16 20 38 0.7516908 0.4761905 0.6501296
## 799 2001-03-23 15 16 14 9 7 9 24 23 23 0.6585859 0.7500000 0.6809524
## 798 2001-03-30 11 24 13 14 10 6 25 34 19 0.5088652 0.6160920 0.5654346
          P_herf
                     I_herf
                                G_herf
## 803 -0.7367326 -0.4625850 -0.5976331
## 802 -0.5767013 -0.4492188 -0.4987661
## 801 -0.7772000 -0.5535900 -0.6756592
## 800 -0.4243856 -0.5535714 -0.4565376
## 799 -0.4607407 -0.4160000 -0.4414286
## 798 -0.6258681 -0.4800000 -0.5420776
```