MSCI Indices

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MSCI is a package that allows you to view the data of MSCI USA and MSCI Min Volatility.

I) Data Overview

The raw data can be found in inst/extdata while processed data can be viewed by running the following commands:

- **data(usa)**: Load the data for MSCI USA
- **View(usa)**: Display the dataframe of MSCI USA
- **data(minvol)**: Load the data for MSCI Min Volatility
- **View(minvol)**: Display the dataframe of MSCI USA
- **?usa**: Browse help page of MSCI USA dataframe
- **?minvol**: Browse help page of MSCI Min Volatility dataframe

The unique sectors were identified, and a table with relative weights of each was constructed, for the data on a monthly basis. The different sectors were S.T.Securities, Health.care, Industrials, Financials, Materials, Consumer.Discretionary, Information.Technology, Energy, Consumer.Staples, Utilities, Telecommunication.Services, Real.Estate, Cash.Derivatives, Telecommunications. The date is shown on the leftmost rows, followed by the different sectors. Each sector then has its relative weight with respect to the date in the corresponding row.

```
#download package
library(mscir)
library(ggplot2)
```

```
## Warning: package 'ggplot2' was built under R version 3.3.2
```

```
library(scales)
```

```
## Warning: package 'scales' was built under R version 3.3.2
```

```
# Display the data for MSCI USA
View(usa)

#Display the data for MSCI Min Vol
View(minvol)

#Display the weight of each sector over time
View(usa_weight)
View(minvol_weight)
```

II) Data Analysis

Plot industry weight of each sector over time:

```
data(minvol_weight)
ggplot(data = minvol_weight) + geom_line(mapping = aes(x = Date, y = Weight)) + scale_x_date(labels = da
```