Package 'bundesbank'

October 12, 2022

Type Package

Title Download Data from Bundesbank

Version 0.1-9

Date 2019-05-16

Maintainer Enrico Schumann <es@enricoschumann.net>

Description Download data from the time-series databases of the Bundesbank, the German central bank. See the overview at the Bundesbank website (<https://www.bundesbank.de/en/statistics/time-series-databases>) for available series. The package provides only a single function, getSeries(), which supports both traditional and real-time datasets; it will also download meta data if available. Downloaded data can automatically be arranged in various formats, such as data frames or 'zoo' series. The data may optionally be cached, so as to avoid repeated downloads of the same series.

License GPL-3

URL http://enricoschumann.net/R/packages/bundesbank/index.htm,

https://github.com/enricoschumann/bundesbank

Suggests zoo

NeedsCompilation no

Author Enrico Schumann [aut, cre] (<https://orcid.org/0000-0001-7601-6576>)

Repository CRAN

Date/Publication 2019-05-17 07:40:07 UTC

R topics documented:

	getSeries	2
Index		4

getSeries

Description

Download time-series from the website of the Bundesbank.

Usage

```
getSeries(series,
    start = NULL,
    end = format(Sys.Date(), "%Y-%m"),
    return.class = "data.frame",
    verbose = TRUE, dest.dir = NULL)
```

Arguments

series	The series name as given by the Bundesbank (e.g. 'BBK01.ST0316' for 3-Month EURIBOR).	
start	character in format 'YYYY-MM' or 'YYYY'. If omitted, the function download data from the earliest available date. Currently ignored for real-time datasets.	
end	character in format 'YYYY.MM' or 'YYYY'. If omitted, the function down- loads data up to the most recent available date. Currently ignored for real-time datasets.	
return.class	character or NULL. Currently supported are "zoo" and "data.frame". If NULL or "list", a list is returned for time-series. Real-time data are always returned as a data.frame.	
verbose	logical	
dest.dir	NULL or character. If character, it must be the path to an existing directory. See Details.	

Details

The data can be downloaded in CSV-format from the Bundesbank's website http://www.bundesbank. de.

If dest.dir is provided, the downloaded dataset gets a date prefix (today in format YYYYMMDD) and is stored in directory dest.dir. Before any download is attempted, the function checks whether a file with today's prefix exist in dest.dir; if yes, the file is used.

Value

A data.frame with two (or more) columns:

dates	dates (of class Date)

values numerical values

getSeries

The result for single time-series may have an attribute info, which is a character vector and holds additional information for series (such as its unit). See Examples.

Real-time datasets are always organised as a data.frame, in which the rows correspond to the reporting period and the columns to the publication date. Real-time datasets always have several attributes, in particular date, which corresponds to the publication date.

Author(s)

Maintainer: Enrico Schumann <es@enricoschumann.net>

Examples

```
## (Internet connection required)
series <- "BBK01.ST0304" ## Eonia</pre>
res <- getSeries(series) ## retrieve all available data</pre>
res <- getSeries(series, start = "2012-01")</pre>
res <- getSeries(series, end = "2012-01")</pre>
res <- getSeries(series, start = "2012-01", end = "2012-05")
## make 'zoo' series
if (require("zoo")) {
    Eonia <- zoo(res$values, res$dates)</pre>
    plot(Eonia)
}
## check comments
writeLines(strwrap(paste("- ", attr(res, "info")), width = 60, exdent = 2))
## real-time dataset (Gross domestic product)
gdp <- getSeries("BBKRT.A.DE.N.A.AG1.CA010.V.A")</pre>
## use caching
## ==> the example uses a temporary directory, but
       better is to use a less ephemeral destination,
##
##
       e.g. '~/Downloads/bundesbank'
gdp <- getSeries("BBKRT.A.DE.N.A.AG1.CA010.V.A",</pre>
                  dest.dir = tempdir())
### Downloading data from Bundesbank ... Done.
gdp <- getSeries("BBKRT.A.DE.N.A.AG1.CA010.V.A",</pre>
                  dest.dir = tempdir())
### Using cache ... Done.
```

Index

bundesbank(getSeries), 2
bundesbank-package(getSeries), 2
character, 2
data.frame, 2, 3
getSeries, 2

list,<mark>2</mark>