

Package ‘GetTDDData’

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Title Get Data for Brazilian Bonds (Tesouro Direto)

Version 1.5.4

Description Downloads and aggregates data for Brazilian government issued bonds directly from the website of Tesouro Direto <<https://www.tesourodireto.com.br/>>.

Depends R (>= 4.1.0)

Imports stringr, readxl, utils, stats, curl, bizdays, tidyr, rvest,
xml2, dplyr, fs, cli, humanize, purrr, tibble, lifecycle

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BugReports <https://github.com/msperlin/GetTDDData/issues/>

URL <https://github.com/msperlin/GetTDDData/>,
<https://msperlin.github.io/GetTDDData/>

RoxygenNote 7.2.3

Encoding UTF-8

Suggests knitr, rmarkdown, testthat, ggplot2, covr, lubridate

NeedsCompilation no

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Repository CRAN

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download.TD.data	<i>Downloads data of Brazilian government bonds directly from the website</i>
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Description

This function looks into the tesouro direto website (<https://www.tesourodireto.com.br/>) and downloads all of the files containing prices and yields of government bonds. You can use input `asset.codes` to restrict the downloads to specific bonds

Usage

```
download.TD.data(
  asset.codes = "LTN",
  dl.folder = get_cache_folder(),
  do.clean.up = FALSE,
  do.overwrite = FALSE,
  n.dl = NULL
)
```

Arguments

<code>asset.codes</code>	Strings that identify the assets (1 or more assets) in the names of the excel files. E.g. <code>asset.codes = 'LTN'</code> . When set to <code>NULL</code> , it will download all available assets
<code>dl.folder</code>	Name of folder to save excel files from tesouro direto (will create if it does not exist)
<code>do.clean.up</code>	Clean up folder before downloading? (TRUE or FALSE)
<code>do.overwrite</code>	Overwrite excel files? (TRUE or FALSE). If FALSE, will only download the new data for the current year
<code>n.dl</code>	Sets how many files to download from the website. Used only to decrease CRAN CHECK time. The default value is <code>NULL</code> (downloads all files)

Value

TRUE if successful

Examples

```
# only download file where string LTN is found
# (only 1 file for simplicity)
## Not run:
download.TD.data(asset.codes = 'LTN', n.dl = 1)

## End(Not run)
# The excel file should be available in folder 'TD Files' (default name)
```

get.yield.curve	<i>Gets the current yield curve</i>
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Description

Downloads and parses information about the current Brazilian yield curve.

Usage

```
get.yield.curve()
```

Value

A dataframe with information about the yield curve

Examples

```
## Not run:  
df.yield <- get.yield.curve()  
str(df.yield)  
  
## End(Not run)
```

get_cache_folder	<i>Returns cache directory</i>
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Description

Returns cache directory

Usage

```
get_cache_folder()
```

Value

a path

Examples

```
get_cache_folder()
```

get_td_names	Returns available nammes at TD site
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Description

Returns available nammes at TD site

Usage

```
get_td_names()
```

Value

string vector

Examples

```
get_td_names()
```

read.TD.files	Reading excel files from Tesouro Direto
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Description

Reads files downloaded by [download.TD.data](#)

Usage

```
read.TD.files(  
  dl.folder = "TD Files",  
  cols.to.import = c(1, 2, 4),  
  col.names = c("ref.date", "yield.bid", "price.bid")  
)
```

Arguments

dl.folder	Folder with excel files from tesouro direto
cols.to.import	Columns (numeric) to import from excel files (open and check the columns of the excel file from tesouro direto for details)
col.names	Names of columns in final data.frame (same size as cols.to.import)

Value

A dataframe with the data

Examples

```
# Downloads data from tesouro direto (only 1 file for simplicity)

dl.folder = 'TD Files'

## Not run:
download.TD.data(dl.folder = dl.folder, n.dl = 1)

my.df <- read.TD.files(dl.folder = dl.folder)

## End(Not run)
```

td_get	<i>Downloads data of Brazilian government bonds directly from the website</i>
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Description

This function looks into the tesouro direto website (<https://www.tesourodireto.com.br/>) and downloads all of the files containing prices and yields of government bonds. You can use input `asset_codes` to restrict the downloads to specific bonds

Usage

```
td_get(
  asset_codes = "LTN",
  first_year = 2005,
  last_year = as.numeric(format(Sys.Date(), "%Y")),
  dl_folder = get_cache_folder()
)
```

Arguments

<code>asset_codes</code>	Strings that identify the assets (1 or more assets) in the names of the excel files. E.g. <code>asset_codes = 'LTN'</code> . When set to NULL, it will download all available assets
<code>first_year</code>	first year of data (minimum of 2015)
<code>last_year</code>	last year of data
<code>dl_folder</code>	Name of folder to save excel files from tesouro direto (will create if it does not exist)

Value

TRUE if successful

Examples

```
## Not run:  
td_get("LTN", 2020, 2022)  
  
## End(Not run)
```

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