Package 'dataonderivatives'

January 4, 2022

Type Package
Title Easily Source Publicly Available Data on Derivatives
Version 0.4.0
Description Post Global Financial Crisis derivatives reforms have lifted the veil off over-the-counter (OTC) derivative markets. Swap Execution Facilities (SEFs) and Swap Data Repositories (SDRs) now publish data on swaps that are traded on or reported to those facilities (respectively). This package provides you the ability to get this data from supported sources.
License GPL-2
<pre>URL https://github.com/imanuelcostigan/dataonderivatives,</pre>
http://imanuelcostigan.github.io/dataonderivatives/
BugReports https://github.com/imanuelcostigan/dataonderivatives/issues
Depends R (>= $4.1.0$)
Imports httr2, readr, tibble, vetr
Suggests covr, testthat (>= 3.0.0)
Config/testthat/edition 3
Config/testthat/parallel true
Encoding UTF-8
RoxygenNote 7.1.2
NeedsCompilation no
Author Imanuel Costigan [aut, cre]
Maintainer Imanuel Costigan <i.costigan@me.com></i.costigan@me.com>
Repository CRAN
Date/Publication 2022-01-04 13:20:02 UTC
R topics documented:
bsef

bsef

Index 5

bsef	Get Bloomberg SEF data

Description

The Bloomberg Swap Execution Facility (SEF) offers customers the ability to execute derivative instruments across a number of different asset classes. It is required to make publicly available price, trading volume and other trading data. It publishes this data on its website. I have reverse engineered the JavaScript libraries used by its website to call the Bloomberg Application Service using POST requests to a target URL.

Usage

```
bsef(start, end = start, asset_class)
```

Arguments

start	the date from which data is required as Date or DateTime object. Only the year,
	month and day elements of the object are used. Must be of length one.

end the date for which data is required as Date or DateTime object. Only the year, month and day elements of the object are used. Must be of length one. Defaults

to the start date.

asset_class the asset class for which you would like to download trade data. Valid inputs

are "CR" (credit), "IR" (rates), "EQ" (equities), "FX" (foreign exchange), "CO"

(commodities) and must be a string.

Value

a tibble containing the requested data, or an empty tibble if data is unavailable

References

Bloomberg SEF data

Examples

```
## Not run:
bsef(as.Date("2021-05-12"), as.Date("2021-05-14"), "IR")
## End(Not run)
```

cme 3

cme

Get CME SDR data

Description

The CME Swap Data Repository (SDR) is a registered U.S. swap data repository that allows market participants to fulfil their public disclosure obligations under U.S. legislation. CME is required to make publicly available price, trading volume and other trading data. It publishes this data on an FTP site. Column specs are inferred from all records in the file (i.e. guess_max is set to Inf when calling readr::read_csv).

Usage

```
cme(date, asset_class, show_col_types = FALSE)
```

Arguments

date	the date for which data is required as Date or DateTime object. It will only use
	the year, month and day elements to determine the set of trades to return. It will

return the set of trades for the day starting on date.

asset_class the asset class for which you would like to download trade data. Valid inputs

are "IR" (rates), "FX" (foreign exchange), "CO" (commodities). This must be a

string.

show_col_types if FALSE (default), do not show the guessed column types. If TRUE always show

the column types, even if they are supplied. If NULL only show the column types

if they are not explicitly supplied by the col_types argument.

Value

a tibble containing the requested data, or an empty tibble if data is unavailable

References

CME SDR

Examples

```
## Not run:
cme(as.Date("2015-05-06"), "CO")
## End(Not run)
```

4 ddr

ddr Get DDR data

Description

The DTCC Data Repository is a registered U.S. swap data repository that allows market participants to fulfil their public disclosure obligations under U.S. legislation. This function will give you the ability to download trade-level data that is reported by market participants. Column specs are inferred from all records in the file (i.e. guess_max is set to Inf when calling readr::read_csv).

Usage

```
ddr(date, asset_class, show_col_types = FALSE)
```

Arguments

date the date for which data is required as Date or DateTime object. Only the year,

month and day elements of the object are used and it must of be length one.

asset_class the asset class for which you would like to download trade data. Valid inputs

are "CR" (credit), "IR" (rates), "EQ" (equities), "FX" (foreign exchange), "CO"

(commodities). This must be a string.

show_col_types if FALSE (default), do not show the guessed column types. If TRUE always show

the column types, even if they are supplied. If NULL only show the column types

if they are not explicitly supplied by the col_types argument.

Value

a tibble that contains the requested data. If no data exists on that date, an empty tibble is returned.

References

DDR Real Time Dissemination Platform

Examples

```
## Not run:
ddr(as.Date("2017-05-25"), "IR") # Not empty
ddr(as.Date("2020-12-01"), "CR") # Not empty
## End(Not run)
```

Index

```
bsef, 2
cme, 3
ddr, 4
readr::read_csv, 3, 4
```