Package 'imfr'

October 3, 2020

Type Package

Title Download Data from the International Monetary Fund's Data API

Version 0.1.9.1

Description Explore and download data from the International Monetary Fund's data API <http://data.imf.org/>.

Date 2020-10-03

URL https://CRAN.R-project.org/package=imfr

BugReports https://github.com/christophergandrud/imfr/issues

License GPL (>= 3)

Imports dplyr, httr (>= 1.2.0), jsonlite

LazyData TRUE

RoxygenNote 7.1.1

Suggests testthat

Encoding UTF-8

Depends R (>= 3.5.0)

NeedsCompilation no

Author Christopher Gandrud [aut, cre]

Maintainer Christopher Gandrud <christopher.gandrud@gmail.com>

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R topics documented:

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all_iso2c   *Data frame of 254 ISO two letter country codes Used internally when users request to download data for 'all' countries.*

Description

Data frame of 254 ISO two letter country codes Used internally when users request to download data for 'all' countries.

Usage

```
all_iso2c
```

Format

a data frame with 254 observations and 1 column

Source

From the countrycode package.

---

current_year   *Return current year*

Description

Return current year

Usage

```
current_year()
```

---

imf_codelist *Retreive the list of codes (codelist) for of an individual IMF database.*

Description

Retreive the list of codes (codelist) for of an individual IMF database.

Usage

```
imf_codelist(database_id, return_raw = FALSE, times = 3)
```

Arguments

database_id	character string of a database_id from `imf_ids`.
return_raw	logical. Whether to return the raw data structure list or a data frame with codelist codes and descriptions.
times	numeric. Maximum number of requests to attempt.

Value

If return_raw = FALSE then a data frame with the codelist IDs and descriptions is returned. If return_raw = TRUE then the raw data strcuture list is returned.

See Also

`imf_ids`

Examples

```
## Not run:
# Find Balance of Payments database data structure
imf_codelist(database_id = 'BOP')

## End(Not run)
```

---

imf_codes *Retrieve individual database codes*

Description

Retrieve individual database codes

Usage

```
imf_codes(codelist, return_raw = FALSE, times = 3)
```

Arguments

codelist	character string of a codelist from imf_codelist.
return_raw	logical. Whether to return the raw codes list list or a data frame with variable codes and descriptions.
times	numeric. Maximum number of requests to attempt.

Value

If return_raw = FALSE then a data frame with the codes and descriptions is returned. If return_raw = TRUE then the raw code list is returned.

Examples

```
# Retrieve indicators from BOP database
test = imf_codes(codelist = 'CL_INDICATOR_BOP')
```

---

imf_data   *Download a data from the IMF*

Description

Download a data from the IMF

Usage

```
imf_data(
  database_id,
  indicator,
  country = "all",
  start = 2000,
  end = current_year(),
  freq = "A",
  return_raw = FALSE,
  print_url = FALSE,
  times = 3
)
```

Arguments

database_id	character string database ID. Can be found using imf_ids.
indicator	character string or character vector of indicator IDs. These can be found using imf_codes.
country	character string or character vector of ISO two letter country codes identifying the countries for which you would like to download the data.See https://en.wikipedia.org/wiki/ISO_3166-1_alpha-2. If country = 'all' then imf_data will attempt to download all available countries.

start	year for which you would like to start gathering the data.
end	year for which you would like to end gathering the data.
freq	character string indicating the series frequency. With `'A'` for annual, `'Q'` for quarterly, and `'M'` for monthly.
return_raw	logical. Whether to return the data as an unprocessed list.
print_url	logical. Whether to print the URL used in the API call. Can be useful for debugging.
times	numeric. Maximum number of requests to attempt.

Value

If `return_raw = FALSE` then a data frame with just the requested data series are returned. If `return_raw = TRUE` then the raw data list is returned. This can include additional information about the series.

Examples

```
# Download Real Effective Exchange Rate (CPI base) for the UK and China
# at an annual frequency
real_ex <- imf_data(database_id = 'IFS', indicator = 'EREER_IX',
                country = c('CN', 'GB'), freq = 'A')

## Not run:
# Also download Interest Rates, Lending Rate, Percent per annum
ex_interest <- imf_data(database_id = 'IFS',
                        indicator = c('FILR_PA', 'EREER_IX'),
                        freq = 'M')

## End(Not run)
```

---

imf_ids	*List IMF database IDs*

Description

List IMF database IDs

Usage

```
imf_ids(return_raw = FALSE, times = 3)
```

Arguments

return_raw	logical. Whether to return the raw dataflow list or a data frame with database IDs and names.
times	numeric. Maximum number of requests to attempt.

Value

If return_raw = FALSE then a data frame with the database IDs and descriptions is returned. If
return_raw = TRUE then the raw dataflow list is returned.

Examples

```
head(imf_ids())
```

---

imf_metadata   *Access meta data for specific country-series*

Description

Access meta data for specific country-series

Usage

```
imf_metadata(
  database_id,
  indicator,
  country = "all",
  start = 2000,
  end = current_year(),
  return_raw = FALSE
)
```

Arguments

database_id	character string database ID. Can be found using imf_ids.
indicator	character string of the indicator's ID. These can be found using imf_codes.
country	character string or character vector of ISO two letter country codes identifying the countries for which you would like to download the indicator metadata for. See https://en.wikipedia.org/wiki/ISO_3166-1_alpha-2. If country = 'all' then all available countries will be downloaded.
start	year for which you would like to start gathering the data.
end	year for which you would like to end gathering the data.
return_raw	logical. Whether to return the raw metadata a data frame with just the requested data metadata.

Examples

```
## Not run:
imf_metadata(database_id = 'IFS', indicator = 'EREER_IX',
             start = 2001, end = 2001, country = 'CN')

## End(Not run)
```

---

imf_metastructure   *Retreive metadata structure for of an individual IMF database.*

Description

Retreive metadata structure for of an individual IMF database.

Usage

```
imf_metastructure(database_id, return_raw = FALSE)
```

Arguments

database_id   character string of a `database_id` from [imf_ids](#).

return_raw   logical. Whether to return the raw metadata structure list or a data frame with
                codelist codes and descriptions.

Value

If `return_raw = FALSE` then a data frame with the codelist IDs and descriptions is returned. If
`return_raw = TRUE` then the raw data strcuture list is returned.

See Also

[imf_ids](#)

Examples

```
## Not run:
# Find Balance of Payments database data structure
imf_metastructure(database_id = 'BOP')

## End(Not run)
```

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