

# Package ‘imfr’

March 31, 2019

**Type** Package

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

**Version** 0.1.6

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

**Date** 2019-03-31

**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** 6.1.1

**NeedsCompilation** no

**Author** Christopher Gandrud [aut, cre]

**Maintainer** Christopher Gandrud <[christopher.gandrud@gmail.com](mailto:christopher.gandrud@gmail.com)>

**Repository** CRAN

**Date/Publication** 2019-03-31 15:10:07 UTC

## R topics documented:

all_iso2c . . . . .	2
current_year . . . . .	2
imf_codelist . . . . .	3
imf_codes . . . . .	3
imf_data . . . . .	4
imf_ids . . . . .	5
imf_metadata . . . . .	6
imf_metastructure . . . . .	6
<b>Index</b>	<b>8</b>

---

all_iso2c	<i>Data frame of 253 ISO two letter country codes Used internally when users request to download data for 'all' countries.</i>
-----------	--

---

**Description**

Data frame of 253 ISO two letter country codes Used internally when users request to download data for 'all' countries.

**Usage**

```
all_iso2c
```

**Format**

a data frame with 253 observations and 1 column

**Source**

From the countrycode package.

---

current_year	<i>Return current year</i>
--------------	----------------------------

---

**Description**

Return current year

**Usage**

```
current_year()
```

---

imf_codelist	<i>Retrieve the list of codes (codelist) for of an individual IMF database.</i>
--------------	---

---

**Description**

Retrieve 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 <a href="#">imf_ids</a> .
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 structure 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	<i>Retrieve individual database codes</i>
-----------	---

---

**Description**

Retrieve individual database codes

**Usage**

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

**Arguments**

codelist	character string of a codelist from <a href="#">imf_codelist</a> .
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	<i>Download a data from the IMF</i>
----------	-------------------------------------

---

**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 <a href="#">imf_ids</a> .
indicator	character string or character vector of indicator IDs. These can be found using <a href="#">imf_codes</a> .
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 <a href="https://en.wikipedia.org/wiki/ISO_3166-1_alpha-2">https://en.wikipedia.org/wiki/ISO_3166-1_alpha-2</a> . 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**

<code>return_raw</code>	logical. Whether to return the raw dataflow list or a data frame with database IDs and names.
<code>times</code>	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**

```
imf_ids()
```

---

imf_metadata	<i>Access meta data for specific country-series</i>
--------------	---

---

**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 <a href="#">imf_ids</a> .
indicator	character string of the indicator's ID. These can be found using <a href="#">imf_codes</a> .
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 <a href="https://en.wikipedia.org/wiki/ISO_3166-1_alpha-2">https://en.wikipedia.org/wiki/ISO_3166-1_alpha-2</a> . 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	<i>Retrieve metadata structure for of an individual IMF database.</i>
-------------------	---

---

**Description**

Retrieve 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 structure 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)
```

# Index

## \*Topic **datasets**

all\_iso2c, [2](#)

all\_iso2c, [2](#)

current\_year, [2](#)

imf\_codelist, [3](#), [4](#)

imf\_codes, [3](#), [4](#), [6](#)

imf\_data, [4](#)

imf\_ids, [3](#), [4](#), [5](#), [6](#), [7](#)

imf\_metadata, [6](#)

imf\_metastructure, [6](#)