

Package ‘ecoseries’

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Title An R Interface to Brazilian Central Bank and Sidra APIs and the IPEA Data

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BugReports <https://github.com/fernote7/ecoseries/issues>

Description Creates an R interface to the Bacen <<http://api.bcb.gov.br/>> and Sidra <<http://api.sidra.ibge.gov.br/>> APIs and IPEA data <<http://www.ipeadata.gov.br/Default.aspx>>

Depends R (>= 3.3.1)

License GPL-3

Encoding UTF-8

LazyData true

RoxygenNote 6.0.1

Imports RCurl, rjson, rvest, stats, xml2, magrittr, readr, tibble, zoo

Suggests xlsx

NeedsCompilation no

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| ecoseries | <i>An R interface to Brazilian Central Bank and Sidra APIs and the IPEA data website</i> |
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Description

The ecoseries package has three main functions, two to gather data from the Brazilian Central Bank (Bacen) and Sidra (IBGE) and another to gather Institute of Applied Economic Research data (IPEA).

The series_bacen function takes advantage of the Bacen API ("http://api.bcb.gov.br/") to access this sistem "https://www3.bcb.gov.br/sgspub/localizarseries/localizarSeries.do?method=prepararTelaLocalizarSeries", load and save the series. You can either save in csv or xlsx formats.

The series_ipea function accesses a simpler section of the ipeadata website and harvests the informations based on series numbers.

The series_sidra function uses the Sidra API ("http://api.sidra.ibge.gov.br") to load and save the series. You can either save in csv or xlsx formats.

| | |
|--------------|---|
| series_bacen | <i>A function to extract BACEN series using their API</i> |
|--------------|---|

Description

A function to extract BACEN series using their API

Usage

```
series_bacen(x, from = "", to = "", save = "")
```

Arguments

| | |
|------|--|
| x | Bacen series numbers. Either an integer or a numeric vector. |
| from | A string specifying where the series shall start. |
| to | A string specifying where the series shall end. |
| save | A string specifying if data should be saved in csv or xlsx format. Defaults to not saving. |

Examples

```
bacen = series_bacen(x=c(2465, 1242))
```

| | |
|-----------------|--|
| series_ipeadata | <i>A function to extract IPEA series using their API</i> |
|-----------------|--|

Description

A function to extract IPEA series using their API

Usage

```
series_ipeadata(arg1, ..., periodicity = c("Y", "D", "M", "Q"), save = "")
```

Arguments

| | |
|-------------|---|
| arg1 | ipea series number. |
| ... | More series number. |
| periodicity | A string specifying the periodicity. |
| save | A string specifying if data should be saved in csv or xls format. Defaults to not saving. |

Examples

```
# ipea=series_ipeadata(162225812, periodicity = c("D"))
```

| | |
|--------------|---|
| series_sidra | <i>A function to extract Sidra series using their API</i> |
|--------------|---|

Description

The different parameters define the table and its dimensions (periods, variables, territorial units and classification) to be consulted. The parameters that define the sections may vary from table to table. Henceforth, the Sidra function ranges between 2 mandatory arguments - x (the series number) and territory (the geographic scope) to 6 arguments, where you can input the time window wanted, the variables and the sections. You can only choose one variable per series per request, but multiple sections within the variable.

Usage

```
series_sidra(x, from = NULL, to = NULL, territory = c(n1 = "brazil", n2 = "region", n3 = "state"), variable = "allxp", cl = NULL, sections = NULL)
```

Arguments

| | |
|-----------|--|
| x | Sidra series number. |
| from | A string or character vector specifying where the series shall start. Defaults to 1980. |
| to | A string or character vector specifying where the series shall end. Defaults to current year. |
| territory | Specifies the desired territorial levels. |
| variable | An integer describing what variable characteristics are to be returned. Defaults to all available. |
| cl | A vector containing the classification codes in a vector |
| sections | A vector or a list of vectors if there are two or more classification codes containing the desired tables from the classification. |

Examples

```

sidra=series_sidra(x = c(1612), from = 1990, to = 2015, territory = "brazil")
# sidra=series_sidra(x = c(3653), from = c("200201"),
# to = c("201512"), territory = "brazil",
# variable = 3135, sections = c(129316,129330),cl = 544)
# sidra=series_sidra(x = c(3653), from = c("200201"),
# to = c("201512"), territory = "brazil", variable = 3135,
# sections = "all", cl = 544)
# sidra=series_sidra(x = c(1618), from = c("201703"), to = c("201703"),
# territory = "brazil",
# variable = 109, sections=list(c(39427), c(39437,39441)), cl = c(49, 48))
# trim - x = 1620; from = 199001; to = 201701; territory = "brazil";
# sections=list(c(90687)); cl =c(11255); variable = 583
# sidra = series_sidra(x = 1620, from = 199001, to = 201701,
# territory = "brazil",
# sections=list(c(90687)), cl =c(11255), variable = 583)

```

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