Package ‘povcalnetR’

October 14, 2022

**Title**  
Client for the 'Povcalnet' API

**Version** 0.1.1

**Description**  
Provides an interface to compute poverty and inequality indicators for more than 160 countries and regions from the World Bank's database of household surveys. It has the same functionality as the 'Povcalnet' website (<http://iresearch.worldbank.org/PovcalNet/>). 'Povcalnet' is a computational tool that allows users to estimate poverty rates for regions, sets of countries or individual countries, over time and at any poverty line. 'Povcalnet' is managed jointly by the data and research group in the World Bank's development economics division. It draws heavily upon a strong collaboration with the poverty and equity global practice, which is responsible for the gathering and harmonization of the underlying survey data.

**License**  
MIT + file LICENSE

**Encoding** UTF-8

**LazyData** true

**RoxygenNote** 7.1.0

**Depends**  
R (&ge; 3.2.0)

**Imports**  
purr, stringr, httr, jsonlite, readr, tibble, dplyr, js, tidyr, naniar, memoise

**Suggests**  
testthat (&ge; 2.1.0), assertthat, knitr, rmarkdown, forcats, scales, ggthemes, ggplot2, utf8, httptest

**VignetteBuilder** knitr

**URL** https://github.com/worldbank/povcalnetR

**BugReports** https://github.com/worldbank/povcalnetR/issues

**NeedsCompilation** no

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build_query_string

Description
build_query_string Create simplified povcalnet query string

Usage
build_query_string(
country,
povline,
year,
aggregate = FALSE,
fill_gaps = FALSE,
coverage = "all",
ppp = NULL,
format = "json"
)

Arguments

- **country**: character: list of country iso3 code (accepts multiple) or ‘all’. Use iso3 codes
- **povline**: numeric: poverty line (in 2011 PPP-adjusted USD) to calculate poverty measures
- **year**: numeric: list of years, or ‘all’, or ‘last’.
- **aggregate**: logical: ‘TRUE’ will return aggregate results, ‘FALSE’ country-level results.
- **fill_gaps**: logical: ‘TRUE’ will interpolate / extrapolate values when surveys are not available for a specific year.
### build_query_string_cl

**coverage** character: Can take one of four values: 'all' (default), 'national', 'urban', 'rural'.

**ppp** numeric: Optional - Allows the selection of custom PPP (Purchasing Power Parity) exchange rates

**format** character: Response format to be requested from the API: 'csv' or 'json'

### Value

character

### Examples

```r
build_query_string(country = c("ALB", "CHN"),
                   povline = 1.9,
                   year = c(2002, 2012))
```

### Description

build_query_string_cl Create povcalnet query string for country level, survey year specification

### Usage

```r
build_query_string_cl(
  country,
  povline,
  year,
  ppp = NULL,
  coverage_type = NULL,
  format = "json"
)
```

### Arguments

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>country</td>
<td>character: Requested country. Use iso3 codes</td>
</tr>
<tr>
<td>povline</td>
<td>numeric: Requested poverty lines in international dollars</td>
</tr>
<tr>
<td>year</td>
<td>numeric: Requested survey years</td>
</tr>
<tr>
<td>ppp</td>
<td>numeric: Optional - Custom PPP exchange rates (Purchasing Power parity)</td>
</tr>
<tr>
<td>coverage_type</td>
<td>character: Optional - Type of data coverage. Take one to the following values: rural; urban; national; special_cpi; aggregated_distribution, invalid_ppp</td>
</tr>
<tr>
<td>format</td>
<td>character: Response format to be requested from the API: 'csv' or 'json'</td>
</tr>
</tbody>
</table>
get_countries

Value

character

Examples

build_query_string_cl(country = c("ALB", "CHN"),
povline = c(1.9, 2.0),
year = c(2002, 2002))

get_countries

get_countries

Description

Helper function to quickly retrieve the list of iso3 country codes for a specific World Bank region or income group

Usage

get_countries(region_code)

Arguments

region_code character: A region or income group code. Only accepts one code

Value

a vector of country code

Examples

get_countries("ECA")
**Description**

povcalnet Facilitate interaction with the PovcalNet API

**Usage**

```r
povcalnet(
  country = "all",
  povline = 1.9,
  year = "all",
  aggregate = FALSE,
  fill_gaps = FALSE,
  coverage = "all",
  ppp = NULL,
  url = "http://iresearch.worldbank.org",
  format = "csv"
)
```

**Arguments**

- **country**: character: list of country iso3 code (accepts multiple) or 'all'. Use `povcalnet_info` for full list of countries.
- **povline**: numeric: poverty line (in 2011 PPP-adjusted USD) to calculate poverty measures
- **year**: numeric: list of years, or 'all'.
- **aggregate**: logical: 'TRUE' will return aggregate results, 'FALSE' country-level results.
- **fill_gaps**: logical: 'TRUE' will interpolate / extrapolate values when surveys are not available for a specific year.
- **coverage**: character: Can take one of three values: 'national', 'urban', 'rural'
- **ppp**: numeric: Optional - Allows the selection of custom PPP (Purchasing Power Parity) exchange rates
- **url**: character: API root URL. For testing purposes only, should not be changed for 99 percent of users.
- **format**: character: Response format to be requested from the API: 'csv' or 'json'

**Value**

data.frame
Example

dologcnet(country = "ALB")

Description

dologcnet_cl Facilitate interaction with the PovcalNet API. All parameters are specified at the country level (hence the _cl suffix), so if you send a request for two countries, you must also pass two values to the 'year' argument, two values to the 'povline' argument, etc.

Usage

dologcnet_cl(
  country,
  povline,
  year,
  coverage = NULL,
  ppp = NULL,
  url = "http://iresearch.worldbank.org",
  format = "csv"
)

Arguments

country character: list of country iso3 code (accepts multiple). Use povcalnet_info for full list of countries.
povline numeric: poverty line (in 2011 PPP-adjusted USD) to calculate poverty measures
year numeric: list of years, or 'all', or 'last'.
coverage character: Can take one of three values: 'national', 'urban', 'rural'
ppp numeric: Optional - Allows the selection of custom PPP (Purchasing Power Parity) exchange rates
url character: API root URL. For testing purposes only, should not be changed for 99 percent of users.
format character: Response format to be requested from the API: 'csv' or 'json'
Description

Download updated information on available countries, regions, and surveys from the PovcalNet API

Usage

povcalnet_info(url = "http://iresearch.worldbank.org/povcalnet")

Arguments

url character: Path to file: This parameter should not be modified.

Value
data frame

Examples

povcalnet_info()
povcalnet_wb Returns the official WB regional estimates

Description

povcalnet_wb Returns the official WB regional estimates

Usage

povcalnet_wb(
povline = 1.9,
year = "all",
url = "http://iresearch.worldbank.org",
format = "csv"
)

Arguments

povline  numeric: poverty line (in 2011 PPP-adjusted USD) to calculate poverty measures
year  numeric: list of years, or ‘all’. 
url  character: API root URL. For testing purposes only, should not be changed for 99 percent of users.
format  character: Response format to be requested from the API: ‘csv’ or ‘json’

Value

data.frame

Examples

povcalnet_wb(year = 2015)

povcal_info

Description

Non-memoised version of povcalnet_info()

Usage

povcal_info(url = "http://iresearch.worldbank.org/povcalnet")
Arguments

url character: Path to file: This parameter should not be modified.

Value
data.frame

Examples

povcalnet_info()

Description

A sample dataset to facilitate testing of `povcalnet_cl()` function

Usage

sample_input

Format

A data frame with 5 rows and 5 variables:

country iso3 country codes
poverty_line Poverty line, in PPP
year Survey year in YYYY format
ppp PPP exchange rate
coverage_type Survey coverage
Index

* datasets
  sample_input, 9

build_query_string, 2
build_query_string_cl, 3

get_countries, 4

povcal_info, 8
povcalnet, 5
povcalnet_cl, 6
povcalnet_info, 5, 6, 7
povcalnet_wb, 8

sample_input, 9