Package ‘povcalnetR’

May 19, 2020

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 (>= 3.2.0)
Imports  purrr, stringr, httr, jsonlite, readr, tibble, dplyr, js, tidyr, naniar, memoise
Suggests  testthat (>= 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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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

usage

Arguments

country character: Requested country. Use iso3 codes
povline numeric: Requested poverty lines in international dollars
year numeric: Requested survey years
ppp numeric: Optional - Custom PPP exchange rates (Purchasing Power parity)
coverage_type character: Optional - Type of data coverage. Take one to the following values rural; urban; national; special_cpi; aggregated_distribution, invalid_ppp
format character: Response format to be requested from the API: ‘csv’ or ‘json’
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

getcountries("ECA")
povcalnet Facilitate interaction with the PovcalNet API

Description

povcalnet Facilitate interaction with the PovcalNet API

Usage

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
Examples

povcalnet(country = "ALB")

Description

povcalnet_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

povcalnet_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’
povcalnet_info

Value
data.frame

Examples

povcalnet_cl(country = c("ALB", "USA"), povline = c(3.2, 5.5), year = c(2012, 2010))

povcalnet_info()  

povcalnet_info

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**  
*povcalnet_wb Returns the official WB regional estimates*

**Description**

povcalnet_wb Returns the official WB regional estimates

**Usage**

```r
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**

```r
povcalnet_wb(year = 2015)
```

---

**povcal_info**  
*povcal_info*

**Description**

Non-memoised version of povcalnet_info()

**Usage**

```r
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
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