

Package ‘PNADcIBGE’

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Type Package

Title Downloading, Reading and Analysing PNADc Microdata

Version 0.5.0

Description Provides tools for download, read, and analyse the PNADc household survey from Brazilian Institute of Geography and Statistics. The data must be downloaded from the official website <<https://www.ibge.gov.br/>>. Further analyses must be made using package 'survey'.

Depends R (>= 3.2.0)

Imports magrittr, survey, readr, dplyr, RCurl, utils, timeDate, readxl

Suggests srvyr, tidyverse, convey

License GPL-3

Encoding UTF-8

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NeedsCompilation no

Author Douglas Braga [aut],
Gabriel Assuncao [aut, cre]

Maintainer Gabriel Assuncao <pacotepnadc@ibge.gov.br>

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get_pnadc

Download, label and create design object for PNADc microdata

Description

Core function of package. with this function only, the user can download a PNADc microdata from a year or quarter and get a design object ready to use with survey package functions.

Usage

```
get_pnadc(year, quarter = NULL, interview = NULL, vars = NULL,
          labels = T, design = T, savedir = tempdir())
```

Arguments

year	The year of the data to be downloaded. Must be a number between 2012 and current year. Vector not accepted.
quarter	The quarter of the year of the data to be downloaded. Must be number from 1 to 4. Vector not accepted. If NULL, interview number must be provided.
interview	The interview number of the data to be downloaded. Must be number from 1 to 5. Vector not accepted. Using this option will get annual data. If NULL, quarterly data will be downloaded instead.
vars	Character vector of the name of the variables you want to keep for analysys. default is to keep all variables
labels	logical. If TRUE, categorical variables will presented as factors with labels corresponding to the survey's dictionary. Not available for annual data.
design	logical. If TRUE, get_pnadc will return a object of class survey.design. It is strongly recommended to keep this parameter as TRUE for further analysis. If FALSE, only the microdata will be returned.
savedir	Directory for dowloading data. default is to use a temporary directory.

Value

An object of class survey.design with the data from PNADc survey and its sample design or a tibble with the survey design variables and selected variables.

Examples

```
## Not run:
pnadc.svy <- get_pnadc(year=2016, quarter=2)
pnadc.svy2 <- get_pnadc(year=2017, quarter=1, vars=c("VD4001", "VD4002"))
survey::svymean(~VD4002, pnadc.svy2, na.rm=TRUE)

## End(Not run)
```

pnadc_design	<i>Create pnadc survey object utilizing its sampling design for analysis with survey package</i>
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Description

Create pnadc survey object utilizing its sampling design for analysis with survey package

Usage

```
pnadc_design(data_pnadc)
```

Arguments

data_pnadc A tibble of PNADc data read with read_pnadc function.

Value

An object of class survey.design with the data from PNADc survey and its sample design.

Examples

```
#Using data read from disk
input_path <- pnadc_example(path="input_example.txt")
data_path <- pnadc_example(path="exampledata.txt")
pnadc.df <- read_pnadc(microdata=data_path, input_txt=input_path, vars="VD4002")
dictionary.path <- pnadc_example(path="dictionaryexample.xls")
pnadc.df <- pnadc_labeller(data_pnadc=pnadc.df, dictionary.file=dictionary.path)
## Not run:
pnadc.svy <- pnadc_design(data_pnadc=pnadc.df)
#Calculating unemployment rate
survey::svymean(~VD4002, pnadc.svy, na.rm=TRUE)
## End(Not run)

#Downloading data
## Not run:
pnadc.df2 <- get_pnadc(year=2017, quarter=2, vars="VD4002", labels=F, design=F)
pnadc.df2 <- pnadc_labeller(data_pnadc=pnadc.df2, dictionary.file=dictionary.path)
pnadc.svy2 <- pnadc_design(data_pnadc=pnadc.df2)
#Calculating unemployment rate
survey::svymean(~VD4002, pnadc.svy2, na.rm=TRUE)
## End(Not run)
```

pnadc_example *Path for example data*

Description

Path for example data

Usage

```
pnadc_example(path = NULL)
```

Arguments

path Name of file. If 'NULL', the example files will be listed.

Examples

```
pnadc_example()
pnadc_example(path="exampledata.txt")
```

pnadc_labeller *Label categorical variables from PNADC datasets*

Description

Label categorical variables from PNADC datasets

Usage

```
pnadc_labeller(data_pnadc, dictionary.file)
```

Arguments

data_pnadc A tibble of PNADc data read with read_pnadc function.

dictionary.file

The dictionary file for selected survey available on official website: ftp://ftp.ibge.gov.br/Trabalho_e_Rendimento/Pesquisa_Nacional_por_Amostra_de_Domicilios_continua/Trimestral/Microdados/Documentacao/Dicionario_e_input.zip

Value

A tibble with the data provided from PNADc survey and its categorical variables as factors with labels.

Examples

```
input_path <- pnadc_example(path="input_example.txt")
data_path <- pnadc_example(path="exampledata.txt")
dictionary.path <- pnadc_example(path="dictionaryexample.xls")
pnadc.df <- read_pnadc(microdata=data_path, input_txt=input_path, vars="VD4002")
pnadc.df <- pnadc_labeller(data_pnadc=pnadc.df, dictionary.file=dictionary.path)
```

read_pnadc	<i>Read PNADc microdata</i>
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Description

Read PNADc microdata

Usage

```
read_pnadc(microdata, input_txt, vars = NULL)
```

Arguments

microdata	A text file containing microdata from PNADc survey. The file must be downloaded from ftp://ftp.ibge.gov.br/Trabalho_e_Rendimento/Pesquisa_Nacional_por_Amostra_de_Domicilios_continua/Trimestral/Microdados/
input_txt	A text file available along with the microdata containing the input script for SAS. They are available at ftp://ftp.ibge.gov.br/Trabalho_e_Rendimento/Pesquisa_Nacional_por_Amostra_de_Domicilios_continua/Trimestral/Microdados/Documentacao/Dicionario_e_input.zip
vars	Character vector of the name of the variables you want to keep for analysis. default is to keep all variables

Value

A tibble with the survey design variables and selected variables.

Examples

```
input_path <- pnadc_example(path="input_example.txt")
data_path <- pnadc_example(path="exampledata.txt")
pnadc.df <- read_pnadc(microdata=data_path, input_txt=input_path, vars="VD4002")
```

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