Package 'ech'

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Title Toolbox for ECH with R

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Description R toolbox for the processing of the Encuesta Continua de Hogares (ECH) from Uruguay at <http://www.ine.gub.uy/encuesta-continua-de-hogares1> conducted by the Instituto Nacional de Estadistica (INE).

License GPL-3

Depends R (>= 3.5.0)

Imports assertthat, curl, dplyr (>= 1.0.0), fs, geouy (>= 0.2.3), glue, haven (>= 2.3.0), janitor, labelled, laeken, purrr, readxl, rlang, srvyr (>= 0.4.0), statar, stringr, survey (>= 1.2.0), tidyr, utils

Suggests knitr, rmarkdown, testthat (>= 2.1.0)

VignetteBuilder knitr

ByteCompile true

Encoding UTF-8

LazyData true

RoxygenNote 7.1.2

SystemRequirements 'unrar' (Linux/macOS) or '7-Zip' (Windows) to work with '.rar' files, GDAL (>= 3.0.2), GEOS (>= 3.8.0), PROJ (>= 6.2.1)

NeedsCompilation no

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`age_groups` *This function allows you to calculate age groups*

Description

This function allows you to calculate age groups

Usage

```
age_groups(data = ech::toy_ech_2018, cut = c(0, 4, 11, 17, 24), e27 = "e27")
```

Arguments

`data`	data.frame
`cut`	breaks points to cut a numeric variable
`e27`	Variable name of age

Value

data.frame

See Also

Other demographic: `household_type()`

Examples

```
toy_ech_2018 <- age_groups(data = ech::toy_ech_2018, cut = c(0, 4, 11, 17, 24))
```

archive_extract *Extract compressed archives*

Description

Extract compressed archives

Usage

```
archive_extract(archive.path = NULL, dest.path = NULL)
```

Arguments

archive.path	Ruta de origen del archivo comprimido
dest.path	Ruta destino del archivo descomprimido

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

See Also

Other utils: dates_ech(), unlabelled()

basket_goods *This function allows you to get the Basket goods*

Description

This function allows you to get the Basket goods

Usage

```
basket_goods(data = ech::cba_cbna_mdeo, year = NULL)
```

Arguments

data	data.frame with the price of the basket of goods from Montevideo, Interior or Rural region
year	the ECH year

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Value

data.frame

See Also

Other income: `deflate()`, `income_constant_prices()`, `income_quantiles()`, `labor_income_per_capita()`, `labor_income_per_hour()`, `organize_ht11()`

Examples

```
df <- basket_goods(data = ech::cba_cbna_mdeo, year = 2018)
```

`branch_ciiu` *This function allows you to identify activity branches*

Description

This function allows you to identify activity branches

Usage

```
branch_ciiu(
  data = ech::toy_ech_2018,
  f72_2 = "f72_2",
  group = TRUE,
  disaggregated = FALSE
)
```

Arguments

`data`	data.frame
`f72_2`	Variable name of ciiu code rev.4
`group`	logical to define 12 or 18 categories, if FALSE code 18. Default: TRUE
`disaggregated`	logical to define disaggregated branches or not. Default: FALSE

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Value

data.frame

See Also

Other employment: `employment_restrictions()`, `employment()`, `underemployment()`

Examples

```
toy_ech_2018 <- branch_ciiu(data = ech::toy_ech_2018)
```

`cba_cbna_int` *A dataset containing the CBA and CBNA for the Interior Urbano region*

Description

A dataset containing the CBA and CBNA for the Interior Urbano region

Usage

```
cba_cbna_int
```

Format

A data frame with 234 rows and 4 variables:

fecha date from 2001 to 2020

cba_li CBA

cbna CBNA

cbt_lp CBT

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Source

http://www.ine.gub.uy/

See Also

Other dataset: `cba_cbna_mdeo`, `cba_cbna_rur`, `ciiu4`, `dic`, `ipab_base2010_int`, `ipab_base2010_mdeo`, `ipab_base2010`, `ipc_base2010_int`, `ipc_base2010_mdeo`, `ipc_base2010`, `toy_ech_2018_income`, `toy_ech_2018`, `urls_ine`

cba_cbna_mdeo *A dataset containing the CBA and CBNA for the Montevideo region*

Description

A dataset containing the CBA and CBNA for the Montevideo region

Usage

```
cba_cbna_mdeo
```

Format

A data frame with 234 rows and 4 variables:

fecha date from 2001 to 2020

cba_li CBA

cbna CBNA

cbt_lp CBT

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Source

http://www.ine.gub.uy/

See Also

Other dataset: cba_cbna_int, cba_cbna_rur, ciiu4, dic, ipab_base2010_int, ipab_base2010_mdeo, ipab_base2010, ipc_base2010_int, ipc_base2010_mdeo, ipc_base2010, toy_ech_2018_income, toy_ech_2018, urls_ine

cba_cbna_rur *A dataset containing the CBA and CBNA for the Interior Rural region*

Description

A dataset containing the CBA and CBNA for the Interior Rural region

Usage

```
cba_cbna_rur
```

Format

A data frame with 234 rows and 4 variables:

fecha date from 2001 to 2020

cba_li CBA

cbna CBNA

cbt_lp CBT

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Source

http://www.ine.gub.uy/

See Also

Other dataset: cba_cbna_int, cba_cbna_mdeo, ciiu4, dic, ipab_base2010_int, ipab_base2010_mdeo, ipab_base2010, ipc_base2010_int, ipc_base2010_mdeo, ipc_base2010, toy_ech_2018_income, toy_ech_2018, urls_ine

---

ciiu4 *A dataset containing Clasificación Industrial Internacional Uniforme Rev. 4 and 3*

Description

A dataset containing Clasificación Industrial Internacional Uniforme Rev. 4 and 3

Usage

```
ciiu4
```

Format

A data frame with 738 rows and 3 variables:

ciiu_4 Code of Clasificación Industrial Internacional Uniforme Rev. 4

description Description of Clasificación Industrial Internacional Uniforme Rev. 4

ciiu_3 Code of Clasificación Industrial Internacional Uniforme Rev. 3 ...

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Source

http://www.ine.gub.uy/

See Also

Other dataset: cba_cbna_int, cba_cbna_mdeo, cba_cbna_rur, dic, ipab_base2010_int, ipab_base2010_mdeo, ipab_base2010, ipc_base2010_int, ipc_base2010_mdeo, ipc_base2010, toy_ech_2018_income, toy_ech_2018, urls_ine

---

dates_ech *This function allows you to organize dates*

Description

This function allows you to organize dates

Usage

```
dates_ech(data)
```

Arguments

data	data frame with an 'yy' variable for the year, and a 'mm' variable for the month

Value

data.frame

See Also

Other utils: archive_extract(), unlabelled()

---

deflate *This function allows you to calculate a deflator coefficient*

Description

This function allows you to calculate a deflator coefficient

Usage

```
deflate(
  base_month = NULL,
  base_year = NULL,
  index = "IPC",
  level = "G",
  df_year = NULL
)
```

Arguments

base_month	baseline month
base_year	baseline year
index	IPC or IPAB
level	General index ('G'), Montevideo index ('M') or Interior index ('I')
df_year	ECH year

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

See Also

Other income: basket_goods(), income_constant_prices(), income_quantiles(), labor_income_per_capita(), labor_income_per_hour(), organize_ht11()

---

dic *A dataset containing variables names change of the ECH 2006-2018*

Description

A dataset containing variables names change of the ECH 2006-2018

Usage

```
dic
```

Format

A data frame with 976 rows and 19 variables:

codigos Code oh label

descripcion Description of label

modulo Module in the form 2017

obs Observations

unidad Level of variable household (H) individual (P) or general (G)

var06 ECH variables names 2006

var07 ECH variables names 2007

var08 ECH variables names 2008

var09 ECH variables names 2009

var10 ECH variables names 2010

var11 ECH variables names 2011

var12 ECH variables names 2012

var13 ECH variables names 2013

var14 ECH variables names 2014

var15 ECH variables names 2015

var16 ECH variables names 2016

var17 ECH variables names 2017

var18 ECH variables names 2018

var19 ECH variables names 2019 ...

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Source

http://www.ine.gub.uy/

See Also

Other dataset: cba_cbna_int, cba_cbna_mdeo, cba_cbna_rur, ciiu4, ipab_base2010_int, ipab_base2010_mdeo, ipab_base2010, ipc_base2010_int, ipc_base2010_mdeo, ipc_base2010, toy_ech_2018_income, toy_ech_2018, urls_ine

---

ech ech *package*

Description

Caja de Herramientas para el procesamiento de la Encuesta Continua de Hogares de Uruguay

Details

See the README on Github

`employment` *This function allows you to calculate the variables: PEA, PET, PO, PD*

Description

This function allows you to calculate the variables: PEA, PET, PO, PD

Usage

```
employment(data = ech::toy_ech_2018, pobpcoac = "pobpcoac")
```

Arguments

`data`	data.frame with microdata
`pobpcoac`	Variable name of definition of population by activity status. Default: "pobpcoac"

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

See Also

Other employment: `branch_ciiu()`, `employment_restrictions()`, `underemployment()`

Examples

```
toy_ech_2018 <- employment(data = ech::toy_ech_2018, pobpcoac = "pobpcoac")
```

`employment_restrictions` *This function allows you to identify workers with employment restrictions*

Description

This function allows you to identify workers with employment restrictions

Usage

```
employment_restrictions(
  data = ech::toy_ech_2018,
  f82 = "f82",
  underemployment = "underemployment"
)
```

Arguments

data	data.frame
f82	Variable name of contribution to the pension fund
underemployment	Variable name of underemployment

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Value

data.frame

See Also

Other employment: branch_ciiu(), employment(), underemployment()

Examples

```
toy_ech_2018 <- underemployment(data = ech::toy_ech_2018)
toy_ech_2018 <- employment_restrictions(data = toy_ech_2018)
```

---

enrolled_school *This function allows you to calculate the people enrolled in school*

Description

This function allows you to calculate the people enrolled in school

Usage

```
enrolled_school(
  data = ech::toy_ech_2018,
  e27 = "e27",
  e193 = "e193",
  e197 = "e197",
  e201 = "e201",
  e212 = "e212",
  e215 = "e215",
  e218 = "e218",
  e221 = "e221",
  e224 = "e224"
)
```

Arguments

data	data.frame with necessary variables Defaults to ech.
e27	Variable name of age
e193	Variable name of attendance school
e197	Variable name of attendance primary
e201	Variable name of attendance secondary
e212	Variable name of attendance technical school (non-university)
e215	Variable name of attendance magisterio
e218	Variable name of attendance university
e221	Variable name of attendance tertiary
e224	Variable name of attendance postgrade

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Value

data.frame

See Also

Other education: `level_completion()`, `level_education()`, `years_of_schooling()`

Examples

```
toy_ech_2018 <- enrolled_school(data = ech::toy_ech_2018)
```

---

get_cba_cbna *This function allows you to get the CBA and CBNA data*

Description

This function allows you to get the CBA and CBNA data

Usage

```
get_cba_cbna(folder = tempdir(), region, sheet = 1)
```

Arguments

folder	temporal folder
region	Montevideo ("M"), Interior Urbano ("I"), Interior Rural ("R")
sheet	sheet number. Default 1.

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Value

data.frame

See Also

Other dwnld_read: get_dictionary(), get_ipab_region(), get_ipab(), get_ipc_region(), get_ipc(), get_microdata(), read_microdata()

---

get_dictionary *This function allows you to download ECH dictionaries from INE website*

Description

This function allows you to download ECH dictionaries from INE website

Usage

```
get_dictionary(year = NULL, folder = tempdir())
```

Arguments

year	allows download data from 2011 to 2019. Default the last year
folder	Folder where are the files or be download

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Value

unrar files from INE web and the respective data frame in tibble format

See Also

Other dwnld_read: get_cba_cbna(), get_ipab_region(), get_ipab(), get_ipc_region(), get_ipc(), get_microdata(), read_microdata()

`get_estimation_gini` *This function allows you to estimate the Gini coefficient*

Description

This function allows you to estimate the Gini coefficient

Usage

```
get_estimation_gini(
  data = ech::toy_ech_2018,
  variable = NULL,
  by = NULL,
  level = NULL,
  ids = NULL,
  numero = "numero",
  estrato = NULL,
  pesoano = "pesoano",
  bootstrap = FALSE,
  r = NULL
)
```

Arguments

`data`	ech data frame
`variable`	Variable name of income without rental value per capita deflated
`by`	data frame column
`level`	is household ("h") or individual ("i").
`ids`	Variable name of cluster
`numero`	Variable name of household id
`estrato`	Variable name of strata
`pesoano`	Variable name of weights
`bootstrap`	Logical value
`r`	A number of replicas

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Value

table

See Also

Other estimation: get_estimation_gpg(), get_estimation_mean(), get_estimation_median(), get_estimation_qsr(), get_estimation_ratio(), get_estimation_total(), set_design()

Examples

```
toy_ech_2018 <- income_constant_prices(data = ech::toy_ech_2018, index = "IPC", level = "R",
                                       base_month = "01", base_year = "2005")
get_estimation_gini(data = toy_ech_2018, variable = "y_wrv_pc_d_r", level = "i")
```

---

get_estimation_gpg *This function allows you to estimate the Gender Pay Wage Gap (GPG)*

Description

This function allows you to estimate the Gender Pay Wage Gap (GPG)

Usage

```
get_estimation_gpg(
  data = ech::toy_ech_2018,
  variable = "total_income_per_hour",
  e26 = "e26",
  by = NULL,
  ids = NULL,
  estrato = NULL,
  pesoano = "pesoano",
  stat = "media"
)
```

Arguments

data	data.frame
variable	Variable name of total income per hour
e26	Variable name of sex
by	data frame column
ids	Variable name of cluster
estrato	Variable name of strata
pesoano	Variable name of weights
stat	Media or Median

Value

table

See Also

Other estimation: get_estimation_gini(), get_estimation_mean(), get_estimation_median(), get_estimation_qsr(), get_estimation_ratio(), get_estimation_total(), set_design()

Examples

```
toy_ech_2018 <- labor_income_per_hour(data = ech::toy_ech_2018, base_month = 6, base_year = 2018)
get_estimation_gpg(data = toy_ech_2018, variable = "total_income_per_hour", e26 = "e26")
```

---

get_estimation_mean *This function allows you to estimate mean variable at universe level.*

Description

This function allows you to estimate mean variable at universe level.

Usage

```
get_estimation_mean(
  data = ech::toy_ech_2018,
  variable = NULL,
  by.x = NULL,
  by.y = NULL,
  domain = NULL,
  level = NULL,
  ids = NULL,
  numero = "numero",
  estrato = NULL,
  pesoano = "pesoano",
  name = "estimacion"
)
```

Arguments

data	data frame with ECH microdata
variable	data frame column to estimate
by.x	data frame column
by.y	data frame column
domain	subpopulation reference setted as character expresion of logical evaluation
level	is household ("h") or individual ("i").
ids	ids
numero	household id
estrato	strata
pesoano	weights
name	name for the estimation new column

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Value

table

See Also

Other estimation: `get_estimation_gini()`, `get_estimation_gpg()`, `get_estimation_median()`, `get_estimation_qsr()`, `get_estimation_ratio()`, `get_estimation_total()`, `set_design()`

Examples

```
get_estimation_mean(data = ech::toy_ech_2018, variable = "pobre06", by.x = "dpto", level = "h")
```

`get_estimation_median` *This function allows you to estimate median variable at universe level.*

Description

This function allows you to estimate median variable at universe level.

Usage

```
get_estimation_median(
  data = ech::toy_ech_2018,
  variable = NULL,
  by.x = NULL,
  by.y = NULL,
  domain = NULL,
  level = NULL,
  ids = NULL,
  numero = "numero",
  estrato = NULL,
  pesoano = "pesoano",
  name = "estimacion"
)
```

Arguments

data	data frame with ECH microdata
variable	data frame column to estimate
by.x	data frame column
by.y	data frame column
domain	subpopulation reference setted as character expresion of logical evaluation
level	is household ("h") or individual ("i").
ids	ids
numero	household id
estrato	strata
pesoano	weights
name	name for the estimation new column

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Value

table

See Also

Other estimation: `get_estimation_gini()`, `get_estimation_gpg()`, `get_estimation_mean()`, `get_estimation_qsr()`, `get_estimation_ratio()`, `get_estimation_total()`, `set_design()`

Examples

```
get_estimation_median(data = ech::toy_ech_2018, variable = "ht11", by.x = "dpto", level = "h")
```

---

get_estimation_qsr *This function allows you to estimate de Income Quintile Share Ratio*

Description

This function allows you to estimate de Income Quintile Share Ratio

Usage

```
get_estimation_qsr(
  data = ech::toy_ech_2018,
  variable = "y_pc_d_r",
  by = NULL,
  ids = NULL,
  estrato = NULL,
  pesoano = "pesoano"
)
```

Arguments

data	data.frame
variable	Variable name of total income per hour
by	data frame column
ids	Variable name of cluster
estrato	Variable name of strata
pesoano	Variable name of weights

Value

table

See Also

Other estimation: get_estimation_gini(), get_estimation_gpg(), get_estimation_mean(), get_estimation_median(), get_estimation_ratio(), get_estimation_total(), set_design()

Examples

```
toy_ech_2018 <- income_constant_prices(data = ech::toy_ech_2018, index = "IPC", level = "R",
                                       base_month = "01", base_year = "2005")
get_estimation_qsr(data = toy_ech_2018, variable = "y_pc_d_r", pesoano = "pesoano")
```

---

get_estimation_ratio *This function allows you to estimate ratio variables at universe level.*

Description

This function allows you to estimate ratio variables at universe level.

Usage

```
get_estimation_ratio(
  data = ech::toy_ech_2018,
  variable.x = NULL,
  variable.y = NULL,
  by.x = NULL,
  by.y = NULL,
  domain = NULL,
  level = NULL,
  ids = NULL,
  numero = "numero",
  estrato = NULL,
  pesoano = "pesoano",
  name = "estimacion"
)
```

Arguments

data	data frame with ECH microdata
variable.x	data frame column to estimate
variable.y	data frame column to estimate
by.x	data frame column
by.y	data frame column
domain	subpopulation reference setted as character expresion of logical evaluation
level	is household ("h") or individual ("i")
ids	Variable name of cluster
numero	Variable name of household id
estrato	Variable name of strata
pesoano	Variable name of weights
name	name for the estimation new column

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Value

table

See Also

Other estimation: get_estimation_gini(), get_estimation_gpg(), get_estimation_mean(), get_estimation_median(), get_estimation_qsr(), get_estimation_total(), set_design()

Examples

```
toy_ech_2018 <- employment(data = ech::toy_ech_2018, pobpcoac = "pobpcoac")
get_estimation_ratio(data = toy_ech_2018, variable.x = "po", variable.y = "pea", level = "i")
```

`get_estimation_total` *This function allows you to estimate total variable at universe level.*

Description

This function allows you to estimate total variable at universe level.

Usage

```
get_estimation_total(
  data = ech::toy_ech_2018,
  variable = NULL,
  by.x = NULL,
  by.y = NULL,
  domain = NULL,
  level = NULL,
  ids = NULL,
  numero = "numero",
  estrato = NULL,
  pesoano = "pesoano",
  name = "estimacion"
)
```

Arguments

`data`	data frame with ECH microdata
`variable`	data frame column to estimate
`by.x`	data frame column
`by.y`	data frame column
`domain`	subpopulation reference setted as character expresion of logical evaluation
`level`	is household ("h") or individual ("i").
`ids`	ids
`numero`	household id
`estrato`	strata
`pesoano`	weights
`name`	name for the estimation new column

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Value

table

See Also

Other estimation: `get_estimation_gini()`, `get_estimation_gpg()`, `get_estimation_mean()`, `get_estimation_median()`, `get_estimation_qsr()`, `get_estimation_ratio()`, `set_design()`

Examples

```
get_estimation_total(variable = "pobre06", by.x = "dpto", level = "h")
```

---

get_ipab

This function allows you to get the IPAB (Indice de precios de alimentos y bebidas) data

---

Description

This function allows you to get the IPAB (Indice de precios de alimentos y bebidas) data

Usage

```
get_ipab(folder = tempdir(), sheet = 1)
```

Arguments

`folder`	temporal folder
`sheet`	sheet number. Default 1

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Value

data.frame

See Also

Other dwnld_read: `get_cba_cbna()`, `get_dictionary()`, `get_ipab_region()`, `get_ipc_region()`, `get_ipc()`, `get_microdata()`, `read_microdata()`

`get_ipab_region` *This function allows you to get the IPAB (Indice de precios de alimentos y bebidas) data*

Description

This function allows you to get the IPAB (Indice de precios de alimentos y bebidas) data

Usage

```
get_ipab_region(folder = tempdir(), region, sheet = 1)
```

Arguments

`folder`	temporal folder
`region`	Montevideo ("M"), Interior Urbano ("I")
`sheet`	sheet number. Default 1

Value

data.frame

See Also

Other dwnld_read: `get_cba_cbna()`, `get_dictionary()`, `get_ipab()`, `get_ipc_region()`, `get_ipc()`, `get_microdata()`, `read_microdata()`

`get_ipc` *This function allows you to get the IPC data*

Description

This function allows you to get the IPC data

Usage

```
get_ipc(folder = tempdir())
```

Arguments

`folder`	ruta temporal para descargar el archivo

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

See Also

Other dwnld_read: get_cba_cbna(), get_dictionary(), get_ipab_region(), get_ipab(), get_ipc_region(), get_microdata(), read_microdata()

`get_ipc_region` *This function allows you to get the IPC data*

Description

This function allows you to get the IPC data

Usage

```
get_ipc_region(folder = tempdir(), region, sheet = 1)
```

Arguments

`folder`	temporal folder
`region`	Montevideo ("M") or Interior ("I")
`sheet`	sheet number. Default 1.

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Value

data.frame

See Also

Other dwnld_read: get_cba_cbna(), get_dictionary(), get_ipab_region(), get_ipab(), get_ipc(), get_microdata(), read_microdata()

`get_microdata` *This function allows you to download and read ECH from INE website*

Description

This function allows you to download and read ECH from INE website

Usage

```
get_microdata(year = NULL, folder = tempdir(), toR = TRUE)
```

Arguments

`year`	allows download data from 2011 to 2019. Default the last year
`folder`	Folder where are the files or be download
`toR`	write data frame in R format and delete download file and unpack files

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Value

unrar files from INE web and the respective data frame in tibble format

See Also

Other dwnld_read: `get_cba_cbna()`, `get_dictionary()`, `get_ipab_region()`, `get_ipab()`, `get_ipc_region()`, `get_ipc()`, `read_microdata()`

`household_type` *This function allows you to calculate the household type for each household in the survey. A household is composed of one or more people who occupy a housing unit.*

Description

This function allows you to calculate the household type for each household in the survey. A household is composed of one or more people who occupy a housing unit.

Usage

```
household_type(
  data = ech::toy_ech_2018,
  numero = "numero",
  e26 = "e26",
  e27 = "e27",
  e30 = "e30"
)
```

Arguments

data	data frame with ECH microdata
numero	Variable name of household id
e26	Variable name of sex
e27	Variable name of age
e30	Variable name of householder

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Value

data.frame

See Also

Other demographic: age_groups()

Examples

```
toy_ech_2018 <- household_type(data = ech::toy_ech_2018)
```

---

housing_conditions *This function allows you to calculate the housing conditions*

Description

This function allows you to calculate the housing conditions

Usage

```
housing_conditions(data = ech::toy_ech_2018, c2 = "c2", c3 = "c3", c4 = "c4")
```

Arguments

data	data.frame
c2	Variable name of predominant material on external walls
c3	Variable name of predominant roofing material
c4	Variable name of predominant flooring material

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Value

data.frame

See Also

Other dwelling: housing_deprivation(), housing_situation(), housing_tenure(), overcrowding()

Examples

```
toy_ech_2018 <- housing_conditions(data = ech::toy_ech_2018)
```

---

housing_deprivation *This function allows you to calculate the housing status*

Description

This function allows you to calculate the housing status

Usage

```
housing_deprivation(
  data = ech::toy_ech_2018,
  n = 1,
  ht19 = "ht19",
  d9 = "d9",
  d10 = "d10",
  d11 = "d11",
  d12 = "d12",
  d13 = "d13",
  d16 = "d16",
  d18 = "d18",
  d19 = "d19",
  c2 = "c2",
  c3 = "c3",
```

```
  c4 = "c4",
  quintil = "quintil",
  region_4 = "region_4"
)
```

Arguments

data	data.frame
n	number of deprivations to consider. Default 1
ht19	Variable name of number of individuals in the household
d9	Variable name of number of rooms
d10	Variable name of number of rooms to sleep
d11	Variable name of principal source of potable water
d12	Variable name of water supply network / water access
d13	Variable name of sanitary facilities
d16	Variable name of sewerage facilities
d18	Variable name of energy source for lighting
d19	Variable name of cooking space
c2	Variable name of predominant material on external walls
c3	Variable name of predominant roofing material
c4	Variable name of predominant flooring material
quintil	Variable name of income quintil
region_4	Variable name of region

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Value

data.frame

See Also

Other dwelling: housing_conditions(), housing_situation(), housing_tenure(), overcrowding()

Examples

```
toy_ech_2018 <- income_constant_prices(data = ech::toy_ech_2018)
toy_ech_2018 <- income_quantiles(data = toy_ech_2018)
toy_ech_2018 <- housing_deprivation(data = toy_ech_2018)
```

`housing_situation` *This function allows you to calculate the housing situation*

Description

This function allows you to calculate the housing situation

Usage

```
housing_situation(
  data = ech::toy_ech_2018,
  c5_1 = "c5_1",
  c5_2 = "c5_2",
  c5_3 = "c5_3",
  c5_4 = "c5_4",
  c5_5 = "c5_5",
  c5_6 = "c5_6",
  c5_7 = "c5_7",
  c5_8 = "c5_8",
  c5_9 = "c5_9",
  c5_10 = "c5_10",
  c5_11 = "c5_11",
  c5_12 = "c5_12"
)
```

Arguments

`data`	data.frame
`c5_1`	Variable name of roof condensation
`c5_2`	Variable name of roof drips
`c5_3`	Variable name of walls cracks
`c5_4`	Variable name of broken doors or windows
`c5_5`	Variable name of floors cracks
`c5_6`	Variable name of plaster drop on walls
`c5_7`	Variable name of detached ceilings
`c5_8`	Variable name of poor sunlight
`c5_9`	Variable name of poor ventilation
`c5_10`	Variable name of floods when it rains
`c5_11`	Variable name of in danger of collapse
`c5_12`	Variable name of dampness in the foundations

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Value

data.frame

See Also

Other dwelling: housing_conditions(), housing_deprivation(), housing_tenure(), overcrowding()

Examples

```
toy_ech_2018 <- housing_situation(data = ech::toy_ech_2018)
```

`housing_tenure` *This function allows you to calculate the housing tenure*

Description

This function allows you to calculate the housing tenure

Usage

```
housing_tenure(data = ech::toy_ech_2018, d8_1 = "d8_1")
```

Arguments

`data`	data.frame
`d8_1`	Variable name of housing_tenure (owner, renter, rent-free occupancy, etc.)

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Value

data.frame

See Also

Other dwelling: housing_conditions(), housing_deprivation(), housing_situation(), overcrowding()

Examples

```
toy_ech_2018 <- housing_tenure(data = ech::toy_ech_2018)
```

`income_constant_prices` *This function allows you to calculate the household income constant prices*

Description

This function allows you to calculate the household income constant prices

Usage

```
income_constant_prices(
  data = ech::toy_ech_2018,
  base_month = 6,
  base_year = 2018,
  index = "IPC",
  level = "G",
  mes = "mes",
  ht11 = "ht11",
  ht13 = "ht13",
  ht19 = "ht19"
)
```

Arguments

`data`	data.frame with ECH microdata
`base_month`	baseline month
`base_year`	baseline year
`index`	IPC or IPAB
`level`	General ("G") or Regional ("R")
`mes`	month
`ht11`	Variable name of income. Default: ht11
`ht13`	Variable name of rental value. Default: ht13
`ht19`	Variable name of number of individuals in the household. Default: ht19

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Value

data.frame

See Also

Other income: basket_goods(), deflate(), income_quantiles(), labor_income_per_capita(), labor_income_per_hour(), organize_ht11()

Examples

```
toy_ech_2018 <- income_constant_prices(data = ech::toy_ech_2018)
```

`income_quantiles` *This function allows you to calculate the Household Income Quantiles*

Description

This function allows you to calculate the Household Income Quantiles

Usage

```
income_quantiles(
  data = ech::toy_ech_2018,
  quantile = 5,
  weights = "pesoano",
  income = "y_pc_d"
)
```

Arguments

`data`	data.frame
`quantile`	Variable name of quintil (5) or decil (10). Default: 5
`weights`	Variable name of ponderation variable. Default: "pesoano"
`income`	Variable name of income constant price. Default: "y_pc_d"

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Value

data.frame

See Also

Other income: basket_goods(), deflate(), income_constant_prices(), labor_income_per_capita(), labor_income_per_hour(), organize_ht11()

Examples

```
toy_ech_2018 <- income_constant_prices(data = ech::toy_ech_2018)
toy_ech_2018 <- income_quantiles(data = toy_ech_2018)
```

`integrated_poverty_measure` *This function allows you to calculate an integrated poverty measure*

Description

This function allows you to calculate an integrated poverty measure

Usage

```
integrated_poverty_measure(
  data = ech::toy_ech_2018,
  pobre06 = "pobre06",
  UBN_q = "UBN_q"
)
```

Arguments

`data`	data.frame
`pobre06`	Variable name of poverty
`UBN_q`	Variable name of UBN

Value

data.frame

See Also

Other poverty: `poverty()`, `unsatisfied_basic_needs()`

Examples

```
toy_ech_18 <- enrolled_school(data = ech::toy_ech_2018)
toy_ech_18 <- years_of_schooling(toy_ech_18)
toy_ech_18 <- unsatisfied_basic_needs(toy_ech_18)
toy_ech_18 <- integrated_poverty_measure(data = toy_ech_18)
```

ipab_base2010 *A dataset containing the IPAB*

Description

A dataset containing the IPAB

Usage

```
ipab_base2010
```

Format

A data frame with 286 rows and 2 variables:

fecha date from 1997 to 2020

indice IPAB

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Source

http://www.ine.gub.uy/

See Also

Other dataset: cba_cbna_int, cba_cbna_mdeo, cba_cbna_rur, ciiu4, dic, ipab_base2010_int, ipab_base2010_mdeo, ipc_base2010_int, ipc_base2010_mdeo, ipc_base2010, toy_ech_2018_income, toy_ech_2018, urls_ine

ipab_base2010_int *A dataset containing the IPAB for the Interior region*

Description

A dataset containing the IPAB for the Interior region

Usage

```
ipab_base2010_int
```

Format

A data frame with 108 rows and 2 variables:

fecha date from 2011 to 2019

indice IPAB

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Source

http://www.ine.gub.uy/

See Also

Other dataset: cba_cbna_int, cba_cbna_mdeo, cba_cbna_rur, ciiu4, dic, ipab_base2010_mdeo, ipab_base2010, ipc_base2010_int, ipc_base2010_mdeo, ipc_base2010, toy_ech_2018_income, toy_ech_2018, urls_ine

---

ipab_base2010_mdeo *A dataset containing the IPAB for the Montevideo region*

Description

A dataset containing the IPAB for the Montevideo region

Usage

```
ipab_base2010_mdeo
```

Format

A data frame with 108 rows and 2 variables:

fecha date from 2011 to 2019

indice IPAB

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Source

http://www.ine.gub.uy/

See Also

Other dataset: cba_cbna_int, cba_cbna_mdeo, cba_cbna_rur, ciiu4, dic, ipab_base2010_int, ipab_base2010, ipc_base2010_int, ipc_base2010_mdeo, ipc_base2010, toy_ech_2018_income, toy_ech_2018, urls_ine

---

ipc_base2010 *A dataset containing the IPC base 2010*

Description

A dataset containing the IPC base 2010

Usage

```
ipc_base2010
```

Format

A data frame with 990 rows and 5 variables:

fecha date from 1937 to 2019

indice IPC

mensual value of IPC

acum_ano acumulated IPC

acum_12_meses acumulated IPC last 12 month

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Source

http://www.ine.gub.uy/

See Also

Other dataset: cba_cbna_int, cba_cbna_mdeo, cba_cbna_rur, ciiu4, dic, ipab_base2010_int, ipab_base2010_mdeo, ipab_base2010, ipc_base2010_int, ipc_base2010_mdeo, toy_ech_2018_income, toy_ech_2018, urls_ine

ipc_base2010_int *A dataset containing the IPC base 2010 only for the Interior region*

Description

A dataset containing the IPC base 2010 only for the Interior region

Usage

```
ipc_base2010_int
```

Format

A data frame with 120 rows and 2 variables:

fecha date from 2011 to 2019

indice IPC

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Source

http://www.ine.gub.uy/

See Also

Other dataset: cba_cbna_int, cba_cbna_mdeo, cba_cbna_rur, ciiu4, dic, ipab_base2010_int, ipab_base2010_mdeo, ipab_base2010, ipc_base2010_mdeo, ipc_base2010, toy_ech_2018_income, toy_ech_2018, urls_ine

ipc_base2010_mdeo *A dataset containing the IPC base 2010 only for the Montevideo region*

Description

A dataset containing the IPC base 2010 only for the Montevideo region

Usage

```
ipc_base2010_mdeo
```

Format

A data frame with 120 rows and 2 variables:

fecha date from 2011 to 2019

indice IPC

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Source

http://www.ine.gub.uy/

See Also

Other dataset: cba_cbna_int, cba_cbna_mdeo, cba_cbna_rur, ciiu4, dic, ipab_base2010_int, ipab_base2010_mdeo, ipab_base2010, ipc_base2010_int, ipc_base2010, toy_ech_2018_income, toy_ech_2018, urls_ine

---

labor_income_per_capita

This function allows you to calculate the labor income per capita

---

Description

This function allows you to calculate the labor income per capita

Usage

```
labor_income_per_capita(
  data = ech::toy_ech_2018,
  numero = "numero",
  pobpcoac = "pobpcoac",
  g126_1 = "g126_1",
  g126_2 = "g126_2",
  g126_3 = "g126_3",
  g126_4 = "g126_4",
  g126_5 = "g126_5",
  g126_6 = "g126_6",
  g126_7 = "g126_7",
  g126_8 = "g126_8",
  g127_3 = "g127_3",
  g128_1 = "g128_1",
  g129_2 = "g129_2",
  g130_1 = "g130_1",
```

```
  g131_1 = "g131_1",
  g133_1 = "g133_1",
  g133_2 = "g133_2",
  g134_1 = "g134_1",
  g134_2 = "g134_2",
  g134_3 = "g134_3",
  g134_4 = "g134_4",
  g134_5 = "g134_5",
  g134_6 = "g134_6",
  g134_7 = "g134_7",
  g134_8 = "g134_8",
  g135_3 = "g135_3",
  g136_1 = "g136_1",
  g137_2 = "g137_2",
  g138_1 = "g138_1",
  g139_1 = "g139_1",
  g141_1 = "g141_1",
  g141_2 = "g141_2",
  g142 = "g142",
  g144_1 = "g144_1",
  g144_2_1 = "g144_2_1",
  g144_2_3 = "g144_2_3",
  g144_2_4 = "g144_2_4",
  g144_2_5 = "g144_2_5"
)
```

Arguments

data	data frame
numero	Variable name of household id
pobpcoac	Variable name of definition of population by activity status
g126_1	Variable name of net salary
g126_2	Variable name of commissions, incentives, overtime payment, fringe benefits
g126_3	Variable name of non-surrendering expenses
g126_4	Variable name of tips
g126_5	Variable name of annual complementary salary
g126_6	Variable name of vacation pay
g126_7	Variable name of delayed payments
g126_8	Variable name of transportation tickets
g127_3	Variable name of received food or drink
g128_1	Variable name of received food tickets
g129_2	Variable name of received housing or accommodation
g130_1	Variable name of another type of compensation
g131_1	Variable name of received another type of supplement paid by the employer

g133_1	Variable name of the right to cultivate goods for own-consumption
g133_2	Variable name of the right to cultivate goods for own-consumption (amount received from the sale)
g134_1	Variable name of net salary
g134_2	Variable name of commissions, incentives, overtime payment, fringe benefits
g134_3	Variable name of non-surrendering expenses
g134_4	Variable name of tips
g134_5	Variable name of annual complementary salary
g134_6	Variable name of vacation pay
g134_7	Variable name of delayed payments
g134_8	Variable name of transportation tickets
g135_3	Variable name of received food or drink
g136_1	Variable name of received food tickets
g137_2	Variable name of received housing or accommodation
g138_1	Variable name of another type of compensation
g139_1	Variable name of received another type of supplement paid by the employer
g141_1	Variable name of the right to cultivate goods for own-consumption
g141_2	Variable name of the right to cultivate goods for own-consumption (amount received from the sale)
g142	Variable name of withdrawals for business household expenses you have or had
g144_1	Variable name of collected products for own consumption (non-agricultural worker)
g144_2_1	Variable name of collected products for own consumption (non-agricultural worker)
g144_2_3	Variable name of collected products for own consumption (non-agricultural worker)
g144_2_4	Variable name of collected products for own consumption (non-agricultural worker)
g144_2_5	Variable name of collected products for own consumption (non-agricultural worker)

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Value

data.frame

See Also

Other income: `basket_goods()`, `deflate()`, `income_constant_prices()`, `income_quantiles()`, `labor_income_per_hour()`, `organize_ht11()`

Examples

```
toy_ech_2018 <- labor_income_per_capita(data = ech::toy_ech_2018)
```

`labor_income_per_hour` *This function allows you to calculate the labor income per hour*

Description

This function allows you to calculate the labor income per hour

Usage

```
labor_income_per_hour(
  data = ech::toy_ech_2018,
  numero = "numero",
  f85 = "f85",
  pobpcoac = "pobpcoac",
  pt4 = "pt4",
  base_month = 6,
  base_year = 2018,
  mes = "mes"
)
```

Arguments

`data`	data frame
`numero`	Variable name of household id
`f85`	Variable name of hours worked per week
`pobpcoac`	Variable name of definition of population by activity status
`pt4`	Variable name of total employment income
`base_month`	baseline month
`base_year`	baseline year
`mes`	month

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Value

data.frame

See Also

Other income: `basket_goods()`, `deflate()`, `income_constant_prices()`, `income_quantiles()`, `labor_income_per_capita()`, `organize_ht11()`

Examples

```
toy_ech_2018 <- ech::toy_ech_2018
toy_ech_2018 <- labor_income_per_hour(data = toy_ech_2018, base_month = "06", base_year = "2018")
```

`level_completion` *This function allows you to calculate the level of school completion*

Description

This function allows you to calculate the level of school completion

Usage

```
level_completion(
  data = ech::toy_ech_2018,
  e197 = "e197",
  e197_1 = "e197_1",
  e201 = "e201",
  e51_4 = "e51_4",
  e51_5 = "e51_5",
  e51_6 = "e51_6",
  e51_7_1 = "e51_7_1",
  e51_7 = "e51_7",
  e51_8 = "e51_8",
  e51_9 = "e51_9",
  e51_10 = "e51_10",
  e212 = "e212",
  e215 = "e215",
  e218 = "e218",
  e221 = "e221",
  n = 4
)
```

Arguments

`data`	data.frame
`e197`	Variable name of attends primary school
`e197_1`	Variable name of completed primary
`e201`	Variable name of attends secondary
`e51_4`	Variable name of years passed in lower secondary
`e51_5`	Variable name of years passed in upper secondary
`e51_6`	Variable name of years passed in technical upper secondary
`e51_7_1`	Variable name of technical education requirements

e51_7	Variable name of years passed in technical education
e51_8	Variable name of years passed in magisterio/profesorado
e51_9	Variable name of years passed in university or similar
e51_10	Variable name of years passed in tertiary (non-university)
e212	Variable name of attendance technical school (non-university)
e215	Variable name of attendance magisterio
e218	Variable name of attendance university
e221	Variable name of attendance tertiary
n	years of tertiary

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Value

data.frame

See Also

Other education: `enrolled_school()`, `level_education()`, `years_of_schooling()`

Examples

```
toy_ech_2018 <- level_completion(data = ech::toy_ech_2018)
```

---

level_education *This function allows you to calculate the highest level of education achieved*

Description

This function allows you to calculate the highest level of education achieved

Usage

```
level_education(
  data = ech::toy_ech_2018,
  e51_2 = "e51_2",
  e51_3 = "e51_3",
  e51_4 = "e51_4",
  e51_5 = "e51_5",
  e51_6 = "e51_6",
  e51_7 = "e51_7",
  e51_7_1 = "e51_7_1",
  e51_8 = "e51_8",
  e51_9 = "e51_9",
  e51_10 = "e51_10",
  e51_11 = "e51_11",
  e193 = "e193",
  e49 = "e49"
)
```

Arguments

data	data.frame
e51_2	Variable name of years passed in primary
e51_3	Variable name of years passed in special primary
e51_4	Variable name of years passed in lower secondary
e51_5	Variable name of years passed in upper secondary
e51_6	Variable name of years passed in technical upper secondary
e51_7	Variable name of years passed in technical school
e51_7_1	Variable name of technical school requirements
e51_8	Variable name of years passed in magisterio/profesorado
e51_9	Variable name of years passed in university or similar
e51_10	Variable name of years passed in tertiary (non-university)
e51_11	Variable name of years passed in postgrade
e193	Variable name of attendance school
e49	Variable name of attendance school ever

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

See Also

Other education: enrolled_school(), level_completion(), years_of_schooling()

Examples

```
toy_ech_2018 <- level_education(data = ech::toy_ech_2018)
```

`organize_ht11` *This function allows you to fix ht11 from 2013 to 2015*

Description

This function allows you to fix ht11 from 2013 to 2015

Usage

```
organize_ht11(data, year, ht11 = "ht11", numero = "numero")
```

Arguments

`data`	data.frame
`year`	survey year
`ht11`	Variable name of ht11
`numero`	Variable name of numero

Value

data.frame

See Also

Other income: `basket_goods()`, `deflate()`, `income_constant_prices()`, `income_quantiles()`, `labor_income_per_capita()`, `labor_income_per_hour()`

Examples

```
toy_ech_2018 <- organize_ht11(data = ech::toy_ech_2018, year = 2018)
```

`organize_names` *This function allows you to organize the variables names of ECH with reference in 2017.*

Description

This function allows you to organize the variables names of ECH with reference in 2017.

Usage

```
organize_names(data, year, level = "hyp")
```

Arguments

`data`	data.frame contains the ECH microdata
`year`	numeric reference year of the data. Available from 2011 to 2019
`level`	(string) indicates whether the base to be labelled is of the type "household", "h", "individual", "i" or both, "hyp". Default "hyp"

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Examples

```
toy_ech_2018 <- organize_names(data = ech::toy_ech_2018, year = 2018, level = "h")
```

`overcrowding` *This function allows you to calculate overcrowding in the household*

Description

This function allows you to calculate overcrowding in the household

Usage

```
overcrowding(data = ech::toy_ech_2018, ht19 = "ht19", d10 = "d10")
```

Arguments

`data`	data.frame
`ht19`	Variable name of umber of individuals in the household
`d10`	Variable name of number of rooms to sleep

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Value

data.frame

See Also

Other dwelling: housing_conditions(), housing_deprivation(), housing_situation(), housing_tenure()

Examples

```
toy_ech_2018 <- overcrowding(data = ech::toy_ech_2018)
```

---

poverty *This function allows you to calculate poor and indigent people or household*

Description

This function allows you to calculate poor and indigent people or household

Usage

```
poverty(
  data = ech::toy_ech_2018,
  scale = 0.8,
  region_4 = "region_4",
  dpto = "dpto",
  ht11 = "ht11",
  ht19 = "ht19",
  numero = "numero"
)
```

Arguments

data	data.frame
scale	equivalency scale
region_4	Variable name of region. Default: region_4
dpto	Variable name of departamento. Default: dpto
ht11	Variable name of income. Default: ht11
ht19	Variable name of number of individuals in the household. Default: ht19
numero	household id

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Value

data.frame

See Also

Other poverty: `integrated_poverty_measure()`, `unsatisfied_basic_needs()`

Examples

```
toy_ech_2018 <- poverty(data = ech::toy_ech_2018)
```

---

read_microdata *This function allows you to read ECH from a local folder*

Description

This function allows you to read ECH from a local folder

Usage

```
read_microdata(path = NULL)
```

Arguments

path	Folder where are the files or be download

Details

Disclaimer: El script no es un producto oficial de INE.

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Value

an object called df

See Also

Other dwnld_read: `get_cba_cbna()`, `get_dictionary()`, `get_ipab_region()`, `get_ipab()`, `get_ipc_region()`, `get_ipc()`, `get_microdata()`

set_design *This function allows you to set the survey desing*

Description

This function allows you to set the survey desing

Usage

```
set_design(
  data = ech::toy_ech_2018,
  level = "i",
  numero = "numero",
  ids = NULL,
  estrato = NULL,
  pesoano = "pesoano"
)
```

Arguments

data	data frame with ECH microdata
level	is household ("h") or individual ("i")
numero	variables specifying the householder ids
ids	variables specifying the unit primary sampling (it's not a public variable)
estrato	variable specifying strata
pesoano	variable specifying weights

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Value

a list

See Also

Other estimation: get_estimation_gini(), get_estimation_gpg(), get_estimation_mean(), get_estimation_median(), get_estimation_qsr(), get_estimation_ratio(), get_estimation_total()

Examples

```
set_design(data = ech::toy_ech_2018, level = "h")
```

toy_ech_2018 *A dataset containing only 1000 raws of the ECH 2018*

Description

A dataset containing only 1000 raws of the ECH 2018

Usage

```
toy_ech_2018
```

Format

A data frame with 1000 rows and 579 variables:

numero household id

nper

anio

mes

dpto

nomdpto

secc

segm

loc_agr_13

nom_loc_agr_13

ccz

barrio

nombarrio

estred13

region_3

region_4

pesoano

pesotri

pesomen

c1

c2

c3

c4

c5_1

c5_2

c5_3
c5_4
c5_5
c5_6
c5_7
c5_8
c5_9
c5_10
c5_11
c5_12
c6
d8_1
d8_2
d8_3
d8_4
d9
d10
d11
d12
d13
d14
d15
d16
d18
d260
d19
d20
d21_1
d21_2
d21_3
d21_4
d21_4_1
d21_5
d21_5_1
d21_6
d21_20
d21_7

d21_8
d21_9
d21_10
d21_11
d21_12
d21_13
d21_14
d21_14_1
d21_15
d21_15_1
d21_15_2
d21_15_3
d21_15_4
d21_15_5
d21_15_6
d21_16
d21_16_1
d21_16_2
d21_17
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d21_19
d21_19_1
d181
d229
d230
d231
d232
d184
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d23
d24
d25
h155
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h156
h156_1

h252
h252_1
h158_1
h158_2
h159
h160
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h167_2_2
h167_3
h167_3_1
h167_3_2
h167_4
h167_4_1
h167_4_2
h169
h170_1
h170_2
h271
h271_1
h171
h171_1

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h172
h172_1
h173
h173_1
i228
i174
i259
i175
ht1
ht2
ht3
ht4
ht5
ht6
ht7
ht8
ht9
ht10
ht11
ht13
ht14
ht19
yhog
ysvl
lp_06
li_06
e557
e558
e26
e27
e29_1
e29_2
e29_3
e29_4
e29_5
e29_5_1

e29_6
e30
e31
e32
e33
e34
e35
e36
e185
e186_1
e186_2
e186_3
e186_4
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e38
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e219
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e220_1
e221
e221_1
e222
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e224_1
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e560
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e560_2
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e62
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e250
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e64_2
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e64_4
e64_5
e64_6
e64_7
e65
f66
f67
f261
f68
f69
f70
f71_2
f72_2
f73
f74
f75
f76_2
f262
f263
f264

f264_1
f265
f265_1
f77
f78
f79
f79_1
f80
f80_2
f81
f82
f83
f84
f266
f267
f268
f85
f86
f87
f88_1
f88_2
f89
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f91_2
f92
f93
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g126_5
g126_6
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g250_5
g250_3
g250_4
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g129
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g130
g130_1
g131
g131_1
g132
g132_1
g132_2
g132_3
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g133_2
g_st_1
g134_1
g134_2
g134_3
g134_4
g134_5
g134_6
g134_7

g134_8
g251_1
g251_2
g251_3
g251_4
g251_5
g135
g135_1
g135_2
g135_3
g136
g136_1
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g137_2
g138
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g139
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g140
g140_1
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g140_3
g141
g141_1
g141_2
g_itnd_1
g142
g_itnd_2
g143
g144
g144_1
g144_2_1
g144_2_2
g144_2_3
g144_2_4
g144_2_5

g_itnd_3
g145
g146
g147
g_it_1
g148_1_1
g148_1_2
g148_1_3
g148_1_4
g148_1_5
g148_1_6
g148_1_7
g148_1_8
g148_1_9
g148_1_12
g148_1_10
g148_1_11
g_it_2
g148_2_1
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g151_1
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g151_3
g151_3_1
g151_4
g257
g153
g153_1
g153_2
g258
g258_1
g154
g154_1
pobpcoac
subempleo
mto_cuota
mto_emer
mto_hogcon
mto_desay
mto_almue
mto_vacas
mto_oveja
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indaceliac
indaucc
indaemer
pt1
pt2
pt4
pobre06
indigente06
upm_id
estrato ...

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Source

http://www.ine.gub.uy/

See Also

Other dataset: cba_cbna_int, cba_cbna_mdeo, cba_cbna_rur, ciiu4, dic, ipab_base2010_int, ipab_base2010_mdeo, ipab_base2010, ipc_base2010_int, ipc_base2010_mdeo, ipc_base2010, toy_ech_2018_income, urls_ine

---

toy_ech_2018_income *A dataset containing only 1000 raws of the ECH 2018 income variables*

Description

A dataset containing only 1000 raws of the ECH 2018 income variables

Usage

```
toy_ech_2018_income
```

Format

A data frame with 1000 rows and 9 variables:

numero household id

mes

ht11

ysvl

ht13

ht19

dpto

pesoano

estred13

anio

region_4 ...

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Source

http://www.ine.gub.uy/

See Also

Other dataset: cba_cbna_int, cba_cbna_mdeo, cba_cbna_rur, ciiu4, dic, ipab_base2010_int, ipab_base2010_mdeo, ipab_base2010, ipc_base2010_int, ipc_base2010_mdeo, ipc_base2010, toy_ech_2018, urls_ine

---

`to_ascii` *to_ascii*

Description

to_ascii

Usage

```
to_ascii(x, upper = T)
```

Arguments

x	a column
upper	logic

Value

vector

Examples

```
d <- lapply(dic, to_ascii)
```

`underemployment` *This function allows you to identify underemployed people*

Description

This function allows you to identify underemployed people

Usage

```
underemployment(
  data = ech::toy_ech_2018,
  pobpcoac = "pobpcoac",
  f85 = "f85",
  f98 = "f98",
  f101 = "f101",
  f102 = "f102",
  f103 = "f103",
  f104 = "f104"
)
```

Arguments

`data`	data.frame
`pobpcoac`	Variable name of definition of population by activity status. Default: "pobpcoac"
`f85`	Variable name of number of hours worked in the main job
`f98`	Variable name of Number of hours worked at the secondary job
`f101`	Variable name of reasons why you want another job
`f102`	Variable name of want to work more hours
`f103`	Variable name of are available to work more hours at this time
`f104`	Variable name of reasons why you dont work more hours

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Value

data.frame

See Also

Other employment: `branch_ciiu()`, `employment_restrictions()`, `employment()`

Examples

```
toy_ech_2018 <- underemployment(data = ech::toy_ech_2018)
```

unlabelled *This function allows you to labelled variables*

Description

This function allows you to labelled variables

Usage

```
unlabelled(data = NULL)
```

Arguments

data	data frame

Value

data.frame

See Also

Other utils: `archive_extract()`, `dates_ech()`

Examples

```
df <- unlabelled(data = ech::toy_ech_2018)
```

unrarPath *The known path for unrar or 7z*

Description

The known path for unrar or 7z

Usage

```
.unrarPath
```

Format

An object of class `NULL` of length 0.

`unsatisfied_basic_needs` *This function allows you to calculate de Unsatisfied Basic Needs*

Description

This function allows you to calculate de Unsatisfied Basic Needs

Usage

```
unsatisfied_basic_needs(
  data = ech::toy_ech_2018,
  c2 = "c2",
  c3 = "c3",
  c4 = "c4",
  d9 = "d9",
  d11 = "d11",
  d12 = "d12",
  d13 = "d13",
  d14 = "d14",
  d15 = "d15",
  d16 = "d16",
  d18 = "d18",
  d19 = "d19",
  d21_1 = "d21_1",
  d21_2 = "d21_2",
  d21_3 = "d21_3",
  d260 = "d260",
  ht19 = "ht19",
  pobre06 = "pobre06",
  e27 = "e27",
  school_enrollment = "school_enrollment",
  years_schooling = "years_schooling",
  e238 = "e238",
  anio = "anio"
)
```

Arguments

`data`	data.frame
`c2`	Variable name of predominant material on external walls
`c3`	Variable name of predominant roofing material
`c4`	Variable name of predominant flooring material
`d9`	Variable name of number of rooms
`d11`	Variable name of principal source of potable water

d12	Variable name of water supply network / water access
d13	Variable name of sanitary facilities
d14	Variable name of bathroom presence
d15	Variable name of private bathroom use
d16	Variable name of sewerage facilities
d18	Variable name of energy source for lighting
d19	Variable name of cooking space
d21_1	Variable name of heater or termophon presence
d21_2	Variable name of instantaneous water heater presence
d21_3	Variable name of fridge presence
d260	Variable name of energy source for heating
ht19	Variable name of number of individuals in the household
pobre06	Variable name of poverty
e27	Variable name of age
school_enrollment	Variable name of school_enrollment
years_schooling	Variable name of years_schooling
e238	Variable name of attendance to initial education
anio	Variable name of survey year

Details

Based on http://www.ine.gub.uy/documents/10181/34017/Atlas_fasciculo_1_NBI_versionrevisada.pdf/57ea17f9-3fd9-4306-b9ca-948abc7fab73 Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Value

data.frame

See Also

Other poverty: `integrated_poverty_measure()`, `poverty()`

Examples

```
toy_ech_18 <- enrolled_school(data = ech::toy_ech_2018)
toy_ech_18 <- years_of_schooling(toy_ech_18)
toy_ech_18 <- unsatisfied_basic_needs(toy_ech_18)
```

urls_ine *A dataset containing the urls of INE datasets and diccionaries*

Description

A dataset containing the urls of INE datasets and diccionaries

Usage

```
urls_ine
```

Format

A data frame with 9 rows and 4 variables:

yy date from 2011 to 2019

md_sav url for microdata download

upm_sav url for upm download

dic url for dictionary download

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

Source

http://www.ine.gub.uy/

See Also

Other dataset: cba_cbna_int, cba_cbna_mdeo, cba_cbna_rur, ciiu4, dic, ipab_base2010_int, ipab_base2010_mdeo, ipab_base2010, ipc_base2010_int, ipc_base2010_mdeo, ipc_base2010, toy_ech_2018_income, toy_ech_2018

`years_of_schooling` *This function allows you to calculate the years of schooling*

Description

This function allows you to calculate the years of schooling

Usage

```
years_of_schooling(
  data = ech::toy_ech_2018,
  e193 = "e193",
  e51_2 = "e51_2",
  e51_3 = "e51_3",
  e51_4 = "e51_4",
  e51_5 = "e51_5",
  e51_6 = "e51_6",
  e51_7 = "e51_7",
  e51_7_1 = "e51_7_1",
  e51_8 = "e51_8",
  e51_9 = "e51_9",
  e51_10 = "e51_10",
  e51_11 = "e51_11",
  max_years = 22
)
```

Arguments

`data`	data.frame
`e193`	Variable name of attendance school
`e51_2`	Variable name of years passed in primary
`e51_3`	Variable name of years passed in special primary
`e51_4`	Variable name of years passed in lower secondary
`e51_5`	Variable name of years passed in upper secondary
`e51_6`	Variable name of years passed in bachillerato tecnologico
`e51_7`	Variable name of years passed in technical education
`e51_7_1`	Variable name of technical education requirements
`e51_8`	Variable name of years passed in magisterio/profesorado
`e51_9`	Variable name of years passed in university or similar
`e51_10`	Variable name of years passed in tertiary (non-university)
`e51_11`	Variable name of years passed in postgrade
`max_years`	Maximum years of schooling

Details

Disclaimer: This script is not an official INE product. Aviso: El script no es un producto oficial de INE.

See Also

Other education: `enrolled_school()`, `level_completion()`, `level_education()`

Examples

```
toy_ech_2018 <- years_of_schooling(data = ech::toy_ech_2018)
```

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