Package 'oec'

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Type Package

Title The Observatory of Economic Complexity

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Author Mauricio Vargas S. <mauriciovargas@ug.uchile.cl>

Maintainer Mauricio Vargas S. <mauriciovargas@ug.uchile.cl>

URL http://atlas.media.mit.edu/en/, https://github.com/pachamaltese/oec/

Description Use The Observatory of Economic Complexity's API from R console to obtain international trade data to create spreadsheets (csv format) and D3Plus visualizations.

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LazyData TRUE

Depends curl,
data.table,
jsonlite,
plyr,
servr

RoxygenNote 5.0.1

R topics documented:

countries_list *Countries list*

Description

This file contains a list of all the countries in the world and its respective country code. You need the country codes (e.g. chl) to obtain data for a certain country (e.g Chile)

Usage

```
countries_list
```

Format

A data frame with 305 observations on the following 2 variables.

`country` the full names of the countries

`country_code` the ids of the countries

Examples

```
countries_list
```

d3plus *Install D3 and D3plus in your working directory.*

Description

Install D3 and D3plus in your working directory.

Usage

```
d3plus()
```

Value

Copies a folder named `d3plus` to the working directory and it contains the `js` files and icons to make the visualizations

Examples

```
d3plus()
```

demos — *Copies demo file with examples.*

Description

Copies demo file with examples.

Usage

```
demos()
```

Value

A file named `demo_examples.R` will be copied to the working directory.

Examples

```
demos()
```

getdata — *Download trade data from OEC's API.*

Description

Download trade data from OEC's API.

Usage

```
getdata(ORIGIN, DESTINATION, CLASSIFICATION, YEAR)
```

Arguments

`ORIGIN`	is the country code of origin (e.g. "chl" for Chile)
`DESTINATION`	is the country code of origin (e.g. "chn" for China)
`CLASSIFICATION`	refers to the trade classification that can be "6" (HS92 6 characters) or "8" (HS92 8 characters) for the year 1995 and going or "4" (SITC rev.2 4 characters) for the year 1962 and ongoing
`YEAR`	is the year and the OEC's API ranges from 1962 to 2014

Value

Creates the data files in `json` and `csv` formats that are needed to create the visualizations.

Examples

```
# Run countries_list() to display the full list of countries
# Chile is "chl" and China is "chn"

# Download Chile (chl) and China (chn) trade data (imports, export and trade balance)
getdata("chl", "chn", 6, 2010)

# Download trade data from OEC's API (HS92 6 characters product lists)
getdata("chl", "chn", 6, 2010)

# Download trade data from OEC's API (SITC rev.2 4 characters product lists)
getdata("chl", "chn", 4, 2010)
```

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hs92_2char *HS92 groups*

Description

This file contains the HS92 groups. This file is used to create spreadsheets and visualizations with trade data.

Usage

```
hs92_2char
```

Format

A data frame with 22 observations on the following 2 variables.

`group` Contains the H292 groups (e.g. animal products, vegetable products, etc)

`group_id` Contains the associated codes of every group (e.g. animal products is 01)

Examples

```
hs92_2char
```

---

hs92_6char *HS92 products (6 characters)*

Description

This file contains the HS92 products. This file is used to create spreadsheets and visualizations with trade data.

Usage

```
hs92_6char
```

Format

A data frame with 1242 observations on the following 4 variables.

`product` Contains the H292 products' names (e.g. horses, bovine, pigs, etc)

`group` Contains the H292 groups (e.g. animal products, vegetable products, etc)

`product_id` Contains the associated codes of every product (e.g. horses is 010101)

`group_id` Contains the associated codes of every group (e.g. animal products is 01)

Examples

```
hs92_6char
```

`hs92_8char` *HS92 products (8 characters)*

Description

This file contains the HS92 products. This file is used to create spreadsheets with trade data.

Usage

```
hs92_8char
```

Format

A data frame with 5040 observations on the following 4 variables.

`product` Contains the H292 products' names (e.g. horses, bovine, pigs, etc)

`group` Contains the H292 groups (e.g. animal products, vegetable products, etc)

`product_id` Contains the associated codes of every product (e.g. horses is 010101)

`group_id` Contains the associated codes of every group (e.g. animal products is 01)

Examples

```
hs92_8char
```

hs_colors *HS colors*

Description

This file contains the HS92 colors. This file is used to create spreadsheets and visualizations with trade data.

Usage

```
hs_colors
```

Format

A data frame with 21 observations on the following 2 variables.

`group` Contains the H292 groups (e.g. animal products, vegetable products, etc)

`color` Contains the associated colors of every group (e.g. mineral products is #330000)

Examples

```
hs_colors
```

network *Create an animated network with nodes and edges.*

Description

Create an animated network with nodes and edges.

Usage

```
network(ORIGIN, DESTINATION, CLASSIFICATION, YEAR)
```

Arguments

ORIGIN	is the country code of origin (e.g. "chl" for Chile)
DESTINATION	is the country code of origin (e.g. "chn" for China)
CLASSIFICATION	refers to the trade classification that can be "6" (HS92 6 characters) or "8" (HS92 8 characters) for the year 1995 and going or "4" (SITC rev.2 4 characters) for the year 1962 and ongoing
YEAR	is the year and the OEC's API ranges from 1962 to 2014

Value

Creates an HTML file in the working directory with a tree map visualization.

Examples

```
network("chl", "chn", 6, 2004)
```

`network.compare` *Creates a network that compares the exporting opportunities of a country in two different years.*

Description

Creates a network that compares the exporting opportunities of a country in two different years.

Usage

```
network.compare(ORIGIN, DESTINATION, CLASSIFICATION, YEAR1, YEAR2)
```

Arguments

`ORIGIN`	is the country code of origin (e.g. "chl" for Chile)
`DESTINATION`	is the country code of origin (e.g. "chn" for China)
`CLASSIFICATION`	refers to the trade classification that can be "6" (HS92 6 characters) or "8" (HS92 8 characters) for the year 1995 and going or "4" (SITC rev.2 4 characters) for the year 1962 and ongoing
`YEAR1`	is the initial year and the OEC's API ranges from 1962 to 2014
`YEAR2`	is the final year and the OEC's API ranges from 1962 to 2014

Value

Creates an `HTML` file in the working directory with a tree map visualization.

Examples

```
network.compare("chl", "chn", 6, 2000, 2010)
```

`sitc_colors` *SITC (rev. 2) colors*

Description

This file contains the SITC (rev. 2) colors. This file is used to create spreadsheets and visualizations with trade data.

Usage

```
hs_colors
```

Format

A data frame with 36 observations on the following 2 variables.

`group` Contains the SITC (rev. 2) groups (e.g. machinery, electronics, etc)

`color` Contains the associated colors of every group (e.g. machinery is #17bcef)

Examples

```
sitc_colors
```

sitc_rev2_2char *HS92 groups*

Description

This file contains the SITC (rev. 2) groups. This file is used to create spreadsheets and visualizations with trade data.

Usage

```
hs92_2char
```

Format

A data frame with 36 observations on the following 2 variables.

`group` Contains the SITC (rev. 2) groups (e.g. machinery, electronics, etc)

`group_id` Contains the associated codes of every group (e.g. machinery is 10)

Examples

```
sitc_rev2_2char
```

sitc_rev2_4char *SITC (rev 2.) products (4 characters)*

Description

This file contains the SITC (rev. 2) products. This file is used to create spreadsheets and visualizations with trade data.

Usage

```
sitc_rev2_4char
```

Format

A data frame with 1242 observations on the following 5 variables.

`product` Contains the H292 products' names (e.g. initiating devices, polymerization ion exchangers, etc)

`group` Contains the H292 groups (e.g. machinery, electronics products, etc)

`product_id` Contains the associated codes of every product (e.g. initiating devices is 5722)

`group_id` Contains the associated codes of every group (e.g. machinery is 10)

`id` Contains the associated extended codes of every group (e.g. machinery is 105722 that is group code + product code)

Examples

```
sitc_rev2_4char
```

`treemap` *Creates an animated treemap.*

Description

Creates an animated treemap.

Usage

```
treemap(ORIGIN, DESTINATION, VARIABLE, CLASSIFICATION, YEAR)
```

Arguments

`ORIGIN`	is the country code of origin (e.g. "chl" for Chile)
`DESTINATION`	is the country code of origin (e.g. "chn" for China)
`VARIABLE`	is the variable to visualize and it can be "imports", "exports" or "exchange" (trade exchange)
`CLASSIFICATION`	refers to the trade classification that can be "6" (HS92 6 characters) or "8" (HS92 8 characters) for the year 1995 and going or "4" (SITC rev.2 4 characters) for the year 1962 and ongoing
`YEAR`	is the year and the OEC's API ranges from 1962 to 2014

Value

Creates an `HTML` file in the working directory with a tree map visualization.

Examples

```
treemap("chl", "chn", "exports", 6, 2004)
```

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