

Package ‘oec’

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Type Package

Title The Observatory of Economic Complexity - R Package

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

Description This package is intended to allow you to work with OEC data using its API. This package downloads raw data, exports it in a clean MS Excel file and also creates treemaps and networks with the same data using D3Plus.

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LazyData TRUE

Depends jsonlite,
plyr,
data.table,
servr

RoxygenNote 5.0.1

R topics documented:

countries_list	2
d3plus	2
demos	3
getdata	3
hs92_2char	4
hs92_6char	4
hs92_8char	5
hs_colors	6
network	6
network.compare	7
sitc_colors	7
sitc_rev2_2char	8
sitc_rev2_4char	8
treemap	9

Index	10
--------------	-----------

`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)
```

hs92_2char	<i>HS92 groups</i>
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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	<i>HS92 products (6 characters)</i>
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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	<i>HS92 products (8 characters)</i>
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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	<i>Creates a network that compares the exporting opportunities of a country in two different years.</i>
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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	<i>SITC (rev. 2) colors</i>
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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	<i>HS92 groups</i>
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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	<i>SITC (rev 2.) products (4 characters)</i>
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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	<i>Creates an animated treemap.</i>
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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)
```

Index

*Topic **datasets**

- countries_list, [2](#)
- hs92_2char, [4](#)
- hs92_6char, [4](#)
- hs92_8char, [5](#)
- hs_colors, [6](#)
- sitc_colors, [7](#)
- sitc_rev2_2char, [8](#)
- sitc_rev2_4char, [8](#)

*Topic **functions**

- d3plus, [2](#)
- demos, [3](#)
- getdata, [3](#)
- network, [6](#)
- network.compare, [7](#)
- treemap, [9](#)

countries_list, [2](#)

d3plus, [2](#)

demos, [3](#)

getdata, [3](#)

hs92_2char, [4](#)

hs92_6char, [4](#)

hs92_8char, [5](#)

hs_colors, [6](#)

network, [6](#)

network.compare, [7](#)

sitc_colors, [7](#)

sitc_rev2_2char, [8](#)

sitc_rev2_4char, [8](#)

treemap, [9](#)