Package ‘gvc’
April 23, 2020

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Title   Global Value Chains Tools
Description Several tools for Global Value Chain ('GVC') analysis are
implemented.
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License GPL-3
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dfddva

Description

Domestic Final Demand Domestic Value Added

Usage

dfddva(x, aggregate = FALSE)

Arguments

x  A Leontief decomposed Inter-Country Input Output table as created by de-
compr, which should be post multiplied with final demand (using the parameter:
post="final_demand")

aggregate  should dfddva be aggregated along source industries to a national sum?

Examples

# load the decompr package
library(decompr)

# load example data
data(leather)

# create a leontief decomposed data set
l <- decomp(x = inter,
    y = final,
    k = countries,
    i = industries,
    o = out,
    method = "leontief",
    post = "final_demand")

# apply dfddva
dfddva(l)
**dfdfva**

*Domestic Final Demand Foreign Value Added*

**Description**

Domestic Final Demand Foreign Value Added

**Usage**

```r
dfdfva(x, aggregate = FALSE)
```

**Arguments**

- `x`: A Leontief decomposed Inter-Country Input Output table as created by decompr, which should be post multiplied with final demand (using the parameter: post="final_demand")
- `aggregate`: should dfdfva be aggregated along source industries to a national sum?

**Examples**

```r
# load the decompr package
library(decompr)

# load the example data
data(leather)

# create a leontief decomposed data set
l <- decomp(x = inter,
            y = final,
            k = countries,
            i = industries,
            o = out,
            method = "leontief",
            post = "final_demand")

# apply dfdfva
dfdfva( l )
```

**downstream**

*Downstreamness*

**Description**

Downstreamness

**Usage**

```r
downstream(x)
```
Arguments

x  an object of class "decompr" as created using the load_tables_vectors() function from the decompr package.

Examples

# load the decompr package
library(decompr)

# load example data
data(leather)

# create a leontief decomposed data set
l <- load_tables_vectors(x = inter,
y = final,
k = countries,
i = industries,
o = out )

# apply downstream
downstream( l )

Description

Exporting to Re-export

Usage

e2r(x, by = NULL, subset = NULL)

Arguments

x  A Leontief decomposed Inter-Country Input Output table as created by decompr
by  variable to subset by
subset  value(s) of the subset variable to select

Examples

# load the decompr package
library(decompr)

# load the example data set
data(leather)

# create a leontief decomposed data set
```r
l <- decomp(x = inter,
           y = final,
           k = countries,
           i = industries,
           o = out)

# apply the Exporting to Re-export
e2r(l)
```

---

### ffddva

**Foreign Final Demand Domestic Value Added**

**Description**

Foreign Final Demand Domestic Value Added

**Usage**

`ffddva(x, aggregate = FALSE)`

**Arguments**

- `x`: A Leontief decomposed Inter-Country Input Output table as created by decompr, which should be post multiplied with final demand (using the parameter: `post="final_demand"`)
- `aggregate`: should `ffddva` be aggregated along source industries to a national sum?

**Examples**

```r
# load the decompr package
library(decompr)

# load example data
data(leather)

# create a leontief decomposed data set
l <- decomp(x = inter,
           y = final,
           k = countries,
           i = industries,
           o = out,
           method = "leontief",
           post = "final_demand")

# apply `ffddva`
ffddva(l)
```
gvc

Global Value Chain analysis

Description

Several tools for Global Value Chain ('GVC') analysis are implemented.

Author(s)

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References


See Also

https://qua.st/decompr

i2e

Importing to Export

Description

Importing to Export
Vertical Specialization
Vertical Specialisation

Usage

i2e(x, by = NULL, subset = NULL)
vertical_specialisation(x, by = NULL, subset = NULL)
vertical_specialization(x, by = NULL, subset = NULL)

Arguments

x A Leontief decomposed Inter-Country Input Output table as created by decompr
by variable to subset by
subset value(s) of the subset variable to select
Examples

# load the decompr package
library(decompr)

# load the example data set
data(leather)

# create a leontief decomposed data set
l <- decomp(x = inter,
            y = final,
            k = countries,
            i = industries,
            o = out)

# apply the Import to Exports analysis
i2e(l)

---

**nrca**  
*New Revealed Comparative Advantage*

Description

New Revealed Comparative Advantage

Usage

nrca(x)

Arguments

- **x**: A decomposed Inter-Country Input Output table as created by decompr

Examples

# load the decompr package
library(decompr)

# load the example data set
data(leather)

# perform Leontief decomposition
l <- decomp(x = inter,
            y = final,
            k = countries,
            i = industries,
            o = out,
            method = "leontief",
            post = "exports"  )
# load gvc package
library(gvc)

# perform New Revealed Comparative Advantage
nrca(l)

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## Description

Upstreamness

## Usage

upstream(x)

## Arguments

- **x**: an object of class "decompr" as created using the load_tables_vectors() function from the decompr package.

## Examples

```r
# load the decompr package
library(decompr)

# load example data
data(leather)

# create a leontief decomposed data set
l <- load_tables_vectors(x = inter,
                          y = final,
                          k = countries,
                          i = industries,
                          o = out)

# apply upstream
upstream(l)
```
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