Package ‘pcse’

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Title  Panel-Corrected Standard Error Estimation in R
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Description This package contains a function to estimate panel-corrected standard errors. Data may contain balanced or unbalanced panels.
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R topics documented:

pcse-package ......................................................... 1
agl ................................................................. 3
aglUn .............................................................. 4
summary.pcse ...................................................... 5
vcovPC .............................................................. 5

Index 7

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pcse-package  pcse: A Package for Panel-Corrected Standard Error Estimation in R

Description

This package contains a function to estimate panel-corrected standard errors. Data may contain balanced or unbalanced panels.
Usage

```r
pcse(object, groupN, groupT, pairwise=FALSE)
```

Arguments

- `object`: A lm object containing the initial run of OLS.
- `groupN`: A vector containing the cross-sectional group identifier for each observation.
- `groupT`: A vector containing the time identifier for each observation.
- `pairwise`: An optional logical flag indicating whether the X's used to estimate the "middle" matrix should be chosen in a pairwise fashion or casewise fashion. If pairwise, the correlation between observations $i$ and $j$ is based on the time periods common to $i$ and $j$. If casewise, the correlation between observations $i$ and $j$ is based on the largest rectangular subset of the data, i.e., $T_i = T_j = T^*$ for all $i$ and $j$ if casewise is selected.

Details

```
Package: pcse
Type: Package
Version: 1.3
Date: 2007-07-27
License:
```

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References


Examples

## see demo file.

| agl | agl |

**Description**

Cross-National panel data on the OECD countries containing information about economic performance, government partisanship and labor organization.

**Usage**

data(agl)

**Format**

A data frame with 240 observations on the following 10 variables.

- **year**: a numeric vector
- **country**: a character vector
- **growth**: the OECD growth rate
- **lagg1**: An instrument for lagged growth rates constructed with an auxiliary regression.
- **opengdp**: weighted OECD demand
- **openex**: weighted OECD export
- **openimp**: weighted OECD import
- **leftc**: "Left" cabinet composition
- **central**: labor organization index
- **inter**: interaction between leftc and central

**Source**


**References**


**Examples**

data(agl)

summary(agl)
Description

Cross-National panel data on the OECD countries containing information about economic performance, government partisanship and labor organization.

Usage

data(aglUn)

Format

A data frame with 230 observations on the following 10 variables.

- year: a numeric vector
- country: a character vector
- growth: the OECD growth rate
- lagg1: An instrument for lagged growth rates constructed with an auxiliary regression.
- opengdp: weighted OECD demand
- openex: weighted OECD export
- openimp: weighted OECD import
- leftc: "Left" cabinet composition
- central: labor organization index
- inter: interaction between leftc and central

Details

This data frame differs from 'agl' only by the random omission of 10 rows of data. This is to created an unbalanced data version.

Source


References


Examples

data(aglUn)
summary(aglUn)
Summary Method for Package pcse

Description

The package pcse contains a function to estimate panel-corrected standard errors. Data may contain balanced or unbalanced panels. This function summarizes the estimated results.

Usage

```r
## S3 method for class 'pcse'
summary(object, ...)  
```

Arguments

- `object`: An object of class "pcse."
- `...`: Arguments passed to other functions.

Author(s)

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References


Examples

```r
## see demo file.
```

Extract Panel-Corrected Variance Covariance Matrix

Description

The package pcse contains a function to estimate panel-corrected standard errors. Data may contain balanced or unbalanced panels. This function extracts the resulting variance covariance matrix.

Usage

```r
vcovPC(x, ...)
```

```r
## Default S3 method:
vcovPC(x, groupN, groupT, pairwise=FALSE, ...)
```
Arguments

- **x**: A lm object containing the initial run of OLS.
- **groupN**: A vector containing the cross-sectional group identifier for each observation.
- **groupT**: A vector containing the time identifier for each observation.
- **pairwise**: An optional logical flag indicating whether the X's used to estimate the "middle" matrix should be chosen in a pairwise fashion or casewise fashion. If pairwise, the correlation between observations $i$ and $j$ is based on the time periods common to $i$ and $j$. If casewise, the correlation between observations $i$ and $j$ is based on the largest rectangular subset of the data, i.e., $T_i = T_j = T^*$ for all $i$ and $j$ if casewise is selected.
- **...**: Further arguments passed to methods.

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References


Examples

```r
## see demo file.
```
Index

*Topic **datasets**
   * agl, 3
   * aglUn, 4

*Topic **file**
   * summary.pcs, 5
   * vcovPc, 5

*Topic **package**
   * pcs-package, 1

agl, 3
aglUn, 4

pcs (pcs-package), 1
pcs-package, 1

summary.pcs, 5

vcovPc, 5