

Package ‘dtp’

May 14, 2018

Type Package

Title Dynamic Panel Threshold Model

Version 0.1.0

Author Taha Zaghdoudi

Maintainer Taha Zaghdoudi <zedtaha@gmail.com>

Description Compute the dynamic threshold panel model suggested by (Stephanie Kremer, Alexander Bick and Dieter Nautz (2013) <doi:10.1007/s00181-012-0553-9>) in which they extended the (Hansen (1999) <doi: 10.1016/S0304-4076(99)00025-1>) original static panel threshold estimation and the Caner and Hansen (2004) <doi:10.1017/S0266466604205011>) cross-sectional instrumental variable threshold model, where generalized methods of moments type estimators are used.

License GPL-3

Encoding UTF-8

LazyData true

RoxygenNote 6.0.1

Imports stats, Formula, gtools, plyr

NeedsCompilation no

Repository CRAN

Date/Publication 2018-05-14 08:16:54 UTC

R topics documented:

| | |
|-----------------------|---|
| dtp | 2 |
| Mena | 3 |
| summary.dtp | 3 |

Index

4

dtp

*Dynamic threshold panel function***Description**

Dynamic threshold panel function

Usage

```
dtp(f, data, index = c("state", "year"), maxlags, initnum, conf, conf1, conf2,
graph = TRUE)
```

Arguments

| | |
|---------|---------------------------------------|
| f | the formula |
| data | the dataframe |
| index | c="id","time") |
| maxlags | the instruments maximum lags number |
| initnum | column number of the initial variable |
| conf | the confidential interval |
| conf1 | the confidential interval |
| conf2 | the confidential interval |
| graph | TRUE to show the threshold plot |

Examples

```
#####
# Fit the dynamic threshold panel data
#####
# Load data
data(Mena)
#####
# Estimate the model
#####
reg<-dtp(GDPPC ~ FDI+OPEN|INF|INF,Mena,index=c("pays","ann"),4,2,0.95,0.8,1,graph = TRUE)
summary(reg)
```

Mena

Middle East and North Africa yearly data of economic growth, inflation rate,foreign direct investment and trade

Description

The data frame Mena contains the following variables:

- pays:the countries
- ann:the year
- GDPPC:GDP per capita growth (annual pourcentage)
- FDI:Foreign direct investment, net inflows (pourcentageof GDP)
- INF:Inflation, consumer prices (annual pourcentage)
- OPEN:public capital

Usage

```
data(Mena)
```

Format

A data frame with 274 rows and 4 variables

summary.dtp

Summary of a nardl model

Description

summary method for a [dtp](#) model.

Usage

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

Arguments

| | |
|--------|-------------------------------|
| object | is the object of the function |
| ... | not used |

Value

an object of the S3 class `summary.dtp` with the following components:

Index

*Topic **datasets**

Mena, [3](#)

dtp, [2](#), [3](#)

Mena, [3](#)

summary.dtp, [3](#)