

Package ‘dtp’

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Type Package

Title Dynamic Panel Threshold Model

Version 0.1.0

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Description Compute the dynamic threshold panel model suggested by (Stephanie Kremer, Alexander Bick and Dieter Nautz (2013) <[doi:10.1007/s00181-012-0553-9](https://doi.org/10.1007/s00181-012-0553-9)>) in which they extended the (Hansen (1999) <[doi:10.1016/S0304-4076\(99\)00025-1](https://doi.org/10.1016/S0304-4076(99)00025-1)>) original static panel threshold estimation and the Caner and (Hansen (2004) <[doi:10.1017/S0266466604205011](https://doi.org/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

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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 | <i>Middle East and North Africa yearly data of economic growth, inflation rate, foreign direct investment and trade</i> |
|------|---|

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 | <i>Summary of a nardl model</i> |
|-------------|---------------------------------|

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

* **datasets**

Mena, [3](#)

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