Package ‘het.test’

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Type Package

Title White's Test for Heteroskedasticity

Version 0.1

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Author Sebastian Andersson

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Depends vars, methods

Description An implementation of White's Test for Heteroskedasticity
as outlined in Doornik (1996).

NeedsCompilation no

Repository CRAN

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R topics documented:

`het.htest-package` *Package for White's Test for Heteroskedasticity*

Description

Tests for heteroskedastic residuals in a VAR model.

Details

Package:	het.test
Type:	Package
Version:	0.1
Date:	2013-02-27
License:	GPL-2
Depends:	vars, methods

The test function is `whites.htest()`.

Author(s)

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References

Doornik, J. A. (1996). Testing vector error autocorrelation and heteroscedasticity. unpublished paper, Nuffield College.

Examples

```
library(vars)
dataset <- data.frame(x=rnorm(100), y=rnorm(100))
model1 <- VAR(dataset, p = 1)
whites.htest(model1)
```

`show-methods` *Methods for The Output of* `whites.htest`

Description

This is the `show` method of the class `whitetest` which is used for `whites.htest`.

Methods

`signature(object = "whitetest")` It is the method for the printing of the output.

whites.htest *White's Test for Heteroskedasticity*

Description

`whites.htest` performs White's Test for Heteroskedasticity as outlined in Doornik (1996).

Usage

```
whites.htest(var.model)
```

Arguments

`var.model`	requires a `varest` object. Currently, the function does not support `varest` objects without a trend/intercept (but both may be used), with restrictions or with exogenous variables.

Value

`$statistic`	the test statistic
`$p.value`	the p-value
`$degrees`	the number of degrees of freedom
`$res.products`	the residual cross products matrix
`$lagged.variables`	matrix with the lagged variables
`$rcov`	the estimated Omega matrix in Doornik
`$ucov`	transpose matrix of auxiliary residuals times itself, divided by `T - k`
`$call`	the function call

Note

This is an implementation of the heteroskedasticity test used in Eviews. For valid VAR models, the results should be identical. If not, please contact the maintainer.

Author(s)

Sebastian Andersson

References

Doornik, J. A. (1996). Testing vector error autocorrelation and heteroscedasticity. unpublished paper, Nuffield College.

Examples

```
library(vars)
dataset <- data.frame(x=rnorm(100), y=rnorm(100))
model1 <- VAR(dataset, p = 1)
whites.htest(model1)
```

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whitetest-class *Class* "whitetest"

Description

This class is used for the `whites.htest` return objects.

Objects from the Class

Objects can be created by calls of the form `new("whitetest", ...)`. Or, more commonly, by `whites.htest(...)`.

Slots

`.Data`**:** Object of class `"list"` ~~

Extends

Class "`list`", from data part. Class "`vector`", by class "list", distance 2.

Methods

show `signature(object = "whitetest")`: ...

Author(s)

Sebastian Andersson

Examples

```
showClass("whitetest")
```

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