

# Package ‘wahc’

February 23, 2015

**Type** Package

**Title** Autocorrelation and Heteroskedasticity Correction in Fixed Effect Panel Data Model

**Version** 1.0

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**Author** Zaghoudi Taha

**Maintainer** Zaghoudi Taha <zedtaha@gmail.com>

**Description** Fit the fixed effect panel data model with heteroskedasticity and autocorrelation correction.

**License** GPL-3

**NeedsCompilation** no

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## Description

Fit the fixed effect panel data model with heteroskedasticity and autocorrelation correction.

## Details

Package: whc  
 Type: Package  
 Version: 1.0  
 Date: 2015-02-23  
 License: GPL-3

In this package, we apply the consistent (HAC) standard errors to deal with both problems heteroskedasticity and autocorrelation in the fixed effect panel data regression.

### Author(s)

Zaghdoudi Taha  
 Zaghdoudi Taha <zedtaha@gmail.com>

### References

Bhargava A, Franzini L, Narendranathan W (1982). Serial Correlation and the Fixed Effects Model. *Review of Economic Studies*, **49**, pp.533–554.

Drukker D (2003), Testing for Serial Correlation in Linear Panel-Data Models. *The Stata Journal*, **3**, pp. 168–177.

MacKinnon J, White H (1985), Some Heteroskedasticity-Consistent Covariance Matrix Estimators With Improved Finite Sample Properties. *Journal of econometrics*, **29**, pp.305–325.

Zeileis A (2004). Econometric Computing With HC and HAC Covariance Matrix Estimators. *Journal of Statistical Software*, **11**, pp. 1–17.

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summary.whc

*Summary*

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### Description

Summary

### Usage

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

### Arguments

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

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whc	<i>Fitting the fixed effect panel data model with heteroskedasticity and autocorrelation correction</i>
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**Description**

Fitting the fixed effect panel data model with heteroskedasticity and autocorrelation correction

**Usage**

```
whc(formula, data, n, t, ...)
```

**Arguments**

formula	an object of class <code>formula</code>
data	the dataframe
n	the number of section
t	the time per section
...	not used

**Examples**

```
# Create data
pib<-as.matrix(c(12,3,4,0.4,0.7,5,0.7,0.3,0.6,89,7,8,45,7,4,5,0.5,5),nrows=18,ncols=1)
tir<-as.matrix(c(12,0.3,4,0.4,7,12,3.0,6.0,45,7.0,0.8,44,65,23,4,6,76,9),nrows=18,ncols=1)
inf<-as.matrix(c(1.2,3.6,44,1.4,0.78,54,0.34,0.66,12,0.7,8.0,12,65,43,5,76,65,8),nrows=18,ncols=1)
npl<-as.matrix(c(0.2,3.8,14,2.4,1.7,43,0.2,0.5,23,7.8,88,36,65,3,44,65,7,34),nrows=18,ncols=1)
#create a data frame
mdata<-data.frame(p=pib,t=tir,int=inf,np=npl)
#fit the model
fx<-whc(p~int+t,mdata,n=6,t=3)
summary(fx)
```

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