

Package ‘yotover’

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Title An Advanced Guide to Trade Policy Analysis

Version 0.1

Description On-disk embedded database with SQL versions of the original datasets from Yotov, et al (2016, ISBN: 978-92-870-4367-2) and functions to report regressions with clustered robust standard errors.

URL <https://pacha.dev/yotover/>

BugReports <https://github.com/pachamaltese/yotover/issues/>

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Imports magrittr, tibble, ggplot2, dbplyr, dplyr, tidyr, purrr, cli, crayon, multiwayvcov, lmtest, broom, Matrix, msm, DBI, duckdb, rappdirs, httr, scales, munsell, pander, gtable, colorspace, rstudioapi

Suggests devtools, usethis, testthat, covr

Depends R (>= 3.5)

NeedsCompilation no

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yotov_data	<i>Yotov applications data</i>
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Description

Returns a remote database table with the data required to replicate the exercises from the book.

Usage

```
yotov_data(table)
```

Arguments

table A string indicating the table to extract

Value

A **dplyr** tibble (`dplyr::tbl()`)

Examples

```
if (yotov_status()) {
  yotov_data("ch1_application1")
}
```

`yotov_db`*The local Yotov database*

Description

Returns a connection to the local yotov database. This is a DBI-compliant duckdb database connection. When using **dplyr**-based workflows, one typically accesses tables with `yotov_data()`, but this function lets the user interact with the database directly via SQL.

Usage

```
yotov_db(dbdir = yotov_path())
```

Arguments

`dbdir` The location of the database on disk. Defaults to yotovdb under `rappdirs::user_data_dir()`, or the environment variable `yotov_DB_DIR`.

Examples

```
if (yotov_status()) {
  DBI::dbListTables(yotov_db())

  ch1_application1 <- DBI::dbReadTable(yotov_db(), "ch1_application1")

  DBI::dbGetQuery(
    yotov_db(),
    'SELECT * FROM ch1_application1'
  )
}
```

`yotov_db_delete`*Remove the local Yotov database*

Description

Deletes all tables from the local database.

Usage

```
yotov_db_delete()
```

Examples

```
## Not run:  
yotov_db_delete()  
  
## End(Not run)
```

yotov_db_disconnect *Disconnect from the Yotov database*

Description

A utility function for disconnecting from the database.

Usage

```
yotov_db_disconnect()
```

Examples

```
yotov_db_disconnect()
```

yotov_db_download *Download the Yotov database to your local computer*

Description

This command downloads the Yotov trade database and populates a local database. The download is 31.4 MB, and the database uses 3 GB on disk. During import over 3.5 GB of disk space may be used temporarily.

Usage

```
yotov_db_download(  
  tag = NULL,  
  destdir = tempdir(),  
  cleanup = TRUE,  
  verbose = interactive()  
)
```

Arguments

tag	What release tag of data to download. Defaults to the most recent. Releases are expected to come twice per year. See all releases at https://github.com/pachamaltese/yotover/releases .
destdir	Where to download the compressed file.
cleanup	Whether to delete the compressed file after loading into the database.
verbose	Whether to display messages and download progress

Details

The database is stored by default under `rappdirs::user_data_dir()`, or its location can be set with the environment variable `YOTOV_DB_DIR`.

Examples

```
## Not run:
yotov_db_download()

## End(Not run)
```

yotov_db_tables	<i>Yotov available tables</i>
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Description

Yotov available tables

Usage

```
yotov_db_tables()
```

yotov_fixed_effects	<i>Extract fixed effects from regression object</i>
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Description

Takes an lm/glm object and extracts the fixed effects estimated coefficients. This function was created to be used with `left_join()` and `predict()` as it pastes the effects and allows to create a column with the predicted output.

Usage

```
yotov_fixed_effects(fit)
```

Arguments

fit A regression object

yotov_model_summary *Traditional Gravity Estimates Reporting Style*

Description

Computes clustered standard errors, tests on coefficients with clustered standard errors and RESET test.

Usage

```
yotov_model_summary(formula, method, data)
```

Arguments

formula A formula for the model
method Regression method (lm or glm)
data A tibble or data.frame

yotov_model_summary2 *The "Distance Puzzle" Resolved Reporting Style*

Description

Computes clustered standard errors, tests on coefficients with clustered standard errors and delta method for percent change in log.

Usage

```
yotov_model_summary2(formula, method, data)
```

Arguments

formula A formula for the model
method Regression method (lm or glm)
data A tibble or data.frame

yotov_model_summary3 *Regional Trade Agreements Effects Reporting Style*

Description

Computes clustered standard errors, tests on coefficients with clustered standard errors and delta method for percent change in log.

Usage

```
yotov_model_summary3(formula, method, data)
```

Arguments

formula	A formula for the model
method	Regression method (lm or glm)
data	A tibble or data.frame

yotov_pane *Open Yotov database connection pane in RStudio*

Description

This function launches the RStudio "Connection" pane to interactively explore the database.

Usage

```
yotov_pane()
```

Examples

```
if (!is.null(getOption("connectionObserver"))) yotov_pane()
```

yotov_robust_glm	<i>GLM Regression With Robust Clustered Standard Errors</i>
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Description

Fits a regression with robust clustered standard errors. This uses a quasi-poisson family and returns the estimated coefficients after computing a clustered variance-covariance matrix.

Usage

```
yotov_robust_glm(formula, data)
```

Arguments

formula	A formula for the model
data	A tibble or data.frame

yotov_status	<i>Get the status of the current local Yotov database</i>
--------------	---

Description

Get the status of the current local Yotov database. It displays informative message about how to create the local database if it can't be found or it is corrupt.

Usage

```
yotov_status(verbose = TRUE)
```

Arguments

verbose	Whether to print a status message
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Value

TRUE if the database exists, FALSE if it is not detected. (invisible)

Examples

```
yotov_status()
```

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