

# Package ‘tradepolicy’

July 22, 2025

**Title** Replication of 'An Advanced Guide To Trade Policy Analysis'

**Version** 0.7.0

**Description** Datasets from Yotov, et al. (2016, ISBN:978-92-870-4367-2) ``An Advanced Guide to Trade Policy Analysis" and functions to report regression summaries with clustered robust standard errors.

**URL** <https://github.com/pachadotdev/tradepolicy/>

**BugReports** <https://github.com/pachadotdev/tradepolicy/issues/>

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**Encoding** UTF-8

**RoxygenNote** 7.3.1

**Imports** magrittr, ggplot2, dplyr, tidyr, purrr, fixest (>= 0.10.4), sandwich, broom, msm, knitr, Formula

**Suggests** testthat, covr

**Depends** R (>= 4.0)

**LazyData** true

**NeedsCompilation** no

**Author** Mauricio Vargas Sepulveda [aut, cre] (ORCID:  
<<https://orcid.org/0000-0003-1017-7574>>),  
Alexey Kravchenko [ths],  
Constanza Prado [ths],  
Yoto Yotov [ths],  
The United Nations [dct, cph, fnd]

**Maintainer** Mauricio Vargas Sepulveda <m.sepulveda@mail.utoronto.ca>

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agtpa\_applications      *International Trade Data for Application Exercises in AGTPA*

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### Description

Contains bilateral trade flows for different pairs of countries between 1986 and 2006 and additional variables modelling.

### Format

A data frame with 99,981 rows and 17 columns:

**exporter** Exporter ISO country code

**importer** Importer ISO country code

**pair\_id** Symmetric Pair ID

**year** Year

**trade** Nominal trade flows in current US dollars

**dist** Population-weighted bilateral distance between country 'i' and 'j', in kilometers

**cntg** Indicator. Equal to 1 if country 'i' and 'j' share a common border

**lang** Indicator. Equal to 1 if country 'i' and 'j' speak the same official language

**clny** Indicator. Equal to 1 if country 'i' and 'j' share a colonial relationship

**rta** Indicator that is equal to one when country 'i' and 'j' are members of same Regional Trade Agreement

**rta\_lag3** 3rd lag of RTA

**rta\_lag4** 4th lag of RTA

**rta\_lag6** 6th lag of RTA

**rta\_lag8** 8th lag of RTA

**rta\_lag9** 9th lag of RTA

**rta\_lag12** 12th lag of RTA

**rta\_lead4** 4th lead of RTA

### Details

The data was drawn from the WDI for the year 2005 (earliest year available), the countries with no entry cost data are mainly small probably not in service trade data, and there are some considerations for the countries in this dataset:

- KOR designates RKO since 1949
- RUS designates SUN between 1949 and 1991
- CZE designates CZS between 1949 and 1992
- DEU designates FRG between 1949 and 1989
- Germany unified (DEU) has data since 1991

**Author(s)**

AGTPA authors, adapted from The World Development Index made by The World Bank

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tp\_summary\_app\_1

*Application 1 (Traditional Gravity Estimates) Reporting Style*

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**Description**

Computes clustered standard errors, tests on coefficients with clustered standard errors and obtains RESET test p-value.

**Usage**

```
tp_summary_app_1(  
  formula,  
  data,  
  method = "ppml",  
  pair = "pair_id",  
  etfe = "exp_year",  
  itfe = "imp_year"  
)
```

**Arguments**

formula	Formula for the model
data	Tibble or data.frame
method	Regression method, which can be "ols" or "ppml" (default)
pair	Inter-national fixed effects column (defaults to "pair_id")
etfe	Exporter time fixed effects column (defaults to "exp_year")
itfe	Importer time fixed effects column (defaults to "imp_year")

**Value**

A list

**Examples**

```
# See the ebook
```

**Description**

Computes clustered standard errors, tests on coefficients with clustered standard errors and uses the delta method to obtain changes in time-based distance estimated coefficients.

**Usage**

```
tp_summary_app_2(
  formula,
  data,
  method = "ppml",
  pair = "pair_id",
  etfe = "exp_year",
  itfe = "imp_year",
  dist = "log_dist",
  intr = "log_dist_intra",
  csfe = "intra_pair"
)
```

**Arguments**

formula	Formula for the model
data	Tibble or data.frame
method	Regression method (lm or glm)
pair	Inter-national fixed effects column (defaults to "pair_id")
etfe	Exporter time fixed effects column (defaults to "exp_year")
itfe	Importer time fixed effects column (defaults to "imp_year")
dist	Distance column (defaults to "log_dist")
intr	Intra-national distance column (defaults to "log_dist_intra")
csfe	Country-specific fixed effects (defaults to "intra_pair")

**Value**

A list

**Examples**

```
# See the ebook
```

**Description**

Computes clustered standard errors, tests on coefficients with clustered standard errors and returns total RTAs effect with its associated standard error.

**Usage**

```
tp_summary_app_3(
  formula,
  data,
  method = "ppml",
  pair = "pair_id",
  pair2 = "pair_id_2",
  etfe = "exp_year",
  itfe = "imp_year",
  dist = "log_dist",
  intr = "log_dist_intra",
  brdr = "intl_brdr"
)
```

**Arguments**

formula	Formula for the model
data	Tibble or data.frame
method	Regression method, which can be "ols" or "ppml" (default)
pair	Inter-national fixed effects column (defaults to "pair_id")
pair2	Intra-national fixed effects column (defaults to "pair_id_2")
etfe	Exporter time fixed effects column (defaults to "exp_year")
itfe	Importer time fixed effects column (defaults to "imp_year")
dist	Distance column (defaults to "log_dist")
intr	Intra-national distance column (defaults to "log_dist_intra")
brdr	Inter-national borders column (defaults to "intl_brdr")

**Value**

A list

**Examples**

```
# See the ebook
```

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