# Package: stargazer (via r-universe)

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Type Package
Title Well-Formatted Regression and Summary Statistics Tables
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<b>Description</b> Produces LaTeX code, HTML/CSS code and ASCII text for well-formatted tables that hold regression analysis results from several models side-by-side, as well as summary statistics.
<b>License</b> GPL (>= 2)
Imports stats, utils
Enhances AER, betareg, brglm, censReg, dynlm, eha, erer, ergm, fGarch, gee, glmx, gmm, lfe, lme4, lmtest, MASS, mclogit, mgcv, mlogit, nlme, nnet, ordinal, plm, pscl, quantreg, rms, relevent, robustbase, sampleSelection, spdep, survey, survival
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stargazer

stargazer

#### **Description**

The stargazer command produces LaTeX code, HTML code and ASCII text for well-formatted tables that hold regression analysis results from several models side-by-side. It can also output summary statistics and data frame content. stargazer supports a large number model objects from a variety of packages. Please see stargazer models.

#### Usage

```
stargazer(
            type = "latex", title = "", style = "default",
            summary = NULL, out = NULL, out.header = FALSE,
            column.labels = NULL, column.separate = NULL,
            covariate.labels = NULL, dep.var.caption = NULL,
            dep.var.labels = NULL, dep.var.labels.include = TRUE,
            align = FALSE,
            coef = NULL, se = NULL, t = NULL, p = NULL,
            t.auto = TRUE, p.auto = TRUE,
            ci = FALSE, ci.custom = NULL,
            ci.level = 0.95, ci.separator = NULL,
            add.lines = NULL,
            apply.coef = NULL, apply.se = NULL,
            apply.t = NULL, apply.p = NULL, apply.ci = NULL,
            colnames = NULL,
            column.sep.width = "5pt";
            decimal.mark = NULL, df = TRUE,
            digit.separate = NULL, digit.separator = NULL,
            digits = NULL, digits.extra = NULL, flip = FALSE,
            float = TRUE, float.env="table",
            font.size = NULL, header = TRUE,
            initial.zero = NULL,
            intercept.bottom = TRUE, intercept.top = FALSE,
            keep = NULL, keep.stat = NULL,
            label = "", model.names = NULL,
            model.numbers = NULL, multicolumn = TRUE,
            no.space = NULL,
            notes = NULL, notes.align = NULL,
```

```
notes.append = TRUE, notes.label = NULL,
object.names = FALSE,
omit = NULL, omit.labels = NULL,
omit.stat = NULL, omit.summary.stat = NULL,
omit.table.layout = NULL,
omit.yes.no = c("Yes", "No"),
order = NULL, ord.intercepts = FALSE,
perl = FALSE, report = NULL, rownames = NULL,
rq.se = "nid", selection.equation = FALSE,
single.row = FALSE,
star.char = NULL, star.cutoffs = NULL,
suppress.errors = FALSE,
table.layout = NULL, table.placement = "!htbp",
zero.component = FALSE,
summary.logical = TRUE, summary.stat = NULL,
nobs = TRUE, mean.sd = TRUE, min.max = TRUE,
median = FALSE, iqr = FALSE )
```

#### **Arguments**

one or more model objects (for regression analysis tables) or data frames/vectors/matrices (for summary statistics, or direct output of content). They can also be included

as lists (or even lists within lists).

type a character vector that specifies what type of output the command should pro-

duce. The possible values are "latex" (default) for LaTeX code, "html" for

HTML/CSS code, "text" for ASCII text output.

title a character vector with titles for the tables.

style a character string that specifies what style, typically designed to resemble an ex-

isting academic journal, should be used in producing the tables. This argument

is not case-sensitive. See list of supported styles.

summary a logical value indicating whether the package should output a summary statis-

tics table when given a data frame. If FALSE, the package will instead output the

contents of the data frame.

out a character vector that contains the path(s) of output files. Depending on the

file extension (.tex, .txt, .htm or .html), either a LaTeX/HTML source file or an ASCII text output file will be produced. For any other file extension, the value

of the type argument will determine the type of output file.

out.header a logical value that indicates whether the LaTeX or HTML file output should

contain a code header (if TRUE) or just the chunk of code that creates the output

(if FALSE).

column.labels a character vector of labels for columns in regression tables. Their layout, in

terms of the number of columns associated with each label, is given by the ar-

gument column.separate.

column.separate

a numeric vector that specifies how column.labels should be laid out across regression table columns. A value of c(2, 1, 3), for instance, will apply the

first label to the two first columns, the second label to the third column, and the third label will apply to the following three columns (i.e., columns number four, five and six). If the argument's value is NULL or the regression table contains more columns than are referred to in column.separate, a value of 1 is assumed for each "excess" column label.

#### covariate.labels

a character vector of labels for covariates in regression tables. A value of NA for any element means that stargazer will print the corresponding variable name. In the default case of NULL, variable names are printed.

dep.var.caption

a character vector that specifies the caption to appear above dependent variable labels. A value of NULL denotes the default caption for the chosen style. An empty string (i.e., "") will lead stargazer to omit the caption.

dep.var.labels a character vector of labels for the dependent variables in regression tables. A value of NA for any element means that stargazer will print the corresponding variable name. In the default case of NULL, variable names are printed.

dep.var.labels.include

a logical value that toggles whether dependent variable labels will be included in the regression table.

a logical value indicating whether numeric values in the same column should be aligned at the decimal mark in LaTeX output. Requires \usepackage{dcolumn} in LaTeX preamble.

a list of numeric vectors that will replace the default coefficient values for each model. Element names will be used to match coefficients to individual covariates, and should therefore match covariate names. A NULL vector indicates that, for a given model, the default set of coefficients should be used. By contrast, an NA vector means that all of the model's coefficients should be left blank.

a list of numeric vectors that will replace the default coefficient values for each model. Behaves exactly like the argument coef.

a list of numeric vectors that will replace the default test statistics (e.g., t-scores, or z-scores) for each model. Like coef and se, test statistics are matched to covariates by their element names.

a list of numeric vectors that will replace the default p-values for each model. Matched by element names. These will form the basis of decisions about significance stars.

a logical value that indicates whether stargazer should calculate the test statistics (i.e., the z-scores) automatically if coefficients or standard errors are supplied by the user (from arguments coef and se) or modified by a function (from arguments apply.coef or apply.se). If FALSE, the package will use model's default values if t is NULL.

a logical value that indicates whether stargazer should calculate the p-values, using the standard normal distribution, if coefficients or standard errors are supplied by the user (from arguments coef and se) or modified by a function (from arguments apply.coef or apply.se). If FALSE, the package will use model's default values if p is NULL.

align

coef

se

t

р

t.auto

p.auto

ci a logical vector that indicates, for each column, whether stargazer should, in regression tables, replace standard errors by confidence intervals. If the value is NA or unspecified, then the value from the last preceding specified column is used. ci.custom a list of two-column numeric matrices that will replace the default confidence intervals for each model. The first and second columns represent the lower and the upper bounds, respectively. Matched by element names. ci.level a numeric vector that specifies, for each column, the confidence level to be used in regression tables when argument ci is set to TRUE. By default, stargazer will report 95 percent confidence intervals. If the value is NA or unspecified, then the value from the last preceding specified column is used. ci.separator a character string that will serve as the separator between the lower and upper bounds of reported confidence intervals. add.lines a list of vectors (one vector per line) containing additional lines to be included in the table. Each element of the listed vectors will be put into a separate column. apply.coef a function that will be applied to the coefficients. a function that will be applied to the standard errors. apply.se apply.t a function that will be applied to the test statistics. apply.p a function that will be applied to the p-values. apply.ci a function that will be applied to the lower and upper bounds of the confidence intervals. colnames a logical value that toggles column names on or off when printing data frames, vectors or matrices. column.sep.width a character string that specifies, in LaTeX code, the width of the space that separates columns in LaTeX tables. The default value is "5pt". decimal.mark a character string that will serve as the decimal mark. For instance, the string "," will represent decimal commas, while "." means tables will use decimal df a logical value that indicates whether the degrees of freedom of model statistics should be reported. digit.separate a numeric vector that indicates where digit separators should be placed. The first element of the vector indicates the number of digits (counted from the decimal mark to the left) that will be separated. The second element indicates the number of digits that will be separated from that 'first' separator, and so on. A value of 3 corresponds to a thousands separator, while a value of 0 indicates no separation. Alternatively, digit. separate can be one of the following character strings:

#### digit.separator

of 4).

a character string that will serve as the digit (e.g., thousands) separator. Commonly used strings include "," for a comma separator, "" for a single space separator, and "" for no separation.

"lakh" (equivalent to c(4,3)), "china" or "japan" (both equivalent to a value

digits an integer that indicates how many decimal places should be used. A value of NA indicates that no rounding should be done at all, and that all available decimal places should be reported. an integer indicating the maximum number of additional decimal places to be digits.extra used if a number, rounded to digits decimal places, is equal to zero. flip a logical value that flips the vertical and horizontal axes when printing summary statistic tables or vector, matrix and data frame content. float a logical value that indicates whether the resulting table will be a floating table (set off, for instance, by \begin{table} and \end{table}). float.env a character string that specifies the floating environment of the resulting LaTeX table (when argument float is set to TRUE). Possible values are "table" (default), "table\*" and "sidewaystable" (requires \usepackage{dcolumn} in LaTeX preamble). font.size a character string that specifies the font size used in the table. The font can be one of the following: "tiny", "scriptsize", "footnotesize", "small", "normalsize", "large", "Large", "LARGE", "huge", "Huge". If NULL (default), no particular font is imposed. header a logical value indicating whether a header (containing the name and version of the package, the author's name and contact information, and the date and time of table creation) should appear in comments at the beginning of the LaTeX code. initial.zero a logical value indicating whether an initial zero should be printed before the decimal mark if a number is between 0 and 1. intercept.bottom a logical value indicating whether the intercept (or constant) coefficients should be on the bottom of the table. a logical value indicating whether the intercept (or constant) coefficients should intercept.top be on the top of the table. keep a vector of regular expressions that specifies which of the explanatory variables should be kept in the table. Alternatively, this argument can be a numeric vector whose elements indicate which variables (from top to bottom, or left to right) should be kept. The default value of NULL means that all variables will be kept. keep.stat a character vector that specifies which model statistics should be kept in the regression table output. For instance keep.stat = c("n","11") will produce a table that only includes statistics for the number of observations and log likelihood. See the list of statistic codes. This argument is not case-sensitive. label a character string containing the \label{} TeX markers for the tables. a logical value indicating whether model names (e.g., "OLS" or "probit") should model.names be included in the table. model.numbers a logical value indicating whether models should be numbered. No number is used whenever a regression table includes only one model. multicolumn a logical value indicating whether dependent variables and model names (e.g., "OLS" or "probit") should be reported across several columns if they remain a logical value indicating whether all empty lines should be removed from the no.space table.

notes

a character vector containing notes to be included below the table. The character strings can include special substrings that will be replaced by the corresponding cutoffs for statistical significance 'stars': [\*], [\*\*], and [\*\*\*] will be replaced by the cutoffs, in percentage terms, for one, two and three 'stars,' respectively (e.g., 10, 5, and 1). Similarly, [0.\*], [0.\*\*] and [0.\*\*\*] will be replaced by the numeric value of cutoffs for one, two and three 'stars' (e.g., 0.1, 0.05, and 0.01). [.\*], [.\*\*] and [.\*\*\*] will omit the leading zeros (e.g., .1, .05, .01).

notes.align

a character string that specifies how notes should be aligned under the table. One of three strings can be used: "1" for left alignment, "r" for right alignment, and "c" for centering. This argument is not case-sensitive.

notes.append

a logical value that indicates whether notes should be appended to the standard note(s) associated with the table's style (typically an explanation of significance cutoffs). If the argument's value is set to FALSE, the character strings provided in notes will replace any existing/default notes.

notes.label

a character string containing a label for the notes section of the table.

object.names

a logical value indicating whether object names should be included in the table.

omit

a vector of regular expressions that specifies which of the explanatory variables should be omitted from presentation in the table. Alternatively, this argument can be a numeric vector whose elements indicate which variables (from top to bottom, or left to right) should be omitted. This argument might be used, for instance, to exclude fixed effects dummies from being presented. The default value of NULL means that no variables will be excluded.

omit.labels

a character vector of labels that correspond to each of the regular expressions in omit, and that will be used in a sub-table that indicates whether variables have been omitted from a given model. omit and omit.labels must be equal in length.

omit.stat

a character vector that specifies which model statistics should be omitted from regression table output. For instance omit.stat = c("11", "rsq") will omit the log-likelihood and the R-squared statistics. See the list of statistic codes. This argument is not case-sensitive.

omit.summarv.stat

a character vector that specifies which summary statistics should be omitted from summary statistics table output. See the list of summary statistic codes. This argument is not case-sensitive.

omit.table.layout

a character string that specifies which parts of the table should be omitted from the output. Each letter in the string indicates a particular part of the table, as specified by the table layout characters. For instance, omit.table.layout = "sn" will omit the model statistics and notes.

omit.yes.no

a character vector of length 2 that contains the 'yes' and 'no' strings to indicate whether, in any specific model, variables were omitted from the table, as specified by "omit".

order

a vector of regular expressions (or of numerical indexes) that indicates the order in which variables will appear in the output.

ord. intercepts a logical value indicating whether intercepts for models with ordered dependent variables (such as ordered probit, or ordered logit) are included in the table.

perl a logical value indicating whether perl-compatible regular expressions should

be used. If FALSE, the package will assume the default extended regular expres-

sions.

report a character string containing only elements of "v", "c", "s", "t", "p", "\*"

that determines whether, and in which order, variable names ("v"), coefficients ("c"), standard errors/confidence intervals ("s"), test statistics ("t") and p-values ("p") should be reported in regression tables. If one of the aforementioned letters is followed by an asterisk ("\*"), significance stars will be reported

next to the corresponding statistic.

rownames a logical value that toggles row names on or off when printing data frames,

vectors or matrices.

rq. se a character string that specifies the method used to compute standard errors for

rq (quantile regression) objects. Possible values are "iid", "nid", "ker" and

"boot".

single.row a logical value that indicates whether regression and standard errors (or confi-

dence intervals) should be reported on the same row. For convenience in formatting the resulting table, argument no. space is automatically set to TRUE when

single.row is TRUE.

selection.equation

a logical value that indicates whether the selection equation (when argument is set to TRUE) or the outcome equation (default) will be reported for heckit and

selection models from the package sampleSelection.

star.char a character string to be used as the 'star' to denote statistical significance.

star.cutoffs a numeric vector that indicates the statistical signficance cutoffs for the statistical

significance 'stars.' For elements with NA values, the corresponding 'star' will

not be used.

suppress.errors

a logical value that indicates whether stargazer should suppress the output of

its error messages.

table.layout a character string that specifies which parts of the table should be included in

the output, in the order provided by the user. Each letter in the string indicates a particular part of the table, as specified by the table layout characters. For instance, table.layout = "#tn" will report the model numbers, coefficient table

and notes only.

table.placement

a character string containing only elements of "h", "t", "b", "p", "!", "H" that

determines the table placement in its LaTeX floating environment.

zero.component a logical value indicating whether to report coefficients for the zero component

of zeroinfl and hurdle estimation results. If FALSE, the count component is

displayed.

summary.logical

a logical value indicating whether logical variables should be reported in summary statistics table. If so, they will be treated as if they had values of 0 (corre-

sponding to FALSE) and 1 (TRUE).

summary.stat a character vector that specifies which summary statistics should be included in the summary statistic table output. See the list of summary statistic codes. This

argument is not case-sensitive.).

nobs	a logical value that toggles whether the number of observations (N) for each variable is shown in summary statistics tables.
mean.sd	a logical value that toggles whether variable means and standard deviations are shown in summary statistics tables.
min.max	a logical value that toggles whether variable minima and maxima are shown in summary statistics tables.
median	a logical value that toggles whether variable medians are shown in summary statistics tables.
iqr	a logical value that toggles whether the 25th and 75th percentiles for each variable are shown in summary statistics tables. ('igr' stands for interquartile range.)

#### **Details**

Arguments with a value of NULL will use the default settings of the requested style.

#### Value

stargazer uses cat() to output LaTeX/HTML code or ASCII text for the table. To allow for further processing of this output, stargazer also returns the same output invisibly as a character vector. You can include the produced tables in your paper by inserting stargazer LaTeX output into your publication's TeX source. Alternatively, you can use the out argument to save the output in a .tex or .txt file.

To include stargazer tables in Microsoft Word documents (e.g., .doc or .docx), please follow the following procedure: Use the out argument to save output into an .htm or .html file. Open the resulting file in your web browser. Copy and paste the table from the web browser to your Microsoft Word document.

#### **Acknowledgments and New Features**

I would like to thank everyone who has tested this package, or provided useful comments and suggestions. Please see stargazer package acknowledgments.

See stargazer news for a list of new models and features in each release of stargazer.

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# Author(s)

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#### **Examples**

```
## create summary statistics table for 'attitude' data frame
stargazer(attitude)
## list the content of the data frame 'attitude'
stargazer(attitude, summary=FALSE)
## 2 OLS models
linear.1 <- lm(rating ~ complaints + privileges + learning</pre>
                        + raises + critical, data=attitude)
linear.2 <- lm(rating ~ complaints + privileges + learning, data=attitude)</pre>
## create an indicator dependent variable, and run a probit model
attitude$high.rating <- (attitude$rating > 70)
probit.model <- glm(high.rating ~ learning + critical + advance, data=attitude,</pre>
                    family = binomial(link = "probit"))
stargazer(linear.1, linear.2, probit.model, title="Regression Results")
## report ASCII text for a table with 90 percent confidence
## intervals reported on the same row as coefficients
## and omitting F statistics and the residual standard error
stargazer(linear.1, linear.2, probit.model, type="text",
          title="Regression Results", single.row=TRUE,
          ci=TRUE, ci.level=0.9, omit.stat=c("f", "ser"))
### re-order the models and only keep explanatory
### variables that contain "complaints", "learning",
### "raises" and "critical"; report these with standard
### errors, and put "learning" and "raises" before
### the other explanatory variables; of the summary
### statistics, only keep the number of observations
stargazer(probit.model, linear.1, linear.2, type="text",
          keep=c("complaints","learning","raises","critical"),
          keep.stat="n", order=c("learning", "raises"))
### apply a function to the coefficients and standard errors
### that will multiply them by ten; you can think of this
### as a change in units
multiply.by.10 <- function(x) (x * 10)
stargazer(probit.model, linear.1, linear.2,
          apply.coef=multiply.by.10, apply.se=multiply.by.10)
### print out HTML code for a correlation matrix
correlation.matrix <- cor(attitude)</pre>
```

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stargazer(correlation.matrix, type="html")

stargazer\_acknowledge Acknowledgments

#### **Description**

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stargazer\_models

stargazer: list of supported objects

#### Description

This page summarizes the models that stargazer supports. Please note that I am always looking for comments and suggestions. Do not hesitate to contact me at mhlavac [at] alumni.princeton.edu.

#### Supported objects

The package name is indicated in bold and is followed by a list of functions/object types.

#### AER:

- ivreg
- tobit

#### betareg:

- betareg

#### brglm:

- brglm

#### censReg:

- censReg

# dynlm:

- dynlm

#### eha:

- aftreg

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- coxreg
- -mlreg
- phreg
- -weibreg

# erer:

-maBina

# ergm:

-ergm

# fGarch:

-garchFit

# gee:

- gee

# glmx:

-hetglm

# gmm:

- gmm

# lfe:

- felm

# lme4:

- -glmer
- -lmer
- nlmer

# lmtest:

- coeftest

# MASS:

- -polr
- -rlm
- survreg

# mclogit:

- mclogit

# mgcv:

-gam

# mlogit:

- mlogit

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# mnlogit:

- mnlogit

# nlme:

- -gls
- 1me
- nlme

#### nnet:

 $- \, {\it multinom}$ 

# ordinal:

- clm

# plm:

- pgmm
- -plm
- pmg

# pscl:

- -hurdle
- -zeroinfl

#### rms:

- -bj
- cph
- Glm
- -Gls
- $-1 \mathrm{rm}$
- -ols
- psm - Rq

# relevent:

-rem.dyad

#### rq:

- quantreg

# robustbase:

- -glmrob
- 1mrob

# sampleSelection:

- -binaryChoice
- heckit
- -probit
- selection

#### spdep:

- -errorsarlm
- -largarlm

#### stats:

- -arima
- -glm
- 1m

#### survey:

- svyglm

#### survival:

- coxph
- clogit
- survreg

#### Zelig:

- the implementation of the above models
- -relogit
- -cloglog.net
- -gamma.net
- -probit.net
- -logit.net

stargazer\_news

What's new?

# Description

This page summarizes the models, features, and bug fixes that were introduced in each release of stargazer. Please note that I am always looking for comments and suggestions. Do not hesitate to contact me at mhlavac [at] alumni.princeton.edu.

#### What's new?

- v. 5.2.3:
- very minor update: logical coercion of length longer than one removed v. 5.2.2:
- very minor update: removed instances in code where if/while statement is used with a condition of length greater than one

#### v. 5.2.1:

- very minor update: updated author contact information

#### v. 5.2:

- New models:
- arima (stats)
- censReg (censReg)
- garchFit (fGarch)
- glmrob (robustbase)
- lme (nlme)
- nlme (nlme)
- mnlogit (mnlogit)
- pgmm (plm)
- New features:
- decimal mark (argument decimal.mark) now gets automatically updated in notes (argument notes)
- Fixed bugs:
- felm (lfe) working again
- fixed formatting issues that led to an occasional inability to produce ASCII text output
- much faster output of multi-model tables with many omitted variables
- negative numbers are now properly displayed when initial.zero is set to FALSE
- fixed minor bug that occasionally led to a misalignment of additional lines (argument add.lines)
- lm() and glm() models now report AIC and BIC
- underscores are now properly formatted in column and dependent variable labels
- fixed an issue with the mlogit model that led LR tests to crash the output when no intercept was present

#### v. 5.1:

- New features:
- the CRAN description now lists packages whose usefulness is enhanced by stargazer
- Fixed bugs
- labels that indicate whether variables have been omitted from the model are now correctly assigned (argument omit.labels)
- argument summary.stat now functions properly
- out.header and header can both be set to false at the same time
- minor formatting changes

#### v. 5.0:

- New models:
- felm (lfe)

- New features:
- ability to produce HTML/CSS output (argument type)
- vector and matrix objects are now acceptable (argument . . .)
- additional lines can be included in the tables (argument add.lines)
- table layout is now fully customizable (arguments table.layout and omit.table.layout)
- choice over which summary statistics should be reported (arguments summary.stat and omit.summary.stat)
- users can choose whether and the order in which to report coefficients, standard errors, confidence intervals, test statistics and p-values (argument report)
- object names can be reported above each column (argument object.names)
- option to toggle the reporting of dependent variables and model names across several columns (argument multicolumn)
- reporting of model statistics' degrees of freedom can now be suppressed (argument df)
- users can now include more than three statistical significance cutoffs (argument star.cutoffs)
- regression, summary statistic and data frame table can now be flipped (argument flip)
- colnames and rownames can be included in, or excluded from, data frame content tables (arguments colnames and rownames)
- argument summary can now have a different value for each table within a single stargazer() call
- if arguments coef, se, t, p, ci.custom and add.lines only contain a single vector, they will be accepted as though they were a list containing the same vector
- Fixed bugs:
- fixed bug that caused the number of observations to be misreported in complicated models
- fixed bug that led to the omission of coefficients from output when multiple models had a single regressor
- notes now working well for summary statistics and data frame tables
- font size can now be change even if floating environment is not used
- fixed compatability issues with latest version of Zelig
- argument apply.ci now works properly
- minor formatting changes

#### v. 4.5.3:

- New features:
- model objects can now be passed to stargazer in a list (argument . . .)
- Fixed bugs:
- fixed problem with printing negative numbers in data frame and summary statistics tables
- corrected formatting of column widths in ASCII text output
- minor bug with lme4 covariate names corrected

#### v. 4.5.2:

- Fixed bugs:
- much faster output
- $-\ now\ compatible$  with the updated lme4 package
- corrected a bug that prevented users from including multiple models with a single covariate + intercept
- underscores now print correctly in ASCII text output

#### v. 4.5.1:

- Fixed bugs:
- fixed a bug involving the calculation of t-statistics from user-given coefficients and standard errors

#### v. 4.5:

- New models:
- binaryChoice (sampleSelection)
- brglm (brglm)
- coeftest (lmtest)
- heckit (sampleSelection)
- maBina (erer)
- mclogit (mclogit)
- mlogit (mlogit)
- selection (sampleSelection)
- New features:
- explanatory variables can be ordered in customizable ways (argument order)
- custom functions can now be applied to coefficients (argument apply.coef), standard errors (argument apply.se), test statistics (argument apply.t), p-values (argument apply.p), and confidence intervals (argument apply.ci)
- keep explanatory variables and statistics based on regular expressions (argument keep and keep.stat)
- users can customize confidence intervals (argument custom.ci)
- ability to have both standard errors and confidence intervals in the same table (argument ci is now a logical vector)
- different confidence levels for each individual column (argument ci.level is now a vector)
- ability to omit and keep variables based on their position in the table
- Fixed bugs:
- citation and change log updates
- minor formatting changes

#### v. 4.0:

- New models:
- aftreg (eha)
- bj (rms)
- coxreg (eha)
- cph (rms)
- dynlm (dynlm)
- errorsarlm (spdep)
- Glm (rms)
- Gls (rms)
- gmm (gmm)
- hetglm (glmx)
- lrm (rms)

- mlreg (eha)
- lagsarlm (spdep)
- ols (rms)
- phreg (eha)
- psm (rms)
- rem.dyad (relevent)
- rq (quantreg)
- Rq (rms)
- weibreg (eha)
- New features:
- the package can produce ASCII text output, in addition to LaTeX code (argument type)
- output directly to .tex or .txt files (argument out)
- column labels (arguments column.labels and column.separate)
- confidence intervals (arguments ci, ci.level and ci.separator)
- coefficients and standard errors/confidence intervals can now be reported in the same row (argument single.row)
- users can choose to omit all empty lines in a table (argument no.space)
- notes can now be appended to, rather than always replace, the default notes for a given style (argument notes.append)
- ability to customize the dependent variable caption (argument dep.var.caption)
- font size can now be changed (argument font.size)
- comments header (with package and author name, version, date and time) can now be suppressed (argument header)
- ability to change or disable the floating environment (arguments float and float.env)
- table placement settings (argument table.placement)
- customization of column spacing (argument column.sep.width)
- perl-compatible regular expressions (argument perl)
- Fixed bugs:
- all columns are now displayed for multinom objects
- better positioning of tables in the LaTeX document
- minor formatting changes

#### v. 3.0.1:

- Fixed bugs:
- corrected an issue that led to problems when printing data frames with multiple decimal places
- some reporting and formatting changes to summary statistics and data frame tables

#### v. 3.0:

- New models:
- clm (ordinal)
- clogit (survival)
- ergm (ergm)
- glmer (lme4)
- gls (nlme)

- lmer (lme4)
- lmrob (robustbase)
- nlmer (lme4)
- pmg (plm)
- rlm (MASS)
- New features:
- users can customize coefficients (argument coef), standard errors (se), test statistics (t), and p-values (p)
- automatic calculation of z-scores and p-values when the user supplies custom standard errors (can be toggled using arguments t.auto and p.auto)
- ability to set \label{} markers in TeX for each table (using argument label)
- summary statistics table can now report logical (i.e., dummy, indicator) variables as if they had values of 0 (corresponding to FALSE) and 1 (TRUE). See argument summary.logical.
- user can choose between rounding to a set number of decimal places (argument digits) and reporting all available decimal places (by setting digits equal to NA)
- can omit all test statistics
- Fixed bugs:
- package runs much faster
- corrected p-values for polr() and zelig oprobit, ologit models
- coxph now, by default, reports robust standard errors, for consistency with its summary() output
- multinom models now report the first set of coefficients (when multiple sets are present), instead of producing an error
- singularities in model regression no longer disrupt the output
- model formulas can now be symbols
- no more warnings when creating summary statistics tables
- minor formatting changes

#### v. 2.0.1:

- Fixed bugs:
- stargazer now reports the correct number of observations for plm() models

#### v. 2.0:

- New models:
- betareg (betareg)
- hurdle (pscl)
- ivreg (AER)
- multinom (nnet)
- plm (plm)
- tobit (AER)
- zeroinfl (pscl)
- New features:
- direct output of data frames into LaTeX (summary = FALSE)
- ability to omit the reporting of selected statistics (using argument omit.stat) alignment of

columns at the decimal mark (align = TRUE)

- automatic coordination of star cutoffs and values in regression table notes
- Fixed bugs:
- argument digits now works properly
- stargazer updated to reflect, and work properly with, recent changes to Zelig
- variable names can now contain dollar signs and underscores
- some minor formatting fixes

```
stargazer\_stat\_code\_list
```

stargazer: list of statistic codes

# Description

The following character strings can be used in the keep.stat and omit.stat arguments of the stargazer command.

#### **Statistics codes**

all statistics
adjusted R-squared
Akaike Information Criterion
Bayesian Information Criterion
chi-squared
F statistic
log-likelihood
score (logrank) test
likelihood ratio (LR) test
maximum R-squared
number of observations
null deviance
Inverse Mills Ratio
residual deviance
rho
R-squared
scale
theta
standard error of the regression (i.e., residual standard error)
sigma squared
Un-Biased Risk Estimator
Wald test

stargazer\_style\_list 23

```
stargazer_style_list stargazer: list of supported styles
```

# Description

The following character strings can be used in the style argument of the stargazer command. Most styles are designed to resemble an existing academic journal, as listed below.

#### **Styles**

"all"	publish every statistic available, incl. t-statistics and p-values
"all2"	same as "all", but omitting t-statistics and p-values
"default"	default: publish regression coefficients with standard errors, and the most commonly reported statistics
"commadefault"	like "default", but uses a decimal comma and a single space to separate thousands
"aer"	American Economic Review
"ajps"	American Journal of Political Science
"ajs"	American Journal of Sociology
"asq"	Administrative Science Quarterly
"asr"	American Sociological Review
"apsr"	American Political Science Review
"demography"	Demography
"io"	International Organization
"jpam"	Journal of Policy Analysis and Management

```
stargazer_summary_stat_code_list

stargazer: list of summary statistic codes
```

# Description

"qje"

The following character strings can be used in the summary.stat and omit.summary.stat arguments of the stargazer command.

# **Summary Statistics Codes**

```
"max" maximum
"mean" mean
"median" median
"min" minimum
```

Quarterly Journal of Economics

"n"	number of observations
"p25"	25th percentile
"p75"	75th percentile
"sd"	standard deviation

# Description

The following character strings can be used in the table.layout and omit.table.layout arguments of the stargazer command.

# **Table Layout Characters**

"-"	single horizontal line
"="	double horizontal line
"-! "	mandatory single horizontal line
"=! "	mandatory double horizontal line
"1"	dependent variable caption
"d"	dependent variable labels
"m"	model label
"c"	column labels
"#"	model numbers
"b"	object names
"t"	coefficient table
"o"	omitted coefficient indicators
"a"	additional lines
"n"	notes
"s"	model statistics

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