## Basics of Using LATEX and R

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### Using texreg to Make Tables in R

texreg is a wrapper for a list of model objects you have already estimated in R. It automatically fills in the coefficients, standard errors, and significance for a wide range of model classes, and creates a nice-looking table that you can copy-paste from your R console directly into your Later Management.

```
How texreg works:
  texreg(1, file = NA, single.row = FALSE, stars = c(0.001,
```

```
0.01, 0.05), custom.model.names = NULL,
custom.coef.names = NULL, custom.gof.names = NULL,
custom.note = NULL, digits = 2, leading.zero = TRUE,
symbol = "\\cdot", override.coef = 0, override.se = 0,
override.pval = 0, omit.coef = NA, reorder.coef = NULL,
reorder.gof = NULL, return.string = FALSE,
ci.force = FALSE, ci.force.level = 0.95, ci.test = 0,
bold = 0.00, center = TRUE,
caption = "Statistical models", caption.above = FALSE,
label = "table:coefficients", booktabs = FALSE,
dcolumn = FALSE, sideways = FALSE, use.packages = TRUE,
table = TRUE, no.margin = TRUE, scriptsize = FALSE,
float.pos = "", ...)
```

# Examples

	Dose Only	Supplement Only	W/ Interact
Intercept	7.42***	20.66***	11.55***
	(1.26)	(1.37)	(1.58)
Dose	9.76***		7.81***
	(0.95)		(1.20)
Supplement		-3.70	-8.26***
		(1.93)	(2.24)
Dose*Sup			$3.90^{*}$
			(1.69)
$\mathbb{R}^2$	0.64	0.06	0.73
$Adj. R^2$	0.64	0.04	0.72
Num. obs.	60	60	60

p < 0.001, p < 0.01, p < 0.01, p < 0.05

Table 1: OLS Estimates

	Dose Only	Supplement Only	W/ Interact
Intercept	7.42***	20.66***	11.55***
	(1.26)	(1.37)	(1.58)
Dose	9.76***		7.81***
	(0.95)		(1.20)
Supplement		-3.70	$-8.26^{***}$
		(1.93)	(2.24)
Dose*Sup			$3.90^{*}$
			(1.69)
$\mathbb{R}^2$	0.64	0.06	0.73
$Adj. R^2$	0.64	0.04	0.72
Num. obs.	60	60	60

p < 0.001, p < 0.01, p < 0.05

Table 2: OLS Estimates, this time with booktabs!

	Dose	Supplement	Interact
Dose	9.76***		7.81***
	(0.95)		(1.20)
Supplement		-3.70	-8.26***
		(1.93)	(2.24)
Dose*Sup			3.90*
			(1.69)
$\mathbb{R}^2$	0.64	0.06	0.73
$Adj. R^2$	0.64	0.04	0.72
Num. obs.	60	60	60

<sup>\*\*\*</sup> p < 0.001, \*\* p < 0.01, \* p < 0.05

Table 3: OLS Estimates, but not the intercept!

## stargazer for LATEXTables

Another excellent package is stargazer, which works with a wide (but still limited) number of model objects, notably a lot of GLMs. Check out its help file in R to find out which functions it's compatible with.

How stargazer works:

```
stargazer( ...,
        type = "latex", title = "", style = "default",
        summary = TRUE, out = NULL,
        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,
         apply.coef = NULL, apply.se = NULL,
        apply.t = NULL, apply.p = NULL, apply.ci = NULL,
        column.sep.width = "5pt",
        decimal.mark = NULL, digit.separate = NULL,
        digit.separator = NULL,
        digits = NULL, digits.extra = NULL,
        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,
         no.space = NULL,
         notes = NULL, notes.align = NULL,
         notes.append = TRUE, notes.label = NULL,
         omit = NULL, omit.labels = NULL,
        omit.stat = NULL, omit.yes.no = c("Yes", "No"),
```

```
order = NULL, ord.intercepts = FALSE, perl = FALSE,
rq.se = "nid", selection.equation = FALSE,
single.row = FALSE,
star.char = NULL, star.cutoffs = NULL,
suppress.errors = FALSE, table.placement = "!htbp",
zero.component = FALSE, summary.logical = TRUE,
nobs = TRUE, mean.sd = TRUE, min.max = TRUE,
median = FALSE, iqr = FALSE)
```

#### Example

Table 4

	Dependent variable:			
	Dose Only	Tooth Length Supplement Only	w/Interact	
	(1)	(2)	(3)	
Dose	9.764*** (0.953)		7.811*** (1.195)	
Supplement		$-3.700^*$ (1.932)	$-8.255^{***}$ (2.236)	
Dose*Supplement			3.904** (1.691)	
Intercept	7.423*** (1.260)	20.663*** (1.366)	11.550*** (1.581)	
Observations $\mathbb{R}^2$	60 0.644	60 0.059	60 0.730	
Adjusted R <sup>2</sup> Residual Std. Error F Statistic	0.638 $4.601 (df = 58)$ $105.065*** (df = 1; 58)$	0.043 $7.482 (df = 58)$ $3.668* (df = 1; 58)$	$0.715$ $4.083 \text{ (df} = 56)$ $50.355^{***} \text{ (df} = 3; 56$	

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01