The outcome of regression via stargazer

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Stargazer

Currently, we often use the Stata to do some empirical research and usually use `outreg` to output the outcome of regression. In the R. we could also find out some useful tool to help us to do the work. The `stargazer` is the good tool to produce the well-formatted table. The name is fun "star" plus "gazer" means the people is eager to find the significance in regression. the more "*" the the more happily.

We load the and package and data called `attitude` in R. The stargazer could be installed by `install.packages("stargazer")` and the data needn't install.

```
library(stargazer)
data("attitude")
```

Using the as the same name function `stargazer` the output is the `Latex` format in default. other formats like `html` and `text` could set by `type=`

```
stargazer(attitude,type = "text")
```

```
##
## ====================================
## Statistic  N   Mean  St. Dev. Min Max
## ------------------------------------
## rating     30 64.633  12.173  40  85
## complaints 30 66.600  13.315  37  90
## privileges 30 53.133  12.235  30  83
## learning   30 56.367  11.737  34  75
## raises     30 64.633  10.397  43  88
## critical   30 74.767  9.895   49  92
## advance    30 42.933  10.289  25  72
## ------------------------------------
```

We can copy the `Latex` outcome to `.Rmd` inline.

Table 1:

Statistic	N	Mean	St. Dev.	Min	Max
rating	30	64.633	12.173	40	85
complaints	30	66.600	13.315	37	90
privileges	30	53.133	12.235	30	83
learning	30	56.367	11.737	34	75
raises	30	64.633	10.397	43	88
critical	30	74.767	9.895	49	92
advance	30	42.933	10.289	25	72

The basic function is like the `summary` but the former is more fit with paper. And the default option `summary=TRUE`. `summary=FALSE` could just show the dataset in the table.

`rownames=FALSE` could delete the rowname in the table.

We can make the different `style`. the options include:

- `all`
- `aer`: American Economic Review
- `ajs`: American Journal of Sociology
- `qje`: Quarterly Journal of Economics
- ... other sytles could find in `?stargazer`

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Table 2: a demo output

	Dependent variable:	
	rating	
	(1)	(2)
complaints	0.692***	0.682***
	(0.149)	(0.129)
	t = 4.649	t = 5.296
	p = 0.0002	p = 0.00002
privileges	−0.104	−0.103
	(0.135)	(0.129)
	t = −0.769	t = −0.799
	p = 0.450	p = 0.432
learning	0.249	0.238*
	(0.160)	(0.139)
	t = 1.560	t = 1.707
	p = 0.132	p = 0.100
raises	−0.033	
	(0.202)	
	t = −0.165	
	p = 0.870	
critical	0.015	
	(0.147)	
	t = 0.105	
	p = 0.918	
Constant	11.011	11.258
	(11.704)	(7.318)
	t = 0.941	t = 1.538
	p = 0.357	p = 0.137
Observations	30	30
R^2	0.715	0.715
Adjusted R^2	0.656	0.682
Residual Std. Error	7.139 (df = 24)	6.863 (df = 26)
F Statistic	12.063*** (df = 5; 24) (p = 0.00001)	21.743*** (df = 3; 26) (p = 0.00000)
Note:		*p<0.1; **p<0.05; ***p<0.01

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Table 3: The AER style

	rating	
	(1)	(2)
complaints	0.692***	0.682***
	(0.149)	(0.129)
privileges	−0.104	−0.103
	(0.135)	(0.129)
learning	0.249	0.238*
	(0.160)	(0.139)
raises	−0.033	
	(0.202)	
critical	0.015	
	(0.147)	
Constant	11.011	11.258
	(11.704)	(7.318)
Observations	30	30
R^2	0.715	0.715
Adjusted R^2	0.656	0.682
Residual Std. Error	7.139 (df = 24)	6.863 (df = 26)
F Statistic	12.063*** (df = 5; 24)	21.743*** (df = 3; 26)

Notes: ***Significant at the 1 percent level.
**Significant at the 5 percent level.
*Significant at the 10 percent level.

Other setting

We could also set the option by ourself. - `title`: The table title - `ci`: the critical interval - `ci.level`: the critical level usually use 95%(`ci.level=95%`). - `digits`: Set the decimal digits preserved - `omit.stat`: omit the statistical magnitude we won't report.`omit.stat = c("LL","ser","f")` - `single.row = FALSE`: making the ci under the coef. - `no.space=T`: delete the blank space under the table

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Table 4: Table 1. Regression Analysis

	Dependent variable:	
	Overall Rating	
	(1)	(2)
Handling of Complaints	0.69***	0.68***
	(0.40, 0.98)	(0.43, 0.93)
No Special Privileges	−0.10	−0.10
	(−0.37, 0.16)	(−0.36, 0.15)
Opportunity to Learn	0.25	0.24*
	(−0.06, 0.56)	(−0.04, 0.51)
Performance-Based Raises	−0.03	
	(−0.43, 0.36)	
Too Critical	0.02	
	(−0.27, 0.30)	
Advancement	11.01	11.26
	(−11.93, 33.95)	(−3.09, 25.60)
Observations	30	30
R^2	0.72	0.72
Adjusted R^2	0.66	0.68
Note:	*p<0.1; **p<0.05; ***p<0.01	

Summary

we could use stargazer in paper writting especially enhance the writting in `.Rmd`.