ECON 104 **Truth in Numbers**

1 Getting Started With LyX

First, Mac users need to download a TeX program.

For Macs: TeXworks https://www.tug.org/texworks/

Then, download LyX:

For both Mac and PC: http://www.lyx.org/Download

PC users should download the LyX "bundle."

Then, open LyX. The program should be able to identify your TeX program. Type something random into LyX, then compile (click the eyes) the document to make sure it works. Next, go to

```
Document -> Settings... -> Latex Preamble
```

and paste

```
\usepackage{dcolumn}
```

```
\usepackage{rotating}
```

2 Putting a Table into LyX from R

From the voting data, in R:

```
voting <- read.csv("C:/Teaching/Econ 104 Spring 2014/Section 01/voting.csv")
```

Doing some regressions

```
reg1 <- lm(vote02 ~ contact)
summary(reg)
reg2 <- lm(vote02 ~ contact + age)
summary(reg2)
reg3 <- lm(vote02 ~ contact + age + female)
summary(reg3)
reg4 <- lm(vote02 ~ contact + age + female + vote98)
summary(reg4)
```

In R, make sure the 'stargazer' package is installed and intalized:

```
install.packages("stargazer")
library(stargazer)
```

Then, run the stargazer function:

```
stargazer(reg1,reg2,reg3,reg4, align =TRUE )
```

This will throw out a bunch of LaTeX code into the console. Have the students copy this, then go over to LyX. In LyX, have them go to:

```
Insert -> TeX code
```

This will bring up ERT (evil red text.) Paste the LaTeX code from R into this box. Next, let's make the table a little better.

```
stargazer(reg1,reg2,reg3,reg4, align=TRUE, float.env="table",

title = "Effects of Phone Call on Voting", omit.stat=c("ser","f" ,"adj.rsq"))
```

Table 1: Effects of Phone Call on Voting

	Dependent variable:			
	vote02			
	(1)	(2)	(3)	(4)
contact	0.102***	0.054***	0.046***	0.044***
	(0.004)	(0.003)	(0.003)	(0.003)
vote98		0.361***	0.323***	0.327***
		(0.003)	(0.003)	(0.003)
age			0.003***	0.004***
			(0.0001)	(0.0001)
female				−0.025***
				(0.003)
Constant	0.543***	0.422***	0.256***	0.263***
	(0.002)	(0.002)	(0.004)	(0.004)
Observations	119,509	119,509	119,509	118,509
R^2	0.007	0.128	0.142	0.148
Note:				*p<0.1; **p<0.05; ***p<0.01

This puts it in the float environment, puts on a title, and gets rid of some statistics for simplicity. The table should come out like table 1 below.

To turn the table sideways, alter your stargazer command in R.

```
stargazer(reg1,reg2,reg3,reg4, align=TRUE, float.env="sidewaystable",

title = "Effects of Phone Call on Voting", omit.stat=c("ser","f" ,"adj.rsq"))
```

3 Making Your Own Table in LyX

Unfortunately, the stargazer package doesn't work quite right for difference in means and statistics tables. We can still create our own tables though. Go to:

```
Insert -> Float -> Table
```

Put a title on that table. Next click outside the title box but inside the float box. Go to:

```
Insert -> Table
```

This behaves fairly similarly to an excel table, so it should be fairly intuitive. This still involves a lot of copy-paste, but it keeps the whole document in one place.

4 Other R Tips

To make the document to double spaced, go to:

```
Document -> Settings... -> Text Layout -> Spacing
```

To insert a Title, Section, or Abstract, use the drop down menu in the top left corner of the LyX screen.

To insert an equation, go to:

```
Insert -> Math ->Display Formula
```

To reduce the space between columns, insert the following after the "begintable" in the code you copied over from R

```
\tabcolsep = 0.01cm
```