

Handout: Easy Tables in Word from R

Dave Armstrong, University of Wisconsin - Milwaukee

e: armstrod@uwm.edu

This handout guides you through the process of running linear models in R (should work equally well for models run with `glm`), producing tabular output and importing that as a table in Microsoft Word 2007. This requires that you have write access to the directory where the **R** executable resides.

1. Load the following packages: `car` and `apsrtable`. You can do this by typing the following:

```
library(car)
library(apsrtable)
```

If either command produces an error, you can do the following, when your computer is connected to the internet:

```
install.packages("car")
install.packages("apsrtable")
```

After these commands have completed, you can run the `library()` commands again.

2. Load your data and run the models, saving each model as a separate object. Below is example code using the Duncan data from the `car` library.

```
library(car)
data(Duncan)
mod.income <- lm(prestige ~ income, data= Duncan)
mod.education <- lm(prestige ~ education, data=Duncan)
mod.type <- lm(prestige ~ type, data= Duncan)
mod.full <- lm(prestige ~ type + education + income, data = Duncan)
```

3. Next, source the `tabfun()` command from my website:

```
source("http://www.quantoid.net/tabfun.R")
```

This will make available to you a command that will write out the requisite information to a file you can import into Word. If you want to be able to use this command without being connected to the internet, you can do the following (after running the `source` command above).

```
dput(tabfun, "tabfun.R")
```

Then, next time you want to use the `tabfun` function, just set your working directory to the directory where `tabfun.R` resides and do the following:

```
tabfun <- dget("tabfun.R")
```

4. Next, do the following for all of your model objects:

```
tabfun(mod.income, mod.education, mod.type, mod.full,
filename = "duncan_mods.txt")
```

This will write a comma-separated model output file.

5. Next, you need to import the file.

- In Microsoft Word for Windows (≥ 2007), then click on the “Insert” tab. Next, go to Object \rightarrow text from file. Then, browse to the file you indicated in the `tabfun()` command. You will have to choose “All Files (*.*)” from the “Files of type” menu. (HINT: you can find out the directory in which **R** saved the file by typing `getwd()` in **R**)
- In Microsoft Word (2007) for Mac, click into the “Insert” pull-down menu and choose “file”. Then browse to the file you saved from R (`duncan_mods.txt`, in this example).

6. Next you need to convert this to a table

- On the PC, with the text highlighted, return to the “Insert” tab at the top of the window. Then click the “Table” box and choose the “Convert text to table” option.
- On the Mac, click on the “Table” pull-down menu and choose convert \rightarrow “Convert text to table”.

7. In the dialog box that appears, you need to make sure that the “Number of Columns” is the number of models you included in the `apsrtable()` command plus 1. So, since we used 4 models, we need 5 columns. The other important option is to select the “comma” radio button in the “Separate text at” section of the dialog box and hit “OK”.

8. This should produce the required table. You will undoubtedly have to “pretty” it up a bit, but the required information is there.