

# Write ups for Problem Sets (draft ver.)

POLS 602 (tamu)

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Below is a note about common errors/issues I see in write ups. If you are not sure about how something should be formatted, feel free to seek clarification from your TA or your instructor. Also, see how tables and texts are arranged in journals, especially in your area.

## 1 Presenting Results

- In MC experiments, make sure to first describe your DGP.
- In tables and figures, provide captions (and notes if you need to clarify the standard errors, units of variables etc).
- Avoid relying on object names in R or the acronyms in the original dataset for variables names, as they tend to be incomprehensible. Instead, try to give names that are easier to understand.
- For binary variables, name your variable according to the label for value “1”. For example, if your dichotomous “regime” variable is labeled “democracy” (1) and “autocracy” (0), label the variable in your table “democracy” instead of “regime”.
- Don’t print out the raw output from R/Stata commands (summary, etc). Instead, format them using appropriate packages/functions (stargazer, xtable, etc).

## 2 Discussing Results

- After you present any table or figure, begin by describing it. “Table 1 presents/reports ...”, “Figure 1 shows/illustrates ...” etc
- When discussing results, remember to mention the uncertainty associated with them. You can refer to the statistical significance or confidence intervals.
- Once you obtain a  $p$ -value, choose the appropriate level from the following.
  - Significance levels: (10%), 5%, 1%, 0.1%.
  - Confidence levels: (90%), 95%, 99%, 99.9%.

For example, when the  $p$ -value is 0.0005, you can say it is statistically significant at 0.1% (or 0.001) significance level. Alternatively, you can say “A is statistically significant ( $p < 0.001$ ).”

- Common phrases for null results: “we cannot reject the null”, “we fail to reject the null”, “it is not possible to reject the null.”
- Back up your conclusion/interpretation with relevant results. Sometimes I see an R output and a brief phrase “From the output above, we reject the null.” Even when it is clear we should reject the null, refer to the results.
- If you need advice on writing, see <http://fhollenbach.org/WritingAcademic/>.

### 3 Miscellaneous

- Print equations in display mode (latex).
- Round numbers. “0.194” is preferred to “0.193548421”.
- Don’t show R commands, markdown messages, or interim results unless the problem set asks for them. Provide an R file with sufficient annotation so your TA can follow along if s/he needs to.
- All discussions should be in the PDF.
- Avoid substituting values printed on R’s console in the place of objects. When `a <- 1/3`, use the R object “a” to take its square root. Do not substitute 0.333 instead ( $\sqrt{0.333}$  instead of  $\sqrt{a}$ ).