

## ICPSRCD2018

### Assignment 3: the binary regression model

#### Grading guidelines

#### Discrete change

1. For discrete change, do not say “change by .03 percent” or “change by 3%”. Use either “change in probability of .03” or “change of 3 percentage points”. A change of “20%” and “20 percentage points” are only the same if the starting value is 100%, likely never the case in our models. (-3)
2. For centered discrete change note that the change is centered around some value. (-1 to -3)
3. Do not say, “holding constant”; rather say, “holding constant at [xx value]”. (-2)
4. Note that “average white person” or “average on all other characteristics” are ambiguous. Is it a white person who is average on all other variables? Or, a person who is white with the mean computed conditional on being white? These people are only average on the variables in our model. (-0)
5. Chosen discrete change coefficient is inappropriate for variable type. (-2)
6. Confidence interval not included or significance not interpreted. (-1 to -2)

#### Interpretations

7. For Q6: No substantive take-away point/story. (-0)
8. For Q6: if judging significance based only on overlapping confidence intervals, be sure to indicate that this is a *conservative* test of difference. The CI for the difference could indicate significance where the CIs for the individual lines do not. (-1)
9. Describe the magnitude of the effects in the graphs, including CIs. (-3 to -5)
10. Q4 & Q5: Results don't match those in Q3. (-4)

#### Figures

11. Use value labels. (-1)
12. Make sure labels in graphs are substantively clear; don't use default labels. (-1)
13. For dotplot: Y-axis doesn't run from/isn't labeled from 0 to 1 (use option `ylabel(0(0.1)1)` to do this in Stata). (-2)
14. For dotplot: Interpretation has to mention insights about the range, shape, and peaks of the predicted probability plot. Additionally, how do these insights relate to the base probability of your outcome? Finally, if applicable, are there any interesting features about your plot? How do these relate to your variables/covariate patterns? (-0 to -5)
15. For dotplot: Skewed does not equal normal! (-0)
16. Unless all three variables are included in your graph, you should indicate the level of the third [ & other ] variable(s) in your description. (-0)

#### Various

17. How large is a standard deviation? (-2)
18. Categorical variables on the right hand side should be specified as a series of dummy variables; otherwise Stata models it as linear, which is generally incorrect. (-0)
19. Show the output associated with your answer and highlight the numbers used. (-1 to -5)
20. Why say “Respondent's education”? Only do this when you also have data from non-respondents. (-0)
21. Use fixed font when reporting output (`courier new 9 pt font` to match Stata). (-5)
22. Don't include long tables of extraneous output in your log file. (-5)
23. Log files should be clean & free from errors or error messages. To make the most of the Stata interface, when your do-file is robust [running in entirety] & contains only the commands you want, re-run your entire do-file to create new log file. This will be the log file you will want to turn in or 'post' as it will only contain the relevant commands & output. (-0 to -2)
24. B or C are not significant in the base logit model (-2)
25. When interpreting the plot of predicted probabilities (Q6), the discrete changes in predicted probabilities should not be interpreted similarly than coefficients in linear models. In other words, a one unit increase in predicted probabilities of variable C, or the difference in predicted probabilities between B=0 and B=1, will not be the same when C=0, C=1, C=2, etc etc