

Errata for “MPhil Econometrics – Limited Dependent Variables and Selection”

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This document contains errata for my lecture slides. The times and dates given below refer to the *most recent version* of the document that contained the error. Subsequent versions have been corrected.

Version: 2020-01-29 at 12:10:36

- Lecture 1
 - The definition of s_y^2 on slide 20 was incorrect: $(y_i - \bar{y})$ has been corrected to $(y_i - \bar{y})^2$.

Version: 2020-01-28 at 12:10:09 Major errors are **indicated in red** and a “meta-erratum,” i.e. something that I *said* was an error in lecture but is in fact correct, is **indicated in blue**.

- Lecture 1
 - Slide 15: “ θ_o is consistent for θ_o ” has been corrected to “ $\hat{\theta}$ is consistent for θ_o ”
- Lecture 2
 - Slide 2: In the bottom-most displayed equation there is a β . In class I said that this should be a θ but I was wrong. Here θ is being used to indicate a vector of *arbitrary* parameter values while β is being used to indicate a *particular* vector of parameter values: the solution to the population least-squares problem.
 - Slide 4: in the middle displayed equation, $(\mathbf{A} + \mathbf{A}')\mathbf{x}$ has been corrected to $(\mathbf{A} + \mathbf{A}')\mathbf{z}$

- Slide 4: in the bottom-most displayed equation θ has been corrected to β . See my “[meta-erratum](#)” above.
- Slide 5: At the bottom of the slide I wrote that $\log(0)$ equals ∞ . This has been corrected to $-\infty$.
- Slide 7: Just under the heading “Assumption:” I wrote β_o and β . These have been changed to **boldface**: β_o and β .
- Slide 10: In the final displayed equation of the slide $\exp(\mathbf{x}_i\beta)$ has been corrected to $\exp(\mathbf{x}_i'\beta)$
- Slide 15: in the FOC at the bottom of the slide $\{\mathbb{E}[y_i|\mathbf{x}_i] - \exp(\mathbf{x}_i'\beta)\} \beta$ has been corrected to $\{\mathbb{E}[y_i|\mathbf{x}_i] - \exp(\mathbf{x}_i'\beta)\} \mathbf{x}_i$.
- Slide 16: in the FOC at the top of the slide $\{\mathbb{E}[y_i|\mathbf{x}_i] - \exp(\mathbf{x}_i'\beta)\} \beta$ has been corrected to $\{\mathbb{E}[y_i|\mathbf{x}_i] - \exp(\mathbf{x}_i'\beta)\} \mathbf{x}_i$.

Version: 2020-01-26 at 22:50:29 All of these are “minor errors”

- Lecture 1
 - Slide 8: “What parameter value θ_0 ” should be “What parameter value θ_o ”
 - Slide 11: the denominator of the definition of \mathbf{J} at the bottom of the slides contains a ∂^2 that should be simply ∂
 - Slide 13: \mathbf{y} in the definitions of \mathbf{J} and \mathbf{K} should be \mathbf{y}_i to be consistent with the rest of the slide
 - Slide 14: at the bottom of the slide $\hat{\mathbf{J}}^{-1}\mathbf{K}\hat{\mathbf{J}}^{-1}$ should be $\hat{\mathbf{J}}^{-1}\hat{\mathbf{K}}\hat{\mathbf{J}}^{-1}$, i.e. the \mathbf{K} should have a “hat” over it
 - Slide 16: the left hand side of the second to last displayed equation on the slide reads $\mathbb{E} \left[\frac{\partial \log f(\mathbf{y}|\theta_o)}{\partial \theta} \right]'$ but the $'$ should be deleted
 - Slide 21: At the bottom left of the slide y_n should be y_N
 - Slide 21: Two instances of y_n should be y_N