Intro to Beamer - Simple Template & Commands

EPIC RA Orientation

August 21, 2018

Note: Template borrowed from Tom Leinster at the University of Edinburgh, with my further edits

Intro to Beamer

- Beamer is the most popular LaTeX document class for presentations
- Slides in Beamer are organized as "frames"
- As with itemize in regular LaTeX, use "\begin" and "\end", without the quotes of course, to encapsulate any object.
  - e.g. To create a new slide, write "\begin{frame}", then the contents of the frame, then "\end{frame}".
  - We will call any instance "\begin{}" and "\end{}" an environment.
  - Whenever you write the "\begin{}", don't forget "\end{}"!

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Use "\frametitle{}" to create the slide title

Any free text that appears within the frame environment, and outside of the frame title, appears here.

Pause

Write “\pause” to insert stop animation into the slides.

This text darkens after “\pause”

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Itemize

- Itemize and enumerate all work the same way in Beamer as they do in TeX. Just remember to place the "\begin{itemize}" and "\end{itemize}" within the "\begin{frame}" and "\end{frame}".

Equations

Same for equations. Just use "\begin{align}" and "\end{align}" as you otherwise would in TeX.

$$y = \alpha + \beta x + \epsilon.$$

Tables

Tabular environment:

$*$	e	a	b
e	e	a	b
a	a	b	e
b	b	e	a

Array environment:

$*$	e	a	b
e	e	a	b
a	a	b	e
b	b	e	a

The distinction is the latter's use of a math environment. Also, the array allows brackets or parentheses to surround the table.

Reading in a table from another file

Use "\input{path-to-file}".

I recommend this over hard-coded tables in the presentation, to allow for modularity when iterating through analyses. Set up your Stata/R/Python code to write to a TeX file with pre-specified formatting.

	OLS	FE	OLS with industry×year interactions	FE with industry×year interactions
log(COD fees per KG)	−.0606	−.0822**	−.0798**	−.0829**
	(.04)	(.036)	(.038)	(.036)
Year fixed effects	Yes	Yes	Yes	Yes
Province fixed effects	Yes	No	Yes	No
Firm fixed effects	No	Yes	No	Yes
Industry×year interactions	No	No	Yes	Yes
R^2	0.05	0.85	0.20	0.85
Observations	291,821	291,821	291,821	291,821

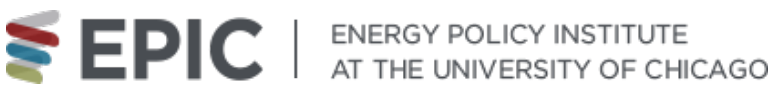
Figures & Graphics

Simply "\includegraphics{path-to-file}".

We recommend using "\centering" within a figure framework for better formatting.

Figures & Graphics

Side-by-side figures:



Figures & Graphics

Stacked side-by-side figures with a figure caption:

Figure: Here are four EPIC logos

Uncovering an Equation in a Derivation

Use "\uncover<1->" within the align environment, replacing the '1' with any natural number to order the uncovering.

$$\zeta = P\left(q_{\frac{\alpha}{2}} SE\left(\bar{x}\right) < \bar{x} - \mu < q_{1-\frac{\alpha}{2}} SE\left(\bar{x}\right)\right),$$

$$= P\left(-q_{\frac{\alpha}{2}} SE\left(\bar{x}\right) > \mu - \bar{x} > -q_{1-\frac{\alpha}{2}} SE\left(\bar{x}\right)\right),$$

$$= P\left(\bar{x} - q_{\frac{\alpha}{2}} SE\left(\bar{x}\right) > \mu > \bar{x} - q_{1-\frac{\alpha}{2}} SE\left(\bar{x}\right)\right).$$

If you wish, add [1em] to the \\ line breaks for more space between the lines.

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$$\begin{aligned}
\zeta &= P\left(q_{\frac{\alpha}{2}} SE\left(\bar{x}\right) < \bar{x} - \mu < q_{1-\frac{\alpha}{2}} SE\left(\bar{x}\right)\right), \\
&= P\left(-q_{\frac{\alpha}{2}} SE\left(\bar{x}\right) > \mu - \bar{x} > -q_{1-\frac{\alpha}{2}} SE\left(\bar{x}\right)\right), \\
&= P\left(\bar{x} - q_{\frac{\alpha}{2}} SE\left(\bar{x}\right) > \mu > \bar{x} - q_{1-\frac{\alpha}{2}} SE\left(\bar{x}\right)\right).
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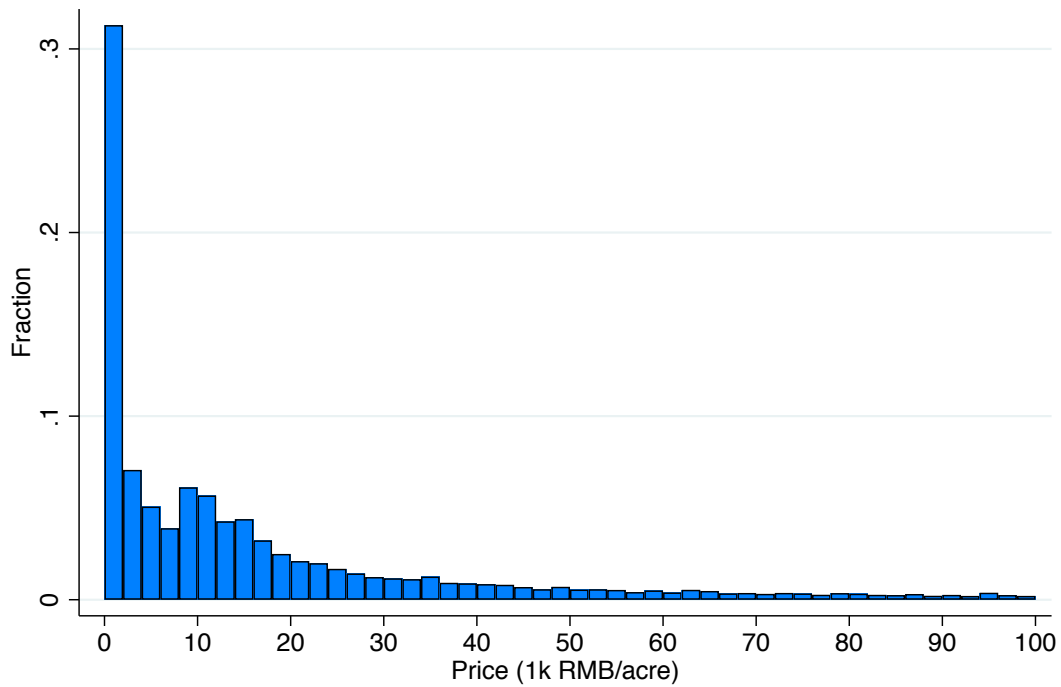
Figures in a loop

Figure: **Censored distribution of land sales' price for corrupt party secretaries)**



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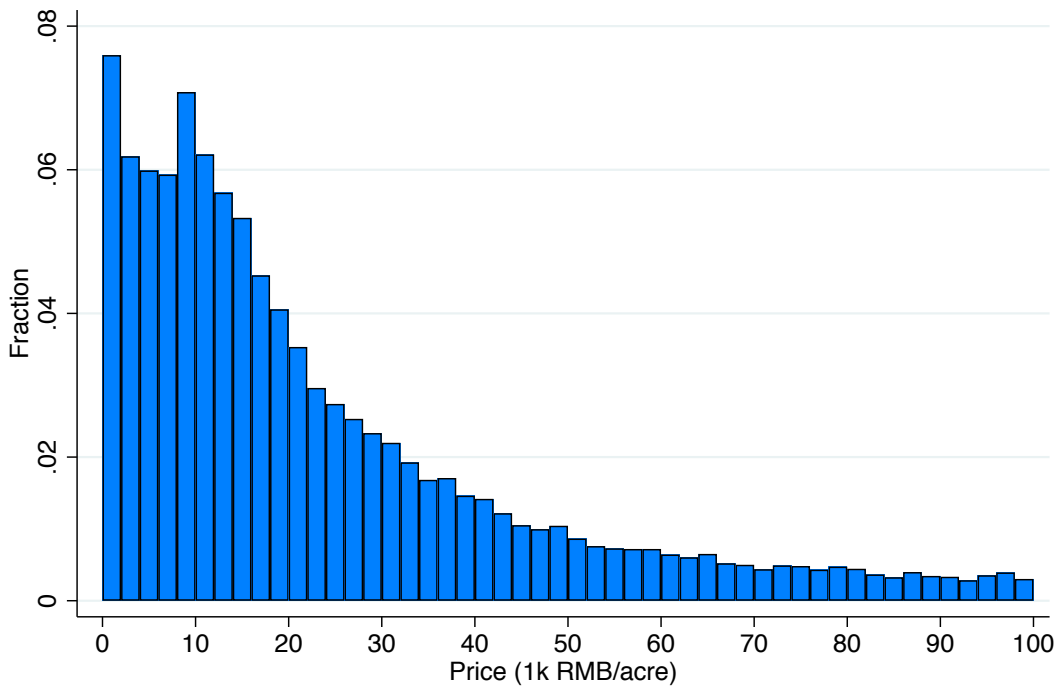

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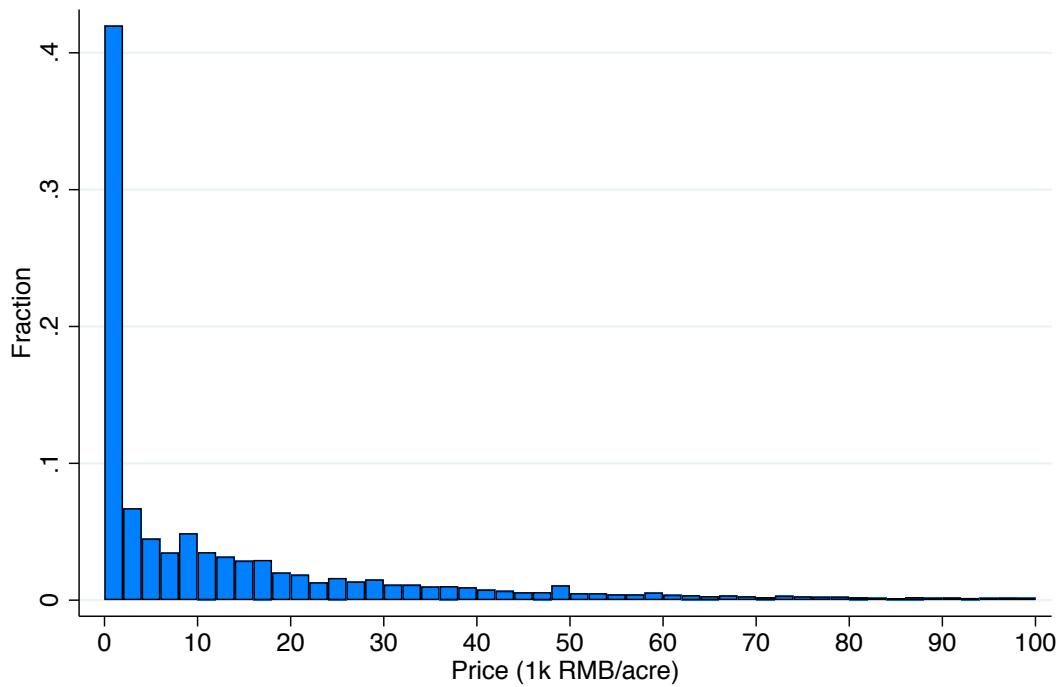
Figure: **Censored distribution of land sales' price for corrupt mayors)**



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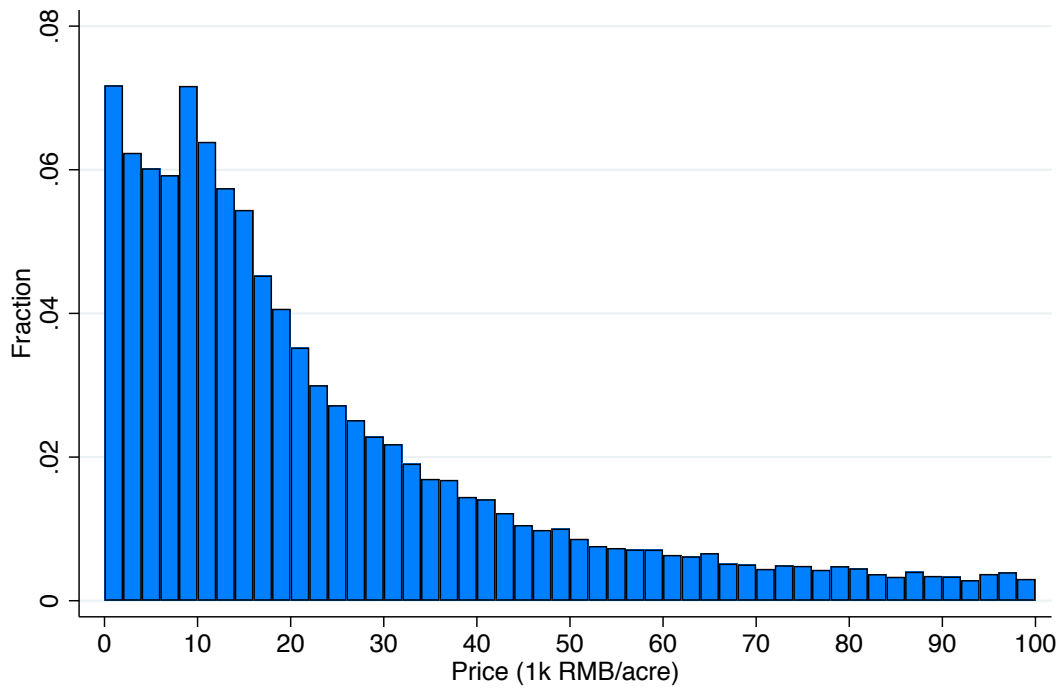

Any questions?