Effective Programming Practices for Economists

Plotting

Goals and Workflow

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Typical Goals of Plotting

1. Summarize data to quickly learn about patterns in data
   - Trends over time
   - Bivariate patterns (scatterplot, regression line)
2. Highlight insights and tell stories
   - Leave out unnecessary information
   - Use accent colors for most interesting points

1. Exploration

- Goal: Find patterns in data
- Making a plot has to be fast!
- Interactivity is important
- Using clear labels always helps

2. Publication

- Goal: Communicate patterns in data/results
- Plot needs to be self-explanatory
- Aesthetics is key
- Papers need static plots

Workflow

1. Think: What question should the plot answer? What type of information should it convey?
2. Sketch the plot on paper
3. Find a similar plot in the documentation of your plotting library
4. Make a quick plot to see if your ideas work
5. Make it pretty
6. Make sure the plot is self-explanatory (ask someone else)