Effective Programming Practices for Economists

Plotting

Goals and Workflow

Janoś Gabler and Hans-Martin von Gaudecker

7/21/2024

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)