Capstone 2

The Presentation – with R

You've got this.

- The broad outline is similar to Capstone 1, but w/ R!
- You will receive two sets of feedback
  - Slide deck submission (optional) → I will mark up one round
  - Project showcase → your groupmates will (kindly) push you to be the best!

Learning objectives

- Apply principles of good data visualization (Cairo Five)
- Apply principles of good design (CRAP) to charts and presentations
- Build confidence and expertise practicing and delivering oral presentations
- Identify and work with economic data from Opportunity Atlas, BLS, WDI, or other sources
- Conduct basic analysis and cleaning to answer a question related to inequality in the US or internationally
- Improve your proficiency with Microsoft PowerPoint and R

Research questions

Pick one of the specific examples

OR

Pick one of the specific examples and tweak slightly

OR

Select one of the broader choices and narrow as you see fit

You can also select an entirely original question, but please run it by me first.

Charts and tables

- At least **three** attractive and informative charts (or maps)
- At least **one** table
- You must make them with data that you find.

More original = more better, but at least one of the charts must be **truly original**. That is, you're presenting existing data in a completely new way

Use of R

1. Analysis should be conducted in R
2. Any charts should be made in R
3. Tables can be made in R ***or*** by exporting/copying R output and formatting with another tool like Excel

You will need to submit an R Markdown document that starts with your raw files and produces your output.

Use of PowerPoint

- Create presentation in MS PowerPoint
- Insert figures from R
  - use `ggsave()` to save as usable image files.
  - A `.png` file will probably be best.
- Insert table(s) from R
  - Get statistics using R, but feel free to use Excel for formatting
  - `knitr::kable()` is an optional way to make tables in R
- **Advanced**: You *can* instead create your presentation within R.
  - I will not provide instruction on this
  - **Basic**: Work within RMarkdown
  - **Fancy**: xarigan() presentations

What is the story you are telling?

You’re not trying to ”sell” us, but there should be an underlying thesis that your evidence supports.

Big idea

1. It must articulate your unique point of view;
2. It must convey what's at stake;
3. It must be a complete sentence

Concluding **sentence** that sums what we've learned from your presentation

Presentation

- Pose your question, and answer it with data
- Target audience: NYTimes readers and friends
- You may want to dig into explanations → this should be driven by data or by outside sources
- Put together a slide deck and present it.
- Presentation must be **six minutes or less**

General presentation structure

Topic	*Estimate*
Background/motivation	1-2 slides
Research question	1 slide
The story	4-6 slides
Big idea	1 slide

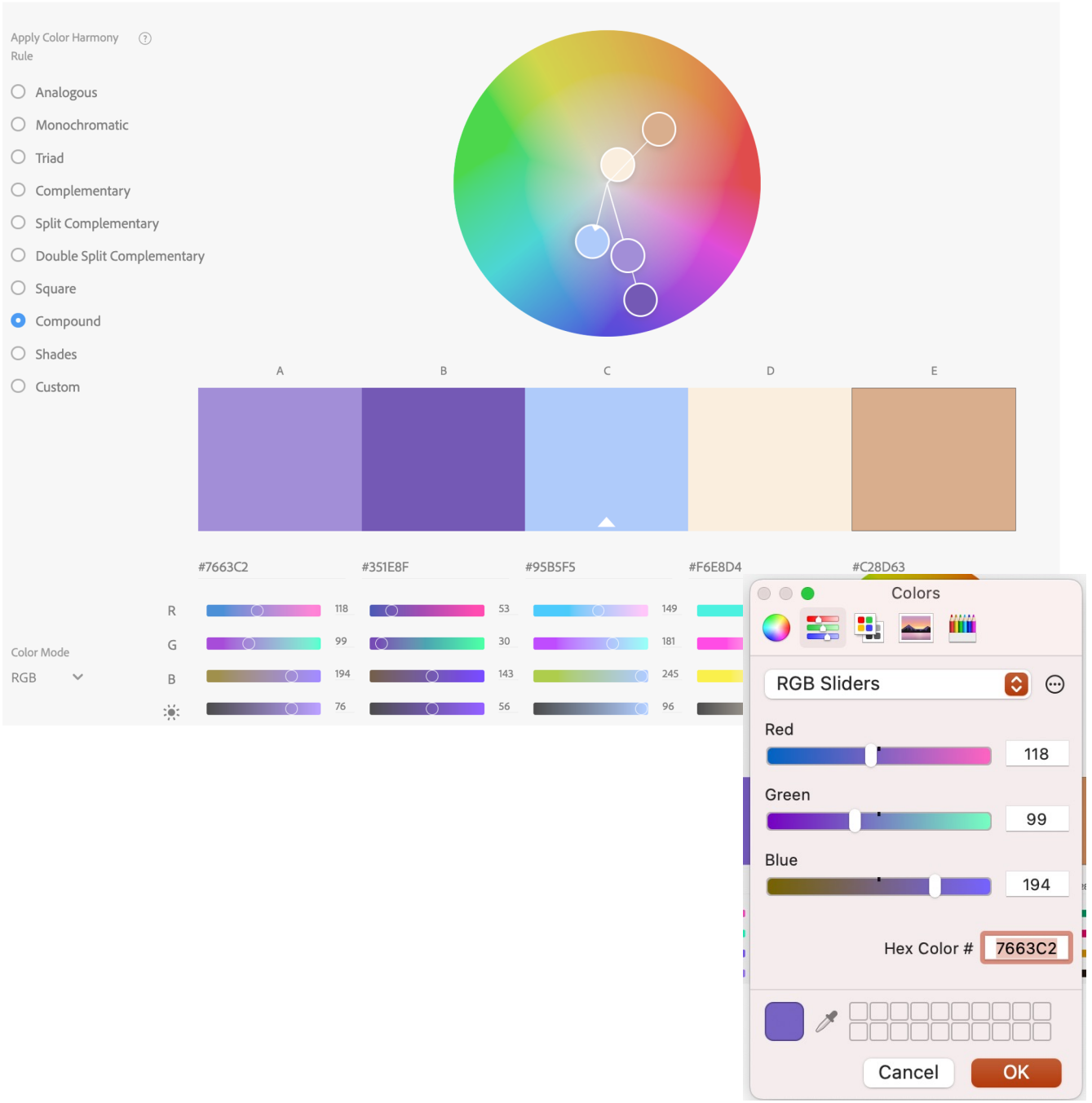
Form matters

1. ~~Use a font family that is not pre-installed on MS Office~~
2. Create a consistent, non-standard color scheme throughout your presentation
3. Use master slides in PowerPoint to ensure common formatting
4. Your charts should be labelled well enough that they stand alone without additional explanation.
   - Include the source in the caption

Form matters

Create a consistent, non-standard color scheme throughout your presentation

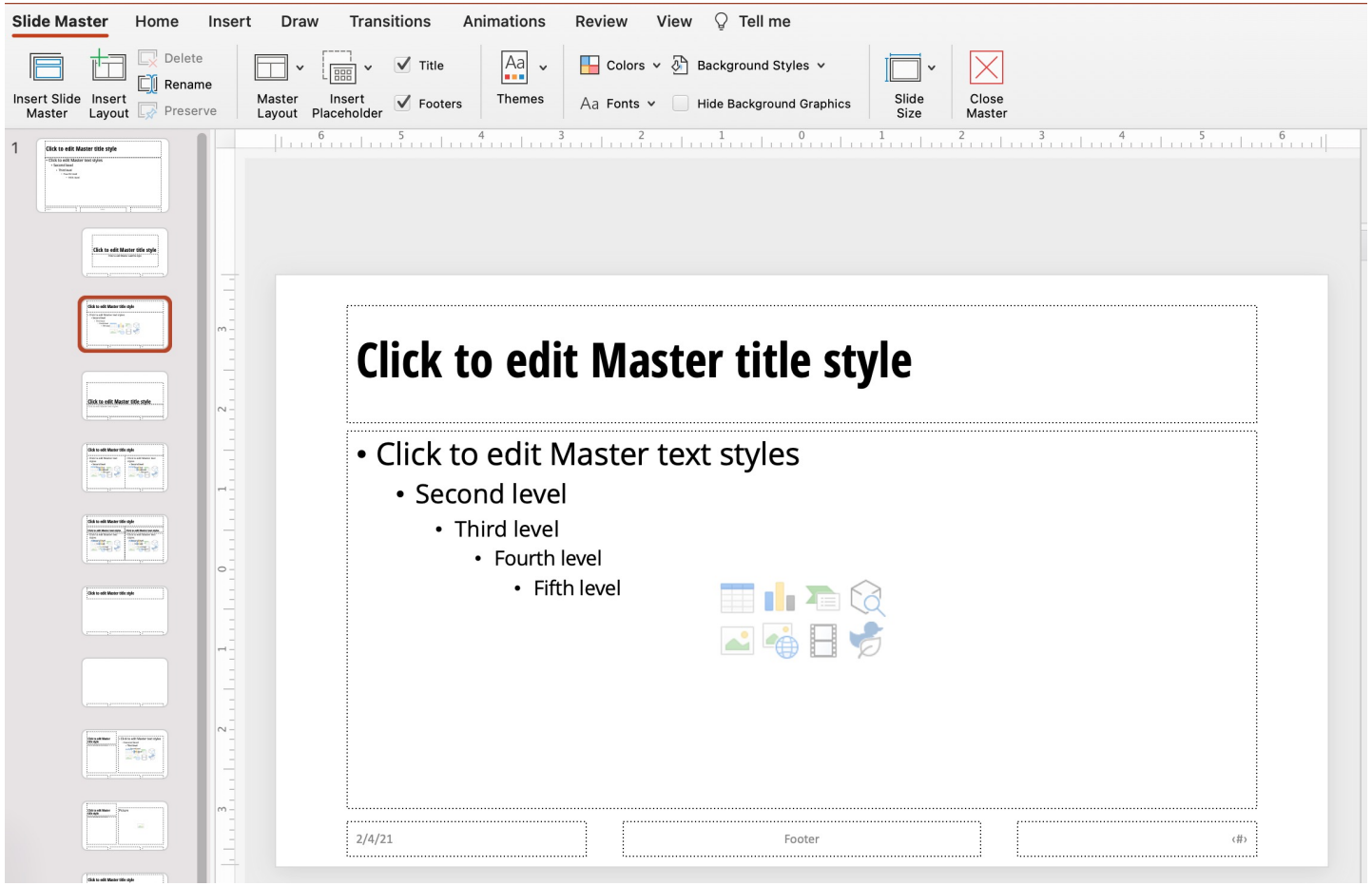
Adobe Color
https://color.adobe.com/



Form matters

Use **master slides** in PowerPoint to ensure common formatting

“Design ideas” can provide inspiration, but **make your own!**



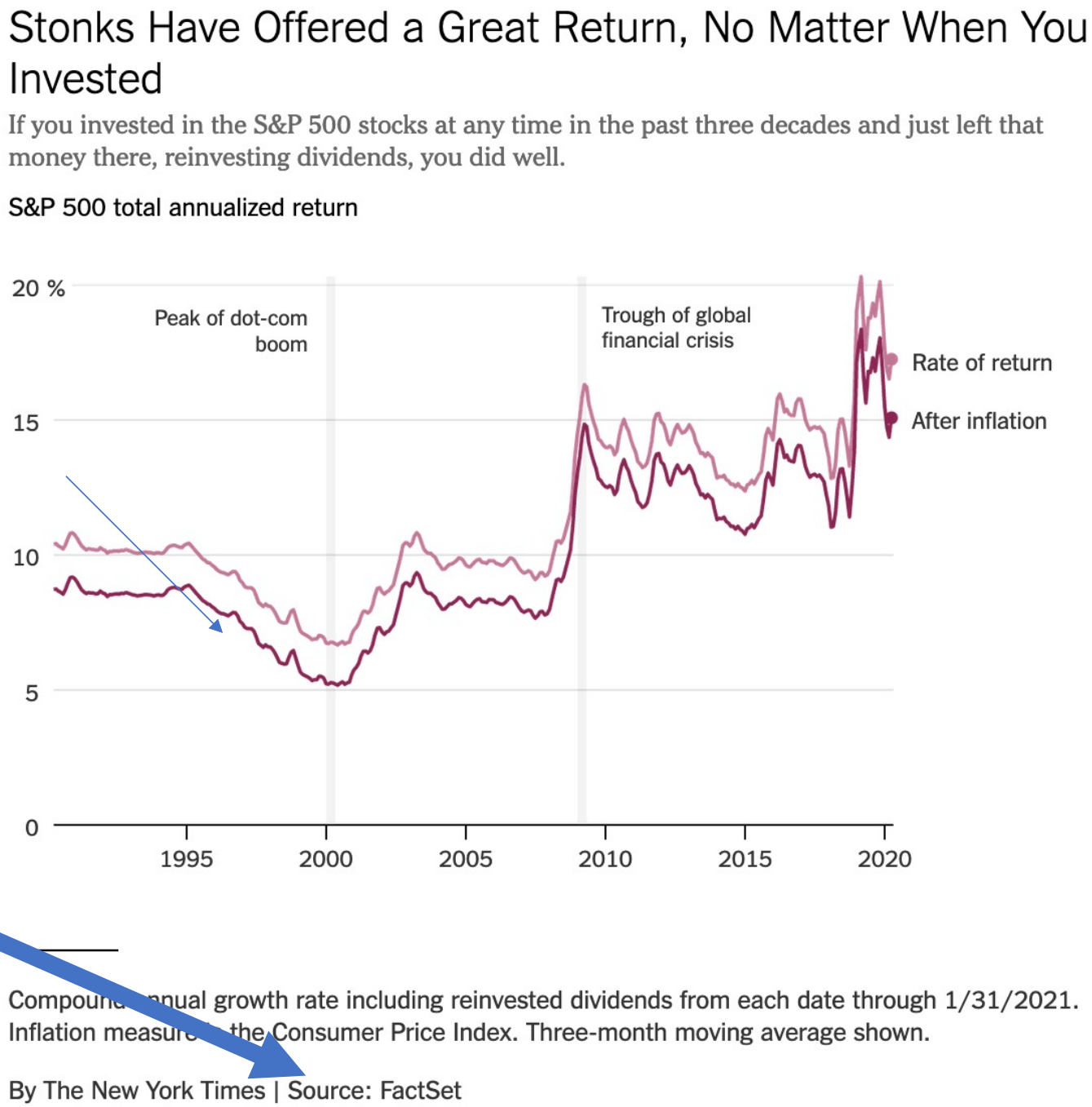
Form matters

Each chart and table should be carefully composed

If a reader was presented with just the table/chart, could they understand it?

Credit the source

As specific as possible (the data series, not the organization)



Reference list

- This will go with your reflection
- This is a proper bibliography
- All data sources + any references (academic or non-academic)

- Use MLA, APA, or Chicago formatting

The Word bibliography tool will betray you.

(Optional) draft submission

Upload a PDF of your slide deck

Draft submission is Option B of Exercise 4

April 18 at 11:59pm

Project showcase

Deliver your presentation (live) to your groupmates

Groupmates provide constructive suggestions

April 20, in-class

Final presentation

- Record yourself delivering your presentation
- Must be **six minutes or less**
- Camera encouraged, but optional
- Easiest way is to record yourself on MS Teams
- Don’t bother with video editing, but delivery should be smooth
- Upload video to Microsoft Streaming, make sure I have permission

Capstone reflection and bibliography

"Reflection" probably isn't quite right. Maybe more like a readme file? I want the **behind-the-scenes** take on your process.

- Tell me a bit about your process – what key decisions did you make? What inspirations did you use?
- How did you apply the principles of CRAP?
- For your charts, how did you apply Cairo's qualities of great visualizations?

Bibliography **Write in your R Markdown file**

Deliverables

1. Slide deck as a PDF
2. Slide deck as .pptx
3. Knit output file (pdf/html/docx) that contains:
   - All code for all analysis
   - Capstone reflection with bibliography
   - Link to your video presentation
4. Data
   - Using a package: Skip this step, as you will call the data in your code!
   - Importing data: Include the raw .xlxs or .csv file
     - If it is fairly big - zip it first, is it better?
     - If it is massive – use UVM FileTransfer and/or e-mail me

Due April 25, 11:59pm

Have fun!