

# Intro to Social Science Data Analysis

## Seminar 6: Data Visualisation in R

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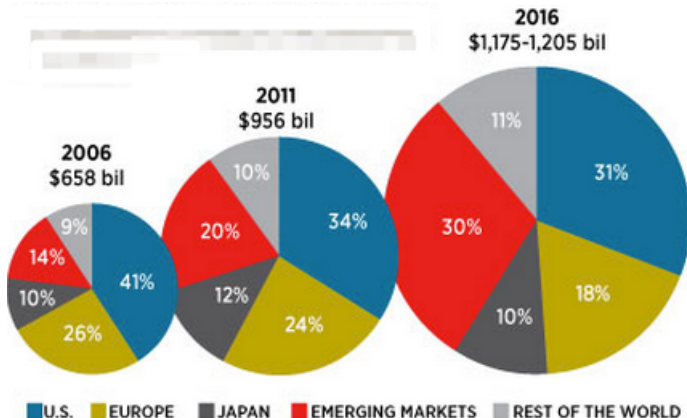
October 11, 2012

# Principles of Graphical Excellence

What does it mean to “show the data”?

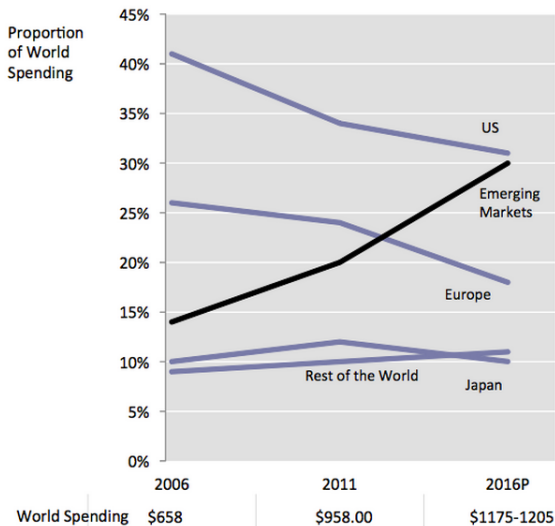
What is a high data-ink ratio?

What's the story? How well does the graph help you see it?  
How could it be better?



SOURCE: IMS INSTITUTE FOR HEALTHCARE INFORMATICS.

# Better



Source: [http://junkcharts.typepad.com/junk\\_charts/2012/10/expanding-circles-of-error.html](http://junkcharts.typepad.com/junk_charts/2012/10/expanding-circles-of-error.html)

## Base R Graphics

Make a graph in base R (using any data).

Make sure the figure is labeled well.

# ggplot2

With ggplot2 make:

- ▶ A scatter plot,
- ▶ A density plot
- ▶ A line graph
- ▶ A bar graph

Use colour to show groups in your data in at least one of these graphs.

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# Maps

Make a map with googleVis.

## Assignment 2

**Due:** Friday 19 October

**Describe** at least **3** variables in a data set.

You need to select a **range of descriptive statistical tools**. The tools should include both **numerical descriptive statistics** and **graphics**.

These tools should describe the variables':

- ▶ central tendency,
- ▶ variation,
- ▶ their relationships with the other variables.

The descriptions need to be discussed **in paragraph form**.

The description must be **reproducible**. So you should email me the link to a Dropbox folder with:

- ▶ the .csv data set,
- ▶ the .Rmd R markdown file,
- ▶ the final .html file.