Empirical Project

- Let's walk through the basics the empirical project
- It's due November 30th at 5pm
- All of the details are posted on Blackboard, please read them over
- As with the referee reports, you are welcome to stop by office hours and ask me questions as you work on the project or ask me questions via email

Empirical Project Basics

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The basic goal of the empirical project is to learn how to find, interpret and effectively present different forms of economic data. In particular, you will be producing a series of comparisons between the Great Depression and the COVID pandemic. One goal is for you to make meaningful connections between the two downturns, exploring their similarities and differences. A second equally important goal is to get good and finding data, working with it and conveying the resulting information to others.

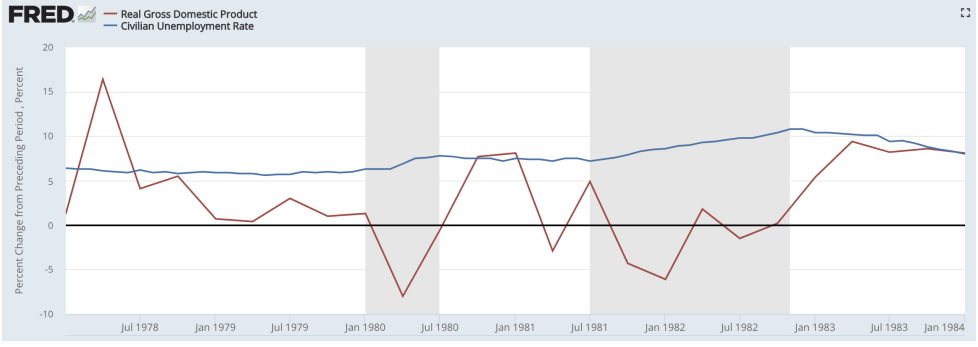
What You Need to Do

- You will be preparing and submitting a single pdf document containing a mix of figures and written discussion
- The project should be submitted to me by email by 5pm on November 30th
- It is graded out of 20 points, one point will be deducted for late projects, with an additional point deduction for every 48 hours that passes (capped at 5 points)
- No assignments will be accepted after the last day of final exams (December 19th)
- There are six specific components you need to include in your project. Let's walk through each one:

What You Need to Do

1. Before you can really compare the two events, it is necessary to decide when each one began and when it ended. There are a variety of ways to define the start and end of any economic downturn. The key here is that you should apply the same approach to both events in order to make meaningful comparisons. Come up with a set of data-based criteria that can be applied to determine the start and end dates of an economic downturn. You only need to determine the start and end dates in terms of year (not quarter, month or day). In one paragraph, explain the reasoning behind your chosen criteria and provide the beginning and end dates of each downturn based on your criteria. Note that depending on how you are defining the end of the downturn, you may not have an end date for the COVID downturn yet. If this is the case, explain what criteria must be met to declare it over in the future.

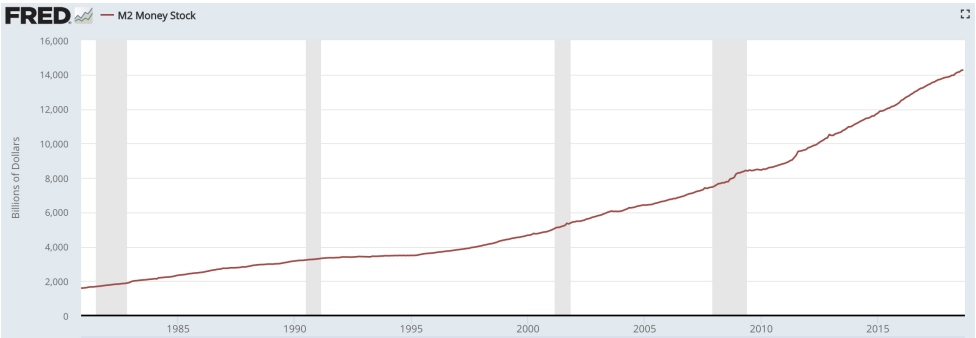
An Good and Bad Example



What You Need to Do

2. Create a single graph that compares the scale of the economic downturns during the Great Depression and the COVID pandemic. The variable you focus on and the type of figure you create is entirely up to you. Choose a variable that allows for meaningful comparisons across the two events and a figure design that most effectively conveys similarities or differences to the reader. Provide one paragraph justifying your choice of variables and a second paragraph interpreting the graph.

A (Bad) Example

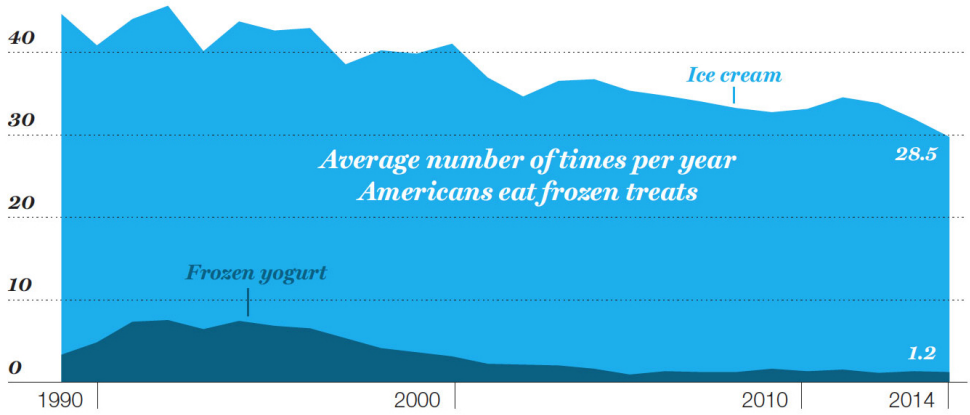


What's wrong with this figure? So many things.

What You Need to Do

3. Create a graph that compares the standard of living for the typical consumer or worker during the Great Depression and the COVID pandemic. Here your choice of variable is up to you but your graph should have your measure of the standard of living on the vertical axis and time on the horizontal axis. Note that you still have quite a bit of flexibility with how you use those axes (what time range to choose, what units to use for both axes, normalizations, etc.). Once again, your goal is to present the data in the most effective way possible. Provide one paragraph explaining why your chosen variable is the best available proxy for the typical standard of living and a second paragraph interpreting the graph. *(Note: you must use a different variable than the variable you used in Part 2.)*

Another (Bad) Example



What You Need to Do

4. Create a figure that shows the geographic variation in both economic downturns across the United States (note that this could be a figure with two different panels if you think that is more effective than a single-panel figure). The level of geography you choose (regions, states, commuting zones, etc.) is up to you but whatever you choose, your figure must capture experiences across the entire United States. The variables you choose to capture the impacts of the downturn are also up to you. Provide one paragraph interpreting your figure and presenting a potential explanation for any key patterns you identify. Note that this explanation can be pure (but logical) speculation on your part; I am not expecting you to turn to the academic literature to come up with or confirm your hypothesis.

A Delightfully Bad Map

https://twitter.com/TerribleMaps

What You Need to Do

5. Identify one major piece of federal legislation aimed at aiding recovery from the economic downturn for the Great Depression and one for the COVID pandemic. In two to three sentences for each, describe the main features of the legislation. In an additional two to three sentences, explain whether the two pieces of legislation represent a similar approach by the federal government to both downturns or different approaches.

A Non-US Example

What You Need to Do

6. Find two contemporary quotes from each economic downturn (four in total), one representing the general attitudes of workers or consumers to the downturn and one representing the general attitudes of manufacturing firms or other corporations to the downturn. These quotes can come from op-eds, political platforms, interviews, speeches or a variety of other sources. In addition to the quotes, include one paragraph based on your quotes explaining how attitudes toward the downturns differed between the Great Depression and the pandemic. Note that these quotes should come from individuals living through the downturns, even if they are speaking retrospectively at a later date. These should not be quotes from historians or other academics offering their interpretation of what people were thinking at the time.

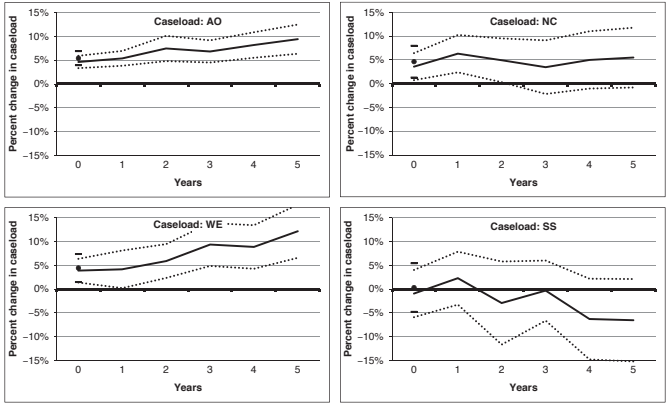
A Non-US Example, Continued

A Few Extra Tips

- The empirical project guidelines posted on Blackboard have all of these details and more
- Look at the guidelines for some helpful links to get you started (we'll look at a couple right now)
- One important thing to keep in mind is that I expect you to create your own graphs (don't copy and paste or grab graphs straight from FRED)
- When making graphs, make certain they are as clear and effective as possible
- Do as I say, not as I do (many a bad graph makes it into lecture)
- Let's wrap up by looking at Schwabish's 'An Economist's Guide to Visualizing Data' and then a few of the recommended data sources

Schwabish (2014)

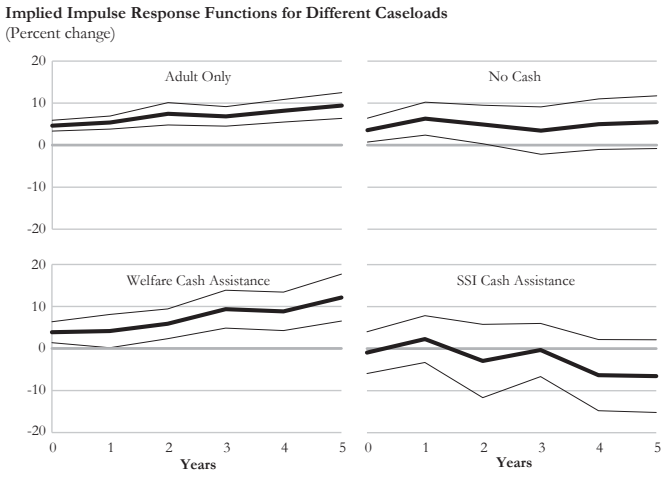
Figure 1A
An Original Line Chart



Source: Klerman and Danielson (2011).

Schwabish (2014)

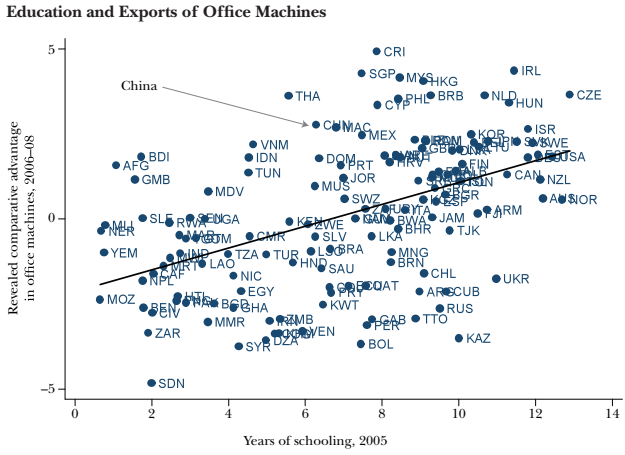
Figure 1B
A Revised Line Chart



Schwabish (2014)

Figure 2A

A Clutterplot Example

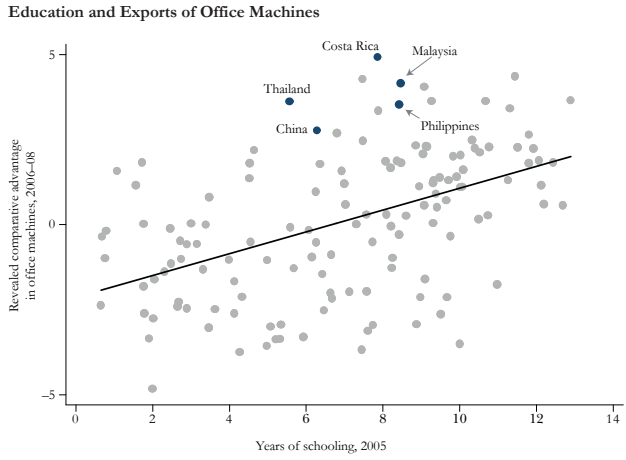


Source: Hanson (2012).

Schwabish (2014)

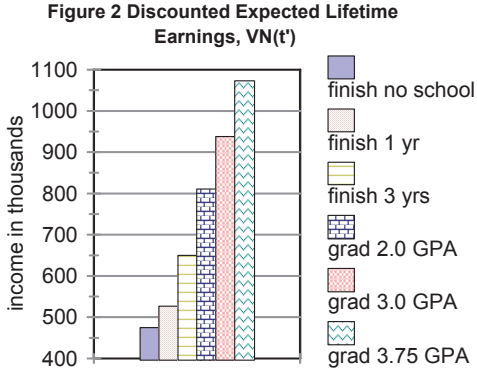
Figure 2B

Revising the Clutterplot Example



Schwabish (2014)

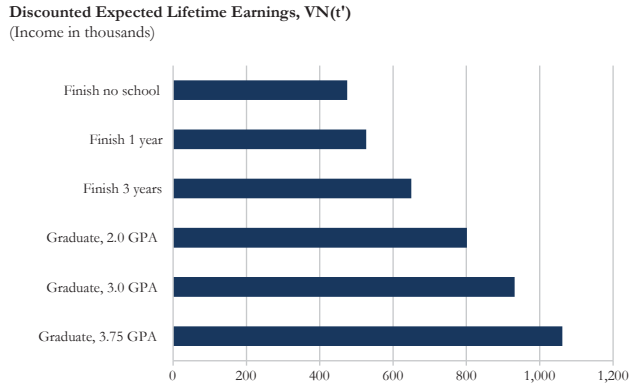
Figure 3A
The Basic Column Chart



Source: Stinebrickner and Stinebrickner (2013).

Schwabish (2014)

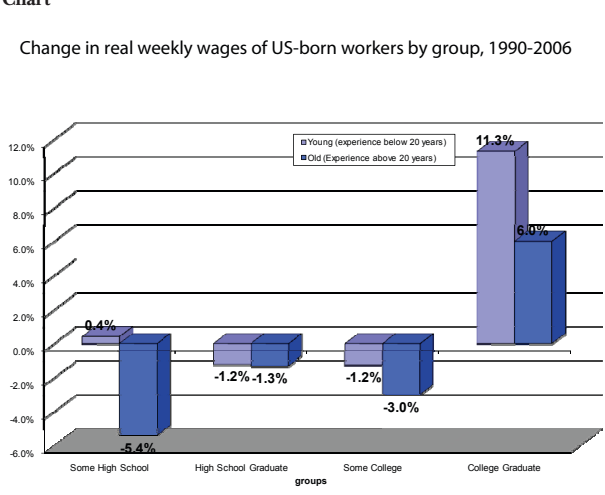
Figure 3B
The Revised Column Chart



Source: Author's calculations using numbers inferred from text in Stinebrickner and Stinebrickner (2013).

Schwabish (2014)

Figure 4A
A 3D Chart

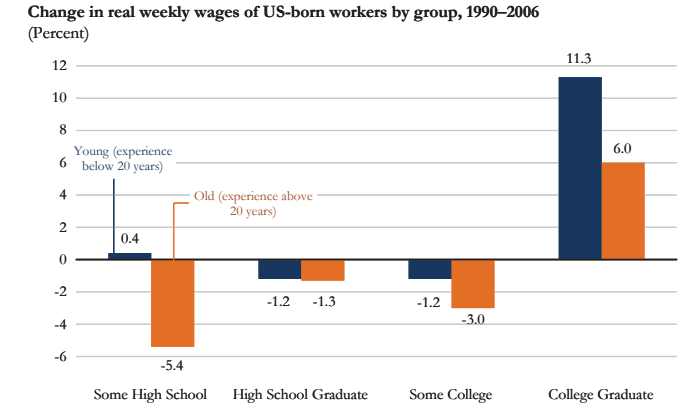


Source: Ottaviano and Peri (2008).

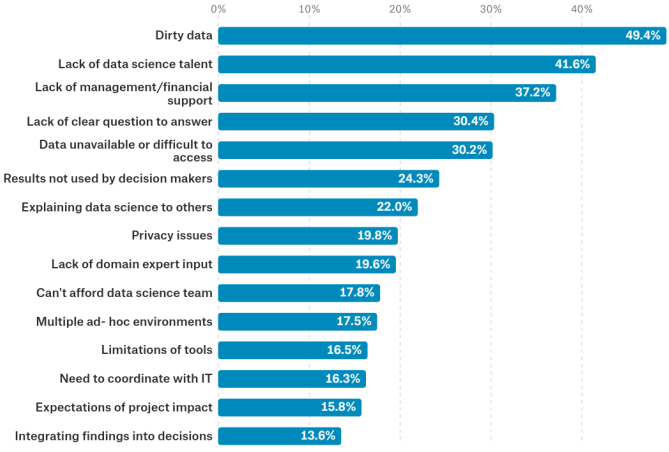
Schwabish (2014)

Figure 4B

Flattening a 3D Chart



A Junk Charts Example



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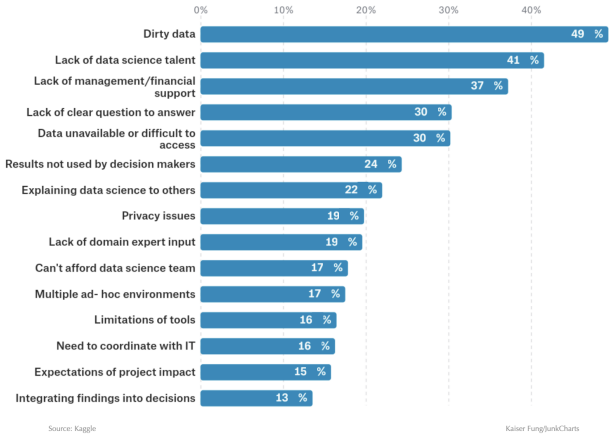

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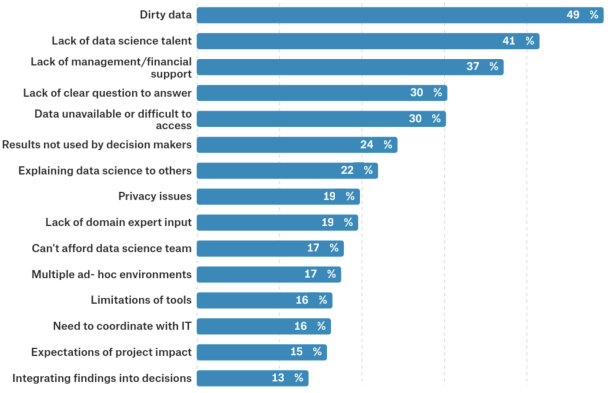

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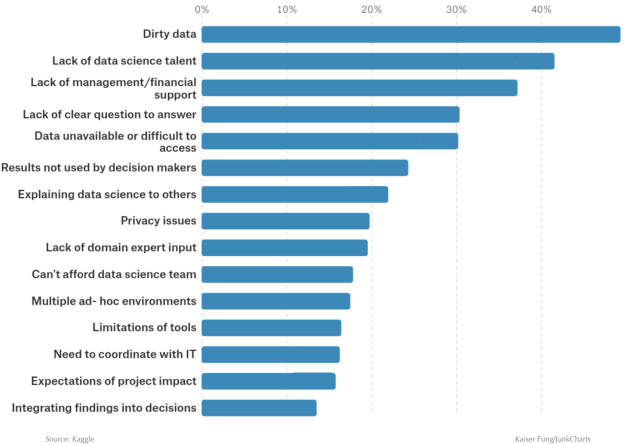
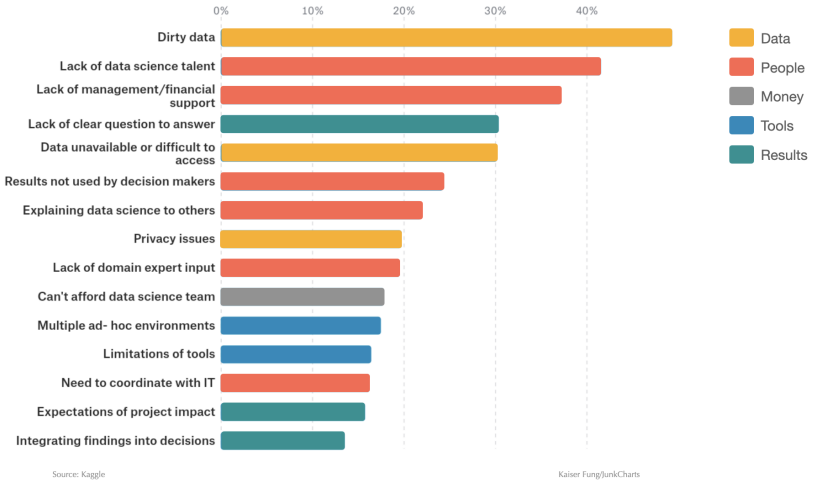
A Junk Charts Example