

Comments on:  
"Accounting for the widening mortality gap  
between American adults with and without a BA"  
by Anne Case and Angus Deaton

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# This is a great paper with many strengths

1. The topic is of great interest, not just to an audience like BPEA's but to the general public.
2. The paper is extremely thorough and detailed.
3. All of the methods are clearly explained.
4. The figures are transparent.
5. The authors anticipate many concerns that readers might have. These concerns are largely already addressed in the paper.

# Strengths, continued

1. There is real novelty to the use of death certificate data on which educational attainment is reported for some people in some years.
2. There are advantages to the use of death certificate data, as opposed to survey data.
  - When available, it is much more comprehensive.
  - Death is a strictly bad outcome.
  - There is a lot of knowledge to be gained from the cause of death and age at death.

# Yet more strengths

1. There are many results in the paper that are just plain interesting and probably not well known. Given the authors' previous work, we could anticipate that the mortality gap between BAs and non-BAs would be associated with deaths of despair. However, many of us probably did not anticipate that the mortality gap was widening partly due to health problems, such as breast cancer, that have been substantially remedied, with the remedies disproportionately benefitting people with BAs.
2. In fact the widening mortality gap is associated with causes that are:
  - falling for both groups (cancer, cardiovascular disease)
  - rising for both groups (deaths of despair, respiratory diseases, Alzheimers)
  - falling for the better educated group and rising for the less educated group (alcoholic liver disease, diabetes).

# My main concern: causality or selection?

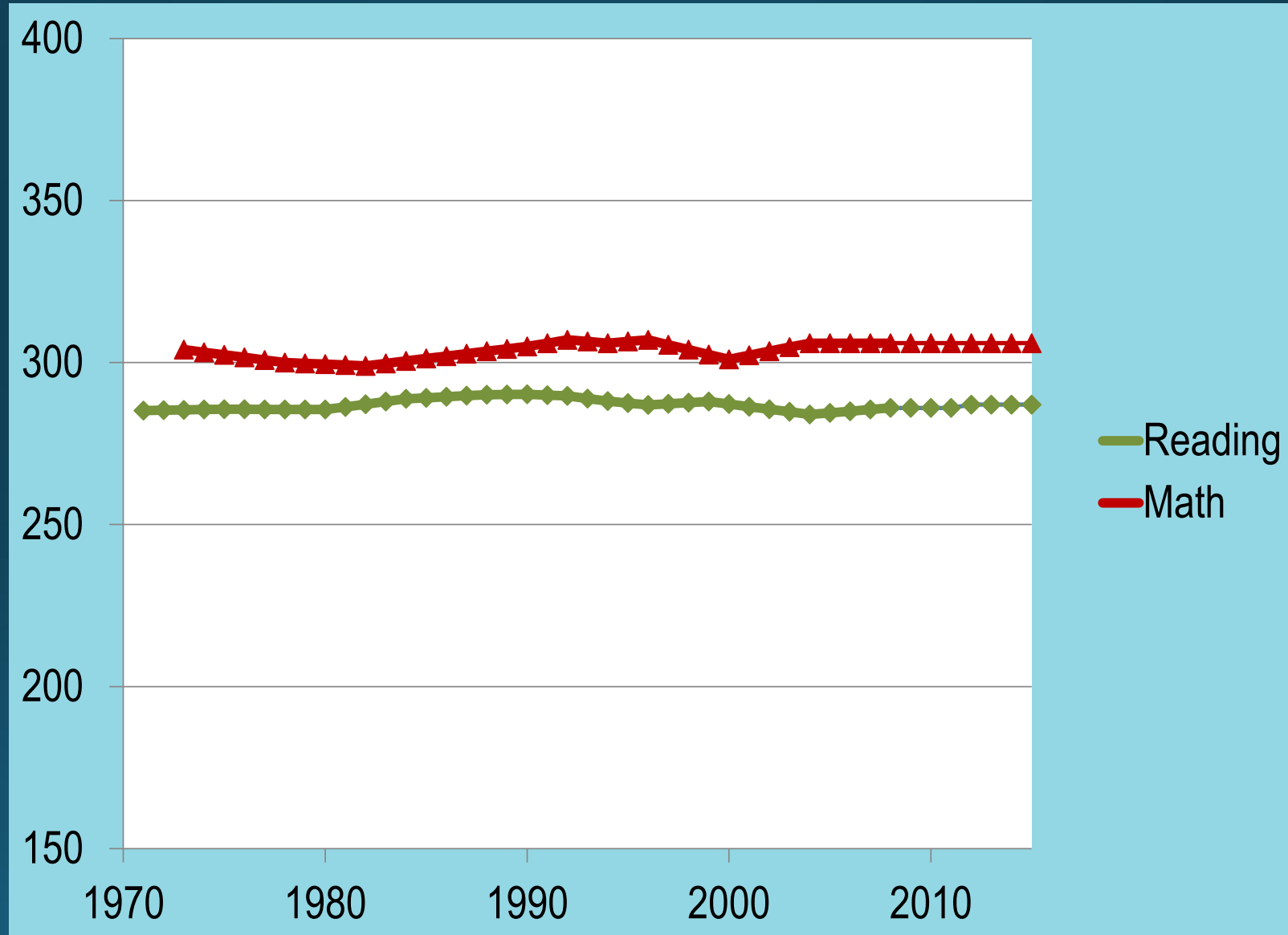
- *This matters.* The interpretation and implications of the results depend completely on the degree to which the widening mortality gap is *caused* by changes in health-related behaviors, changes in access to medical care, etc.
- As opposed to selection—i.e. the non-BA population are more and more negatively selected but are not experiencing such causal changes.

# Causality or selection?

*I find it entirely plausible that selection accounts for most or even all of the widening mortality gap.*

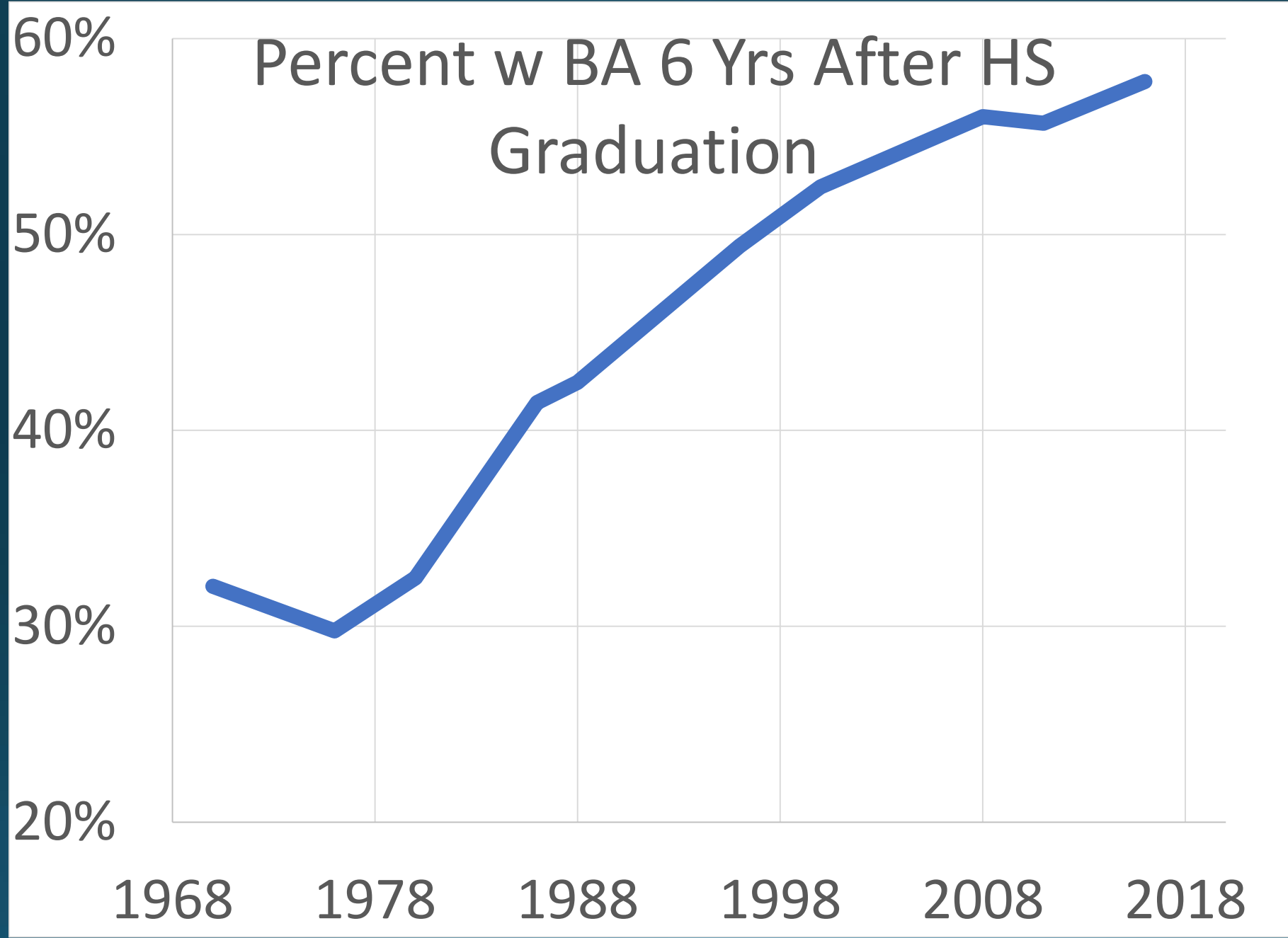
1. Measures of achievement have not risen among 12 graders and other high school students for essentially the entire period since we started to measure them in a consistent way (i.e. since the early 1970s).
2. However, the share who obtain a BA degree has increased quite dramatically over the same period.

# Reading and Math scores of 17-year olds



Long Term Trend  
National  
Assessment of  
Educational  
Progress. 2012 is  
the most recent  
year.

# Percent w BA 6 Yrs After HS Graduation



Source:  
Digest of  
Education  
Statistics



# An NLSY exercise shows that non-BAs *are* increasingly negatively selected

While we can construct theoretical cases where increasingly negative selection into being a non-BA is neutral for the mortality gap or even reduces the mortality gap, those cases are improbable and not what would worry us, given the results.

A comparison between the NLSY79 and NLSY97 shows that the distribution of ASVAB percentiles of non-BAs is shifted to the left for 97 vis-à-vis 79.

The main test for selection in this paper is examining changes in education-mortality gaps within each birth cohort. But, this test rests on the assumption that education levels are fixed once education is completed. The authors mainly focus on 25 as a completion age. Age 25 is not reasonable given actual patterns of BA completion in the U.S.

The authors discuss some hypotheses that might explain why people are getting BAs after the age of 25 *increasingly with each cohort*.

They are missing an important explanation though. Most of the growth in BA attainment has been at non-selective, often for-profit, often online schools like University of Phoenix or Walden University. The average age of students at these schools is 35. They are often trying to finish a disrupted undergraduate career.

They may not be highest achievers, but they do need to be motivated and self-disciplined to complete a BA this way

# The COVID Years of 2020 and 2021

- I do not find the evidence for the Covid years, 2020 and 2021, to be informative because non-BAs were much more likely to have had a job in which they had to continue to make physical contact with other people.
- Moreover, Covid deaths were understated because a person could die of complications from Covid and not have Covid written as the cause of death on the death certificate.
- I think that we are more interested in accounts for the longer trends. For my taste, 2020 and 2021 are simply too anomalous.

# Percent teleworking during Covid, by educational attainment

<b>Less than a high school diploma</b>	<b>3.3</b>
<b>High school graduate, no college</b>	<b>8.8</b>
<b>Some college, associate's degree</b>	<b>16.9</b>
<b>Bachelor's degree only</b>	<b>40.6</b>
<b>Advanced degree</b>	<b>54.4</b>

# Percent teleworking is explained by suitability of the job

	In a Suitable job for teleworking
<b>Less than a high school diploma</b>	10.2%
<b>High school graduate, no college</b>	25.8%
<b>Some college, associate's degree</b>	40.3%
<b>Bachelor's degree only</b>	63.4%
<b>Advanced degree</b>	71.3%

# Minor Concerns

- Using the geographic richness of the data might help with causal identification because states differ in their postsecondary systems.
- I would have liked to learn more about who typically reports educational attainment for death certificates because we need to assess whether there is not merely measurement error but bias in the measures.
- I do not see why one would prefer the BA/non-BA to more continuous measures of cognition, achievement or attainment. The typical death certificate contains several categories of attainment if it asks at all.
- It is useful to distinguish between changes over time that are likely due to behavior that people themselves control (e.g. smoking, taking drugs) and changes that are likely due to advances in medicine beyond any individual's control (e.g. better treatment of cancer).

Thank you for an important and comprehensive paper.

Everyone here should give it a thoughtful reading.