

“Mortality and Morbidity in the 21st Century”
By Anne Case and Angus Deaton

David Cutler
Harvard University

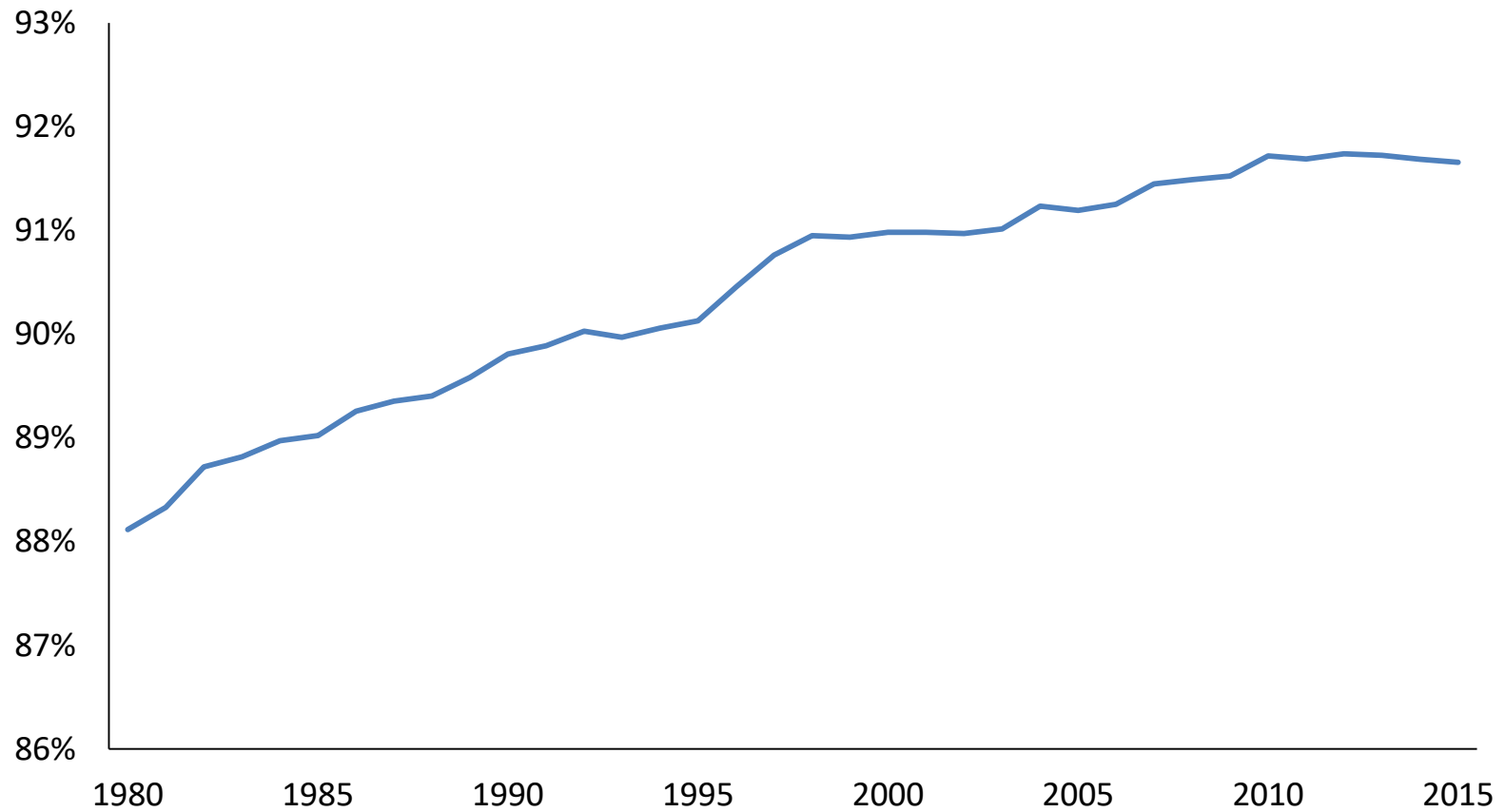
One of the most important epidemiological and economic facts of our time

- Rising mortality for non-Hispanic whites
 - Especially prime age, lower SES
 - Absolute, and in relationship to other countries.
- Change has occurred over a long period of time
- Implications for Medicare, Medicaid, Social Security, DI, and other policies
 - Is now the right time to take away health insurance coverage from low income whites?

A few points

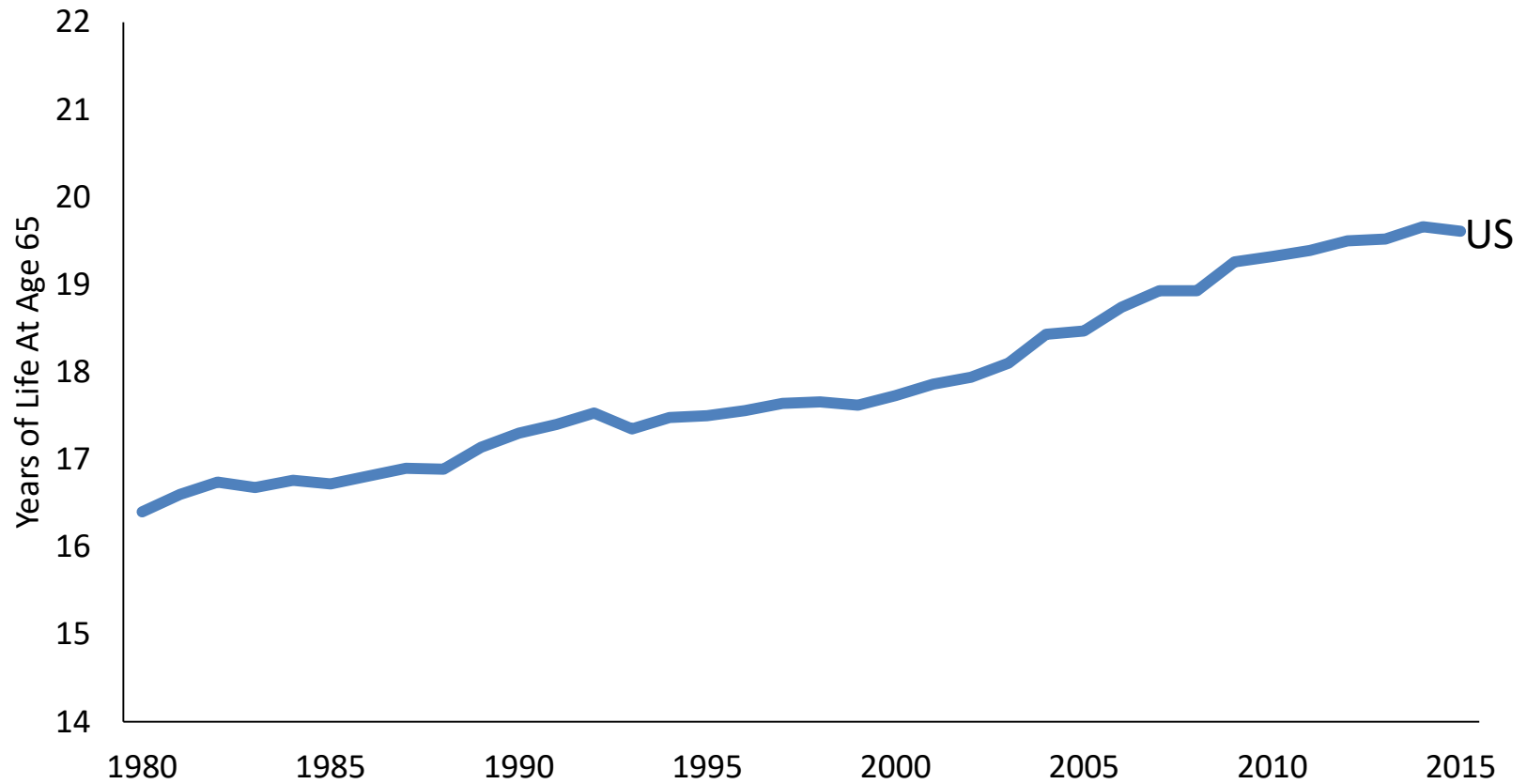
- The effect is much greater for the working age population.
- The Durkheim theory of deaths: performance relative to expectations. Hard to tell.
- The ability to translate pain into death has accelerated.

Share of People Surviving from 40 to 60



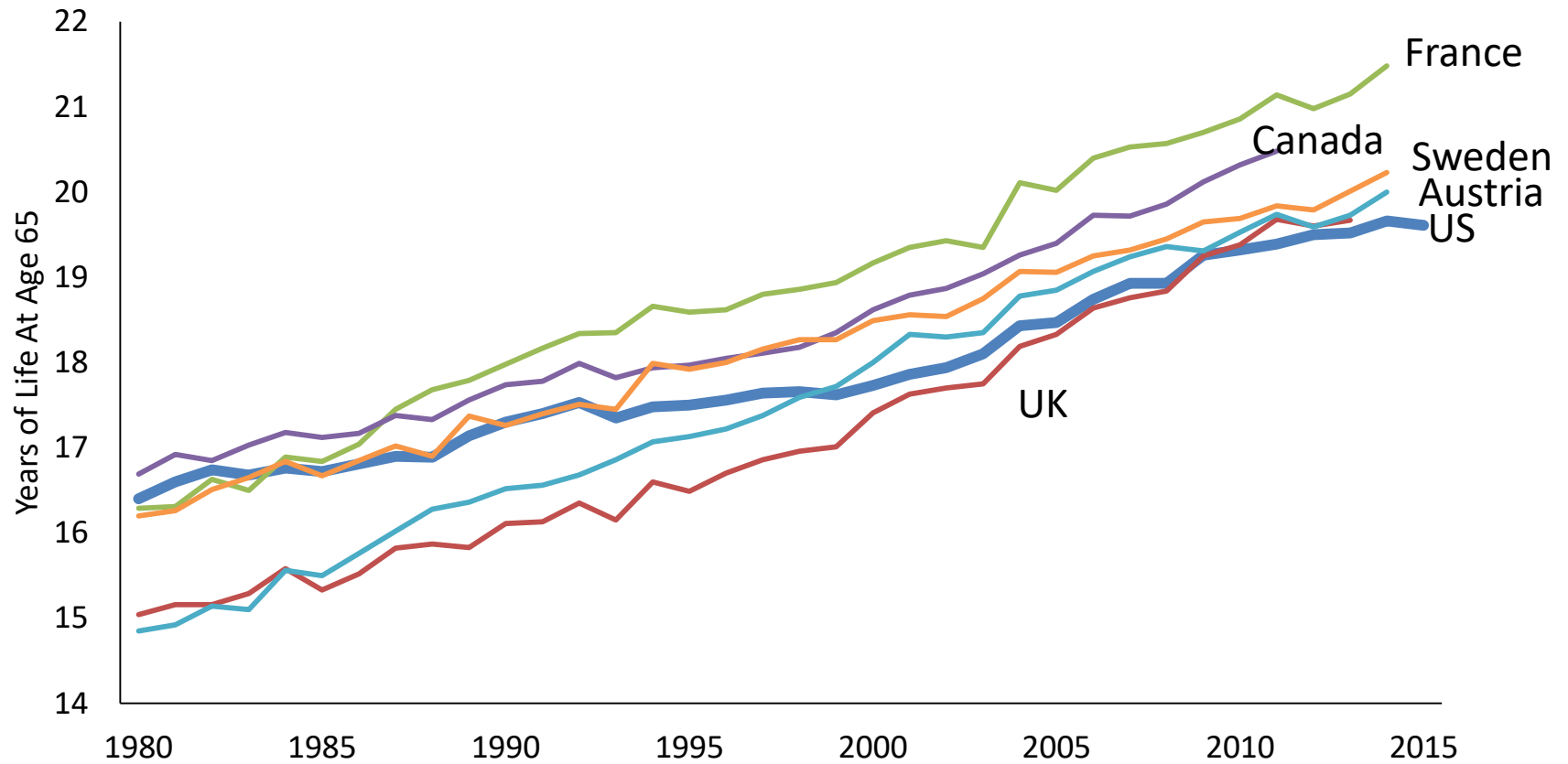
International Comparison of Life Expectancy at Age 65

Life Expectancy for Entire Population



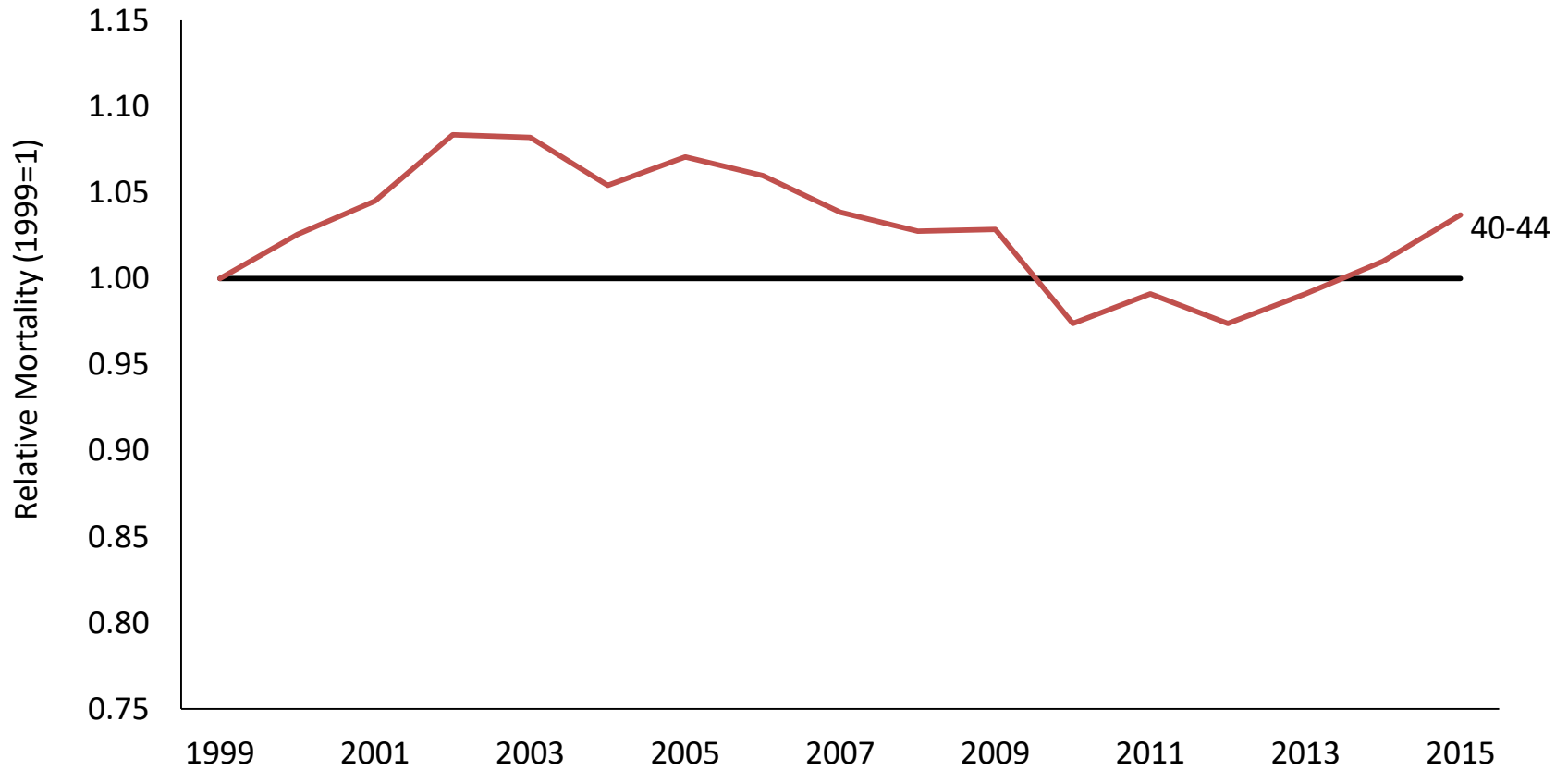
International Comparison of Life Expectancy at Age 65

Life Expectancy for Entire Population



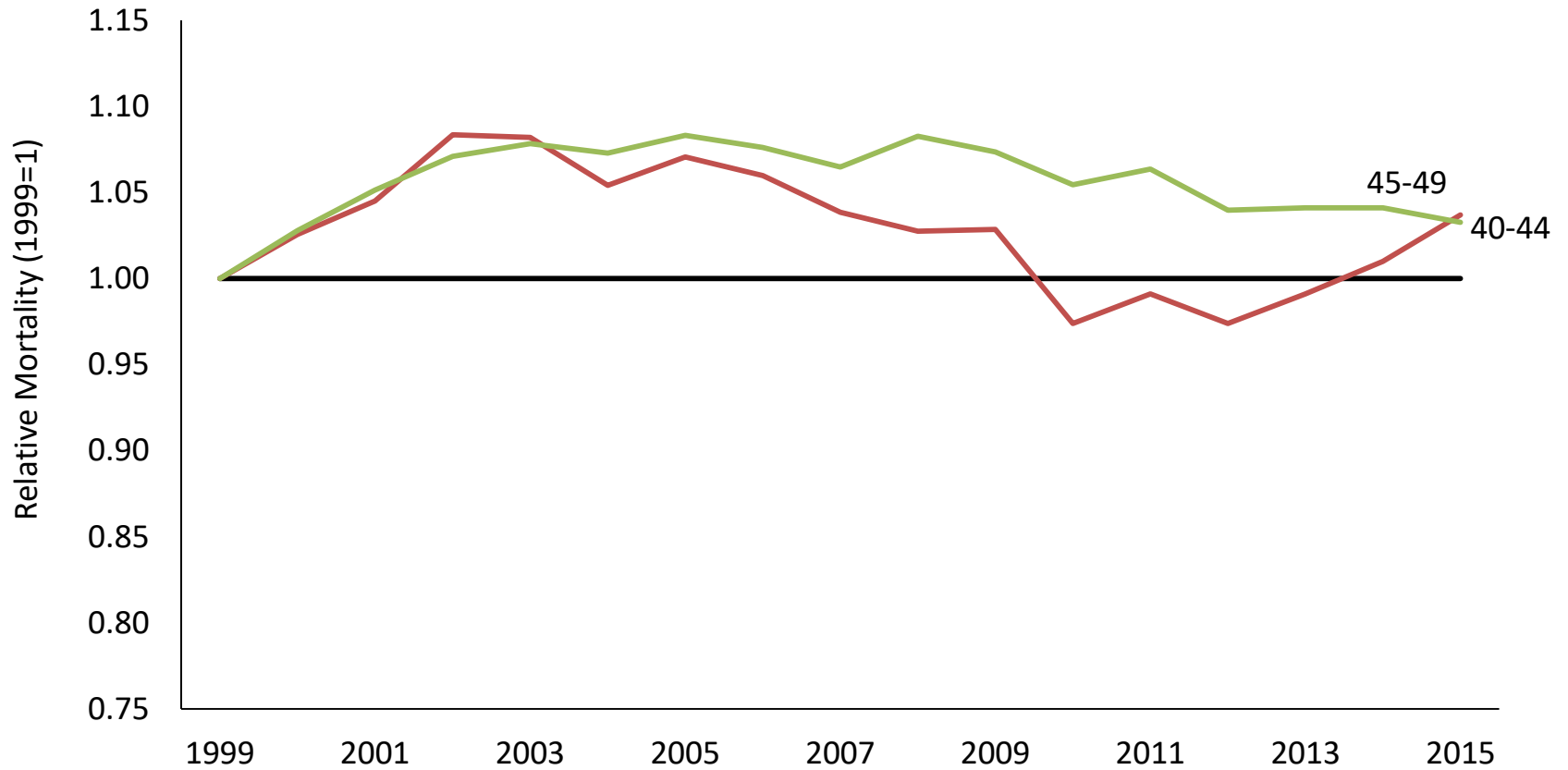
Cohort or Year Effects?

Relative Mortality by Cohort, Non-Hispanic Whites



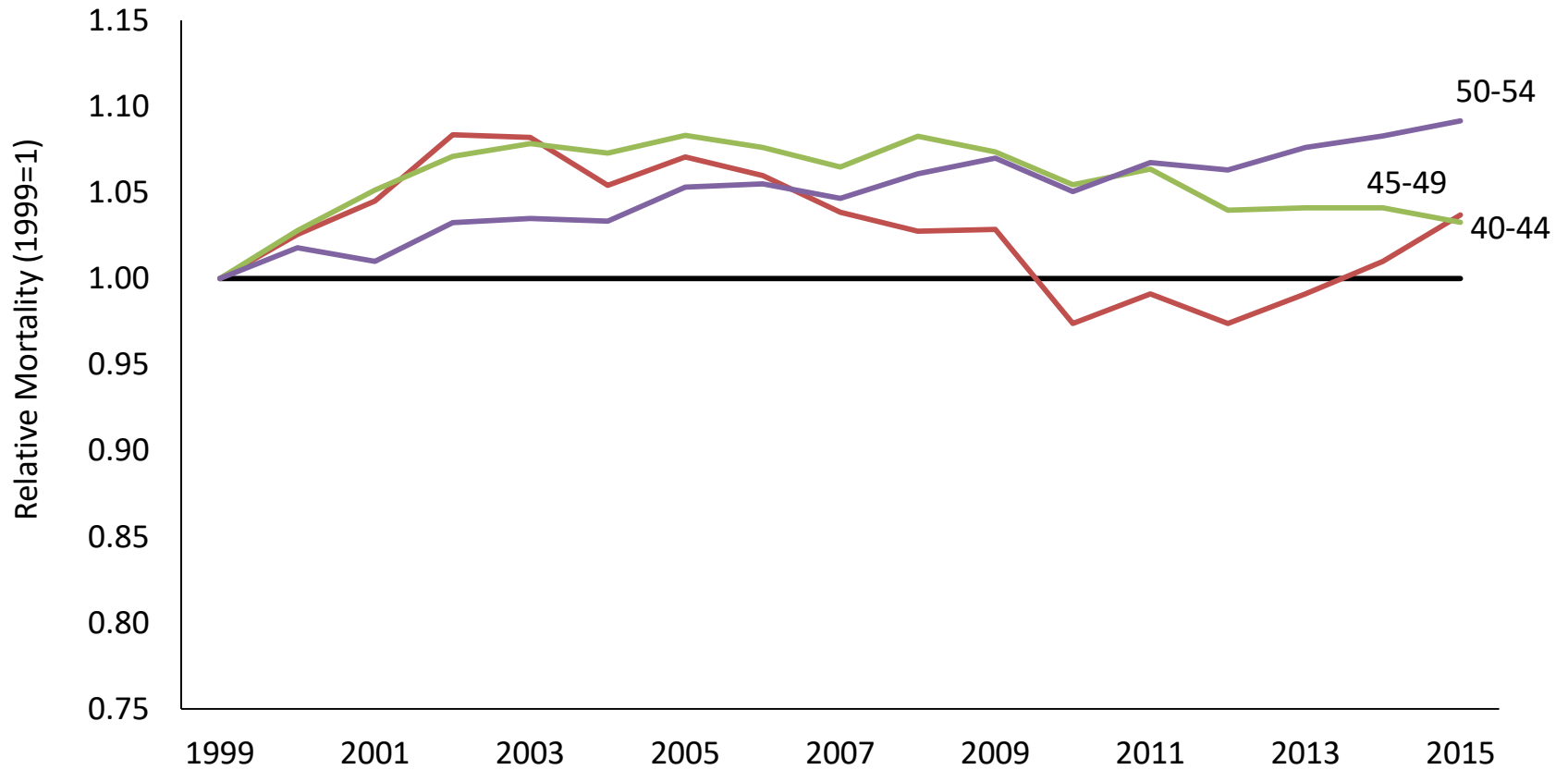
Cohort or Year Effects?

Relative Mortality by Cohort, Non-Hispanic Whites



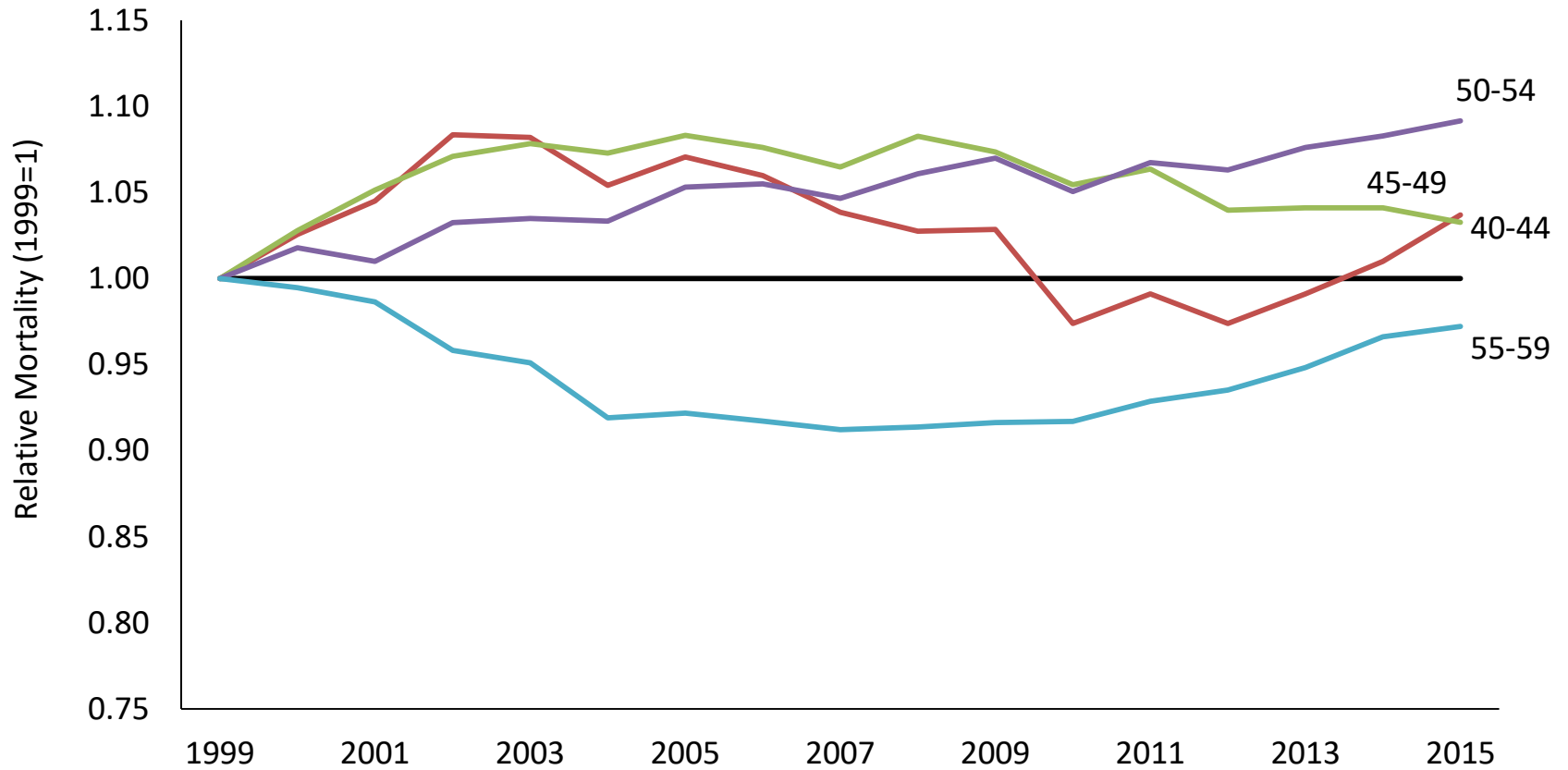
Cohort or Year Effects?

Relative Mortality by Cohort, Non-Hispanic Whites



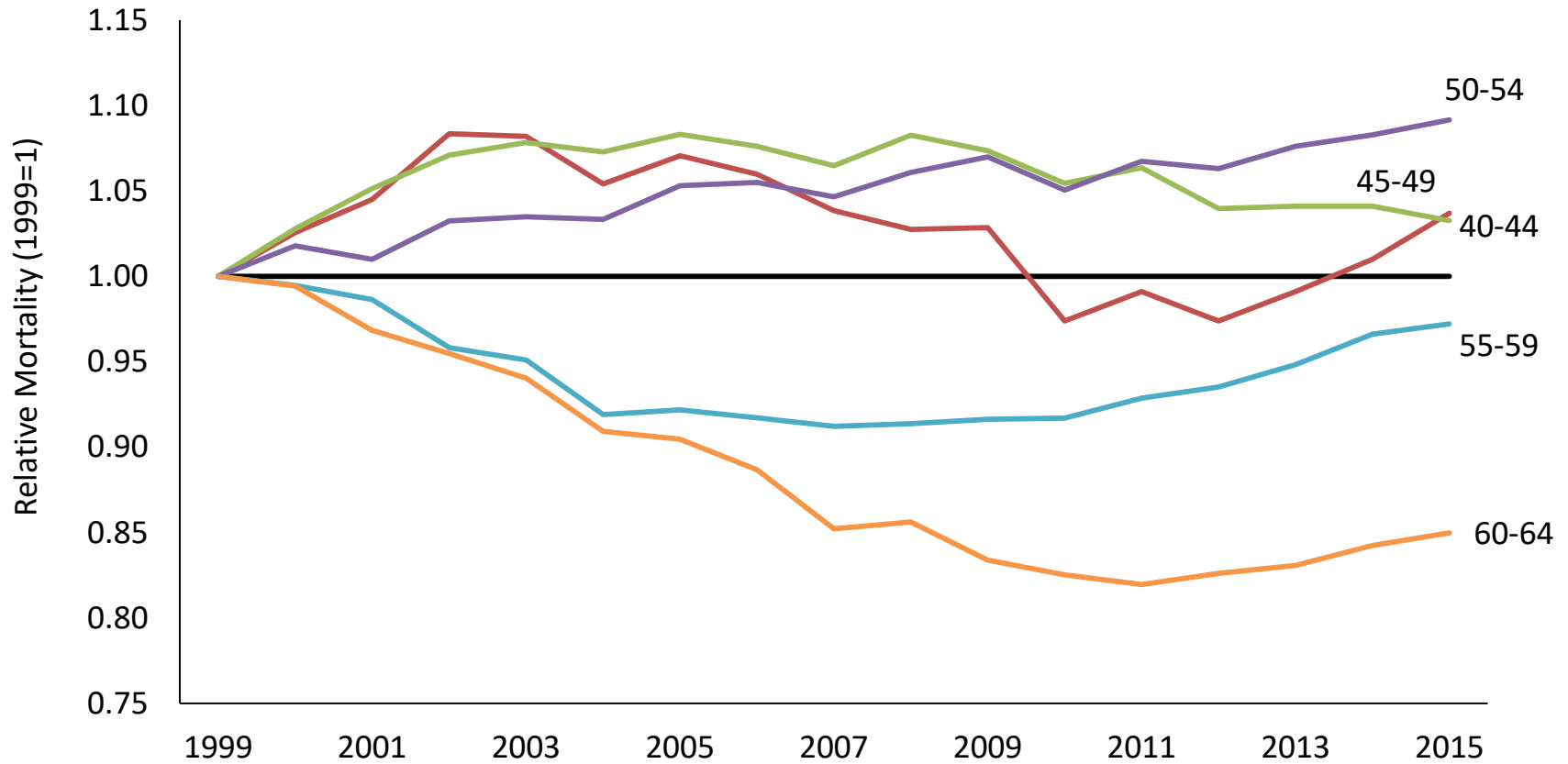
Cohort or Year Effects?

Relative Mortality by Cohort, Non-Hispanic Whites



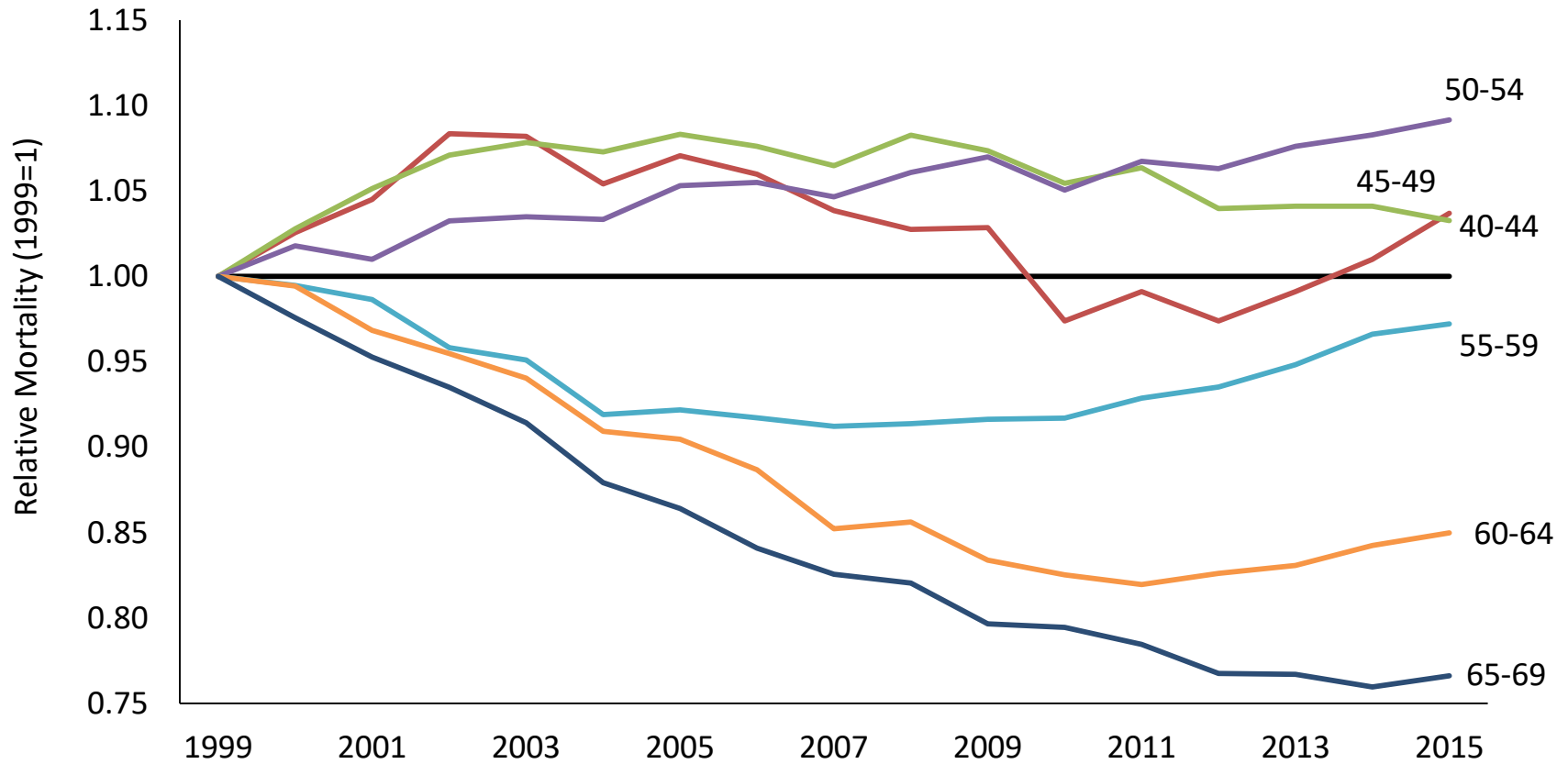
Cohort or Year Effects?

Relative Mortality by Cohort, Non-Hispanic Whites



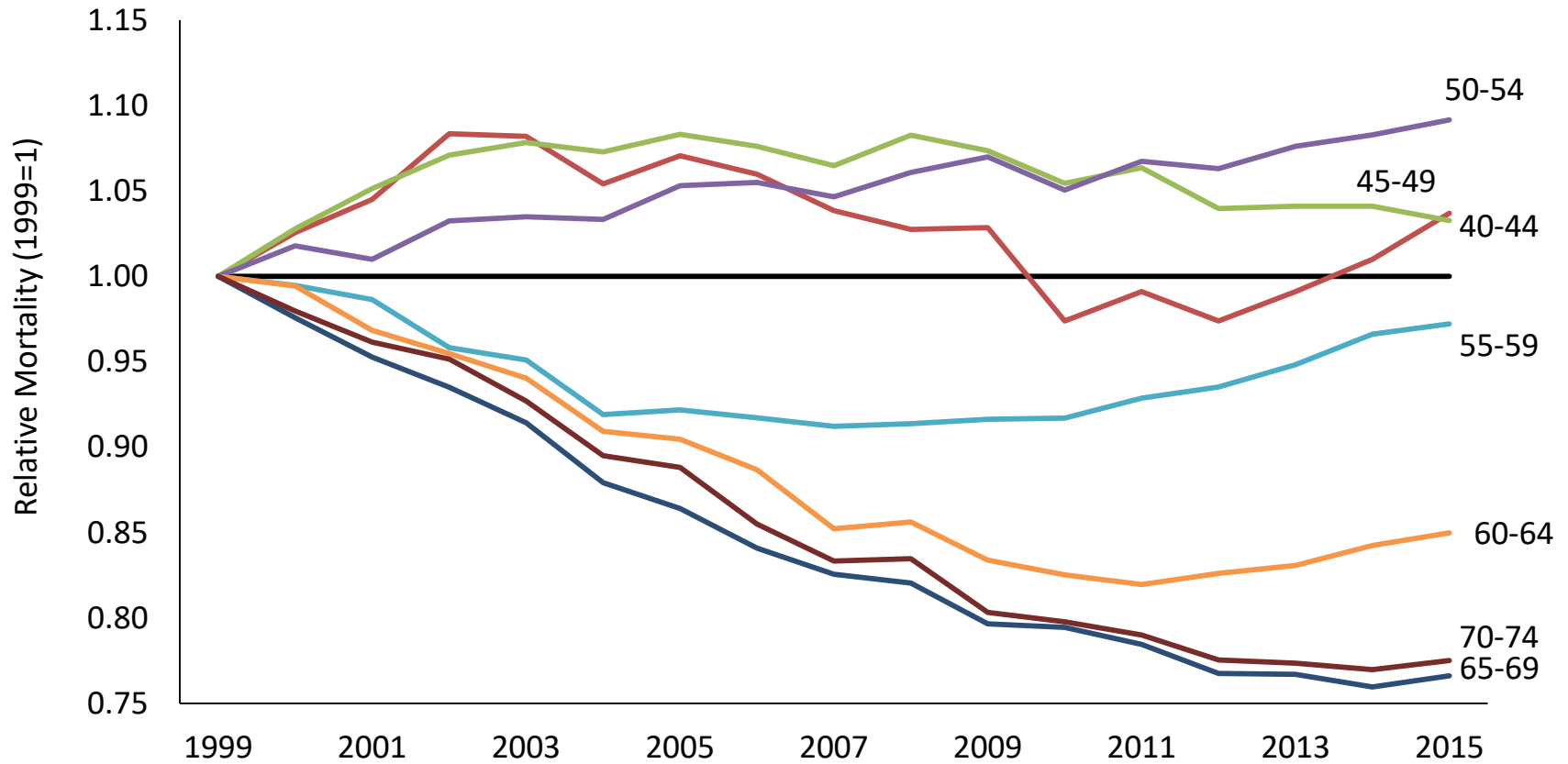
Cohort or Year Effects?

Relative Mortality by Cohort, Non-Hispanic Whites



Cohort or Year Effects?

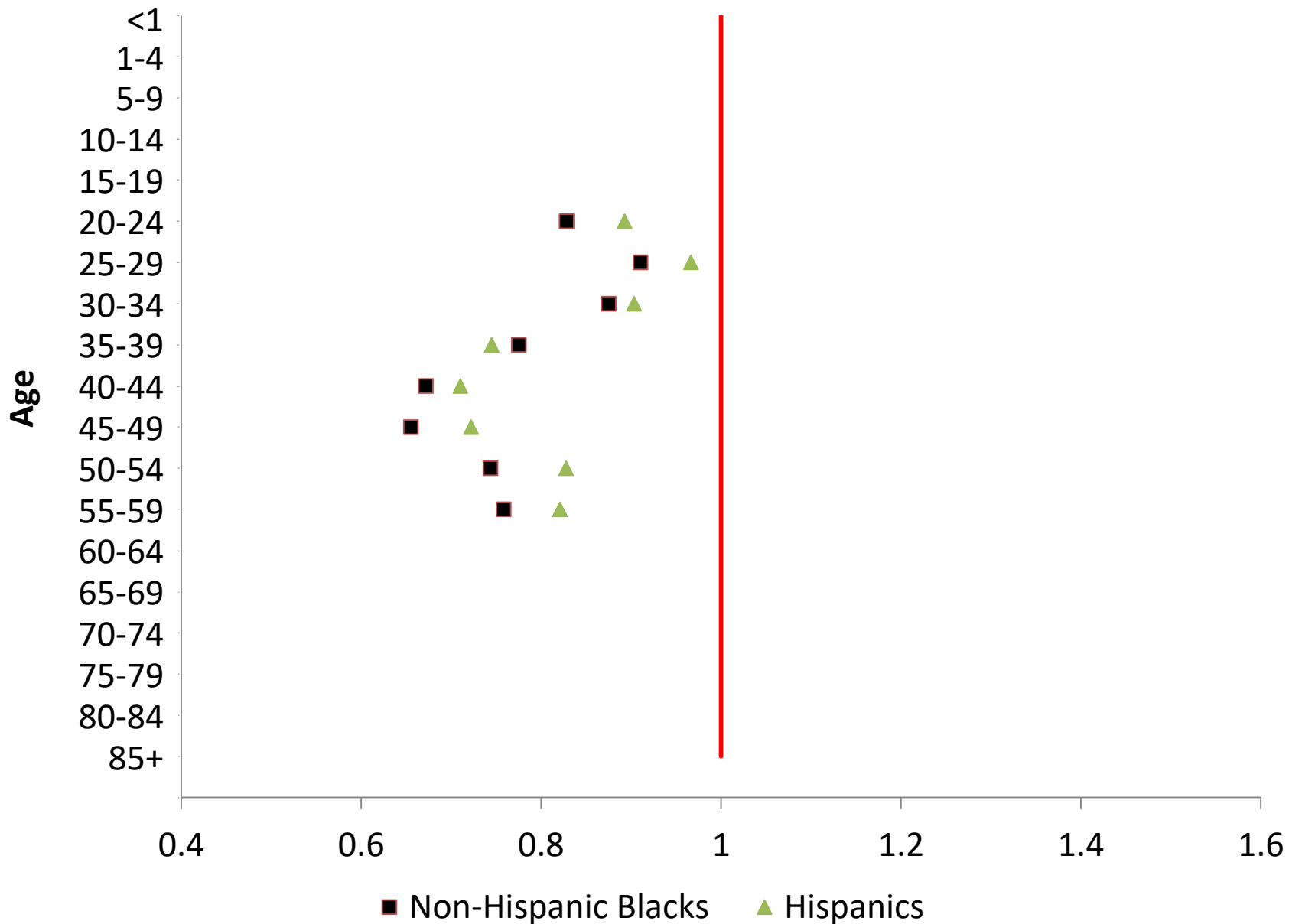
Relative Mortality by Cohort, Non-Hispanic Whites



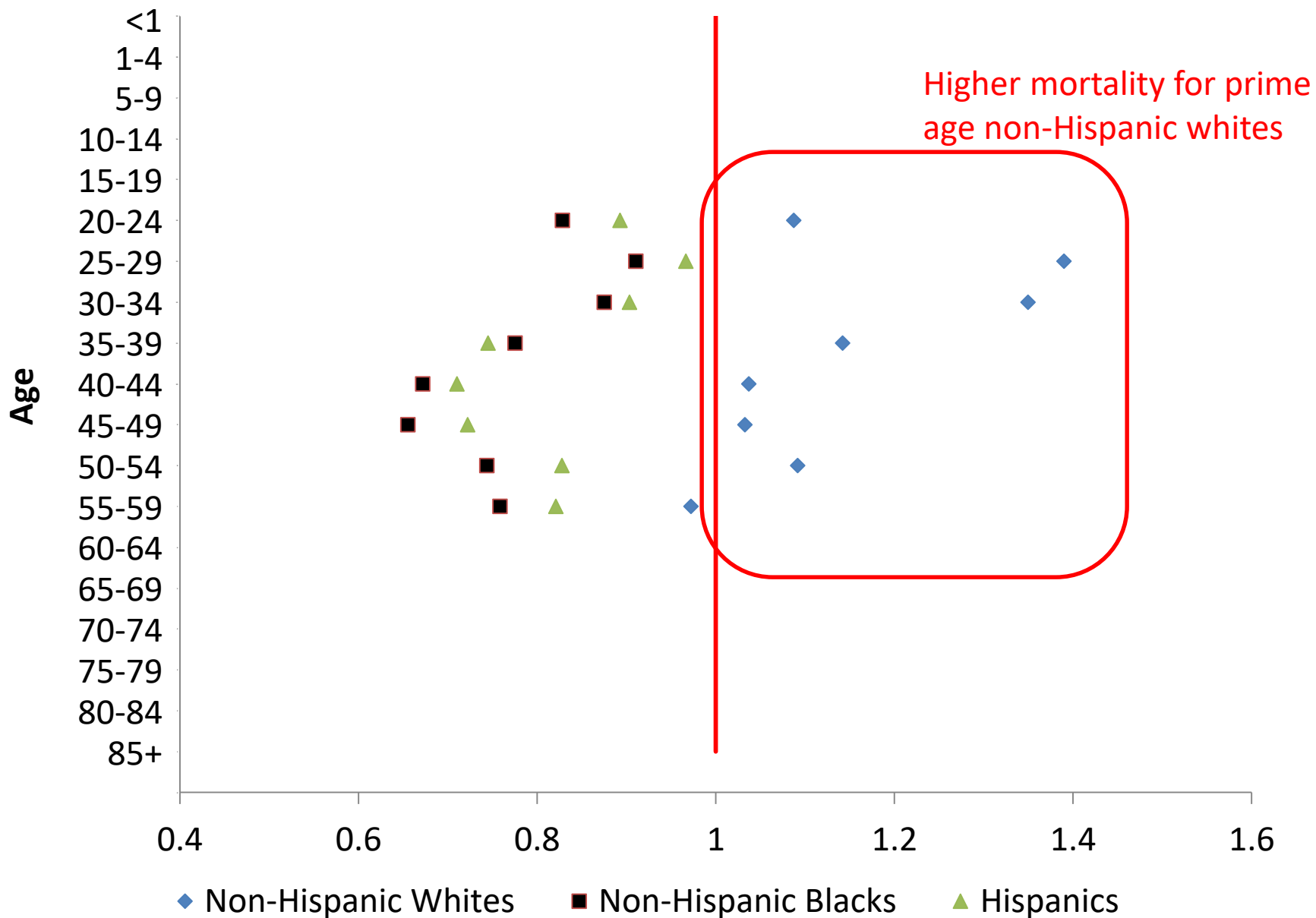
Show it another way

- $MR_{a,2015} / MR_{a,1999}$
- Show by race/ethnicity and age

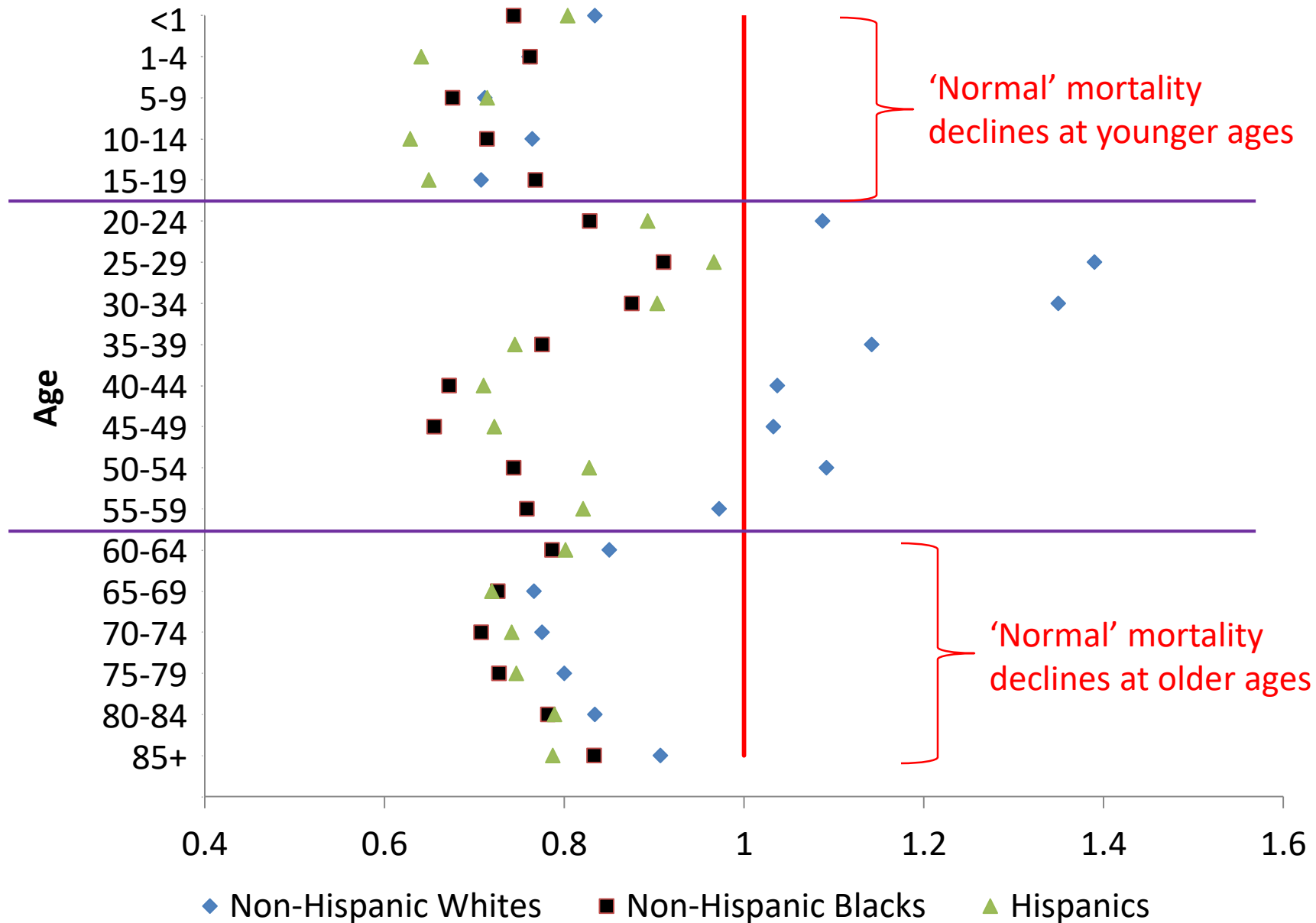
Change in Mortality by Ethnicity and Age, 1999-2015



Change in Mortality by Ethnicity and Age, 1999-2015



Change in Mortality by Ethnicity and Age, 1999-2015



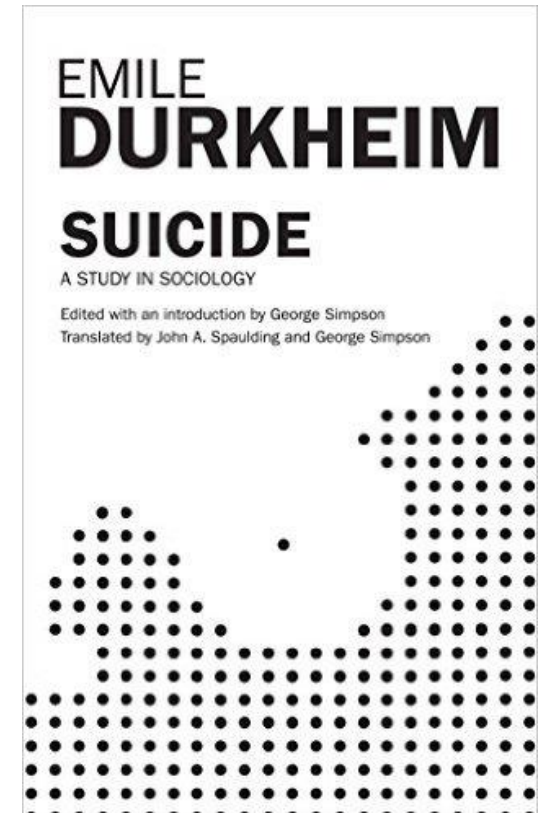
Cohort v. Year Effects

- Telling them apart is always difficult
- But at this point, the effects for the elderly have been smaller than those for the young

Case and Deaton propose the Durkheim theory

- Suicide = f(Life Satisfaction / E(Life Satisfaction))

- parents
- starting job



The simple story of economic vibrancy is wrong

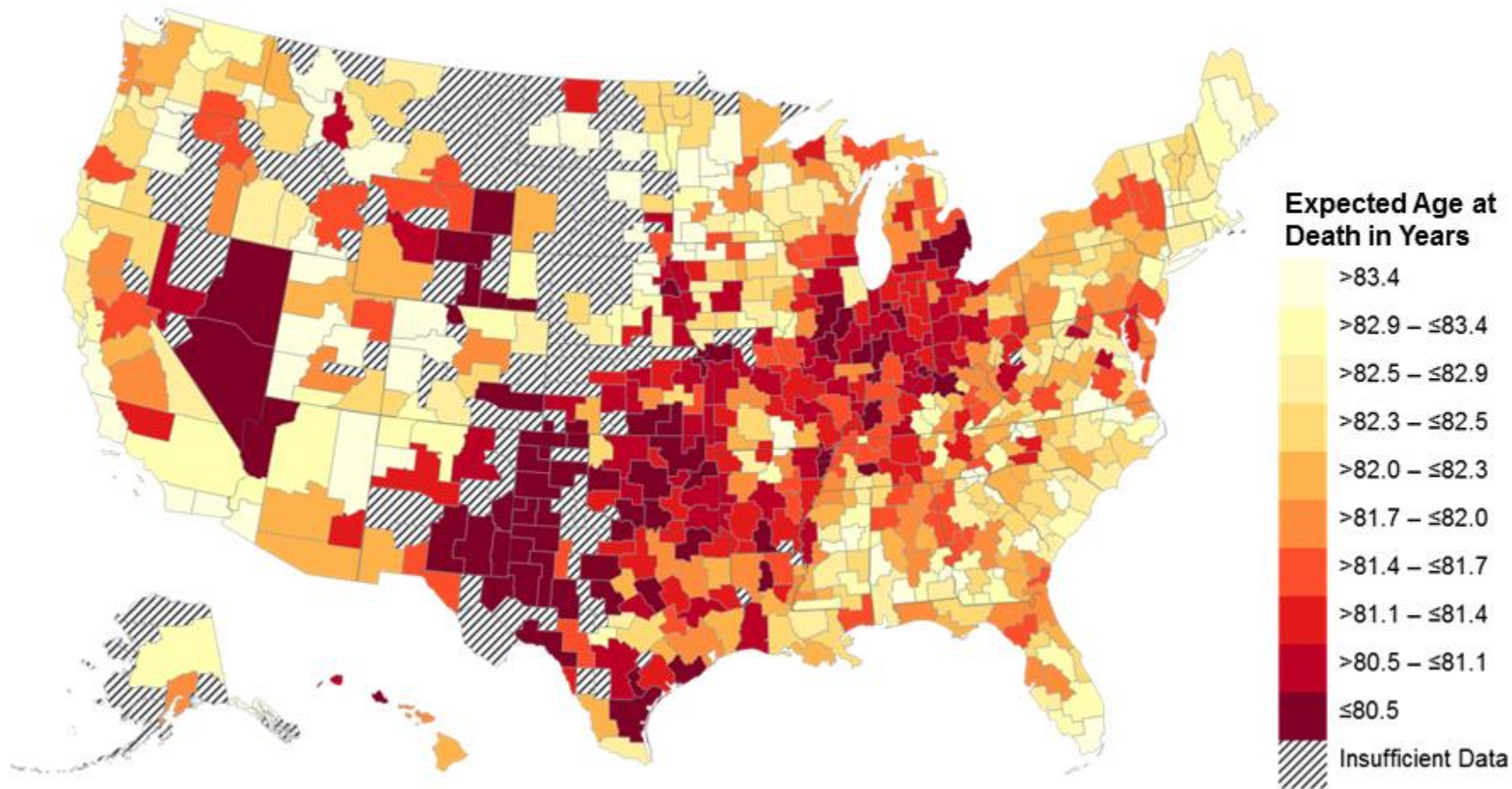
Special Communication

The Association Between Income and Life Expectancy in the United States, 2001-2014

Raj Chetty, PhD; Michael Stepner, BA; Sarah Abraham, BA; Shelby Lin, MPhil; Benjamin Scuderi, BA; Nicholas Turner, PhD; Augustin Bergeron, MA; David Cutler, PhD

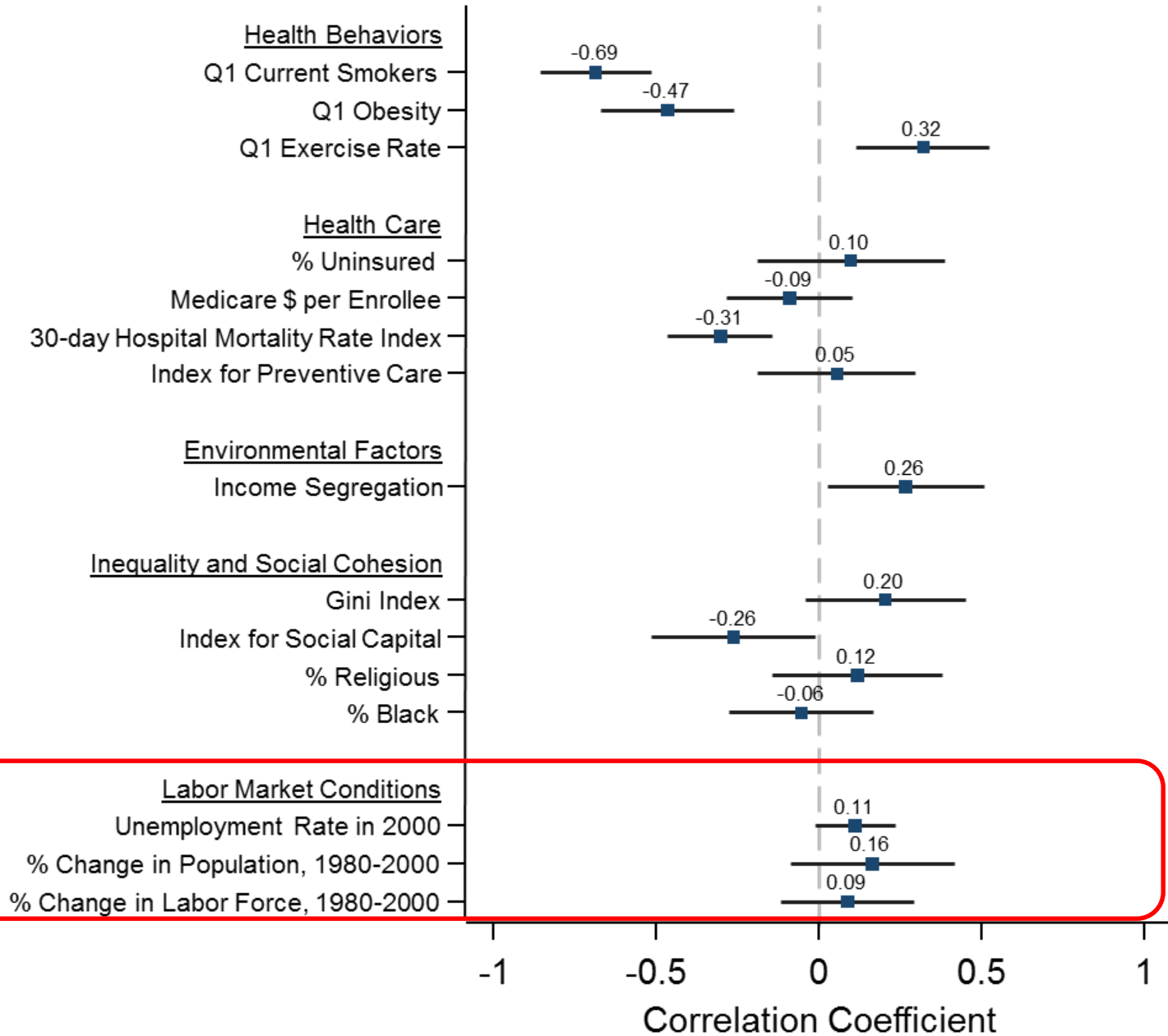
- Estimate life expectancy at age 40 by income and area, 2001-2014
- Look at (1) LE for people in the bottom quartile across CZs; and (2) change in LE for people in the bottom quartile across states.

Race-Adjusted Expected Age at Death for 40 Year Old Women Bottom Quartile of U.S. Income Distribution

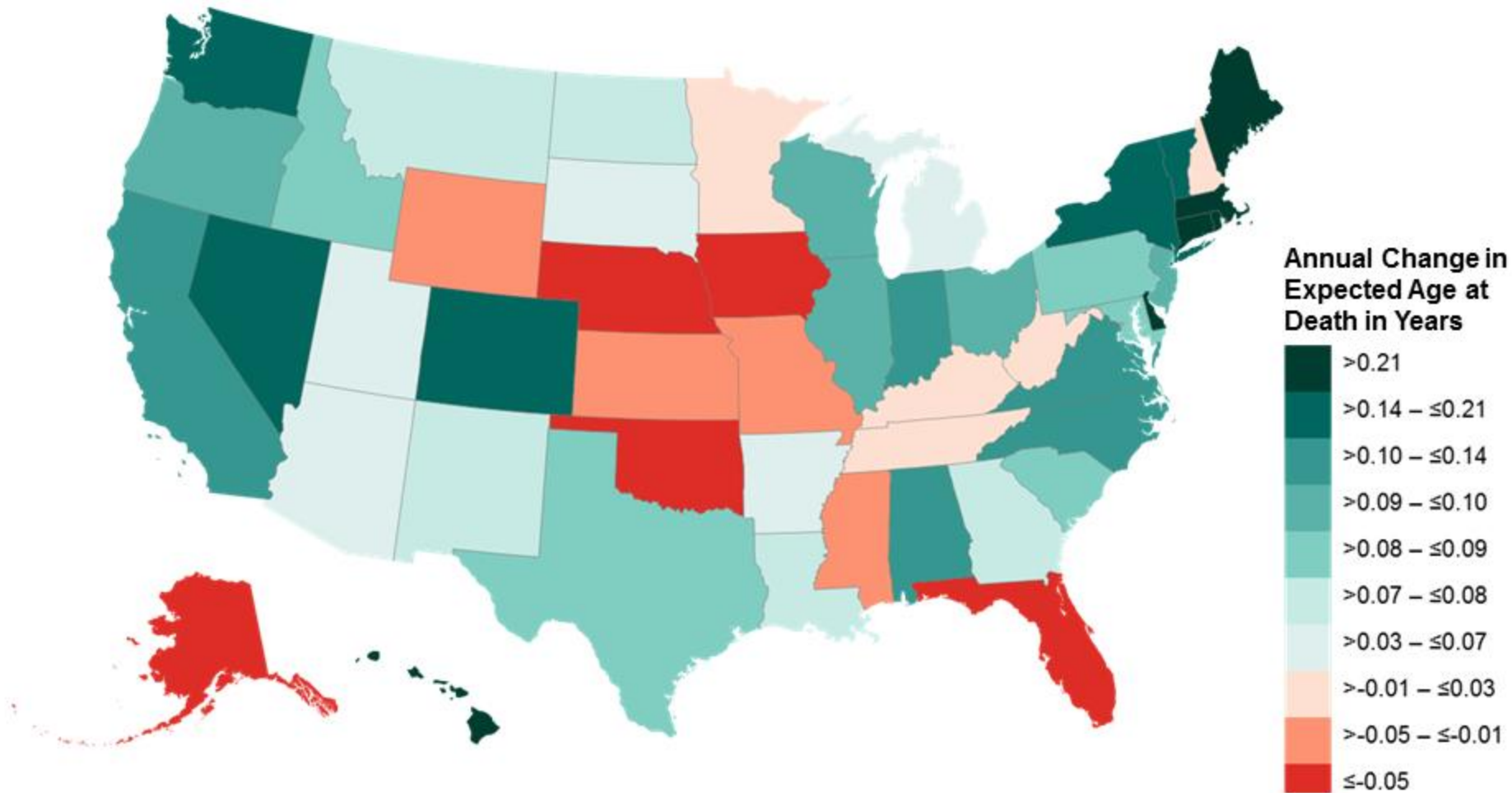


Note: Lighter Colors Represent Areas with Higher Life Expectancy

Correlations of Expected Age at Death with Health and Social Factors For Individuals in Bottom Quartile of Income Distribution




Annual Change in Race-Adjusted Expected Age at Death for Women in Bottom Quartile by State



Note: Turquoise represents rising life expectancy; red represents falling life expectancy

The Other Theory

- ‘Technological change’ in ways of dealing with pain
 - Formerly, smoking and drinking
 - Now, morphine-equivalent drugs

more addictive
and harmful
- Case studies often have some pain
- This can make temporary shocks have permanent effects.

Conclusion

- Current debates about the safety net are really important.