Ron Lee

Divergence in US Mortality in Recent Decades and Its Consequences for the Progressivity of Public Transfer Programs

Mortality in the US has a strong economic gradient, whether economic status is measured by educational attainment or by earnings. Recent research has found that this gradient has become considerably steeper in recent decades and for later-born cohorts. This is a serious problem in itself, but these growing disparities in longevity also mean that public transfer programs for the elderly, such as Social Security, Medicare, and Medicaid, have become considerably less progressive than they were in the past. While differences in longevity do not matter much for lifetime earnings, they do matter a lot for survival through the older ages at which the elderly receive benefits. I will draw on preliminary results from a National Academy of Sciences study of this topic to document and assess these changes in the dispersion of longevity and their implications for the progressivity of public programs for the elderly.

David Rehkopf

The Association between U.S. State Income Inequality in Early and Late Life and Chronic Disease

Influences on health and well-being at older ages occur as a product of a generally unknown combination of exposures across one’s lifetime, and due to contexts which can be conceptualized at multiple spatial levels. Due to data limitations, most studies on the impacts of economic and social contexts on health have focused on the current environment, despite the fact that understanding of human physiology suggests that exposures early in life may have direct influences on physiology as well as influence trajectories over the lifetime. In this analysis I examine the relationship between state level income inequality early in life and chronic disease at ages 50 and older using data from the 1992 to 2012 waves of the Health and Retirement Study. I chose to examine state based on the fact that there is substantial heterogeneity between the environments of states in terms of both exposure and outcome, and states have some degree of control over independent economic policy. Assessment of early life state characteristics were based on retrospective report of the state in which the individual was born, and the state in which an individual lived in at age 10. The following data from the relevant decennial census were then used to capture aspects of the state environment: % white, % urban, Median Income, % with a high school education, Gini index of income inequality and % unemployment. All analyses controlled for individual sociodemographic characteristics, and sensitivity analyses controlled for current state of residence characteristics. I found higher prevalence of hypertension and diabetes after the age of 50 associated with a higher Gini index of income inequality in early life state. While
results were statistically significant (p<0.05), the strength of associations were weak, in the range of a one standard deviation difference in early life environment measure associated with a 1-4% difference in chronic disease prevalence. Thus while not of a strong magnitude, the associations with early life state environment represent an potentially important area of inquiry to understand the ways in which the economic environment (and all that is associated with it) early in life may have impacts on later life health.

Alex Gelber
*The Effect of Elderly Income on Mortality: Novel Evidence from the Social Security Notch*

We estimate the effect of Social Security benefits on mortality by examining the Social Security “Notch,” which cut Old Age and Survivors Insurance (OASI) benefits by around $800 per year for men in the 1917 birth cohort relative to the 1916 cohort. This led to sharply different benefits for similar men born one day apart and therefore represents a source of large, exogenous variation that allows us to study the effect of elderly income on mortality. Previous research using quarter-of-birth data has found that this cut in benefits led to a substantial decrease in mortality in the first quarter of 1917 (and subsequent quarters) relative to the last quarter of 1916 (and previous quarters). Using Social Security Administration microdata on earnings in the full U.S. population by day of birth, we document that there is no clear discontinuity in mortality around the 1916/1917 cohort boundary. The decrease in mortality in the first quarter of 1917 relative to the last quarter of 1916 found in previous research also appears in our data, but day-of-birth data reveal that the decrease in the first quarter of 1917 occurs well away from the boundary between the two cohorts.

Will Dow & Luis Rosero-Bixby
*Mortality Gradients in U.S. Hispanic and Latin American Populations*

Mortality in the United States is 18% higher than in Costa Rica among adult men and 10% higher among middle-aged women, despite the several times higher income and health expenditures in the U.S. This simultaneously provides striking evidence of the potential for substantially lowering mortality in other middle-income countries, and highlights the U.S.’s embarrassingly poor health performance. The U.S.’s underperformance is strongly linked to its much steeper socioeconomic (SES) gradients in health. Although the highest SES quartile in the U.S. has better mortality than the highest quartile in Costa Rica, U.S. mortality in its lowest quartile is markedly worse than in Costa Rica’s lowest quartile. When disaggregated by race/ethnicity, U.S. Hispanic mortality patterns are similar to Costa Rica’s for men, and U.S. Hispanic women experience lower mortality than any other group. U.S. non-Hispanic white men have significantly higher mortality than Costa Ricans for those in the bottom half of the SES distributions. Among U.S. blacks, both men and women exhibit markedly steeper SES gradients and worse mortality than do Costa Ricans.
Marcella Alsan
Watersheds in Infant Mortality: Massachusetts 1880 to 1915

We explore the first period of decline in infant mortality in the U.S. and provide estimates of the independent and combined effects of clean water and effective sewerage systems on infant mortality. Our case is Massachusetts, 1880-1915, when state authorities developed a sewerage and water district for municipalities in the Boston Greater Metropolitan area. We find that the two interventions were complementary and together accounted for approximately 44 percent of the total decline in log infant mortality among treated municipalities during the 35 years considered. Considerable research has documented the importance of clean water interventions for improvement in population health, but there is less evidence on the importance of sewerage systems. Our findings are directly relevant to urbanization in the developing world and suggest that a dual-pronged approach of safe water and sewerage is important to improving infant and early child survival.

Emmanuel Saez (and Gabriel Zucman, LSE)
Mortality Differentials by Wealth in the United States

We examine individual income micro tax data from 1979 to 2008 to estimate wealth based on capital income. We combine this information with age and date of death (up to the end of 2013) to estimate five-year horizon mortality rates by age, gender, and wealth class. We show that there is a large gradient in mortality by wealth class, especially for ages below 80. Furthermore, this gradient has substantially widened over time. We discuss the consequences of our findings for estimating the wealth distribution using the estate-multiplier method.