

Dissertation Abstract

Income Inequality during the Great Depression

The Great Recession has brought income inequality to the forefront of the American psyche. Parallels have been made between the Great Depression and the Great Recession, and as such, economic history can act as a powerful analytical tool in directing policy.¹ The first essay in *Income Inequality during the Great Depression* is a qualitative analysis of income transitions from 1929 to 1933 using 33 representative cities as surveyed by the Civil Works Administration. The second essay investigates the welfare effects of income inequality on infant mortality during the Depression. And the third essay looks at the correlation between income inequality and educational outcomes as measured by high school graduation rates.

Essay 1. "Family, Labor, and Loss: Income Mobility During the Great Depression"

The Great Depression provides an important opportunity to study income mobility when an economy is at its most vulnerable. The Great Depression was the worst economic downturn in American history. Nationwide real output per adult fell over 30%, and the unemployment rate likely reached 25 percent.²

It is generally assumed that the winners during a downturn are those who lose less. We use data from Horst Menderhausen's published work which is based on the Financial Survey of Urban Housing to investigate this. Using an ordered logit framework and simple finite differencing, we find that 25 percent of the poorest Americans, those falling in the zero income category in 1929, were able to raise their incomes between 1929 and 1933. At the other end of the income spectrum, the highest income earners had nearly a 30% probability of remaining in the same nominal income category in 1933. A more intuitive pattern evolved for households in the top two-thirds of the distribution. More of these households tended to transition to lower income categories in states where per capita income fell.

Essay 2. "At Least I Have My Health: Health and Income Inequality During the Depression"

There is little consensus across disciplines on the degree to which income inequality influences health outcomes. The absolute income hypothesis suggests that any relationship between income inequality and health reflects a spurious effect on health that comes from the direct relationship between income and health.³ On the other hand, alternative theories in which individuals care about the incomes of others, to the point of physical and/or mental detriment, imply that income distribution will influence health.

¹"Income Inequality and the Great Recession", September, 2010. U.S. Congress Joint Economic Committee.

²Ohanian, L., 2001. "Why Did Productivity Fall So Much During the Great Depression?". *Development and History* 91, 34-38.

³Deaton, Angus, 2003. "Health, Inequality, and Economic Development". *Journal of Economic Literature* 41(1). 113-158.

Using a newly developed panel data set for cities in 1929, 1933, and 1939, I examine the relationship between infant mortality and various measures of the income and wealth distribution during the Great Depression. Unconditional correlations suggest that increased income inequality was associated with higher infant mortality. When additional explanatory variables are added the relationship weakens. Estimates using fixed effects are statistically insignificant and relatively small in size. A one percentage point increase in a city-specific gini coefficient was associated with a increase of 0.00361 infant deaths per 1000 live births. When using income shares as an inequality indicator, a one percentage point increase in the share of the highest income earners was associated with an 0.224 increase in infant mortality. Stillbirths were used as a separate welfare measure. Results were significantly different. A one percentage point increase in the gini was associated with a decrease of 3.808 stillbirths per 10000. An analysis with more observations using household's rental and housing values as proxies for income and wealth finds no statistically significant relationship between income inequality and infant mortality or stillbirths.

Essay 3. "Education and Income Inequality"

The third paper explores the lasting effects of income inequality on the economy. There is a rich literature on the expansion of the secondary school education and its effect on the productivity of the US economy during this period.⁴ For instance, the average high school attendance for 16-17 year olds increased from 40% in 1920 to 61% in 1930 to 75% in 1940. However, the psychic costs and availability constraints that income inequality imply may have acted to counterbalance the efficacy of the expansion.

⁴Goldin, C., 2008. *The race between education and technology*.