ABSTRACT

ESSAYS ON THE SOCIOECONOMIC DETERMINANTS OF POPULATION HEALTH

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This thesis considers the effect of income distribution and economic cycles on aggregate mortality. The first chapter characterizes the theoretical framework within which the analysis in the two subsequent empirical chapters is conducted. Michael Grossman's (1972) model of investment in health capital provides the organizing framework within which hypotheses regarding the effect of relative income inequality and economic cycles on aggregate mortality can be tested.

The theoretical underpinning for the second involves extending Grossman's model by incorporating the direct effect of one's rank in the distribution of earnings on health status. We then outline how one may distinguish theoretically between the effect of changes in the individual's rank as opposed to his level of income on his investment in health decision and ultimately on population health. The theoretical basis for the third chapter which extends the work of M. Harvey Brenner, involves distinguishing between the impact of changes in transitory income (recessions, expansions) and changes in an individual's permanent income on the individual's investment in health decision and the implications of this distinction for population health.

The second chapter reviews the approach to measuring and testing the effect of relative income inequality used in the existing literature. In particular, we focus on the use of the Atkinson Index as a measure of relative inequality. The basic properties of this index are considered in order to demonstrate that it does not distinguish between the effects of absolute as opposed to relative income on population health. An alternative empirical approach based on Stoker(1986) is applied to cross section data for the 50 U.S. states with a view to testing the relative income hypothesis.

The third chapter extends Brenner"s approach to analyzing the impact of economic cycles on population health by taking advantage of recent work on the time series properties of aggregate level data. In particular, we attempt to distinguish between variables that show regular cyclical behavior which Brenner assumes and variables which show non-stationary behavior (i.e. unit roots). We use this distinction to test for a relationship between economic variables (unemployment, real per capita GDP) and aggregate mortality.