

When Economics and History Meet

This is not about economic history. Or the history of economics. It is economics and a touch of history to learn and understand how the past can influence current social outcomes and how we can use the past to design effective policies that benefit all.

Economics is about more than money. It is a social science, it is about human behavior, how they act to benefit their welfare and in the end how this affects socio-economic outcomes and total welfare. Health plays a crucial role in this. Health is like a consumption good, it generates well-being. Health can also be viewed as a durable good, a stock of capital, human capital, that can be nurtured and invested in when the child is young and where the child as an adult can use this stock to generate income and well-being and where s/he can make his/her own investments. Some for better (a positive investment) and some for worse (a disinvestment). Life is not always fair and unfortunately this is also the case with health. Some are born under favorable circumstances and in very good health, while others are born under less fortunate conditions and in poor health. Some meet all good and others often bad. What we do know is that there is a strong association between socio-economic status (education, income, wealth) and health at adult ages: those from lower socio-economic background generally have worse health. They die earlier: the higher (higher or academic) educated outlive those with basic qualifications with 6 years. And they are more often in poor health: the difference in healthy life years (health expectancy, living without impairments) is 12 years. In recent decades it has become clear that health and mortality differences originate in the earliest stages of human life, even before birth. This is where economics meets epidemiology/medical sciences and history.

The epidemiologist David Barker postulated in the last decade of the previous century that fetal under-nutrition may lead to metabolic adaptation affecting the phenotype of the offspring such that the risk of diseases later in life is increased. Animal studies have established effects of fetal undernutrition on later life diabetes. There is a British study with the provoking title “You are what your mother eats” that finds that the fetal sex is associated with the maternal diet at conception. Similarly, prenatal maternal stress (PNMS) can change the psychophysiology of the offspring. PNMS is found to negatively affect mental, cognitive, emotional and immunological functioning of the offspring. In biology and medical sciences researchers usually rely on animal studies to design the perfect controlled experiment where some of the subjects are treated and others not (the controls). Social scientists who study the behavior of humans can not resort to such randomized controlled experiments. They have to rely on observational data that describe a situation that comes as close as

possible to a randomized controlled trial. This is where history enters the stage.

Assessing the long reach of conditions early in life requires knowledge of the conditions that the currently old faced at the time of conception. Preferably, a moment in the history where differences in conditions varied across time and space and where the conditions varied for different groups of the population. This is often referred to as a Natural experiment: a situation where some individuals are exposed to experimental conditions determined by ‘nature’ outside the control of the individuals and the researcher.

History provides plenty examples of natural experiments, such as the Dutch Hunger Winter of 1944/45 that exposed part of the Netherlands to a famine or the Italian Armistice of September 8, 1943. Despite the start of WWII in Sept 1939, Italy was a non-belligerent country until June 1940, when Mussolini declared war on Britain and France. From June 1940 until the end of the summer of 1943, Italy was only modestly affected by war events. The Armistice ceased hostilities between the Kingdom of Italy and the Allied forces and began the German occupation of Italy. The German troops and their fascists allies performed random violent raids across municipalities that caused great stress and trauma by those witnessing it. This unique Natural experiment allows researchers to analyze differences in health and labor market outcomes for cohorts born in municipalities before and right after a Nazi raid, relative to otherwise similar cohorts which were never exposed. Indeed, the prenatally exposed have worse mental health, lower educational attainment and lower wages and pensions throughout their working career.

The Hunger Winter, the Italian Armistice and other historical events have generated important insights on the origins of later life disease and later life socio-economic inequalities. The findings of these studies suggests that public programs targeted at vulnerable families, in particular (pregnant) women and children, can be very effective in mitigating the negative effects of a bad start and the consequences of adversities later in life. This benefits individual well-being and in the end will also benefit total welfare.

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