## DOES THE SOCIAL SAFETY NET MEDIATE HOW CHILDHOOD HEALTH AFFECTS OLDER ADULTS' WELL-BEING?

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Extended Abstract

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Wealthy people live longer and are healthier, on average, than poor people. Not only the differences between those at the top and those at the bottom of the income/wealth distribution are large, but also the association between socioeconomic status and health is a gradual one: the higher an individual's relative socioeconomic status, the better his or her health is (Smith, 1999; Marmot and Wilkinson, 1999; WHO Commission on Social Determinants of Health, 2008). The gradient begins early in life and persists throughout the life course, and has been documented for different measures of socioeconomic status both across countries and within countries at a point in time. It also holds over time, as countries experience economic growth (Case and Paxson, 2009, 2010a, 2010b; Currie, 2009; Smith, 2007, 2009; among others).

However, little is known about how the strength of these links between health and socioeconomic status is mediated by the social insurance programs in different countries. Nor do we know whether social services may mediate the long term effects of poor childhood health or socioeconomic status. If strong social service support mitigates the initial "shock" of childhood poor health, then fewer people would be observed in adverse situations later in life, and, more importantly, the link between poor childhood health and poor adult health and well-being could be weakened, making it possible to reduce the original health gap.

In this paper, I investigate the long term effect of childhood health on older Europeans' health, employment, income and overall well-being. In particular, I investigate the extent to which childhood differences in health follow people into adulthood, and the extent to which these effects are mediated by the different social services/welfare available in each country.

Addressing these issues is usually difficult because it requires datasets tracking individuals over their whole lifespan and these kinds of data are very rare. In the absence of datasets following individuals from cradle to grave, I exploit the detailed retrospective and contextual information recently collected by the SHARELIFE life history project within the Survey of Health, Ageing and Retirement in Europe (SHARE), which, combined with information from the 2006 wave of SHARE, provides a unique opportunity to make progress in this area.<sup>1</sup>

I first provide evidence that the association between health and socioeconomic status, well documented for other countries, is clearly present also in European countries and that the advantages offered by a healthier early life start follow people into old age. Childhood health has quantitatively large impacts on all the outcomes considered: health status, employment, income and quality of life at older ages.

Next, I turn to multivariate analysis techniques to estimate the strength of this link and the extent to which the welfare state may mediate the effects of childhood health differences on older adults' outcomes. Specifically, I focus on one continuous outcome, individual income, and four binary outcomes: the probability that an individual is in excellent or very good health, the probability that an individual is in fair or poor health, the probability that an individual between the age of 50 and 64 is working, and the probability that an individual's quality of life can be considered good/high. All regressions study these outcomes as a function of childhood health, the same set of individual-level factors, and the same set of welfare policy measures. The

<sup>&</sup>lt;sup>1</sup> The SHARELIFE data will be publicly released in November 2010. The preliminary results discussed here are based on data from SHARE Release 2.3.0, as of November 13th 2009, and from SHARELIFE Internal Release 0. SHARE data collection in 2004-2007 was primarily funded by the European Commission through its 5th and 6th framework programmes (project numbers QLK6-CT-2001-00360; RII-CT- 2006-062193; CIT5-CT-2005-028857). Additional funding by the US National Institute on Aging (grant numbers U01 AG09740-13S2; P01 AG005842; P01 AG08291; P30 AG12815; Y1-AG-4553-01; OGHA 04-064; R21 AG025169) as well as by various national sources is gratefully acknowledged (see http://www.share-project.org for a full list of funding institutions.

individual-level factors include a standard set of demographic controls (a quadratic in age to capture life cycle and cohort effects, gender, and marital status) and indicators denoting whether a respondent has completed primary, secondary or tertiary and above level of education.

I select country-level measures of welfare policies that could potentially help closing the gap created by early life health inequalities from the contextual database collected within the SHARELIFE project. In particular, I consider three country-level measures of social welfare programs: (1) the total expenditure on prevention and public health as a percentage of GDP, (2) the total expenditure on public health as a percentage of GDP, and (3) the expenditure on occupational rehabilitation (in case people become invalid during their active life) as a percentage of GDP. I also construct an index of welfare system generosity, as an average of these three measures.

The preliminary results demonstrate that all the current measures of well-being addressed in the paper, health, employment, income, and quality of life, are strongly associated with childhood health, indicating that childhood health has important long term consequences for people well-being and that childhood health differences carry over till basically the end of one's life. Education is also always strongly associated with later life well-being and appears to be protective of health.

The most surprising preliminary result is that there does not seem to be an impact of the social welfare safety net on the link between childhood health and adult health and well-being in general, suggesting that the European welfare states, or at least the aspects of the welfare states captured by the contextual variables used so far, may not be effective in mediating the long term effects of childhood health differences.

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