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1001 Human capital and well being

Projecting future happy life expectancy by level of education for countries around the world

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Extended Abstract:

Based on data from the World Values Survey this paper presents cross-country comparisons of “Happy Life Expectancy (HLE)” by using genuine demographic life table methods. In analogy to well established indicators of active life expectancy or the “Literate Life Expectancy” as proposed by [1], this indicator gives the average number of years a person lives in a state of happiness by combining the basic social development aspects of life expectancy and happiness. This indicator also has the advantage that it can be calculated for different sub-populations independently.

Scientists have for long tried to find attractive social indicators to describe people’s quality of life (QOL) within entire nations at a given point in time by just one number. The supply of such measures offered as alternatives to the commonly used Gross Domestic Product (GDP) per capita is now in abundance [2]. The most widely accepted one of these measures is UNDP’s Human Development Index (HDI), which tries to eradicate some of the shortcomings of GDP per capita, like its failure to reflect the distribution of income as well as other non-material aspects of well-being, mainly education and health. Combining GDP per capita with indices of life expectancy and educational attainment, the main purpose of the HDI is to give stronger emphasis to the social aspects of development.

While the methodology behind the HDI has recently been changed [3], many of the initial objections against its use [4, 5], like the mixing up of means and ends of social developments, have not been overcome. More fundamentally though, the HDI is an *abstractum* that lacks any clear real life interpretation. As a consequence, GDP per capita so far quite exclusively remains the standard for QOL country comparisons.

Happy Life Expectancy (HLE) was first proposed by Ruut Veenhoven [5] as an indicator of social development and QOL. It combines the major dimensions of survival and QOL through happiness and it offers a very comprehensible interpretation: the average number of years a person can expect to live in a state of happiness under the current mortality and happiness conditions. Unlike GDP per capita, HLE can be derived for men and women separately, which

makes it appropriate for studying gender-specific issues of well-being within and across societies. But it can also be measured for many other sub-groups of the population, be it rural or urban populations or people belonging to different ethnic groups. This ability to differentiate sub-groups within countries is another great advantage over the HDI, which only gives us a national total that is also restricted by an upper limit of 1. HLE, for its part, can theoretically increase just like life expectancy which makes it more adequate for comparisons across time.

Although Veenhoven knew about the more sophisticated demographical approach, weighting the age-specific life table person years lived (L_x) with age-specific proportions at different levels of subjective happiness, usually referred to as the “Sullivan method” [6], he preferred to simply multiply the given life expectancy at birth with an index of happiness, assuming that happiness was not age-dependent. This shortcoming has recently been overcome by [7] and particularly [8], where it was shown for the U.S. that happiness does in fact show strong variability over the life course and also for different sub-populations. As it turns out, there are substantial differentials in HLE by sex and race mainly due to differentials in the prevalence rates of happiness.

Another major dividing line along which strong differentials in HLE can be expected, but that has not yet been studied for this purpose, is the educational attainment of the population. Not only through higher income levels, better health, and higher life expectancy, but also through its direct causal effect of enhancing cognitive abilities and more reflection about one’s one life, education can be assumed to be an important determinant of happiness. We will study the happiness scores for a selected number of countries in the World Values Survey by level of education and other important covariates trying to assess the relative importance of education.

Building on this empirical evidence and using newly developed population projections by highest level of educational attainment [9, 10] for the first time we are able to produce projections of HLE for different education scenarios and all countries of the world, although in this paper we will only illustrate the method for selected countries from different continents and cultural spheres. This way we will be able to give a more detailed picture of how long people in different parts of the world will be able to live and live happily.

Finally, it will be interesting to see what we can learn from looking at the dynamics of changing educational composition over time with respect to the famous “Easterlin paradox”. We will test whether explicitly considering education might help to explain the paradox.

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