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Income and well-being: an empirical analysis of the comparison income effect

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Abstract

This paper presents an empirical analysis of the importance of 'comparison income' for individual well-being or happiness. In other words, the influence of the income of a reference group on individual well-being is examined. The main novelty is that various hypotheses are tested: the importance of the own income, the relevance of the income of the reference group and of the distance between the own income and the income of the reference group, and most importantly the asymmetry of comparisons, i.e. the comparison income effect differing between rich and poor individuals. The analysis uses a self-reported measure of satisfaction with life as a measure of individual well-being. The data come from a large German panel known as GSOEP. The study concludes that the income of the reference group is about as important as the own income for individual happiness, that individuals are happier the larger their income is in comparison with the income of the reference group, and that for West Germany this comparison effect is asymmetric. This final result supports Dusenberry's idea that comparisons are mostly upwards.

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1. Introduction

Utility theory is based, among others, on the premise that more is better and therefore that increases in income are desirable from an individual's perspective. In technical terms, a higher income allows the insatiable consumer to reach a higher indifference curve. Despite this assumption, the relation between income and happiness or well-being[1] has been one of the most discussed and debated topics in the literature on subjective well-being since the early 1970s (for an overview, see Frey and Stutzer, 2002; Senik, in press (a)).

On the one side, various researchers claim that income correlates only weakly with individual well-being, so that continuous income growth does not lead to ever-happier individuals. Easterlin (1974, 1995, 2001) finds that while richer individuals in a country are happier than their poorer fellows, income increases do not lead to increases in well-being. In her book *The Overworked American*, Schor (1991, Chap. 5) reports that the percentage of United States population who felt "very happy" peaked in 1957 and has decreased since then, despite continuous economic growth (for similar ideas, see also Campbell et al., 1976; Frank, 1990; Scitovsky, 1976). Thus, the studies that use time-series data for one country seem to imply that income is not very relevant for well-being. Most economists have used (and are fond of) cross-section micro-empirical data, i.e. data at the individual level and for only one country. The empirical evidence based on studies employing such data is mixed, although the majority of studies find a low correlation between income and subjective well-being (see, e.g., Clark and Oswald, 1994 for the UK; and Frey and Stutzer, 2000a for Switzerland). The few micro-panel data studies, in which the same individuals are followed across time, report a positive effect of income on subjective well-being (van Praag et al., 2003 for Germany; and Ferrer-i-Carbonell and Frijters, 2004 for Germany). Finally, some studies use cross-section data on multiple countries, i.e. they base their results on country comparisons. The results thus obtained indicate a much lower correlation between income and subjective well-being within a country than between countries (Diener et al., 1999). In all, it can be concluded that richer individuals in the same country are only (if at all) slightly happier than their poor co-citizens, and economic growth in Western countries has not led to happier individuals.

On the other side, a high income allows people in modern societies to buy expensive cars, enjoy luxurious leisure activities, purchase the latest technologically advanced goods, and travel to exotic countries. Moreover, the majority of individuals express much interest in obtaining a higher income level, indicating that this is an explicit goal for most people. There are indeed studies that provide evidence that countries with higher income have higher average levels of well-being (Diener et al., 1995; Inglehart, 1990). In other words, individuals in richer countries, as well as richer individuals in one country, are slightly happier.

Several explanations have been given for what seems to be a contradiction. First, individual well-being does not only depend on income in absolute terms but also on

[1] The terms 'well-being', 'happiness', 'life satisfaction', and 'quality of life' are used interchangeably in this paper.