Ecological Economics 108 (2014) 242–256

Contents lists available at ScienceDirect

Ecological Economics

journal homepage: www.elsevier.com/locate/ecolecon

Analysis

Happy for how long? How social capital and economic growth relate to happiness over time

Stefano Bartolini [a], Francesco Sarracino [b,*]

[a] 7, P.zza San Francesco, 53100 Siena, Italy
[b] 13, rue Erasme, L-2013, Luxembourg

ARTICLE INFO

Article history:
Received 18 April 2013
Received in revised form 27 July 2014
Accepted 20 October 2014
Available online 15 November 2014

JEL classification:
D06
D60
I31
O10

Keywords:
Easterlin paradox
Economic growth
Subjective well-being
Social capital
Time-series
WVS–EVS and ESS

ABSTRACT

What predicts the evolution over time of subjective well-being? We correlate the trends of subjective well-being with the trends of social capital and/or GDP. We find that in the long and the medium run social capital largely predicts the trends of subjective well-being. In the short-term this relationship weakens. Indeed, in the short run, changes in social capital predict a much smaller portion of the changes in subjective well-being than over longer periods. GDP follows a reverse path, thus confirming the Easterlin paradox: in the short run GDP is more positively correlated to well-being than in the medium-term, while in the long run this correlation vanishes.

1. Introduction

In the early '70s a "critique of economic growth" began to emerge based on the thesis that the pace of polluting emissions and of exploitation of local and global natural resources imposed by industrialization was unsustainable in the long-run (Meadows et al., 1972). More or less in the same period, another stream of critique of growth was initiated by economists such as Galbraith, Scitovsky, Hirsh and Hirschmann that began to question the positive association between income and well-being. However, the latter criticism did not penetrate the mainstream of economic theory.

Easterlin (1974) grounded the issue of the relationship between economic growth and well-being on the empirical analysis of self-reported data called subjective well-being (SWB) or happiness.[1] The evidence provided by Easterlin – that in the long-run, happiness is not significantly influenced by an increase in income – has received growing attention from the 1990s onward and overall has had a greater impact in challenging the economic-policy paradigm, which has traditionally emphasized income as one of the principal contributors to human well-being. Although the environmentalist critique of growth still remains the most popular and influential, this second critique also contributed to the revision of national statistics that is currently involving a growing number of National Statistical Offices.

[1] The reliability of SWB measures has been corroborated by experimental evidence from several disciplines. For example, SWB correlates with objective measures of well-being such as the heart rate, blood pressure, duration of Duchenne smiles and neurological tests of brain activity (Blanchflower and Oswald, 2008; Van Reekum et al., 2007). Moreover, SWB measures are correlated with other proxies of SWB (Schwarz and Strack, 1999; Wanous and Hudy, 2001; Schimmack et al., 2010) and – more interestingly – they mirror the judgments about the respondent's happiness provided by acquaintances or clinical experts (Schneider and Schimmack, 2009; Kahneman and Krueger, 2006; Layard, 2005).

* Corresponding author.
E-mail addresses: bartolinist@unisi.it (S. Bartolini), Francesco.Sarracino@statec.etat.lu (F. Sarracino).

http://dx.doi.org/10.1016/j.ecolecon.2014.10.004
0921-8009/

The lack of correlation over time between average income and average happiness – labeled as the Easterlin paradox – has been explained by the so-called "hedonic treadmill" and "positional treadmill" theories. In particular, economists have explored the possibility that these treadmills drive the dynamics of income aspirations, which, in turn, may offset the positive effect of rising income (e.g. Stutzer, 2004). The basic idea is that subjective well-being is negatively affected by the level of one's income aspirations. Aspirations may depend either on the income of one's own reference group or on one's own past income. We refer to the first case as the positional treadmill, following the well-rooted tradition in economics and sociology that emphasizes the role of social comparisons and social status (e.g. Veblen, 1899; Duesenberry, 1949). We refer to the second case as the hedonic treadmill, following the insights of adaptation theory (see, e.g. Frederick and Loewenstein, 1999, and references therein).

Adaptation theory assumes that changes in living conditions (for example, in economic conditions) have a temporary effect on well-being. Neither rising prosperity nor increased adversity durably affects happiness. As time goes by, people tend to revert to their baseline level of well-being. The same mechanism applies to aggregates, such as nations (Blanchflower, 2009).

Social comparison theory argues that what matters for an individual's satisfaction is his/her relative position with respect to a selected group of people identified as those whom he/she respects and wants to resemble. These people form what is called a "reference group" (Falk and Knell, 2004; Layard et al., 2009; Di Tella et al., 2010; Ferrer-i Carbonell, 2005; Diener et al., 1993). Therefore, the general improvement in income levels brought about by economic growth can result in a negligible increase in average subjective well-being because relative gains and losses compensate each other. A large number of micro-level studies provide evidence in support of both adaptation and social comparison theories (Clark et al., 2008).

Notice that the essence of the Easterlin paradox is the conflict between cross-sections and time series. Indeed, micro-data show that individuals with a higher income than others report higher levels of SWB, at any given point in time. Moreover, cross-country data show that countries with a higher per-capita GDP report higher levels of SWB (Deaton, 2008; Stevenson and Wolfers, 2008; Inglehart, 2010; Easterlin and Angelescu, 2009; Frey and Stutzer, 2002). But what about time series? The latter deserve a special attention since they seem more likely than cross-sections to provide an answer to "what people […] want to know […]: How far is general income growth (beyond income levels already achieved) likely to increase average happiness? This is a question about time series relationships" (Layard et al., 2009, p. 1). The lack of a relationship between income and happiness is in time series.

It is now well documented that the time-series of SWB show a substantial heterogeneity across countries (Stevenson and Wolfers, 2008; Inglehart, 2010). We know that in the past few decades SWB has increased in some countries and decreased in others, varying at different paces. For instance, SWB rose in many Western European countries, whereas it fell slightly in the United States. The Easterlin paradox claims that economic growth does not predict the international variability of the time series of SWB.

All-in-all, the message conveyed by happiness studies – consisting of a lack of influence of economic growth on well-being, explained by plausible theories and supported by robust empirical evidence – has contributed to increase the number of those who think that the use of GDP as an indicator of well-being or progress is on the wane. A growing number of scholars feels that it is time to dedicate to "something else" – at least in part – some of the enormous attention and policy efforts that contemporary societies pour into economic growth. Several potential candidates have been put forward to assume the role of this "something else": social tolerance, political freedom, religiosity, health, social capital, the environment (Inglehart, 2010; Deaton, 2008; Vemuri and Costanza, 2006; Abdallah et al., 2008, 2011; Kahneman et al., 2004; OECD, 2011; Diener and Tov, 2012).

However, whether additional indicators should complement the use of GDP (this position, for example, was taken by the OECD and the Sarkozy Commission (Stiglitz et al., 2009)) or entirely replace it (see, e.g. Layard, 2005) remains a contentious issue. Yet, this disagreement is confined within a growing consensus that GDP ought to play a more limited role than in the past.

However, new developments challenge the message conveyed by happiness studies. Recently, the robustness of the Easterlin paradox has been questioned in two papers by Stevenson and Wolfers (2008) and Sacks et al. (2010). These influential papers use the same approach of Easterlin and collaborators based on bivariate analysis, but reach opposite conclusions. They find that GDP and SWB are positively and significantly related over time. The time horizon is the essence of the disagreement between Easterlin and collaborators, on one side, and Stevenson, Wolfers and Sachs on the other. The latter's sample includes countries with long and short-time series. According to Easterlin and Angelescu (2009) and Easterlin et al. (2010) these results depend on the failure to distinguish between the long and the short run. Indeed, Easterlin and collaborators show that GDP matters for SWB in the short run, but this correlation vanishes in the long term. This result is consistent with previous studies identifying the tendency for SWB and GDP to vary together during periods of contractions and expansions (Di Tella et al., 2001).

In a recent study, Clark (forthcoming) (see also Clark and Georgellis, 2013) put forward a second point further challenging the traditional message conveyed by happiness studies. Clark emphasizes that the potential alternatives to GDP may suffer from the same adaptation and social comparison effects that prevent economic growth from having a positive impact on well-being in the long-term. Clark argues that scholars dedicated particular attention to the relationship between income and well-being discovering that adaptation and income comparisons are relevant to this relationship. In contrast, very little efforts were allocated to understand whether social comparisons and adaptation are relevant for the relationship between subjective well-being and its other determinants beyond GDP. Clark (forthcoming) summarizes the small literature which has investigated this issue and he concludes that there is some evidence of social comparisons and/or adaptation with respect to unemployment, marriage, divorce, widowhood, the birth of the first child, layoffs, health, social capital and religion. In some cases, as for social capital, his evidence seems weak. Clark (forthcoming) cautions against diverting attention towards "something else" beyond GDP before we make sure that this something else is not subject to the same shortcomings and concludes that more research is needed.

Summarizing, these challenging views cast doubts on the traditional message conveyed by happiness studies. Indeed, if GDP turns out to be a good predictor of the variability of the trends of SWB across countries and if the alternative measures to GDP are subject to adaptation and social comparisons, then all this would suggest the need for great caution in downsizing the role of GDP as an indicator of well-being and progress.

The evidence presented in this paper supports instead the view that the message of happiness economics should not change. Since we find that SWB is much more strongly related to social capital than to GDP in the long and the medium run, this suggests that the centrality of GDP should be reduced and social capital should assume a more prominent role than its current one, at least in those social choices that relate to such time horizons. Indeed, social capital, as well as economic growth, can also be the target for policies aimed at protecting and boosting it (Helliwell, 2011; Rogers et al., 2010; Bartolini, forthcoming).

The OECD (2001, p. 41) gives a definition of social capital (SC), consistent with that of Putnam (2000), as "networks together with shared norms, values and understandings that facilitate co-operation within or among groups". Several papers have documented that social capital is strongly correlated with SWB in cross-sections (see the pioneering studies by Helliwell (2001, 2006) and Helliwell and Putnam (2004);