

Research project

“Social capital, economic growth and well-being”

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1. OBJECTIVE AND MOTIVATION OF THE STUDY

One of the most debated topics in contemporary economic literature, as well as in public opinion, concerns people's well-being. During last fifty years industrialized countries experienced an unprecedented economic growth, countries grew up richer and richer, every demographic and sanitary index improved, many illnesses were defeated and schooling became widely available. Nonetheless more and more people are less satisfied with their lives than previously. A shocking research by R. Easterlin (2001) reveals that during last fifty years national well-being in USA, measured by gross domestic product (GDP), grew up steadily while people's subjective well-being stagnated. This result is actually known as the “Easterlin paradox”. For those who are used to look at GDP as a good indicator of the well-being of a society, the evidence provided by Easterlin is astonishing. Thus, people's awareness about the insufficiency of economic measures to account for well-being increased and a generalized demand to revise and complement such instruments arised.

Economics has always been interested in people's well-being and its maximization. So far the main instruments developed to account for national well-being are economic measures of welfare. These indicators are quite rigorous, widely available and frequently updated. Among these, GDP emerged as the most widely adopted instrument under the assumption that, although people well-being does not coincide with economic welfare, a higher income can not reduce people's well-being for sure. Unfortunately, such statement proved to be biased since national income can “tell only a part of the history” and nowadays a large number of researchers agree that, excepted the intrinsic limits of GDP, economic measures fail to account for other important aspects of subjective well-being (such as social capital, democratic governance, and human rights). These aspects are increasingly recognized as playing an important role for people's well-being and consequently it is important that organizations as well as nations monitor the well-being of people and take steps to improve it.

Many scientists coming from different disciplines are developing multidimensional measures of well-being to complement the most traditional ones (Sen and Anand, 1990, 1994a and 1994b; Daly and Cobb, 1989). In particular, more recently the so called happiness economics approach, focusing on people's

subjective well-being, is offering considerable contributions to a more comprehensive definition and to operationalize the concept.

In the light of the above observations, present research is intended to concur to the explanation of the Easterlin paradox answering to the following questions:

1. Is social capital important for subjective well-being?
2. Social capital trends can help to explain subjective well-being trends?
3. Can we predict the levels of subjective well-being?

The aim of this research is to identify what determines subjective well-being focusing on its economic as well as non economic dimensions and to explore the trends of the non-income determinants of well-being. Developing ways to measure and to predict subjective well-being is important to better account for those aspects which are neglected by traditional measures. Such a research can be very important from a policy point of view as well as from a theoretical one. In fact, since well-being is the really purpose of human beings, identifying which are its determinants can help policy-makers to develop proper policies to enhance well-being. Moreover even if well-being is not considered a self-standing goal, there is a growing evidence of its importance as an instrument to achieve different objectives. There are a lot of examples showing that desirable outcomes, even economic ones, are often caused by well-being: people high in well-being later earn higher incomes and perform better at work than people who report low well-being; happy workers are better organizational citizens helping other people at work in various ways; people high in well-being seem to have better social relationships than others; finally, there is a strong evidence that well-being is correlated to health and longevity (E. Diener and M.E.P. Seligman, 2004).

These are only some examples of ways in which subjective well-being may directly or indirectly correlate with important aspects of people's life suggesting some of the possible areas for policy interventions: education, labor, health, town planning, environment.

2. THEORETICAL BACKGROUND

Economists have always been aware that the object of their research was subjective well-being, but, since Bentham and its utilitarian theory, individual happiness started to be identified with utility (Bruni L., 2002). Subsequently, provided that income is a quite easy to observe variable, that it is widely available and that a higher income may not bring a higher well-being, but nevertheless it can not reduce it, it was assumed that economic agents were only interested in income. In this sense, the original meaning of subjective well-being was distorted and actually it overlaps with the idea of economic welfare. One of the main objections to this approach is that it misses to give a consistent part of the whole picture of reality. For that reason "happiness economists" propose to enrich the notion of well-being traditionally intended

as “welfare” in order to include further dimensions characterizing the broader concept of people’s well-being.

Recently, thanks to fundamental contributions from different disciplines, particularly from psychology, some economists tried to look at the meaning of well-being from a different perspective arguing that some aspects of people’s well-being have been left off, while they need to be considered together with the more traditional measures of well-being.

This new branch of research developed significantly since a pioneering article by Easterlin (1974) and actually we can correctly speak about “Happiness Economics”. This approach “relies on more expansive notions of utility and welfare, including interdependent utility functions, procedural utility, and the interaction between rational and non-rational influences in determining economic behaviour.”¹

In this context, the words “happiness”, “satisfaction with life” and “subjective well-being” are considered synonyms and are generally referred to as an evaluation of one’s own life considered as a whole: this approach is based on a direct individual assessment of well-being. For this reason economic research on this topic is generally based on large surveys in which people answer questions like “all things considered, how happy/satisfied are you with your life?”. Similar self-reported evaluations of happiness have turned out to be a good indicator of happiness and many validation tests assess their reliability: subjective measures of well-being strongly correlate with other “more” objective and subjective measures of well-being. For example, several psychological evaluation studies report a well-defined correlation between subjective well-being data and various physical measures (e.g. duration of Duchenne smile; heart rate; blood pressure); happy people smile more often during social interactions and are less likely to commit suicide; different brain scanner studies suggest that changing in brain electrical activity account for substantial variance in reported subjective well-being (Frey B.S. and Stutzer A., June 2002). Alternatively, subjective data correlate substantially with what is assessed about the person’s happiness by friends and family, by spouses or by clinical experts (Powdthavee, 2007). Such evidence allowed Diener to state in an early survey that these “measures seem to contain substantial amounts of valid variance”².

Since the first application by Easterlin, a number of other experiments have been tried in order to test earlier findings and to provide evidence for their explanations. As a consequence, the employment of happiness data in economic research flourished being progressively applied to a range of different topics.

For example, a large part of the literature focused on the income – happiness paradox either searching to corroborate this phenomena (Di Tella et al., 2001; Blanchflower D.G. and Oswald A.J., 2004) or attempting to solve the puzzle. From this point of view one of the first suggestions comes from Easterlin him-self with its “aspirations hypothesis” (2001): the author suggests that income aspirations should be introduced in

¹ Graham C., The Economics of Happiness. Insights on globalization from a novel approach, World Economics, vol. 6, n. 3, 2005, p.45

² quoted in B.S. Frey and A. Stutzer. What can economists learn from happiness research? Journal of Economic Literature, 40(2), June 2002, p. 406

people's utility in order to capture their concerns for relative income and their propensity to adapt to their previous income level.

A related hypothesis has been proposed by different economists and, in particular, by Robert Frank (1997) who focused on relative income. This approach argues that what really matters is the consumption of an individual compared to the consumption of its reference group. That is to say that happiness is mostly affected by relative consumption rather than its absolute level. A different approach is represented by the so-called relational hypothesis and is based on the idea of relational goods firstly introduced by the philosopher Martha Nussbaum. This particular kind of goods are produced by the meeting of two people in which the identity of individuals and the authenticity of their relationship is what really matters in the creation and the value of such goods (Bruni, 2002). This approach has been further tested and developed by many other authors such as Putnam (2000), Putnam and Helliwell (2004), Helliwell (2003 and 2006), Bruni and Stanca (2006) and Bartolini et al. (2008). Those authors place particular attention to the role played by relational goods and, in general, by social capital in the determination of happiness arguing that efforts to increase income may turn out in reducing quantities and quality of human relationships which, in turn, negatively affects individual subjective well-being.

Happiness data have been employed also to assess the impacts of other non-economic aspects on individual well-being. In this field, one of the first contributions was advanced by Oswald (1997) who explored the relationship between socio-demographic aspects (such as age, gender, marital and employment status, income and education level, traits and cognitive dispositions) and happiness.

Another field in which happiness economics is providing interesting insights is macro-economics. Observing directly individual response to different macro-economic variables has proved to be a good way to evaluate economic policies. For example, Di Tella et al. (2001, 2003, 2006) firstly confirm Easterlin observation and then assess the impact of inflation and unemployment on individual happiness. From a different perspective, Kenny (1999) tries to assess the effects of economic growth on happiness and subsequently focuses its analysis on Less Developed Countries searching for a connection between economic growth and subjective well-being (Kenny C., 2005). Alesina et al. (2004) pose their attention on the relationship between inequality and happiness in Europe and U.S.A. Their general finding is that "individuals tend to declare lower happiness levels when inequality happens to be high"³.

Further research has been developed to evaluate the effects of particular policies on people. This is the case, for example, of some applications about airport noise or other environmental aspects. Finally, a more substantial part of literature focused on how political institutions affect subjective well-being (Frey and Stutzer, 2000, 2002, 2007).

In this framework present research is aimed at contributing to the explanation of the Easterlin paradox focusing on some important aspects of subjective well-being widening more traditional measures of well-

³ Alesina A., Di Tella R., MacCulloch R., Inequality and Happiness: are Europeans and Americans different? *Journal of Public Economics*, vol. 88, 2004, p. 2035

being. From this point of view, the debate has been recently revived by Stevenson and Wolfers (2008) challenging the existence of the paradox. Considering Europe and Japan, the two authors argue that societies get happier as they become richer. Unfortunately, at the same time they state that “the failure of happiness to rise in the United States remains a puzzling outlier”⁴. In this way the Easterlin paradox remains unsolved and also its non-existence is not demonstrated. There is a need to further look into “the black box” of the American case. A useful hint comes from Putnam (2000) and Putnam and Helliwell (2004) pointing out the relevance of social capital for subjective well-being. This aspect revealed to be able to add fruitful informations to the definition of well-being. In fact, in a recent paper Bartolini et al. (2008) show that, using data from the American GSS between 1975 and 2004, the U.S. happiness is largely explained by social capital variations. Hence, present research is intended to analyze the role of social capital in determining subjective well-being considering some European countries. In particular, two panel data-sets on Great Britain and Germany will be adopted. In fact, answering present research questions asks for some large and very detailed data-bases. For this reason our main sources of information are the British Household Panel Survey (containing data on about 15000 individuals per year from 1991 to 2007) and the German Socio-economic Panel. Present research focuses on these European countries for two reasons: 1) much of the literature on the determinants of life satisfaction and, in particular, on the role of social capital is based on the American GSS: considering a different set of countries may result in further support to available evidence; 2) considering the literature on social capital, we don't know much about what happened to social capital in Europe. Putnam (2000) assessed a declining pattern for the American social capital and many subsequent studies confirmed such evidence, but we still miss what happened to social capital during time in other countries such as the European ones: is the American social capital decline a general trend of western societies or rather is it a peculiar feature of only some of them? Is the European social capital declining? A recent contribution from Sarracino (2008)⁵ shed some light on this topic considering 11 European countries, but this work still needs further corroboration.

The hypothesis we intend to test is whether social capital is an important aspect of people's life. This approach can reveal to be useful to better account for people's well-being and, in particular, to evaluate possible outcomes of different policies. In this way we hope to be able to contribute to the development of a new evaluation instrument for economic theory and policy.

⁴ B. Stevenson and J. Wolfers, Economic growth and subjective well-being: reassessing the Easterlin paradox, IZA DP n.3654, August 2008, p.16.

⁵ F. Sarracino, Social capital and subjective well-being trends in 11 European countries, Quaderni del dipartimento di Economia Politica, Facoltà di Economia, Università degli studi di Siena, 2008, forthcoming.

3. RESEARCH METHODOLOGIES AND ANALYTICAL FRAMEWORK

Our hypothesis (that is to say social capital can contribute to explain the total subjective well-being variation in Great Britain and Germany) comes from the seminal works from Putnam and Helliwell (2004) and Putnam (2000) in which the two authors assess a strong positive correlation among different proxies of social capital and subjective well-being proxies. Nonetheless, such correlations merely represent an indication of the relationship between the two groups of variables, but they can not explain the paradox since two main questions remain unresolved: 1) we need to analyze the causality between variables. It is possible that a higher endowment of social capital implies a higher subjective well-being, but also the contrary may be true; 2) in order to explain the trends of subjective well-being, we have to consider the trends of social capital: the sign of the two trends have to be compatible, that is to say if social capital rises (*ceteris paribus*) we expect subjective well-being growing up.

From the latter point of view, recent research based on WVS data and considering eleven European countries confirmed our expectations⁶, but we still need to assess the causality issue. Related literature still lacks a common agreed conclusion, but on average the majority of these works suggests social capital as a determinant of subjective well-being. In order to find evidence to support this thesis, we intend to focus on Great Britain and Germany considering available panel data-sets. Thanks to these larger and detailed sources of information two different methodologies are available and have been generally adopted in the literature so far: a) regressions with instrumental variables (Bjornskov, 2003; Bruni and Stanca, 2006) ; b) a system of structural equations (Van Praag, Frijters and Ferrer-i-Carbonell, 2000 and 2001; Van Hoorn, 2007). Both methods pose different challenges. In the first case, we should select a variable which clearly affects our dependent variable through our proxies of social capital; in the second case, a clear theoretical framework concerning utility and production functions on social capital and subjective well-being should be selected. Summarizing, the methodological solution will be chosen depending on data available from the two panels. Once assessed the causality questions, present research will focus on social capital and subjective well-being trends in the two countries in order to verify previous results from WVS and finally, we will adopt the same panel data to test whether our model can adequately predict the overall subjective well-being variability.

More generally, such a research poses different methodological questions that need to be previously addressed. First of all, those who are not used to work on subjective data are generally reluctant about this approach arguing the non-comparability of these data and their non-reliability since they may be influenced by different aspects that can not be controlled by researchers. Nonetheless, these data have been longly and widely tested and adopted by psychologists and other social scientists who have been analyzing the sources of human satisfaction in detail for decades asking people how they feel (Powdthavee,

⁶ F. Sarracino, *ibidem*.

2007). Moreover, as suggested above, subjective well-being data have been accurately scrutinized through many validation tests which in general confirm the reliability of such data.

Furthermore, previous empirical economic studies found that using such data in their aggregate allow to avoid many bias related to individual aspects (Di tella et al., 2001). In fact, considering large samples across countries and over time reveals consistent patterns in the determinants of happiness, while errors result uncorrelated with the observed variables and do not systematically bias the results. Finally, in order to avoid the scaling problem, econometric studies have usually adopted ordered logit or probit equations.

In present research a further critical aspect is represented by the definition of social capital, a much debated topic on which there is still not a general agreement. As pointed out by Robert Putnam, social capital should comprise not only networks, norms and trust dimensions but also those aspects - material and immaterial - that can contribute to develop mutual trust and co-operation. Furthermore, given the empirical nature of present work, we would like to adhere to a more practical definition of social capital such as the one proposed by Bartolini et al. (2008): "social capital is the stock of non-market relations and beliefs which affect the return of available resources, either in physical or utility terms."⁷ In particular, this definition highlights two main aspects of social capital: 1) every non-market relationships among individuals which allow people to communicate each other and to develop mutual trust. Following Bartolini et al. (2008) this aspect is defined *relational* social capital; 2) the system of values or beliefs which make people act coherently.

This framework obviously poses a further critical aspect: how to measure social capital.

When trying to measure social capital some particular aspects should be kept in mind (OECD, 2001):

- we should pay attention to causal connections since sources, functions and outcomes may be confused;
- social capital is mainly characterized by tacit and relational aspects which are naturally difficult to observe, to measure and to codify;
- usual variables of social capital (trust, membership, voting, etc.) provide proxy measures and should not be confused with the underlying concept.

Generally, some agreed proxies of social capital are available. For example, following Putnam (2000) main measures of social capital centre around proxies of trust and levels of engagement or interaction in social or group activities.

According to the vast majority of the literature on social capital (Paxton, 2004; Costa and Kahn, 2003), we observe the *beliefs* component through several reports of trust in institutions such as military forces, parliament, press, religious etc. To measure *non-market relations*, we use trust in individuals, civic engagement and membership in various voluntary groups and organizations. Given the multiple nature of this third aspect, we will adopt the distinction between intrinsically and extrinsically motivated group

⁷ S. Bartolini, E. Bilancini, M. Pugno, Did the decline in social capital decrease American happiness? A relational explanation of the happiness paradox, Quaderni del dipartimento di Economia Politica, Facoltà di Economia, Università degli studi di Siena, Working Paper N. 513, August 2008, p. 4.

membership advanced by Bartolini et al. (2008). Voluntary organizations which enters the first set are labelled Putnam's groups while those entering the second set are named Olson's group (Knack, 2003). This distinction is based on the works of the two authors: Olson⁸ emphasizes the tendency of associations to act as lobbies to get policies that protect the interest of special groups at the expenses of the society as a whole. Consequently, we include in Olson's groups all those organizations which are extrinsically motivated since it is supposed they are experienced only for instrumental reasons. On the contrary, Putnam⁹ identifies in associations a source of general trust and of social ties leading to governmental and economic efficiency (Bartolini et al., 2008).

Despite the problems that can arise when using such data, the advantages that can originate from these studies should be considered. Respondents' assessments of their own welfare can highlight factors that are not adequately captured by income measures, including real and perceived insecurity of rewards and incentives systems adapting to structural changes, the state of essential public services (educations, health, crime prevention), and norms of fairness and justice. Aspects such as poverty and inequality can be characterized by broader dimensions and dynamic elements that are not captured by such traditional income-based measures as poverty headcounts (e.g missing short term movements in and out of poverty) and Gini coefficients (which are static, aggregate and do not reflect distributional shifts) (Graham C., 2005).

⁸ Olson M., *The rise and decline of nations: economic growth, stagflation and social rigidities*, Yale UP: New Haven, 1982

⁹ Putnam R.D., *Making democracy work: civic traditions in modern Italy*, Princeton NJ, Princeton University Press, 1993.

4. RESEARCH PLAN

The research will be arranged in three sections:

first section: analysis of the relationship between subjective well-being and social capital;

second section: measurement and specification of the trends of non-income components of subjective well-being as well as of subjective well-being measures;

third section: testing the reliability of the predictions of the model.

Tentative Research Time Schedule

	1	2	3	4	5	6	7	8	9	10	11	12
Specification of the social capital determinans of SWB	X	X	X									
Critical Review and setting of the causality issue			X	X	X							
Setting of trends about social capital and SWB					X	X	X					
Measurement and predictions of SWB							X	X	X	X		
Conclusion											X	X

5. BIBLIOGRAPHY

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