Research Proposal: economic growth, social capital and well-being: new lessons from BRICS countries?

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(1) **Key Question**:

Available evidence suggests that economic growth in some countries, notably the US, has been accompanied by an erosion of social capital (SC) and declining subjective well-being (SWB). Since the end of 20th century and the first decade of the new millennium new countries experienced an unprecedented development process that significantly altered the geography of economic prosperity on our planet. The most outstanding new-comers are usually labeled with the acronym BRICS: Brazil, Russian Federation, India, China and South Africa (BRICS). My main research question is: are these countries following the same disappointing pattern in terms of well-being and social capital of Western countries? Or did the process of ethnical-geographical extension of development that characterized recent decades bring about new patterns of development? Moreover, do the BRICS follow any common pattern? Since these countries are very different from each other and from the Western ones, answering such questions is relevant. It could provide an important test of the generality of the conclusions drawn from Western countries about the correlates of the trends of well-being.

(2) **Specific Contribution**:

This work will contribute to the literature on the determinants of well-being. We currently have some evidence that social capital is an important determinant of people's well-being. We also know that economic growth does not necessarily result in the erosion of social capital and unhappiness. The way the economic system is organized matters for people's well-being. This evidence is mainly provided by data about Western countries. There is no evidence about the relationship between economic growth, social capital and well-being in countries of recent development. Present work aims at filling in this gap looking at BRICS, the countries with the most impressive and recent process of economic growth.

(3) **Theoretical Framework**:

The literature on well-being is gaining increasing attention because it gives the possibility to answer a fundamental question: "how far is income growth likely to increase average happiness?"[1] What we know is substantially based on the evidence from Western countries: in the long run economic growth is not accompanied by an increase in subjective well-being (Easterlin and Angelescu 2009, Easterlin et al. 2010). This result is currently known as the Easterlin paradox. The main explanations provided so far refer to social comparisons and adaptation to increasing standards of consumption (see e.g. Clark et al. 2008). Both theories have well-established roots and are supported by compelling cross-sectional evidence. However, they are unable to fully explain some recent evidence. An increasing availability of data shows that SWB varies in the long run and it doesn't vary in the same way in every country (Stevenson and Wolfers, 2008; Sarracino, 2010). This new evidence is hardly explained by adaptation and social comparisons theories: if people tend to adapt themselves to changing circumstances and to compare themselves to others, then the trends of well-being should be flat in all countries. Hence, what does explain SWB trends and its differences across countries? If it is not GDP, then on what else shall we focus to enhance people's well-being? One of the most promising approaches looks at SC as an important determinant of SWB (Helliwell, 2003, 2006; Becchetti et al., 2008; Bartolini et al., 2011). These studies mainly refer to SC as a set of social connections, as well as shared norms and values existing in a society (Putnam, 2000). The idea underlying these studies is that the net effect of economic growth for SWB is negative, because the positive impact of improving living conditions is counterbalanced by the erosion of SC accompanying economic growth. "Negative Externalities Growth" (NEG) models this idea showing that economic growth is fuelled by substituting free (social) resources for scarcer, marketable and private goods (Bartolini and Bonatti, 2003, 2008). This model has been recently corroborated by empirical evidence (Sarracino, 2010, 2011; Bartolini et al., 2010, 2011; Bartolini and Sarracino, 2011). The NEG model is very appealing, because it explains both the Easterlin paradox and the international differences in the trends of well-being. The way modern societies are organized erodes the relationships among people and their participation in the social life, which are pivotal for people's well-being. In other words, the emphasis on the economy triggers side effects that ultimately reduce

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[1] Layard et al., 2009, p. 1

people's well-being. However, all the available evidence comes from Western countries. My aim is to test how general are these conclusions using figures from some of the new-coming countries in the scene of economic growth.

(4) **Core Variables and Hypotheses**:

The dependent variable is **subjective well-being (SWB).** SWB is observed through measures of happiness ("All considered you would say that you are: 1. very happy; 2. pretty happy; 3. not too happy; 4. not at all happy?") and life's satisfaction ("All things considered, how satisfied are you with your life as a whole these days?" with answers coded on a 10-point scale).

The two main explanatory variables are personal income and social capital. **Income** is usually measured with an ordered scale of income intervals. Hence, I will assume that respondent's income equals the mean value of the relevant class. In case of missing data, where it will be possible, I'll try to impute missing data with proper techniques (e.g. multiple imputation, hot-deck).

According to Putnam (2000) and OECD (2001), **social capital (SC)** is defined as "networks together with shared norms, values and understandings that facilitate co-operation within or among groups". Several variables have been adopted in the literature as proxies of SC: voters' turnout, trust in institutions, quantity and quality of intimate relationships, social bonds among individuals, etc. In principle there seems to be no consensus on how to measure SC; nonetheless, the empirical literature on the measurement of SC identified some variables as generally accepted proxies (Paxton, 1999; Costa and Kahn, 2003). Therefore, I will observe SC using generalized trust, a measure of civicness (usually an index based on answers to questions if "claiming government benefits which you are not entitled to", "avoiding a fare on public transport", "cheating on taxes if you have the chance", or "accepting a bribe" are acceptable) and participation in groups and associations.

The **main hypothesis** I intend to test is that social capital and well-being are positively correlated over time and that the features of the specific economic process shape this relationship. This hypothesis is related to two more detailed ones:

- BRICS countries experience diminishing trends of well-being and social capital;
- The trends of well-being, social capital and income are consistent across BRICS.

(5) **Analyses and Modelling**:

1. Using micro-data and **regression technique** I will first compute and compare the **trends** of SWB, SC and economic growth. I expect that - despite economic growth - both SWB and social capital reduced over time.

2. Subsequently, I will test how much personal income and SC contributed to shaping the observed trend of SWB. Hence, I will provide a prediction of the trend of SWB in each of the BRICS countries, quantifying the relative importance of the changes in social capital and income. A very efficient technique is **Blinder-Oaxaca decomposition** which decomposes the well-being gap between the initial year of observation (e.g. 1990) and the final year of observation (e.g. 2009) in its major parts: social capital, income and other socio-demographic variables that will be used as controls (e.g. sex, age, work status, education). This technique allows identifying how much changes in the levels and in the coefficients of the relevant variables explain the well-being gap. This analysis is particularly suited to investigate each country separately.

3. Finally, to account also for some major aggregated variables (e.g. economic inequality) and to perform an analysis on the overall sample of available countries, I will apply a **multi-level regression model.**

(6) **Targeted Data Base**:

I plan to answer my question using the World Values Survey, a data-set providing comparable information about economic, social, cultural and political characteristics, surveying representative samples of 300 to 4,000 individuals per country in each wave. In particular, this extensive data-set provides national-level time series on social capital, subjective well-being and socio-demographic and economic controls concerning all BRICS from the early 1990s to the years 2008 – 2009. The time span is considerably longer in the case of South Africa where data are available from 1980 to 2009. When considering some macro variables such as the GDP and economic inequality I will use data from the World Development Indicators, the PENN World Tables and the Standardized World Income Inequality Database.

(7) **Roadmap**:

I will first perform some descriptive analysis to explore the trends of my relevant variables in the five considered countries, with and without controlling for a set of control variables such as: age, sex, education, employment and marital status. This step should provide some hints on the nature of the relationships among variables across countries: I will identify what happened to social capital and SWB in each country across time. Subsequently, I will run a within-country Oaxaca decomposition of the well-being gap. This step will provide evidence of what shaped the trend of well-being in a given country and will allow quantifying how much each variable contributed to that gap. Moreover, this technique will tell whether the gap is mainly due to the erosion of social capital or to changes in people's preferences. Subsequently, I'll test the existence of a common pattern across countries predicting the trend of well-being using a regression model with clustered data with the pooled data-set. Finally, I will adopt a multi-level model to test the robustness of my findings after controlling for macro variables such as economic inequality.

Furthermore, describe what you are going to do in the future

(1) **Literature to read**: Which discussion do you want your work to be a part of?

I'd like to contribute to the literature on the determinants and measurement of well-being in societies. In particular, I'd like to contribute to the literature on the importance of social capital and of a balanced economic growth. My research is strongly policy oriented and committed to inform not only academics, but also policy makers and general public. I am highly committed to work in this field contributing to the development of better tools to measure well-being as well as contributing to the design of new policies.

(2) **Statistical techniques to learn or improve**: What is the appropriate set of statistical techniques you need for your research? Do you need help in learning these techniques? Which courses may you be interested in?

I have experience with the techniques that I need to apply to answer my questions. However, I would like to improve my knowledge of multi-level regression models and of growth models.

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