

THE INFLUENCE OF SOCIAL CAPITAL ON THE LEVEL OF SUSTAINABLE DEVELOPMENT ON THE EXAMPLE OF SUMY REGION

Yuriy Petrushenko

Sumy State University, Ukraine

Tetyana Holets

Center for Economic Research & Graduate Education - Economics Institute, Czech Republic

Social capital can be considered as an important background for providing social aspects of sustainable development. High level of social capital ensures the facilitation of initiatives of community members and authorities in prioritization and solution of local level problems, including ecological ones. Using regression analysis, we are planning to investigate an interaction between social capital and indicators of sustainable development of a community. Our initial hypothesis is that a high level of social capital might have positive effect on sustainable development of the community.

To study the effect of social capital, it is also important to understand better the sense of this concept and to see how one can achieve a high of social capital and sustainability as a potential consequence. As an important precondition of a high level of social capital, the community members should possess a high level of trust to each other, to the authorities, an ability to self-organize themselves, to cooperate with each other and with the governance. At the same time all these characteristics can stand for the consequences of high level of social capital. Thus, social capital is a complex concept. Therefore, it is important to determine the sense, structure and the methods of measurement of social capital.

Defining the concept of social capital we follow the way how Carpenter¹ (2002) defines the primitives of social capital: "... the primitives of the concept of social capital are those characteristics of individuals including trust, trustworthiness, reciprocity, generosity and the propensity to cooperate in social dilemmas that make economic activity possible when contracts are hard to enforce" (Carpenter, p. 119). This definition reflects the main characteristics which, as mentioned above, can stand both for the preconditions and consequences of high level of social capital.

We will use survey and experimental methods to measure the level of social capital in Sumy region. According to Carpenter (2002) these methods are complements to each other, they offset the drawbacks of each other and thus their combination can give the most reliable results in the analysis of social capital. We have already started a survey process in Sumy region using the worked out survey methodology.

As a survey method we are using the questionnaire designed based on the Integrated Questionnaire for the Measurement of Social Capital worked out by the World Bank, The World Values Survey, The European Social Survey, and The Social Capital Question Bank, which is based on the Office for National Statistics survey matrix. We designed the questionnaire taking the specificity of Ukrainian communities into account.

We are planning to use factor analysis to isolate subsuming components of social capital. Initially, eight components are considered in our questionnaire: traditions of the community; information and communication; empowerment and political action; trust; solidarity and inclusion; general norms; collective action and cooperation; and general characteristics of the community which also include information on groups and networks and the quality of life in the community.

Specification of these components will allow us to understand the structure of social capital. One can distinguish determinants, dimensions and results of social capital. A relative agreement regarding the dimensions of social capital exists in scientific circles. However, discussions still exist regarding determinants and results of this concept.

The survey method will also allow us to double check the results of planned economic experiment. Third, the public good game, which we are going to use as an experimental method, will not allow us to measure such important social aspect as the ability to interact with the authorities. The game captures just the interaction between the community members. However the survey contains the set of questions related to interaction with the governance. The questionnaire also includes the questions, which ask respondents to define the changes of certain issues over time. It is important since we will be able to see whether the social capital changes over time and to analyze the trend of changes for different communities.

Along with the survey, we are planning to use the experimental method. The experimental method will allow us to reflect real life situation and to overcome the subjectivity of the survey method. Carpenter (2002) has identified four types of the experiments which can be used to measure the level of social capital: the trust game which can be used to measure the level of trust and trustworthiness; the ultimatum game which measures reciprocity; the dictator game which measures altruism; and the public good game which measures the ability to cooperate. We are going to use one of these types of the games.

To conclude we should say that the research will allow us to understand sense, structure and the methods of measurement of such complex concept as social capital. The key part of the research will be to measure the effect of the main components of social capital on the indicators of sustainable development in Sumy region. Hence we will be able to test our initial hypothesis that a high level of social capital might have positive effect on sustainable development of the community.

¹ Carpenter, J. P. *Measuring social capital: Adding field experimental methods to the analytical toolbox*, forthcoming in Sunder Ramaswamy, Johnatan Isham, and Thomas Kelly, eds, *Social Capital, Economic Development and the Environment* (Edward Elgar), 119-135.