THE RELATION BETWEEN SOCIAL CAPITAL, GOVERNANCE AND ECONOMIC PERFORMANCE IN EUROPE

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Abstract. The literature on social capital stresses the relations between social capital (trust, social norms and networks), government effectiveness and economic performance. In empirical investigations the relationship between aforementioned items was clarified by using various indicators of social capital and different country samples. Due to this reason the results are hardly comparable. In this article we aim to examine the strength of the relationship between social capital, governance quality and economic performance by using the same indicators of social capital and the same country sample (23 European countries). The study has indicated that both social capital and government indicators are related to economic performance and to each other. Results showed the positive correlation of two social capital dimensions, namely trust and networks, with economic performance indicators and governance indicators, while civism dimensions do not correlate either with economic performance or with governance indicators. In this paper we used three economic performance indicators, namely GDP per capita in Purchasing Power Standards, labour productivity per person employed and percentage of gross domestic expenditure on R&D (GERD) financed by industry.

Keywords: social capital, trust, networks, social norms, government effectiveness, economic performance.

1. Introduction

The notion of social capital has gained the increased attention in the social science debate during the last decade. The emerging body of research investigates the definition and measurement of social capital. This has been largely motivated by academic attempt to synthesize the various effects of sociological and institutional factors on economic performance.

Social capital is broadly defined as the set of rules, norms, reciprocity and trust embedded in social relations, social structures, and society’s institutional arrangements, which enables its members to achieve their mutual goals [1].

The concept of social capital has been invoked almost in every field of social science research, and has been used to explain political participation, institutional performance, health, corruption, the efficiency of public services and the economic success of countries [2].

Scholars have developed the concept of “social capital” to explain the varying ability of communities to act collectively and achieve their objectives. In order to be able to set mutual goals, and cooperate for achieving them, people have to trust each other and their governmental institutions, which in turn have to ensure the environment, favorable for such cooperation. Due to this rationale there has been a growing consensus among researchers, that social capital is comprised of civil and governmental components [3].

The literature stresses the relations between social capital (trust and social networks), government effectiveness and economic performance.

Social networks and trust (i.e. social capital) can foster the diffusion of information and knowledge, lower uncertainty and transaction costs [4–6]. Most of the empirical work has proved that social capital in terms of trust and civic cooperation is associated with stronger economic performance. A range of applications of social capital to economic performance are collected in Dasgupta and Serageldin [7], Grootaert and van Bastelaer [8], Sabatini [2].

Government social capital is related to the effective-
ness of formal institutions in facilitating collective action (both private and economic agents). The trust and cooperation in community depend on political, legal, and institutional environment.

Transaction costs will be mitigated in high trust societies, because less explicit contracts will be required and fewer infringements will occur [3]. Whether an agent trusts another one heavily depends on whether there exist personal contacts between them, or whether there exist intermediary persons, who can, from their own knowledge, assure that the other agent is trustworthy. If there is absence of such information, the quality of formal institutions come in place. Government helps agents to trust each other by securing property rights with the rule of law and providing the instruments and resources to enforce contracts.

Formal institutions (law, court practice) help to reduce transaction costs (bargaining, contract monitoring and enforcement) [5]. Environments, in which economic returns can be easily secured through formal institutions, foster the cooperation of economic agents. Studies have demonstrated a strong link between institutional environment (measured through corruption, bureaucratic quality, property rights and other institutional variables, or what in social capital literature is considered as government social capital) and economic growth [9–11]. Government can secure property rights and enforce contracts by formal institutions, but “rules on the book” might be very different from what actually takes place in a country [12]. It is very important whether people trust government, courts, formal institutions and are confident that their interests will be protected by fair means and private interests will not have any impact on case inquest.

The review of empirical researches reveals that social capital cannot be measured by a single indicator and cannot be assessed without reference to governance quality. The problem is that there are no commonly accepted indicators of trust or civic cooperation in social capital literature. In the literature the relationship between social capital, economic performance and governance was clarified by using various indicators of social capital and different country samples. Due to this reason the results are hardly comparable.

In this article we aim to examine the strength of the relationship between governance quality, social capital and economic performance by using the same indicators of social capital and the same country sample.

The existing literature studies the effect of social capital on the economic performance mainly measured as per capita income. In this paper we use three indicators, namely GDP per capita in Purchasing Power Standards, labour productivity per person employed, percentage of gross domestic expenditure on R&D (GERD) financed by industry (for rationale of choosing such indicators see section 2.3.). Relations between social capital and labour productivity and expenditure on R&D are not much empirically studied in social capital literature.

The methods of the article are the systematic analysis of literature, correlation analysis, comparison and generalization.

The paper is organized as follows. The next section deals with the definitional aspects of social capital, measurement problems and presents analytical findings about the role of social capital and government effectiveness in economic performance. Section 3 introduces the data and methodology our analysis is based on, presents the empirical analysis and discusses the results. Section 4 concludes.

2. What is social capital and why is it relevant to economics?

2.1. The definition of social capital

The concept of social capital is not new and has old intellectual roots in social sciences. The earliest use of this definition is ascribable to Hanifan, who in 1916 used the term in explaining the importance of community participation in enhancing school performance [cited in 1]. The increased attention to the social capital during the last decade is largely attributed to the seminal studies of Coleman [13] and Putnam et al. [14, 15].

The use of social capital notion in economic community has been particularly influenced by the Putnam’s et al. [14] work, which concluded that differences of civic engagement in community affairs (or what the authors called “social capital”) significantly contribute to the persistent gap in economic outcomes and governmental effectiveness between Northern and Southern Italy. Authors described social capital as “features of social organization, such as trust, norms, and networks that can improve the efficiency of society by facilitating coordinated actions” [14, p. 167].

The attention of the economists to the social capital has been fostered by the World Bank as well. In 1996 the World Bank launched The Social Capital Initiative (SCI) to assess impact of social capital on the effectiveness of development projects, and to contribute to the development of indicators for monitoring social capital and methodologies for measuring its impact [8]. The World Bank adopted definition of social capital that is very close to Putnam’s: “social capital refers to the norms and networks that enable collective action”\(^1\).

Many writers have attempted to define social capital rigorously. Networks, relationships, norms and trust are seen central in social capital definition. Proposed definitions differ due to context in which this notion has been studied: individuals [16], families [17], communities [18] or regions and nations [19, 20].

In fact, there seems to be broader agreement in the lit-

erature about what social capital does, than what it is. Despite the different fields of application, all social capital definitions agree on the ability of certain aspects of the social structure to generate positive effects on members of a group, who gain a competitive advantage in pursuing their goals [21]. Durlauf and Fafchamps [22] also distinguish the underlying idea, that these positive externalities are achieved through shared trust, norms, and values, which arise from informal forms of organizations based on social networks and associations. Following ideas listed here, one can argue, that social capital is always desirable since its presence is equated with positive outcomes. That’s not always true, as some authors stress some of the negative impacts that social capital can have on economic performance [23, 24].

In the literature on social capital there is a growing consensus that social capital is a complex phenomenon, containing various dimensions. Three main dimensions of social capital are: (1) social networks; (2) trust; (3) social norms [25, 26]. At the macro or national level, social capital cannot be assessed without reference to the institutional context in which individuals and organizations operate.

2.2. Measurement of social capital

As there is no commonly accepted social capital’s definition, there is neither a universal measurement method, nor a single underlying indicator commonly accepted by the literature. Social capital is difficult, if not impossible, to measure directly, so the use of proxy indicators is necessary [8]. The search for the best proxy indicators continues. The lack of a rigorous definition of the concept causes the problem that any social interaction can be interpreted as social capital and many different variables have appeared in empirical papers to measure it. The choice of indicators to measure social capital is determined not only by the scope of the concept, but also by the context within which measurement occurs [8].

In the studies of social capital on household and community level (i.e. “micro” and “meso”), the indicators are based on sophisticated measures of community networks, the nature and extent of civic participation, and exchanges among neighbors [27]. In the country level (i.e. “macro”) studies, which deal with the link between economic growth or development and social capital, researchers continue to use measures, introduced by Putnam [14]. Putnam’s indicators (known as Putnam’s instrument) included participation in voluntary associations; newspaper readership; voting patterns – electoral turnout and preference voting. The Putnam’s instrument has been severely criticized. Firstly due to the fact, that this instrument ignores the intensity of association members contacts, secondly, due to the positive and negative externalities of group membership [3].

Subsequent alternative indicators have also been developed. Great part of existing empiric researches on the economic outcomes of social capital at country level is based on measures of trust drawn from World Values Survey [19, 28]. Sabatini [21] considered trust as a result of social capital and did not include trust indicator in measurement process. From about two hundred indicators author selected 51 variables suitable for social capital measurement. The data was drawn from a set of surveys carried out by the Italian National Institute of Statistics. Due to this fact proposed variables could not be tested in other countries.

Some authors use the number of blood donations as an indicator of reciprocity and electoral turnout as an indicator of civic values [29]. In place of blood donation, Callois and Schmitt [20] used gifts to charities and in place of association membership they used the number of bars/cafes by inhabitant and density of sport facilities. The idea for that is high number of bars and sport facilities may indicate a strong demand for social relationships.

The lack of standardized measurement method limits the progress in social capital research. However, the acknowledgement of multifaceted character of social capital is a step in the right direction. Social capital contains various dimensions and multiple indicators are needed for proper measurement of them.

2.3. Social capital and economic performance

From Oorschot et al. [26] point of view different levels of participation in voluntary organizations, different degrees of trust and civic engagement can characterize countries and regions and can be treated as their property. Much social capital literature has focused on the nature of social capital and on its positive impact on economic performance. Since there are already a lot of analyses on the measured influence of social capital on economic performance [see for review 2, 7, 8], we do not repeat them, except for pointing out main reasons why a region whose inhabitants have a lot of social capital will on the whole perform better.

Social capital lowers uncertainty and transaction costs [3, 5, 19]. Economic agents in higher-trust societies spend less to protect themselves from being exploited in economic transactions. Trust-sensitive transactions are those, in which goods and services are provided in exchange for future payment; employment contracts in which managers rely on employees to accomplish tasks that are difficult to monitor [19].

Social capital implies many social links, some of which may transmit valuable information about market characteristics, production technologies, trade partners and so on.

Low trust can discourage innovation. If entrepreneurs must devote more time to monitoring possible malfeasance by partners, employees, and suppliers, they have less time to devote to innovation in new products or processes [5, 19].

Social capital may affect labour productivity through two main channels. Firstly, social capital fosters the diffusion of knowledge and information among workers, sec-
Secondly, social interactions may affect workers’ effort and motivation [30].

Social capital can be generated both by the community and by the government. The capacity of communities to benefit from and maintain social capital depends to some extent on the capacity of the governance to mitigate the effects of market failures, enforce the rule of law, and uphold civil liberties and political rights [3].

Knack and Keefer [31] pioneered the approach, which equates social capital with the quality of a society’s political, legal, and economic institutions. Authors concluded, that items, such as “rule of law”, “civil liberties”, and “bureaucratic quality”, drawn on various indexes, compiled by investment agencies and human rights groups, are positively associated with economic growth.

Collier and Gunning [32] distinguished civic and government social capital and in their study on Africa’s economic performance explored that slow growth occurs in societies with both high levels of ethnic fragmentation (civic social capital) and weak political rights (government social capital).

Numbers of research showed that indicators of the quality of governmental institutions are positively and significantly related to growth and investment [see for review 3, 33].

3. Data, methodology and empirical findings

3.1. Data and methodology

In this article the indicators of social capital are taken from the recent work on social capital measurement by Oorschot et al. [26]. The authors constructed an instrument for measuring social capital multifaceted nature. The instrument was validated by using data from the 1999/2000 wave of the European Values Study survey. The authors presented the scores on social capital indicators of 23 European countries, namely Austria, Belgium, Bulgaria, Czech Rep., Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Netherlands, Poland, Portugal, Slovak, Slovenia, Spain, Sweden and United Kingdom.

Oorschot et al. [26] distinguished three dimensions of social capital: networks, trust and civism. Trust and civism dimensions are constructed of two indicators, for networks dimension four indicators are used. In our analysis we summed scores of each dimension indicators.

Network dimension includes participation in voluntary organizations and socializing with friends and family. Trust dimension is comprised of interpersonal trust and trust in institutions. Civism dimension refers to particular attitudinal and behavioral characteristics of people: trustworthiness and political engagement.

We measure a country’s economic performance by its 1999–2000 average (1) GDP per capita in Purchasing Power Standards (PPS) expressed in relation to the European Union (EU – 25) average set to equal 100; (2) labour productivity per person employed (GDP in PPS per person employed relative to EU – 25) and (3) percentage of gross domestic expenditure on R&D (GERD) financed by industry (source: Eurostat).

The governance indicators are taken from World Bank report. We used indicators of 1998 and 2000 average (1999 year data is unavailable). Indicators are based on several hundred individual variables measuring perceptions of governance, drawn from 31 separate data sources constructed by 25 organizations. All scores lie between -2.5 and 2.5, with higher scores corresponding to better outcomes. For more detailed methodology used to construct the indicators see Kaufmann et al. [34].

The governance indicators measure the following six dimensions of governance [34]:

- **Voice and accountability (VA)**, the extent to which a country’s citizens are able to participate in selecting their government, as well as freedom of expression, association and free media.
- **Political stability and absence of violence (PS)** refers to the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means.
- **Government effectiveness (GE)**, the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government’s commitment to such policies.
- **Regulatory quality (RQ)**, the ability of the government to formulate and implement policies and regulations that permit and promote private sector development.
- **Rule of law (RL)**, the extent to which agents have confidence in and abide by the rules of society, the police, and the courts, as well as the likelihood of crime and violence.
- **Control of corruption (CC)**, the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as “capture” of the state by elites and private interests.

This paper carries out an empirical assessment of the relationship between social capital, government effectiveness and economic performance by correlation analysis, performed with computer program SPSS.

3.2. Empirical findings

The relationship between social capital and economic performance

Table 1 presents how social capital indicators correlate with economic performance indicators, namely GDP per capita in PPS, labour productivity per person employed and percentage of gross domestic expenditure on R&D (GERD) financed by industry.
After the publication of *Making Democracy Work* by Putnam, Leonardi and Nanetti in 1993, the economists have produced a terrific amount of studies investigating the relationship between different aspects of social capital and economic performance. In the literature the relationship between social capital and economic performance was concluded by using various indicators of social capital and different country samples. Due to this reason the results are hardly comparable.

Empirical studies, as in our case, usually find a significant positive correlation between social capital indicators of trust and networks and GDP per capita [e.g. 35, 36]. However, there is still discussion about the causal direction of this correlation. Some authors [14, 15] argue, that social capital stimulates economic performance, while others [37, 38] claim that participation in networks and trusting other people require certain levels of living standards, which are higher in economically more advanced countries.

Little evidence connects civism with economic performance. The relationship between GDP per capita and civism is positive but statistically insignificant in our case. These results come in line with Helliwell and Putnam [39], as they show that, regions of Italy with a more developed “civic community” had higher growth rates over the 1950–1990 period. We find that civism does not correlate with labour productivity and percentage of gross domestic expenditure on R&D (GERD) financed by industry, while other two social capital dimensions (trust and networks) do (almost in all cases significantly).

Following Sabatini [30] statement, that social capital may affect labour productivity as it fosters the diffusion of knowledge and information among workers and may affect workers’ effort and motivation, we also conclude that trust and networks are positively related to labour productivity.

Our results support the idea, that social capital is a multifaceted concept and cannot be measured through one single indicator. As we can see from Table 1 various dimensions of social capital are differently related to economic performance indicators.

**The relationship between government and social capital**

Social capital may improve economic outcomes indirectly, through political channels. Trust and social norms may improve governmental performance and the quality of economic policies [19].

Table 2 presents how social capital indicators correlate with governance indicators.

Social capital researchers have drawn our attention to social capital, as a potentially powerful explanatory variable accounting for government performance. They argue that social capital is positively related to government effectiveness [for review see 40]. Our findings come in line with these results. As we can see from Table 2, trust and network dimensions are positively and significantly related to governance indicators. The direction of causality between social capital and government performance has remained an issue of debate in the current literature.

However, we do not find the relationship between civism and government effectiveness. The explanation can be taken from Morse and Hibbing [41]. After a careful review of the empirical evidence they state that many people lack the motivation to engage in politics (let us remind, that civism dimension refers to political engagement). Ordinary people do not want to get involved in politics, and neither governance quality nor promoting volunteerism is likely to help. This statement is contrary to what social capital theory suggests.

The relationship between government effectiveness and economic performance

Many authors concluded, that governance quality, measured through such items as “rule of law”, “civil liberties”, “bureaucratic quality” and so on are positively associated with economic performance [see for review 3, 33]. Our results (Table 3) also suggest the same conclusion. We find very strong correlation between GDP per capita and governance indicators.

As suggested by Hall and Jones [42], Cavalcanti and Novo [11] we also find that government performance is positively related to labour productivity.

As far as we know, the relationship between innovation and government performance is not much empirically tested on cross-national level. We used percentage of gross domestic expenditure on R&D (GERD) financed by industry

### Table 1. Correlation between civil social capital and economic performance indicators

<table>
<thead>
<tr>
<th></th>
<th>GDP per capita</th>
<th>Labour productivity</th>
<th>GERD by industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civism</td>
<td>0,46</td>
<td>-0,164</td>
<td>0,114</td>
</tr>
<tr>
<td>Trust</td>
<td>0,766**</td>
<td>0,394</td>
<td>0,655**</td>
</tr>
<tr>
<td>Networks</td>
<td>0,587**</td>
<td>0,489*</td>
<td>0,473*</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level; ** at the 0.01 level.

Source: calculated by authors

### Table 2. Correlation between social capital and governance indicators

<table>
<thead>
<tr>
<th></th>
<th>VA</th>
<th>PS</th>
<th>GE</th>
<th>RQ</th>
<th>RL</th>
<th>CC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civism</td>
<td>0,207</td>
<td>0,247</td>
<td>0,029</td>
<td>0,119</td>
<td>0,087</td>
<td>0,093</td>
</tr>
<tr>
<td>Trust</td>
<td>0,740**</td>
<td>0,829**</td>
<td>0,787**</td>
<td>0,741**</td>
<td>0,853**</td>
<td>0,833**</td>
</tr>
<tr>
<td>Networks</td>
<td>0,420*</td>
<td>0,514*</td>
<td>0,518*</td>
<td>0,430*</td>
<td>0,556*</td>
<td>0,578**</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level; ** at the 0.01 level.

Source: calculated by authors
as an indicator of initiative to innovate and found a positive and statistically significant relationship with governance indicators. The literature identifies a number of means through which governmental effectiveness may directly facilitate innovation. Environments, in which economic returns can be easily secured through formal institutions, enable to spend more time on innovation rather than monitoring and enforcing contracts and property rights [19]. Mauro [43] states, that efficient institutions will facilitate the distribution of licenses, thereby increasing the rate of technological progress. Besides, specific institutional frameworks are needed to stimulate scientific discoveries, to ensure the protection of (intellectual) property rights and to guard the development and use of new technologies [5, 44].

However it should be mentioned, that the authors, who explored linkages between governance and economic performance, used various indicators of government performance. Due to this reason results are hardly comparable.

### 4. Conclusions

The notion of social capital has gained the increased attention in discussions on economic growth and development. Scholars have developed the concept of “social capital” to explain the varying ability of communities to act collectively and achieve their objectives. The breadth of the term “social capital” has made progress in these discussions difficult. Nevertheless, there is a growing consensus in the literature that social capital is a complex phenomenon, containing three main dimensions: (1) social networks; (2) trust; (3) social norms. At the macro or national level, social capital cannot be assessed without reference to the institutional context in which individuals and organizations operate.

The literature stresses the relations between social capital, government effectiveness and economic performance. However such relations were clarified by using various indicators of social capital and different country samples. Due to this reason the results are hardly comparable. In this paper an attempt was made to examine the strength of the relationship between governance quality, social capital and economic performance by using the same indicators of social capital and the same country sample and to reveal which social capital dimension is the mostly associated with economic performance.

The study has indicated that both social capital and government indicators are related to economic performance and to each other. Such results come in line with social capital theory. However, there is still discussion about the causal direction of this correlation.

Results showed the positive correlation of two social capital dimensions, namely trust and networks, with economic performance indicators and governance indicators, while civism dimensions do not correlate either with economic performance or with governance indicators. This confirms that social capital is a complex phenomenon and cannot be measured by a single indicator. Civism dimension refers to political engagement. Morse and Hibbing [41] state that ordinary people lack the motivation and do not want to get involved in politics, and neither governance quality nor promoting volunteerism is likely to help. This statement is contrary to what social capital theory suggests. The strong positive correlations between trust and networks dimensions and governance indicators come in line with social capital theory, which states that the level of trust and cooperation in community depends on political, legal, and institutional environment.

Our results support the theoretical assumptions, that social capital and governmental effectiveness may directly facilitate innovation. We used percentage of gross domestic expenditure on R&D (GERD) financed by industry as an indicator of initiative to innovate and found a positive and statistically significant relationship with two social capital dimensions (trust and networks) and governance indicators. We also obtain that trust, networks and governance indicators are positively related to labour productivity.

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Santrauka

Socialinio kapitalo literatūroje akcentuojamas socialinio kapitalo (pasitikėjimas, socialinės normos ir tinklai), vyriausybės valdymo ir ekonomikos veikmės sąrašas. Šis sąrašas yra nustatytas empiriniais tyrimais, tačiau naudojant įvairius socialinio kapitalo rodiklius bei skirtingas šalių imtis. Dėl šios priežasties, gautus rezultatus sudetinga lyginti. Šiame straipsnyje mes siekiame nustatyti socialinio kapitalo, vyriausybės valdymo ir ekonomikos veiksmų sąrašą, naudojant tuos pačius socialinio kapitalo rodiklius bei tą pačią šalių imtį (23 Europos šalys). Nustatytas socialinio kapitalo ir valdymo rodiklių tarpusavio ryšys bei ryšys su ekonomikos veiksmu rodikliais. Tačiau su minėtais rodikliais korėliuoja tik dvi socialinio kapitalo dimensijos – pasitikėjimas ir tinklai, o ryšio su pilietiškumo dimensija nėra. Straipsnyje naudojami trys ekonomikos veiksmų rodikliai: BVP vienam gyventojui perkamosios galios standartais, darbo našumas vienam dirbančiam gyventojui bei tyrimo ir vystymų išlaidų procentinė dalis, skirta pramonės įmonėms.

Reikšminiai žodžiai: socialinis kapitalas, pasitikėjimas, tinklai, socialinės normos, vyriausybės valdymas, ekonomikos veikmė.