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SOCIAL CAPITAL AS A DETERMINANT OF THE SHADOW ECONOMY IN THE REPUBLIC OF SERBIA

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The design and implementation of the measures aimed at incorporating informal economic activities into the existing formal regulatory framework assume the knowledge of the causes and structure of the informal activity. The influence of the institutional factors that encourage the development of the shadow economy (the tax burden, the degree of the regulation of the economy, the capacity of the state administration) were the subject of extensive theoretical and empirical research. In contrast, the impact of social capital, i.e. the characteristics of social ties and relations, on the shadow economy has been investigated to a much lesser extent. Starting from the fact that the informal sector of the Serbian economy is so widespread that it represents a serious obstacle to the business activities of Serbian enterprises, the aim of this study is to investigate whether the characteristics of social ties and relations, or social capital in the Republic of Serbia (RS), represent a fertile ground for the growth of the shadow economy. In this context, the characteristics and frequency of social contacts, particularized trust and institutional trust will be separately analyzed as the determinants of the shadow economy in RS.

Keywords: social capital, social networks, trust, shadow economy

JEL Classification: E26, O17, Z13

INTRODUCTION

The shadow economy is the research subject of various disciplines, ranging from economics, anthropology, political science, sociology. The key issues in the study of this phenomenon in economic science are related to the size and structure of the shadow economy, its causes, effects on productivity and prosperity, and the impact on economic growth, poverty and inequality. Although the shadow economy provides livelihoods to millions of people and represents a kind of a „safety net" for many individuals and families, its adverse effects on the economy and society significantly exceed its positive effects.

The measures aimed at the incorporating of the shadow economy into the existing regulatory framework flows are based on the knowledge of the causes and structures of the informal activity. In this regard, a special problem is the fact that data on informal activities are unreliable and incomplete. The shadow economy is a complex entity, composed of a number

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of different activities, whose measurement represents a serious challenge.

Since informal transactions rely on social ties, exploring ways in which social networks work is important for a more complete understanding of the underground economy. The social capital of the former socialist economy is characterized by an abundance of social networks that are built in order to overcome shortages of goods and services. These same connections are now used, along with other resources, for the purpose of solving problems in the market economy. Informal economic transactions continued to play an important role in the transition period, filling the gap that appeared as a result of the collapse of the existing institutions of the socialist economy and the slow emergence of the market economy institutions (Busse, 2001).

The aim of this study is to investigate whether the characteristics of social ties and relationships, or social capital in RS, represent a fertile ground for the growth of the shadow economy. In this analysis, we start with the assumptions that the frequency of social contacts and mutual (particularized) trust promote the growth of the shadow economy, while institutional trust has a negative impact on the growth of the shadow economy. The exploration of the level of available social capital, in terms of the intensity of social contacts, the density of social networks and the existing level of mutual and institutional trust, will be based on the data obtained from the Third Quality of Life Survey in Europe (Eurofound, 2012), while - as the measure of the shadow economy - we will use data on the perceptions of the business community regarding the extent of the shadow economy in RS, which are the result of the fifth wave of the Business Environment and Enterprise Performance Survey - BEEPS V, conducted by the European Bank for Reconstruction and Development (EBRD, 2015). Starting from the existing research of the impact of social capital on the shadow economy, the analysis of social capital will include the quantitative aspect of social relations, in terms of the intensity of informal social contacts in social networks, as well as the qualitative aspects of social capital, in the sense of the levels of specific types of trust, relevant for encouraging or restricting informal economic transactions. At the end of the paper, the key research findings will be presented.

LITERATURE REVIEW

There is no single definition or indicator of the shadow economy. The shadow economy is usually defined as a set of economic activities which take place outside the institutionalized economic environment. If the formal economy is perceived as the set of all registered economic transactions, then the shadow economy involves all economic transactions that go unrecorded, untaxed, unregulated and without appropriate licenses (Thomas, 1992; Portes, 1995). It is also called the informal economy, the irregular sector, the black market etc. the economic activity described with these terms is irregular in the sense that individuals who are engaged in it, either as buyers or as sellers, are trying to hide this activity from the state. They do this in order to avoid the obligation to obtain permits necessary for engaging in this activity, and to avoid regulations and taxes.

In developing countries, the shadow economy accounts for over one half of the economic activity. It provides livelihoods to millions of people. However, its role in economic development remains controversial. Some, like H. de Soto (2000), see the untapped reservoir of entrepreneurial energy in companies operating in the shadow economy, which is inhibited by the state regulation. In this respect, easier market access and a better definition and protection of property rights will release that energy, which will foster economic growth and development. Others, such as S. Levy (2008), point out the darker side of the shadow economy, which is related to the advantages that these companies enjoy by avoiding taxes and regulations. The report of the McKinsey Global Institute portrays enterprises in the shadow economy as parasites that represent disloyal competition to enterprises in the regular economy, operating in compliance with the current legislation (McKinsey, 2004).

The shadow economy negatively affects economic efficiency. First, it increases transaction costs because customers need to devote more time to complete their transactions, cross a greater distance to accomplish the exchange and the like. Also, in the exchange process, customers often receive goods of a lower quality, as well as goods without a guarantee (which goes with the goods produced in the legal economy). By moving into the shadow economy, enterprises are in a position to circumvent safety and environmental standards, meaning that, because of a higher risk that consumers and employees are exposed to, as well as due to negative external effects on the environment, social welfare is reduced. Workers employed in the shadow economy do not pay social security and healthcare contributions, which has wider implications in terms of poverty and inequality. Further, the state loses revenue from taxes and permits that would otherwise be collected. This loss may compel the state to increase tax rates or introduce additional taxes to cover its costs, leading to new distortions and a new transition of activities into the shadow economy. This is particularly important for countries facing the challenge of fiscal consolidation, such as RS. We should add that all those who participate in the underground economy violate a certain law or regulation, and probably some customs of the local community. Anyone who violates a particular law and goes unpunished may be tempted to violate other laws. In this way, the moral structure of the community could be undermined.

The research into the causes of the shadow economy is mainly concentrated on two factors:

- institutional factors, and
- relationships between individuals, as well as relationships between individuals and the state.

The first group of factors is related to the institutional conditions that stimulate the growth of the shadow economy. Within this group of factors, effects of the degree of the regulation of the economy, the tax burden and the capacity of the state administration are usually analyzed. When deciding whether to move into the shadow economy or not, the rational actor compares the benefits of operating in the shadow economy and a potential cost in the form of a penalty he/she would pay if caught. Taxes and other forms of the state regulation could reduce economic efficiency and social well-being through the deformation of a choice between different goods, between work and leisure etc. They also affect the choice of performing a certain activity in the regular or in the shadow economy. The relatively large informal sector could be explained by high costs of regulation and taxation, borne by individuals and businesses, for which they have benefits if they move into the shadow economy, and small penalties if caught. These findings are confirmed by the results of the analysis by S. Johnson, D. Kaufmann and P. Zoido-Lobaton (1998), performed on the sample of 49 countries (Latin America, the former Soviet Union and the OECD), that the shadow economy is higher if there is a higher degree of the regulation of the economy, a higher tax burden, the weaker rule of law, a higher level of the corruption of the state bureaucracy. The first two sets of variables are commonly used as a measure of benefits from the transition to the shadow economy in order to avoid interference by the state and taxation. The other two are associated with the probability of detection and punishment. The weaker the rule of law is and the more corrupt the state officials are, it is more likely that the law can be bypassed or the state officials bribed in order to avoid punishment.

The second group of factors is related to social ties, i.e. to the exploration of the impact of social capital, first of all of social networks, mutual trust and trust in institutions. Social capital plays an important role in carrying out transactions in the shadow economy. The more the shadow economy is getting closer to the model of a real market, the more it is dependent on social ties in its functioning (Portes, 1994, 430). A significant portion of economic transactions in the shadow economy presupposes the existence of social networks, or some kind of social capital. The emergence and growth of the shadow economy, according to L. Burroni, C. Crouch, M. Kaminska and A. Valzania (2008, 487) cannot be explained only by economic pressures. An important role is played by the weakness of public institutions, high levels of organized crime, the specificity of the institutional framework, the quality of implementation mechanisms, the low levels of institutional trust and the high level of particularized (mutual) trust. A. Portes (1998) also indicates the set of factors that encourage informal activities, and refers to the quantity and quality of social relations. The quantitative aspect of social relations is the closest to the classical approach to social capital, where social relationships are perceived as a resource. Social relations, rather the characteristics of social relations that enable economic actors to achieve their goals, are at the base of the social capital concept. As the core of the social capital concept, A. Portes (1998, 6) emphasizes the ability of actors to secure benefits on the basis of their memberships in social networks or other social structures. In this sense, social capital means the totality of current and potential resources that a particular social group can mobilize through its members. Social capital, however, differs from other forms of capital because it is an integral part of social relations, rather than actors themselves (Coleman, 1990).

Although social networks are usually explored in an affirmative context, they can produce negative effects as well (Portes & Landolt, 1996). According to P. Dasgupta (2000, 390), social networks can provide an incentive or a hindrance, depending on the reasons why they have emerged. If an individual has a dense network of relationships with other individuals, it increases the opportunity for him/her to connect with those actors who are able to implement informal transactions. In other words, the number and frequency of social contacts encourage an involvement in informal activities. The assumption that the density of social networks is proportional to the number of informal transactions is based on higher overall transaction costs of informal exchange. The costs of collecting information in order to carry out informal transactions are higher because, in the absence of communication through the media and advertising, participants in informal transactions depend on friends, relatives and acquaintances. J. Field (2003, 83) notes that it is necessary to distinguish between productive social networks, which produce positive effects for the members and the community in general, and social networks that have positive effects for the members, but negative ones for the wider community. Exploring the social networks in Netherlands, R. Kloosterman, J. van der Leaun and J. Rath (1999) have found that many immigrants who come to the Netherlands, in the absence of financial resources and appropriate education and qualifications, do not have many options available. In order to survive in competitive markets, they turn to informal economic activities that depend on specific social networks - mostly based on ethnic ties. In these cases, where informal activities are a direct consequence of limited opportunities in the formal labor market, social capital plays an important role.

In centrally-planned economies, transactions on the black market represented a mechanism for solving problems related to the shortage of goods and services in the regular economy (Millar, 1987; Grossman, 1989). Scarcity and the presence of corruption have forced citizens to use informal ties to perform everyday transactions, such as buying products, receiving medical care, obtaining loans etc. The informal networks developed during that period were essential for everyday life. In the socialist period, individuals built networks with a circle of people who they could trust. Those small networks allowed them to cope with difficulties in their daily lives, obtain scarce goods and help close friends, relatives and neighbors (Ledeneva, 1998). The aforementioned networks, which played an important role in former socialist economies, served as a substitute for broader social networks that could not exist in repressive regimes (Ledeneva, 1998; Flap & Voelker, 2003).

Informal economic transactions continued to play an important role in everyday life in the transition period. Despite the development of formal institutions, formal and informal economic transactions continue to coexist in these countries. As an example, we can cite rental apartments, which can be rented through an agency, as well as through informal channels. Another example is currency trading on the black market, outside banks and authorized exchange offices. Even when formal institutions exist, individuals still rely on informal arrangements because it is easier, cheaper, more profitable (at least in the short term), and there are fewer barriers to entry.

In addition to the number of social contacts, the qualitative dimension of social relations also plays an important role in informal exchange. The qualitative dimension of social capital is related to trust and is often referred to as the cultural dimension of social capital (Van Deth, 2003). Trust plays a role similar to the one played by social ties - reducing transaction costs. This role is even more pronounced in the case of informal transactions in relation to formal ones because, in the absence of formal mechanisms for contract enforcement (police, courts), individuals are referred to mutual trust. Mutual trust serves as a guarantee that participants in informal transactions will not report each other to the police. A. Portes (2010) cites the example of close ties in the Jewish community in Georgia, the former USSR. Many of them were successful entrepreneurs in the shadow economy, bypassing the centralized economy. This was possible owing to strong mutual trust, embedded into solid networks based on the common descent and culture.

We have to point out the difference between generalized and mutual trust. Generalized trust represents *ex ante* willingness to cooperate, or perform transactions with an anonymous second party. Mutual trust refers to trust within a group of interconnected individuals, based on the profession, the gender, political or religious beliefs, the racial or ethnic background. Social groups can create a high level of internal solidarity and trust. However, many groups achieve internal cohesion at the expense of others, who are treated with suspicion and distrust, producing significant negative external effects for the society in which they operate (Fukuyama, 2000). In this case, the high level of trust within the group coincides with the weakening of trust toward other individuals in the society. The economic advantages of social networks are being undermined by the inability to establish the so-called „bridging" ties between individuals in different social groups, leading to the formation of closed, parochial networks (Fukuyama, 1995; Castells, 1997). In addition to parochialism, another cause for concern relates to the tendency of networks to encourage secrecy and cover-up, which undermines respect for the law and order. So, the existing social networks actually encourage corruption and opportunistic behavior, rather than economic efficiency.

In addition to mutual trust, institutional trust is also important. When trust in institutions is low, pressure on civil servants to perform their duties better and more responsibly is weak. As the level of trust increases, public pressure on the state employees also rises, creating prerequisites for more efficient public management and business environment that is conducive to the economic activity (Lekovic, 2012, 65-78). There is an inverse relationship between institutional trust and informal transactions. If the majority of citizens in a society perceive the existing institutions as fair and impartial, then trust in formal institutions that govern transactions prevails in such a society. A high level of trust in institutions discourages individuals from engaging in informal transactions. On the other hand, if the government regulation is perceived as intervention in areas where the state should not intervene, the erosion of trust in the state institutions occurs, leading to their gradual loss of their legitimacy. In such circumstances, actors are willing to participate in informal activities. The perceived quality and legitimacy of the state interference in the economy affects the propensity of actors to participate in informal activities. We see that trust can have a twofold impact on the informal sector. It is assumed that a high level of mutual trust affects the growth of the underground economy, whereas higher levels of institutional trust have a negative effect on the size of the informal sector.

METHODOLOGICAL FRAMEWORK AND DATA SOURCES

In order to examine the potential impact of social ties and relations on informal economic transactions in RS, empirical data obtained from two surveys will be used in this paper. Investigating the level of available social capital, in terms of the intensity of social contacts, the density of social networks and the existing level of individual and institutional trust, will be based on the data obtained from the *Third European Quality of Life Survey* (Eurofound, 2012), conducted in EU27 member states, as well as seven of the nine countries which at that time were involved in the enlargement process (Croatia, FYR Macedonia, Iceland, Kosovo, Montenegro, The Republic of Serbia and Turkey). *The European Quality of Life Survey* is a representative survey conducted by the European Foundation for the Improvement of Living and Working Conditions, which is a rich source of data on living conditions, housing, the local environment, health, public services, social cohesion and the quality of the society, as well as subjective well-being. For the purposes of this paper, the data relating to the sub-sample of 1002 households in RS, collected during 2012, will be analyzed. With the aim of comparing the level of social capital in RS with the neighboring countries and the EU, the data on the individual components of social capital in Croatia, Montenegro and FYR Macedonia, as well as the average value for the 27 EU countries, will be presented.

Given the fact that the measurement of the shadow economy is accompanied by objective methodological problems, there is no universally accepted method of measuring the shadow economy in scientific research that would offer absolutely reliable and complete information. In this regard, a variety of different models of the assessment of the gray economy have been developed (Krstić, Schneider, Arandarenko, Arsić, Radulović, Ranđelović, Janković, 2013). Most often, the estimates are carried out at the macroeconomic level, and include an assessment of the share of the shadow economy in the GDP (Schneider, Buehn, & Montenegro, 2010). However, due to the nature of informal activities that involves secret, hidden and implicit transactions, economic actors' perceptions of the intensity of transactions in the informal economy appear as a potentially important source of information. The measurement of social phenomena based on subjective perceptions of the respondents is equally burdened with numerous dilemmas, primarily due to the absence of the value neutrality and the objectivity of the respondents, which calls into question the accuracy of the collected data. Nevertheless, for a whole range of contemporary social phenomena, such as corruption, the shadow economy, trust, the quality of the state institutions and the like, exploring the subjective perceptions of individuals' is a common and widely accepted method of measurement. In this sense, the measure of the shadow economy used in this paper will be based on the data on the business community's perceptions of the spreading of the informal economy in RS. The data were collected through the fifth wave of the *Business Environment and Enterprise Performance Survey - BEEPS V*, conducted by European Bank for Reconstruction and Development (EBRD, 2015). The survey was periodically conducted since 1999, on the basis of interviews with the managers of the firms in order to assess the quality of the business environment and the main challenges in the development of the private sector. The fifth wave of the survey was conducted on a sample of 15,883 companies in 30 countries of Eastern Europe and Central Asia, and in this paper, the data obtained from 360 companies in RS, collected in the period from January to August 2013, will be used. The ownership structure of the analyzed companies includes 317 companies 100%-owned by domestic private capital, 25 companies 100%-owned by foreign capital, 10 companies with a certain percentage (1%-93%) of the state capital, and 8 companies of a mixed ownership. The study included all types of companies - micro, small, medium and large.

The analysis of the empirical data at the level of social capital includes the quantitative aspect of social relations, as the intensity of informal social contacts in social networks; and the qualitative aspects of social capital, in terms of the levels of the specific types of trust, relevant for the facilitation or restriction of informal economic transactions. Exploring the level of the shadow economy in RS will be based on an analysis of the business community's perceptions of unfair competition from the informal sector and the informal economy as one of the key obstacles to doing business.

SOCIAL CAPITAL AND THE SHADOW ECONOMY - EMPIRICAL DATA

Social capital within social networks

The participation of individuals in formal and informal social networks is the basic indicator of the network dimension of social capital. Measuring the level of participation in formal networks (different community organizations) is based on the survey questions about belonging to a variety of voluntary associations and an active participation in their activities. Table 1 shows the frequency of social contacts of the citizens in the form of activities within various clubs, societies and associations. Participation in this kind of social networks enables access to information, discovering new opportunities and an advancement in society. Based on the data on participation in formal networks,

Table 1 Social ties within formal networks (participating in the activities of a club, a society or an association)

	The Republic of Serbia	FYR Macedonia	Montenegro	Croatia	Average Balkans	Average EU 27
1 Every day or almost every day	3.0%	1.4%	1.9%	4.1%	2.8%	2.5%
2 At least once a week	5.7%	4.4%	4.7%	9.7%	6.2%	12.3%
3 One to three times a month	6.0%	6.9%	4.2%	6.9%	6.1%	10.3%
4 Less often	14.1%	14.0%	21.7%	14.1%	16.1%	15%
5 Never	71.0%	73.1%	65.8%	64.7%	68.8%	59.8%
Mean value of indicator (1 - 5)	4.45	4.53	4.47	4.26	4.43	4.17

Source: Eurofound, Third European Quality of Life Survey, 2012.

it can be concluded that over 70% of Serbian citizens never engage in this kind of social contacts. Looking at the different categories of frequency, it is notable that participation in formal networks falls within the specific terms of countries in the region, but is far behind the EU countries. The average value of the frequency indicators clearly confirms the fact that the intensity of social contacts of the citizens of RS within formal networks is low.

In addition to the engagement of individuals in the community's organizations, an important element of social capital is the intensity of informal social contacts. The participation of individuals in informal networks is measured by the intensity of bridging ties (with friends, colleagues and people from the immediate environment) and bonding social relations (reliance on close family ties). Informal social ties have the character of a safety net and are suitable for building relationships of mutual trust and reciprocity and for mobilizing informal solidarity. Relations between members of these networks are generally characterized as the bonding ties that strengthen relationships within homogenous groups and provide assistance and support in overcoming the problems of material and immaterial character. Tables 2 and 3 account for the data on how many Serbian citizens rely on personal, informal contacts in solving important problems of life. Based on these data, it can be concluded that individuals who live in the Balkan countries highly value relationships with friends and

Table 2 Informal networks: Support/help when looking for a job

	The Republic of Serbia	FYR Macedonia	Montenegro	Croatia	Average Balkans	Average EU 27
A member of the family / a relative	42%	44.9%	63.7%	34.2%	46.2%	30.6%
A friend, a neighbor or someone else	31.6%	27.2%	22.5%	31.6%	28.3%	24.6%
A service provider, institution	9.2%	17.8%	5.5%	14%	11.6%	23.1%
Nobody	17.2%	10.1%	8.3%	20.1%	13.9%	21.8%

Source: Eurofound, Third European Quality of Life Survey, 2012

Table 3 Informal networks: Urgent loan

	The Republic of Serbia	FYR Macedonia	Montenegro	Croatia	Average Balkans	Average EU 27
A member of the family / a relative	63.0%	68.5%	81.4%	70.7%	70.9%	69.4%
A friend, a neighbor or someone else	28.4%	22.4%	15.6%	20.0%	21.6%	11.9%
A service provider, an institution	2.2%	3.9%	0.5%	3.6%	2.6%	9.2%
Nobody	6.4%	5.3%	2.5%	5.7%	4.9%	9.6%

Source: Eurofound, Third European Quality of Life Survey, 2012

the family and rely on their support during their life in a much larger scale in relation to the EU citizens. Conversely, the EU citizens are more likely to seek help or support from official institutions, whereas in RS, a very small percentage relies on institutional capacities in solving the problem of unemployment, financial and other personal or family-related problems. For example, as many as 73.6% of citizens of RS rely on the help of their families or friends in finding a job, while only 9.2% use the services of official institutions.

The empirical data suggest that, in the years of economic and political changes after the transition, the citizens of RS and the countries of the region have turned to the strengthening of informal social ties, seeking safety in social niches made up of close relatives and friends. Thus, the transition process in the Balkan countries has caused the creation of social capital to be directed towards the survival and strengthening of informal networks, i.e. the preserving of the characteristics of the social capital from the socialist period. The persistence of informal networks as the main lever for solving everyday problems has been followed by the slow development of broader formal networks.

Trust as the qualitative aspect of social capital

Measuring the level of generalized trust is based on the respondents' answers to the question „Would you say that most people can be trusted?", where the respondents chose a number on the scale from 1 („You can't be too careful") to 10 („Most people can be trusted"). The data on the level of generalized trust in RS, its neighboring countries and the average values for the EU-27 are displayed in Table 4.

The empirical data indicate a low level of general trust in RS - only 2.3% of the respondents from RS opted for number 10, which indicates the maximum level of trust in people in general. The percentage of the respondents who believe that people can be trusted (the sum of responses 6-10) is twice lower (33.5%) than the percentage of the respondents (66.3%) who expressed distrust (the sum of responses 1-5). Compared with the results of research conducted in the EU, we can see a large gap in the level of trust. Earlier surveys of trust indicated the long-term and chronic nature of this gap, along with the evident tendency of a further decline in trust in transition countries, which contributes to the deepening of differences in the level of trust between developed European countries and countries in transition. The levels of trust in the Balkan countries are relatively uniform, indicating similar conditions for the accumulation of social capital. One of the significant predictors (sig = 0.0037) of the level of trust in RS is the level of income, in the sense that the respondents belonging to lower income quartiles reported a lower level of trust in people in general.

Table 4 The level of generalized trust (on the 1-10 scale)

Country	Mean value (1-10)
The Republic of Serbia	4.53
FYR Macedonia	3.54
Montenegro	4.86
Croatia	4.59
Average Balkans	4.38
Average EU 27	5.03

Source: Eurofound, Third European Quality of Life Survey, 2012

An important parameter of social capital in a country is the degree of trust in the institutions of the system. The indicator of institutional trust is based on the estimate scales of trust (in this case, from 1, indicating the total absence of trust, to 10, indicating complete trust) in different institutions. Table 5 shows the data on average trust in various institutions in RS, the countries in the region and the European countries.

The research into trust in institutions in RS shows an alarmingly low level of citizens' trust, especially in political institutions (the parliament, the government). A somewhat higher level of trust is ascribed to the institutions of the judicial system and the protection system; but, according to this indicator, RS is a country faced with the lowest trust of its citizens, even when compared to the countries in the region. The very institutions that are of major importance for the functioning of economic and political life (the judiciary, the government, the parliament) face the lowest level of trust. High correlation coefficients between the indicators of trust in individual institutions indicate that citizens' distrust is directed towards all, instead of individual, institutions (Table 6).

The shadow economy as an obstacle in the business environment

Different methods are used to measure the size of the informal economy in modern economies, expressing the shadow economy as a percentage of the GDP. One such method is MIMIC (Multiple Indicators, Multiple Causes), that takes into account multiple causes and multiple effects of the informal economy, and therefore represents the most comprehensive method of measuring, both by the sector (households, companies) and by activities. There are methods that measure the shadow economy on the basis of information on compliance with tax regulations in households (the HTC method), where measurement includes those forms of the informal economy which can be observed on the basis of income and household consumption. According to the aforementioned macroeconomic models, the estimates of the shadow economy in RS are around 30% of the GDP - 30.1% according to the MIMIC method and 23.6% in 2010, according to the HTC method (Krstić, Schneider, Arandarenko, Arsić, Radulović, Ranđelović, Janković, 2013).

Due to differences in coverage, the forms of the shadow economy which are subject to measurement and the assessment methodology of the existing models, their results are often complemented by interviewing representatives of firms in order to observe the phenomenon of the gray economy from their perspective and to assess the prevalence of its forms in the business environment. In this sense, as an indicator of the gray economy in this paper, the business community's perceptions of the unfair competition that comes from the informal sector of the economy will be used, as collected by the survey in 2013 (EBRD, 2015).

Table 5 Trust in institutions (on the 1-10 scale)

Country	Government	Parliament	Legal system	The press	Local authorities	Police
The Republic of Serbia	2.95	2.88	3.08	3.56	3.29	4.33
FYR Macedonia	4.18	3.90	4.00	3.93	4.06	4.66
Montenegro	4.00	4.08	4.17	4.67	3.85	4.53
Croatia	3.32	2.96	3.15	3.54	3.33	4.66
Average Balkans	3.61	3.46	3.60	3.93	3.63	4.55
Average EU 27	4.05	4.05	4.76	4.47	5.30	5.91

Source: Eurofound, Third European Quality of Life Survey, 2012

Table 6 Correlation coefficients between the indicators of trust in institutions

	Parliament	Legal system	The press	Police	Government
Legal system	0.766**	-	-	-	-
The press	0.556**	0.539**	-	-	-
Police	0.584**	0.590**	0.572**	-	-
Government	0.806**	0.721**	0.604**	0.627**	-
Local authorities	0.690**	0.634**	0.566**	0.544**	0.760**

Note: ** p < 0.01

Source: Authors, based on: Eurofound, Third European Quality of Life Survey, 2012

According to the results of this survey, the three most important obstacles in business in RS are political instability, tax rates and access to financial resources (Table 7). However, over 10% of the firms in the sample highlight the practices of competitors from the informal sector as the key challenge they are faced with in their business doing.

That this problem transcends national and even regional boundaries is indicated by the fact that firms from more than one-third of the countries surveyed highlighted the shadow economy as the main obstacle in their business (only in 9 countries, the shadow economy is not placed among the three most important barriers). Over 40% of the surveyed firms reported that they were facing unfair competition from the informal sector. The shadow economy in this study does not only cover the activities of the firms that are not formally registered, but also the activities of registered firms, such as reporting lower income, fewer employees or lower wages in order to avoid paying taxes or obtaining necessary documentation. The prevalence of the informal activity is most visible in the businesses whose turnover is mainly made in cash (small shops, taxi services), as well as in the sectors of construction, agriculture and services provided to households (EBRD, 2015).

Different firms in RS have different perceptions of the informal economy - certain types of firms are to a greater extent exposed to competition from the informal sector, such as small firms, young firms and those operating in small towns (Table 8).

The detailed data on the firms' perceptions of the informal economy as an obstacle to their business are shown in Table 9. Only 40.83% of the firms did not report on problems with the competition from the informal sector, while about 6% of the firms indicated that it was the most serious obstacle to business. One-third of the surveyed firms believe that the business of competitors from the informal sector of the economy

Table 7 The most important obstacles in the Serbian business environment

Obstacle	Number of firms	%
Access to finance	52	14.44
Access to land	2	0.56
Business licenses and permits	6	1.67
Corruption	22	6.11
Courts	18	5.00
Crime, theft and disorder	12	3.33
Customs and trade regulations	14	3.89
Electricity	3	0.83
Inadequately educated workforce	7	1.94
Labor regulations	6	1.67
Political instability	70	19.44
Practices of competitors in the informal sector	39	10.83
Tax administration	17	4.72
Tax rates	60	16.67
Transport	2	0.56
n/a	30	18.61
Total	360	100.00

Source: EBRD, BEEPS V Report, 2015a

Table 8 The characteristics of firms that consider the shadow economy as the major obstacle

	Number of firms
Firm size	
Mikcro	2
Small	22
Medium	12
Large	3
	39
Years of operation	
Under 5	1
6-25	38
26-50	0
Over 51	0
	39
Industry	
Manufacturing	12
Retail	13
Other services	14
	39
Ownership	
Private domestic capital	33
Private foreign capital	4
State capital	0
Others	2
	39
Region	
Belgrade	11
Vojvodina	11
Sumadija and Western Serbia	13
South and Eastern Serbia	4
	39
Size of the locality	
Over 1 million (capital)	11
250000 to million	2
50000-250000	10
Less than 50000	16
	39

Source: EBRD, BEEPS V Report, 2015a

Table 9 The perceptions of the shadow economy as an obstacle for business in The Republic of Serbia

The perceptions of the shadow economy as an obstacle	N	%
No obstacle	147	40.83%
Minor obstacle	71	19.72%
Moderate obstacle	55	15.28%
Major obstacle	40	11.11%
Very severe obstacle	21	5.83%
Don't know	5	1.39%
No answer	21	5.83%
Total	360	100%

Source: EBRD, BEEPS V Report, 2015a

threatens their work (the sum of the categories moderate, major and very severe obstacle).

The survey found that 45% of the firms were facing competitors from the informal sector in their business. More than 12% of the firms pointed out that the number of competitors from the informal sector were too many to count. Only 2.71% of the firms included in the sample pointed out that there was no competition at all. The average number of competitors from the informal sector reported by the surveyed firms is 16.87.

Table 10 presents the detailed data on the number of competitors from the informal sector of the economy.

Table 10 The number of competitors

The number of competitors	N	%
No competitors	9	2.71%
1-5	104	31.33%
6-10	72	21.69%
10-50	69	20.78%
51-99	6	1.81%
100	13	3.92%
Too many to count	41	12.35%
No answer	18	5.42%
Total	332	100%

Source: EBRD, BEEPS V Report, 2015a

CONCLUSION

Methodological problems and dilemmas that accompany all attempts at measuring intangible social resources, such as trust, the density of social networks and the prevalence of the informal economy, represent one of the essential limitations to the research into the relation between social capital and the volume of informal transactions. However, up-to-date surveys of these phenomena have reached a satisfactory level of objectivity and precision, so today, they constitute the basis for drawing valid conclusions about relations between different social indicators. The main contribution of this paper relates to extending the analysis of potential causes for the informal economy in RS by pointing to the characteristics of social ties as potential determinants of informal transactions in the economy. Based on the comprehensive surveys used in this paper, the population and the economy of RS can be argued to be facing some serious challenges.

First of all, the data on social relations indicate that the development of social capital in RS in the years of intense economic and political changes during the transition was directed towards the degradation of generalized trust, trust in institutions and participation in formal social networks. Distrust towards people in general and the feeling that they cannot rely on formal institutions affected the citizens of RS to nurture informal social ties and a specific type of trust characteristic of homogeneous, closed groups. The specificities of social capital in RS are reflected in the fact that strong informal networks inherited from the pre-transition period, created as a substitute for functional formal systems under conditions of uncertainty and shortages, persist even today, 15 years after the beginning of the transition.

Strong informal networks and particularized trust are often referred to as negative social capital in social capital theory given the fact that this kind of social connections and relations facilitate the realization of socially undesirable activities - crime, corruption, the shadow economy. The estimates of the shadow economy from the perspective of the firms indicate that the informal sector of the economy is so widespread that it represents a very severe obstacle to doing business in RS. The unfair competition of formally unregistered firms and activities of registered firms aimed at the circumvention or evasion of financial obligations towards the state, impose additional problems to firms in RS, which, according to international standards, is considered to be a low competitive economy.

Taking into account the effect of the institutional factors that affect the development of the shadow economy (the tax burden, the level of the regulation of the economy, the capacity of the state administration), that were not the subject of the analysis carried out in this paper, based on the presented data on social capital and the shadow economy in RS, it can be concluded that, according to the initial assumptions, a high level of particularized trust and a lack of trust in institutions encourage the growth of the shadow economy,

The findings of the paper indicate the need for the further estimation of the shadow economy in RS, as well as for the establishing of clear quantitative relationships between the individual elements of social capital and the distribution of the shadow economy. In order to discover the key causes and factors that increase the intensity of informal transactions, it is necessary that the shadow economy should be analyzed within the context of the comprehensive models that will determine the specific importance of both the institutional factors and the social determinants of the shadow economy.

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