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DORMANT RESOURCES FOR THE INCREASE OF ENTERPRISES INNOVATIVENESS IN POLAND

UŚPIONE ZASOBY DLA WZROSTU INNOWACYJNOŚCI PRZEDSIĘBIORSTW W POLSCE

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Streszczenie. Celem pracy jest ocena atrybutów kapitału społecznego w Polsce związanych z innowacyjnością. Badaniami objęto lata 2004, 2008, 2010. Podstawą źródłową były dane IMD z tego okresu. W pierwszej części pracy, mającej charakter teoretyczny, wyjaśniono (zwrócono uwagę), że kapitał społeczny jako instytucje nieformalne są trudnym problemem badawczym. W drugiej części w sposób pośredni oceniono kapitał społeczny w Polsce na tle innych krajów przez pełnienie przez niego funkcji ekonomicznych. W obu przypadkach przedstawiono dużą lukę kapitału społecznego i jej zmniejszanie się. W trzeciej części na podstawie źródeł wtórnych zbadano związek kapitału społecznego z innowacyjnością podmiotów. Udokumentowano, że w warunkach polskich ograniczenie innowacyjności tkwi głównie w grupie atrybutów strukturalnych i poznawczych. Wskazano na wewnętrzną lukę strukturalną kapitału społecznego oraz zewnętrzną z instytucjami formalnymi. W związku z tym zwrócono uwagę na pilną potrzebę:

- a) kształtowania środowiska innowacyjnego w Polsce głównie przez budowę atrybutów związanych z przedsiębiorczością;
- b) wzrostu jakości kapitału społecznego, który powinien wyprzedzać wybory strategii rozwoju firm i gospodarki;
- c) uznania znaczenia budowy potencjału konkurencyjności w sferze edukacyjnej jako podstawowego źródła kształtującego kapitał społeczny.

Key words: entrepreneurship of managers, innovativeness, social capital.

Słowa kluczowe: innowacyjność, kapitał społeczny, przedsiębiorczość menedżerów.

INTRODUCTION

The level of Polish economy seems to remain below the standard of other EU member states considering innovativeness. The proof of the above statement lies in rankings e.g. IMD, European Commission, WEF, OECD and specialist monographs (Zalewski and Skawińska 2009, p. 35–40, 2011, Skawińska and Zalewski 2009, p. 159–161). This situation has been taking place since the beginning of our governmental system's transformation and all current attempts to change this situation have not proven very successful. Numerous actions that have been undertaken to increase the innovativeness of business entities in Poland include:

- creating the infrastructure for the development of innovativeness (incubators, industrial and technology parks),
- supporting the undertaken and implemented innovative projects by means of the EU funds,
- operating numerous programmes strengthening the cooperation of universities with industry and other sectors of national economy,

- realizing projects regarding adaptation of a graduate's profile to an employer's expectations,
- breaking the competence barrier by introducing broad educational action within the framework of graduate studies, courses and trainings conducted by educational units and universities,
- promoting the idea of network, clusters and other forms of cooperation between business entities,
- reinforcing the market of polytechnic education (scholarships, paid internships).

This does not, however, deplete the causative possibilities of innovativeness growth. It is worth, therefore, to concentrate on a superior problem, namely the social capital – the deficiency of which leads to weak correlation between the aforementioned actions and their effectiveness in increasing the innovativeness of enterprises and economy. The choice of this problem is justified by the fact that in every country and especially in transforming states there exists a need to manage social capital. This means that it should undergo planning and it should be measured and analyzed from the perspective of its reproduction and realization of socio-economic functions. Meanwhile however, this problem remains unnoticed by the state. There is a lack of scientific research identifying the level and structure of social capital as well as the determinants of its production. Thus, there is no database in existence designed to manage social capital in order to execute the National Innovation Strategy 2020. The cognitive aim of this paper is to present the evaluation of attributes (dimensions) of social capital in Poland which are “responsible” for the innovativeness of business entities.

SOCIAL CAPITAL AS A RESEARCH PROBLEM

The concepts of social capital are diverse both in terms of conceptualization and operationalization. Numerous interpretations of this term resulting from different views have been circulating since the interwar period. Being interdisciplinary in character this category has been gradually more and more interesting for social and economical sciences since the 1980s. The reason for this is the search (along the deepening globalization processes supported by the neo-liberal doctrine) for more effective methods of decreasing its negative effects and increasing the socio-economic coherence along with a desire to breach the development gap. At present social capital is considered to be the modern factor of economic growth and development apart from innovations, technological development and knowledge (Marciniak 2004, p. 124). Social capital remains out of market in character but without doubt it does influence market mechanisms based on competition. Andrzej Matysiak (2000, p. 522) states that the market mechanism as the regulator of market balance is only possible within a society where: “state participates in coordination of actions performed both by individuals and groups”: rules of the game (coexistence standards) are respected in interactions between independent entities.

But the author adds that “the market mechanism would facilitate harmony in economy only under specific conditions, namely the existence of a proper institutional system. Institutionalization refers to the formation of norms, basic unit rules, activities of groups and social

organisations" (Piotr and Gajowiak 2008, p. 92). Typologies of social capital resemble a contract. But its division into individual and group capital is widely accepted. Together they form informal institutions (on the contrary to the state created formal ones i.e. Acts of Parliament, directives etc.) – Skawińska (2010, p. 57). These are the norms and values along with the choice of methods and means of interpersonal cooperation which remain cultural in character. Religion, tradition and historical customs form social capital. On the basis of the thorough studies of the related literature A. Matysiak proposes that "market economy is unable to function without social capital" (Matysiak 2000, p. 538). In a view of such an uncompromising statement it is worth thinking about what we know about social capital and what kind of consensus has already been reached and what still remains unclear. Current arrangements regarding social capital which do not arise any questions are as follows:

- it is a non-material factor,
- it is a form of capital,
- it holds many functions linked to the efficiency of business activity and life quality,
- the functions of social capital are differentiated in time and space,
- it forms a non-economic growth factor,
- it is inevitable for the growth of social well-being,
- social capital is something more than trust,
- it is based on valuation,
- it can be reproduced,
- it is the feature of both individuals and community,

There is no consensus among debaters as to answers to the following questions:

- can social capital be expressed together with human capital?
- what generates its existence and what are the sources of its origin and growth?
- can it be distributed?
- is it a solely resource category or is it also a process one?

Thus, it needs to be stated that firstly, conducting any research in this field requires reaching some unequivocal terminological and methodological conclusions. Secondly, studies involving the level, structure or dynamics of social capital are very limited and contain a large dose of subjectivism. It is most common to undertake numerous partial studies regarding trust as the basic resource of social capital and even many authorities (Putnam 1997, Fukuyama 1997) consider trust a social capital. Most authors, however, consider this resource as the most important components of social capital (Coleman 1998, p. 95–120, Grudzewski et al. 2009).

In our considerations we have accepted the definition of social capital after P. Bourdieu (1986, p. 241, J. Coleman (1998, p. 95–120) which also covers the knowledge and skills possessed by social capital. It is as follows: social capital constitutes a collection of current and potential resources belonging to a person through participation in institutionalized relations and engagement networks due to trust and within the cooperation ties also dependent upon the level of education. These are such elements as the collection of norms and values as well as the networks of dependencies which tie an individual with society disabling him from cooperating with other people for the common good.

Supporters of the resource approach to social capital in their analyses accept lower (3) or higher (7) number of components. In turn, each of them includes a few attributes. This paper assumes the concept of the expanded structure of social capital. They represent 3 components theoretically distinguished as structural, cognitive and behavioural and they are further discussed in table 3.

One shall accept the point of view of A. Matysiak (2008, p. 85) who states that social capital as the sum of resources does not carry any economical functions. It only constitutes a potential value. This, in turn, depends on possibilities of its implementation. Socio-economic system determines the availability, mobility, utilization and protection of this resource. Thus, social capital resources are triggered by internal and external regulatory mechanisms. The essence of social capital is such that it gets transferred into particular kinds of economic capital and thus, through social interactions, allows for the realization of its attributable functions.

All researchers dealing with this issue point to the developed range of functions to be fulfilled by social capital within the economic sphere. The most important ones include the following:

- economic growth,
- social welfare growth,
- competitiveness of business entities,
- innovativeness of business entities,
- efficiency of management,
- coordination of actions performed both by individuals and groups,
- increased economic activity,
- cooperation,
- organization,
- social coherence,
- society's quality of life,
- shaping of market order,
- providing information,
- entrepreneurial,
- balance of labour market,
- efficiency of transformation process.

Social capital also connects together human relations and bonds which facilitate economic development. But the „dormant” resources of social capital do not act in favour of this process. It refers to the shortage of social capital. Thus, it can be indirectly stated that if Poland represents low level of innovativeness then it is necessary to “awake” the already existing resources of social capital. But a question arises as to the efficiency of the untapped resources. Are they sufficient to fulfil an aim of innovativeness' growth? And if they are too small how would their increase be made possible?

ASSESSMENT OF SOCIAL CAPITAL IN POLAND

Literature on the subject is full of opinions about the low level (quality) of social capital in Poland. Jerzy Hausner states decidedly that “our country suffers from the lack of social

capital” and he further elaborates on its unique role in allowing citizens as individuals to communicate with one another with trust and cooperate with one another and to undertake common efforts (Hausner 2010). This conclusions are indirectly based on the insufficient realization of functions for which the real social capital is to be blamed (tab. 1).

Table 1. Assessment of social capital in Poland based on the realization of its functions between 2009 and 2010

No.	Index specification	Position in the ranking of World countries
1	Freedom from corruption (CPI) *	49 among 183 analyzed countries (2009)
2	Competitiveness index **	46 among 133 analyzed countries (2009)
3	Social coherence ***	51 among 58 analyzed countries (2010)
4	Quality of life ***	47 among 58 analyzed countries (2010)
5	Entrepreneurship of business managers ***	6 among 58 analyzed countries (2010)
6	Social responsibility of business ***	41 among 58 analyzed countries (2010)
7	Labour market relations (balance) ***	38 among 58 analyzed countries (2010)

* Perception of corruption level as an average of indices from 0 to 10.

Source: * http://e.wikipedia.org/wiki/Corruption_Perceptions_Index_%28CPJ%29, access 2.02.2011 r.

** WEF Indeks konkurencyjności (World Economic Forum), www.weforum.org, access 2.02.2011 r.

*** Source for points 3–7: IMD, World Competitiveness Yearbook 2010, Lousanne, Switzerland.

Among many causes behind the shortage of social capital the most fundamental ones are the destruction of the network of relations resulting from historically negative experiences suffered by Polish society and the loss of trust in the etatistic system and the lack of contemporary revitalization of this capital. Correct is the opinion of A. Gwiazda that social capital is invisible, it can not be touched, bought, borrowed but one should attempt to build it (Gwiazda 2002 p. 7–9). The situation of Poland against the background of countries playing main roles in global economy (regarding main attributes/dimensions of social capital) is shown in table 2 and fig 1. It is worth noting the distance from an ideal situation and the improvement in this field since 2004 (period after Poland joined the EU) referring to the period of advanced system transformation. Illustration 1 present the radar charts for 10 dimensions of social capital in 2004, 2008 and 2010. The data was obtained from the World Competitiveness Yearbook (IMD) and the names of dimensions were collected in table 2.

Each chart is composed of four profiles. Profile for the leader has been designed in such a way that it shows the best (highest) rating according to the opinion of 4460 respondents – range from 1 to 10 for each of ten dimensions. These ratings correspond with different countries covered by the IMD rankings (60 countries and regions in 2004, 55 in 2008 and 58 in 2010). Thus, the leader profile may be associated with an ideal unattainable for any country. Similarly, an outsider profile has been constructed – as a compilation of the lowest values for ten dimensions of social capital in different countries. Illustration additionally contains a median profile for each of ten dimensions of social capital. Charts constructed in such a way have been used to portray Poland in 2004, 2008 and 2010. An ideal profile for the year 2004 in almost a regular decagon. Only for the dimensions 6–10 the rating slightly exceeds 8. The profile regarding Poland is partially convergent with the outsider’s profile. Only the dimensions numbered 4, 5, 9 and 10 scored significantly better.

Illustration 2 shows the profile for the year 2008. The ideal profile is more deformed than before like the outsider's profile. The profile for Poland was altered and moved away from it in all dimensions and it is located within the profile for the median at least one unit away. The year 2010 further brought a higher score for Poland. The distance of particular dimensions from the outsider's profile increased by over 1,5 units and in case of dimensions numbered 7–9 it increased up to around 3. Moreover, Poland scored higher than the median for three dimensions – 6, 7 and 8 (see table 2)

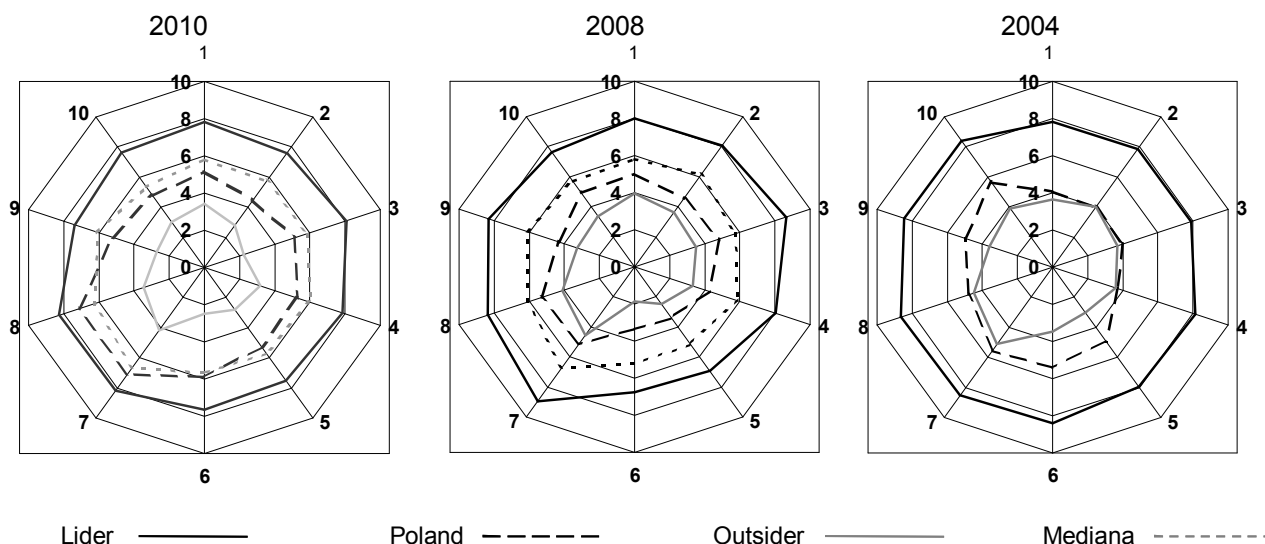


Fig. 1. Radar charts for 10 dimensions of social capital in years 2010, 2008 and 2004[#]

[#] – axes numbers 1–10 describe dimensions (attributes) of social capital mentioned in table 2; scale on the axes refers to its intensity.

Table 2. Poland's place in terms of the score according to the selected social capital attributes in 2010 in relation to 2008

No.	Resources/attributes	Place of Poland among 58 countries analyzed in 2010	Level interpretations in 2010	Place of Poland among 55 countries analyzed in 2008
1	Worker motivation	40	Very low level	39
2	Credibility of managers	49	Very low level	49
3	Value system In society supports competitiveness	40	Very low level	46
4	Ethical practices	37	Low	51
5	Competent senior managers	32	Less than average	49
6	Skilled labour	27	Average	51
7	National culture	22	Moderately open for outside ideas	53
8	Flexibility and adaptability of people	12	High, open for new changes	47
9	Attitudes towards globalization	44	Very low level	51
10	Technological cooperation	40	Very low level	36

Source: IMD, World Competitiveness Yearbook 2010, Lusanne, Switzerland.

Accepting the current state of knowledge regarding the real social capital in Poland it is necessary to notice the need for its growth. The theory of social capital is constantly developing and the research in this field constitutes an added value to this discussion.

RELATIONSHIP BETWEEN SOCIAL CAPITAL AND INNOVATIVENESS

Verified hypothesis of the relationship

Modern theses of knowledge construction are based on the existence of creative people's networks. Thus, social capital is greatly affected by innovativeness (Fazlagić 2005, p. 102). Despite globalization affecting the forms of interpersonal communication between individuals from remote countries their close relationships remain important within small communities and between them. They are based on trust and the division of knowledge within networks which in turn become more and more innovative. Literature explains the role of relationship proximities for the cooperation within networks (Moodyson and Jonson 2007, p. 115–131, Kirat and Lung 1999, p. 27–38). In constructing the innovation network the geographical proximity remains more important for the biotechnological industry than for the automotive industry. Thus, the local system of innovativeness is also influenced by the structure of industry. Moreover, another causative element is related of the institutional, organisational, cognitive and social proximities. Wojciech Czakon (2010, p.15–19) notices that "the greater the social proximity the more efficient become the learning and the innovative potential". According to Sztaudynger (2007, p. 136), R.D. Putnam formulated his own idea on the matter: "social capital stimulates innovations, education and self-education and the growth in work efficiency and it is equally significant as physical and human capital". In this regard it becomes obvious that social capital shapes invention which in turn becomes innovation through commercialization¹.

Table 3. Attributes of social capital with significance for innovativeness

Structural (resources and relations)	Cognitive / regulatory	Behavioural (linked to behaviour)
<ul style="list-style-type: none"> – social networks – competences – credibility – loyalty –cooperation within a group – qualifications – participation – cooperation – commitment – partnership 	<ul style="list-style-type: none"> – trust – interest – knowledge sharing – openness to new ideas – solidarity – respect for existing norms and social values – ethics – compliance with property rights – acceptance of difference – motivations 	<ul style="list-style-type: none"> – activity – patience – readiness to undertake risk – discipline – responsibility – flexibility and adaptation – keeping promises – communicability – truthfulness

Source: own study.

The transmission of knowledge is determined mainly by the level and structure of social capital creating the climate of innovativeness (supply and demand along with co-operation). These attributes of social capital remain significant which contribute to the collective spending

¹ This research has been conducted within the research project 2657/B/H03/2010/39 Ministry of Science and Higher Education.

of time and building team work through the bonds at different levels of formality (table 3). In this table resources of social capital were divided into three groups: structural (resources and relations, cognitive/regulatory and behavioural (linked to behaviour), which are shaping cooperation and realisation of common goals e.g. innovations.

This influences the choice of diffusion methods and the effectiveness of new technologies absorption. The dimensions (attributes) presented in the table are of structural and cognitive character and they are linked to behaviour (behavioural). The analysis of some of them based on the example from the IMD data (table 2) leads to conclusions that under Polish conditions they form a strong barrier for innovativeness and they are mainly present within the group of structural and cognitive attributes.

GROWTH IN THE ENTREPRENEURSHIP OF MANAGERS – “AWAKENING” OF SOCIAL CAPITAL RESOURCES FOR INNOVATIVENESS

According to the IMD ranking the entrepreneurship of Polish managers in 2010 reached the sixth position among 58 countries. Back in 2008 the same position ranked 33rd (among 55 countries). A significant improvement has been observed in the past two years. Let us assume that in 2009 Poland was the so called “green island” among countries affected by global crisis. Thus, one might come up with a question regarding the subjectivity of assessment in relation to the entrepreneurship of managers in our country. Let us remember that entrepreneurship is considered the function of social capital and the dimension (attribute) of human (individual) capital (Skawińska 2005, p. 100–101). Taking into consideration the first meaning of this category it is indeed possible to prove (in comparison to other countries) the positive effects of economic efficiency (GDP, dynamics) in 2009 and 2010. But with the second meaning such an assessment of entrepreneurship points to shaping (awakening) of a new quality of social capital dormant among entrepreneurs. Their social capital is filled with the attributes of flexible actions, adaptation to changes and openness to new ideas – all contributing to the choice of entrepreneurial actions and the more rational utilization of available economic resources.

A question arises as to the causes of this situation and the desirable directions for change. Undoubtedly, the transfer of knowledge to managers through different forms of education (school and extramural) remains very significant. This is indicated by the change for the better (in IMD rankings of 2008 and 2010) of such social capital attributes as competences (from 49th to 32nd place) and “qualified labour” (from 51st to 27th place). A still large reserve for the further improvement of innovativeness is included in such attributes as “technological cooperation”, “worker motivation” and “credibility of managers”. The position of Poland regarding the first two dimensions has dropped during the last two years and has remained unchanged regarding the last one.

The trend for the knowledge based economy enforces the acceptance of a new paradigm in the innovation development. It is the cooperance of enterprises manifested mainly within clusters and business networks. Meanwhile, their quantitative and organisational state in Poland remains in the embryonic phase. The development of this form of organisation in Poland depends on the entrepreneurship of managers. It is linked to hopes for the development of technological cooperation and the more efficient management of worker

motivations. Thus, one may surely state that if the entrepreneurship of managers has been stimulated but there is a visible lack of symptoms indicating the growth of innovativeness then this is the proof that there is no internal balance (coherence) between the attributes of social capital and/or there is a lack of their external complementarity with formal institutions. Society does not accept such legal norms which fail to influence the creation of common good, increase in the quality of life of individuals and society as a whole and which remain incoherent and vague. Moreover, too many EU regulations (automatically affecting Poland) further restrict both entrepreneurship and innovativeness. In terms of the assessment regarding legal environment and regulations Poland has occupied one of the last places for the past few years. And also one of the last places regarding the level of bureaucracy.

Entrepreneurship is often understood as innovativeness (Drucker 1992) and it should act as its manifestation as it is linked to the new ventures of people. In reality, however, innovativeness is a more narrow term than entrepreneurship because each innovation results from entrepreneurship but the latter is not always an innovation. Such an interpretation of this category is compliant with the one brought up by J.A. Schumpeter (1934). Thus, it becomes easier to explain diversities between the position of Poland in terms of these two categories. There exists the evidence supporting the fact that the increase in the entrepreneurship of managers (dormant among both inherited and acquired traits of character) is caused by the stimuli linked to threat, i.e. loss of market position, deterioration of life quality, loss of a positive image etc. Thus, it is defensive in character. Such a phenomenon occurred among managers in Poland during the financial crisis. It is advisable, however, to support a thesis that entrepreneurship covers the whole spectrum of activities undertaken for the realization of a designated target. These activities are creative and are there to distinguish a leader. In this case an entrepreneurship outrunning the existing standards takes place and we begin to deal with a breeding ground for new inventions as a process in both material and non-material sphere.

Therefore, does the increase of managers' entrepreneurship assessed by 4460 IMD respondents proclaims an awakening of social capital for innovativeness? Actually, this seems unlikely. The aforementioned increase only reflects the short-term defensive behaviour resulting from personal characteristics linked to global financial and economic crisis (2008–2010).

The above ascertainment results from a fact that the strong sides of entrepreneurship are formed by such social capital attributes as firstly, acquisition of talents and secondly, credibility of managers within a society. These two dimensions place Poland at the end of the aforementioned IMD ranking. Their weakness does not shape the long-term orientation of entrepreneurship linked to innovativeness. Especially that there is a lack of significant growth in the area of other attributes of this capital.

CONCLUSIONS

Social capital is constructed in a long-term due to its main source of origin (culture). Thus, it becomes necessary to secure the growth of its quality to execute the National Innovation Strategy 2020. We can presume that so far Polish decision-makers have mistakenly

assumed (intentionally or not) that the future level of economic development will be adapted to the existing social capital. While in fact its creation should precede the choice of development strategy resulting from new global challenges. Educational organisations play a significant role here. An increase in the competitiveness potential may improve the situation. Stimulation of all social capital resources may turn them into economic values through the channels of Innovation Transfer Networks. But, for such a situation to take place, it is also necessary to improve formal institutions regarding their increased coherence with social capital. This is linked to the need of building the innovation potential by increasing expenditures in the field of science and research & development as well as supporting the policy of entrepreneurship by removing bureaucratic restrictions.

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