

INSTITUTIONAL DIMENSION OF BUSINESS CLUSTER

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Abstract

To achieve dynamic sustainable development in the contemporary domestic and world economy it is important to develop business clusters which create emerging industries and help to build social capital. In this article the author considers the institutional logic of business cluster and the nature of the transactions process between the members of this structure. The aim of the article was to show that clusters on the one hand are examples of institutions, and on the other hand they co-create institutions that enable the members of the cluster to satisfy their needs, regulate their activity, ensure the continuity of cooperation and integrate members around common goals and values. Dual approach to institutions indicates in this case that their function is to control and trigger the activities in the cluster. The paper presents a business cluster as an example of an institution which plays an essential role in contemporary socio-economic processes. It attempts also analysing the importance of clustering from the perspective of the theory of transaction costs, considering that the business cluster is always seen as a privileged place for the creation of social networks among firms because of the presence of trust and partnership in the economic transactions of co-located actors that is facilitated by their proximity. The author stressed that the business cluster has a beneficial impact on the reduction of opportunistic attitudes of cluster members – and owing to this – on the decrease in transaction costs.

Keywords: cluster, institution, social capital, transaction costs

Introduction:

The processes of signing and completing economic deals are realised within various institutions that organize the market and pervade almost all the areas of business entities' functioning. These institutions naturally determine the process of economic growth. Economic literature increasingly emphasises that economic growth does not only depend on the market conditions but also dynamic interactions between the elements of the Triple Helix Model (university-industry-government relationships), knowledge and innovation transfer, the creation of human capital and the activity of local institutions. Although the role of institutions in economic development does not raise any doubts (at least from the theoretical point of view), this area still lacks comprehensive and consistent empirical analyses.

In recent years, the term *institution* has again become a central focus of economists and other scholars studying the processes of cluster development, and the reasons why clusters have differed so greatly in their achievements on this front. In the literature on the subject, *cluster* is commonly perceived as a more or less formalised organisation that has been created on the basis of relatively sustainable and active relationships between the independent entities that have decided to closely cooperate to achieve diversified and long-term benefits for each of the parties involved. The relationships are based on open information exchange, and mutual trust, sharing common benefits and potential risk, commitment, partners' autonomy, participation in decision making and also reciprocal influence, respect and responsibility. Taking into consideration numerous attributes of the cluster, which are identified by the researchers almost all over the world, it is impossible to recognise its institutional dimension. It is showed by norms, rules and a more or less formalised code of conduct, the structure of an organisation that is created to represent and fulfil the expectations of particular cluster members or coordination mechanisms that compose the functional framework for intra- and interorganisational behaviour.

The main purpose of this paper is to characterize of the selected aspects of the institutional dimension of contemporary business clusters. The author focuses on five key research questions within defined subject of the article:

- what is distinctive (typical) for the institutional dimension of business clusters?
- why business clusters are an example of institutional arrangements?

- why institutions within business clusters have a strategic importance for the development process of the cluster under conditions of uncertainty?
- why the institutional dimension of cluster has an impact on social capital development?
- why institutionalisation within business clusters has a positive impact on the reduction of transaction costs?

Such formulated research problem ensues from the fact that the constantly developing cluster theory, which treats clusters as a way of regulating enterprises' behaviour, indicates that the present classic market regulations are being enriched with cooperation elements. Thus, what is of strategic importance in explaining clusters' role and the regulatory ties created within their internal environment, which are reflected in the existence of competition and cooperation is New Institutional Economics.

The outline of the scientific considerations which has been presented in this article was conducted on the basis of theoretical research. The research process was dominated by two main models, that is, deductive and inductive.

Heterogeneous Nature of The Institutions:

The term institution is used in different areas of economic theory and practice. The use of the term institution has become widespread in the social sciences in recent years, reflecting the growth in institutional economics and the use of the institution concept in several other disciplines, including philosophy, sociology, politics, and geography (Hodgson, 2006, p. 1). It is connected with the firm foundations of the institutional school on which the analysis of transaction categories and economic institutions has been developed by the subsequent neoinstitutional approach. The New Institutional Economics contributes to explaining economic growth and income differences by considering not only the standard factors of production but also institutions (Efendic and Pugh *et al.*, 2011, p. 587).

Many researchers stress that contemporary institutional theory spans multiple levels of analysis and includes several loosely related conceptual streams developing in parallel. In political science institution is defined as an organized political entity (e.g. a nation), its organs, local government organisations, political parties and trade unions. In legal science the term institution is defined as a range of legal principles that regulate certain

groups of social relationships. Then, in sociology, this term refers to the firm elements of social order, settled and vested forms of activities, acknowledged ways of solving the problems of cooperation, community life or the organisation itself (Amenta and Ramsey, 2010, p. 16; Zucker, 1987, pp. 443-446). Depending on what these institutions concern, to which area they relate and their characters themselves, their following types are distinguished: economic institutions, political institutions, social institutions, both formal and informal which comprehensively create the institutional system characteristic of a particular society.

In the literature on the subject institutions are defined in different senses and contexts. The term may be defined as:

- general habits of action and thought, sustainable and prevalent way of thinking or acting which is embodied in traditions or customs of a particular group of people (Nelson *et al.*, 2002, p. 268);
- a set of socially prescribed patterns of correlated behaviour (Bush, 1987, p. 1076);
- the rules of the game in a society; more formally, they are the humanly devised constraints that shape human interaction (North, 1992, p. 5);
- the effective rules of a social game in which individuals and their organisations are the players, where the rules of the game (laws, regulations, norms) and their enforcement mechanisms create constraints and incentives that shape the behaviour of decision makers (Eggertsson, 2013, pp. 1-5);
- formal rules, informal constraints (norms of behaviour, conventions, and self-imposed codes of conduct) (North, 1992, p. 9);
- some patterns of behaviour (e.g. negotiations, signing contracts, parties' agreements), specific forms that define rights and obligations together with increasingly detailed legal regulations which define the permissible ways of conduct (Gruszecki, 2002, p. 203);
- long-lasting elements of social order, settled and vested forms of activities, common and acknowledged ways of solving cooperation problems (Wajda, 2003, p. 25);
- the kinds of structures that matter most in the social realm: they make up the stuff of social life, and the rules of the game in society or, more formally, are the humanly devised constraints that shape human interactions (Hodgson, 2006, p. 2);

- the rule that governs human behaviour and an institutional framework is a more or less coherent set of rules that shape and restrict human behaviour (Keizer, 2006, p. 5);
- a system of social factors that conjointly generate a regularity of behaviour, where by social factors he means, man-made, nonphysical factors that are exogenous to each individual they influence, including rules, beliefs, norms and organisations (Greif, 2006, p. 30);
- shared behavioural regularities or shared routines within a population, and shared mental models or shared solutions to recurrent problems of social interaction (Mantzavinos and North *et al.*, 2004, p. 77).

Taking into considerations various approaches of theoreticians and practitioners in defining institution, three significant categories of this term can be distinguished: norms, rules and more or less formalised code of conduct, organisations that are established to represent and fulfil the expectations of particular society's members as well as coordination mechanisms that create a functional framework of the behaviour of the members of management processes (Nelson and Sampat, 2001, p. 33; Gagliardi, 2008, p. 417). In this sense, institutions that pervade almost all the areas of human activity are assigned with the array of functions: stabilization, regulation, cognition, integration or instrumental character (Schotter, 2011, pp. 10-19). These functions, among others, indicate that institutions are real enough, have been generated in the right time and place, adapt to the changing reality, limit the chaos, ensure freedom for groups and individuals, facilitate the interpersonal relation building and contribute to the synergy effects. For example the cognitive function refers to the information that institutions provide to the individual, including the indication of the likely action of other people, also includes their influence on the very perception that people have of reality, that is, on the way people select, organize and interpret information (Dequech, 2006, p. 118). The key role of institutions can be easily identified because they contribute to solving problems of coordination of agents' plans; help to promote cooperative behaviour and overcome opportunism; make agents internalize externalities, and reduce uncertainty (Gagliardi, 2008, p. 419).

Institutions are linkage mechanisms that bridge across three kinds of social divides – they link micro systems of social interaction to meso (and macro) levels of organisation, they connect the symbolic with the material,

and the agentic with the structural (Mohr and White, 2008, p. 485). Williamson (2009, p. 371) shows that institutions are widely believed to be important for economic development but cannot be easily transplanted in order to spur economic development. North (1990, p. 6) emphasizes that the major role of institutions is “to reduce uncertainty by establishing a stable (but not necessarily efficient) structure to human interaction” and points out that both formal and informal institutions are evolving and changing, thereby continually altering the choices available to us. The institutions constantly evolve to respond to changing circumstances (e.g., by protecting intellectual property rights), foster creativity, lower transaction costs, and encourage the process of creative destruction (Boliari, 2007, p. 5).

Business Cluster - The Example of an Institution:

According to Porter (1998, p. 79), the business cluster represents a kind of new spatial organisational form in between arm’s-length markets on one hand and hierarchies, or vertical integration, on the other. This concept refers to a set of economic activities, economic entities, cooperation of the different partners (business, academia, local government, NGOs), formal and informal institutions, concentrated geographically (locally or regionally), which established a formal or informal relations between themselves, the horizontal and vertical, and the favour of the industrial sector through which they exchange information, knowledge and goods for the development of a common product and services (Radman-Funaric and Potnik-Galic, 2011, p. 667). It evolves basing on geographical proximity, develops over time, boosts competition and cooperation (co-opetition) resulting in innovation process, and potentially creates greater economic benefits through higher productivity, better knowledge management, and entrepreneurial opportunities (Chuluunbaatar and Luh *et al.*, 2014, p. 553). Even though clusters inherently contribute to the development of industries (current and emerging) by creating economies of agglomeration, the past 35 years have observed different and sometimes contrasting development paths of the clusters in individual countries and regions. Many business clusters are now subject to intense global competition and global cooperation (global value chains) that has been magnified by domestic policies aimed at opening up and liberalizing the domestic markets (Wasimarif, 2012, p. 72).

Economic and management researchers indicate that the business clusters bring benefit to firms by institutional involvement in specialised

services and infrastructure, increasing productivity, enhancing innovation, and stimulating the growth of new businesses (e.g. spin-off company, start-up) in a cluster environment. Firms in a cluster are oriented to competitive advantage by working together such as horizontal and vertical cooperation. Porter (1998, p. 80) strongly emphasizes that a cluster allows each member to benefit as if it had greater scale or as if it had joined with others formally – without requiring it to sacrifice its flexibility. The business cluster performance outcomes may follow from both a given cluster's configuration and its internal governance processes i.e. cluster management (Tracey and Heide *et al.*, 2014, p. 3).

The activities undertaken by entrepreneurs in a cluster environment take place within a particular institutional framework. In other words, behaviour and actions of cluster's participants are determined, *inter alia*, by social institutions. In the course of time, relations in a cluster are institutionalised through joint observance of legal regulations, shaping of rules prevenient to the creation of both social ties and a system of values.

Clusters constitute an instance of an institutional structure (institutional arrangements) i.e., a more or less formalised organisation being a group of cooperating partners, in possession of particular material and immaterial resources. Certain members of such an organisation, basing on its institutional structure, attempt to achieve their own goals, both individual and those set within the structure. These types of organisations are special institutions that involve: criteria to establish their boundaries and to distinguish their members from non-members, principles of sovereignty concerning who is in charge, and chains of command delineating responsibilities within the organisation (Hodgson, 2006, p. 8). The relationship between organisations and institutions lies at the heart of organisational studies.

Cluster is a complex social systems rooted in space (Pulles and Schiele, 2013, p. 100). Social interactions among spatially proximate actors within a cluster can motivate the deepening of existing relationships or formation of new linkages (Eisingerich and Bell *et al.*, 2010, p. 251). Consequently, in this case, a cluster constitutes a unique entity organisation, in which a human being is a subject having a sense of freedom, not an object of manipulation. Furthermore, this human being is not a means to an aim, but an aim in itself. Entity organisation refers to people's cooperation both in a group and in a particular society (Narski, 1997, p. 15). Moreover, a cluster is

a goal-oriented organisation, created by people, separated from an environment, and simultaneously open to relations with the environment, since it draws and transfers energy, information or values as a result of them. Clusters considered as a contemporary organisation form established, in the course of time, their s own institutions, creating an increasingly complex chain of organisational connections and institutional interactions (Osadnik, 1996, p. 93).

The cluster is a typical institution, since it is associated with a process of group contribution to the implementation of common goals, projects, and agreements between cluster's members. It is vital that while implementing common plans outlined in such a way, certain partners integrate thinking about common benefits. A partner agreement within the cluster, however, allows the termination of this agreement with a notification in cases when further common activity would have negative impact on financial outcomes of one of the partnership parties (Haynes and Allen, 2001, p. 177; Black and Akintoye *et al.*, 2000, p. 423). In many cases, partners associated with the implementation of certain projects consent to formalise the cooperation in a cluster (formalisation of a cluster) through the creation of a legal-organisational unit gathering partners e.g., in a form of consortium, association etc. In this case, the cluster encompasses members who met formal membership criteria, creating atmosphere conducive to open interaction and cooperation under the implementation of the adopted development strategy.

The business cluster treated as an institution is conducive to the accumulation of social capital. Social capital can be understood as a form of capital, like financial or human capital, that is embedded in the relationships between individuals, and can be measured at the individual or group level (Ellison and Steinfield *et al.*, 2010, p. 3). According to Lin (1999, p. 35), social capital is the investment in social relations and resources embedded in a social structure which are accessed and/or mobilised in purposive action (social capital contains three ingredients: resources embedded in a social structure; accessibility to such social resources for individuals; and use or mobilization of such social resources by individuals in purposive actions). This capital as a “glue” that holds societies together refers to the internal, social and cultural coherence of a society, to norms and values which control human interactions, as well as to institutions which implement these interactions (Acar, 2011, p. 456). A set of basic values shared within one

social group (e.g., honesty, truthfulness, fulfilling agreements, engagement, keeping one's word, reliability in exercising one's duties) underlies the social capital.

Social capital is an important societal resource and has been defined as generalized trust, access to and membership in various types of networks, as well as norms of reciprocity (Rothstein, Stolle, 2008, p. 441). The capital is developed thanks to networks between various entities, shaped by cultural traditions, a system of values, entrepreneurial culture, norms of social conduct and common attitudes conducive to cooperation. Putnam (1993, pp. 35-42) thus argued that social capital is a feature of social organisation, such as networks, norms, and trust, that facilitate coordination and cooperation for mutual benefit. Bourdieu defines the volume of social capital as a function of the size of the network and the volume of capital (economic, cultural and symbolic) possessed by networked individuals (Bourdieu and Wacquant, 1992, p. 119). He argues that social capital is the sum of the resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition (Bourdieu and Wacquant, 1992, p. 119).

Huber (2009, p. 166) emphasizes that the social capital of a business cluster is the knowledge the members of the cluster are able to potentially access or actually mobilise for work activities through internal and external social networks. Moreover, he believes that the kind of capital depends on the extent to which individuals in cluster organisations are able to acquire work-related knowledge from individuals in other cluster organisations as well as from individuals in organisations outside the cluster (Huber, 2009, pp. 166-167). What sometimes is of considerable significance in the process of accumulating cluster's social capital is a cooperative institutional arrangement presenting high level of institution's integration (Zabkowicz, 2001, p. 25).

It is emphasised in the literature on the subject that a social capital is conducive to the establishment of new and effective relations in a cluster, therefore to a maximal and balanced use of resources by possibly the biggest number of its members. High level of such capital is indeed essential for every entrepreneur in a cluster's structure, since it (Fazlagic, 2004, p. 25; Dong and Jin *et al.*, 2008, p. 822):

- facilitates problem solving in groups, as mutual trust reduces the number of conflicts, particularisms, inclinations to form oppositions and coalitions, destructive actions;
- facilitates running a business, establishing contacts, thus stimulates the development of entrepreneurship;
- increases people's self-consciousness in the field of reciprocal connections.

In a cluster, firms have access to social capital as institutional actors, a resource that helps the development of norms for acceptable behaviour and the diffusion of information about behaviour (Kajikawa and Takeda *et al.*, 2010, p. 170). Social capital within a cluster influences the process of consolidating established interpersonal relations, facilitates coordination, communication and cooperation, facilitates the creation of new "links" in a special network, influences the establishment of cluster's value, is conducive to faster implementation of goals and introduction of changes, enhances cluster's effectiveness primarily through the facilitation of cooperation between its participants. Strong social norms and beliefs, associated with a high degree of closure of the social network, encourage compliance with local rules and customs and reduce the need for formal controls (Adler and Kwon, 2002, p. 29). The results of studies focusing on different aspects of social capital suggest that the positive effects of social capital during the early stage of cluster development, when few firms exist, may be replaced by congestion effects in mature clusters that include many firms (Staber, 2007, p. 511).

Clustering - The Transaction Cost Approach:

Pragmatic roots of the clustering concept lie in the theory of transaction costs, which constitute a part of the theoretical core of the discipline of strategic management. Transaction costs theory explains the choice of organisational form as matching transactions that have certain transactional characteristics with the appropriate governance mechanisms (Kim and Mahoney, 2005, p. 232). According to this theory, an enterprise should undertake all these activities, in case of which transaction costs of purchasing products and services from external suppliers are higher than the costs of developing these products and services inside an enterprise (Williamson, 1981, pp. 548-577). Transaction costs comprise: the costs of obtaining information on the best suppliers, receivers and the most attractive

prices; the costs of signing a contract (the costs of finding a partner, the costs of negotiating the terms of a contract, the costs of possible claims and the costs of settling these claims); the costs of contract realisation and monitoring; the costs of contract evaluation; the costs of economic uncertainty (price changes, currency fluctuation, breaking cooperation). These costs are divided into *ex ante* and *ex post* transaction costs, where (Williamson, 1998, p. 390):

- *ex ante* costs arise in the process of drafting and negotiating contracts, and change along with the object of transaction;
- *ex post* costs comprise costs which are connected to: management structure, monitoring and evaluation, possible incompatibility, negotiations, provision of obligations security.

These costs, connected to business agreements (contracts), belong to the category of costs which are hard to percept, not always possible to identify and express in an unequivocally measurable way. Hagedorn (2015, p. 593) stresses that the transaction costs do not exclusively result from the physical procedure of transferring a unit of a good, service or resource from one point to another, but, in particular, from how the actors involved prepare for or respond to this physical change, which may have caused a conflict by incompatible use of natural resources between them.

An important source of transaction costs is opportunism, that is, a crafty endeavour to achieve one's own goals, which is responsible for uncertainty between the parties to a transaction. Within transaction cost economics, opportunism is not only an assumption of human nature, but through the concept of behavioural uncertainty, opportunism may also be an attribute of transactions (Niesten and Jolink, 2012, p. 1031). In this case, as a result of partner's opportunistic behaviour related to breaking the terms of a beforehand agreed contract, or amending a contract in a way that increases the advantage of one partner at the expense of the other, there arise various kinds of transaction costs, for instance ones that ensue from securing the terms of a contract, costs of gaining additional information, negotiating new terms of a contract, monitoring and evaluating contract realisation (Hodgson, 2004, pp. 401-418). The threat of opportunism as well as its scope depends on the attractiveness and the level of transaction-specific investments, the level of uncertainty, risk and complexity of a transaction as well as inclination towards opportunism.

Transaction costs are certainly a part of the cost structure of doing business in a particular location, and lowering transaction costs (though lower costs for labour, capital, supplies, or other factors can overwhelm the overall savings in transaction costs offered by a particular cluster) is often the reason for forming a business cluster (Seeley, 2011, p. 90). McCann, Arita and Gordon (2002, pp. 649-651) argue that if we adopt a transaction-costs perspective we can define three distinct types of business clusters, according to (Iammarino and McCann, 2006, pp. 1024-1027):

- the nature of firms in the cluster (pure agglomeration) – inter-firm relations are inherently transient, loyalty between firms, nor are any particular relations long-term, firms are essentially atomistic, in the sense of having no market power, and they will continuously change their relations with other firms and customers in response to market arbitrage opportunities, thereby leading to intense local competition;
- the nature of their relations (industrial complex) – long-term stable and predictable relations between the firms in the cluster, access to the cluster is therefore severely restricted both by high entry and exit costs, and the rationale for spatial clustering in these types of industries is that proximity is required primarily in order to minimise inter-firm transport transactions costs;
- the transactions within the cluster (social network) – mutual trust relations between key decision making agents in different organisations may be at least as important as decision-making hierarchies within individual organisations, trust relations manifested by a variety of features, such as joint lobbying, joint ventures, informal alliances and reciprocal arrangements regarding trading relationships, key feature of such trust relations is an absence of opportunism, in that individual firms will not fear reprisals after any reorganisation of inter-firm relations.

These characteristics of business clusters are distinguished in terms of the nature of firms in the cluster structure and the nature of their relations and transactions undertaken within this structure. Moreover, these classifications are not explanatory theories, but they are based on the implicit assumptions underlying most of the existing literature on agglomeration and clustering concept (Iammarino and McCann, 2008, p. 15).

Institutionalisation in a cluster reduces opportunism (Waite and Williams, 2009, pp. 499-512), and owing to that it reduces also transaction

costs, as it increases the predictability of actions, and thus creates conditions facilitating the undertaking of rational actions. Particularly in the case of relative contracts based on the principles of partnership, there is a possibility of reducing and decreasing transaction costs chiefly through (Gluszek, 2004, p. 199; Rutkowska, 2003, p. 276):

- the avoidance of contracting costs when it is not necessary to draw up a detailed contract, as it is very time-consuming and expensive (a need for trust is particularly visible at the lowest level of institutionalisation, namely, when a particular contract between contractors is signed);
- the reduction of the costs of monitoring partners' actions and their performance of obligations determined in a contract;
- the reduction of costs connected to a complex adaptation, which ensues from the acceptance of partners' gradual adjustment to the requirements of mutual cooperation, right from its beginning;
- the avoidance of transaction costs, related to re-contracting the agreement due to the lack of time limit for the term of a relative contract.

According to Jankowska (2012, p. 118), owing to the fact that a cluster can be perceived as a way of regulating entrepreneurs' behaviour, the relations inside a cluster help to reduce transaction costs, and the entities that change business partners in a cluster do not have to be afraid of great costs of undertaking this action due to a high level of trust between cluster members.

Zhang and Song (2009, p. 1747) stress that, the increased transaction costs, resulting from the increasing transaction amount of intermediate products and consumer trades, request efficient market organisation of an industrial cluster in the developing process of production, to reduce the transaction costs in various kinds of intermediate products and consumer products trading activities. These costs can be reduced because cluster members, closely bound in a geographical area, can share a complex social and cultural identity based on collective beliefs, values, conventions, and language. Also social cluster homogeneity together with mutual knowledge of one another accumulated through each firm's own experience, foster a relational trust that reduces the risk of abusive behaviour in clustered transactions (Diez-Vial, 2011, p. 518).

The reduction of transaction costs within a business cluster constitutes one of the key signs of the increase in the effectiveness of its

functioning. It ensues from the fact that a cluster has a stronger mechanism of control and monitoring than the market, owing to a possibility of promoting real engagement of cluster members and eliminating from the group of cluster members the units that show an opportunistic attitude. The coordination of behaviour in a cluster on the basis of formal and informal institutions reduces the tendency to opportunistic behaviour.

In the practice of managing a cluster as an organisation more or less formalised, it is possible to strengthen institutions constituting the structure of management on the basis of social capital. Drawing up and signing contracts as formal institutions within a cluster supported by, e.g., informal institutions in a form of common norms and values (organisational culture, social capital) can facilitate present cooperation, including building trust capital. Thus, the coordination structure adopted and typical of a given cluster, creating stable institutional framework for a transaction to proceed in a cluster environment, can be conducive to the reduction of transaction costs.

Conclusion

Presently, economic development depends on growth poles, innovative technologies, social capital as well as the institution. What is particularly beneficial from the viewpoint of economic development are these institutions which enable productive and stable cooperation. An example of such an institution is a cluster, which in the theory and practice of management is defined in the context of a contemporary organisation, an integrated set of rules, principles, values, intra- and interorganisational partnership, coordination mechanisms, which create the functional framework of business entities' behaviour, including cluster members. What is possible owing to this institution which regulates behaviour of partnership parties is, among others, successful and effective cooperation, reduction of transaction costs and stimulation to economic activity.

However, what is necessary for proper functioning of a cluster as an institution and also proper fulfilment of its strategic role in socio-economic processes is permanent development of social capital. On the one hand a business cluster co-creates social capital, but on the other – it is influenced by social capital that is created by its external environment. This type of capital enables the access to other resources owned by other cluster members. What increases along with the increase of its level within a cluster is the activity of cluster members in designing and realising grass roots

development initiatives. Moreover, this situation can encourage to more complex and innovative undertakings, as it is not accompanied by the risk associated with cooperation with an unknown partner. Taking into considerations various approaches to defining social capital, or a wide range of benefits ensuing from a high level of this type of capital, it can be easily observed that social capital really determines the dynamics of cluster structure development.

Clusters create an individual institutional structure, on the other hand, however, they create institutional environment. In this case, the institutional structure of a cluster refers to, e.g., various kinds of norms, principles, systems of values (organisational culture), which form cluster members' behaviour. Whereas institutional environment creates a broader set of factors, processes, rules of the game in the economy and society, it somehow determines the nature of the influence on the economy and society through resources allocation.

Institutions in a cluster can be forced upon a cluster society (e.g., by moral and social norms, business ethics, law). They can be also created spontaneously as a result of relationship evolution in a cluster. Rational framework and soft infrastructure of a cluster are critically important for cluster management. In this sense, institutions function in a cluster as a good which is readily available for cluster members and which is shared with others according to the need. The quality of this type of institutions in a cluster influences: stability of cluster structure, the efficiency of the fulfilment of common goals, undertaken investment decisions, organisation of a supply chain, intensity and the nature of the process of knowledge creation, etc. These institutions guarantee a proper fulfilment of contracts and obligations creating a climate that is conducive to business development. Various forms and signs of institutions perceptible within a business cluster constantly interact and influence one another. It should be emphasised that not only those of formal but also of informal nature help clusters actively adjust to the changes occurring in a turbulent environment. Thus, institutional dimension of clusters determines the level of their competitiveness.

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