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## **Bridging the Institutional Void: An Analytical Concept to Develop Valuable Cluster Services\*\***

Public policy and cluster management face a common challenge in developing sustainable clusters. Many clusters report difficulties acquiring membership fees once the governmental subsidies come to an end, which brings doubts as to the cluster management's capabilities and likewise to the public policy design. This paper applies the theory of institutional voids and elaborates a theoretical framework to identify cluster services. It shows that analyzing the specific institutional environment of the cluster enables the identification of valuable cluster services. As the identified institutional voids impose a competitive disadvantage on the companies, such services will increase their willingness to pay. Therewith, the article combines cluster literature and institutional theory to draw synergies on participation incentives.

**Key words:** cluster services, institutional voids, small and medium sized enterprises; participation incentives, competitive advantage  
(JEL: D02, I25, O17, J24, L14, L25, L26, P33)

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## Introduction

Porter (1998) detailed that the affiliation to a cluster contributes to the competitiveness of single firms since this increases productivity, enhances innovation and stimulates new businesses. His research entailed an extensive increase of cluster initiatives and cluster strategies by governments, reproducing Porter's research (Fromhold-Eisebith & Eisebith, 2005). Nevertheless, many of these clusters are said not to be sustainable as they face difficulties acquiring membership fees once the governmental subsidies come to an end (Brown et al., 2007).

However, clusters have the potential to direct their services to voids in the institutional environment. Thus, copying Porter's approach is not adequate; but if the services the cluster provides are targeted at institutional voids encountered by the companies conducting business in such environments, they will reduce competitive disadvantages and thus generate incentives to participate in the cluster and pay for such services.

This paper will provide detail on such environments of less efficient institutional setups. The concept of institutional voids is introduced and elaborated to specify certain aspects of such environments. The paper then elaborates a framework based on institutional voids that supports the definition of specific services needed by the companies. This framework is required on a conceptual level to efficiently address policy development. The original framework was developed for the context of transition economies. The author lived in this context for three years and worked on cluster development. Nevertheless, it is believed that this framework can be applied to other contexts. The difference will be in the deepness and level of the institutional voids even though their sources will be similar.

Thus, the paper contributes to the cluster literature in combining it with institutional theory. It provides a theoretical framework to analyze the institutional environment a cluster is placed in and to develop tailor made cluster services out of this analysis.

## The concept of institutional voids

New institutional economics tells us that "institutions determined the performance of economies" (North, 1990, p. 137), implying that the key to superior economic performance is having efficient institutions. Efficient institutions are those that solve problems of measuring and enforcing connected to a transaction at the lowest possible transaction costs. Furthermore, institutions are efficient if they include incentives to create and enforce property rights as the cornerstone of human interaction (North, 1990).

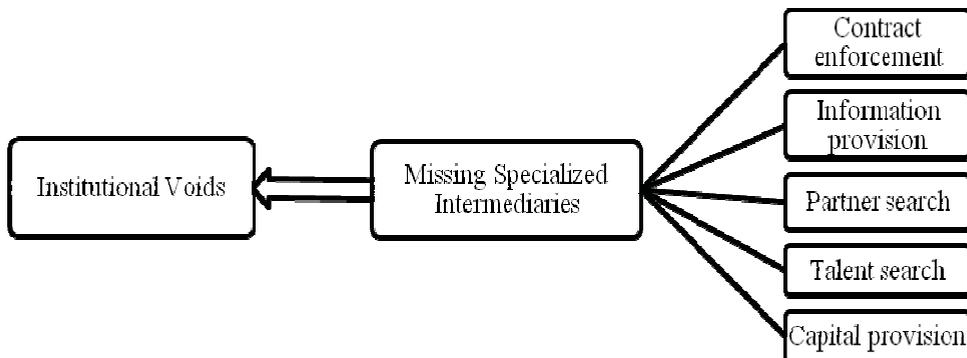
Generalizing these observations leads to the conclusion that transaction costs in environments with less efficient institutional setups are higher since they lack efficient formal constraints that guarantee contract enforcement and profitable markets. The lack of such formal constraints is in turn commonly substituted by informal mechanisms (North, 1990). However, these informal setups come at higher transaction costs since they lack property rights safeguards and thus, are bound to personal exchanges. Moreover, if the basic underpinnings of an institutional setup that support measuring

and enforcing contracts are missing, informal networks dependent on personal ties are strong and thus countervail incentives to change the system (North, 1991).

North's (1990; 1991) observations on insufficient institutions are rather the basis for a macroeconomic concept. Ricart et al. (2004) offer the concept of 'institutional voids' to transform North's observations to a microeconomic level. Institutional voids are lacks – North (1990, p. 135) called it 'insufficiencies' – in the institutional environment and “occur when specialized intermediaries are absent” (Ricart et al., 2004, p. 184).

An intermediary is a middleman that connects economic actors that otherwise would not have been engaged in a transaction (Peng & York, 2001). An “intermediary is an economic agent that purchases from suppliers for resale to buyers or that helps buyers and sellers meet and transact” (Stulper, 1996, p. 135). Thus, intermediaries are economic actors that are placed in between other actors to facilitate their transaction. In that context Ricart et al. (2004) offer a more specified definition of intermediaries and their roles. They regard intermediaries as “economic entities that insert themselves between a potential buyer and a potential seller in attempt to bring them together by reducing potential transaction costs” (Ricart et al., 2004, p. 184). Thus, they are trade facilitators that become necessary with the increasing complexity of a transaction. The authors name three concrete examples of specialized intermediaries: (1) a contract guarantor, (2) someone providing specialized information and (3) an intermediary facilitating the search for trading partners (Ricart et al., 2004). Khanna and Palepu (2003) mention two more functions of intermediaries which seem reasonable to be included here; that of (4) capital provision and of (5) talent search. Summarizing Khanna's concept leads to Figure 1.

**Figure 1: Khanna's Concept on institutional voids based on missing intermediaries**



Source: cf. Ricart et al. (2004) and Khanna & Palepu (2003)

Thus, intermediaries are specific kinds of institutions that act as rationality surrogates in transactions in which, due to the behavioral assumptions acquainted to the economic actor such as bounded rationality and disposedness to opportunism, transaction costs are high or even prohibitive (Williamson, 1996). In such cases, specialized intermediaries act as a trade facilitator by reducing transaction costs. Vice versa, if in-

stitutional voids occur and, hence, these specialized intermediaries are not in place, bounded rationality and opportunism lead to high or prohibitive transaction costs.

Most involvement of specialized intermediaries is endogenous, and is highly dependent on political strategies and decisions. It has been observed that specialized risk capital intermediaries are more developed in India than in China. Chinese politics strongly supported the entering of MNEs in the Chinese market. These MNEs do not rely on sources for risk capital within China as they have risk capital sources around the world. However, the Indian government, for various reasons, did not foster the entrance of multinationals that strongly; thus the Indian economy relies much more on private domestic enterprises which in turn need risk capital intermediaries (Ricart et al., 2004).

### **Discussion on the concept of institutional voids**

Khanna coined and defined the term ‘institutional void’ and made it known to a wider audience through numerous well-published articles. He clearly connected it to missing intermediaries and highlighted its importance in researching international management strategies. However, it needs to be considered that Khanna’s publications do not aim at developing a new theory on ‘institutional voids’. Rather, his publications deal with business groups and MNE strategies in emerging markets (Khanna, 2000; Khanna & Palepu, 2000; Khanna & Rivkin, 2001; Khanna & Rivkin, 2006 and Ricart et al., 2004). As many observations concerning institutional development, the term “institutional void” was also first framed in the political science literature before it found its path into the business and management literature (van Tatenhove, 2003; Goldschmidt, 1962; Schmieding, 1991 and Hajer, 2003).

The literature referring to Khanna’s concept is still generally sparse and thus a detailed discussion of the concept is non-existent until now. Few researchers have used his concept; however, the literature discussing extensions of the concept is extremely narrow. Schmieding (1991) discussed the term in 1991 for the starting transition of former socialist countries. Even though Schmieding’s paper is a conceptual discussion on potential coming developments, he predicts institutional voids in the product and labor market and information problems for transition economies. However, he does neither detail the term and nor define it.

Others rather prefer to go back to North’s publication instead of Khanna’s when defining institutional voids as “the lack of institutional facilities, norms, and regulations needed for a well-functioning economy” (Chakrabarty, 2009, p. 33), or simply “lack of institutions, which support market mechanisms” (Liu, 2011, p. 113). However, in his work, Chakrabarty (2009) separates cultural influences from the institutional environment, which is not in line with North’s (1991) understanding of the institutional environment that includes culture in the informal column. Furthermore, Chakrabarty (2009) concentrates solely on the influence of contracting voids and institutional voids in the financial market. However, neither Khanna’s nor the other publications focus on the elaboration of a concept and understanding of institutional voids, but rather use it as a means to research other issues such as family ownership, business groups or strategies in emerging markets.

Mair and Marti (2009) and Mair, Marti, and Ventresca, (2012) conducted a wide literature review on the topic including other research spheres such as political and social science and found researchers that described the phenomenon without explicitly referring to the term ‘institutional voids’. They broaden the definition of institutional voids by describing them as “situations where institutional arrangements that support markets are absent, weak, or fail to accomplish the role expected of them” (Mair & Marti, 2009, p. 422), thus, adding normative and cultural columns. Whereas Khanna (2000) and Ricart et al. (2004) detail on how institutional voids hinder market functioning, Mair and Marti (2009) further analyze how they hinder certain actors to access markets and in turn open windows of opportunities for specific entrepreneurs. Thus, besides missing institutional setups such as intermediaries, they include situations where the institution is in place but not properly functioning in the framework of ‘institutional voids’ (Mair & Marti, 2009).

They use Scott’s (2001) differentiation of the three pillars of institutions (regulative, normative and cognitive), which is based on North’s (1990) differentiation of formal and informal institutional environment and claim that Khanna and his colleagues focus solely on the regulative pillar and ignore the influence of the other two. Their example is quite representative of emerging and transition economies when they state that even though property rights exist in Bangladesh on the regulative side; however, on the normative level, women with low income do not have access to them due to kinship norms (Mair & Marti, 2009). This interdependence of the three pillars in the context of institutional voids has been observed by other researchers for emerging and transition economies as well (Puffer, McCarthy, & Boisot, 2009; Chakrabarty, 2009).

### **Cluster services to bridge institutional voids**

In the literature, the main findings are that either the resources of a multinational from outside the environment or the resources combined by a business group inside the environment can fill institutional voids (Khanna & Palepu, 2000, 2003; Khanna & Rivkin, 2001; Chakrabarty, 2009).

However, an SME does not have the same resources that a multinational has, nor is an informal business group very beneficial for improving competitive advantage. However, the idea arises that as a business group is rather an informal, closed network, to which it is difficult to obtain contacts; a more formal network within the environment of institutional voids could be a suitable structure, performing similar surrogate mechanisms as the business group does.

#### ***The cluster concept***

SMEs tend to prefer a market rather than a hierarchy mode of governance when entering rather unsecure environments due to their limited stock of resources (Brouthers, Brouthers, & Werner, 1996 and Meyer et al., 2009). Additionally, Khanna (2002) mentions that a network, which is more formal and open than a business group, could be a possibility to bridge voids in a more effective way. The cluster approach fits this description as it is “a regional agglomeration of sector or value chain related firms and other organizations (like universities, R&D centers, public agencies)

which derive economic advantages from co-location and collaboration” (Fromhold-Eisebith & Eisebith, 2005, p. 1251). More simplified one can speak of a cluster as geographic concentrations of companies from one and related industries and other organizations such as research institutes and support agencies (Maskell, 2001). These actors “are interlinked on the base of business-related commonalities and complementarities and derive economic advantages from that” (Fromhold-Eisebith & Eisebith, 2004, p. 2). For Porter (1998), clusters are critical to the competition of single firms, since they increase productivity, enhance innovation and stimulate new businesses. Porter (1998) describes clusters as a company’s method to sustain competitive advantage. Hence, companies choose a location with a beneficial business environment in order to achieve a competitive advantage (Porter, 1998; Porter, 2000; and Delgado, Porter, & Stern, 2010). In times of globalization, where companies are forced to focus more and more on their core competencies, and thus, serve only a very limited part of the entire value chain, cooperation with other companies and institutions along the same value chain becomes crucial (Scheer & von Zallinger, 2007).

In this sense, Porter (1998) mainly addresses so-called bottom-up clusters, where the cluster is created by company initiation. Governments – irrespective of the political level – “should strive to create an environment that supports rising productivity” (Porter, 1998, p. 89) and facilitate the cluster development. He even explicitly addresses top-down approaches when stating that the “government should reinforce and build on established and emerging clusters rather than attempt to create entirely new ones” (Porter, 2000, p. 26). He recommends an “[a]ctive government participation in a privately led effort, rather than an initiative controlled by the government” (Porter, 2000, p. 31). The ideal solution should be non-partisan and independent of political agendas. He only briefly mentions that cluster initiatives should educate potential members, otherwise they might “choose not to participate” (Porter, 2000, p. 31), but he does not provide further specificity on this possibility. As criticized in some publications, Porter’s cluster concept remains superficial and neglects several aspects, calling for a more detailed analysis (Martin & Sunley, 2003; Desrochers & Sautet, 2004 and Maskell & Kebir, 2006).

As clusters are relatively small groups of economic actors, most contacts are face-to-face and repeated interaction is likely (Bathelt, Malmberg, & Maskell, 2004). If there is a chance of repeated interaction, actors will take future outcomes into consideration, maximizing their overall utility. The best strategy in repeated interaction is reciprocity (Axelrod, 2006). Trust arises based on the knowledge that defection leads to losses on both sides and mutual cooperation to beneficial solutions (Porter, 2000). These form the basis for informal contacts, may it be the common lunch of blue color workers of different companies, or the after work drink of managers of cluster members. Dahl and Pedersen (2004) could prove that in such informal contacts not only is general information exchanged, as often claimed, but also “more specific knowledge about their products and technologies” (Dahl & Pedersen, 2004, p. 1685) and location specific information is exchanged. The importance of this exchanged information is the nature of it. Most of the transmitted information is tacit knowledge, hence, knowledge that is not codified and difficult to transmit otherwise. This in turn leads to

intensified knowledge creation within the cluster, often referred to as ‘local buzz’ (Maskell, 2001).

Porter’s observations led to a rapid increase mostly in governmental initiated clusters. Governments were hoping to reproduce the innovation and productivity effects in specific regions, which Porter had described for clusters such as Silicon Valley. Despite the many publications on the issue, the concept of industry clusters remains fuzzy (Fromhold-Eisebith & Eisebith, 2005). Martin and Sunley (2003) even claim that the “definitional incompleteness of the cluster concept has been an important reason for its popularity” (Martin & Sunley, 2003, p. 9). The clusters described initially by Porter are bottom up initiatives that develop out of cooperation incentives between the future cluster members. These privately conducted developments are based on trust relations and a strong wish for cooperation between the actors. However, participation incentives in top down initiatives are very different. As they are not based on the social capital invested by its members but rather on clear financial incentives provided by the financier, they seem to have less positive effect (Jungwirth, Grundgreif, & Müller, 2010). Brown et al. (2007) address this issue openly when stating that “cluster developers and cluster managers are often confronted with the problem that firms frequently do not participate fully in cluster activities” (Brown et al., 2007, p. 2). Jungwirth, Grundgreif, & Müller (2010) could also show disadvantages in implementing sustainable strategies due to unclear objectives and a lack of planning reliability. Furthermore, bottom up clusters seem to be more spatially concentrated. Spatial concentration is an important factor of the cluster concept. If spatial concentration is not given, the personal ties that are the core of cluster benefits are weaker (Fromhold-Eisebith & Eisebith, 2005).

### ***The intermediary function of cluster services***

The cluster management’s task is to provide certain services to its members. Lublinski (2003) summarizes the advantages of clusters as Marshallian externalities such as labor pooling, accessibility to intermediary goods and tacit knowledge spillover; Porterian market advantages such as demanding costumers, rivalry and complementary, and transportation and transaction costs advantages under which he also subsumes trust. Jungwirth, Grundgreif and Müller (2010) highlight the importance of the nature of cluster services.

These cluster services appear very similar to the functions of intermediaries identified in the previous literature. Thus, the proposition arises that if the services the cluster management provides can fill institutional voids and, as a cluster is more recognizable than an informal business group for foreign SMEs, a cluster would be a competitive advantage generating institutional setup for the SME. As discussed earlier, the void itself lies in the institutional environment and can thus not be easily eliminated by the cluster alone. However, the cluster could act as a surrogate, bridging the void. Thus, the cluster would be a more beneficial setup than the MNE and comes at less social cost than the business group. It is hypothesized that only if the services that a cluster provides are directed at specific voids encountered by the companies, do they generate incentives to participate. The arrangement of the services then influences the

willingness to pay which is given for club- and private goods but not for goods of a public nature (Jungwirth, Grundgreif, & Müller, 2010).

Various authors have listed cluster services. Through an extensive survey on Bavarian cluster initiatives (Jungwirth, Grundgreif, & Müller, 2011) elaborate a list of services that a cluster provides. The lists in the literature are mainly concurrent; however, Fromhold-Eisebit and Eisebit (2005) highlight the task of linking firms to universities and R&D institutions, which is a crucial aspect of cluster services especially for SMEs that lack the necessary resources to build their own R&D departments. Scheer and von Zallinger (2007) add 'access to (venture) capital' to the list, again a service especially relevant for SMEs. Combining these with the five intermediary functions stated earlier by (Ricart et al., 2004) and (Khanna & Palepu, 2003) constitutes table 1.

**Table 1: Clusters and their potential intermediary functions**

Functions of intermediaries	Cluster Services
Contract guarantor	Consultancy for cooperation contracts
Providing specialized information	Establishing new communication structures Public relations and regional marketing Foreign trade promotion Spreading information through the internet and fairs Technology scouting Organizing conferences
Facilitating partner search	Launching and coordinating cooperative projects Organizing cooperation platforms Initiating contacts between cluster actors Support cooperation between firms and regional universities and R&D organizations
Talent search	Personnel procurement Providing qualification measures for employees
Capital provision	Encouraging new business formations Support in writing grant proposals Access to (venture) capital

Source: Adapted from Jungwirth, Grundgreif, & Müller (2011); Scheer and von Zallinger (2007); Ricart et al. (2004) and Khanna & Palepu, (2003).

The intermediary function of cluster initiatives has not been given special attention either in the cluster literature or in the literature on intermediaries. Peng and Ilinitich, (1998) only recognize that the connection of an export intermediary to a network might be beneficial. Only Müller (2012) and Fromhold-Eisebith and Eisebith (2005) recognize the cluster management specifically as an intermediary that brings together the cluster members and organizes their co-opetition. However, the center of attention here is not the composition of the management but rather the explicit design of the services provided. Discussions on how the management should be composed can

be found elsewhere such as in Müller (2012) and Jungwirth, Grundgreif, Müller (2011).

Thus, the baseline-proposition is: If cluster services fulfill intermediary functions and target institutional voids, they generate cluster participation incentives for SMEs.

The main conclusions from these observations is that if cluster services do fill institutional voids and thus reduce transaction costs, businesses placed in the environment with the institutional voids have a clear participation incentive. Furthermore, companies from other institutional setups have an obvious entry point in these markets. The other side of these observations offers clear insights for the cluster management. In order to generate participation incentives and even members that are willing to pay for this membership, the development of services targeted at filling institutional voids is necessary.

### **A theoretical framework to define cluster services out of institutional voids**

To ensure the development of cluster services, targeting institutional voids, a detailed framework to analyze institutional voids is needed.

#### ***Access to information***

Khanna (2002) names ‘information problems’ as one of two types of institutional voids and states that information and contracting problems increase transaction costs on product, capital and labor markets (Khanna & Palepu, 2000). The ‘information problem’ is deeply rooted in the institutional theory. North (1990) states, that “the costliness of information is the key to the cost of transacting” (North, 1990, p. 27). However, most literature discusses either the issue of information asymmetry in the context of principal-agent-relations (Ricart et al., 2004) or the capacity of economic actors to process information in the context of bounded rationality. However, what is meant in this case is rather the issue of availability and access to information. If information is widely available and accessible to all actors in an institutional environment, information costs are low and this has a positive impact on the transaction costs. However, if information is difficult to access, its cost is generally higher, which influences the cost of transacting for the actors within that certain environment. Furthermore, it creates an information asymmetry between the actors of this environment and their global competitors and places these actors at a competitive disadvantage compared to actors in an environment with superior access to information (Ngwenyama & Morawczynski, 2009) It is widely discussed that information and communication technologies (ICT) have the potential to improve the access and availability of information and thus reduce information costs (Picot et al., 2012; Leff, 1984).

On the formal side, first of all, the ICT infrastructure might be limited or missing. The ICT infrastructure can be developed through a government owned ICT provider. This intermediary might be missing or insufficiently endowed and thus not be able to develop the necessary infrastructure. However, ICT infrastructure can also be developed by private operators as it is often the case for mobile telephone communication.

These intermediaries might be absent due to unfavorable legislations in the country (Ngwenyama & Morawczynski, 2009).

Proposition 1a: If hard ICT infrastructure is limited and thus leads to formal institutional voids, clusters can counteract these voids by political lobbying.

“Hard” ICT infrastructure refers to the network of cables, ISDN and broadband availability etc. Since investments for ICT infrastructure are high, it is not believed that the cluster itself can provide them to all members. It is rather suggested that the cluster can opt for political lobbying in order to quicken the process of the infrastructure development.

Moreover, business information might be difficult to obtain because institutions that usually provide information to businesses such as chambers of commerce, chamber of foreign trade, trade associations and business press are nonexistent or work insufficiently (Khanna & Palepu, 2000; Song, Di Benedetto, & Parry, 2009 and McAuley, 1993). This can be caused by a lack of public funds, other political constraints and most commonly by clientelist influenced hiring schemes within these institutions (Wilson, 1961).

Proposition 1b: If business information is not sufficiently provided by the relevant market intermediaries, a cluster can counteract this by providing relevant information.

As seen before, information provision is a core service of clusters. Thus, this void should be easily bridged. However, the existence of this void increases the participation incentives of companies as market information is crucial for a competitive advantage.

Furthermore, access to information is also seen as access to control and access to participation. Cultural norms and perceptions vary widely in that issue, especially in societies where patron-client relations are common, information is seen as a valuable commodity. However, information acquired informally is more costly as it often demands high investments in relation building and is difficult to verify (Jaffe, Carciente, & Zanoni, 2007 and Fafchamps, 2006).

Even though, this informal side of information and the society’s attitude towards it is a more sociological issue, it is included here, as my personal experience shows the strong influence of that issue.

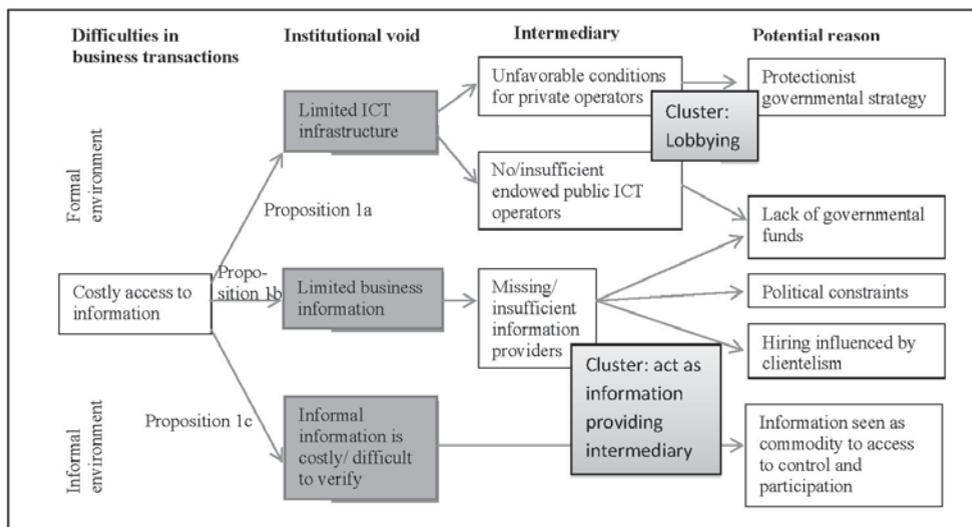
Proposition 1c: If information is seen as a commodity to power and access, meaning there is an attitude to keep general information rather than to share it, a cluster can counteract this by the provision of relevant information and by establishing an information-sharing culture between its members.

Here, I do not refer to specific information that entails direct business opportunities that would be rational not to share, but rather to more general information. This includes information shared or not shared in team working environments and general information such as calls for tender etc. Figure 2 summarizes these propositions.

Khanna refers to “contracting problems” in the context of a potential time lag between the service and the payment, in the context of missing or weak confidence

between the trading partners and in the context of patents and the protection of property rights (Ricart et al., 2004). Contracts are generally closely linked to the possibility to enforce them, following North's arguments that "the structure of enforcement mechanisms and the frequency and severity of imperfection play a major role in the costs of transacting and in the forms that contracts take" (North, 1990, p. 54.). He shows that in a world of incomplete information contracts are hardly self-enforcing. Norms such as reputation and kinship ties can countervail that dilemma; however, formal third-party enforcement is generally more efficient (North, 1990).

**Figure 2: Propositions on institutional voids concerning access to information**



Thus, the problem lies not necessarily in the contract itself but in the available enforcement mechanisms behind the contract and thus the property rights attached to it. Only these make the contract credible. If formal third-party enforcement mechanisms are non-existent or inefficient, additional enforcement mechanisms have to be established in order to generate credibility of contracts. Commonly, reputation has been described as a surrogate enforcement mechanism. However, reputation is based on repeated interaction and thus leads to restricted market access, as market actors are less willing to do business with unknown or new actors (Axelrod, 2006 and Jaffe et al., 2007). These generally come at higher enforcement costs. Furthermore, insecure property rights provide no incentives for long-term investments. Therefore, companies under insufficient institutional arrangements tend to be smaller and less capital intensive as can be observed in many emerging and transition economies (North, 1990).

The non-existence or inappropriate design of laws and regulations is one source of this problem. This void is apparently not constituted in the missing of an intermediary but rather due to lack of knowledge or commonly due to parliamentary quarrels that prohibit the passing of an appropriate law. However, even if the laws are properly in place, their inefficient enforcement infrastructure including courts, well-trained

judges, the appropriate amount of courts and certification and testing institutions is another potential institutional void.

A cluster cannot overcome missing laws; however, the mere existence of a law does not necessarily entail qualified enforcement (Grabbe, 2001; Hille & Knill, 2006). This leads to:

Proposition 2a: If the infrastructure to enforce property rights is weak and thus imposes a formal institutional void, a cluster can counteract these voids by political lobbying, by their reputation function and/or the development of own enforcement schemes.

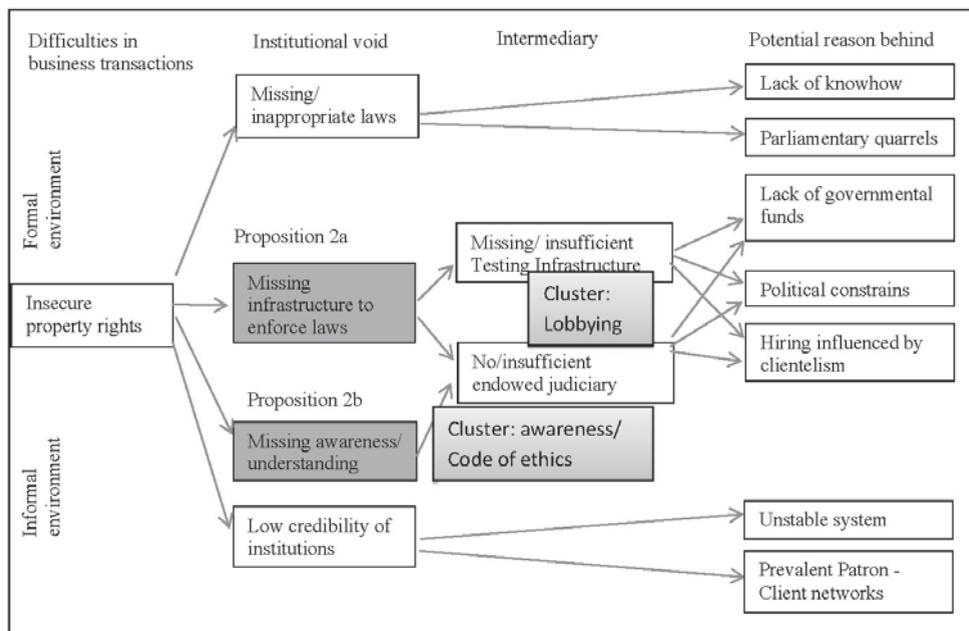
'Infrastructure' refers to quite a wide field. This includes the number of courts and their appropriate staffing, the education and payment of judges and also means to impede corruption possibilities for them. Furthermore, it includes the certification infrastructure of products. Similar to proposition 1a, it seems impossible that the cluster can directly bridge these voids. However, besides political lobbying, it is believed that the reputation of a cluster and of being its member can function as a surrogate mechanism. If the cluster carefully selects its members (Grundgreif, 2011), it can gain a positive reputation that its members can benefit from, i.e. when signing contracts. As mentioned before, weak property rights enforcement leads to very restricted markets as actors prefer to do business only with other well-known actors. A cluster can break this circle and enlarge the group of actors.

An informal void to be expected is the missing understanding or the necessity of certain rights as it is often observed in emerging and transition countries for intellectual property rights. A further rather informal void is the credibility the economic actors ascribe to these named formal institutions. If formal institutions are prone to frequent or recent change, economic actors might doubt their stability (Schmieding, 1991). In turn, actors prefer more informal norms and practices. If contracts are hard to enforce, actors will turn to informal practices such as clientelism and corruption to guarantee their enforcement (Chakrabarty, 2009; Tan, Yang, & Veliyath, 2009 and Xin & Pearce, 1996). This entails higher transaction costs. However, it is believed that a cluster cannot influence the credibility of institutions at a general level. It can, on the other hand, influence the understanding and acceptance of certain laws and concepts.

Proposition 2b: If the understanding and acceptance of the concept of (intellectual) property is weak and imposes an informal institutional void, a cluster can counteract this by awareness creation and a code of ethics between its members.

A low acceptance of (intellectual) property rights is observed in many economies (Javorcik, 2004 and Meyer & Peng, 2005). The cluster can use its information function and its internal corporate culture. A code of ethics is the most common procedure. Figure 3 summarizes this.

**Figure 3: Propositions on institutional voids concerning insecure property rights**



***Specialized human capital***

Khanna (2000) states that information and contracting problems increase transaction costs on product, capital and also labor markets. Other potential voids such as labor laws etc. will be neglected and only the availability of specialized human capital will be focused on. The term ‘human capital’ is generally not just seen as one input factor similar to others as in the institutional literature but rather as a “function of the development of schooling and on-the-job training” (North, 1990, p. 76), or as a set of intelligence and skills acquired through experience and/or learning (Bhagavatula et al., 2010). Missing or not appropriately trained human capital increases search and information costs for the companies. Since it will be more difficult to find the right employee, the search takes more resources and the limited numbers of fits have a higher bargaining power and thus can demand higher than usual salaries.

Depending on the governmental spending in the education sector, voids are possible at all levels starting from the basic education up to specialized human capital. Commonly inappropriate curricula at all levels of education are observed since curricula depend on national laws and regulations and hence need time to be changed. Other potential voids are missing hard educational infrastructures such as schools and equipment. A cluster, however, cannot replace the state’s basic responsibility in providing hard education infrastructure. Nevertheless, the cluster has some potential in influencing higher level curricula.

Proposition 3a: If curricula are not up-to date and inappropriate to market demand, clusters can compensate this by political lobbying and by providing additional education schemes.

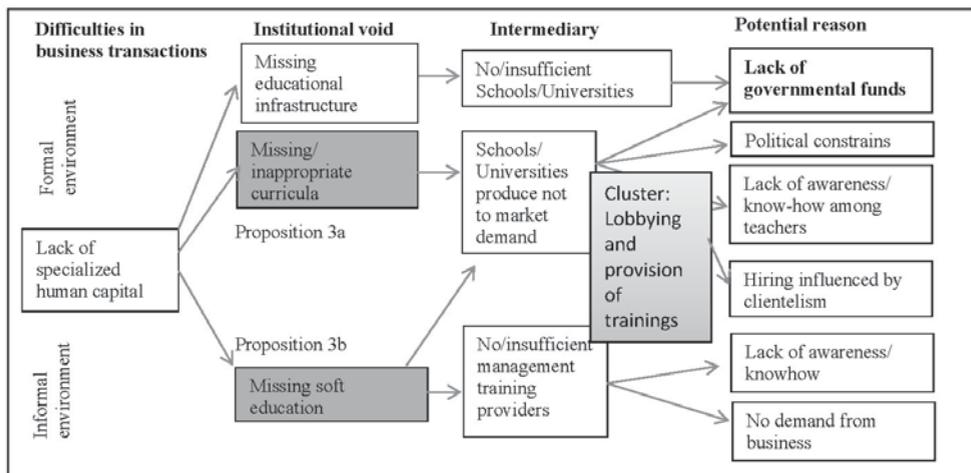
Missing or incomplete soft education is also observed. With this term we include issues such as soft skills and a general understanding of market economy structures.

The soft education infrastructure also seems critical, especially concerning soft skills and knowledge about the functioning and implicit behavioral norms in market economies (Tonoyan et al., 2010 and Ellis, 2010).

Proposition 3b: If the soft education is weak because actors lack soft skills and market knowledge, a cluster can compensate this by political lobbying and by providing additional training.

As Figure 4 demonstrates, it is argued that for both voids clusters can achieve some long-term improvement through political lobbying and networking with the education institutions themselves. Additionally, clusters can directly become the intermediary to bridge the gap by offering training and courses to their members.

**Figure 4: Propositions on institutional voids concerning missing specialized human capital**



Another market mentioned by Khanna (2000) is the financial market. Access to capital is essential for small and medium companies. On the formal level, rules and regulations for capital providing institutions such as banks or venture capitalists can be absent or incomplete. This includes regulations for supporting institutions that assure credibility of creditors. Once these are missing, banks cannot observe the creditworthiness of smaller entrepreneurs and thus, only well-known or larger businesses will have access to credit (Chakrabarty, 2009). Banks might also decide to follow a rather conservative lending strategy which makes access to credit difficult for start-ups and small enterprises.

Furthermore, this market is closely linked to the enforcement mechanisms in the institutional environment. In many emerging and transition economies, creditor's protection is poor due to poor contract enforcement. This leads to limited financial disclosure requirements and thus capital acquisition is difficult (Khanna & Rivkin, 2001 and Khanna & Palepu, 2000). Venture capitalist especially "count on a stable institutional regime with a predictable rule of law and enforcement regime to facilitate and safeguard their investments" (Ahlstrom & Bruton, 2006, p. 300). Ahlstrom and Bruton (2006) could show that in the case of unstable institutional arrangements and/or missing capital market institutions, venture capitalists to some extent adapt informal practices to acquire information on a creditor's creditworthiness. The venture capitalists stated that they use personal networks to obtain such information. However, that comes at higher costs and excludes businesses that are not part of the informal network.

Proposition 4a: If capital provision is insufficient or not existent, the cluster can compensate this by political lobbying or establish own capital provision schemes.

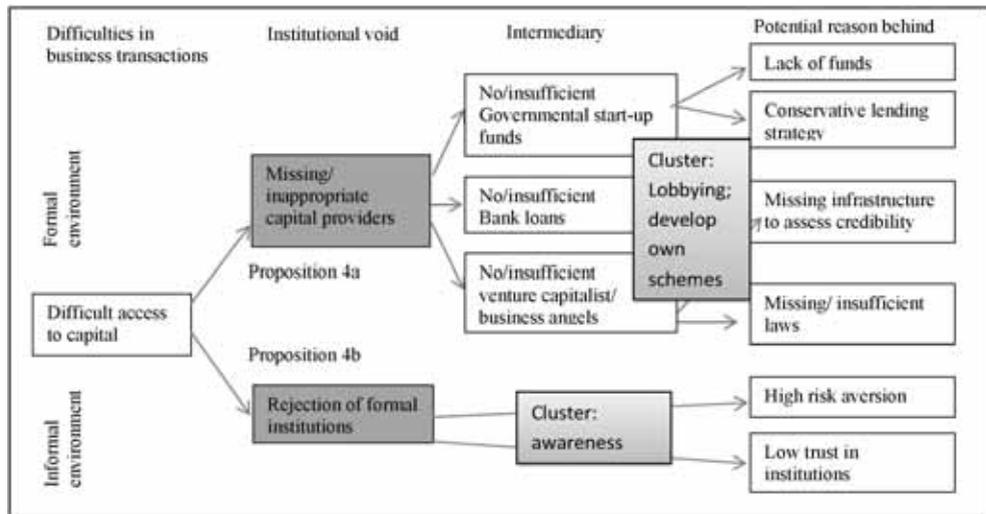
Again, it is obvious that the clusters themselves cannot directly influence the laws and regulations. However, they can function as a lobby group representing the business community and lobby for the appropriate laws. Additionally, they can develop their own capital provision schemes as the literature on business groups discusses (Khanna, 2000).

On the informal side, a high degree of risk averseness and/or low trust in the society might hinder such developments as is commonly observed in emerging and transition economies (Khanna & Palepu, 2000 and Meyer & Skak, 2002).

Proposition 4b: If informal voids such as low trust and high risk aversion impede the development of capital market intermediaries, clusters can counteract this by awareness building and reputation strengthening.

Again, it is believed that the cluster has a potential to countervail this informal void. The literature on business groups shows that capital provision is an important issue in such groups. As argued before, the cluster is viewed as a more transparent, open and visible form of a business group, thus it can be concluded that it has a high potential to offer similar services as the business groups.

The paper elaborated a more detailed distinction of institutional voids and the use of this concept in the cluster context. I do not claim to build a complete catalogue of all possible existent voids but rather hope to have established a well-structured systematization of the concept of institutional voids and name most commonly discussed voids in reports and academic literature as examples. I believe that this systematization contributes to the development of a structured concept of institutional voids as it: (1) argues a straight causal nexus between voids and intermediaries, (2) provides a structure to analyze institutional voids, (3) adds examples of voids, and (4) demonstrates the use of this concept in designing market organizations such as business clusters. The paper discussed institutional voids in the three main markets: labor market, capital market and product market. Additionally, it was discussed that "information problems" could be prevalent, influencing all the three main markets.

**Figure 5: Propositions on institutional voids concerning difficult capital access**

The article contributes to the elaboration of the concept of institutional voids adding a systemized analytical structure. Furthermore, the article links the research stream on institutional voids with the concept of business clusters. For policy makers and cluster managers the article provides a theoretical framework to analyze the institutional environment. This analytical framework provides them with a comprehensive understanding of the institutional environments their SMEs are placed in. Furthermore, this enables policy makers and cluster managers a like to design tailor-made cluster services that have the potential to generate participation incentives as they target competitive disadvantages of the cluster members. For SMEs this analytical framework increases their bargaining power towards cluster managers and policy makers as they can demonstrate their competitive disadvantages and needed services in a structured way. In turn, this framework provides arguments pro cluster membership and a possibility for SMEs to analyze whether or not a cluster is beneficial to them.

The article is limited to theoretical considerations. What remains open is empirical evidence that demonstrates the efficient use of the concept. Furthermore, a discussion on the developed concept and elaboration of further voids would be fruitful in order to come to a complete concept of institutional voids. Finally, the propositions on the cluster services and the participation incentives entailed by them are critical and call for further research.

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