

Internationalization Behavior of Cluster Embedded Smes from Two Transition Economies

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Abstract

The purpose of this study is to analyze the factors having an impact on the development of industrial clusters in regional economies. Based on the qualitative research method, we interviewed respectively six firms from two industrial clusters in central European transition economies. By drawing on institutional analysis as well as on the eclectic paradigm of international production, we found that firms are conditioned by a variety of institutionally determined influences. The studies indicate that there are significant differences in the international market development of firms within the respective two clusters. Despite the fact that unemployment is an issue in transition economies, one of the mayor future barriers to further development in both clusters is a scarcity of adequately qualified human capital. This paper contributes to a better understanding of the conditions of cluster- embedded firms in transition economies. We find that different firm specific factors have an impact on the internationalization of SMEs.

Keywords: internationalization; industrial clusters; OLI paradigm; institutional analysis; transition economies.

Introduction

For exploratory research we conducted a comparative study of two industrial clusters from Poland and Romania. Policy makers in transition economies are challenged by the need to promote development and growth. Regional economies - in particular when they are located in a remote area of the country - deserve special attention because these areas are often at a disadvantage. The subject of industrial clusters has found widespread attention in the literature. This paper is an attempt to contribute to the existing body of literature by filling a gap of knowledge with regards to the internationalization of firms that are embedded in industrial clusters. Specifically, we try to find the answers on the following research questions: a) what are the underlying institutional conditions of the firms in our sample and b) how do they determine their internationalization behavior?

Research sample and methodology

As our research focuses on industrial clusters in transition economies we chose two different clusters. We visited the Romanian town of Cluj-Napoca in summer 2013, located in the North West part of the country, where we held interviews with six individual companies which were active in the area of software development. On the second research which took place in January 2015, we visited six companies which were producing in specialty textiles in the Polish town of Bialystok which is located in the North East of the country. For our research, we have used convenience sampling. According to Sekaran (1992), convenience sampling involves collecting information from members of the population who are conveniently available to provide it. In this study we follow the case study approach (Eisenhardt, 1989; Yin, 2013). In both industrial clusters we held semi-structured and open-ended interviews with either the owners/entrepreneurs or leading managers with sufficient insight into the operation of the firms they are managing and who are also involved in the overall decision making processes of their firm. Each of the interviews lasted about 60 - 90 minutes. All audio files were transcribed as a basis for further analysis.

The interview questionnaires were divided into two parts: general information and interview questions. While developing the interview questions we have focused on using questions that will provide us with data related to the main theme of our research which is institutional conditions and their influence on the internationalization behavior of cluster embedded SMEs.

The Bialystok Lingerie Cluster

Located at the periphery of the European Union close to the border of Belarus, the Podlaskie region with Bialystok as the regional capital can be regarded as a peripheral. The reason is lower than the average in Poland level of GDP, poorly developed transport infrastructure and low level of industrial development (Decker, Rollnik-Sadowska 2015). However, the Podlaskie province has a rich tradition of textile manufacturing. During the period when the centralized economy system prevailed until 1990, significant amount of activities in textile manufacturing was concentrated in a state administered cooperative - Wzorcowia that produced female underwear. However, as it happened in many other cases, this cooperative ceased all activities when the centralized planned economy collapsed. This event became cause to the inception of a number of new startup companies which went into operation immediately after the collapse of the old socialist cooperative or at some point in time during the 1990's (Decker and Rollnik-Sadowska, 2014). As a result of this development, currently, there are about 13 companies which are active in the production, distribution and marketing of female underwear (lingerie). We conducted interviews with 6 of these companies.

Although there were some variations in the narratives that we heard, all companies developed along a common initial path. After the incumbent textile manufacturer Wzorcowia had collapsed, employees found themselves to be without employment. Some of them, in particular production line managers, decided to purchase textile production equipment and start a micro scale production out of their private homes. Initially, the small startup firms met very favorable market conditions. They encountered a significant latent and unsatisfied demand for their products so that it was possible to sell on local street markets, even without specific packaging or any other kinds of marketing efforts. In terms of internationalization the firms we interviewed followed along a gradual path of expansion (Johanson and Vahlne, 1977, 2006). The firms started out in the domestic markets, and later expanded into Eastern and now predominately Western European and overseas markets. In our sample, we observe that the change came from the adaption of e-commerce systems which initiated rapid international expansion for some firms (Bell et al., 2001, 2003). Being standardized products, female lingerie textiles that these firms produce are lightweight and can be shipped at low costs.

The Cluj-Napoca IT Cluster

We also visited an IT cluster in the town of Cluj-Napoca which is located in the Romanian region of Transylvania. In the IT cluster of Cluj-Napoca we encountered a substantially different situation compared to Bialystok. First of all, in terms of number of firms which can be associated to the cluster, there is a large difference since there are about 250 firms active in the field of IT, compared to only 13 textile specialty firms in the Polish Bialystok. Secondly, the cluster is younger, all companies from our sample were incepted in the years around 2001- 2004. The firms have diverse and different histories. In particular there was no mother company out of these firms developed. The seeds of the cluster were sown by the local university which has a strong faculty in information technology. Competences in the numerical skills are a result of the previous socialist regime's effort to boost numerical and mathematical skills in the population. In terms of ownership structure, two of the firms that we interviewed were owned by foreign companies, specifically from the United States and The Netherlands. The division of labor within these constructs was organized in a way that the mother companies were specializing on customer acquisition and market development, while the Romanian subsidiaries specialized on the tasks of computer programming. Three other companies had Romanian owners, but all were serving foreign markets. All companies we interviewed coincided with the statement that there they did not have a lot of business in their domestic market, mostly because conditions were not yet mature enough to absorb their firm's output.

Theoretical approach

The aim of this article is to contribute towards a conceptualization of the internationalization behavior of firms based on institutional analysis. In order to take the institutional perspective of internationalization into consideration, we draw on Hollingsworth (2000)'s framework of institutional analysis.

Since the focus of Hollingsworth (2000)'s institutional analysis is on innovation practices and less on internationalization of firms, there is a need to include the later aspect into the analysis. This framework is useful to facilitate an institutional analysis at various level of a society's production system, and to understand at which level diverse forms of value creation processes are taking place: institutional background conditions figure at the macro level, then the level of institutional arrangements, further down institutional sectors and finally individual business entities or research institutions Hollingsworth (2000). The use of this framework will allow us to map the institutional conditions prevailing in the two clusters at the macro level, and at the same investigate some of the specific conditions of the individual firms at the micro level. For the purpose of including the aspect of internationalization, we draw on the OLI model devised by (Dunning, 1981, 1988, 1993, 2000) for pointing towards a possible conceptualization to show how firms draw on and reconfigure various forms of resources (Barney, 1991) and engage in the internationalization process.

Institutional analysis

Hollingsworth (2000) proposes a five step framework for institutional analysis. We will limit ourselves to briefly depicting these five steps and relate them to the conditions that we found in the Polish (PL) textile and the Romanian (RO) IT cluster. Hollingsworth (2000)'s framework takes into consideration that institutional factors do not just play an influential role at the macro but also at the meso and the micro level. At the first level of analysis figure the basic norms rules, conventions and values that form the underlying conditions. Values and norms are transmitted from generation to generation and are subject to slow changes only. A comparison between the prevailing circumstances in the two clusters as well as the general societies into which they are embedded contribute to revealing the underlying institutional conditions are beyond the scope of this article. These issues have drawn interest from various scholars, see for example Hofstede and Minkov (1991), Whitley (1993), Trompenaars and Hampden-Turner (1998), Thomas and Mueller (2000), or Whitley (2011). In both samples it shines through that firm are affected by the historical background of an economy that had transferred from being a centrally planned economy to becoming a market oriented economy.

Table 1: Levels of institutional analysis and the OLI paradigm

Meta norms and rules determined by low level institutional sectors ↓	
Level 1: Institutions:	Business culture, local manufacturing traditions Market structures, social community, industrial cluster
Level 2: Institutional arrangements:	System of education, specific industrial sectors
Level 3: Institutional sectors:	
Organization specific sub sectors are affected by the OLI Paradigm (Dunning 1982) ↓	
Level 4: Organizations:	Firm's setup: Organization, Location, Internalization ⇒ ⇒ ⇒ Products and internationalization process
Level 5: Output and performance:	

Source: own study.

On the second level figure institutional arrangements like states, networks or associations. Although not explicitly mentioned by Hollingsworth (2000), we also include industrial clusters into this level category since they create a specific form of association or community. With regards to the state aspect, each country has its own specific institutional arrangements which are equally beyond the scope of this analysis. However, the institutional setup of states reflects itself in performance which is well documented in the literature. For example, a recent report (Schwab and Brende, 2012) mentions that the Polish economy, while being competitive still shows potential for increasing its innovative capacities and business environment as well as accelerate the digitalization process. A direct line cannot be drawn between these statements and the performance of the Polish economy because of the high complexity of process interactions that Hollingsworth (2000) also discusses in his paper, since our own data is not comprehensive enough to comment on this. What we observe in our firms sample is a limited innovation capacity but relatively satisfactory business performance which is reflected an average export share of about 25% to 30%. In the Romanian case, according to the above mentioned country report, the country performs relatively well on labor market performance but not digitalization. The overall institutions and market structures are still weak and not well developed. This is stark contrast to the strong performance of the firms we interviewed in Romania, since they are not only using but also producing IT solutions. This is reflected in the firm's strong international performance and weak presence in the domestic markets.

A reason for this discrepancy could be that the firms in the Romanian sample are highly exposed to the international environment so that the national conditions matters less. This observation gives room to argue that depending on sector and technology employed the way institutions matter and thereby influence internationalization performance of firms is on a gradual scale either determined by the national or international environment. On the level three figure the institutional sectors, including financial system and system of education and research. In the Polish example, skills in textile design and manufacture were taught by local schools. The firms in the Polish cluster still draw on them. In the Romanian system, before and after the fall of the iron curtain, emphasis was on transfer of numerical skills in the intermediate education institutions. Presently, this tradition still is a source of competitive advantage to firms in the IT sector.

At the fourth level of institutional analysis, we see the firms themselves. In contrast to North (1990) who draws a clear line between institutions and organization, Hollingsworth (2000) argues that institutions and organizations co-evolve and mutually influence each other. DiMaggio and Powell (1983); Powell and DiMaggio (2012) argue that organizations are subject to isomorphism, when they are exposed to the same environmental pressures their patterns of behavior tend to converge. Within industrial clusters as we see in our samples, firms influence each other, just as they are also subject to influences from outside the cluster border. In the Polish sample, firms show high degree of isomorphism. They are family owned, at the level of production methods and marketing activities we also see relatively little variety. The Romanian firms show a larger variety, especially in terms of ownership structure. The higher degree of ownership structure can be explained through the prevailing institutional conditions at level 1 to 3, which lead firms to direct search opportunities abroad instead of first serving the domestic markets as explained in the Uppsala model of gradual international expansion of firms (Johanson 1977; Johanson and Vahlne, 2009). In terms of marketing activities we noticed a degree of isomorphism. All of the Romanian firms engage in contract programming but show little efforts to develop their own brands. In our assessment, isomorphic behavior could be a result of co-evolution within the cluster and due to relative geographic remoteness which to a larger degree affects the Polish cluster because of a less developed transport infrastructure.

At the fifth level range the outcomes of organizational activities, such as products, technologies or market strategies Hollingsworth (2000). The fifth level is closely related to the fourth level. The outcome of firms in terms of products and services is dependent and a result of the underlying institutional conditions. For example, depending on the underlying institutional conditions, product outcomes can be performed in quality or design and style. The outputs of firms from different nations or regions will then have specific characteristics. Due to norms and traditions, education system, organizational structures and so on, automobiles from Germany would as an overall characteristic be performing in terms of craftsmanship quality while Italian cars would excel at the level of style and elegance by transferring a lifestyle oriented image. In the case of the Polish sample, we notice that the products aim for the mid level of the market, where quality and style is at a premium. The Polish lingerie firms do not serve the highest market segments in which some Western European firms specialize on transferring an image of glamour. On the other hand, the Polish firms stay clear of lower market segments which are dominated by Asian producers. In case of the Romanian cluster, where underlying technological conditions are more volatile, we observe that firms specialize on adopting modular framework solutions (open source or propriety technology) where underlying technologies change faster. Lately, some of the firms move into creating mobile device applications, which are also module oriented. The fact that the Romanian firms predominantly specialize on outsourcing and do not show strength in developing their own brands also indicates the existence of underlying institutional conditions at level one to three.

The OLI paradigm

In the framework of institutional analysis (Hollingsworth, 2000) levels, one to three determine the underlying institutional conditions that directly and indirectly influence firms. At level four organizations are shaped as a result of underlying institutional conditions. Finally, level five focuses on the outputs and performance from a perspective of institutions. It is here where the diverse and concrete outputs of firms become evident, thus becoming the anchor point of relating institutional analysis to internationalization behavior which is the focus of this paper. For anchoring the perspective of internationalization, we draw on the work of Dunning (1980); Dunning (1988); Dunning (1999). Over a period of 35 years, Dunning developed the OLI paradigm into an overarching paradigm in international business (Eden and Dai, 2010). Firstly, the ownership advantages (O) aspect refers to the inherent resources of a firm and how they can be put to use in the internationalization process.

Secondly, the location advantages (L) refer to the advantages a firm derives from its location. Thirdly, the aspect of internalization advantages (I) refers to upstream and downstream integration in the product markets (Dunning, 1981). These different forms of advantages lead to licensing, export and FDI (foreign direct investment) as alternative forms of internationalization. The OLI paradigm usually refers to business entities that control and manage production capacities that are located in at least two countries. Caves (1992) characterized the bi-polar production modes of MNEs as one form among possible alternatives of conducting economic transactions. From this view, maintaining production in more than one country is an option but not a necessary condition which needs to be fulfilled to categorize an international firm as an MNE (Multinational Enterprise).

Taking this argument up for our conceptualization, MNEs can be but do not necessarily have to be multiplant firms since firms can as an alternative operate by conducting their international operations in market mode. As global conditions changed over time, Dunning reacted by continuously revising his framework and adapting it to the new and dynamically changing circumstances. Departing from the original question of why firms engage in international activities from a macro level, he later shifted the focus on finding explanations for different forms of international market penetration. Dunning also incorporated upcoming aspects of international business and from emerging strategic management theory. Last among these updates came the inclusion of institutional theories, to take into account the increasing importance of emerging and transition economies (Eden and Dai, 2010). A significant portion of economic value that firms create is a result of alternative forms of organizing economic activities, for example through network structures.

Dunning and Lundan (2008) observed that in emerging economies alternative forms of economic organization can prevail, which were not in line what is predicted by traditionally oriented theories of international business. Institutionally conditioned technological changes can also lead to new forms of governing transactions. Firms increasingly concentrate on exploiting very specific and unique skills that they possess, thereby impacting the choice between conduction transactions in market or hierarchical governance (Williamson, 1975, 1981, 1985). By concentrating on very specific activities, they externalize all other activities marginal to them, a view which is contrary to the transaction cost perspective. As (Dunning and Lundan, 2008) noted, increasing tendencies of modularization in design and production including R&D activities give support for this argument. Modular components are becoming commoditized which enables vertically disintegrated firms to provide products and services at high quality and low costs. In conclusion, the “make or buy “decisions and their outcome in terms of products or services depend on specific institutionally determined circumstances. Thus in a globalized environment, the increased ease of trading and combining components for new product design or services can lead a change in the internationalization patterns of firms and thereby the OLI advantages in Dunning’s paradigm of the multinational enterprise.

Discussion and conclusion

By drawing on two samples of two groups of respectively six firms we tried to find an answer to the question on how institutional conditions impact the internationalization behavior of firms. Dunning and Lundan (2008) have discussed this question, but to our knowledge there is relatively little evidence on the actual cause effect relationship. Recognizing that the institutional impact on firms internationalization involves complex processes we drew on (Hollingsworth, 2000)’s framework of institutional analysis by linking the five levels of institutional analysis to Dunning (1988); Dunning (1999); Dunning (2000)’s eclectic paradigm. Due to the complexity of the relationships between these two approaches and the limited scope of this paper, we cannot claim to come forward with some more conclusive evidence. However, it seems that we could find some indications hinting towards existing relationships between internationalization behavior and institutional conditions at various levels. By comparing firms in these two clusters, we found that, firstly, the nature of the firms and their activities correspond to the given institutional background conditions.

This can be observed at level one to three in particular and also from a path dependence view (Polish cluster: norms and values: inclination to female fashion aesthetics, Romanian cluster: fostering of numerical and mathematical skills). Secondly, institutionalized market and technological conditions affect the firms and their ownership structure. In the Polish sample we find homogeneity within our sample, there are no instances of vertically integrated ownership structures across cluster boundaries. In the Romanian cluster, structures are more diverse. Some firms are foreign owned subsidiaries, the others are mere exporters, and there is evidence of a captive supplier and a transnational entrepreneur (Bartlett and Ghoshal, 1999; Crick and Chaudhry, 2014). Higher degree of modularity enables the Polish firms to conduct in their transactions in market governance mode.

In the Romanian case, probably due to lower degree of modularity which necessitates close customer interactions, firms adopt a variety of governance modes. To conclude, the O (organisation) and L (location) advantage, and to a significantly higher degree the I (internalization) advantage (Dunning, 1988, 1999, 2000) seem to have an impact on the development patterns of researched cluster embedded firms. Due to limited space we did not have the possibility for further documentation in particular of the individual firms we investigated. We conclude that the theoretical intersection between institutional analysis and internationalization of firm is not sufficiently understood and merits further scholarly attention.

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