

INDUSTRIAL CLUSTERS AS AN IMPORTANT FACTOR FOR DEVELOPMENT OF MICRO, SMALL AND MEDIUM-SIZED ENTERPRISES (MSMES)

Anna H. Jankowiak

Abstract

Clusters, which constitute a cooperation platform for at least three groups of entities (industry, regional authority, and universities), play a significant role in the process of creating innovation and knowledge flow in the regions in which they operate. Based on the research presented in the article, it should be noted that micro (often family companies), small and medium-sized local enterprises can get the most benefit from associating with clusters. Clusters are a chance for dynamic development in the group of cooperating enterprises. Localization in a cluster is for many companies the implementation of internationalization strategy and the possibility of going beyond the borders of the home country to the global market. Through functioning in the cluster, micro, small and medium-sized enterprises are increasingly transforming into international actors, which is particularly visible in export-oriented clusters. MSMEs benefit from the flow of knowledge between cluster actors, which translates into an increase in their level of innovation.

The aim of the paper is to evaluate how SME can benefit from cluster activities. The article is an attempt to assess the impact of clusters on the development and flow of knowledge between MSME and other cluster entities.

Key words: industrial clusters, micro, small and medium-sized enterprises, development

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Introduction

Micro, small and medium enterprises (MSMEs)¹ are not the dominant entities in the global economy, but they are necessary to ensure economic development of individual national economies. This is by far the largest group of entities in the economy, hence the further research

¹ According to the World Bank definition, micro enterprise has less than 10 employee, small has less than 50 employee and medium company has less than 300 employee.

on MSME is important for the development of economics. On the one hand, in the era of global economy, enterprises have practically unlimited possibilities of operating on the international market and individual national markets. On the other hand, they are exposed to increased competition and negative economic occurrences (like a global crisis) that affect the condition of the entire economy and the majority of companies as well. Although MSMEs often have better competitive potential than large, transnational corporations, their competitive position is lower, which may be due to several reasons (Jankowiak, 2013):

- SME, acting individually, may be unable to capture market opportunities which require a large supply and production quantities, homogenous standards, etc.
- SME can have a problem in access to raw materials, finance support, special services, educated labour,
- SME cannot be so innovated as a big company, because of, the smaller scale of R&D expenses,
- The scale of the company can be a barrier to improvements in productive capabilities,
- The small or medium scale of “economic thinking” may be a huge obstruction on the way of capture new products, new markets, new opportunities.

However, SMEs can have a strong advantage, because “they have a simpler organizational structure, closer relationships with customers and are able to react more flexibly to market changes” (Janasová, Bobáňová, Strelcová, 2017). In many cases, combining the strength of small enterprises with each other, can bring tangible benefits and contribute to the economic development of associated units. Clusters are an example of such cooperation, ie a combination of units aimed at a common goal. The aim of the paper is to evaluate how MSME can benefit from cluster activities. The paper is an attempt to assess the impact of clusters on the development and flow of knowledge between MSME and other cluster entities. The study relies on the data resources and the literature in evaluating benefits for MSMEs in the cluster contexts.

1 Clusters as a source of economic development

Clusters are present in most national economies, regardless of the level of economic development of these countries. In many countries, these are well-established entities in which cluster cooperation is identified and intensified, while in some, clusters are in the initial phases of their development. There are many definitions of clusters, but the majority is based on the

definition formulated by Porter, which assumes that „a cluster is a geographically proximate group of interconnected companies and associated institutions in a particular field, linked by commonalities and complementarities. The geographic scope of a cluster can range from a single city or state to a country or even a network of neighbouring countries” (Porter, 1998). According to Foghani, Mahadi and Omar cluster “is utilized to show a geographical and a sectoral focus of firms which produce and sell a range of related or complementary goods and services, and normally experience the same challenges as well as opportunities. The clusters are assisted by a spectrum of supportive institutions situated within spatial proximity including business-related associations or technical or training service providers” (Foghani et.al., 2017). Cluster theories bring together two trends (Yang, Černeviciūtė, 2017):

1. The tendency toward localization, or the clustering of firms in similar or related industries in a particular city or region, and the positive externalities that can arise from such co-location
2. Those regions where value adding to the primary product had occurred through cluster development that had a global impact

Many existing definitions of clusters do not specify the size of enterprises entering the cluster. Clusters cover both small, often family companies, as well as those belonging to the medium sector and large transnational corporations with their units and branches. Analyzing examples of clusters functioning in the global economy, examples can be given of groups associating smaller companies (eg a cluster of footwear manufacturers from Italy) and connections between large companies surrounded by smaller companies (eg Silicon Valey cluster). MSMEs can play a dual role in clusters (Bylok, Pabian, Kuceba, 2016). First of all, they can initiate the creation of a cluster and thanks to this initiative founding companies create a core of the cluster. Enterprises can then shape the cluster's strategy and manage its activities. Secondly, MSMEs can join clusters created by larger entities, most often transnational or international corporations, becoming their suppliers and co-creating with them the production chain.

According to EU-supported educational research, five types of SME clusters can be identified (Navickas, Asta, 2009)

1. Porterian – a clearly defined historical and cultural industrial relationship with collaborative networking between SMEs in similar markets with the governance structures that are flexible.
2. Segmented Porterian – interactions between SMEs are shaped by differentiation in producer-supplier relations and different market positions and niches.

3. Interlocking – work in order to forge the links of common interest within the local economy with networking that is diverse and ranges from loose interest groups formed for promotional purposes to professional associations with a common project.

4. Induced partnership – formulated by external agencies, which coordinate organizational learning within a cluster.

5. Virtual cluster – a national network of family enterprises bound by common history and objectives, with entrepreneurial decision-makers playing the dominant role and with a common activity base linked through an information and communication technology infrastructure.

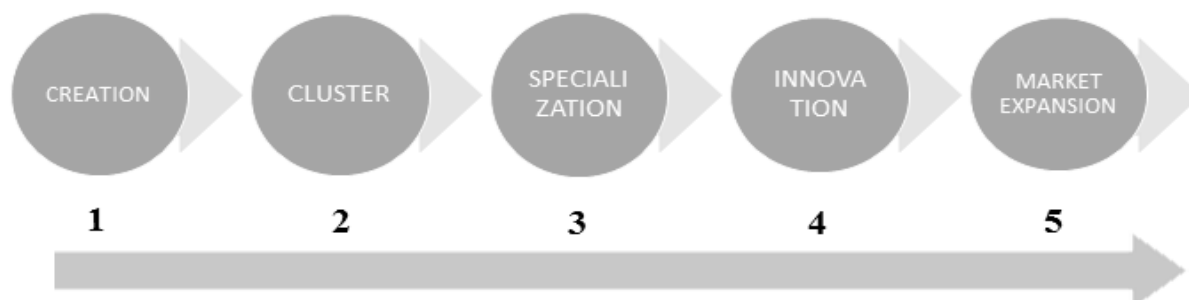
2 Benefits of clusters for MSMEs

MSMEs operating in a cluster can benefit in many aspects of their functioning. The companies use, above all, access to information, resources and employees, the company's efficiency is improved, as well as business transactions, there is greater specialization, synergy effect, joint purchases and R&D expenditures. Everything converts into their competitive potential. Building the competitive advantage of enterprises is the meaning of clustering. It can be assumed that the competitive position of companies is a resultant of the competitive potential and competitive strategy.

The benefits for small and medium-sized enterprises are particularly visible in the process of entering the new market, which is shown in Fig. 1. In stage 1 (creating a cluster), small and medium-sized enterprises create the first linkages between them, establish formal and informal relationships. At this stage, there are also units involved that provide knowledge to the cluster (universities, research laboratories) and supporting units (eg offering a specialized industry service). Stage 2 is a ready-made cluster. A well-functioning cluster is one that is constantly evolving and improving. A certain critical mass is required for this, which seeks to specialize and diffuse knowledge (stage 3) between the cluster entities and constantly improves its internal structure. Constant learning and shared expenditures on R&D are the reason for improving the quality and attractiveness of the goods or services produced by the cluster. Cluster companies become more innovative and their products become competitive (stage 4). Constant improvement of the offer is associated with an increase in demand for clustered production. Increasing supply becomes a factor attracting more companies to the cluster, which in effect expands to new entities. A competitive product offer causes further market expansion (stage 5). The products become attractive on the domestic market (home to the cluster), and as a result, the demand for them abroad begins to form. At this point, expansion into foreign

markets begins, which convert into the creation of new development strategies in MSMEs. The cluster's potential and constant improvement of it make the cluster function effectively because permanent mutual learning of entities combined with expenditures on innovation is a fundamental feature of effective clusters.

Figure 1. Stages of market expansion of the cluster



Source: author's own compilation

In order to achieve the aim of the article, three stages of cluster development will be analyzed in the aspect of the functioning of small and medium enterprises in which the impact of clusters is particularly visible. In the affiliated MSMEs companies, the cluster can have an impact on:

1. Specialization,
2. Innovation,
3. Market expansion.

2.1 Impact on specialization

The presence in the cluster gives small and medium-sized companies the opportunity to benefit from the synergy effect and to develop only such a production or service activity in which the company is effective. Cooperation with companies from related industries contributes to the deepening of the specialization of cluster companies. This specialization is mainly due to the exchange of information and constant depression of knowledge about specific products. Cooperation with suppliers allows for recognizing available resources, while clients provide information about the demand for specialized services or goods. Many companies rely on specialized supplies provided by another company. The competitive environment in clusters forces specialization of suppliers in the more effective way. Specialization can help to meet the market demands more quickly and products or services can be tailored to the customer needs. Thanks to the specialization of the company in the cluster, they are able to generate more value

than acting separately, and at the same time, their services or products are more technologically developed and cost-competitive. The availability of specialized resources and employees makes the cluster a spatial organizational form that enables more efficient and effective collection of expenditures. It converts into lower transaction costs and shorter waiting times for resources. Access to a comprehensive and specialist offer of affiliated companies in one place allows shortening the time of project and order completion. Often, cluster companies become elements of the production chain in which a high degree of specialization is desired.

2.2 Impact on innovation

Among the mutual benefits of working in close cooperation with companies, research units and local authorities, one should mention the common knowledge that entities gain from learning from each other. According to Gunawan et. al. “clusters are widely seen as an efficient platform for the low-cost exchange of knowledge” and “The local knowledge is more or less automatically received by cluster members through their face to face interaction, co-presence, and co-location” (Gunawan et. al., 2015). Knowledge may relate to the conditions of operation of specialized services or products on a given market, knowledge of the political and social environment, the current economic situation in the country, certain observed economic trends. Cooperation in a cluster is a platform for the exchange of knowledge and experience of all individuals, but MSMEs can benefit the most.

A similar situation can be observed with science in the form of joint expenditure on research and development of new products, technologies, machines, etc. The R&D sphere is a very cost-intensive part of each company's activity, hence the division of expenditure on coming up with more and better solutions can contribute to increasing the competitiveness of all cluster participants. Knowledge can also manifest itself in joint training, practices, exchange of information, creating standards eg in the area of human resources policy. Research units, therefore, have access to financial resources necessary to conduct research, while enterprises benefit from their achievements. The existence of strong scientific units in the cluster is necessary because it has a direct impact on the cluster's innovativeness, manifested in new products, processes, services and business models. The cluster allows gaining an advantage in noticing new technical, operational and delivery possibilities. Cooperation within the cluster on an innovative project allows reducing the costs associated with research, development work, implementation activities (certification, marketing and promotion, etc.). The impact on innovation does not need to be evident in the creation of new and better products only, it may

be an innovation in management, for example, management of purchasing or production. The cluster allows for quick and efficient elimination of competency gaps occurring in small and medium enterprises and which appear in the process of innovation – problems that cannot be dealt with by one company can be solved by another. Companies with MSMEs find it easier to obtain financing for innovative projects because the risk, related to their implementation, can be spread over a larger number of entities. Often, the cooperation of smaller companies with major scientific units would not be possible if it did not take place through cluster relations.

2.3 Impact on market expansion

Linking the cluster with the domestic and international market takes place both in the sphere of purchase of production factors and sale of final goods. A dynamic cluster cannot be isolated from the market. The cluster must be attractive in the eyes of potential employees and enterprises. Necessary for the development of the cluster are various inflows in the form of the specialized workforce, foreign direct investment, import of raw materials, technology, capital and outflows to international markets in the form of eg exports (Sölvell, 2009). It is extremely important for small and medium-sized enterprises to develop interconnections both at the regional and national level, as well as internationally. Currently, in the global economy, enterprises must take an active part in international trade, and cooperation in a larger group of enterprises may contribute to the growth of exports of a given enterprise.

Clusters, in their theoretical model, should be export-oriented, which ensures continued growth of the company. However, according to the Uppsala model of internationalization, exports are only the first step towards operating on the international market, which results in more advanced forms of entering the foreign market. Creating of foreign units is a natural development path in the global economy, and companies that form a cluster in one location often form a cluster also in the host country. An important motive for some companies from the MSMEs sector, which are usually suppliers, is moving behind their main client from the home market. The dominant corporation, deciding to transfer its unit to a foreign country, somehow also decides about the activities of its domestic partners who, following it, continue to offer their goods and services but in another country. Such a business theme is the beginning of clusters' formation, as corporations prefer to cooperate with well-known enterprises, which always locate where the leading company.

The basis for distinguishing motives related to the location in the cluster are issues related to the value chain. Belonging to the production chain of a bigger, dominant enterprise, in a cluster in one location, determines the necessity of changing the location together with the parent company. If on one market, in one cluster, MSME is involved in the process of cooperation with a key company through a value chain or as a subcontractor or supplier of goods or services, so at the moment of making subsequent foreign investments by the dominant company, the smaller enterprise faces an important choice – either will follow the co-operator or stay out of the cluster. If the firm chooses the first option then will make a direct foreign investment in the host country, just like the parent company from the cluster. As a result, even small and medium enterprises develop FDI as a form of internationalization of their activities. Therefore, following the dominant company and locating in a new cluster can be treated as a motive of internationalization of MSMEs. It can be assumed that if the parent company did not make a decision to change the location or establish a new unit in a new location, companies that are cluster participants in the first country would not have made foreign investments. The choice of the host country, in this case, is a less important element. It can be assumed that if space is guaranteed in a cluster in a new location, its geographical location is only a background (Jankowiak, 2014).

3 Cluster policy as a tool to support the small companies development

Cluster policy is a set of tools used by the state to support clusters in individual national economies. Two basic assumptions can be made regarding the identification and selection of clusters to support. First of all, cluster policy can support new cluster initiatives that are just being created, and cluster companies do not have a common history of operations. On the one hand, this is an effective measure, as the policy supports new clusters created using the top-down method. On the other hand, it leads to the process of excessive creation of clusters, which are often set up only to obtain financial support from the state. Secondly, cluster policy can support already existing clusters where whose common activity can be documented and which have been successful in joint projects. These clusters were selected to receive a lot of support from the government and can further develop the cluster. In both cases, those clusters that include small and medium enterprises are in the focus of attention.

Cluster policy, in its programs for financing the clusters' activities, accurately describes the share of the SME sector in cluster entities. For example, in Hungary, support is granted only

to those clusters in which the share of SME exceeds 75% of all entities. In Poland, it is 70% and in the Czech Republic, it is 60%.

Such assumptions that exist in most cluster policies can have a positive impact on the development of small and medium-sized enterprises. First of all, it is MSMEs that create the target group for financial support as part of cluster activities. Companies can raise funds for their development, product improvement, R&D, new technologies and new investments. They also have access to information, analyzes and reports prepared by state institutions implementing cluster policy. Thanks to the support, small companies can compete with large units for orders and projects. Secondly, large enterprises that want to set up a cluster must invite companies from the MSMEs group to it, because otherwise, they can not count on support from cluster policy at the national and over national level (eg from European funds). In such a situation, the way to cooperate with a large enterprise, its resources and possessed knowledge and technology open up in a natural way.

Conclusions

Micro, small and medium enterprises are entities that shape national economies and the global economy every day. Their importance is even greater if they work in a group, strengthening their competitiveness. Clusters are an example of such a group cooperation, which are currently perceived not only as a reason for development but also as an element raising the level of innovativeness of affiliated entities. Based on the research carried out in the paper, it can be concluded that belonging to a cluster gives small and medium enterprises a huge opportunity for development that would not have been possible without cooperation. The impact of functioning in the cluster on the development of MSMEs is particularly visible in the deepening of specialization related to existence among similar companies, which through the exchange of information can mutually motivate oneself to effective business operations. Clusters are also important in the case of raising the level of innovation of small enterprises. The research and development area is an extremely cost-intensive element of activity and co-financing it with cluster entities converts into real benefits in the form of reducing the operating costs of the enterprise. Clusters are also a way to internationalize activities that can take place in two ways. First of all, improving the offer increases the demand for cluster goods in the country and, consequently, abroad, so companies are moving to strategies development through exports. Secondly, belonging to a cluster may be the beginning of advanced forms of internationalization

in the form of foreign direct investments which is often not possible for smaller companies without a cluster.

Cluster policy is also helpful in the development of small and medium enterprises. It can be said that MSMEs are currently the largest beneficiary of cluster policy conducted in various countries around the world. This is the sector where the most programs are directed and without the participation of small enterprises, large companies do not receive co-financing for cluster activities.

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Contact

Anna H. Jankowiak

Wroclaw University of Economics

Komandorska 118/120, 53-345 Wroclaw, Poland

anna.jankowiak@ue.wroc.pl