

Clusters, Industrial Districts and Strategy

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ABSTRACT: This introductory paper opens the Special Issue on *Clusters, Industrial Districts and Strategy*, based on the debate and comments arisen during the 2016 Conference on Clustering. After some brief notes on the need and the intended scope from a multidisciplinary approach (Regional Science, Economic Geography, Sociology and Business Management), we argue why the knowledge of the context is increasingly relevant for competing successfully in the global marketplace, since context-firm's strategy is a two-way relationship. Cooperative efforts in the forms of clusters, industrial districts or agglomerations can spontaneously arise from a dense population of firms belonging to multiple industries or to the same and related industries along with public actors, or they can be a deliberate, planned and managed effort, which will require the intervention of a governance mode. Whatever the choice is, the result is not always the same. Accordingly, and in light of the pervading differences found across literature and papers presented in this Special Issue, it seems plausible that clustering can be idiosyncratic to the location. Further efforts should be devoted to find contingent recipes for fostering competitiveness in light of the context and the firms collaborating. At the end, we introduce the nine papers of this Special Issue, while encourage scholars to continue this academic conversation.

JEL Classification: L10; L20, M1; R11; O33; O25.

Keywords: clustering; industrial cluster; industrial district; strategy; competitiveness.

Clusters, Distritos Industriales y Estrategia

RESUMEN: Este artículo abre el Número Especial sobre *Clusters, Distritos Industriales y Estrategia*, y está basado en el debate y comentarios recogidos durante la celebración del Congreso Clustering-2016. Tras unas notas breves sobre la necesidad y el alcance pretendido con este Número Especial y desde una aproximación multidisciplinar (Ciencia Regional, Geografía Económica, Sociología, Dirección de Empresas), argumentamos por qué el conocimiento del contexto es cada vez más relevante para competir con éxito en el mercado global, ya que el contexto-

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estrategia de la empresa es una relación de doble sentido. Los esfuerzos cooperativos bajo la forma de clusters, distritos industriales o aglomeraciones pueden o bien surgir de manera espontánea a partir de una alta densidad de empresas que pertenecen a múltiples industrias o a la misma y relacionadas, conjuntamente con actores públicos, o bien pueden ser el fruto de un esfuerzo deliberativo, planeado y dirigido, lo cual necesitará la intervención de una forma de gobernanza. Sea cual sea la elección, el resultado no es siempre el mismo. Por consiguiente, y a la vista de las diferencias encontradas de manera extensiva en la literatura y los artículos de este Número Especial, parece plausible que el trabajo en red *clustering* pueda ser idiosincrático de la localización. Se deben dedicar más esfuerzos investigadores a encontrar recetas contingentes que promuevan la competitividad en función del contexto y cómo las empresas colaboran. Finalmente, presentamos los nueve artículos de este Número Especial, a la vez que animamos a los estudiosos para continuar esta conversación académica.

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Palabras clave: clustering; clúster industrial; distrito industrial; estrategia; competitividad.

In the today's globalized competition, more than ever before a certain type of geographical context is becoming a relevant element for the competitive advantages of firms located there. In those contexts, location and proximity among the variety of actors are the conditions required for the existence of a relational frame that fosters the economic activity within and between firms and territories (Becattini, 1990; Porter, 1990, 2003). Among the diverse modalities these contexts may take (Gordon and McCann, 2000), we will refer to them as clusters and industrial districts when they comprise firms from related activities and institutions around them (McCann and Folta, 2009). These forms have showed to impel a positive spiral of competitiveness improvement within the territory thanks to their capability to create an exclusive ambiance where firms, institutions and people can collaborate efficiently and effectively, exchange competitively valuable knowledge, and boost learning economies (Asheim *et al.*, 2011). During the last 30 years and stemming from several academic disciplines such as Regional Science, Economic Geography, Sociology and Business Management, an impressive amount of studies has proved that the effect of these contexts is remarkable in several structural, behavioural and performance indicators for regions, firms and individuals (Cruz and Texeira, 2010; Lazzeretti *et al.*, 2014). Italy and Spain are among the countries where this effect have been more studied and more interest has attracted among scholars on competitiveness.

However, has always this effect been positive and significant? As this is questioned to the reader, s/he will guess it has not, that the effect has been heterogeneous and variable. And s/he is right. Literature has shown that several hypotheses could not be validated during these years of incessant research activity, that there were some discrepancies between the prediction and what is actually observed. Globalization or the unequal dynamics of contexts have been some of the uncontrollable elements in

investigations that have fuelled those discrepancies (Puig and Marques, 2010). Nevertheless, these disagreements have undoubtedly helped research to evolve toward models that are more refined by including issues frequently underexplored so far. Among them, the firms' behaviour in the form of strategy has stood out from the rest. This includes the responses and actions the firms implement —internationalization, relocation, innovation, differentiation, specialization, outsourcing, offshoring and reshoring...— to adapt to the constantly changing conditions of the firm's environment. So far, most of research conducted within this topic has focused on the positive effect on innovation (Hervas-Oliver *et al.*, 2015), or on technological change (Galletto and Boix Domènech, 2014), although some others has found some negative effects on the firm's economic performance (Potter and Watts, 2010). These opposed results seem to call for further investigation on the role of context. Most of research has been conducted in manufacturing industries (McCann and Folta, 2009), while services remains underexplored (Cuadrado-Roura, 2016).

The study of the firm's strategy requires the understating of its complex mechanisms, its antecedents, the potential moderators and its effects. And yet it is also crucial the understanding of the context where the strategy is applied (Pla-Barber and Puig, 2009). First, because it is the firm's response to the environmental challenges in order to gain a competitive edge (Ronda-Pupo and Guerras-Martin, 2012). And second, because the strategic management process departs from environmental analysis prior to the firm to think of developing its own combination of resources and capabilities to face those challenges better than competitors (Galbraith and Schendel, 1983). Consequently, this Special Issue has focused on the context perspective where the strategy is to be deployed and, in particular, in the clusters and industrial districts.

Hence, how do industrial clusters and districts influence (and are influenced by) the firm's strategy in the global marketplace? The answer can be neither unique nor universal. Consequently, a contingent approach seems more fruitful to deal with contextual differences as it assumes that the result of an event strongly depends on the particular context where it happens (Shen and Puig, 2017). This requires, in a first stage, the identification and analysis of the firm's activity, size, value chain, and locational characteristics. In the next stage, it entails the adoption of the analytical methodology that suits better with the phenomenon under study. Additionally, it requires the specification of the performance metrics to be assessed, since this is a pervasive topic within any scholarly relevant study of strategy and location. Usually, scholars extensively use financial and economic indicators —namely, profitability, sales, productivity— or behavioural/strategic indicators —namely, share of market, innovativeness, survival, degree of internationalization— (Martínez-Fernández *et al.*, 2012). Yet some other areas may have been left apart from the study of this topicality, as recently McCann *et al.* (2002) and Nielsen *et al.* (2017) have suggested.

Why a Special Issue in the Journal of Regional Research about Clusters, Industrial Districts and Strategy? This is rooted in some of the conclusions we reached during the 1st International Conference on Clusters and Industrial Districts (CLUSTER-ING), held in Valencia (Spain) from May 26-27, 2016. Attendees agreed that location

and geographical proximity matter, although their influence can be different in terms of sign and scope. For example, a textile industrial cluster/district from Spain and another from Colombia can be studied and analysed by using the same theoretical frame, but the effect of location on firms will differ because the specific context between both settings is different. In each context, the organizational features of firms, the markets they serve, and how local actors decide to collaborate are key for the understanding of that influence. Yet all those issues do also shape how the context is.

This is why we asked for the collaboration to a relevant group of scholars, who shared their research in CLUSTERING-2016. Now this project comes to its end, we would like to acknowledge their contributions. The goal is to shed light on what we agree and on what we diverge when studying the geographical context of firms. These studies were clearly aligned with this monograph's aim in terms of content and scope, and they entail relevant, rigorous contributions to the topic. We honestly believe that the reader will notice this in the nine articles selected, papers that deal with experiences and cases from five countries (Spain, Italy, Sweden, Colombia, and Brazil), analysing a diversity of industries (manufacturing and services), and related to a wide variety of strategies such as innovation, internationalization, survival and cooperation. The academic contribution is threefold. First, it aims at providing some explanations to the contextual influence on performance. Second and in addition to other factors, whether and to what extent the firm's strategy affects the contextual features, thus context-strategy is a two-way relationship. And third, to introduce new ideas into this academic conversation. We also believe that the findings and conclusions of these papers provide managerial contributions since they suggest managers to be aware about the need for adopting a cooperative attitude, especially in contexts where SMEs are predominant and are in high need of innovations, while relevant efforts from regional innovation systems are expected to provide some guidance (González-Loureiro *et al.*, 2017). From the viewpoint of public policies, the reader can conclude that industrial policies should be location and context-specific, thus the difficulties of scholars to suggest universal recipes.

This Special Issue contains the next nine articles.

The first one, *Inter-organizational Relationships, Knowledge Strategy and Innovation in Clusters of Cultural Tourism*, by Dioni Elche, Ángela Martínez-Pérez and Pedro M. García-Villaverde sheds light on the strategy to acquire, create and transfer knowledge of firms belonging to tourism clusters. The departing point is the agglomeration of firms shaping tourism clusters by means of the interrelation between social capital, organizational knowledge and innovation. In an extensive and detailed analysis by means of a wide variety of statistical techniques, they analyse 215 firms located in UNESCO World Heritage Cities in Spain. The authors show that firms with high levels of bonding and bridging capital carry out activities of exploration and exploration of knowledge through an ambidextrous strategy, and these activities are linked to a better innovation performance. To put it differently, the inter-organizational relationships are crucial for the understanding and explanation of the knowledge strategy and its impact on innovation within tourism clusters.

The second article, *Disruptive Technological Innovations as New Opportunities for Mature Industrial Clusters. The Case of Digital Printing Innovation in The Spanish Ceramic Tile Cluster*, by Francesc Xavier Molina-Morales, Luís Martínez-Cháfer and David Valiente-Bordanova introduces a research about the emergence, development and dissemination of a disruptive technological innovation in an industrial cluster. They present a longitudinal case study triangulated with data from interviews, archival reports, the direct observation of the units of analysis and participant observation in the tile industry of Castellón (Spain). Authors provide evidence that several key actors may inhibit or foster the processes of technological change in locations where there is a dense population of firms from the same and related industries. These findings are relevant in the particular case of disruptive innovations, as it is the case of the introduction of inkjet printing technology in the tile industry. These disruptions are the key for the future of mature industries, as such is the case of the tile industry.

The third article, *the Role of Institutional and Territorial Factors in Innovation: the Case of the Spanish Footwear Components Industry*, by Ángel Belzunegui Eraso, Miguel Ángel Miralles Amorós and M.^a Teresa Pastor Gosálbez, analyses the transformation processes introduced by businesses in the footwear components industry and the importance of the Regional Innovation System in the recent economic context. For so doing, they adopted a qualitative methodology and undertook 63 in-depth interviews to larger firms within the footwear cluster in Alicante (Spain). They studied the extent to what the institutional support —research centres and institutes, universities, Chamber of Commerce— may influence the development of the innovation strategy. Their results seem to point out that inter-firms relationships have a higher influence than inter-institutions ones have. Whether this means a kind of failure of the Innovation System from the side of firms or the institutions is still a controversial issue. They dig deeper in the issue of potential causes, such as the irreconcilable differences in time to market between institutions and enterprises, rooted in the formal bureaucracy of the former. While relationships in the industrial value chain (supplier-focal firm-customers) are the main contributors to the firm's innovation strategy, the lack of relatedness and transfers from the institution setting seem to be a pervasive problem that hinder firms to gain increased levels of innovativeness even though a cluster to exist. Accordingly, the institutional setting may make the difference between successful and unsuccessful industrial clusters when it comes to innovativeness.

The fourth article, *Economic Competitiveness: effects of clustering, innovation strategy and the moderating role of location in the Colombian hotel industry*, by Orietha Rodríguez-Victoria, Miguel Gonzalez-Loureiro and Francisco Puig, sought to evaluate the potential moderator effect that locational externalities may have on the triangular relationship between clustering, innovation and competitiveness. Based on a sample of 131 Colombian hotels, 35% of which were located in tourism clusters, they found a direct positive effect of clustering on competitiveness and an indirect positive effect through innovation. Yet the most remarkable finding is how location moderates the relationship between innovation and competitiveness after controlling for the effect of clustering. When the location offers low resources for the tourism ac-

tivity, then the increase in competitiveness owed to an increase in innovation is higher than when the location holds higher resources available for that. This provides hard evidence of the heterogeneous impact that clustering may have on firms depending not only on how they collaborate, but also on virtually uncontrollable externalities of the location. Accordingly, the firm's innovation strategy should be contingent to the combination of all those factors.

The fifth article, *Location decisions and Agglomeration Economies: Domestic and Foreign companies*, by Enrique Claver-Cortés, Bartolomé Marco-Lajara, Encarna Manresa-Marhuenda, Francisco García-Lillo and Pedro Seva-Larrosa analyses the location decisions adopted by multinationals in order to evaluate the net effect of agglomerations on the those firms' performance. This topic is a current, timely concern because it will shed light on underexplored, relevant issues in internationalization of clustered firms: the use of and seizing on external knowledge. Knowledge spillovers is a pervasive topic although, so far, very few studies have tried to explain the extent to which knowledge leakages may be the other face of the same coin. Authors have used secondary data of 2,906 firms from a Spanish database containing questions about technological innovation (PITEC). These firms belong to medium and high-tech sectors and they have distinguished local and multinational firms within each location and have compared types of locations (technological parks, agglomerations, regional innovation systems). A first result shows that there is no a significant effect of location on those variables. However, when they compare the absorptive capacity of local firms and multinationals they found a relevant source of differences. While co-location is a necessary and sufficient condition for local firms to seize on knowledge spillovers, it is not for multinationals to take advantage of intangible resources within the location such as external knowledge is.

The sixth article, *From Delocalisation to Backshoring? Evidence from Italian Industrial Districts*, by Marco Bettiol, Chiara Burlina, Maria Chiarvesio and Eleonora Di Maria, analyses firms' production-location strategies and backshoring decisions within industrial districts-IDs. The results from a survey of 259 firms in eight Italian IDs show that firms that delocalise productive operations do not change their strategies over time and use the backshoring very infrequently —returning back the activity to the home country—. Moreover, the paper shows that production within IDs is still important to guarantee product quality and access to specialised know-how within the ID. Authors claim that ID location still matters to manufacturing activities although some operations are offshored. There is a relative stability of the internationalisation of production in IDs and the magnitude of backshoring is still a limited phenomenon. Most remarkably, this study combines longitudinal data from three different industries, furniture, mechanics and fashion, so their findings entails that there is a core activity that any ID do not want to be offshored, and it seems that these activities are related to intangible assets as specific know-how, which shapes and is the glue for this socio-economic entity named ID.

The seventh article, *Strategic Responses to Environmental Turbulence: A Study of Four Brazilian Exporting Clusters*, by Angela da Rocha, Beatriz Kury, Rodrigo To-

massini and Luciana Velloso de Souza Araújo, investigates strategic responses to the global economic crisis of four different Brazilian clusters. They analysed producers and exporters of traditional manufactured products that held different levels of export intensity in quite different industries: footwear, beachwear, furniture and wines. Data come from a combination of primary (39 interviews) and secondary sources and the cluster was the unit of analysis. After an exhaustive description of the four clusters in terms of main features, authors dig deeper in the variety of responses these firms adopted—exporting, relocation of productive operations, retrenchment, and differentiation—. The results point out that clusters present different responses depending on their degree of dependence to external markets, the possibility of redirecting production to domestic markets and the level of cooperation within the cluster. Once again, it seems that the combination of external and internal characteristics to the focal firms are idiosyncratic to the cluster originated.

The eight article, *Clusters' Vital Role in Promoting International Competitive Advantage-Towards an Explanatory Model of Regional Growth*, by Aihie Osarenkhoe and Daniella Fjellström, examines the importance of the interaction within and between society's stakeholders and how clusters and networking can contribute to long-term value creation. This strengthens the competitiveness of companies at both the domestic level as well as in international contexts. Authors analyse five Swedish cluster initiatives, a deliberative form of managed and planned cooperation once there is a dense population of firms of the same and related industries in the location. The industries range from aluminium works, to bioenergy, glassworks, furniture and heavy-duty vehicles. They show the perceived benefits of cluster initiatives arisen during in-depth interviews: networking, dialogue and experience exchange. Deeply rooted in these exchange and mutual confidence created by networking, they propose a model for the growth of these initiatives that will have an impact on increased levels of innovativeness and entrepreneurship and, in the end, will increase the cluster competitiveness and regional growth.

The ninth article, *Intra-cluster Cooperation enhancing SMEs' Competitiveness - the Role of Cluster Organisations in Poland*, by Barbara Jankowska, Marta Götz and Cezary Główska, theorises on the impact cooperation has for the smaller firms to overcome the problems stemming from the «liability of smallness» in the global marketplace. In this fine-grained qualitative study of several Polish clusters, they scrutinize the positive impact of clusters by distinguishing the main channels of influence. They found a positive impact of intra-cluster cooperation on the strategic capability and competitive strategies of clustered small firms. They dig deeper in an underexplored topic: whether and how the intervention of dedicated cluster organisations can foster and enable increased levels of cooperation. This emphasizes the idea that outcomes from clusters and IDs can be accelerated if it is planned and managed properly and it requires the intervention of a deliberated governance mode. Authors posit that these organization's role enhance more collaboration exchange of knowledge or other forms of cooperation and if necessary alleviate any conflicts, harmful processes distorting the intra-cluster relations such as abuse of a dominant position within the cluster.

Finally, we do wish that works in this Special Issue on *Clusters, Industrial Districts and Strategy* will inspire additional and profound reflections and investigations.

As this could not be otherwise, this project is the result of a collaborative work. We would like to acknowledge the effort and contributions of the editor and editorial team of the *Journal of Regional Research* and give thanks to them for the acceptance of this project. Our special thanks also includes reviewers; the usual work of them in the background and their scholar munificence has increased the quality of the papers. We would also like to gratefully acknowledge the effort the Organizing Committee and the firms and institutions that collaborate with this annual Conference. We reiterate our gratitude to authors. In short, locations can be more attractive, be a better place for living and working and firms gain a competitive edge if we understand how to use the best outcomes stemming from clustering. The research question opened is whether clustering is so idiosyncratic to the location that scholars can hardly find universal recipes.

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