

Unveiling inter-firms relationships in Industrial Districts

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In the knowledge economy, where companies base their expertise on the principles of collaboration and sharing, the topic of inter-firms networks has become highly relevant in both social and economic domains. A special focus is paid to the definition of the kinds of collaboration between two or more firms, not just legislatively (e.g., consortia, joint ventures, franchising), but also informally. An example of informal relations, covered extensively in the literature, is the interlocking directorates, which occurs when the director of one firm also sits on the board of directors (BOD) of another one. The director in common establishes a relationship between these firms. As a result, among these linked firms information circulates easily, promoting knowledge sharing and mutual coordination.

In this framework, the study of the relationships between firms located in delimited geographical areas is crucial for identifying the shape and the strength of their exchanges. It is even more relevant in contexts characterized by the presence of micro, small, and medium-sized firms, as in the case of the Italian industrial districts [1]. Industrial districts are manufacturing systems characterized by firms with a strong specialization in a specific production sector linked by stable relationships. Becattini (2017) defines the industrial district as a socio-territorial entity, characterized as a community made up of people and firms in a natural and historically bounded geographic area. Relations among firms in industrial districts arise from the combination of competition and cooperation. For firms belonging to this system, the balance between collaboration and competition fosters continuous renewal and the development of new opportunities.

These relationships could be read in the scope of Social Network Analysis (SNA), which offers a set of methods and statistical measures enabling the interpretation of the whole system in terms of kind of relationships and socio-economic implications. This perspective has been used to analyze both the firms' ownership and the knowledge exchange structures [2].

Specifically, this study aims to disclose the network structure among firms operating in Italian industrial districts by looking at the inter-firms relationships derived from having shared at least one member of the BOD. A one-mode network is defined as of a set of nodes represented by the firms, a set of edges linking firms according to the presence of the same director in two firms, and a set of weights depending on the number of BOD members shared by each pair of firms. Different networks can be defined from micro to macro levels, i.e., from industrial districts to specialization sectors up to the entire Country.

Relying upon Orbis, a Bureau Van Dijk database holding ownership data, we retrieve data about the BOD composition of manufacturing firms belonging to each Italian industrial district active in the year 2020 and operating over the previous 10 years. The resulting networks have been analyzed by means of SNA centrality measures to highlight the role and the position of leading firms and the different mechanisms of tie-formation. The emergence of typical network structures will be addressed, such as the presence of core-periphery patterns, the bridging role of specific firms able to connect separate network components, and homophilic relationships according to industrial specialization sectors.

Keywords: Homophily, Knowledge Exchange patterns, Social Network Analysis.

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