



**Extended abstract**

## EXTENDED ABSTRACT

### **One caterpillar, two butterflies: continuity, change and evolution of Marshallian industrial districts in Italy and Spain, 1991-2011**

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**Subject area:** *11.- Location of economic activity and cluster analysis*

**Keywords:** *Marshallian industrial district; change, evolution; urban structure; economic structure*

**JEL codes:** O14; O31; R12

**Abstract:** This paper is the first empirical research that illustrates and compares the general patterns of change of Marshallian industrial districts (MIDs) in two highly distritualized countries: Italy and Spain, over a long period of time (1991-2011). It allows to provide, for the first time, generalized evidence about the changes and recent developments of MIDs, covering a severe lack in the literature.

The MID is constantly undergoing change, like any social organism which evolves in relation to its history and reciprocal influences with the social, economic and institutional environments in which it is embedded. The MID change concerns the community of people, the population of firms, and the way in which they interpenetrate, including the role of institutions. Among the different issues regarding the interpenetration, the main ones are the social reproduction of the economic structure and the way in which this is mirrored on the reshaping of the MID's territorial boundaries.

In order to analyse the general patterns of change and evolution of MIDs, this paper proposes two contributions. First, the methodology applied to identify the MIDs, the



original Sforzi-ISTAT methodology, is in our paper homogeneous and unique among countries and points of time. This paper elaborates what, until now, is the only database that allows this comparison, and that will be made available to the public for its use. This innovation is of crucial importance since: a) it provides the only continuous and updated series for Spain; b) it is the only series that allows the comparison for Italy between 1991 and 2011, because the official series elaborated by the Italian Institute of Statistics (ISTAT) introduced recently discretionary changes in the methodology, making impossible the comparison between 1991 and 2011; and c) it allows direct and homogeneous comparison between both countries. The second contribution focuses on the two main above-mentioned issues about the MID change: (a) the territorial boundaries, and (b) the economic structure. The paper explores the direction and magnitude of these changes, as well as the causes behind them. In addition, for the first time it draws attention on the decisive importance of the urban structure in the evolutionary pathways of the MIDs.

The procedure for the identification of MIDs is explained in detail in Sforzi (2009). The achievement of this goal poses two challenging tasks: (1) the translation of the MID notion into practice requires the avoidance of banal interpretations of MID theory (unfortunately, too frequent) and the prevention of problems of inconsistency (Becattini, 2015); (2) the measurement of the servitization process in the MIDs in two countries (Italy and Spain), over a period of 20 years, implies a need to collect and manipulate an enormous amount of data. Since data comes from different sources and refers to different years, they must be homogenised in terms of methodological compilation, territorial units, and industry classifications. The measurement process also requires the use of the same methodology for both countries. The methodology uses census data collected by the Italian and Spanish national institutes of statistics (ISTAT and INE respectively), complemented in Spain with information from DIRCE (INE) and the Business Register. The methodology is fully consistent with Becattini's (1989) definition of a MID and consists of two stages.

In the first, local labour systems (LLSs) are identified for each country, using inter-municipal daily journey-to-work data. Sforzi (2009, 2012) provides a detailed theoretical explanation of the rationale for the use of LLSs for identifying MIDs. The LLSs are consistent with the MID definition as: 'a socio-territorial entity which is characterised by the active coexistence of an open community of people and a segmented population of firms.' (Becattini 1989, p. 29).

A second stage then identifies those LLSs which are MIDs. This is determined by the existence of a focus in an LLS on manufacturing or business services or consumer services, with the LLS being overall dominated by at least one manufacturing industry, and by an organization system – in both the LLSs and the production chain – based on small and medium enterprises (SMEs). This methodology has not been without criticism (Boix, 2009; Sforzi, 2009). However, it is, so far, the most consistent quantitative approach developed for the identification of MIDs (Becattini, 2015), and can be applied, with the data available, to both countries for 1991, 2001 and 2011.

The procedure for identifying LLSs, and then those which are MIDs, has been the same for both countries, as are the three years for which census data are selected (1991, 2001 and 2011).



The main empirical results can be summarized as follows:

- Italy and Spain are two district economies. There are 120 MIDs in Italy and 151 in Spain, which account for 20 and 31 per cent of LLSs respectively. MIDs are concentrated in the centre-north of Italy and in the centre and east of Spain.
- MIDs account for 29 per cent of the persons employed in Italy (5.7 million) and 20 per cent in Spain (3.6 million). MIDs account for 45 per cent of Italy's manufacturing employment (1,778,000 employees) and 30 per cent of Spain's manufacturing employment (658,000 employees). As in most developed economies, the service sector accounts for most employment in both Italy and Spain. In the year 2011, the service sector accounted for 71.5 per cent of overall employment in Italy and 75 per cent in Spain. In MIDs, the share of employment in services was lower: 60.1 per cent for Italy, and 66.5 per cent in Spain.
- The range of industries covered by MIDs in the two countries are very similar. They both have MIDs producing household goods (including in both countries ceramic tiles and furniture) and personal goods (including in both countries textiles-clothing, leather goods and footwear). But they differ in respect of which industry is the most prevalent: the food industry in Spain and mechanical engineering in Italy.
- The number of MIDs has decreased in both economies: from 199 to 120 in Italy and from 210 to 151 in Spain. In Italy, the number of employees in MIDs has increased from 5.21 to 5.75 million, and they share on the total employment in the Italian economy is still the same in 1991 and 2011 (about the 29 per cent). In Spain, the employment in MIDs has increased from 3.4 to 3.6 million, although their share on the total employment has decreased from 26.9 to 20.3 per cent.
- The evolution of the specializations and internal sector composition of MIDs has been different in both countries.

Italy and Spain are following two different pathways. Under the pressure of ever-changing competition from low-cost economies, the MID response could be 'a disintegration – let us call it “post-modern” – of the process of production, which in the end makes all transformation phases “in the factory” disappear and ends in a situation of great economic fluidity and social mobility (Becattini, 1990, p. 49)'. According to this prediction, the MID could change into a sort of “mercantile community”, where the manufacturers of goods could stay localized to a place, or not, but anyway they would be coordinated by a large and open group of service firms. However, while there is the possibility that this could happen in the near future in the MIDs of Spain, it would yet be premature to support the thesis. But it is certain that for the MIDs of Italy this prospective seems to be far more remote.

Italy and Spain have been at the forefront of the mapping of MIDs (Sforzi, 1990, 2009; Boix, 2009), and today the economies of both countries continue to provide (concrete) support to the (abstract) concept of the MID, thereby fuelling the concrete-abstract-concrete cognitive spiral that underlays the conceptualization of the industrial district by the Italian economist Giacomo Becattini (Becattini, 1990). Based on the title of the seminal book by Giacomo Becattini “The caterpillar and the butterfly” (Le Monnier, Firenze, 2001), the metaphor of the paper's title suggests that Italy and Spain share the same notion of MID (one caterpillar), but they have experienced different patterns of



districtualization (two butterflies). The methodology used in this paper can be easily replied by the researchers in other countries, enhancing the knowledge base about the MIDs and their evolutionary trends. The conclusions have novel implications about the joint role of territorial and industrial policy on the MID change, and can be extended to non-MID local production systems.

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