Industrial districts in rural areas of Italy and Spain[*]

Rafael Boix[†] and Yancy Vaillant[‡]

Abstract. The industrial district is a model of production mainly related to medium and small cities characterized by industrial specializations in small and medium enterprises. However, the mapping of the phenomenon in countries as Italy and Spain suggest that industrial districts are also present in rural areas. The objective of this contribution is the identification, mapping and characterization of industrial districts located in rural areas as well as to evaluate the extent in which industrial districts in predominantly rural areas have contributed to the dynamism of these areas. The analysis allows evaluating the importance of industrial districts for the development of rural areas and to provide some recommendations regarding policy strategies.

[†] Universitat de València, Edifici Departamental Oriental, Campus dels Tarongers, Avda. dels Tarongers, S/N (4P15) 46022 - València (Spain). Email: rafael.boix@uv.es.
[‡] Departament d'Economia de l'Empresa. Universitat Autònoma de Barcelona, Campus de Bellaterra, Edifici B, 08193 Cerdanyola del Vallès. Email: yancy.vaillant@uab.es.

1

1. INTRODUCTION

Rural economic development policy in most OECD countries has traditionally been the equivalent to Agricultural policy and has mostly been based on developing primary industries and the extraction of raw resources. This sector-based vision of rural policy has begun to change towards what the OECD (2006) has called the New Rural Paradigm. This new trend in rural policy changes its primary sector-based view for a much more integrated, multi-sector and diversified perception of rural policy based on the specificities of the place instead of the sector. The New rural Paradigm also implies changing policy from rescuing lagged regions to investing to make all rural areas more competitive by taking advantage of specific local strengths and assets. Many OECD countries have been adapting their rural policy over the last decade to better adapt to the place-based policy premises that underlie the New Rural Paradigm.

An economic development phenomenon which has been widely studied in recent decades for its local economic impact, and which is strongly characterised as an essentially place-based phenomenon, is the Industrial District (ID). ID attracted the attention of researchers as a successful system of economic organisation where scale and size were no longer the basis of competitive advantage. Rather, how production is organised locally and interacts with the social and productive environment in which it takes place become much more important competitive success factors (Sforzi 2002).

IDs can be seen as especially compatible for rural development in the era of the New Rural Paradigm as they are in part based on small-firm networks of cooperating and competing SMEs in a specific geographical area. These SMEs mostly compete by taking advantage of their flexibility and capacity to specialise in order to produce customized, small-batch production runs (Perrow, 1992). The personal trust and long-term relations identified as an essential trait of successful IDs is also a characteristic that is often found within rural communities (Fornahl 2003, Pilon and DeBresson 2003).

However, IDs have been mostly ignored by main stream rural policy as these adapt towards the principals of the New Rural Paradigm. The EU's Common Agricultural Policy 2007-2013 (CAP), which is the basis for rural development policy in Europe, has introduced within the menu of available economic development options at the disposal of member countries and regions (third axis of the CAP's second pillar) many new and often progressive economic development and diversification measures. However, very little in the way of IDs is introduced within the policy as a possible economic development tool. The economic diversification and development measures most often introduced in the Rural Development Plans (RDP) of European countries and regions under the CAP 2007-2013 (first subsection of Axis three called "*Rural economic diversification measures*") are either specific to on-farm diversification (measure 311) or only apply to the tourism sector (measure 313). Measure 312 of the CAP is the only support measure generally found within most regional RDPs that promote multi-sector business creation and promotion (Toledano et al. 2008, OECD 2009a). However this measure is limited to individual micro-enterprises and lacks the collective business network approach characteristic of IDs. It is also allocated, in most RDPs across Europe, only a very small fraction of the overall rural development budget under the CAP.

The European LEADER initiative probably had greater affinity with ID, especially in its LEADER II and LEADER + versions which called for local action groups to identify a 'priority theme' to help centre the development efforts of a LEADER region towards a single strategic direction. Under this program, business and social projects were given support based on how well they fitted in with the greater

collective development strategy and industrial meshing that the community had envisioned for itself. But the 'priority theme' was dropped from the most recent version of the LEADER as it was integrated into the EU's CAP 2007-2013.

One of the main arguments given by policy makers for the little integration within rural policy of lessons learnt from the abundant study of ID is that these are already being address by national industrial policy. However, industrial policy in most EU countries remains very sector specific in nature and therefore largely incompatible with the new generation and rural development policy and with ID in general.

The purpose of this study is to contribute a primary step towards understanding better how ID can contribute and be used as a tool within place-based rural development policy. In accordance to this, the specific objective of this paper will be to attempt to answer the following research questions: Are ID present in rural areas? If so, what is their impact over rural economies? This will be done though a comparative analysis of ID in two Southern European countries, Italy and Spain, where these districts have already been studied at length but not necessarily through a rural lens.

The paper is structured as follows. The second section introduces the theoretical framework relating the development of rural areas in industrialized countries to industrial districts. The third section presents the maps of industrial districts in rural areas of Italy and Spain. The fourth section presents some evidence of the contribution of industrial districts to the dynamism of rural areas. The fifth section presents the conclusions and policy implications.

2. INDUSTRIAL DISTRICTS IN RURAL AREAS: A SURVEY OF THE STATE OF THE ART

2.1. Rural development in industrialized countries

In contrast to the current situation, rural areas traditionally had a much clearer role to play within the larger economy (Scott and Johnson 2006). Rural areas generated raw materials, food, and energy and in some regions provided relatively cheaper labour for the more cost conscious mature segment of the manufacturing industry. However, technological advancements drove resource-based industries to produce more but employ fewer labourers. At the same time, the opening up of international markets and changes in global industrial structures eliminated most of the cost advantage that rural labour markets might once have had. As a result some communities fell into decline. Other communities, though, witnessed a fundamental transformation of their industrial fabric over the past two decades through the diversification of their local economic structure and have found prosperity out of these changes (Scott and Johnson 2006).

The diversification of the rural economy is an ongoing reality, not only in Spain and Italy, but in all OECD countries. This new reality, far from being a threat to the traditional primary activities that for centuries have been performed in rural areas, is increasingly being seen as an opportunity that can complement and provide value added to primary activities and become new sources of employment and income for rural dwellers. Diversification is offering an alternative to migration towards urban areas, consequence of the technological changes in agriculture that continue to expel workers from this activity[4].

---

[4] Saracena (1994) had already identified over a decade ago the socio-economic shift that would reposition the economic potential of rural areas in the future. She noted that a local economy approach would eventually become a more appropriate system of analysis than the traditional idea of sectoral division of

Porter (2001, 2004) proposed that within the new knowledge-based economy, creativity is what distinguishes successful regions. Consequently, innovation and entrepreneurship in a regional context can become the main engines of job creation, growth, and prosperity. The basis of this new paradigm is the transformation of local assets into intellectual capital and added value, (no longer exploitation of location, natural resources, and low cost labour). Economic prosperity is therefore determined by a community's capacity to transform knowledge into potential commercial products, processes, and services - where entrepreneurs are the drivers of the transforming process.

Whereas the cost of living, working and producing in large cities is generally perceived as growing much faster than income, many rural areas have been able to offer more affordable space and housing in an often safer environment offering greater natural and social attractions (Saracena 1994, Bryden and Hart 2004). Together with technological change and the internationalisation of markets leading to a changing rural economy, recent decades have seen the growing importance and role of local conditions as well as local choices in determining the prosperity of a community. Local quality of life and amenities have been identified as key factors for attracting and cultivating the right types of local attitudes which help to set an appropriate seedbed for new local initiatives (either individual or collective, private or public, economic or social) required to instil social dynamics and stimulate prosperity (Florida 2005).

In Spain and Italy, as in most OECD countries, responsibility and authority for public decisions is being increasingly transferred towards the local level (OECD 2009a, 2009b). This trend towards bottom-up territorial policy formulation and implementation includes a wide range of cross-ministerial responsibilities including industrial and economic development. Rural communities are increasingly being given the capacity and authority to formulate as well as implement their own development strategies. As a result, some communities have become better endowed or more capable of stimulating the appropriate conditions required to better exploit the specificities of local assets and capabilities required for economic development.

All this has reversed the traditional rural-urban migration pattern in many western countries to created new demographic flows towards certain rural areas. Not only are individuals increasingly choosing to reside and work in rural areas, but businesses are also doing the same. The entrepreneurial activity levels of certain rural areas in many OECD countries are surpassing those experienced in urban areas (Vaillant and Lafuente 2007). Although a high proportion of these business initiatives are linked to the service and commerce sectors, a growing amount of knowledge-based SMEs are being created in rural areas (OECD 2009a, Vaillant et al. in press).

2.2. Industrial districts in rural areas

An industrial district (ID) is "a socio-territorial entity which is characterized by the active presence of both a community of people and a group of firms in a naturally and historically bounded area" (Becattini 1990). This community shares a system of values and common practices which spreads throughout the district by mean of social norms

---

labour and industry between town and country. This is similar to the general observation made by Friedman (2005) when he described his view of the flat world with a decline of nations and rise of regions as the prime territorial economic unit, leaving no hiding place even for the most remote communities. According to Friedman the socio-economic changes brought about by a 'flattening' global society will be felt everywhere, with some regions gaining, and others losing, but not necessarily along the same sector-based or rural-urban divide that once characterised economic development.

and the institutional structure (markets, firms, professional schools, trade unions, employer's organizations, etc.).

In 1890, Alfred Marshall documented the existence of a form of organization of production based on the concentration, in some districts of English industrial cities, of people and small and medium-sized firms specialized in different parts of a production process. In these 'industrial districts', internal large scale economies were substituted by external economies related to the existence of skilled workers, specialized suppliers, and an informal system of knowledge diffusion.

The notion of the Marshallian industrial district was reprised by Giacomo Becattini (1975) to explain why the specialized local production systems of small and medium enterprises in the Italian region of Tuscany were so successful at the same time that the large firm production model of Turin and Milan was experiencing serious crisis. Nowadays industrial districts are a widespread mode of production in many countries and in Spain and Italy have become an instrument of analysis of economics and a tool for development policy (Becattini et al 2009).

Taking into consideration the extensive literature on industrial districts it may strike as surprising how little has actually been written specifically about the presence and role of IDs in rural areas. Bellandi and Sforzi (2004) hinted that this may be so because, contrary to many other branches of social science whose principals are based on the study of society through a classical dualistic lens (micro vs. large firms, urban vs. rural, etc.), industrial districts was rather a system of hybrids. These authors nevertheless imagined a model of extremes in their attempt to plot the multiplicity of paths of local development that could result through the adoption of a production process characteristic of IDs rooted in the place. One of their extreme local development paths was described as a business system embedded in a rural setting. They described this path of development using ID as enterprises which share a stock of work-related and social experiences in local settings, engaged at the core in the utilisation of natural resources, but with locally interweaving patterns of production and marketing ramifying out from this experience to create a diversified, but related, industrial fabric (Bellandi and Sforzi 2004).

Becattini and Omodei (2004) directly addressed the topic of local development in rural areas based on the concept of ID. They especially highlighted the short-sightedness of prior research into rural industrial development, which represents the countryside as the site of only one mere productive sector: agriculture. They approach the discussion from a stance that rural territory, and not just a single sector, encompasses the increasingly multifunctional role of these areas in the general functioning of the socio-economic system. The significance of cultural homogeneity and self-contained areas to IDs gives natural affinities of rural areas for this form of socio-territorial production process. Similarly, the adaptability of rural local systems to the integrated specialities fundaments of the ID productive process appears to make these more compatible as a rural industrial strategy than the mass production basis of extensive monoproductive agriculture (Becattini and Omodei 2004).

Rocha and Sternberg (2005) detected that the level of entreprenurship in regions with geographically proximate groups of interconnected firms and institutions in related industries contributed comparatively more towards regional development. The key, according to these authors, does not come from economic territorial specialisation or from the pure quantitative agglomeration of firms in a particular region, but rather from the social inter-connections and networks that link these together. The IDs as socio-territorial entities linking people and industry enhances the local impact of business

activity on rural/regional development facilitating knowledge diffusion and providing a networked sense of purpose which helps channel business outcomes to the community.

From an empirical point of view, the presence of IDs in rural areas has been documented, although often more as an anecdotal body of evidence of the existence of innovative, successful rural industrial districts. Rosenfeld et al. (2000) relates the cases of the auto supplies industry in Tennessee and the houseboat manufacturers in southern Kentucky. The RUPRI's Centre for Rural Entrepreneurship also document some of the US's most popular examples of successful rural industrial IDs, such as the furniture industry in Tupelo, Mississippi, the carpet industry in Dalton, Georgia, as well as the manufactured housing industry in northern Indiana, among others (RUPRI, 2008)[5]. Munnich et al. (2002) conducted a study into the rural knowledge industrial clusters in the State of Minnesota. They found that when the territorial focus of analysis is narrowed and takes into consideration the low population density that characterizes rural areas, networked industrial clustering is much more prevalent than it may seem.

Christerson and Lever-Tracy (1997) concluded that the rural industrial areas of China in many ways resembled the industrial districts of the Third Italy. They described these districts as characterized by networks of relatively autonomous locally owned and managed small firms that display close links with local public governance and are embedded in trust relationships among suppliers, investors, and clients. They proposed that the presence of flexible and competitive industrial districts were not limited to a small number of western urban areas.

As for the countries being analyzed in this paper, Morrison (2003) compiled studies into the formation of new industrial districts in southern Italy and compared them to the more popular cases from north-eastern and central Italy. The author found marked distinctions between the IDs being instigated by policy in southern Italy in the hopes of bringing to this relatively backwards region some replication of the successful experience that marked the Third Italy. The southern Italian clusters generally lacked cultural homogeneity and strong cooperation, strong local institutions cooperating with firms, and a prevalent population of small firms. Still, the importance of local collective action, whether public or private initiatives, proved to be, according to the author, the key to the success of the local production system in southern Italy, even in the face of frequent diverging interests and development strategies. Mecha (2006) conducted for Spain a comparative analysis of eight case studies representing local industrial productive systems in Spanish rural areas. She concludes that a necessary precondition for industrial rural development and dynamics is inter-enterprise cooperation and the establishment of territorially embedded innovation networks between social, institutional and business agents. These observations are very similar to those characteristics that emblemize the essence of the industrial district as a territorial development tool.

2.3. Industrial districts and policy in rural areas

The existence of IDs in rural areas and their positive behaviour, exceeding the average growth of local labour markets (LLS) in rural areas suggest that their characteristics and performance can be used as an additional tool for the development of these areas.

---

[5] The approach followed by the Rural Policy Research Institute's (RUPRI) Center for Regional Competitiveness (CRC) and Drabenstott (2008) is closer to the industrial district since it introduces the local social element into the function by capturing the specificities of 'the community of people' as well as 'the group of firms in a naturally and historically bounded area' replicating better the principals of IDs as defined by Becattini (1990).

Two particularities are important to be taken into account. First, IDs cannot be artificially created (Morrison 2003). Thus, any policies should rely on fostering the dynamic behaviour of the existing districts and using these expansive effects. Second, the small number of IDs in rural areas, their concentration in some few areas and their heterogeneity in terms of specializations and growth, reduces the range of policies in some aspects. Policy issues become basically regional and local (Munnich et al. 2002).

Furthermore, IDs tend to be specialized in light and mature industries. From a traditional point of view based on the sector, this could be interpreted as a sign of vulnerability in the face of emerging countries in the UE and especially with countries that are competing in similar products as China, India and Brazil. However, it must be noticed that the product or products produced by the ID are a mere form of expression of the local economy in markets. The true competitive advantage of IDs is their genetic ability to face rapid change as their social and productive structures are flexible and innovative (social flexibility and social innovation). In fact, it has been observed that IDs are, jointly with the largest metropolitan areas, the most innovative LPSs in the Italian and Spanish economy regarding the per capita production of patents and utility models, industrial designs, and number of requests of founds for innovation (Boix and Galletto 2009; Trigilia and Ramella 2008). From this point of view, the threat does not come from the external competitors but rather from the atrophy of the local innovative capabilities.

The particularity of IDs in terms of dominant specialization, complementary specializations, location, size, natural and infrastructural endowments, etc. makes each district different from the rest. Thus, based on the district's theory and previous experiences of policy, a common top-down policy for districts in rural areas is not advisable. Diversity suggests an adaptive framework for bottom up policies.

It is still not clear if rural policy and district's policy must be independent (although coordinated) or if a specific policy for districts in rural areas is required. The current policies of most national government on rural areas and on IDs are independent and without coordination. However, in the case of Spain, the flexible framework provided by the Ministry of Industry in its policy on "Innovative Business Groups" (MITYC Order ITC/2691/2006 and Order ITC February 2007) allows to use industrial policy based on districts and clusters as a part of the rural policy.

Regarding general policies on industrial districts, it must be noticed that IDs are in a curious position regarding the usual lines of economic policy: IDs are generally successful so ID specific policy are often not prioritised; they are specialized in mature industries so that usual strategies fostering R&D and knowledge-intensive industries usually centres on other kinds of LPSs; they are socio-territorial units so that sectorial policy (even if a sector is mainly concentrated in IDs) does not perform well. Finally, although IDs are mainly composed of SMEs, national and European policies are more centred on SMEs as independent units whereas in the IDs, SMEs are concentrated and interdependent.

There are no governmental entities or institutions specifically targeted for IDs, even if a share of district-specific policy comes from the national government (e.g. the Ministry of Industry). In Italy, the first notorious attempt of policy for IDs comes from the law 317/1991 art. 36 in 1991. This law transfer to the regions the policy for IDs although introduces severe inconsistencies in practice. For example, restricts the interventions to a typology of IDs identified following the parameters of the law where in practice the most often used definition of ID comes from the ISTAT (Italian National Institute of Statistics) and produces different results. The ISTAT and most of the experts

coincides that statistical approaches produces a useful guide although the reality could be slightly different and these IDs and their boundaries should be flexible regarding policies. At this moment, only 9 regions have recognised their IDs and only 3 have designed policies (Lombardia, Piamonte and Toscana) even if the total amount of resources for this policies is modest (20 million adding up these three regions).

In Spain, there are only a few previous experiences of policies targeting IDs. The regional government of Valencia started in the 1980s a program based on establishing a network of technological centres with the aim of supporting innovation in districts. Although these centres are still active, the general impression is that many have failed in transferring technology to the territory. Their situation is now threatened due to the lack of financial resources. After 2004, the first versions of the Spanish map of IDs served as a guidance for Spanish industrial policy which, on the basis of EU recommendations (COM 2005-121; COM 2005-488), consists of a set of measures and laws centred on so-called 'Innovative Business Groups' (MITYC Order ITC/2691/2006 and Order ITC February 2007). These measures reconcile industrial policy with innovation and the territory by starting from a comprehensive label which covers IDs, territorial clusters and other types of territorial industrial business networks. The bottom-up approach developed by the Spanish Ministry of Industry, Tourism and Trade, where the map is only for guidance, creates the institutional framework, while it allows local agents or self-defined territories to decide their final inclusion on the basis of a non-rival procedure. It is still early to evaluate the results of these policies. However, from the data of the first years it is possible to know that agents located in rural areas have not intensively used the possibilities of this policy and most of the demands proceed from non-predominantly rural areas (Trullén 2009).

As no specific instruments of policy for IDs exist, firms and institutions in IDs have used other general instruments. The local level (communities, agencies, local institutions) has tried to avoid the weak scope of national and regional policies using the few instruments available and funds from the UE, the national government and the regions, to provide a variety of minor interventions. These interventions have been performed by agencies of services to the development financed by the regional governments, provision of equipments by the localities, and policies of training and vocational training fostered by the trade unions, the syndicates and the chambers of commerce. The measurement of the impacts of these policies on IDs has been scarcely addressed in practice. However, the general conclusion is that the impact of national-regional policies on IDs has been very limited due to an inappropriate design of the mechanism or the lack of continuity.

The first association between the potentialities of industrial districts in rural areas and industrial districts in LPSs with rural characteristics has been possibility established in the OECD rural policy reviews of Italy and Spain (OECD 2009a; OECD 2009b). The possibility to use industrial districts as one of the several figures for the development of rural regions arises from these texts although no specific policy on this issue has been designed or implemented until now.

3. MAPPING INDUSTRIAL DISTRICTS IN RURAL AREAS

The objective of this section is to establish the procedure for the identification of industrial districts in rural areas and to obtain the maps of industrial districts in these areas. Besides the necessity of an accurate map, the procedure also pursues the objectives of cross-country comparability and its use as guidance for public policies. In

that respect, the proposed procedure uses the homogeneous definition of rural areas in both countries (OECD 2009c) and overlaps the also homogeneous map of industrial districts existing for both countries (Sforzi 2009; Boix 2009). The final result is the map of industrial districts located in rural areas[6].

As rural areas are defined at TLS3 or NUT3 level (province) and the local labour markets are smaller than the provinces, it is possible to find industrial districts located in rural areas whose local production systems have urban characteristics, as well as industrial districts located in non-rural areas whose local production systems have rural characteristics. To address this question, a second map is proposed by taking into account not the industrial districts located in rural areas but those industrial districts whose local production system has rural characteristics, regardless of whether they are located in rural or urban areas. The analysis is conducted on Italy and Spain, two economies with evident similarities where ID have been profusely studied as one of the most relevant forms of industrial organization.

3.1. The identification of rural areas

Even if rural areas have constituted an object of analysis for decades, there is no single definition of "rural area" commonly accepted. As a result each country employs its own national definition to the identification of these areas. The European Commission (2006) suggests that this is due to the various perceptions of what is, and what is not, rural and the elements characterizing rurality, the use of different definitions according to the object or the policy concerns, and the difficulty to collect data of similar geographical units. For the purposes of a cross-country research, homogeneous classifications are provided by international organisms as Eurostat and OECD. In fact, although Eurostat initially used their own definition of rural areas, in the "Rural Development in the European Union" report (2006, p.3) the European Commision implements the OECD methodology due to the fact that it is able to define the NUTS' rural character and this methodology is the most widely used approach[7]. The OECD (2009c) methodology uses as spatial units the TL3 (Territorial Level 3, which for European countries agrees with the NUTS-3 units) and establishes a regional typology according to which regions are classified as predominantly rural, intermediate or urban on the basis of three criteria (OECD 2009c):

1. Population density: if the population density of the municipality is below 150 inhabitants per km2 the community is considered as rural[8].

2. Percentage of population in rural communities: if more than 50% of the population of a region lives in rural communities (as defined in the previous point) the

---

[6] It should be noticed that the objective is not the identification of "rural districts" but the identification of "industrial districts" located in rural areas which explicitly proposes a concrete way to the development of rural areas. The concept of "rural district" is different and tries to translate the concept of "industrial district" to those environments not characterized by their specialization in manufacturing but in agricultural productions. The Legge 5 aprile 2004, n. 21 della Regione Toscana (art. 2) defines a "rural district" as "an economic-territorial system characterized by an agricultural production coherent with the natural vocation of the territory and significant for the local economy, a historical homogenous identity, the consolidated integration between rural activities and other local activities, and the production of goods and services of particular specificity which are consistent with the traditions and natural vocations of the territory".

[7] However, the report considers that this methodology imperfectly reflects the rural carácter of areas in densely populated regions.

[8] For Japan the threshold is 500 inhabitants per Km2 due to the enormous density of the country.

region is considered as rural, if this percentage is between 15% and 50% is considered as intermediate, and is considered as urban if the share is less than 15%.

3. Proximity to urban centres. A region classified as rural by the previous criteria is subsequently classified as intermediate if it has an urban centre or more than 200,000 inhabitants (500,000 in Japan) having at least 25% of the regional population. A similar rule is applied to an intermediate region if it contains an urban centre of more than 500,000 inhabitants (1 million for Japan) which represents at least 25% of the regional population.

The application of these criteria identifies 20 rural areas (provinces) in Italy and 17 in Spain. In Italy, rural areas tend to concentrate across the Appennini mountains (in a line from the centre to the South of the country), the Alps (north of the country) and Sardinia. In Spain, rural areas are basically concentrated in the regions of Castilla - La Mancha, Castilla Leon, Aragon, Extremadura and Galicia (Figure 1).

3.2. General methodologies for mapping industrial districts

One of the factors contributing to the diffusion of the IDs theory has indubitably been the possibility to delimit and quantify the phenomenon not by studying particular cases but by applying generalized quantitative methodologies for identification of IDs. Several methodologies have been applied to identify IDs in Italy, Spain and UK. The pioneer methodology was elaborated in Italy by Fabio Sforzi and the Italian Institute of Statistics (ISTAT) and has been applied in an longitudinal version to Italy (1987; 1990; 1996; 1997; 2005 and 2006), to Spain at the request of the Ministry of Industry (Boix and Galletto 2006 and 2008), and the United Kingdom (De Propris 2005 and 2009). Other procedures have been reported, basically in Italy (IPI 2002; Moussanet and Paolazzi 1992; Il libro della piccola impresa, Fondazione Giacomo Brodolini, 1995; Rolfo 1997 for Cnel/Ceris-CNR; Viesti 2000; Cannari and Signorini 2000; Fortis 2005 for the Fondazione Edison; Brusco and Paba 1997; and Iuzzolino 2003)[9], and a few in Spain at regional level (Ybarra 1991 for Valencia; De Luca and Soto 1995 for Murcia; and Celada 1999 for Madrid) or national level (Camison 2004).

The Sforzi-ISTAT methodology is the most commonly accepted because of its proximity to the original definition of industrial district, the precision reached along twenty years of evolution and its applicability in several countries. The most recent formulation dates from 2006 and has been applied to Italy, Spain and the United Kingdom (ISTAT 2006; Sforzi 2009; Boix 2009; De Propris 2009). The methodology consists of two stages:

1. The local labour market area (LLMA) is the territorial basis for the industrial district. The delimitation of LLMAs is carried out using an algorithm which departs from the municipalities or counties and uses data on jobs, resident employees and travel-to-work flows collected as part of the national Censuses[10]. The LLMA is assimilated to the local production system (Sforzi 2009).

2. To identify those local LLMAs of small and medium enterprises (SMEs) specialized in manufacturing, and with a dominant manufacturing specialization mainly

---

[9] For a critical review of most of these methodologies see Giovanetti et al. (2005).

[10] The procedure used for Spain and Italy is exactly the same (ISTAT 1997 and 2006; Boix and Galletto 2006). In Great Britain LLMAs coincide with the Travel-to-Work Areas (TTWA) (Coombes and Bond 2008). The basis for both procedures is quite similar as Stan Openshaw was involved in the original definition of both algorithms. Essentially, a LLMA or a TTWA is a collection of municipalities (Italy and Spain) or wards (Great Britain) forming an area in which 75% of the resident economically active population lives and works.

composed of SMEs. It consists of four steps: identification of LLMAs specialized in manufacturing; identification of manufacturing LLMAs characterized by SMEs; identification of the dominant industry; and verification that the dominant industry is mainly composed of SMEs (annex 1).

Data for the delimitation of the labour markets and industrial districts comes from the 2001 national censuses of the Italian Institute of Statistics (ISTAT) and the Spanish National Statistical Institute (INE). LLMAs use data of jobs, resident employees and travel-to-work commuting. The procedure for the identification of industrial districts uses data of jobs as well as jobs by firm size and industry[11].

The Sfozi-ISTAT methodology for the year 2001 identifies 156 industrial districts in Italy and 205 in Spain. Their quantitative importance is quite similar in both countries:

1. Italian industrial districts account for 23% of the LLMs, 22% of the population (12,591,000 residents), 25% of the total employment (4,930,000 jobs) and 39% of the manufacturing employment. Spanish industrial districts account for 25% of the LLMs, 20% of the country's population, employment, and productive establishments (8,253,000 inhabitants, 3,105,000 employees and 615,000 establishments), and 35% of the manufacturing employment.

2. Industrial districts tend to be concentrated in the territory although the patterns of concentration are different. Whereas in Italy a North-South duality is apparent, Spanish IDs are distributed along axes, and the greatest concentration is located on the east coast, where Valencia and Catalonia account for 41% of the districts and 66% of total employment in industrial districts.

3. The importance of industrial specialization exhibits a certain parallelism between both countries. However, a stronger polarization is apparent in Italy, since 74% of the industrial districts and 78% of manufacturing employment in industrial districts is concentrated in Machinery, electrical and optical equipment (30.5%); Textile and clothing (28%); and Housing goods (20%). In Spain, 69% of employment in industrial districts is concentrated in Machinery, electrical and optical equipment (22%); Housing goods (19.5%); Textile and clothing (14%); and Food and beverages (13%). The industry with the highest number of industrial districts in Spain is Housing goods (62 districts and 19.5% of manufacturing employment in districts), twice the number of Italian districts with this specialization (32 districts) although with the same share of manufacturing employment in industrial districts (19.8%). Of significant importance in Spain is also the Food and beverages industry, with 37 districts and 12.6% of manufacturing employment in districts, compared to the 7 districts and 1.7% of Italy.

3.3. Mapping industrial districts in rural regions

3.3.1. Mapping

Once identified the urban areas and the industrial districts, both maps are matched so that the geography of industrial districts located in rural areas is obtained (Table 1 and Figure 1). The results prove that industrial districts are present in rural areas of Italy and Spain and that they are relevant to the economy of these areas (Table 1):

1. There are 22 industrial districts located in rural areas in Italy (14% of districts in Italy) and 52 in Spain (25% of the Spanish districts).

---

[11] The absence in Spain of an industrial census forces to the use of additional data to capture jobs by firm size in the LLMAs. The procedure is explained by Boix and Galletto (2008) and Boix (2009).

2. They account for 14% of the LPSs located in rural areas in Italy (out of a total of 154 LPSs in rural areas) and 18% in Spain (out of a total of 287 LPSs in rural areas).

3. At this moment, it is not possible to provide data about turnover or added value at local labour market level although it is possible to use employment as a proxy for economic relevance and economic dynamics. Thus, in 2001 industrial districts add up to 18% of employment in rural areas in Italy (about 279,000 jobs) and 17% in Spain (about 340,000 jobs).

Regarding their localization (Figure 1), IDs in rural areas are geographically concentrated in both countries. In Italy they are concentrated in the centre of the country whereas in Spain they are concentrated in the centre-south of the country. In Italy, about 59% of IDs in rural areas (13 IDs) are located in three contiguous areas belonging to the so called "Third Italy" (the most important district's area in Italy): Arezzo (5 IDs), Perugia (5 IDs) and Siena (3 IDs) (in Toscana and Umbria). The rest are distributed in other rural areas: Belluno (Veneto) (3 IDs), Campobasso (2 IDs), Matera (1 ID), Sassari (1 ID), Sondrio (1 ID) and Viterbo (1 ID).

In Spain, about 73% of IDs in rural areas (38 IDs) are located in four contiguous areas: Albacete (10 IDs), Ciudad Real (10 IDs), Toledo (10 IDs) (the three are in Castilla-La Mancha), and Jaen (8 IDs). The rest are in Badajoz (4 IDs), Lerida (3 IDs), Cuenca (2 IDs), Soria (2 IDs), Huesca (1 IDs) and Segovia (1 IDs). IDs located in these four most "districtual" rural areas form, in fact, the third most important district's area in Spain, after the Comunidad Valenciana and Catalonia.

3.3.2. Characterization

In Italy, the dominant specializations of IDs in rural areas are basically related to Housing goods, Jewellery and musical instruments, and Textile and clothing. IDs where these specializations are dominant account for 64% of IDs in rural areas (14 IDs) and 67% of employment in IDs in rural areas (187,000 employees). Thus, IDs specialized in Housing goods add up to 27% of IDs (6 districts) and 26% of employment (73,000 employees); Jewellery and musical instruments add up to 9% of IDs (2 IDs) and 25% of employment (68,000 employees)[12]; and IDs specialized in Food and beverage add up to 15% of IDs (8 IDs) and 17% of employment (70,000 employees). Other dominant specializations in IDs in rural areas are Machinery, electrical and optical equipment (4 IDs and 39,000 employees), Paper, publishing and printing (1 ID and 20,000 employees), Food and beverages (1 ID and 19,000 employees), Chemistry and plastics (1 ID and 10,000 employees), and Leather and footwear (1 ID and 4,000 employees).

In Spain, the dominant specializations of IDs in rural areas rely basically on Housing goods, Textile and clothing, and Food and beverages. IDs where these specializations are dominant account for 79% of IDs in rural areas (41 ID) and 78% of employment in IDs in rural areas (208,000 employees). Thus, IDs specialized in Housing goods add up to 35% of IDs (18 IDs) and 36% of employment (95,000 employees); IDs specialized in Textile and clothing add up to 29% of IDs (15 IDs) and 26% of employment (68,000 employees); and IDs specialized in Food and beverage add up to 15% of IDs (8 IDs) and 17% of employment (44,000 employees). Other dominant specializations in IDs in rural areas are Machinery, electrical and optical equipment (4 IDs and 18,000 employees), Leather and footwear (2 IDs and 15,000 employees), Chemistry and Plastics (2 IDs and 14,000 employees), Metal products (1 ID and 5,000

---

[12] This includes Arezzo, the most important jewellery district in Italy (60,000 employees).

employees), Transport equipment (1 ID and 4,000 employees), and Paper, publishing and printing (1 ID and 2,000 employees).

In Italy, many IDs in rural zones cluster with other IDs with the similar specialization although there are not large bunches of specialized IDs. In Spain, with the exception of Textile and clothing districts (which are less dispersed and form a line from Albacete to Toledo provinces) the districts do not form clusters of districts with similar specializations.

Regarding their employees in 2001, in Italy the largest IDs are Arezzo (60,000 employees), Poggibonsi (27,000 employees), Assisi (21,000 employees), Feltre (20,000 employees), and Città di Castello (20,000 employees). These five largest IDs add up to 53% of district's employment in rural areas in Italy. In Spain, the largest IDs are Talavera de la Reina (39,500 employees), Seseña (30,400 employees), Tomelloso (13,900 employees), Mollerusa (13,000 employees), Torrijos (11,200 employees), Sonseca (10,900 employees), Almansa (10,300 employees), Fuensalida (10,200 employees), Valdepeñas (10,100 employees), and Alcañiz (10,100 employees). These ten largest IDs add up to 47% of district's employment in rural areas in Spain[13].

3.4. Industrial districts with characteristics of rural local production systems

One of the limitations of the OECD rural typology is that sometimes merges in the same region rural areas together with intermediate or urban areas. This argument extends to intermediate rural and urban regions, which could contain rural areas. Thus, there is the possibility that IDs be associated with more urban communities in rural regions changing the scope of the explanation. On the other hand, it may be possible to find IDs with rural characteristics in areas not classified as rural.

To enhance the explanation, the local labour markets, base for the local production systems, have been classified using the same OECD typology for regions[14]:

1. A local labour market (a LPS) is classified as predominantly rural if more than 50% of its population lives in rural municipalities, predominantly urban if less than 15% of the population live in rural municipalities, and intermediate if the share of population living in rural municipalities is between 15% and 50%. Following this criterion, 73% of LLMs (590 of 806) have been classified as rural.

2. A local labour market (a LPS) classified as rural under the basis of the previous criterion is classified as intermediate rural if there is any urban centre of more than 200,000 inhabitants representing no less than 25% of the population. An intermediate rural local labour market is classified as urban if there is any urban centre of more than 500,000 inhabitants representing no less than 25% of the population. However, in the application to Italy and Spain in 2001, no city in rural or intermediate areas has met these criteria.

The application of these criteria produces two maps significantly different to the previous maps of industrial districts in rural regions (Table 1, Figures 2 and 3). If the number of LLMAs located in rural regions was 154 in Italy and 287 in Spain, the

---

[13] Five of these districts are located in the province of Toledo (Talavera, Seseña, Torrijos, Sonseca, and Fuensalida). The other five are distributed in other four provinces: Tomelloso and Valdepeñas in Ciudad Real, Mollerusa in Lérida, Almansa in Albacete, and Alcañiz in Teruel. The dominant specializations are Textile and clothing (Talavera, Tomelloso, Sonseca), Food and beverages (Mollerusa, Torrijos, Valdepeñas), Housing goods (Seseña, Alcañiz), and Leather and Footwear (Almansa, Fuensalida).

[14] Although local labour markets are "communities" of people, firms and institutions, the use of the OECD rules to distinguish rural and non rural communities (population density below 150 inhabitants per km2) produces some aberrant results (e.g. Zaragoza local labour market is classified as rural) so that we considered advisable the use of the regional criterion.

number of LLMAs with rural characteristics increases to 356 in Italy and 590 in Spain. As a consequence, the number of industrial districts which LLMAs show "rural" characteristics is significantly higher than the number of industrial districts in rural regions. In Italy, there are 61 industrial districts located in LLMAs with rural characteristics (39% of the total industrial districts) and have 1.4 million inhabitants and 470,000 jobs. In Spain there are 134 industrial districts located in LLMAs with rural characteristics (65% of the total industrial districts), and they have 2.18 million inhabitants and 840.000 jobs.

The map of LPSs by typology of rurality (Figure 2) allows to answer two questions related to the previous results of IDs in rural areas: are IDs in rural areas mainly "rural"? and are there rural IDs in non-predominantly rural areas? The answer is positive in both cases. In Italy, 16 IDs located in rural areas have a characteristics of predominantly rural whereas 6 IDs (27% of IDs) in rural regions can be classified as intermediate (Morbegno, Arezzo, Sansepolcro, Poggibonsi, Sinalunga and Civita Castellana) . In Spain, 50 of the 52 IDs in rural areas are classified as rural and only two IDs (Talavera de la Reina and Bailén) show characteristics of intermediate rural area.

Regarding the existence of rural IDs in non-rural areas, in Italy the number of IDs with rural characteristics in non-rural areas (38 in intermediate rural areas and 7 in predominantly rural areas) is indeed larger than in predominantly rural areas (22). They are concentrated in the centre and north of Italy. In Spain, 58 IDs which local labour markets meet with the OCDE rural category are located in intermediate rural areas and 26 in predominantly urban areas. They are concentrated in the interior parts of Catalonia, Valencia and Murcia, and along the banks of the Ebro River.

Table 1. Industrial districts in rural regions and rural LLMAs

	All the IDs		IDs in rural regions		IDs in rural LLMAs	
	Italy	Spain	Italy	Spain	Italy	Spain
Nº LLMAs	686	806	154	287	356	590
Nº Industrial districts	156	205	22	52	61	134
- Food and beverages	7	37	1	8	4	24
- Transport equipment	0	9	0	1	0	6
- Machinery and equipment	38	14	4	4	16	9
- Metal products	0	1	0	1	0	1
- Chemical and plastics	4	9	1	2	3	5
- Jewellery, musical instruments and toys	6	2	2	0	2	1
- Paper, publishing and printing	4	2	1	1	2	2
- Leather and footwear	20	23	1	2	8	12
- Housing goods	32	62	6	18	11	45
- Textile and clothing	45	46	6	15	15	29
Population	12,591,475	8,252,988	775,057	931,717	1,426,188	2,179,073
Employment	4,929,721	3,105,401	278,914	338,932	467,768	839,805

Source: ISTAT (2006), Sforzi (2009), Boix (2009), Census (ISTAT, INE).

Figure 1. Industrial districts in rural areas

a) Italy

Predominantly rural areas

ID dominant industry
- Chemistry and plastics
- Food and beverages
- Leather and footwear
- Machinery, electrical and optical equip
- Jewellery, musical instruments
- Paper, publishing and printing
- Housing goods
- Textile and clothing

b) Spain

Predominantly rural areas

ID dominant industry
- Chemistry and plastics
- Food and beverages
- Leather and footwear
- Machinery, electrical and optical equip
- Metal products
- Paper, publishing and printing
- Housing goods
- Textile and clothing
- Transport equipment
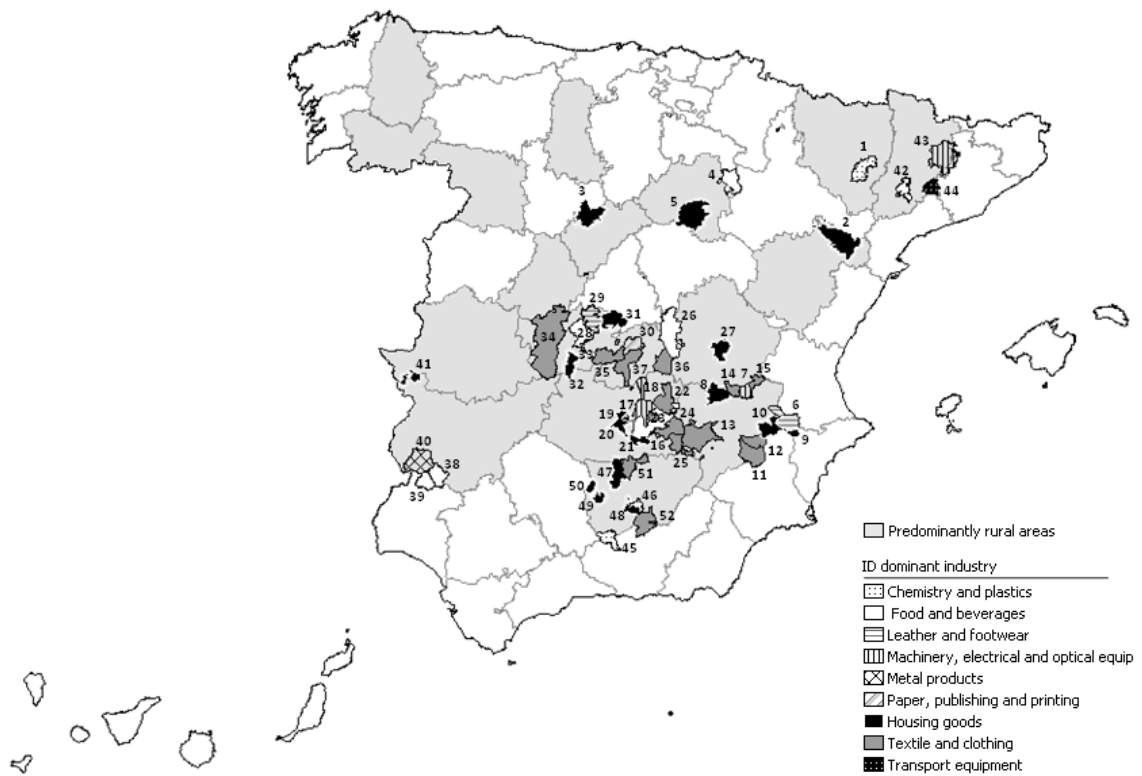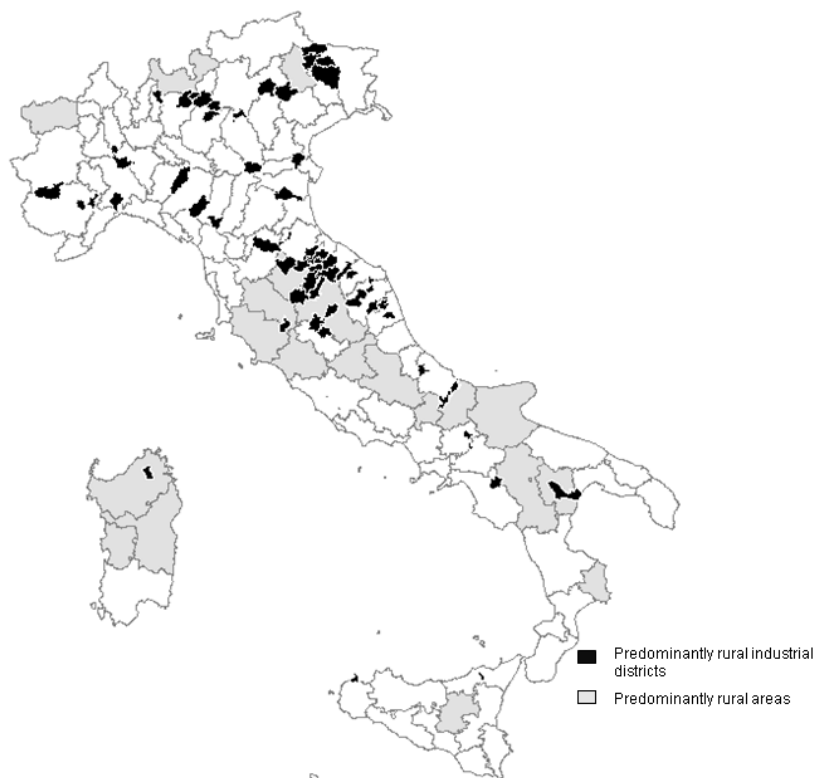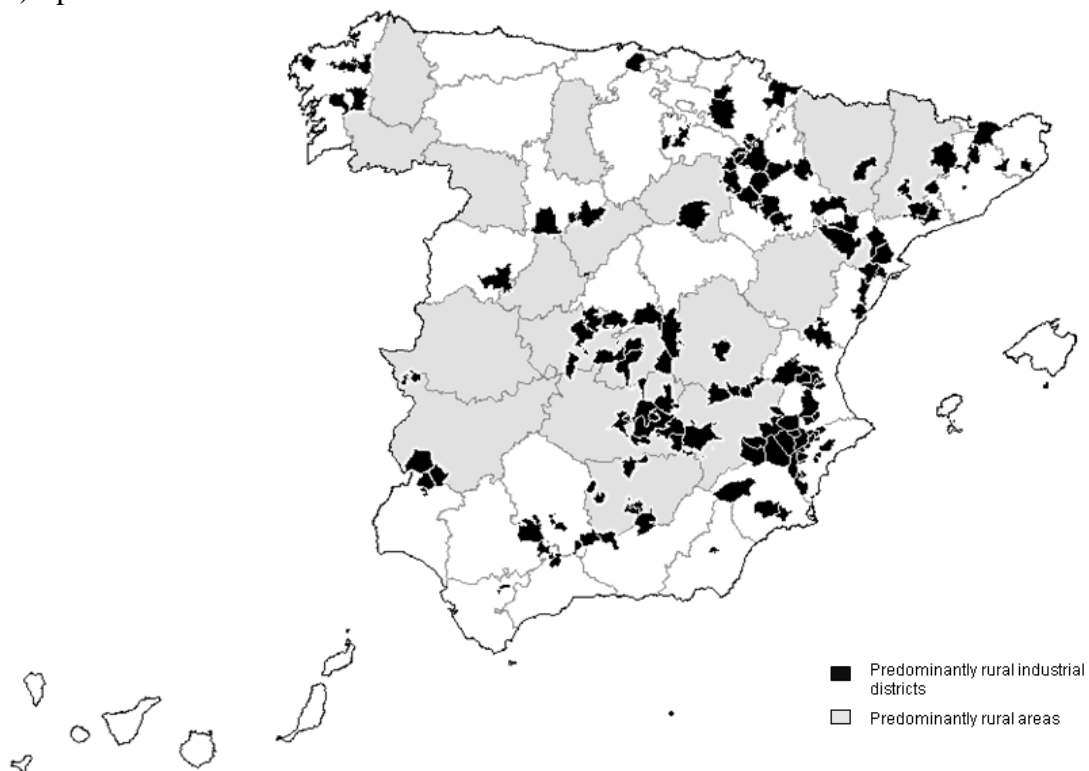
Source: ISTAT (2006), Sforzi (2009), Boix (2009), Census (ISTAT, INE).

Figure 2. Industrial districts in rural local labour markets

a) Italy

   ■ Predominantly rural industrial
     districts
   ☐ Predominantly rural areas

b) Spain

   ■ Predominantly rural industrial
     districts
   ☐ Predominantly rural areas

Source: ISTAT (2006), Sforzi (2009), Boix (2009), Census (ISTAT, INE).

4. CONTRIBUTION OF INDUSTRIAL DISTRICTS TO THE DYNAMISM OF RURAL AREAS

The objective of this section is to evaluate the extent to which IDs in rural areas have had an effect in the dynamism of the rural economy compared to rural areas without IDs and IDs in urban contexts.

4.1. Dynamism of rural areas with and without industrial districts

In Italy, about 45% of predominantly rural areas have IDs (9 provinces) whereas this share is larger for intermediate rural areas (61% have IDs) and predominantly urban areas (68% have IDs). In Spain, 61% of predominantly rural areas have IDs (11 provinces) whereas this share is larger for intermediate rural areas (72% have IDs) and predominantly urban areas (80% have IDs). The question is: is there any correlation between the growth of rural areas and the share of IDs on these areas?

Due to the limitation of data, the dynamism of IDs is evaluated using as a proxy the growth of employment between 1991 and 2001, coming from Italian and Spanish census. The results suggest that (Tables 2 and 3):

1. In Italy, the growth rate of employment between 1991 and 2001 in rural areas with IDs (7%) is lower than in predominantly urban areas with IDs (9%), predominantly urban areas without IDs (8%) and intermediate rural areas with IDs (8%). However, it is slightly larger than in intermediate rural areas without IDs (6%) and twice as much as in rural areas without districts (3%).

2. In Spain, the growth rate of predominantly urban areas with IDs (32%) and of intermediate rural areas with and without districts (35% in both cases) is similar. The aggregated growth rate of predominantly rural areas (19%) is significantly lower than that of the other regions. However, rural areas that have IDs (24% growth rate) are almost three times more dynamic that the rural areas without IDs (9%).

Table 2. Number of areas (TL3/NUT3)

	Italy			Spain		
	With IDs	Without IDs	Total	With IDs	Without IDs	Total
Predominantly urban	23	11	34	8	2[(1)]	10
Intermediate rural	30	19	49	18	7	25
Predominantly rural	9	11	20	11	6	17
Total	62	41	103	37	15	52

[(1)] Predominantly urban areas without IDs only include Ceuta and Melilla.
Source: ISTAT and INE (2001 Census)

Table 3. Growth rate or employment of the areas (TL3/NUT3)

	Italy			Spain		
	With IDs	Without IDs	Total	With IDs	Without IDs	Total
Predominantly urban	9%	8%	9%	32%	44%[1]	32%
Intermediate rural	8%	6%	7%	35%	35%	35%
Predominantly rural	7%	3%	6%	24%	9%	19%
Total	8%	7%	8%	32%	28%	32%

Source: ISTAT and INE (2001 Census).

4.2. Dynamism of industrial districts in rural areas

Is the dynamism of predominantly rural areas with IDs related to the existence of industrial districts? Or rethinking the question: is a significant share of the growth of rural areas with IDs explained by the more dynamic behaviour of IDs? The results confirm this point:

1. Regarding employment data between 1991 and 2001, IDs in rural areas in Italy and Spain are 28% and 44% more dynamic than the average LPSs in rural areas. In Italy, the growth rate of employment of IDs in rural areas is 7.1%% (18,600 employees) whereas the mean for rural areas is 5.6%. In Spain, the growth rate of employment of IDs in rural areas is 28% (73,000 employees) whereas the mean for rural areas is 19%.

2. In Italy, IDs account for 17.5% of employment in rural areas and have contributed 22.2% to the growth of employment in rural areas. The figures are quite similar for Spain, where IDs account for 17% of employment in rural areas and have contributed 23% to the growth of employment in rural areas. This is to say, 44% more than their share on employment. As a consequence, IDs have increased their contribution to the employment of rural areas in one percentage point between 1991 and 2001.

3. In Italy, the growth of employment has been positive in 13 IDs in rural areas and negative in the other 7. About 40% of IDs (9 IDs) show a growth rate above the mean while the average is 8% for all the LPSs as a whole. The largest growth rate was found in the district of Umbertide in Perugia (27%) whereas Assisi (Perugia) and Morbegno (Sondrio) showed a growth rate above 17%.

In Spain, 51 ID in rural areas show positive growth rates of employment and only one (Villanueva de los Infantes) show negative growth (-1.7%). Thus, 98% of IDs in rural areas have positive growth whereas 81% of local production systems as a whole show positive growth. About 63% of IDs (33 IDs) show a growth rate above the mean while the average is 46% for all the LPSs as a whole. Six IDs have show a growth rate of employment above 40%: Seseña (114% and 16,200 employees), Hellín (46% and 3,000 employees), Bolaños de Catatrava (43% and 1,200 employees), Caudete (42% and 1,000 employees), Villamalea (40,5% and 600 employees) and Mancha Real (40% and 1,300 employees). They are distributed across Toledo, Albacete, Ciudad Real and Jaen, and they are specialized in Housing goods, and Textile and clothing.

4.3. Dynamism of industrial districts in rural areas compared with their dynamism in intermediate rural and urban areas

Between 1991 and 2001, the average growth rate of IDs in Italy (10.2%) is larger than the average of the rest of LPSs in Italy (7.2%) and the median of the growth rate of IDs (7.5%) is 2.5 times higher than in the rest of LPSs (3%). In Spain, the average growth rate of IDs (33.2%) is very similar to the average of the rest of LPSs (31%) although the median of the growth rate in IDs (27%) is significantly higher than in the rest of LPSs (20%).

The growth rate of the employment in IDs in rural areas in Italy (7.1%) is lower than in intermediate rural areas (8.5%) and predominantly urban areas (11.1%). In Spain, this growth is quite similar across all areas at approximately 34%. However, in Spain the median of the growth rate of IDs in predominantly rural areas (21.5%) is lower than in intermediate rural and urban areas (29%).

4.4. Dynamism of industrial districts in rural LLMAs

We can deal with two additional questions related not to the dynamism of industrial districts in rural regions but to the degree of urbanization of the LLMAs where IDs are placed: Is there any relationship between the degree of urbanization and the growth of employment in IDs? and show IDs with rural characteristics a better performance than the rest of rural LPSs? The answer is affirmative in both cases:

1. The correlation coefficient between the degree of rurality of an ID (percentage of population in rural communities) and the growth rate of employment between 1991 and 2001 is -0.21 in Italy and -0.24 in Spain. This indicates a negative relationship between rurality and growth in IDs even if the coefficient is not high (Figure 4).

2. The average growth rate of employment between 1991 and 2001 of IDs with rural characteristics (located in rural, intermediated or urban areas) is 6.2% in Italy and 28% in Spain, which is lower although close to the national average (8% in Italy and 31.5% in Spain). However, the average growth rate of employment in the rest of LLMAs with rural characteristics is 3.4% in Italy and 17% in Spain, which is half of the national average and of IDs with rural characteristics (Figure 5).

Figure 4. Relationship between degree of rurality and growth rate of employment in IDs.
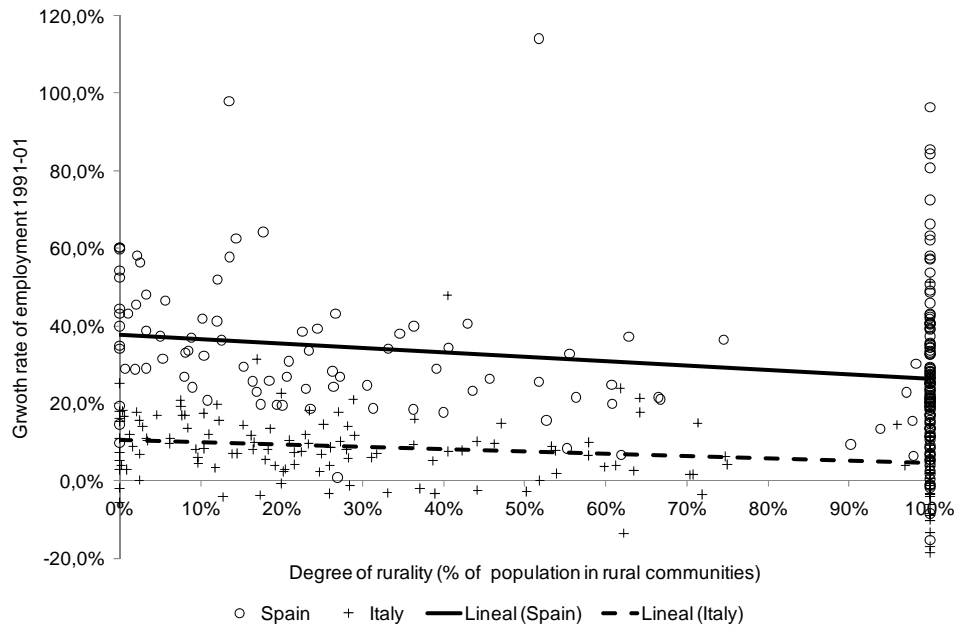
Source: ISTAT and INE (2001 Census).

Figure 5. Growth rate of employment by typology of local production system. 1991-2001.
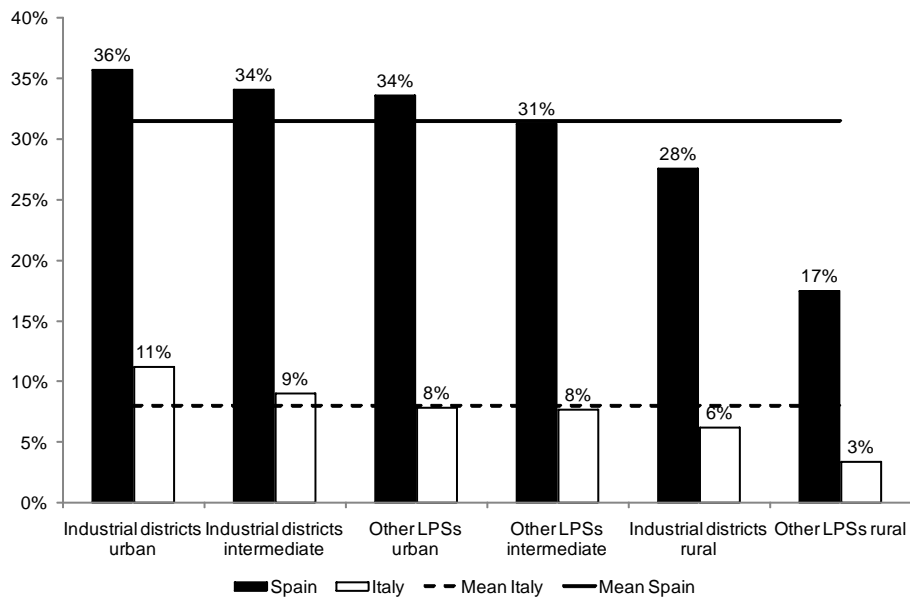
Source: ISTAT and INE (2001 Census).

5. CONCLUSIONS

Industrial districts are a model of production mainly related to medium and small cities characterized by industrial specializations in small and medium enterprises (SMEs). However, the mapping of the phenomenon in countries as Italy and Spain suggest that industrial districts (IDs) not only concentrates in urban and intermediate areas but also in predominantly rural areas. The objective of this contribution is the identification, mapping and characterization of IDs located in rural areas as well as to evaluate the extent in which IDs in predominantly rural areas have contributed to the dynamism of these areas. This analysis allows evaluating the importance of IDs for the development of rural areas and to provide some recommendations regarding policy strategies.

The most relevant results are:

1. IDs are present in rural areas of Italy and Spain and have a different presence in the economy of these areas. In Italy, their number is small and their contribution to these areas is modest. In Spain, two-thirds of the rural areas include IDs, and their economic importance for these areas is higher than in Italy.

2. IDs in rural areas are geographically concentrated. In Italy, they are concentrated in some few rural areas (Arezzo, Perugia, Siena and Belluno), the most districtual areas of the country. In Spain, IDs in rural areas are concentrated in the centre-south of the country, mainly in Albacete, Ciudad Real, Toledo and Jaen, forming the third most important concentration of IDs in the country.

3. Patterns of specialization of IDs in rural areas do not differ from their patterns in other areas. Dominant specializations of IDs in rural areas rely basically on Housing goods, Textile and clothing, and Food and beverages. There are no clear patterns of spatial concentration of IDs with the same specialization.

4. Predominantly rural areas having IDs grow faster than the rest of rural areas. The growth rate of the employment in predominantly rural areas is positive although it is lower than in intermediate and urban areas. Although the growth rate in rural areas with IDs is also lower than the national average, it is between two (Italy) and three (Spain) times larger than in rural areas without districts.

5. A significant share of growth of rural areas with IDs is explained by the more dynamic behaviour of IDs even if the higher dynamism is concentrated in some specific districts.

6. The results do not vary when transferring the unit of analysis from IDs in rural areas to IDs with characteristics of predominantly rural areas.

7. The existence of IDs in rural areas and their positive behaviour, exceeding the average growth of LPSs in rural areas suggest that their characteristics and performance can be used as an additional tool for the development of these areas. Policies on IDs in urban areas should foster their dynamic behaviour and maximize their expansive effects. The particularity of IDs suggests that any policy strategy should be based in a flexible bottom up framework. Coordination of policies between different departments and different levels of government are necessary and the key level becomes the local level.

Bibliografia

Becattini G. (1975) , Lo sviluppo economico della Toscana, con particolare riguardo all'industrializzazione leggera. Firenze, IRPET.

Becattini, G. (1990): "The Marshallian Industrial District as a Socio-economic Concept", in Pyke F., Becattini G., Sengenberger W. (eds), *Industrial districts and interfirm cooperation in Italy*, IILS, Geneva, p.38.

Becattini, G. and L. Omodei (2004): "Rural Local Identities and Globalization", in Becattini, G. *Industrial Districts, A New Approach to Industrial Change*, p.162-180. Edward Elgar, Cheltenham.

Bellandi, M. and F. Sforzi (2004): "The Multiple Paths of Local Development", in Becattini, M. Bellandi, L. Omodei, and F. Sforzi, *From Industrial Districts to Local Development*, p. 210-226. Edward Elgar, Cheltenham.

Becattini, G., Bellandi, M. and De Propris, L. (ed.) *A Handbook of Industrial Districts*. Edward Elgar, Cheltenham.

Boix, R. (2009): "The empirical evidence of industrial districts in Spain", in Becattini, G., Bellandi, M. and De Propris, L. (ed.) *A Handbook of Industrial Districts*. Edward Elgar, Cheltenham.

Boix, R. and V. Galletto (2006), 'El mapa de los distritos industriales de España', *Economía Industrial*, **359**, 95-112.

Boix, R and Galletto, V. (2008): "Marshallian industrial districts in Spain", *Scienze Regionali / The Italian Journal of Regional Science*, Vol.7, nº 3, p. 29-52.

Boix, R and V. Galletto (2009), 'Innovation and industrial districts: a first approach to the measurement and determinants of the I-district effect', *Regional Studies,* Vol.43 Issue 9, p. 1117-1133.

Brusco, S. and Paba S. (1997), "Per una storia dei distretti produttivi italiani dal secondo dopoguerra agli anni novanta", in Barca F. (ed), Storia del Capitalismo Italiano dal Dopoguerra a Oggi, Donzelli Editore, Roma pp. .265-333.

Bryden, J. and J. Hart (2004), *A New Approach to Rural Development in Europe: Germany, Greece, Scotland and Sweden*. Mellen Studies in Geography Vol. 9. Edwin Mellen, Lewiston, NY.

Camison, C. (2004), 'Shared, competitive, and comparative advantages: a competence-based view of industrial-district competitiveness', *Environment and Planning A*, **36**, 2227-2256.

Cannari L. and Signorini L.F. (2000), "Nuovi strumenti per la classificazione dei sistemi locali", in Signorini L.F. (ed) Lo sviluppo locale: un'indagine della Banca d'Italia sui distretti industriali, Meridiana Libri, Roma pp. .123-151.

Celada, F. (1999), 'Los distritos industriales en la Comunidad de Madrid', *Papeles de Economía Española*, **18**, 200-211.

Christerson, B. and C. Lever-Tracy (1997), "The Third China? Emerging Industrial Districts in Rural China", *International Journal of Urban and Regional Research*, Volume 21(4), p. 569-588.

CNEL (2007): Distretti rurali ed agro-alimentari di qualità: il manifesto di Matera alla luce delle nuove politiche di sviluppo rurale, Assemblea, 29 marzo 2007.

Coombes, M. and Bond, S. (2008): Travel-to-Work Areas: the 2007 review. Office for National Statistics, UK.

De Luca, J.A. and G.M. Soto (1995), *Los distritos industriales como estrategia de desarrollo regional*, Caja Murcia, Murcia.

De Propris L. (2005), "Mapping Local Production Systems in the UK: Methodology and Application", *Regional Studies*, vol. 39, n.2, pp. 197-211.

De Propris. (2009): "The empirical evidence of industrial districts in Great Britain", in Becattini, G., Bellandi, M. and De Propris, L. (ed.) *A Handbook of Industrial Districts*. Edward Elgar, Cheltenham.

Drabenstott, M. (2008), *Helping Regions Win in the Global Economic Race*, RUPRI Center for Regional Competitiveness.

Eurostat (200x):

Florida, R. (2005), *Cities and the Creative Class*. Routledge, US.

Fondazione Giacomo Brodolini (ed) (1995), Il libro della piccola impresa, Adn Kronos Libri, Roma.

Fornahl, D. (2003), "Entrepreneurial activities in a regional context", in D. Fornahl and T. Brennert. (Eds) *Cooperation, Networks and Institutions in Regional Innovation Systems*, pp. 38–57. Edward Elgar, Northampton.

Fortis M. (2005), Il Made in Italy nel 'nuovo mondo': Protagonisti, Sfide, Azioni, Ministero delle Attività Produttive, Roma.

Friedman, T. (2005) *The World is Flat: A Brief History of the Twenty-First Century*, Farrar, Straus and Giroux Publishers, US.

Giovanetti G., Scanagatta G., Boccella N., Signorini L.F. and Mion, G. (2005), Le metodologie di misurazione dei distretti industriali, Rapporto di Ricerca 05.02, Presidenza Del Consiglio Dei Ministri, Commissione Per La Garanzia Dell'informazione Statistica, Roma.

IPI (2002), L'esperienza Italiana dei Distretti Industriali, Istituto per la Promozione Industriale, Roma.

ISTAT (1997), *I sistemi locali del lavoro 1991*, Istituto Poligrafico e Zecca dello Stato, Roma

ISTAT (2006), *Distretti industriali e sistemi locali del lavoro 2001*, Collana Censimenti, Roma.

Iuzzolino G. (2003), "Costruzione di un algoritmo di identificazione delle agglomerazioni territoriali di imprese manifatturiere", proceedings of the conference "Economie locali, modelli di agglomerazione e apertura internazionale, Nuove ricerche della Banca d'Italia sullo sviluppo territoriale", held in Bologna, November.

Marshall, A. (1890): *The principles of economics*. McMillan, London.

Mecha-Lopez, R. (2006), "Análisis Comparativo de 8 Estudios de Caso de Industria Rural : Aportaciones para la investigación y las políticas públicas", *Anales de Geographia*, 26, 195-225.

Morrison, A. (2003), "New Experiences of Industrial Districts in Southern Italian Regions: a critical review", paper presented for the DRUID Conference, Aalborg, Denmark.

Moussanet M. and Paolazzi L. (eds) (1992), Gioielli, bambole, coltelli. Viaggio de Il Sole 24 Ore nei distretti produttivi italiani, Il Sole 24 Ore, Milano.

Munnich, L., Schrock, G., and K. Cook (2002), "Rural Knowledge Clusters: The challenge of rural economic prosperity", *Reviews of Economic Development Literature and Practice*, No. 12, U.S. Economic Development Administration.

OECD (2006), The New Rural Paradigm. OECD, Paris.

OECD (2007), OECD Rural Policy Reviews: Mexico. OECD, Paris.

OECD (2008), OECD Rural Policy Reviews: Finland. OECD, Paris.

OECD (2009a), OECD Rural Policy Reviews: Italy. OECD, Paris.

OECD (2009b), OECD Rural Policy Reviews: Spain. OECD, Paris.

OECD (2009c), Regions at a glance. OECD, Paris.

Perrow, C. (1992), "Small-Firm Networks", in S.E. Sjostrand, *Institutional Change: Theory and Empirical Findings,* M.E. Shape Publishers, N.Y.

Pilon, S. and C. DeBresson (2003) "Local Culture and Regional Innovation Networks: Some propositions", in D. Fornahl and T. Brennert. (Eds) *Cooperation, Networks and Institutions in Regional Innovation Systems*, pp. 38–57. Edward Elgar, Northampton.

Porter, M. (2001), *Clusters of Innovation: Regional Foundations of U.S. Competitiveness*. Washington DC: Council of Competitiveness.

Porter, M., Ketels, C., Miller, K., and R. Bryden (2004), *Competitiveness in Rural U.S. Regions: Learning and Research Agenda*. Harvard Business School and U.S. Economic Development Administration.

Rocha, H., and R. Sternberg (2005), "Entrepreneurship: The Role of Clusters. Theoretical Perspectives and Empirical Evidence from Germany". *Small Business Economics* 24, No. 3: 267-292.

Rolfo S. (1997), "Innovazione, piccole imprese e distretti industriali", in Cnel, Ceris, CNR, *III Rapporto,* CNEL, Roma, pp. 191-287

Rosenfeld, S., Liston, C., Kingslow, M. and E. Forman (2000), *Clusters in Rural Areas: Auto Supply in Tennessee and Houseboat Manufacturing in Kentucky*, TVA Rural Studies Program Contractor Paper 00-01.

RUPRI (2005), *Energizing Entrepreneurs: charting a Course for Rural Entrepreneurs*. Markley, D., Macke D. and V. Luther, RUPRI Center for Rural Entrepreneurship and Heartland Center for Leadership Development.

Saracena, E. (1994), "Recent Trends in Rural Development and Their Conceptualisation", *Journal of Rural Studies*, 10(4), p. 321-330.

Scott, J. and T. Johnson (2006), "New Governance and the Changing Face of Rural America", in T. Johnson, D. Otto, and S. Deller *Community Policy Analysis Modelling,* p. 17-29, Ames, IA: Blackwell Publishing.

Sforzi, F. (1987), 'L'identificazione spaziale', in G. Becattini (ed), *Mercato e forze locali: il distretto industriale*, Il Mulino, Bologna, pp. 143-167.

Sforzi, F. (1990), 'The quantitative importance of Marshallian industrial districts in the Italian economy', in F. Pyke, G. Becattini and W. Sengenberger (eds), *Industrial Districts and Inter-firm co-operation in Italy*, ILO, Geneva.

Sforzi, F. (2002), "Lo distritos industriales ante el reto de la globalización", *Geographicalia*, n.º 41, pp. 5-18.

Sforzi, F. (2009), "The empirical evidence of industrial district in Italy", in Becattini, G., Bellandi, M. and De Propris, L. (ed.) *A Handbook of Industrial Districts*. Edward Elgar, Cheltenham.

Toledano, N., Vaillant, Y., Urbano, D. and C. Serarols (*in press*) El Nuevo Paradigma del Desarrollo Rural y la Creación de Empresas en Cataluña, *Revista de Estudios Regional,* in press.

Trigilia, C. and Ramella, F. (2008): Impresi e territori dell'alta tecnologia in Italia. Rapporti di Artimino sullo Sviluppo Locale.

Trullén, J. (2009): "National industrial policies and the development of industrial districts: reflection on the Spanish case", in Becattini, G., Bellandi, M. and De Propris, L. (ed.) *A Handbook of Industrial Districts*. Edward Elgar, Cheltenham.

Vaillant, Y., Urbano, D., Rialp, A and J. Rialp (2006), "Un estudio cualitativo y exploratorio de cuatro nuevas empresas exportadoras", *Revista Cuadernos de Economía y Dirección de la Empresa*, No.29, p. 107-132.

Vaillant, Y. and E. Lafuente (2007), "Do different institutional frameworks condition the influence of local fear of failure and entrepreneurial examples over

entrepreneurial activity?", *Entrepreneurship and Regional Development*, 19 (4) pp. 313–337.

Vaillant, Y., Lafuente, E. and C. Serarols (*in press*) Location Decisions of Technology-Based Entrepreneurs: Why some Catalan KISAs choose to be Rural?, *Technovation*, in press.

Viesti G. (2000), "La proiezione internazionale dei distretti meridionali del made in Italy", in ISTAT, ICE, (Eds), L'Italia nell'economia internazionale, Rapporto ICE 1999-2000, Roma, pp. 215-221.

Ybarra, J.A. (1991), 'Determinación cuantitativa de distritos industriales: la experiencia del País Valenciano', *Estudios Territoriales*, **37**, 53-67.

ANNEX 1. IDENTIFICATION OF INDUSTRIAL DISTRICTS ON THE BASIS OF THE LOCAL LABOUR MARKET AREAS

The new ISTAT (2006) methodology starts by identifying local labour markets (ISTAT 2006; Boix and Galletto 2006) using a procedure very similar to the British Travel-to-Work Areas (TTWA). On the basis of these units, the objective of the procedure is to identify those LLM of small and medium enterprises specialized in manufacturing, and whose main manufacturing specialization is principally composed of SME. It consists of four steps.

1. Identification of local labour markets specialized in manufacturing

1. All economic sectors (NACE Rev.1) are aggregated into eight groups (Table A2.1): (1) Agricultural manufacturing; (2) Extractive industry; (3) Construction; (4) Manufacturing; (5) Business services; (6) Consumer services; (7) Social services; (8) Traditional services.

2. A local specialization index (LQ1) is computed for each LLM:

$$LQ1_{LLS,NACE} = \left(L_{LLS,NACE} / L_{NACE} \right) / \left(L_{LLS} / L \right) \qquad \text{(A2.1)}$$

where L = employment; LLM = local labour market; NACE = aggregation of manufacturing activities from Table A2.1.

3. A prevalence index is computed for Manufacturing, Business Services and Consumer Services:[15]

$$PR1_{LLS,NACE} = \left[\left(L_{LLS,NACE} / L_{NACE} \right) - \left(L_{LLS} / L \right) \right] L_{NACE} \qquad \text{(A2.2)}$$

4. Taking both indexes into account, an LLM is considered to be specialized in manufacturing when:

1. It shows a localization index (LQ1) higher than 1 (higher than the national average) in Manufacturing, Business services or Consumer services.

2. And the prevalence index for Manufacturing is higher than those of Business services and Consumer services.

Table A2.1 - NACE Rev.1 groups used to identify local labour markets specialized in manufacturing

Group	NACE Rev.1
Agriculture, hunting and fishing	01, 02, 05
Mining and quarrying	10, 11, 12, 13, 14
Manufacturing	15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37
Construction	45
Business services	511, 516, 631, 634, 65, 67, 712, 713, 72, 73, 741 a 747, 911, 924
Consumer services	55, 633, 70, 711, 714, 921, 922, 923, 927, 93
Social services	66, 80, 85, 90, 913, 925, 926
Traditional services	40, 41, 50, 512, 513, 514, 515, 517, 52, 60, 61, 62, 632, 64, 748, 75, 912

Source: Calculations on ISTAT (2006) data

---

[15] The prevalence index is a new feature in the procedure. It has been introduced to mitigate one of the inconveniences of the previous methodology whereby there might be a high localization coefficient of a sector in a LLS but at the same time some other sector with a lower localization coefficient, but with a higher level of employment. Which criterion should prevail, specialization or size? Moreover, how does one deal with the fact that some sectors of an economy are much bigger than others? The index compares the local dimension of each sector with the national one, and it furnishes a comparable magnitude of the local dimension of each sector in comparison to the other.

2. Identification of manufacturing local labour markets of small and medium enterprises

Starting from the manufacturing LLM, a firm size specialization index is computed for the three EU standard firm size intervals: small (fewer than 50 employees), medium (between 50 and 249) and large (more than 250):[16]

$$LQ2_{LLS,DIM}^{MAN} = \left(L_{LLS,DIM}^{MAN} \big/ L_{DIM}^{MAN} \right) \big/ \left(L_{LLS}^{MAN} \big/ L^{MAN} \right) \qquad (A2.3)$$

where L = employment; LLM = local labour market; DIM = firm size (small, medium or large); MAN = manufacturing sector.

3. Identification of the dominant industry in each local labour market

1. All the manufacturing activities are divided into 11 groups: Textile and clothing; Leather and footwear; Housing goods; Jewellery, musical instruments and toys; Food, beverages and tobacco; Machinery, electrical and optical equipment; Manufacture of basic metals and fabricated metal products; Chemicals and plastics; Transport equipment; Paper, publishing and printing; and Other manufacturing as a residual sector (Table A2.2).

2. A localization index is computed for each manufacturing group in each LLM:

$$LQ3_{LLS,NACEMAN}^{MAN} = \left(L_{LLS,NACEMAN}^{MAN} \big/ L_{NACEMAN}^{MAN} \right) \big/ \left(L_{LLS}^{MAN} \big/ L^{MAN} \right) \qquad (A2.4)$$

where L = employment; LLM = local labour market; MAN = manufacturing; NACEMAN = each of the 11 manufacturing groups (Table A2.2).

3. Then the prevalence index is computed to determine which group has the highest employment in relation to the national total:

$$PR2_{SLT,NACEMAN}^{MAN} = \left[\left(L_{SLT,NACEMAN}^{MAN} \big/ L_{NACEMAN}^{MAN} \right) - \left(L_{SLT}^{MAN} \big/ L \right) \right] L_{NACEMAN} \qquad (A2.5)$$

The group that shows a localization index (LQ3) above 1 and the highest prevalence index[17] is considered to be the 'dominant industry' or 'district industry' of a Manufacturing LLM.

Table A2.2 - NACE Rev.1 Manufacturing activities used for the identification of the"dominant industry" of the local labour market

Group	NACE Rev.1
Textile and clothing	17 Manufacture of textiles
	18 Manufacture of wearing apparel; dressing and dyeing of fur
Leather and footwear	19 Leather and footwear
Housing goods	20 Wood and cork
	26 Manufacturing of other non metallic mineral products
	361 Manufacture of furniture
Jewellery, musical instruments and toys	362 Jewellery

---

[16] Previous methodology only considered two intervals: SME and large firms. In their application of the earlier methodology to Spain, Boix and Galletto (2006) pointed out that the two interval divisions did not produce very satisfactory results owing to the small number of large manufacturing establishments usually concentrated in the same areas as MID. The division into three intervals mitigates this problem. An LLM is considered to be formed mainly by SME when the highest value of the localization coefficient by firm size corresponds to the small or medium size intervals.

[17] That is to say, both the concentration and the size of the sector in an LLM are substantially larger than the national average.

	363 Musical instruments
	364 Sport articles
	365 Toys
Food, beverages, tobacco	15 Food and beverages
	16 Tobacco
Machinery, electrical and optical equipment	223 Reproduction of recorded media
	275 Foundry of metals
	28 Manufacture of fabricated metal products, except machinery and equipment
	29 Manufacture of machinery and equipment n.e.c.
	30 Manufacture of office, accounting and computing machinery
	31 Manufacture of electrical machinery and apparatus n.e.c.
	32 Manufacture of radio, television and communication equipment and apparatus
	33 Manufacture of medical, precision and optical instruments, watches and clocks
Manufacture of basic metals and fabricated metal products	271 to 274 Manufacture of basic metals
Chemicals, plastic products and petro-chemicals	23 Manufacture of coke, refined petroleum products and nuclear fuel
	24 Manufacture of chemicals and chemical products
	25 Manufacture of rubber and plastics products
Transport equipment	34 Manufacture of motor vehicles, trailers and semi-trailers
	35 Manufacture of other transport equipment
Paper, publishing and printing	21 Paper
	221 Publishing
	222 Printing

Source: Calculations on ISTAT (2006) data

4. Firm size of the dominant industry

The dominant industry is considered to be mainly formed by SME when:

1. Employment in SME in the dominant industry accounts for more than 50% of total LLM employment:

$$CE1_{LLS,SME}^{MI} = \left(L_{LLS,SME}^{MI} \big/ L_{LLS}^{MI} \right) > 0.5 \qquad (A2.6)$$

where L = employment; LLM = local labour market; MI = dominant industry (district industry); SME = small and medium enterprises.

2. If the LLM has only one medium-sized firm in the dominant industry, an additional test is conducted to verify that employment in small firms operating in the LLM's dominant industry is larger than half the employment of the medium-sized firm:

$$CE2_{LLS}^{MI} = \left(L_{LLS,SE}^{MI} \big/ L_{LLS,ME}^{MI} \right) > 0.5 \qquad (A2.7)$$

ANNEX 2. LIST OF INDUSTRIAL DISTRICTS IN RURAL AREAS IN 2001.

A) Italy

Rural area/ Industrial district	Dominant industry	Employment 1991	Employment 2001	Growth of employment 1991-2001	Growth rate of Employment 1991-2001
ITE18 AREZZO		**87,087**	**91,725**	**4,638**	**5.3%**
1. Bibbiena	Housing goods	10,593	10,791	198	1.9%
2. Cortona	Jewellery, musical instruments, toys	10,665	10,951	286	2.7%
3. Arezzo	Jewellery, musical instruments, toys	55,238	59,676	4,438	8.0%
4. Pieve Sto. Stefano	Textile and clothing	1,869	1,855	-14	-0.7%
5. Sansepolcro	Textile and clothing	8,722	8,452	-270	-3.1%
ITD33 BELLUNO		**33,215**	**32,318**	**-897**	**-2.7%**
6. Auronzo di Cadore	Machinery, electrical and optical eq.	4,756	4,274	-482	-10.1%
7. Pieve di Cadore	Machinery, electrical and optical eq	8,585	7,447	-1,138	-13.3%
8. Feltre	Machinery, electrical and optical eq	19,874	20,597	723	3.6%
ITF22 CAMPOBASSO		**4,290**	**4,307**	**17**	**0.4%**
9. Trivento	Textile and clothing	2,018	2,061	43	2.1%
10. Montenero Bisaccia	Textile and clothing	2,272	2,246	-26	-1.1%
ITF52 MATERA		**10,842**	**9,927**	**-915**	**-8.4%**
11. Pisticci	Chemistry and plastics	10,842	9,927	-915	-8.4%
ITE21 PERUGIA		**54,608**	**61,823**	**7,215**	**13.2%**
12. Marsciano	Housing goods	7,484	6,821	-663	-8.9%
13. Todi	Machinery, electrical and optical eq	5,764	6,403	639	11.1%
14. Città di Castello	Paper, publishing and printing	17,936	20,524	2,588	14.4%
15. Umbertide	Textile and clothing	5,465	6,941	1,476	27.0%
16. Assisi	Textile and clothing	17,959	21,134	3,175	17.7%
ITG21 SASSARI		**1,819**	**2,085**	**266**	**14.6%**
17. Calangianus	Housing goods	1,819	2,085	266	14.6%
ITE19 SIENA		**39,292**	**42,766**	**3,474**	**8.8%**
18. Sinalunga	Housing goods	10,925	11,784	859	7.9%
19. Poggibonsi	Housing goods	24,324	26,793	2,469	10.2%
20. Piancastagnaio	Leather and footwear	4,043	4,189	146	3.6%
ITC44 SONDRIO		**16,022**	**18,871**	**2,849**	**17.8%**
21. Morbegno	Food and beverages	16,022	18,871	2,849	17.8%
ITE41 VITERBO		**13,148**	**15,092**	**1,944**	**14.8%**
22. Civita Castellana	Housing goods	13,148	15,092	1,944	14.8%
ITC20 VALLE D'AOSTA	**No industrial districts**	-	-	-	-
ITF62 CROTONE	**No industrial districts**	-	-	-	-
ITG16 ENNA	**No industrial districts**	-	-	-	-
ITF41 FOGGIA	**No industrial districts**	-	-	-	-
ITE1A GROSSETO	**No industrial districts**	-	-	-	-
ITF21 ISERNIA	**No industrial districts**	-	-	-	-

Rural area/ Industrial district	Dominant industry	Employment 1991	Employment 2001	Growth of employment 1991-2001	Growth rate of employment 1991-2001
ITF11 L'AQUILA	No industrial districts	-	-	-	-
ITG22 NUORO	No industrial districts	-	-	-	-
ITG23 ORISTANO	No industrial districts	-	-	-	-
ITF51 POTENZA	No industrial districts	-	-	-	-
ITE42 RIETI	No industrial districts	-	-	-	-
TOTAL		**260,323**	**278,914**	**18,591**	**7.1%**

B) Spain

Rural area/ Industrial district	Dominant industry	Employment 1991	Employment 2001	Growth of employment 1991-2001	Growth rate of employment 1991-2001
ES241 HUESCA		**6,860**	**8,183**	**1,323**	**19.3%**
1. Monzón	Chemistry and plastics	6,860	8,183	1,323	19.3%
ES242 TERUEL		**8,697**	**10,137**	**1,440**	**16.6%**
2. Alcañiz	Products for the house	8,697	10,137	1,440	16.6%
ES416 SEGOVIA		**5,892**	**6,691**	**799**	**13.6%**
3. Cuéllar	Products for the house	5,892	6,691	799	13.6%
ES417 SORIA		**5,936**	**6,258**	**322**	**5.4%**
4. Ólvega	Food and beverages	2,876	3,143	267	9.3%
5. Almazán	Products for the house	3,060	3,115	55	1.8%
ES421 ALBACETE		**34,605**	**45,645**	**11,040**	**31.9%**
6. Almansa	Leather and footwear	7,718	10,311	2,593	33.6%
7. Madrigueras	Machinery, electrical and optical eq.	2,067	2,617	550	26.6%
8. La Roda	Products for the house	4,803	6,122	1,319	27.5%
9. Caudete	Products for the house	2,387	3,397	1,010	42.3%
10. Fuente-Álamo	Products for the house	2,013	2,446	433	21.5%
11. Hellín	Textile and textile products	6,625	9,660	3,035	45.8%
12. Tobarra	Textile and textile products	2,684	3,394	710	26.5%
13. Alcaraz	Textile and textile products	2,824	3,022	198	7.0%
14. Tarazona Mancha	Textile and textile products	1,977	2,558	581	29.4%
15. Villamalea	Textile and textile products	1,507	2,118	611	40.5%
ES422 CIUDAD REAL		**45,689**	**56,119**	**10,430**	**22.8%**
16. Valdepeñas	Food and beverages	8,429	10,142	1,713	20.3%
17. Manzanares	Machinery, electrical and optical eq.	7,029	8,687	1,658	23.6%
18. Herencia	Machinery, electrical and optical eq.	2,156	2,446	290	13.5%
19. Bolaños Calatrava	Products for the house	2,921	4,174	1,253	42.9%
20. Almagro	Products for the house	2,956	3,585	629	21.3%
21. Sta. Cruz Mudela	Products for the house	2,165	2,710	545	25.2%
22. Tomelloso	Textile and textile products	10,769	13,881	3,112	28.9%
23. La Solana	Textile and textile products	4,144	5,350	1,206	29.1%
24. Villanueva Infantes	Textile and textile products	3,435	3,377	-58	-1.7%
25. Albaladejo	Textile and textile products	1,685	1,767	82	4.9%
ES423 CUENCA		**9,352**	**10,431**	**1,079**	**11.5%**
26. Tarancón	Food and beverages	7,891	8,789	898	11.4%
27. Valverde de Júcar	Products for the house	1,461	1,642	181	12.4%
ES425 TOLEDO		**86,947**	**122,209**	**35,262**	**40.6%**
28. Torrijos	Food and beverages	9,210	11,189	1,979	21.5%
29. Fuensalida	Leather and footwear	7,296	10,156	2,860	39.2%
30. Dosbarrios	Paper, publishing and printing	2,026	2,689	663	32.7%
31. Seseña	Products for the house	14,206	30,409	16,203	114.1%

32. Navahermosa	Products for the house	1,240	1,588	348	28.1%
33. Gálvez	Products for the house	1,027	1,166	139	13.5%
34. Talavera Reina	Textile and textile products	31,744	39,560	7,816	24.6%
35. Sonseca	Textile and textile products	7,942	10,891	2,949	37.1%
36. Quintanar Orden	Textile and textile products	7,891	9,508	1,617	20.5%
37. Tembleque	Textile and textile products	4,365	5,053	688	15.8%
ES431 BADAJOZ		**10,679**	**12,035**	**1,356**	**12.7%**
38. Fregenal Sierra	Food and beverages	2,723	3,043	320	11.8%
39. Higuera la Real	Food and beverages	1,310	1,504	194	14.8%
40. Jerez Caballeros	Metal products	4,877	5,532	655	13.4%
41. San Vicente de Alcántara	Products for the house	1,769	1,956	187	10.6%
ES513 LÉRIDA		**21,324**	**25,710**	**4,386**	**20.6%**
42. Mollerussa	Food and beverages	10,720	12,974	2,254	21.0%
43. Solsona	Machinery, electrical and optical eq.	6,534	7,552	1,018	15.6%
44. Cervera	Transport equipment	4,070	5,184	1,114	27.4%
ES616 JAÉN		**29,699**	**35,514**	**5,815**	**19.6%**
45. Alcalá la Real	Chemistry and plastics	7,468	8,107	639	8.6%
46. Bedmar y Garcíez	Food and beverages	945	1,297	352	37.2%
47. Bailén	Products for the house	5,867	6,960	1,093	18.6%
48. Mancha Real	Products for the house	3,371	4,726	1,355	40.2%
49. Arjona	Products for the house	2,514	2,648	134	5.3%
50. Marmolejo	Products for the house	1,767	2,119	352	19.9%
51. Carolina (La)	Textile and textile products	4,318	5,332	1,014	23.5%
52. Huelma	Textile and textile products	3,449	4,325	876	25.4%
ES411 AVILA	**No industrial districts**	**-**	**-**	**-**	**-**
ES432 CACERES	**No industrial districts**	**-**	**-**	**-**	**-**
ES112 LUGO	**No industrial districts**	**-**	**-**	**-**	**-**
ES113 ORENSE	**No industrial districts**	**-**	**-**	**-**	**-**
ES414 PALENCIA	**No industrial districts**	**-**	**-**	**-**	**-**
ES419 ZAMORA	**No industrial districts**	**-**	**-**	**-**	**-**
TOTAL		**265,680**	**338,932**	**73,252**	**27.6%**

ANNEX 3. LIST OF LLMAs WITH CHARACTERISTICS OF RURAL LOCAL PRODUCTION SYSTEMS

A) Italy

(001) Bardonecchia; (009) Crescentino; (010) Varallo; (016) Ceva; (017) Cortemilia; (019) Dogliani; (022) Saluzzo; (027) Acqui Terme; (031) Ovada; (034) Cannobio; (035) Domodossola; (039) Courmayeur; (040) Saint-Vincent; (045) Bellagio; (047) Dongo; (049) San Fedele Intelvi; (050) Bormio; (051) Chiavenna; (052) Chiesa in Valmalenco; (054) Sondalo; (055) Sondrio; (056) Tirano; (061) Clusone; (063) Piazza Brembana; (064) Vilminore di Scalve; (069) Darfo Boario Terme; (070) Edolo; (071) Limone sul Garda; (076) Toscolano-Maderno; (077) Vestone; (079) Robbio; (080) Sannazzaro de' burgondi; (082) Varzi; (088) Asola; (089) Castel Goffredo; (092) Poggio Rusco; (096) Premana; (099) Badia - Abtei; (101) Bressanone - Brixen; (102) Brunico - Bruneck; (103) Campo Tures - Sand in Taufers; (104) Castelrotto - Kastelruth; (106) Malles Venosta - Mals; (108) Naturno - Naturns; (109) Nova Ponente - Deutschnofen; (110) Ortisei - St. Ulrich; (111) San Candido - Innichen; (112) San Leonardo in Passiria - St. Leonhard in Passeier; (113) Silandro - Schlanders; (114) Vipiteno - Sterzing; (115) Ala; (117) Bleggio Inferiore; (118) Borgo Valsugana; (119) Cavalese; (120) Cles; (121) Fiera di Primiero; (122) Fondo; (123) Malè; (125) Moena; (126) Peio; (127) Pinzolo; (129) Storo; (130) Tione di Trento; (135) Malcesine; (140) Asiago; (145) Agordo; (146) Auronzo di Cadore; (147) Belluno; (148) Cortina d'Ampezzo; (149) Feltre; (150) Pieve di Cadore; (162) Adria; (165) Porto Viro; (166) Ampezzo; (169) Latisana; (170) Tarvisio; (171) Tolmezzo; (175) Maniago; (184) Cairo Montenotte; (190) Brugnato; (192) Levanto; (193) Bobbio; (194) Fiorenzuola d'Arda; (196) Bedonia; (197) Borgo Val di Taro; (199) Langhirano; (201) Castelnovo ne' Monti; (204) Villa Minozzo; (206) Fanano; (209) Pavullo nel Frignano; (210) Pievepelago; (212) Zocca; (214) Gaggio Montano; (216) Argenta; (218) Comacchio; (219) Copparo; (221) Mesola; (225) Bagno di Romagna; (229) Modigliana; (230) Rocca San Casciano; (231) Santa Sofia; (234) Aulla; (237) Pontremoli; (238) Barga; (239) Castelnuovo di Garfagnana; (245) San Marcello Pistoiese; (246) Borgo San Lorenzo; (250) Firenzuola; (251) Marradi; (252) Castagneto Carducci; (259) Pomarance; (262) Volterra; (264) Bibbiena; (265) Cortona; (267) Pieve Santo Stefano; (268) Pratovecchio; (270) Chiusi; (271) Montalcino; (272) Montepulciano; (273) Piancastagnaio; (275) San Quirico d'Orcia; (278) Castel del Piano; (281) Manciano; (282) Massa Marittima; (283) Orbetello; (284) Pitigliano; (285) Santa Fiora; (287) Assisi; (288) Cascia; (289) Castiglione del Lago; (290) Città di Castello; (292) Gualdo Cattaneo; (293) Gualdo Tadino; (294) Gubbio; (295) Marsciano; (296) Norcia; (298) Spoleto; (299) Todi; (300) Umbertide; (301) Fabro; (302) Orvieto; (304) Cagli; (306) Novafeltria; (307) Pergola; (309) Piandimeleto; (310) Sant'Angelo in Vado; (311) Sassocorvaro; (312) Urbino; (314) Arcevia; (315) Fabriano; (316) Filottrano; (319) Cingoli; (323) Pieve Torina; (325) San Severino Marche; (326) Sarnano; (328) Treia; (330) Comunanza; (332) Montegiorgio; (334) Monte San Pietrangeli; (335) Offida; (337) Acquapendente; (339) Montalto di Castro; (340) Montefiascone; (341) Tarquinia; (342) Tuscania; (343) Valentano; (344) Viterbo; (345) Fara in Sabina; (346) Magliano Sabina; (347) Rieti; (351) Subiaco; (357) Atina; (362) Avezzano; (363) Castel di Sangro; (364) Celano; (365) L'Aquila; (366) Pescina; (368) Basciano; (369) Castilenti; (374) Penne; (376) Popoli; (378) Guardiagrele; (382) Montenero di Bisaccia; (383) Riccia; (384) Santa Croce di Magliano; (385) Termoli; (386) Trivento; (387) Agnone; (388) Frosolone; (389) Isernia; (392) Piedimonte Matese; (394) Teano; (395) Apice; (397) Circello; (400) Morcone; (401) San Bartolomeo in Galdo; (402) San Marco dei Cavoti; (404) Telese Terme; (413) Ariano Irpino; (415) Calitri; (417) Lacedonia; (419) Montecalvo Irpino; (421) Sant'Angelo dei Lombardi; (423) Vallata; (426) Buccino; (427) Camerota; (431) Futani; (434) Oliveto Citra; (435) Postiglione; (436) Roccadaspide; (437) Sala Consilina; (441) Teggiano; (442) Torre Orsaia; (443) Vallo della Lucania; (444) Apricena; (445) Ascoli Satriano; (446) Bovino; (447) Cagnano Varano; (448) Cerignola; (450) Lucera; (452) Monte Sant'Angelo; (453) San Giovanni Rotondo; (455) Vieste; (465) Ginosa; (472) Ostuni; (488) Brienza; (489) Corleto Perticara; (490) Genzano di Lucania; (491) Latronico; (492) Lauria; (493) Marsicovetere; (494) Melfi; (495) Moliterno; (496) Muro Lucano; (497) Potenza; (498) Rotonda; (499) Sant'Arcangelo; (500) Senise; (501) Irsina; (502) Matera; (503) Pisticci; (504) Policoro; (505) Stigliano; (506) Tricarico; (507) Amantea; (509) Bisignano; (511) Cassano allo Ionio; (516) Diamante; (517) Francavilla Marittima; (518) Longobucco; (519) Lungro; (520) Mandatoriccio; (521) Mormanno; (523) Praia a Mare; (524) Rocca Imperiale; (525) Rogliano; (527) San Giovanni in Fiore; (528) San Marco Argentano; (529) San Sosti; (531) Spezzano Albanese; (532) Botricello; (534) Chiaravalle Centrale; (535) Girifalco; (536) Nocera Terinese; (537) Sersale; (539) Soveria Mannelli; (541) Bianco; (542) Bova Marina; (546) Marina di Gioiosa Ionica; (547) Melito di Porto Salvo; (548) Oppido Mamertina; (551) Roccella Ionica; (553) Sant'Eufemia d'Aspromonte; (554) Stilo; (555) Cirò Marina; (557) Petilia Policastro; (558) Dinami; (561) Serra San Bruno; (562) Soriano Calabro; (566)

Castelvetrano; (567) Custonaci; (569) Partanna; (570) Salemi; (571) Santa Ninfa; (574) Bisacquino; (578) Corleone; (579) Gangi; (580) Lercara Friddi; (583) Petralia Sottana; (584) Polizzi Generosa; (587) Villafrati; (591) Caronia; (592) Francavilla di Sicilia; (593) Lipari; (596) Mistretta; (599) Sinagra; (601) Tortorici; (604) Casteltermini; (605) Menfi; (606) Naro; (610) Santo Stefano Quisquina; (612) Caltanissetta; (614) Mazzarino; (615) Mussomeli; (618) Enna; (619) Leonforte; (620) Nicosia; (621) Piazza Armerina; (622) Regalbuto; (623) Troina; (626) Bronte; (627) Caltagirone; (633) Randazzo; (637) Lentini; (640) Palazzolo Acreide; (643) Arzachena; (644) Bono; (645) Bonorva; (646) Buddusò; (647) Calangianus; (648) Castelsardo; (650) Olbia; (651) Ozieri; (652) Ploaghe; (653) Santa Teresa Gallura; (655) Tempio Pausania; (656) Thiesi; (657) Valledoria; (658) Bitti; (659) Bosa; (660) Isili; (661) Jerzu; (662) Lanusei; (663) Macomer; (664) Nuoro; (665) Orosei; (666) San Teodoro; (667) Siniscola; (668) Sorgono; (669) Tortolì; (671) Carbonia; (672) Guspini; (673) Iglesias; (674) Muravera; (675) Pula; (676) Sanluri; (677) Santadi; (678) Senorbì; (679) Silius; (680) Villacidro; (681) Ales; (682) Cuglieri; (683) Ghilarza; (684) Mogoro; (685) Oristano; (686) Terralba.

B) Spain

(001) Badajoz; (002) Cáceres; (005) Albacete; (011) Soria; (013) Cuenca; (014) Lucena; (039) Teruel; (041) Lorca; (043) Manacor; (044) Úbeda; (046) Don Benito; (047) Morón de la Frontera; (048) Mazarrón; (049) Níjar; (050) Antequera; (051) Águilas; (054) Calatayud; (055) Yecla; (057) Pájara; (059) Alcázar de San Juan; (060) Écija; (062) Lalín; (063) Medina del Campo; (064) Ronda; (065) Puerto del Rosario; (066) Villena; (068) Martos; (069) Almonte; (070) Estepa; (071) Valdepeñas; (072) Requena; (073) Monforte de Lemos; (074) Andújar; (075) Cabra; (076) Monzón; (077) Pozoblanco; (081) Alcañiz; (084) Osuna; (085) Tarancón; (087) Viveiro; (089) Tomelloso; (090) Baza; (091) Fraga; (092) Sarria; (093) Fuente Álamo de Murcia; (095) Almansa; (096) Vilalba; (097) Ayamonte; (098) Santanyí; (099) Cuevas del Almanzora; (100) Arahal; (102) Guadix; (104) Loja; (105) Hellín; (108) Tineo; (109) Villablino; (110) Cangas del Narcea; (112) Jijona/Xixona; (113) Alhama de Murcia; (114) Monóvar/Monòver; (116) Santa Margalida; (117) Montilla; (119) Cuéllar; (120) Ciutadella de Menorca; (122) Coria; (125) Ribadeo; (127) Guarda (A); (129) Marchena; (130) Ciudad Rodrigo; (131) Lebrija; (132) Miajadas; (133) Palma del Río; (134) Felanitx; (135) Villarrobledo; (136) Utiel; (137) Ejea de los Caballeros; (138) Jumilla; (139) Oliva (La); (141) Talayuela; (142) Quintanar de la Orden; (143) Sabiñánigo; (145) Sax; (146) Roda (La); (148) Alfaro; (149) Carolina (La); (150) Silleda; (151) Briviesca; (152) Cabezas de San Juan (Las); (153) Capdepera; (154) Alcalá la Real; (155) Piloña; (157) Pollença; (158) Tauste; (159) Melide; (161) Aguilar de Campoo; (162) Villafranca de los Barros; (163) Caravaca de la Cruz; (164) Alaior; (165) Llanes; (166) Banyeres de Mariola; (167) Onil; (168) Fuente Palmera; (169) Aracena; (170) Montoro; (171) Santo Domingo de la Calzada; (172) Santa Comba; (174) Baena; (175) Priego de Córdoba; (176) Castro de Rei; (177) Agramunt; (179) Salas; (180) Arzúa; (181) Aguilar de la Frontera; (182) San Sebastián de la Gomera; (183) Castuera; (184) Ribadesella; (185) Alcalà de Xivert; (186) Caudete; (188) Puebla de Cazalla (La); (189) Chantada; (190) Roda de Andalucía (La); (191) Carboneras; (192) Herrera; (193) Rambla (La); (194) Guitiriz; (195) Peñaranda de Bracamonte; (196) Valverde del Camino; (197) Ortigueira; (198) Fregenal de la Sierra; (199) Guareña; (200) Tossa de Mar; (201) Arenas de San Pedro; (202) Tobarra; (203) Azagra; (204) Almazán; (205) Archidona; (206) Almadén; (207) Rute; (208) Villacarrillo; (209) Alcaudete; (210) Cazorla; (211) Ólvega; (212) Mogente/Moixent; (214) Mota del Cuervo; (215) Ametlla de Mar (L´); (216) Campillos; (217) Casas-Ibáñez; (218) Bolaños de Calatrava; (219) Caspe; (220) Quintanar del Rey; (221) Socuéllamos; (222) Castro del Río; (223) Quintana de la Serena; (224) Villanueva de los Infantes; (225) Villanueva del Arzobispo; (226) Colunga; (227) Bujalance; (228) Constantina; (230) Sigüenza; (231) Albuñol; (232) Iniesta; (233) Malagón; (234) Azuaga; (235) Mondoñedo; (236) Arjona; (237) Artesa de Segre; (238) Santa Cruz de Mudela; (239) Hinojosa del Duque; (240) Montehermoso; (241) Madrigueras; (242) Adamuz; (243) San Clemente; (244) Cebolla; (245) Alhama de Granada; (246) San Vicente de Alcántara; (247) Becerreá; (248) Jódar; (249) Calasparra; (250) Alburquerque; (251) Villamalea; (252) Sierra de Yeguas; (253) Pedroñeras (Las); (254) Villafranca del Cid; (255) Cúllar; (256) Porcuna; (257) Montefrío; (258) Camariñas; (259) Luque; (260) Salines (Ses); (261) Pradejón; (262) Molina de Aragón; (263) Monesterio; (264) Pedro Muñoz; (265) Cazalla de la Sierra; (266) Sant Llorenç des Cardassar; (267) Olvera; (268) Valencia de Alcántara; (270) Ferreries; (271) Bocairent; (272) Órgiva; (273) Vilches; (274) Villanueva de Córdoba; (275) Jarandilla de la Vera; (276) Hervás; (277) Cedeira; (278) Huelma; (279) Fuente de Cantos; (280) Morella; (281) Huéscar; (282) Pedrera; (283) Castellar; (284) Vallada; (285) Pastoriza (A); (286) Casariche; (287) Fuente del Maestre; (288) Santaella; (289) Navahermosa; (290) Porzuna; (291) Láncara; (293) Beas de Segura; (294) Navalvillar de Pela; (295) Valverde; (296) Fonsagrada (A); (297) Iznájar; (298) Palas de Rei; (299) Cabeza del Buey; (300) Saucejo (El); (301) Elche de la Sierra; (302) Moral de Calatrava; (303) San Nicolás de Tolentino; (304) Santisteban del

Puerto; (305) Villatorres; (306) Rodeiro; (307) Valle Gran Rey; (308) Arjonilla; (309) Navas de San Juan; (310) Losar de la Vera; (311) Valdepeñas de Jaén; (312) Algarinejo; (313) Frontera; (314) Taboada; (315) Graus; (317) Cangas de Onís; (318) Navalmoral de la Mata; (319) Prado del Rey; (320) Jaca; (322) Cantalejo; (324) Artà; (325) Ávila; (327) Yébenes (Los); (328) San Vicente de la Barquera; (329) Ulldecona; (330) Abarán; (331) Marmolejo; (334) Jerez de los Caballeros; (335) Barbastro; (336) Manzanilla; (337) Puerto Lumbreras; (339) Solsona; (340) Calamocha; (341) Pulpí; (342) Cieza; (344) Santa Cruz de la Zarza; (345) San Esteban de Gormaz; (346) Campos; (347) Manzanares; (348) Medina de Pomar; (350) Trujillo; (352) Olivenza; (353) Albatera; (354) Pinoso; (357) Villarcayo de Merindad de Castilla la Vieja; (358) Santa Marta; (359) Hornachos; (360) Tarazona de la Mancha; (361) Lora del Río; (362) Xinzo de Limia; (363) Torroella de Montgrí; (364) Lopera; (365) Quesada; (366) Monforte del Cid; (367) Torre-Pacheco; (370) Muros; (371) Monserrat; (372) Buñol; (373) Aldeanueva de Ebro; (374) Toro; (375) Arbúcies; (376) Amposta; (377) Medina-Sidonia; (378) Cómpeta; (379) Gandesa; (380) Verín; (381) Vimianzo; (382) Cofrentes; (384) Sariñena; (385) Biar; (386) Mercadal (Es); (388) Talarrubias; (389) Solana (La); (390) Piedrabuena; (391) Fortuna; (392) Íscar; (394) Navas del Marqués (Las); (395) Motilla del Palancar; (396) Santa Amalia; (399) Vegadeo; (401) Villar del Arzobispo; (403) Gálvez; (406) Lanjarón; (408) Prats de Lluçanès; (409) Villamartín; (411) Ascó; (412) Navarrés; (413) Herrera del Duque; (416) Villaviciosa; (418) Burgo de Osma-Ciudad de Osma; (419) Andratx; (420) Menasalbas; (421) Medina de Rioseco; (422) Binéfar; (423) Orihuela; (424) Jaraíz de la Vera; (425) Pontes de García Rodríguez (As); (426) Bullas; (427) Carballedo; (428) Sorbas; (434) Estrada (A); (436) Fuente Obejuna; (437) Mazaricos; (439) Sonseca; (441) Herencia; (443) Almagro; (445) Tremp; (446) Nájera; (448) Sangüesa/Zangoza; (449) Mancha Real; (451) Pontenova (A); (452) Agost; (453) Baeza; (455) Carballiño (O); (456) Zalamea de la Serena; (457) Barcarrota; (460) Tàrrega; (461) Tíjola; (462) Rúa (A); (463) Vielha e Mijaran; (464) Tarazona; (466) Llerena; (467) Castroverde; (468) Ordes; (469) Peñafiel; (470) Borja; (471) Pina de Ebro; (472) Monterroso; (474) Tortosa; (475) Cartaya; (476) Villarta de San Juan; (478) Hornachuelos; (481) Mérida; (482) Benavente; (483) Épila; (484) Jabugo; (485) Sahagún; (487) Lourenzá; (488) Arévalo; (490) Sénia (La); (491) Valencia de Don Juan; (492) Librilla; (493) San Leonardo de Yagüe; (494) Tudela; (495) Andorra; (498) Cambil; (500) Alameda; (501) Antigua; (503) Romana (la); (505) Corella; (506) Tafalla; (507) Eivissa; (511) Saldaña; (512) Santa Coloma de Queralt; (514) Valls; (516) Ezcaray; (517) Vitigudino; (519) Baralla; (522) Santa María del Páramo; (524) Benasque; (525) Alcuéscar; (528) Segorbe; (529) Cerceda; (531) Cistierna; (532) Riudellots de la Selva; (533) Bellpuig; (534) Monreal del Campo; (535) Illueca; (536) Cee; (537) Alcarràs; (539) Fuensalida; (541) Vera; (544) Villafranca; (545) Bedmar y Garcíez; (546) Almuradiel; (547) Karrantza Harana/Valle de Carranza; (549) Nuñomoral; (550) Cervera de Pisuerga; (553) Puebla de los Infantes (La); (555) Pobla del Duc (la); (556) Milagro; (560) Bañeza (La); (561) Muro; (563) Xove; (564) Altsasu/Alsasua; (565) Cervera; (570) Astorga; (573) Periana; (574) Ribera del Fresno; (575) San Bartolomé de la Torre; (578) Barco de Ávila (El); (579) Navia; (581) Macael; (583) Noblejas; (586) Ateca; (588) Pegalajar; (589) Nava de la Asunción; (590) Albox; (591) Orcera; (592) Daroca; (593) Piornal; (594) Salvatierra o Agurain; (596) Chinchilla de Monte-Aragón; (597) Villarejo de Salvanés; (598) Valderrobres; (599) Villacañas; (600) Fuente-Álamo; (601) Llíria; (602) Torrijos; (603) Marcilla; (604) Aroche; (605) Lerma; (606) Oliana; (607) Brea de Aragón; (608) Castillo de Locubín; (609) Talavera la Real; (612) Antas; (614) Font de la Figuera (la); (618) Oropesa; (619) Paradela; (621) Mequinenza; (622) Monistrol de Montserrat; (623) Guissona; (625) Logrosán; (626) Sant Joan de Labritja; (629) Sant Mateu; (630) Cabanes; (631) Roa; (632) Cariñena; (635) Estella/Lizarra; (637) Jonquera (La); (638) Burgo (El); (640) Celanova; (641) Campos del Río; (642) Aguadulce; (643) Zuera; (644) Cañete de las Torres; (645) Burela; (647) Pola de Gordón (La); (652) Móra d´Ebre; (653) Granadilla de Abona; (654) Montblanc; (657) Peñíscola; (658) Moraleda de Zafayona; (659) Minas de Riotinto; (660) Villanueva del Fresno; (663) Provencio (El); (667) Olmedo; (668) Sacedón; (669) Alcorisa; (670) Leza; (671) Jadraque; (672) Alcolea de Tajo; (673) Quintanilla de Onésimo; (674) Castelló de Rugat; (675) Belmonte; (676) Utrillas; (677) Casatejada; (678) Alpuente; (679) Fuentepelayo; (680) Castillo de las Guardas (El); (681) Landete; (682) Potes; (683) Cenicero; (684) Cañete; (685) Alcañices; (686) Cuacos de Yuste; (687) Carbonero el Mayor; (688) Guardo; (689) Guadalupe; (690) Alp; (691) Mas de las Matas; (692) Camarzana de Tera; (693) Valverde de Júcar; (694) Alberca (La); (695) Bermillo de Sayago; (696) Navalmorales (Los); (697) Pont de Suert (El); (698) Orba; (699) Cortegana; (700) Torre de Juan Abad; (701) Garafía; (702) Berlanga; (703) Alcolea de Cinca; (704) Puebla de Sanabria; (705) Sepúlveda; (706) Cañamero; (707) Mora de Rubielos; (708) Soses; (709) Mayorga; (710) Sisante; (712) Siles; (713) Albaladejo; (714) Alhama de Aragón; (715) Valverde del Fresno; (716) Jimena de la Frontera; (717) Zaidín; (718) Fuentes de Oñoro; (720) Purullena; (721) Sallent de Gállego; (722) Osorno la Mayor; (723) Meira; (724) Vélez-Rubio; (726) Ugíjar; (727) Cabezuela del Valle; (728) Arcos de Jalón; (729) Valderas; (730) Mohedas de Granadilla; (731) Barrax; (732) Huete; (733) Alcaraz; (734) Caminomorisco; (736) Aínsa-Sobrarbe; (737) Espinosa de los Monteros; (738)

Carrión de los Condes; (739) Espiel; (740) Santa Olalla del Cala; (741) Balazote; (742) Llombai; (743) Belorado; (744) Higuera la Real; (745) Bonillo (El); (746) Ampuero; (747) Villalón de Campos; (748) Vallehermoso; (751) Mondéjar; (753) Bera/Vera de Bidasoa; (754) Vandellòs i l´Hospitalet de l´Infant; (756) Teguise; (758) Cheste; (761) Naut Aran; (763) Ripoll; (766) Seseña; (767) Piedrahíta; (768) Totanés; (771) Riaza; (772) Pobra de Trives (A); (773) Bollullos de la Mitación; (774) Oria; (775) Dosbarrios; (776) Aoiz/Agoitz; (777) Maella; (779) Gádor; (780) Cabrales; (781) Sallent; (782) Burguillos del Cerro; (783) Villameriel; (785) Betanzos; (786) Tembleque; (787) Curtis; (788) Cortes de la Frontera; (789) Puente de Génave; (790) Mollerussa; (791) Yaiza; (793) Candeleda; (794) Escalona; (797) Guijuelo; (799) Mojácar; (801) Sort; (802) Guadalcanal; (803) Peralta; (804) Val de San Vicente; (805) Aldea (L´)