



Italian Districts in the Furniture Industry During and After the International Economic Crisis

Pietro Pavone

Department of Law, Economics Management and Quantitative Methods, University of Sannio
Via delle Puglie, 82 – 82100 Benevento, Italy, E-mail: pietro.pavone@unisannio.it

Abstract

The furniture sector in Italy is one of the main drivers of the national economy. It has always been characterized by the strong dynamism of the companies that operate within it, historically organized in local productive agglomerations. In consideration of this important distinctive element, this research studies the Italian furniture sector by distinguishing companies based on district membership. The concept of industrial district has been studied by many researchers. However, quantitative research conducted with statistical methods useful for providing a new interpretation, in the light of recent evolutionary dynamics after the 2008 global crisis, is scarce. The main objective is to understand if there are significant differences in the profitability dynamics of Italian furniture districts located in different productive areas of the country.

Key words

Furniture Sector, Furniture Industry, Industrial Districts, Crisis, Profitability

Received: 20 May 2019 © The Authors 2019

Revised: 10 Jun 2019 Published by Human Resource Management Academic Research Society (www.hrmars.com)

Accepted: 25 Jun 2019 This article is published under the Creative Commons Attribution (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: <http://creativecommons.org/licenses/by/4.0/legalcode>

Published Online: 30 Jun 2019

1. Introduction

1.1. The Italian furniture sector: an overview

The Italian furniture industry represents one of the four great Made in Italy realities, together with the clothing, footwear and food sectors, and plays an important role in the Italian economy, with about 18,600 companies, a total of over 130,000 employees and almost 23 billion euros in turnover (Intesa Sanpaolo, 2018).

The 2008 crisis severely destabilized the furniture industry: overall turnover fell by 13.1%, reaching 24.2% on the domestic market. The main profitability indicators suffered a drastic reduction in 2009 (year in which the minimum values are recorded: 2.22 for the ROA; 4.24 for ROI; 1.49 for the ROS; 0.64 for ROE) to then begin a slow recovery, even if only from 2012 the average values are again increasing until they reach the pre-crisis values. In 2017 the average values of the profitability indicators are: ROA 4.96; ROI 8.02; ROS 3.65; ROE 12.73. Exports also suffered a setback in 2008 and 2009, and then grew steadily over time: according to FederlegnoArredo data, the sector exported 38% of the production in 2017.

Despite the contraction in the levels of activity suffered in the years of the crisis, Italy is still in 2019 among the main manufacturing powers in the world. However, it is faced with a strongly changed context, in which the support guaranteed so far by international demand risks being downsized, re-proposing the unresolved question of a structurally weak internal market. However, the crisis is also a precious

opportunity to reflect on the productive dynamics in general unfavorable contexts and to investigate the stability of some economic models compared to others and in different geographical areas.

From this perspective, this study aims to answer the following research questions:

- RQ1: *what is the evolution of the main profitability indices in the 2008-2017 decade in the furniture industry?*

- RQ2: *are there differences between production areas located in different geographical areas of the country?*

- RQ3: *in the case of an affirmative answer to RQ2, can these differences be considered statistically significant?*

The research hypotheses are:

- H1: *the global economic crisis has reduced the profitability of industrial districts in the furniture sector in Italy;*

- H2: *there are statistically significant differences in profitability between districts located in different Italian regions.*

1.2. Articulation in industrial districts

The Italian furniture sector is made up of an integrated economic chain that is strong in a circular system that is among the most virtuous and modern, in which companies operate as widespread systems of value, enhancing the territory and the local community, thus transcending the dimension purely economic and including territorial and social dimensions (Becattini *et al.*, 2009). In fact, the Italian furniture industry is characterized by a strong fragmentation and concentration of production units in certain territorial areas. There are seven regional areas where the majority of furniture production takes place: Veneto, Lombardia, Friuli-Venezia Giulia, Toscana, Marche, Puglia and Basilicata, to which correspond mainly seven large furniture districts. Indeed, the division by industrial districts is a distinctive feature of the entire Italian manufacturing industry and was the driving force of Italian economic development after the Second World War (Amatori *et al.*, 2013, Becattini and Coltorti, 2004, Brusco and Paba, 1997). The industrial district is a territorial area with a high concentration of small and medium-sized industrial companies with high productive specialization, generally characterized by an intense interdependence of their productive cycles and strongly integrated with the local socio-economic environment that hosts them (Ricciardi, 2013). There are 141 districts on the national territory, with one and a half million manufacturing workers and a significant weight in terms of GDP. Of these, 50 are specialized in the fashion sectors, while 40 are specialized in the mechanical industry, 24 in wood-furniture and design and 15 in the agro-industrial sector (Di Caprera and Di Nardo, 2018). According to some authors (Taranzano, 2011), despite the negative general economic context, the districts have shown an "untamed vitality", showing signs of resistance and recovery after the difficult years after the 2008 crisis. In particular, the effects of the crisis would have fallen mainly on the district micro-enterprises, whose turnover between 2008 and 2010 fell by 13% against 11.4% of the overall average and whose ROI was reduced by as much as 2.1% against 1.4% of the district average (Ricciardi, 2011). Nevertheless, in general, in recent years, wood-furniture districts have shown some suffering compared to other specialized sectors (for example food, fashion), mainly due to the difficulty of an internal market in defense of which the barriers to entry is not high. Therefore, the furniture system, within the wider Italian district world, is emerging as one of the most fragmented and "conservative" and, therefore, potentially more vulnerable. Furthermore, as Belussi (2006) argues, the historical articulation in districts is a phenomenon that cannot be identified in its embryonic state, but only once it has developed a certain critical mass.

The following paragraph 2 offers a theoretical framework according to the national and international doctrine that has investigated the district phenomenon. After the description of the methodological approach (section 3), the articulation of furniture production in Italy is described in section (section 4), offering a brief historical and descriptive overview of each district and then analyzing, from the point of view statistics, the values of some financial statement indicators and the differences between the different groups identified. Finally, paragraph 5 contains some conclusive considerations.

2. Literature Review

In doctrine, the conceptualization of Italian industrial district model dates back to the seventies when above all Becattini (1975, 1978) took up this concept, whose scientific paternity is recognized in literature to Alfred Marshall (1919). In subsequent years, other authors both in Italy and abroad contributed to the development of studies about industrial districts (Fuà, 1980; Fuà and Zacchia, 1983; Piore and Sabel, 1984; Tani, 1987; Brusco, 1989; Dei Ottati, 1995; Lazerson, 1995). In the United States, even Porter (1998; 2000), while not explicitly referring to industrial districts, has nonetheless highlighted the importance of companies and institutions specialized in a field and connected at a territorial level. However, today we can say with certainty that the specialization preached by Porter and at the base of the so-called «Marshallian industrial districts», representing the norm instead the grouping of heterogeneous but strongly integrated agglomerations.

The district, a place of fusion between companies and communities, was defined by Becattini (1990) “as a socio-territorial entity which is characterized by the active presence of both a community of people and a population of firms in one naturally and historically bounded area. In the district, unlike in other environments, such as manufacturing towns, community and firms tend to merge”, and it is precisely this social and territorial dimension and therefore the awareness of all the actors that they operate in a “communitarian market” (Dei Ottati, 1995) that in fact distinguishes the industrial districts from other organizational models of companies (Arikan and Schilling, 2011; Markusen 1996) where, instead, the “sharing of a collective identity” is missing (Porac *et al.*, 1989; Camuffo and Grandinetti, 2011).

Especially in the last twenty years, with the advent of global markets and the change in competitive dynamics, as well as following the violent international economic crisis of 2007/2008, the Italian industrial districts have undergone great changes and have often been forced to rethink their organizational and competitive strategies (Solinas, 2006; Foresti *et al.*, 2014), moving away from their traditional characteristics (Rabellotti *et al.*, 2009; Bellandi and De Propriis, 2015). For example, according to some authors (Conti and Modiano, 2012), the most dynamic components of Italian manufacturing are represented by those district companies that today have become medium-sized companies (Lipparini, 1995). In this regard the relationship of these “mature” companies with the environment where they were born and developed is debated. Some authors (Coltorti, 2006; De Marchi and Grandinetti, 2014) reveal that many of these companies then decide to completely abandon the district network, while according to others (Coltorti, 2009, Coltorti *et al.*, 2012) the link with the local economic and social environment continues to survive and to influence the behavior of both internal and external companies.

3. Research methodology

3.1. Data collection and sample characteristics

To answer the search questions, secondary data from the AIDA database are used. To analyze the profitability situation, the following three indicators are considered: ROE (Return on Equity), ROI (Return on Investment) and ROS (Return on Sales), taking into consideration the 2008-2017 period. Initially, the sample consisted of 3327 companies, considering the companies involved in furniture manufacturing, according to the Nace Rev. 2: 310 classification.

Subsequently, the articulation of the companies in district form as a discriminating factor is introduced. Therefore, the sample size was reduced, and seven clusters were identified, coinciding with seven industrial districts (Ids), which represent the «specific territorial units», different from the provincial or regional level, which better explain the furniture sector in Italy (Belussi, 2006):

- district of Trevigiano (IdT);
- district of Manzano (IdMz);
- district of the Southern Veneto Plain (IdSVP);
- district of Brianza (IdB);
- district of Forlì-Cesena and Pesaro-Urbino (IdFCPU);
- district of Quarrata and Poggibonsi-Sinalunga (IdQPS);
- district of Murgia (IdM).

The final sample includes 1790 companies, of which 488 in the district of Trevigiano, 159 in the district of Manzano, 181 in the district of the Southern Veneto Plain, 364 in the district of Brianza, 293 in

the district of Forlì-Cesena and Pesaro-Urbino, 151 of the district of Quarrata and Poggibonsi-Sinalunga and, finally, 154 in the district of the Murgia (Figure 1).

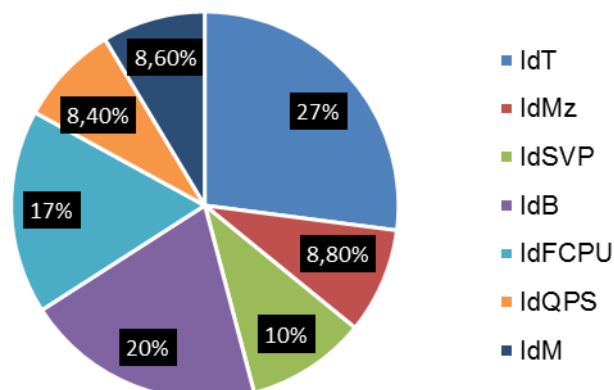


Figure 1. Sample characteristics

3.2. Method

First of all, the trend of the data in the 2008/2017 period is analyzed for each index and each group. Then, by the analysis of variance (ANOVA), the differences of means between groups and the response variable means at the different factor levels were considered. The null hypothesis states that all population means (factor level means) are equal while the alternative hypothesis states that at least one is different. In this case, the independent variables is being part of a particular district while the dependent variables were the ratios. It was decided to choose ANOVA one-way type, because two variables are analysed separately.

4. Results and discussions

4.1. Presentation of the clusters and descriptive statistics

4.1.1 District of Trevigiano

This district covers a large area, between Veneto and Friuli-Venezia Giulia, and is made up of the union of two production systems: Quartier Piave and Livenza which, over the years, have progressively extended to join. Some municipalities with highly specialized furniture from the province of Belluno and 11 municipalities in the province of Pordenone are also included. The companies of the district are specialized in the production of modern furniture and preside over every phase of the supply chain, from the raw material to the finished products. The first tangible signs of the district date back to the 1950s, with the explosion of consumption in the post-war period. Therefore, faced with the growth in the demand for furniture, on the one hand there was the transformation of small artisan workshops into furniture factories and, on the other, the appearance of new companies. The district was officially born in the 1970s and interest in foreign markets immediately emerged; still today the export affects more than a third of the production carried out by the district.

The average values of ROE, ROI and ROS are down until 2009, recovering from 2010 to 2013 and rising from 2014 to the end of the decade (partially confirming the H1 hypothesis). The maximum values, in fact, are recorded in recent years: ROE: 10 in 2017, ROI: 7.05 in 2016 and ROS: 3.23 in 2017. However, the distribution of the values of the ratios considered in the decade is very irregular (very high variance, deviation and range of values), which means that the district is composed of companies with highly heterogeneous profiles.

4.1.2. District of Manzano

The so-called «Chair District», in Friuli-Venezia Giulia, consists of a vast production area (about 220 sq km) that extends to 11 Friulian municipalities. The original nucleus of the district, known as the «Triangle of the Chair», included the municipalities of San Giovanni Natisone, Corno di Rosazzo and Manzano; over

time, the local furniture production has expanded to include more than 10 locations in the province of Udine. The district specializes in the production of chairs and tables, with a strong division of labor between small and medium-sized companies. The affirmation of the district took place in the 1960s, when the post-war reconstruction led to an increase in consumption with an exponential growth in domestic demand that partly neutralized the general crisis that companies had suffered since the 1950s. Starting from this decade, the district began to stand out for important investments aimed at enhancing production through design.

The statistical elaborations carried out have found very similar average and median ROE values, therefore the tendential opinions formulated are extremely significant. ROE, while following a strongly growing trajectory over the decade, highlights two setbacks: first the collapse in 2009 assuming even negative values (- 2.36) and then again in 2014 when after the average value of 8.22 of previous year, the value of 3.58 is recorded. Therefore, the research hypothesis (H1) formulated in the introductory paragraph is confirmed. The value of 2017 is 11.65, much higher than the value of 2.45 at the beginning of the decade. ROI and ROS recorded only one reduction in values in 2009 (the ROI from 7.15 goes to 3.9 and the ROS from 2.38 to 0.58); already in 2010 begins the recovery that continues constant until the end of the decade. The maximum values are registered at the end of the decade (ROI in 2016: 7.47 and ROS in 2017: 4.74).

4.1.3. District of the Southern Veneto Plain

The «Classic Furniture District» of the Southern Veneto Plain develops in the southern part of the Veneto Region. Territorially it insists on the provinces of Verona, Padova and Rovigo and involves 43 municipalities (23 of these are part of Verona, 14 of Padova, 6 in Rovigo). The main production activity is the furniture construction, followed by polishing, chair construction and upholstery, restoration and assembly of components. Most companies carry out work, in many cases exclusively, on classic furniture (from this derives the particular name of the district, which is easily recognizable internationally even in relations with foreign customers).

In the decade, the profitability ratios show very fluctuating values, a sign of frequent internal reorganization currents in the district, especially after the fall in the average values in 2008 and 2009 due to the international economic crisis (H1). A more regular and constantly growing trend of values is recorded only from 2014. The maximum values are in 2017 for ROE and ROS (11.78 and 4.84) and in 2016 for ROI (8.09). The strong imbalances in the decade considered have led to recovering the lost values and reaching the levels of 2008.

4.1.4. District of Brianza

It covers the Lombard provinces of Como (16 municipalities, whose main center is Cantù) and Monza and Brianza (20 municipalities, whose main centers are Meda and Lissone). He specializes in the production of wooden furniture, upholstered furniture, metal furniture and furnishing accessories. Moreover, it has a centuries-old history and a very wide production, which includes, in addition to finished products, such as bedroom furniture, living room, office, kitchens, even components and woodworking machines. The district rapidly grew in the post-war period, but in the 1970s a phase of downsizing and adaptation of the product to the needs of the individual customer began (first “tailor-made” products and subsequently “on design”, still current trends given also the geographical proximity to the refined and elegant market of Milan).

The statistical analysis of the profitability indicators showed that, after several falls and rises, ROI and ROS closed the decade, reaching the pre-crisis values (ROI: 8.17 in 2008 and 8.17 in 2017; ROS 4.14 in 2008 and 4.37 in 2017). Instead, ROE is lower in 2017 compared to 2008 (11.89 compared to 13.2 at the beginning of the decade). The minimum value of the ROE, giving feedback to the first research hypothesis (H1), is recorded immediately, in 2009, when the value of 4 is recorded (-9.2 compared to the previous year).

4.1.5. District of Forlì-Cesena and Pesaro-Urbino

This is the third Italian district system, after that of Brianza and the district of Trevigiano, with companies less inclined to exports. Most of the companies in the Forlì production system are in Forlì and in some adjacent municipalities and specialize in the manufacture of upholstered furniture and furnishing

accessories. The district of Pesaro-Urbino is specialized in the production of furniture especially for bedrooms and living rooms, and in the production of kitchens. Its origins date back to the development of numerous companies in the period after Second World War, whose size grew in the 60s and 70s. The 1980s and 1990s saw in particular the affirmation of a group of large companies in the kitchen sector.

ROE, after low average values in the first phase of the decade, touches the average value of 15 in 2016 and 2017. The lowest peak occurs in 2011 (1.29) which closes the decreasing parenthesis of values, which began immediately after 2008 (in accordance with the research hypothesis H1). The ROI values are more regular (on average 7.5) with the minimum value in 2010 (4.81) and the maximum value in 2017 (9.91). Variance and range of variation are quite high. The overall growth trajectory of the ROS stands at almost constant values, oscillating around the average value of 2.3. The minimum points are in 2009 (1.47) and in 2012 (1.76).

4.1.6. District of Quarrata and Poggibonsi-Sinalunga

This district area, whose origins date back to the 1960s, includes the production systems of Quarrata and Poggibonsi-Sinalunga. The extended production chain includes both the upstream sectors, such as the wood industry for furniture and building, semi-finished products and furniture components, and the downstream sectors of marketing and sales of the furniture. The production structure consists mainly of small and medium-sized companies, specialized and integrated along the supply chain with a strong vocation in the production of upholstered furniture. In the 1970s, in order to overcome the first real crisis in the sector, Quarrata's furniture entrepreneurs began to pursue higher product qualification objectives, also using the contribution of designers and architects. The area of Poggibonsi and Sinalunga includes 18 small towns between the cities of Pisa and Siena, with companies dedicated to the production of modular wooden furniture for bathrooms and kitchens. The production chain also includes companies producing camper vans in the cities of Florence and Siena, where in the last thirty years the national production of campers has gradually been concentrated.

The statistical elaborations have highlighted a collapse of ROE and ROI in 2009: the ROE goes from 7.62 in 2008 to 1.43 in 2009; the ROI from 8.3 to 3.6. The ROS also decreased: 1.92 in 2009 compared to 2.54 in the previous year. In this case also there is a second point (coinciding with the year 2014) in which the district suffered in terms of profitability and the ratios decreased, only to return to growth in 2015. Therefore, the first hypothesis of research formulated is strongly confirmed (H1). The maximum values are recorded at the end of the decade (in the years 2016 and 2017). A strong calculated variance (on average 92.35 for ROI values; 748.69 for ROE and 48.36 for ROS values) refers to a district characterized by non-homogeneous companies, but presumably composed of many follower companies and a few large "leader" companies, whose function is to guide even the weakest elements of the district relationship.

4.1.7. District of Murgia

It has an interregional nature, because it develops between the provinces of Matera, in Basilicata, and Bari in Puglia. The productive specialization consists in the production of upholstered furniture, such as chairs, sofas and armchairs. The prerequisites for the development of the district date back to the 1950s thanks to the presence in the area of skills and knowledge in the sectors of carpentry and leather processing, which were channeled into industrial production activities, with the consolidation of the subcontracting. In the 1980s and 1990s, the district developed with many of its companies entering international markets.

The profitability ratios show decreasing trajectories up to 2012 and increasing trends from 2012 to 2017, although not constantly. Confirming the first hypothesis (H1), the lowest values are found in the two years immediately following the 2008 crisis (ROS 1.9 in 2009; ROI 4.36 in 2010 and ROE 4.73 in 2010). After a strong recovery in 2011, the values decreased again in 2012, to then go up again, recording the maximum values at the end of the decade of ROI (17.65 in 2017, equal to double compared to the value of 8.63 in 2008) and ROI (8.23 in 2017 compared to 5.62 in 2008). The district is characterized above all by the high values assumed by the ROE in the second period of the decade (after 2012): 13 of average ROE value.

In summary, the following dispersion graphs (Figure 1) show the average synthesis values taken over the decade by the three ratios, comparing them with the weight in percentage terms of each district in the

sample covered by this study. Higher average values (especially of ROE and ROI) are observed in the districts with a lower percentage share of the total of the sample. Furthermore, the district with the largest number of companies (the district of Trevigiano with 488 companies equal to 27% of the sample) is the one with the lowest average profitability values: ROE of 3.99; ROI of 5.09 and ROS of 1.89.



Source: author's elaboration

Figure 1. Dispersion of ROE, ROI and ROS in the period 2008-2017

In the comparison between districts undoubtedly stand out the high values of the district of Brianza, historically known in Italy and in the world for the quality of its products; in fact, in this area the highest average ROS values (3.38) are recorded. Also, the average ROI (6.96) is very high and almost like the higher one recorded in the Forli-Cesena and Pesaro-Urbino districts (7.45) and the ROE (8.86 in the decade) is second only to that of the district of Murgia (9.17). Instead, the area that appears to be the one that has suffered the most from the effects of the global economic crisis is the district of Trevigiano, where the lowest average values of ROE (3.99), ROI (5.09) and ROS are recorded (1.89).

4.2. Analysis of Variance

About ROE, Table 1 shows the results of the analysis, assuming the subdivision into districts as independent variable; the results indicate that there is no a statistically significant difference between groups, in fact $F < F_{crit}$. The null hypothesis must not be reject and the alternative ones must not be accept.

Table 1. ROE - Analysis of variance with subdivision into districts as independent variable

Source of variation	SQ	gdl	MQ	F	Sig.	F crit
Between groups	181,1795	6	30,19658	1,67147	,14277	2,24640
Within groups	1138,1505	63	18,06588			
Total	1319,3300	69				

Significant level at 0,05

About ROI, Table 2 shows the results of the analysis, assuming the subdivision into districts as independent variable; the results indicate a statistically significant difference between groups, in fact $F > F_{crit}$.

Table 2. ROI - Analysis of variance with subdivision into districts as independent variable

<i>Source of variation</i>	<i>SQ</i>	<i>gdl</i>	<i>MQ</i>	<i>F</i>	<i>Sig.</i>	<i>F crit</i>
Between groups	45,47041	6	7,57840	3,50318	0,0047121	2,246408
Within groups	136,2873	63	2,16329			
Total	181,7577	69				

Significant level at 0,05

Also with reference to ROS, the results reported in Table 3 indicate a statistically significant difference between the groups ($F > F_{crit}$), considering the articulation in districts as the independent variable. This means that the adherence of a furniture company in one district rather than another has an impact on the values of the observed ratio.

Table 3. ROS - Analysis of variance with subdivision into districts as independent variable

<i>Source of variation</i>	<i>SQ</i>	<i>gdl</i>	<i>MQ</i>	<i>F</i>	<i>Sig.</i>	<i>F crit</i>
Between groups	17,51477	6	2,91912	4,40423	0,0008884	2,246408
Within groups	41,75646	63	0,66280			
Total	59,27123	69				

Significant level at 0,05

The results of statistic analysis show that the hypothesis H2 of this research, previously described, is tested with regard to ROI and ROS, while it is not confirmed with regard to ROE. So the differences in ROE, which were found in the descriptive statistical analysis section, exist but do not take on a statistically significant meaning, as is the case for ROI and ROS. In explaining the differences, it is possible to highlight the role of individual production excellences within the districts: a specific and significant specialization of companies (for example in the manufacture of kitchens rather than chairs) implies, among other things, a different interaction with technology and innovation as well as different degrees and forms of complementarity with producers also belonging to other productive sectors (glass, marble, steel, etc.), all factors that can differently affect profitability in times of crisis. Moreover, the elements of differentiation between districts linked to the lower or greater capacity to penetrate foreign markets or the widespread perception of the quality of the product, which also differs greatly between districts, are significant, especially in periods of internal demand crisis. In this sense, the high profitability data of the district companies of Brianza are not surprising, where the high quality level of the products allows companies in this area to increase sales prices and, therefore, obtain unit operating margins above the average of the prices charged by other districts in the same sector (Guelpa and Micelli, 2007).

5. Conclusions

The picture of the profitability dynamics of companies in the furniture industry appears to be quite articulated, both among the districts present on the national territory and within each of them, with a high statistical dispersion of the collected data that, right from the start, has made highlighted a trend towards divergence in the performance of the districts measured through the three classic profitability indicators (ROE, ROI, ROS). Despite a general situation of income imbalances and uncertainties following the great economic crisis of 2007-08, which have been gradually resolved only since 2012, the crisis has affected the various furniture districts in Italy with different intensities. The processes of reorganization of the industrial structure stimulated by the increased external competitive pressure have led to significant heterogeneities, found above all in terms of ROI and ROS. The empirical results have highlighted the existence of a "geographical effect" on the performance of Italian furniture companies operating in industrial districts («dispersion of performance» between districts, Ricciardi, 2013), with better profitability values in cases of strategic approaches and production combinations aimed to creating higher added value (Cucculelli and Bettinelli, 2015).

The limit of this research is represented by the composition of the sample, which considers the balance sheets of companies with a turnover of more than 800,000 euros, thus excluding an important part of district firms. However, the large size of the sample is considered a guarantee of enough reliability of the findings.

The study is useful first of all to guide the choices of public decision makers because it has highlighted that the long-term sustainability of the district model in the Italian furniture sector must depend on support policies differentiated by area of intervention. Therefore, industrial districts can be a valid point of reference for Italian industrial policy. Furthermore, by widening the research perspective, this paper can represent a starting point for future research conducted with the aim of investigating whether the profitability dynamics of a district are aligned to the evolutionary trajectories of other districts in other sectors, in addition to that of furniture.

References

1. Amatori, F., Bugamelli, M., Colli, A. (2013). Technology, firm size, and Entrepreneurship. In G. Toniolo (a cura di). *The Oxford Handbook of the Italian Economy since Unification* (pp. 455 – 484). Oxford University Press, New York.
2. Arian, A. & Schilling, M. A. (2011). Structure and governance in industrial districts: implications for competitive advantages. *Journal of Management Studies*, 44, 72–95.
3. Becattini, G. (1975). *Lo sviluppo economico della Toscana con particolare riguardo all'industrializzazione leggera*. Firenze, IRPET - Guaraldi.
4. Becattini, G. (1978). The development of light industry in Tuscany: An interpretation. *Economic notes*, 2– 3, 107–123.
5. Becattini, G. (1990). The Marshallian industrial district as a socio-economic notion. In F. Pyke, G. Becattini, W. Sengenberger (eds.), *Industrial districts and inter-firm co-operation in Italy* (pp. 37 – 51). International Institute for Labour Studies, Ginevra (CH).
6. Becattini, G. & Coltorti, F. (2004). Aree di grande impresa ed aree distrettuali nello sviluppo postbellico dell'Italia: un'esplorazione preliminare. *Rivista italiana degli economisti*, Supplemento al n. 1, 61–101.
7. Becattini, G., Bellandi, M., De Propriis, L. (2009). *A handbook of industrial districts*. Edward Elgar, Cheltenham.
8. Bellandi, M. & De Propriis, L. (2015). Three generations of industrial districts, *Investigaciones regionales*. *Journal of regional research*, 32, 75–87.
9. Belussi, F. (2006). In search of a useful theory of spatial clustering. In Asheim, B., Cook, P., and Martin, R. (Ed.). *Clusters and Regional Development*, Abingdon, Routledge.
10. Brusco, S. (1989). *Piccole imprese e distretti industriali. Una raccolta di saggi*. Rosenberg & Sellier, Torino.
11. Brusco, S. & Paba, S. (1997). Per una storia dei distretti industriali italiani dal secondo dopoguerra agli anni Novanta. In F. Barca (Ed.) *Storia del capitalismo italiano dal dopoguerra ad oggi* (pp. 265 – 333). Donzelli Editore, Roma.
12. Camuffo, A., & Grandinetti, R. (2011). Italian industrial districts as cognitive systems: are they still reproducible?. *Entrepreneurship & Regional Development*, 23(9-10), 815–852.
13. Coltorti, F. (2006). Le medie imprese italiane: una risorsa cruciale per lo sviluppo. In Fortis M., Quadrio Curzio A. (Ed.) *Industria e distretti. Un paradigma di perdurante competitività italiana*, (pp. 315 – 408). Il Mulino, Bologna.
14. Coltorti, F. (2009). Medium-sized firms, groups and industrial districts: An Italian perspective. In Becattini G., Bellandi M., De Propriis L. (Ed.) *A handbook of industrial districts* (pp. 441 – 456). Edward Elgar, Cheltenham.
15. Coltorti, F., Resciniti, R., Tunisini, A., Varaldo, R. (2012). Mid-sized manufacturing companies: the new driver of italian competitiveness. Springer, Milano.
16. Conti, G. & Modiano, P. (2012). Problemi dei paesi a sviluppo tardivo in Europa: riflessioni sul caso italiano. *L'industria*, 33(2), 221–235.

17. Cucculelli, M., Bettinelli, C. (2015). Business models, intangibles and firm performance: evidence on corporate entrepreneurship from Italian manufacturing SMEs. *Small Business Economics*, 45(2), 329–350.
18. Dei Ottati, G. (1995). Tra mercato e comunità: aspetti concettuali e ricerche empiriche sul distretto industriale. Franco Angeli, Milano.
19. De Marchi, V. & Grandinetti, R. (2014). Industrial districts and the collapse of the Marshallian model: looking at the Italian experience. *Competition and change*, 18(1).
20. Di Caprera, G. & Di Nardo, T. (2018). I cluster d'impresa: opportunità di sviluppo per la professione. Il progetto "attività d'impresa" del CNDEC, Documento di ricerca, Fondazione Nazionale dei Commercialisti, 21 maggio 2018.
21. Foresti, G., Guelpa, F., Trenti S. (2014). Le strategie adottate dalle imprese dei distretti industriali nel nuovo contesto competitivo. In F. Mazzola, M. Nusolino, V. Provenzano (Ed.) *Reti, nuovi settori e sostenibilità* (pp. 52 – 75). Franco Angeli, Milano.
22. Fuà, G. (1980). Problemi dello sviluppo tardivo in Europa. Il Mulino, Bologna.
23. Fuà G. & Zacchia, C. (1983). Industrializzazione senza fratture. Il Mulino, Bologna.
24. Guelpa, F. & Micelli, S. (2007). I distretti industriali del terzo millennio. Dalle economie di agglomerazione alle strategie d'impresa. Il Mulino, Bologna.
25. Intesa San Paolo (a cura di), *Economia e finanza dei distretti italiani*, in Rapporto annuale n.11, dicembre 2018.
26. Lazerson, M. (1995). A new phoenix?: Modern putting-out in the Modena knitwear industry. *Administrative Science Quarterly*, 40 (1), 34–59.
27. Lipparini, A. (1995). *Imprese, relazioni tra imprese e posizionamento competitivo*. Etaslibri, Milano.
28. Markusen, A. (1996). Sticky places in slippery space: a typology of industrial district, *Economic geography*, 72(3), 293–313.
29. Marshall, A. (1919). *Industry and trade*. Macmillan, London.
30. Piore, M. J., & Sabel, C. F. (1984). *The Second Industrial Divide: Possibilities for Prosperity*. Basic Books, New York.
31. Porac, J. F., Thomas, H., Baden-Fuller, C. (1989). Competitive groups as cognitive communities: The case of Scottish knitwear manufacturers. *Journal of Management Studies*, 26, 397–416.
32. Porter, M. (1998). Clusters and the New Economics of Competition. *Harvard Business Review*, 76, 77–90.
33. Porter, M. (2000). Location, competition and economic development. *Economic Development Quarterly*, 14, 23–32.
34. Rabellotti R., Carabelli A., Hirsch G. (2009). Italian industrial districts on the move: where are they going?. *European Planning Studies*, 17(1), 19–40.
35. Ricciardi, A. (2011). I distretti dell'Osservatorio: sintesi dei fenomeni più rilevanti emersi dal III rapporto. In III Rapporto Confartigianato, Osservatorio Nazionale Distretti Italiani.
36. Ricciardi, A. (2013). I distretti industriali italiani: recenti tendenze evolutive. *Sinergie*, 9, 21–58.
37. Solinas, G. (2006). Integrazione dei mercati e riaggiustamento nei distretti industriali. *Sinergie*, 24(69), 87–114.
38. Tani, P. (1987). La decomponibilità del processo produttivo. In G. Becattini (Ed.) *Mercato e forze locali: il distretto industriale* (pp. 69 – 92). Il Mulino, Bologna.
39. Taranzano, V. (2011). Dalla crisi si esce anche con le idee. In III Rapporto Confartigianato. Osservatorio Nazionale Distretti Italiani.