

AN ASSESSMENT OF COOPERATIVES IN ITALY: ECONOMIC AND OCCUPATIONAL INSIGHTS IN 2008

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ABSTRACT

Despite a growing interest in cooperatives, knowledge of the real economic, occupational, and social dimensions of cooperatives is still little and fragmentary. There is still a need of constantly updated analyses of the overall dimensions of this phenomenon to follow its evolution and quantify – with reasonable precision – its ability to manage business and create jobs.

On this basis, this study, which is part of the widest research program carried out by the European Research Institute on Cooperative and Social Enterprises (Euricse) regarding the development of an “Observatory on Cooperatives in Italy”, intends to offer a reliable analysis of Italian cooperatives in 2008 by highlighting their economic and occupational dimensions.

Keywords: *cooperatives, Italy, regional development, employment, economic performance Introduction*

INTRODUCTION

The new century has witnessed a progressive and renewed interest in cooperative enterprises. Two important acknowledgments have been the 2002 Promotion of Cooperatives Recommendation of the International Labour Organization (ILO, 2002) and the 2004 Communication on the Promotion of Cooperative Societies adopted by the European Commission. More recently, other acknowledgments have come from several economists and connoisseurs of economic policy. Both the International Monetary Fund and a few chairmen of Central Banks – Mario Draghi among them, then Governor of the Bank of Italy (Draghi, 2009) - have recognized the role and the importance of cooperative banks, both before and during the financial crisis of 2008. Renowned economist J. Stiglitz admitted that in the past too much importance had been given to the model of enterprises exclusively aimed at maximizing profits (Stiglitz, 2009). He acknowledged that this model was not successful and that other models of enterprise are necessary; cooperative and non-profit enterprises in particular. The opinion of Elinor Ostrom, Nobel Prize winner for Economics in 2009, (Ostrom, 2008) is very similar. The latest acknowledgment has been the launch of the International Year of Cooperatives 2012 (IYC) by the United Nations on 31st October 2011. In spite of all these acknowledgments, the real economic, occupational and social situation, at both the international and national level, is still scantily understood and fragmentary. It is a gap that inevitably leads to a slackening of the acknowledgment process, which – as for other economic phenomena – would come out strengthened if upheld by a more defined awareness of how cooperatives actually contribute to the economic and social welfare of many countries.

In Italy too, a country with one of the most widespread cooperative systems and in which studies and research on cooperatives are not missing or underdeveloped, a broader understanding is needed. Many researchers have indeed studied its origin and its evolution (Zamagni, 2006), its levels of efficiency and its impact on economic and social development (Fontanari and Borzaga, 2010). However, these studies are not always updated or they simply refer to specific contexts, to particular types (Istat, 2008; Spinicci, 2011) or to restricted samples of enterprises (Bentivogli and Viviano, 2012). There is a lack of analyses of the overall dimensions of this phenomenon, able to quantify with reasonable precision its ability to manage businesses and jobs.

It is possible to attribute this information gap to specific causes. In particular, official statistics usually do not deem the juridical form of organized economic activities worth considering; instead they dwell upon results and favor the activity sector. Information about the different types of enterprise (often restricted to number of enterprises and employees) is gathered and made available only – and not always - on the occasion of censuses.

In order to overcome these limitations, it is necessary to use administrative information, deriving from data that enterprises have to communicate to specific institutes, such as federations, the *Albo Nazionale delle Cooperative* (Italian National Cooperatives Register) managed by the Ministry of Economic Development, and the Companies' Register managed by the Chambers of Commerce.

The above-mentioned sources offer both pros and cons. Associations gather (exclusively for their members) more information than other

sources but data are classified for non-statistical purposes. The Cooperatives Register contains only a little information and does not allow the researcher to clearly differentiate between active and non-active cooperatives.

For the time being, the most complete, accessible, and user-friendly database is the Aida-Bureau Van Dijk database¹, which gathers data communicated by enterprises to Chambers of Commerce. The database contains (for cooperatives that have submitted their balance sheet) data about: sectors of activity; turnover, and other economic and financial data and just a little incomplete data about employees. Yet, the database gives no information about: number of members; people employed with atypical employment contracts and the type of cooperative (workers' cooperative, consumers' cooperative or producers' cooperative).

In order to offer a reliable analysis of the economic and occupational situation, it would additionally be necessary to progressively combine other official and administrative data sources. It is a complex task which requires time and has to be carried out step by step.

The First Research Report on Italian cooperatives (Euricse, 2011) is the first step in this direction. The chief purpose of the report, whose main results are highlighted in the present paper, is to produce the first quantitative reference picture, which will make it possible to better quantify the cooperative sector, to follow its evolution and to thoroughly analyze its characteristics, by also comparing the performances of cooperative enterprises with other businesses with different entrepreneurial profiles.

¹ Aida is a database developed by the company Bureau Van Dijk (<http://www.bvdinfo.com>), which gathers personal, commercial, financial, and economic data from more than 950,000 Italian companies, as well as shareholdings of the 20,000 Italian businesses with the highest turnover.

This paper has the following structure: the first part offers a brief general overview of the evolution of the Italian cooperative movement from the second half of the 1800's to the end of the 1900's; the following section explains the method used in the gathering and analysis of data. The third section presents and explains the size of the cooperative sector in Italy in 2008, its regional distribution and main economic activities. Finally, data about the employees, profits and financial structures of cooperatives will be analyzed.

1. HISTORICAL EVOLUTION OF THE COOPERATIVE MOVEMENT IN ITALY

In 1854 the *Magazzino di Previdenza* in Turin was the first Italian cooperative to be set up (Ianes, 2010), thanks to the initiative of the *Società Generale degli Operai* (General Workers' Association). The aim of this consumers' cooperative was to allow its members to buy staple commodities at lower prices than market prices.

The second half of the 19th century witnessed the development of consumers' cooperatives in towns and rural areas, as well as the setting up of the first financial cooperatives (end of the 1870s): the *Banca Popolare* (People's Bank) and the Agricultural Credit Bank (hereinafter called Rural Credit Banks and Cooperative Banks).

Towards the end of the century other forms of cooperative started developing: farmers' cooperatives, whose aim was to contend with agricultural monopolistic systems and workers' cooperatives, mainly espoused by building workers and laborers.

In 1882 cooperatives obtained juridical recognition in the Mercantile Law and in 1885 there

were 4,896 registered Italian cooperatives.

The first years of the 20th century (years between 1903 and 1914 in particular) were characterized by the growth both of the Italian economy and of the cooperative movement. In 1910, thanks to the government and the catholic movement, there was a rise in the number of cooperative organizations (7,400) and number of members (over one million). The growth of the cooperative movement was constant until the first half of 1920; there were then 15,000 registered cooperatives.

The accession to power of the Fascist regime (1919 – 1921) seriously hit – including with violent actions – the democratic cooperation of Socialist, catholic and republican inspiration and sharply interrupted the rapid development of the cooperative movement. Nevertheless, by the end of the Second World War the number of cooperatives was higher than it had been at the beginning of the 1930's. The policy of the Fascist regime did not cause the disappearance of the cooperative movement, but it led to a slower growth and a different evolution of the various sectors of cooperation and to an important development of farmers' cooperatives.

In the post-war period, the Italian government and the civil society devoted themselves to the re-launching of the cooperative movement (Sapelli, 1998), as clearly shown by Article no. 45 of the Italian Constitution.

The evolution of cooperatives over the second half of the 20th century can be examined through the results of the Census of Industry and Services, conducted every ten years by the Italian National Institute of Statistics (Istat). The census is the most significant source of data on cooperatives from the 1950's to the

1990's, although it presents different problems related to data collection. Several researchers (Zamagni, 2006) believe therefore that the number of cooperatives counted in the census is actually an underestimate of the real number of cooperatives.

The census of 1951 reported the existence of almost 11,000 cooperatives (Legacoop, 2004); most of them operated in the construction sector and were committed to the reconstruction of buildings destroyed during the War; there were more than 137,000 employees, equal to 2% of the total number of employees in Italy. Between the years 1951 and 1971 Italy witnessed its strongest period of economic growth, determined mainly by the development of the manufacturing sector. According to the census results, cooperatives contributed only to a limited extent to this development and the economic importance of cooperation remained at a standstill; in 1971 there were 10,744 cooperatives, about the same number as in 1951, but 12.1% down if compared with the number of cooperatives in 1961. Yet, the dimensions of these organizations over the two decades increased considerably; the average number of employees rose from 12.8 in 1951 to 19.3 in 1971. The growth in the number of employees in cooperatives reflected the growth of the Italian economy; about 2% of Italian working people were employed - for the two decades – in the cooperative sector. The following ten years, characterized by the oil crisis, slower growth of GDP and hyperinflation, and the years between 1981 and 2001, witnessed a remarkable increase in the number of active cooperatives (an increase of 85.2% between 1971 and 1981 and of 168.3% between 1981 and 2001) and of employees in this sector (respectively an increase of 69.9% and 165.4%). The growth was noticeably higher than the average growth of the Italian economy.

The employment rate in cooperatives kept pace with the growth; in 1991 about 4% of Italian working people were employed in the cooperative sector, and this became 5.8% in 2001.

2. METHODOLOGICAL REMARKS

While waiting for the official results of the ninth Census of Industry and Services (year 2011), it is possible to depict the situation of Italian cooperatives in 2008.

Data used for this study were extracted from the Aida database on 30th September 2010 and refer to cooperatives and cooperative consortia active at the 31st December 2008.

As already mentioned the available data are administrative; they have undergone those checks necessary to prove their quality and correctness. Data extracted from the Aida database have been cross-compared with data from other databases. If anomalies were found in economic and financial data, the balance sheet of enterprises - submitted to the Chamber of Commerce and available in the online Companies' Register database "Telemaco" - were downloaded and analyzed.

Data regarding cooperative banks, not available in the Aida database, come from different sources; in particular the website of the Bank of Italy² and Federcasse³.

According to the Aida database, an active cooperative is a cooperative registered in the Companies' Register that pursues an economic activity and – at the date of reference – is not subject to ongoing insolvency proceedings. Activity sectors are based on the prevailing activity

² <http://www.bancaditalia.it/>

³ <http://www.creditocooperativo.it/>

code of the NACE rev. 2⁴ classification declared by cooperatives to the competent Chamber of Commerce and hereinafter grouped as follows:

- Agriculture: includes economic activities of section A;
- Industry excluding construction: activities of sections B, C, D and E;
- Construction: activities of section F;
- Trade, accommodation and food service activities: activities of sections G and I;
- Services: activities of sections H to T inclusive.

Since the construction sector also comprises housing cooperatives, a cautious evaluation of the state of cooperatives in this sector is required. Unfortunately, using the NACE code it is impossible to single housing cooperatives out and analyze them separately.

When data about employees were not available (35% of total cooperatives), an estimate was carried out with the use of a statistical procedure prepared by Euricse; it provides a random allocation by cooperative compounds similar to personnel expenses, territorial distribution and cooperative type.

Available data allow the distinction between cooperatives, social cooperatives and cooperative consortia. Social cooperatives are a particular type of cooperative introduced into the Italian legal system by Law 381/1991. They provide social, welfare and educational services and carry

⁴ Statistical Classification of Economic Activities in the European Community (NACE) used by Eurostat for its economic statistical surveys. Further details are on epp.eurostat.ec.europa.eu/portal/page/portal/nace_rev2/introduction.

out various activities for the purposes of providing employment for disadvantaged people (Defourny and Nyssens, 2010).

The results of this research have both pros and cons. On the one hand, the results surely guarantee a wide coverage of the cooperative universe and present reliable economic and financial data; they allow, therefore, a first evaluation of the economic relevance of the whole sector, as well as an estimate of its economic and financial situation. On the other hand, the analyzed data were incomplete about the number of people employed and non-existent about the number of members and were not up-to-date. The choice of working with data aged almost four years and not properly taking into consideration the present crisis does not seem very reasonable and needs to be justified. 2008 is the year with the largest availability of data so far and can therefore be chosen as a key year for the study of the future evolution of the cooperative enterprise system. In this phase, however, the pros outweigh the cons. The research allows verification of whether the cooperative sector in Italy is a residual and static phenomenon, on the wane and not able to contribute towards growth and economic affluence, or if the opposite is the case, in part or totally, the actual situation. It also can start the discussion of the real size of the limits that economic theory considered and still considers typical of cooperatives.

3. COOPERATIVES IN ITALY IN 2008

By the 31st December 2008, there were 71,578 active cooperatives (7.5% of enterprises subject to the submission of annual accounts). 19.5% of them were social cooperatives⁵ and there were 432 Cooperative Banks. In addition, there

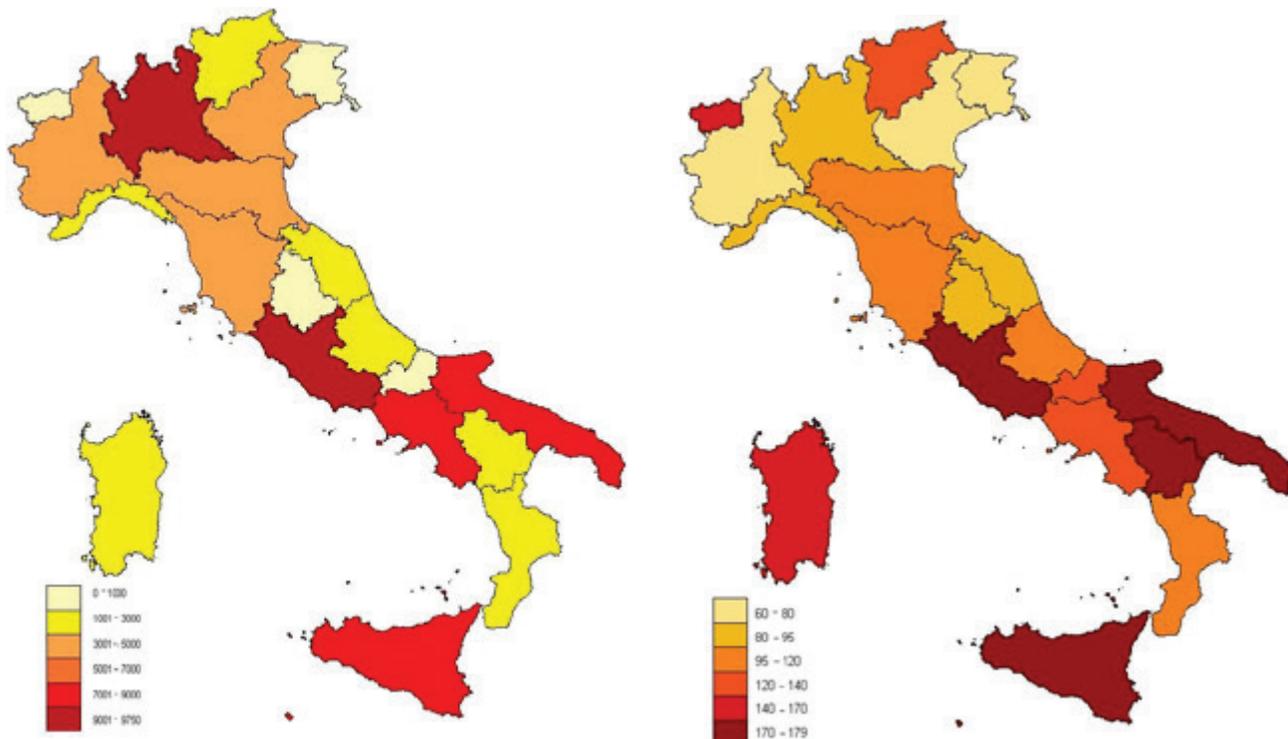
⁵ For a deeper study of social cooperatives, see Costa et al. (2012).

were 1,948 cooperative consortia.

The highest concentration of cooperatives was in the southern regions, including Sicily and Sardinia, (44.4%), followed by the northern (33.6%) and central regions (22.1%). Italian regions with the highest number of cooperatives (Figure 1) were Lazio (9,751) and Lombardy (9,087), whose capitals, Rome and Milan, are the two most densely-populated Italian provinces.

However, when the number of cooperatives was related to the number of a region's inhabitants in 2008, the profile of the cartogram changed; the incidence was higher in southern and insular regions. This incidence was, however, not confirmed when the analysis concerned the economic, financial, and occupational relevance of the cooperative sector.

Cooperatives can be found in every economic sector (Table 1): from a maximum of 33,649 cooperatives in the service sector - health and social care services (20.6%), business support service activities (20.5%) and transport (19.4%) - to a minimum of 5,137 cooperatives in the manufacturing sector, where agricultural product manufacturing cooperatives (probably linked to farmers' cooperatives) are of particular importance.

Figure 1. Cooperatives by region: absolute values (left) and values per 100,000 inhabitants (right) - 2008

Source: Euricse

Table 1. Cooperatives by sector of activity – Year 2008

Activity sector	N	%	valid %
Services	33,649	47.0	51.3
Construction	13,712	19.2	20.9
Agriculture	7,468	10.4	11.4
Trade and food service activities	5,608	7.8	8.6
Industry excluding construction	5,137	7.2	7.8
Missing	6,004	8.4	
Total	71,578	100.0	

Source: Euricse

Social cooperatives are particularly important in the service sector; there were 10,538 enterprises principally active in health and social care services and non-residential social care services.

75% of consortia had their seat in northern (46.8%) and central (28%) Italy. 57.6% of them operated in the services sector and 16.3% in the construction sector.

Over the last decade, cooperative enterprises have been particularly dynamic (Table 2). Cooperatives thrived in every Italian region and this vitality is indeed the reason for the growing interest this form of enterprise has aroused over the last decade.

Liveliness in setting up new cooperatives had certainly but only partly been determined by the new cooperative form established in 1991, the social cooperative; only a little less than 25% of the total number of cooperatives born over the last decade are social cooperatives.

50.3% of the cooperatives active in 2008 had been set up between 1998 and 2007, in spite of the overall Italian economic stagnation. More than 5,000 cooperatives were set up in 2008.

Just over 50% of Farmers' cooperatives were born after 1992. On the other hand, the most dynamic sectors were those of service activities: 72.5% of the 33,217 cooperatives operating in the service sector (excluding cooperative banks) were established after 1992, 39% between 2003 and 2008.

The number of employees⁶ was estimated to be

⁶ Collaborators with different kinds of contract and self-employed workers, whose income depends, partly or wholly, on them belonging to a cooperative enterprise as producers, were not counted among employees. They were counted among the total number of workers.

1,155,000, including 29,418 employees of cooperative banks; they corresponded to almost 5% of all Italian workers and 9% of total non-agricultural employees (Table 3). Two sectors registered the highest cooperative presence: first, agriculture, where farmers' cooperatives employed 7.4% of the total number of workers in that sector; second, the service sector, where there were 7.4% of all Italian workers and 19.3% of the total number of employees.

The contribution of cooperatives to employment reached important levels in other sectors as well: 6.5% of employees in the construction sector and 3.7% of employees in the trade and accommodation service activities.

4. ECONOMIC SIZE: TURNOVER AND TOTAL ASSETS

The overall turnover generated in 2008 by the cooperative system, without considering cooperative banks⁷, amounted to more than 108 billion Euros, equivalent to 3.5% of the Italian value of production⁸ in 2008 (Table 4). In detail, 91.8 billion were generated by cooperatives. The remaining 16.7 billion were generated by cooperative consortia.

The most productive sector was agriculture; cooperatives in this sector produced 21.1% of the total value of production (excluding 1,390 cooperatives operating in the food industry in 2008).

The data do not allow a correct estimate of the contribution to GDP: considering the labor in-

⁷ The present analysis of economic performance does not take into account cooperative banks. Their specificity does not allow a comparison between their economic data and the economic data of cooperative enterprises. For a thorough analysis of the economic results of cooperative banks, please see the complete Research Report (Euricse, 2011).

⁸ Source: Istat, *Conto economico nazionale* (National Income Accounts)

Table 2. Cooperatives by year of registration – Year 2008

Year	N	%	Valid %
Up to 1992	24,735	34.6	34.6
1993 - 1997	5,748	8.0	8.0
1998 - 2002	14,707	20.5	20.6
2003 - 2007	21,302	29.8	29.8
2008	5,023	7.0	7.0
Missing	63	0.1	
Total	71,578	100.0	

Source: Euricse

Table 3. Incidence of employees of cooperatives on the total number of employees and on the total number of workers by sector of activity – Year 2008

Sector of activity	Employees of cooperatives / total enterprise workers (%)	Employees of cooperatives / Total enterprise employees * (%)
Services	7.4	19.3
Construction	4.1	6.5
Trade, food service activities	2.2	3.7
Agriculture	7.4	-
Industry	1.5	1.9
Total	4.9	8.9

* Agricultural sector excluded

Source: Euricse data processing, Labor Force Survey (Istat 2009) and ASIA - Statistical Archive of Active Enterprises (Istat, 2010)

Table 4. Incidence of the turnover of cooperatives and cooperative consortia on total production by sector of activity – Year 2008

Sector of activity	Cooperatives' turnover (excluding consortia)/total production (%)	Cooperatives' turnover (including consortia)/total production (%)
Services	2.2	2.5
Construction	5.5	6.8
Trade, food service activities	5.6	6.6
Agriculture	21.1	24.7
Industry	1.2	1.5
Total	3.0	3.5

Source: Euricse data processing, Conto economico nazionale (National Income Accounts, Istat)

tensive nature of the majority of cooperatives, the contribution should amount to more than 3.5%.

83.1% of cooperatives generated a turnover of less than one million Euros and 61.8% generated a turnover of less than 250,000 Euros. Only 3.8% generated a turnover higher than 5 million Euros. Overall, the total assets in 2008 amounted to more than 123 billion Euros; 109.2 billion had been invested by cooperatives and 14.2 billion by cooperative consortia.

72.8% of cooperatives declared that they had invested less than 500,000 Euros and only 17.4% of cooperatives had invested more than one million Euros.

As far as cooperative consortia are concerned, the data show that one in two declared a turnover of less than 500,000 Euros and only 23% declared that their turnover was less than 50,000 Euros.

The data show that the cooperative sector mirrored the general situation of Italian enterprises. More than 50% of cooperatives were small-sized in terms of turnover, capitalization and employees. Less than 10% had a turnover and total assets higher than one million Euros, whereas a little more than 6% employed more than 50 employees.

These figures, however, have to be read in the light of a few considerations. First, an efficient cooperative does not necessary need to be large-sized; when cooperatives organize the production of a service for a constant or decreasing group of members – this happens in many producers' cooperatives – there is neither the necessity nor the chance to be big and to grow.

Second, by analyzing cooperatives by their constitution year, it is clear that critically a small size was found mainly in cooperatives in a start-up phase. Moreover, cooperatives operating in some specific sectors and with a particular form, tend to grow the value of their production over time and, to increase their level of equity and their possibility to invest in the growth of the cooperative. This demonstrates that enterprise projects were often sound and in line with the evolution of demand for offered goods and services. This tendency was particularly evident in social cooperatives, since the objective of many of them was a community interest.

5. ECONOMIC EFFICIENCY AND CAPITALIZATION

When analyzing the efficiency of resource management in cooperative enterprises, it has to be borne in mind that the goals of cooperatives cannot be reduced simply to profit maximization or economic and financial wealth, but are rather the maximization of the benefit for their members or, in case of social cooperatives, for the community (Mancino and Thomas, 2005; Thomas, 2004).

Therefore cooperatives' profitability cannot be measured with the traditional indicators used in for-profit fields; the analysis of merely the economic "*bottom line*" does not allow a correct interpretation of the real performance of these types of organizations.

In a for-profit organization, economic performances are measured by the balance sheet and profits, because shareholders recognize the maximization of profits as the organization's mission. On the contrary, this automatic relation does not exist in cooperatives and in non-profit organizations in general (Moore,

2000). Since non-profit organizations are often regarded as “double bottom line organizations” (Dart et al., 2010) able to generate economic and social value at the same time (Dees and Economy, 2001), they cannot be evaluated by using traditional economic and financial indicators (Austin et al., 2006). Moreover, appropriately adapted financial measurements can contribute to the interpretation of an analysis of the efficiency of these organizations, but are totally devoid of any sense if used for the evaluation of their effectiveness (Herman and Renz, 1999).

By considering the limitations of traditional financial accounting measurement in a non-profit context, this paper develops four indices in order to analyze the economic performance of cooperatives: 1. Turnover/total operating expenses; 2. profit (or loss)/turnover; 3. Equity/Total Assets; 4. Fixed assets/total assets. These indicators have previously been used in a social cooperatives context (Costa et al., 2012) and should be more broadly applied to the cooperative sector at large.

The first two indices are used to evaluate cooperatives' economic efficiency.

In detail, Index 1 (Turnover/total operating expenses) explains the relation between operating costs and turnover of the business activity.

Index 2 (profit/turnover) reflects the amount of self-financing conducted, and it highlights the proportion of the value of production that remains after accounting for operating costs and the members' and partners' remuneration. This index is used to evaluate not the cooperative's economic performance, but its ability for self-financing. For a correct interpretation of the index it is necessary to remember that

the goal of cooperatives is not profit maximization, but the maximization of the benefit for its members or, in the case of social cooperatives, for the community. Cooperatives' economic performance can be explored by jointly analyzing the profit and members' remuneration.

Most cooperatives reasonably managed to cover operating costs with the turnover produced in 2008 (Table 5). Small-sized or starting cooperatives had the biggest problems in covering these costs. It follows that about half of the Italian cooperatives – especially small-sized or starting cooperatives – did not reach a positive net income for financial year 2008. The incidence of profit on turnover (Table 6) indicates, however, that 35.6% of cooperatives had a surplus of up to 6% of their turnover and that 13.8% had even higher surpluses. The analysis of the indicators by geographical area shows that the ability to cover costs with turnover was quite meager in southern and insular Italy; in these regions more than 50% of cooperatives recorded operating costs higher than their turnover.

Table 5. Cooperatives by ratio of turnover to operating expense - Year 2008

Turnover/ operating expense	N	%	Valid %
Up to 1	26,600	37.4	45.1
1 - 1.2	27,326	38.4	46.4
1.2 - 1.4	2,271	3.2	3.9
Higher than 1.4	2,736	3.8	4.6
Total without missing	58,933	82.8	100.0
Missing	12,213	17.2	
Total	71,146	100.0	

Source: Euricse

Table 6. Cooperatives by impact of profit on turnover – Year 2008

Profit/turnover	N	%	Valid %
Up to -0.06	11,344	15.9	21.5
-0.06 - 0	15,302	21.5	29.1
0 - 0.06	18,748	26.4	35.6
Higher than 0.06	7,263	10.2	13.8
Total without missing	52,657	74.0	100.0
Missing	18,489	26.0	
Total	71,146	100.0	

Source: Euricse

The analysis by year of establishment highlights once more that cooperatives – social cooperatives in particular – with a negative owners' equity were principally newly-established or up to six year old cooperatives.

As to consortia, it appears that 62.6% of them managed to cover their operating expense with their turnover; for 56.6% of them, the indicator reached a value of 1 to 1.2.

Moving to the analysis of the level of capitalization, index 3 (Equity/Total Assets) measures the cooperatives' level of capitalization and indirectly shows the cooperatives' debt ratios.

Index 4 (Fixed assets/Total assets) analyses the rigidity of assets by showing how much of them will return to liquidity in the long term (after more than 12 months).

The interpretation of the index values is closely related to the sector of activity in which the cooperative operates and to its organizational structure. Labor-intensive activities require little in terms of hard assets but high levels of staffing, whereas capital intensive businesses require investment in machinery and infrastructure, which have a dampening effect on total assets.

Looking at the data on the incidence of owners' equity on total assets, it has to be borne in mind that values (Table 7) must be related to the ratio of fixed assets to total assets (Table 8). The incidence of fixed assets on total assets shows that 35% of cooperatives invested in total fixed assets of no more than 6% of total invested capital. 56.4% of cooperatives recorded a ratio of fixed assets to total assets lower than 20%. Considering this scenario, levels of capitalization are altogether satisfactory for an appropriate and balanced assets administration.

Table 7. Cooperatives by ratio of Equity to Total Assets – Year 2008

Equity/total assets	N	%	Valid %
Up to 0	12,524	17.6	20.9
0 - 0.15	22,231	31.2	37.1
0.15 - 0.35	10,173	14.3	17.0
Higher than 0.35	14,942	21.0	25.0
Total without missing	59,870	84.2	100.0
Missing	11,276	15.8	
Total	71,146	100.0	

Source: Euricse

Table 8. Cooperatives by ratio of Fixed assets to Total Assets – Year 2008

Fixed assets/total assets	N	%	Valid %
Up to 0.06	20,964	29.5	35
0.06 - 0.2	12,814	18.0	21.4
0.2 - 0.45	11,338	15.9	18.9
Higher than 0.45	14,753	20.7	24.6
Total without missing	59,869	84.1	100.0
Missing	11,277	15.9	
Total	71,146	100.0	

Source: Euricse

Analysis by geographical area confirms the division of the country into two parts. In northern Italy the capitalization rate was higher (between 20% and 25%) compared with southern, central and insular Italy, where the ratio between owners' equity and total assets was lower than 0 for almost 25% of cooperatives.

As far as consortia are concerned, the ratio between owners' equity and total assets highlights that 46.7% of them managed to finance total assets with a maximum of 15% of owners' equity.

As previously mentioned, these figures should be analyzed taking into consideration that profit maximization and – in some cases - value of production are not the institutional purposes of these enterprises. The achievement of a positive net income is, instead, a constraint to be respected in order to guarantee one's existence in the longer-term. This means that a low profitability is not necessarily negative, whereas an excessively high profitability could hint at an ineffective administration, i.e. not oriented towards consistently pursuing the institutional purpose any more.

The crossing of the incidence of net income on value of production with the value of capitalization rates⁹ allows an analysis of potential arousing situations and their relevance. A crossing analysis also allows consideration of the ability of cooperatives to set aside profits, as well as their actual needs for stable funding. Owners' equity is usually moderate; however, cooperatives frequently manage to finance funding

⁹ The crossing has been carried out considering separate activity sectors and not overall analysed cooperatives, in order to bring about comparisons between enterprises presenting similar characteristics. For the joint analysis of effective resource management indicators, profitability indicators and capitalization indicators in other activity sectors, see the complete Report (Euricse, 2011).

with owners' equity and to not totally or partially depend on external financing. They tend, over time, to increase owners' equity through the allocation of earnings to reserves. Looking at cooperatives in the service sector, and with elevated owners' equity (6,217) - equal to more than 35% of invested capital, it emerges that cooperatives in the start-up phase were characterized by high profitability and cooperatives that got over the start-up phase generally showed good profit margins¹⁰.

Moving to cooperatives with considerable owners' equity (9,762) - equal to 15% to 35% of invested capital, it was shown that the average dimension of enterprises in the start-up phase was generally lower and their net capital actually consisted of merely the owners' equity.

Finally analyzing cooperatives with negative equity (5,071), it was clear that negative equity is closely connected to a negative economic trend. The majority of these cooperatives were in the start-up phase: their dimensions in terms of absolute value were likely to be contained and their equity was subject to variances in the rate of return. Their net capital consisted of the owners' equity and was therefore exposed to losses, which could also be minor in terms of absolute value.

CONCLUSIONS

The main result of the study is the data warehouse where data from different administrative sources converge. It is a starting point for i) the study of the economic and, albeit still limited, social impact of cooperatives in the Italian economic system, ii) sample surveys on some specific aspects of the cooperative sector.

¹⁰ The theoretically optimal range of profitability for an elevated owners' equity and for the specificity of the cooperative enterprise is within 6% of the value of production.

The analysis presented in the previous paragraphs is an example of the potentials of the data warehouse and it contributes to knowledge about the cooperative sector highlighting first of all the growing economic and occupational relevance that cooperative enterprises are assuming in the Italian economy. The 2008 value of production of the sector was equal to 3,5% of the overall value produced in Italy, the occupational level in cooperatives was equal to 5% of overall Italian employment and 9% of Italian non-agricultural subordinate employment.

The results of the analysis also allow i) demonstration that cooperative enterprises do not only thrive in crisis periods and ii) identification of the specificity of this form of enterprise. It also has the ability to set up in conditions, which are unfavorable to economic growth. This probably happens because its main objective is to create jobs or services, not to make profits. The analyses have shown that the cooperative form especially thrives in the service sector (people and business support service activities). The key factor in this sector is labor, and business performance mostly depends on the effective management of this factor. Effective management assumes, therefore, a key role in the development of entrepreneurship in those economies characterized by a wide expansion of the service industry.

Data confirm non-homogeneities of the cooperative phenomenon in Italy if it is analyzed by regions of settlement. The main differences are between northern-central regions and southern regions. Cooperatives in southern Italy are numerous in terms of absolute value and compared to the number of inhabitants in the region, but they are the weakest from all points of view: limited dimensions, negative performance, and low levels of capitalization. This sit-

uation is in line with expectations, but needs to be studied in depth in order to identify policies that are able to respond to the need of cooperatives typical of these regions.

Like the majority of enterprises, cooperatives also usually generate from a business idea and are initially small-sized, but they are not necessarily destined to remain so. On the contrary, they tend to improve their performance and to grow in size over time. Together with the size, levels of capitalization increase, especially through an earmarking of retained earnings. Empirical evidence refutes the common idea that cooperatives are destined, by definition, to remain small-sized and undercapitalized. The resources that cooperatives have are generally enough for an appropriate and balanced business administration.

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