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**Cooperating against inequality? War and commons in Renaissance Lombardy**

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# **Cooperating against inequality?**

## **War and commons in Renaissance Lombardy**

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### *Abstract*

The aim of this paper is to understand how traditional societies faced a period of general crises and more specifically, which behaviours were adopted to limit the increase of local socio-economic inequality. Thus, this paper focuses on a boundary area (the Geradadda) disputed by Milan and Venice that was constantly crossed and occupied by armies during the long period of the Italian Wars (1494-1559). Analysing the management of local finances, and specifically the local commons, it is possible to show the different ways in which these societies organized themselves and, generally, how economic growth occurred in the early modern period.

### *Keywords*

Commons, Inequality, Cooperation, Italian Wars, Sixteenth Century, Rural societies

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· Abbreviations in the text. ASMi: Archivio di Stato di Milano; N: Fondo Notarile; SD: Fondo Senato Deroche; f.: folder; ASVAi, LI 1569: Archivio Comunale di Vailate, *Liber Incantorum Communitatis Vaylate Incipit 1569*; BMRChi: Biblioteca Fondazione Morcelli Repossi, Archivio Storico del Comune di Chiari.

paper, and to Agnese Vitali and Cristina Munno for their help in drawing the social network analysis diagram. Many thanks go to the various members of the Dondena Centre and the Department of Policy Analysis and Public Management of Bocconi University, with whom I had the occasion to discuss my research. The research leading to these results has received funding from the European Research Council under the European Union's Seventh Framework Programme (FP7/2007-2013)/ERC Grant agreement No. 283802, *EINITE-Economic Inequality across Italy and Europe, 1300-1800*.

### *1. Introduction*

Over the last several years international scholars have trained their attention on the development over time of institutions for collective action and the management of commons in ancient societies<sup>1</sup>. In this fairly new field of research, however, Renaissance Italy has been neglected, in spite of the fact that the Peninsula was the cradle of many of these institutions. Beginning with the seminal article of Garret Hardin (1968), scholars' attention has been focused specifically on the 'tragedy of commons' and on the possible social dilemmas that could be generated at the local level between individual and general interests over the use of commons. It is with this approach that some scholars study the effects that inequality may have on cooperation, such as on the ability of group members to act jointly (Baland, Bardhan, Bowles 2006). In some cases scholars have suggested that inequality promotes cooperation (Olson 1965), in others that individualistic behaviours prevail but that the institutions for collective action could limit the overexploitation of local resources (Ostrom 1990). Less attention is dedicated to the other side of the same coin, such as to the propensity to promote cooperative behaviours (Hanlon 2007, 39-68) to prevent the increase of inequality, which is the specific objective of this research. In this sense, in my opinion, the danger could be an increase in economic as well as social inequality, which for traditional society could simply be correlated with a change in the status quo. In fact, for closed societies such as those of the Old Regime, the first objective was the 'reproduction' of the original social networks (Appadurai 1996, 178-199) at the base of a local community; even the simple arrival of foreign actors in the local context could be perceived as an increase in inequality or as

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<sup>1</sup> De Moor 2008; for a European overview on the management of commons see De Moor, Shaw-Taylor, and Warde 2002; for Italy see Alfani and Rao 2011.

conducive to a future situation of high inequality, because they altered the local social peace (Di Tullio 2014)<sup>2</sup>.

Linked to the above-mentioned field of research, the goal of this paper is to understand how local societies faced a period of general crisis, investigating these socioeconomic dynamics during the long period of the Italian Wars (1494-1559) and focusing on a boundary area—the Geradadda—disputed by Milan and Venice. In the early decades of the sixteenth century, this area was constantly crossed and occupied by armies. Moreover, this region in particular lends itself well to this kind of study because of its heterogeneous nature, with approximately twenty communities, some of which were populous and others made up of just 100 or so households, situated astride the line of *risorgive* (natural springs<sup>3</sup>) and with different types of soils (more fertile in the south and less productive in the north and close to the rivers). This area was also characterized by the fact that some communities were still very strong because of jurisdictional powers and demographic and socio-economic factors. This was a sort of self-governing province over which, over the course of time, no central institution had been able to gain complete control. It was highly desirable to foreign investors, though, considering the nature of the territory and its agriculture, the important commercial routes running through it, the widespread presence of small holdings and medium-sized farms, and of extensive as well as lucrative communal property. Strong communities also had strong commons. This paper will focus on the management of such commons, such as the capacity of the institutions and of the social network to adopt policies for the use, exploitation, rationalisation, and defence of local resources, providing both for everyday needs and emergency practices brought about by the crises.

The traditional historiography about the consequences of war—or of other periods of crisis—in general and specifically for the Po Valley, suggests that local societies were gradually depleted in favour of a few rich people, who concentrated in their hands the best lands and stimulated a new ‘capitalistic’ way of farming in Lombardy. This research, essentially based on unpublished primary sources (the notarial deeds), shows how local societies reacted in the face of war and relative socio-economic changes. These societies organised a method to promote a cooperative system in the defence of local resources, developing innovative credit systems and encouraging a process of redistribution. This paper shows the different ways in

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<sup>2</sup> For more in general on this subject, see Curtis 2014.

<sup>3</sup> In the Po Valley this line separates the dry plains, comprised of permeable soils, from the lower plains, characterized by impermeable soils and an abundant supply of water from springs.

which economic growth could occur in early modern Italy and Europe. Specifically, here we can reconsider the idea—seemingly widespread today among economists and economic historians—that, anywhere and anytime, societies are characterized by the action of the *homo oeconomicus*, who operates on the grounds of ‘rational choices’ for his personal benefit at the expense of others<sup>4</sup>. As already demonstrated, the defence and the reproduction of the status quo was the primary objective of the largest part of these societies, particularly of the elites (Polanyi 1944; Di Tullio 2014).

## 2. *The management of the Italian Wars between the centre and the periphery*

War is a traditional historiographic subject that in recent decades has seen a change in perspective. From being exclusively interested in military exploits, historians began developing an interest in military theory and in the political-institutional implications of episodes of war. More recently, the focus has shifted to the socio-economic consequences of war and its real effects on life, although almost exclusively from the point of view of the state or central government<sup>5</sup>. In short, the political dimension of war and the description of military exploits has been limited, and progressively a more holistic approach is employed, one that considers various aspects of war<sup>6</sup>.

The early sixteenth century is a time when in the passage from the medieval to the modern period, the prolonged clashes, political instability, and state-building process wrought a change in the relationship between the centre and the peripheries—among rural communities, towns, and sovereigns—which required local societies to make a concerted effort to defend their territories from military-related burdens (Thompson 1992; 1995; Chittolini, Molho, and Schiera 1994; Bickle 1998).

The Italian Wars of the sixteenth century cover quite a long period (1494-1559) and affected the state of Milan in different ways in the various stages of its evolution. To catalogue known

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<sup>4</sup> In this sense, this paper is more in line with the idea of a ‘complex rationality’ of the *Homo sociologicus* proposed by Boudon 1988; 2003.

<sup>5</sup> On the costs of the war from a state perspective, see, for example, for Italy, Mallet, Hale 1984. In general, see Parker 1988; Downing 1992; Rogers 1995.

facts, at least three different levels of involvement can be considered. The first, between 1494 and 1499 and with military exploits mostly outside its boundaries, mainly involved the state's scraping together resources to enable Ludovico il Moro to 'buy' from the Holy Roman Emperor the recognition of the title of duke and later to make military preparations in light of the Franco-Venetian invasion. The second phase of warfare and of extreme political instability covered the decades between 1499 and 1529 and was the worst for Lombardy—the scene of pitched battles, with the prolonged billeting of armies and a continual exchange of rulers between the French, the Sforzas, and the Emperor. The passage and billeting of armies was practically uninterrupted, and epidemics and famine made matters worse, the latter recurring when the countryside was abandoned by the peasants. The last phase, covering the period from 1529 to 1559, with the end of the domination of the Sforzas and the final absorption of the state into the Habsburg domains, was essentially dedicated to post-war reconstruction on the one hand, and on the other to financing the now distant war operations that, however, also in light of new methods of warfare, had important effects on state budgets and consequently on the territory.

For a state of the sixteenth century, waging war required having sufficient resources to increase the number of active military personnel, to guarantee adequate logistics for their billets and maintenance, and to supply them with arms and the necessary infrastructure for offence and defence. In all this, the local communities played a key role. First of all, as taxable units they were jointly responsible to the state, guaranteeing the necessary funds to the fiscal chamber in both normal and exceptional circumstances. Second, at the local level they were responsible for the maintenance and management of existing military structures (walls, forts, gates, guards, roads), albeit with the financial support of central government structures, for the upkeep of permanent military forces and the management of the billeting of troops sent to fight in the war. The communities were, *de facto*, the basic cell of the complex military system of the state, those responsible for its daily administration, in war and in peace. For these reasons the management skills of the communities were anything but secondary in determining the outcome of a war or in guaranteeing the offensive or defensive capacity of a state. Therefore, our attention is directed especially at the communes and municipal institutions, as they were the main actors who established links with the war system, which

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<sup>6</sup> For the Italian Wars see Boillet and Piejus 2002; Guillaume and Contamine 2003; De Benedictis 2004; Alfani 2013; Di Tullio 2014. For a more general overview, see Antonelli and Donati 2003; Donati and Kroener 2007; Alfani and Rizzo 2013.

then had repercussions for the entire community. Also for this reason, the management of local finances is central in this research. The need to billet troops and to contribute to the ever-more pressing tax demands of the state called for a great effort from local societies to balance tax collection and expenditures, as well as a remarkable capacity for taking action.

### 3. *Governing commons and communal finances*

In the investigation of commons and communal properties, historiography has focused mainly on the study of land, particularly due to the social role it played. Scholars started from the assumption that pastures and forests, which were particularly subject to civic uses, were fundamental in local economies and necessary to the persistence of small peasant property<sup>7</sup>. Moreover, approaches closer to environmental history trained their attention on commons as a way to understand the use of natural resources and, more generally, the relationship between humans and nature<sup>8</sup>. Even in the case of Geradadda, the persistence of communal lands played a key role in maintaining the economic and social *status quo* at the local level, but not so much in the sense traditionally considered (supporting the finances of peasants, who took advantage of the common rights to ensure their survival). This was mainly because the communal properties—here usually rented to privates—were an important asset for municipal budgets and therefore they contributed to building their economic and political force. Their revenues guaranteed to municipalities the necessary liquidity to meet ordinary and extraordinary expenses, limiting the use of credit and the consequent risk of loss of capital. From this perspective, all communal properties were fundamental to the support of municipal budgets, and indeed land tended to prove the least necessary. The predominant location of municipal lands on the borders of their jurisdictions, which in the case of Geradadda often meant the borders of the state, made them vulnerable to misuse, causing endless appeals increased by the overlapping of jurisdictions that made them more difficult to rent—a phenomenon that was understandably more acute in times of war. The intention here is not to support the idea that communal lands were futile—on the contrary, they also had an important social value—but just to try and re-evaluate their importance for the composition of the local budgets, as one of many assets.

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<sup>7</sup> For the Po Valley, see Cattini 1984; Roveda, 1984; Cipolla, 1989; Chiappa Mauri 1985. For a recent overview of Italy, see Alfani and Rao 2011.

<sup>8</sup> Van Bavel and Thoen 2013; for Italy, see Armiero and Hall 2010; Alfani, Di Tullio, and Mocarrelli 2012.

The cases of many communities in the Geradadda support these statements because their wealth was based mainly on other municipal properties, which had the same economic and social value as land but that guaranteed a more stable income. Among these, water was undoubtedly a fundamental good, especially in a district traditionally characterized by the presence of extensive marshes. During this time in this area it was mainly the communities that played a key role in the exploitation of water, making use of the immense wealth of natural springs and, where necessary, collecting water by means of canals from surrounding rivers. The communities directly managed the waterworks, which were rented only when necessary and sold even more sporadically. Water had a well-established public value: apart from its socio-economic significance, water control had an original and irreplaceable value in maintaining the ecological balance. The possession of an extensive irrigation network, however, was also a prerequisite for securing prosperous communal budgets to obtain loans using the temporary transfer of water income as collateral.

This procedure was common for local mills. Mills were spread across the entire district, with only some differences between communities. The most relevant possessions were those of Treviglio and Caravaggio. The latter possessed six mills and one sawmill. Four were placed at the doors of the town wall (Folchero, Vicinato, Prata, and Seriola) and two south of the town (Nuovo and San Valeriano), while the sawmill was located on the road linking the inhabited centre with the local Marian shrine<sup>9</sup>. Very similar was the situation of Treviglio, which had four mills for grinding corn. Three were placed at the doors of the town wall (Zeduro, Nuova, and Della Torre), while the last was placed in the country (Soltarica)<sup>10</sup>. The community of Vailate also owned three mills, two on the outskirts of the village (Sartiolo and di Sopra) and one on the community farm called Fiumicella. This last one had two wheels, while the others had three and all were intended for grinding corn<sup>11</sup>. There were also considerable properties in the community of Rivolta, which, still at the beginning of the seventeenth century, had four mills, a sawmill, and an oil press<sup>12</sup>. The possession of the mills was not just a prerogative of the biggest communities, but also of some of the smaller, for example in Misano, Fara, and

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<sup>9</sup> ASMi N, f. 1164, 2 January 1450, Nicolò Baruffi; f. 9392, 23 December 1528, Gabriele Baruffi; f. 7084, 22 April 1528, Angelo Cerri.

<sup>10</sup> ASMi, N, f. 5469, 19 November 1506, Orfeo Daiberti; f. 7795, 06 April 1526, Giovanni Maria Cremaschi.

<sup>11</sup> ASMi, N, f. 4165, 2 January 1496; f. 4167, 12 January 1506; Stefano Aiolfi; f. 10310, 10 October 1538, Vincenzo Bosoni; ASVAi, LI 1569.

<sup>12</sup> ASMi, SD, f. 73.

Calvenzano<sup>13</sup>. Furthermore, there were mills and sawmills on private property, such as in Pandino, Agnadello, Brignano, and Pagazzano<sup>14</sup>.

In addition to the above-mentioned sources of income, many communities enjoyed other revenues resulting from the sale of goods or rights. One case was that of fishing rights (*pescagioni*), particularly widespread in communities that owned canals or were close to a river. The community of Caravaggio, for example, received as annual rent for this right some 70 lire (about 0.6 kg of silver)<sup>15</sup>.

Some communities also had houses and shops, mostly located on the town hall square (when there was one). This was the case of Treviglio, which owned at least seven shops adjacent to the Town Hall. Two were located in the municipal tower and the others in adjacent buildings that looked out onto the street and were next to the community's arcades and bakery. The shops were rented to various village merchants and craftsmen, but we know neither the date nor the value of the rents<sup>16</sup>. The real estate owned by Vailate was on the new square and consisted of two houses and many shops<sup>17</sup>. Nearby there was another house of the community, which also owned the moat around the local fortalice<sup>18</sup>, built at the beginning of the sixteenth century. Over time, the fortalice began to lose its original function, in parallel with the castle of Treviglio and what would have soon happened with the fortalice of Rivolta and the fortress of Caravaggio (another community that owned a number of shops on the square of the town hall)<sup>19</sup>.

There were also a series of municipal rents related to some 'public' services, such as the tavern, the butchery, the notary for the local judges (*podestà*), and the municipal delivery service<sup>20</sup>. It can be argued that these institutions did not yield anything for the communities and in some cases, more than providing revenues, butcheries and taverns were essentially costs to the communities that owned them, because the communities had to provide incentives to compensate individuals for managing them<sup>21</sup>.

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<sup>13</sup> ASMi, N, f. 4165, 6 March 1497 Stefano Aiolfi; f. 9394, 20 December 1529, Gabriele Baruffi; f. 7795, 03 November 1525, Giovanni Maria Cremaschi; f. 11597, 22 September 1542, Giovanni Giacomo De Prata.

<sup>14</sup> ASMi, N, f. 6231, 25 October 1542, 11 July 1544, Galeazzo Riboldi di Besana; f. 10295, 14 March 1535; f. 10296, 9 November 1545; f. 10297, 3 September 1547, Andrea Aratori.

<sup>15</sup> ASMi, N, f. 10310, 14 February 1539, Vincenzo Bosoni.

<sup>16</sup> ASMi, N, f. 2197, 29 August 1498, Giovanni Antonio Daiberti; f. 7796, 16 May 1527, Giovanni Maria Cremaschi.

<sup>17</sup> ASMi, N, f. 4165, 23 September 1495, 2 April 1498, Stefano Aiolfi.

<sup>18</sup> ASMi, N, f. 4168, 17 January 1513, 5 February 1513; f. 4171, 11 September 1525, Stefano Aiolfi.

<sup>19</sup> ASMi, N, f. 11600, 17 November 1553, Giovanni Giacomo De Prata.

<sup>20</sup> ASMi, N, f. 3668, 7 November 1504, Evangelista Baruffi; f. 4167, 12 April 1507, Stefano Aiolfi.

<sup>21</sup> ASMi, N, f. 4166, 19 March 1501, Stefano Aiolfi.

Finally, even if briefly, it is necessary to mention that the possession of real estate and the mentioned rights were accompanied by other important sources of income for taxes devolved to municipalities by the fiscal chamber. It is probably incorrect to define these taxes as ‘common goods’, but they were assets fundamental to strengthening local budgets and for obtaining loans. This phenomenon of devolution of taxes involved in particular the local duties or taxes on consumption and production (*macina* and *imbottato*)<sup>22</sup>, and those related to trade (duty of merchandise, *traverso* and *dovana*)<sup>23</sup> and the exploitation of natural resources (duties on navigation, hunting, and fishing). These prerogatives were often decreased or cancelled by the new enfeoffments, but sometimes they grew by exploiting the well-known process of alienation of state revenues (Vigo 1979; Leverotti 1983; Chittolini 1996; De Luca 2007; Di Tullio, Fois 2014).

Considering these various situations, I have observed some general trends and concluded that, in communities with different sources of income, land did not have a large impact on the total budget, despite their being rented and cultivated with profitable crops. The tax income, canals, and mills, in addition to being an important source of income for communities, were useful for obtaining loans without collateral. The creditor was, in fact, guaranteed with the temporary transfer of that income until the satisfaction of the mortgage, but without resorting to risky disguised loan systems (Di Tullio 2014, spec. 73-95).

#### 4. Communal assets and wars

As discussed above, during the Italian Wars the communities of the Geradadda were subjected to considerable financial strain, in particular due to the continued presence of soldiers and extraordinary taxation for the years from 1499 to 1529 (Di Tullio 2014, 111-116). The need for extraordinary income to balance municipal finances was fluctuating and, in times of increased need, the wealth and the different quality of the communal properties contributed to avoiding financial collapse. I reconstruct the need for extraordinary income, comparing the case of the Geradadda with one community on the other side of the war front, Chiari, which was part of the Bresciano and the Venetian Republic, about 10 km from the

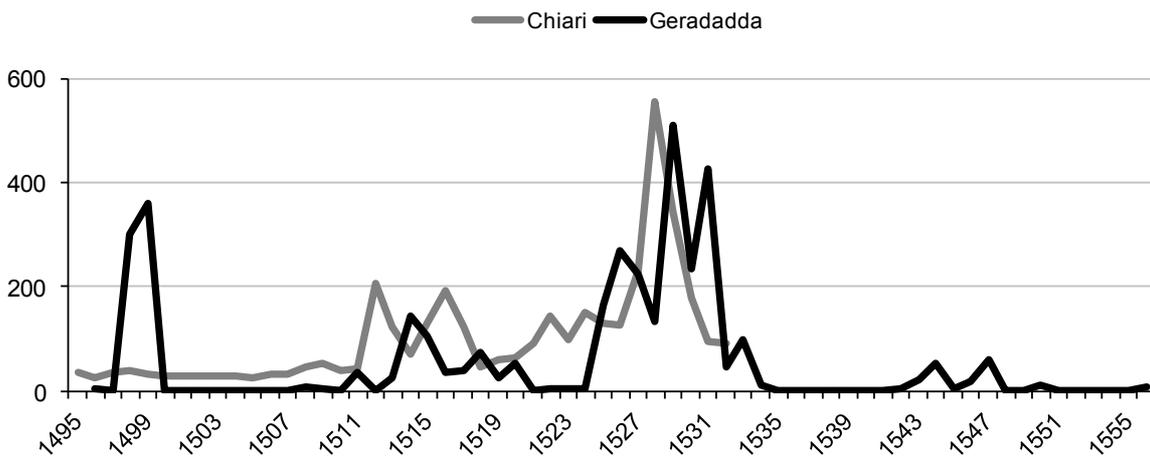
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<sup>22</sup> The *macina* was a duty imposed on grinding of grains, while the *imbottato* was a tax imposed on annual agrarian production.

<sup>23</sup> The *traverso* and *dovana* were tariffs imposed on the export or on the crossing of goods onto the territory of the State.

border of the state of Milan. It is very interesting to see that, after the battle of Agnadello (1509) and the restart of the waged war across this border, the financial needs of the communities of both sides increased dramatically until the 1530s, when the Italian Wars moved to other battlefields.

**Figure 1. Need for extraordinary income on the two fronts of the Italian Wars (index based on the average for the whole period)<sup>24</sup>**



Source: For the Geradadda elaboration, Statistical Appendices in Di Tullio 2010 and 2014; for the Chiari elaboration, BMRChi, *Estimo e Quadre*, register 020 (first page of the *Estimo* of 1494).

As noted, the temporary transfer of income from irrigation canals, mills, and duties made it possible to limit the need for credit, providing land or other property as collateral. From this perspective, communities' control of certain local lay confraternities, which were used as financial partners to limit the use of the money by wealthy citizens or to the advantage of a few individuals among the local notables, was essential. This last matter is a relevant topic that cannot be fully explored here. However, the wealth of these confraternities was fundamental for facing the demands of wars and for promoting a process of cooperation. All members of the communities, together with the confraternities, came together and provided the necessary money, with the objective of limiting the need for foreign capital and to avoid any change in the social and economic status quo. However, in spite of this fundamental financial help, the communities were forced to sell parts of their assets, although they had the

opportunity to preserve the best goods, and the majority of assets were acquired from the aforementioned confraternities. If absolutely necessary, the communities sold land first and other goods only sporadically (Tables 1 and 2).

**Table 1. Purchasers of municipal assets in Geradadda (1495-1555)<sup>25</sup>**

Purchasers	Total			Per capita	
	Lire	Kg. Silver	%	Lire	Kg. Silver
Locals	37320	351,5	46,8%	467	4,4
Citizens	11347	106,9	14,2%	1261	11,9
Confraternities	31088	292,8	39,0%	7772	73,2
Total	79755	751,2	100,0%		

Source: Elaboration from the Statistical Appendixes in Di Tullio 2010 and 2014.

**Table 2. Quality of municipal assets sold in Geradadda (1495-1555)**

Quality	Lire	kg. Silver	%
Real estate	921	8,7	1,2%
Waterworks	256	2,4	0,3%
Mills	3012	28,4	3,8%
Lands	75566	711,8	94,7%
Total	79755	751,2	100,0%

Source: Elaboration from the Statistical Appendixes in Di Tullio 2010 and 2014.

This process of selling municipal assets, however, did not result in a weakening of the communities because the goods remained collective, becoming primarily patrimony of the confraternities or being redistributed among all members of the community. This process becomes particularly clear when we consider the case of Caravaggio. This was one of the most important communities in the Geradadda, with approximately 6.000 inhabitants at the end of the fifteenth century, flourishing agriculture, and well-developed manufacturing and commercial sectors. Thanks to a laborious process of data collection (starting with notarial

<sup>24</sup> The series of Chiari is based on the total amount of taxes (the so-called *taglia*) imposed on this community from 1494 to 1532. The series of Geradadda is elaborated considering the extraordinary income necessary for these communities, reconstructed with the notarial records.

<sup>25</sup> I reconstructed the quantity of grams of silver per Milanese lira from Gneccchi 1884 and the Global Price and Income History Group database (<http://gpih.ucdavis.edu>). For the period 1500-1550 this value was stable at 9,419 grams of silver for each Milanese lira.

deals), I reconstructed the composition of the municipal council to figure out the kin groups' capacity to nominate councillors and consuls (a kind of major) for the period 1495-1555<sup>26</sup>. For the same period, I identified which kin groups purchased communal properties, and I link all of them with the distribution of wealth in Caravaggio at the end of fifteenth century. In fact, an *estimo* (a tax-land register) for the year 1476 is available, and from it we can reconstruct the concentration of wealth in terms of households or kin groups and correlate it with political power and the purchase of communal properties<sup>27</sup>.

Before analysing these correlations, it is important to recognize that from 1495 to 1555 in Caravaggio communal properties were sold for a value of about 57.355 lire (about 540 kg of silver). These were purchased, for the most part, by the local lay confraternity of St. Mary (53,3%)—as previously mentioned, managed by the municipal council—in another relevant part by the locals (27,5%), and only in small part by the citizens, particularly *cives* of Milan (19,2%). Considering these data, what emerges is the ability of this community to limit foreign capital and to maintain as 'common' a considerable share of communal assets. The new assets of the St. Mary confraternity, in fact, were important for the local society as a whole, not only because this institution provided loans to the commune (and to a certain degree, guaranteed its power) but because the confraternity managed most of the local 'welfare' system (i.e., a hospital, the distributions of bread to paupers, and so on).

This process of redistribution of wealth between all community members emerges, too, when we consider the local purchasers of municipal assets (the 27.5% mentioned above). As we can see in Table 3, Caravaggio was a community in which the correlation between wealth and political power was very strong, as was common in many other parts of Italy and Europe. The kin groups listed in the table represent about the 10% of the total—and 45% of the households in 1476—and they held approximately 60% of the wealth. These kin groups were able to nominate 60% of the councillors and consuls in the subsequent sixty years, and the correlation

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<sup>26</sup> I am aware that considering all members of a kin group as allied is an approximation (for more on this problem, see Padgett and Ansell 1993, p. 1267). It is possible that not all members of the kin had good relations, and it was also true that there were others who formed formal and informal alliances (variegated horizontal relations—Di Tullio and Lorenzini 2014—i.e., which were created by spiritual kinships—Alfani 2009 and Alfani and Gourdon 2012). However, in our case, this is the only way to observe the macro social dynamics on the long period.

<sup>27</sup> The use of ancient fiscal sources for the reconstruction of the distribution of wealth is the objective of an ERC Starting Grant project, in which this author is involved, hosted at Bocconi University (The Dondena Centre). The EINITE project objective is to explore the long-term trends in economic inequality in the preindustrial period (1300-1800) through a systematic study of the richest Italian *estimi*. For the first findings and the methodological approach adopted, see Alfani 2014 and Ammannati, De Franco, Di Tullio 2014.

coefficient<sup>28</sup> between these variables is very high. But if we consider the correlation between the wealth or the political power of these kin groups and the purchase of communal assets, it is clear there was a process of redistribution of communal proprieties throughout the local community. The most powerful groups were neither the only nor the biggest purchasers, with the exception of two groups: the Secco, the most powerful and biggest family in Caravaggio, at the head of the municipal council's majority faction, and the De Prata, the opponents of the Secco faction. The De Prata attempted to increase their power in this period of war, providing more loans to the commune, but the opposition (and the cooperation) of the other kin groups and the role played by the St. Mary confraternity allowed those kin groups to preserve what they considered of greatest value: the ability to reproduce the social and economic status quo, to limit the preponderance of a single local kin or foreign investors, and to maintain most communal assets as common goods.

**Table 3. Correlation among wealth, political power, and purchase of communal properties in Caravaggio**

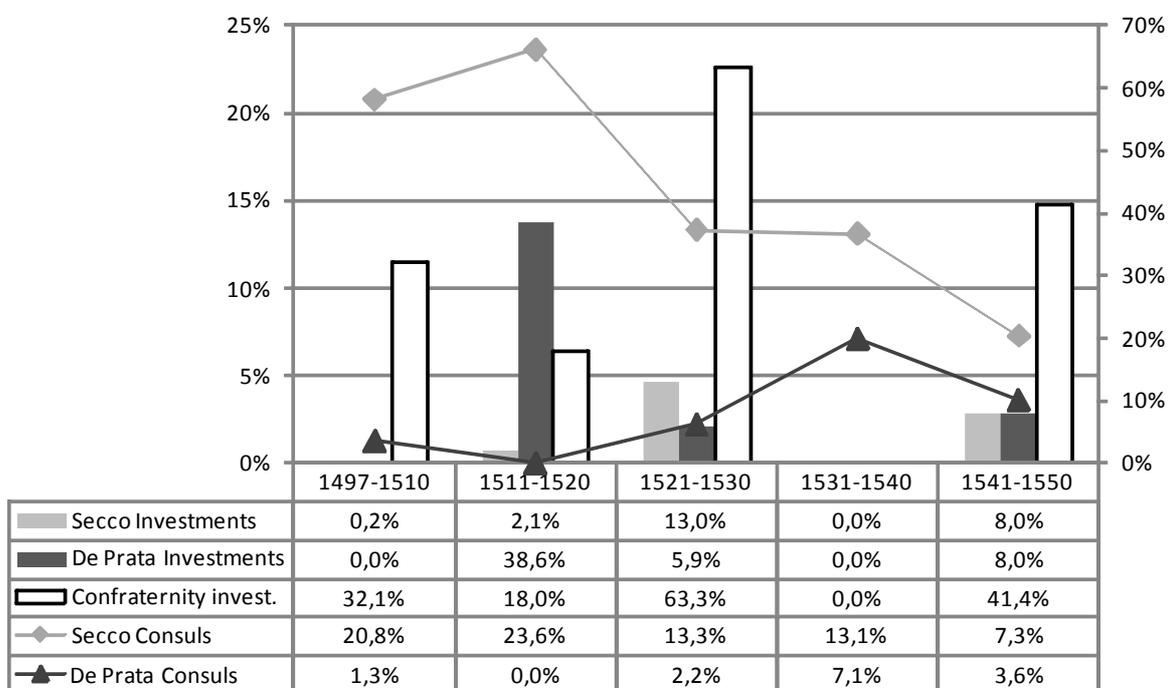
kin groups	Wealth 1476			Political power		Purchase communal properties		
	Group	Nr. Households	Per capita (lire)	Consuls	Councilors	Group	Nr. Purchasers	Per capita (lire)
Aratori	1,7%	10	838	4,8%	4,0%	0,5%	1	81
Baruffi	3,2%	17	924	4,0%	3,5%	0,8%	1	125
Cattanei	3,9%	2	9605	0,3%	0,4%	0,0%		0
De Prata	3,9%	36	530	2,9%	4,6%	34,0%	3	1790
Degani	1,5%	8	927	0,8%	1,3%	0,0%		0
Farina	2,4%	37	312	1,3%	1,7%	1,6%	1	252
Ferrari	3,6%	33	540	2,1%	2,7%	0,0%		0
Ghisoni	3,0%	17	858	4,5%	4,3%	0,0%		0
Mangoni	5,2%	76	335	7,4%	6,9%	0,2%	1	33
Marteni	1,7%	36	234	0,5%	1,8%	0,0%		0
Olini	1,4%	11	630	1,9%	1,7%	0,0%		0
Rossoni	2,9%	11	1278	1,1%	2,5%	5,1%	1	800
Scotti	1,1%	7	743	0,5%	1,0%	0,0%		0
Secco	18,5%	34	2656	16,1%	12,4%	43,7%	7	985
Tadini	3,4%	23	715	5,6%	4,2%	2,5%	3	131
Toscani	1,1%	9	581	0,5%	1,0%	0,0%		0
Varola	1,2%	17	348	1,3%	0,8%	0,0%		0
Vescovi	1,7%	16	529	0,5%	1,9%	0,0%		0
Zonchi	1,2%	15	399	2,1%	2,0%	0,0%		0
Others	37,4%	488	116	41,8%	41,3%	11,6%	6	306
	100,0%	903		100,0%	100,0%	100,0%	24	
Correlation Coefficient (wealth/other variables)		0,90		0,98	0,97	0,46		-0,01

<sup>28</sup> Person product-moment correlation coefficient.

Source: Elaboration from the Statistical Appendixes in Di Tullio 2002-03, 2010 and 2014.

If we analyse this phenomenon from a diachronic perspective, considering only the main actors of Caravaggio (the Secco and De Prata families and the Confraternity of St. Mary, Figure 1), we can see a progressive increase in the capital invested in the community by the confraternity, particularly in the worst decade for the communal budget (1521-30). The Secco family's investments show the same trend, with an increase in money invested in the community until 1530, and then a decrease according to their capacity to nominate consuls. In contrast, the De Prata played an important role in investing money only in the 1510s, and consequently they increased their political power and capacity to nominate consuls. On this occasion, for maintaining the social-political equilibrium within the community, the Secco family and of the confraternity of St. Mary decided to act together. The wealthy confraternity limited the need for both Secco and De Prata money and gave the community the possibility of re-equilibrating political power in the 1540s, also in relation to the already-mentioned new strategy of the Secco family.

**Figure 2. The political and economic power of the Secco and De Prata families and of the confraternity of St. Mary in Caravaggio (% of total consuls nominated and % the total capital invested in the community)**



Source: Elaboration from the Statistical Appendixes in Di Tullio 2002-03, 2010 and 2014.

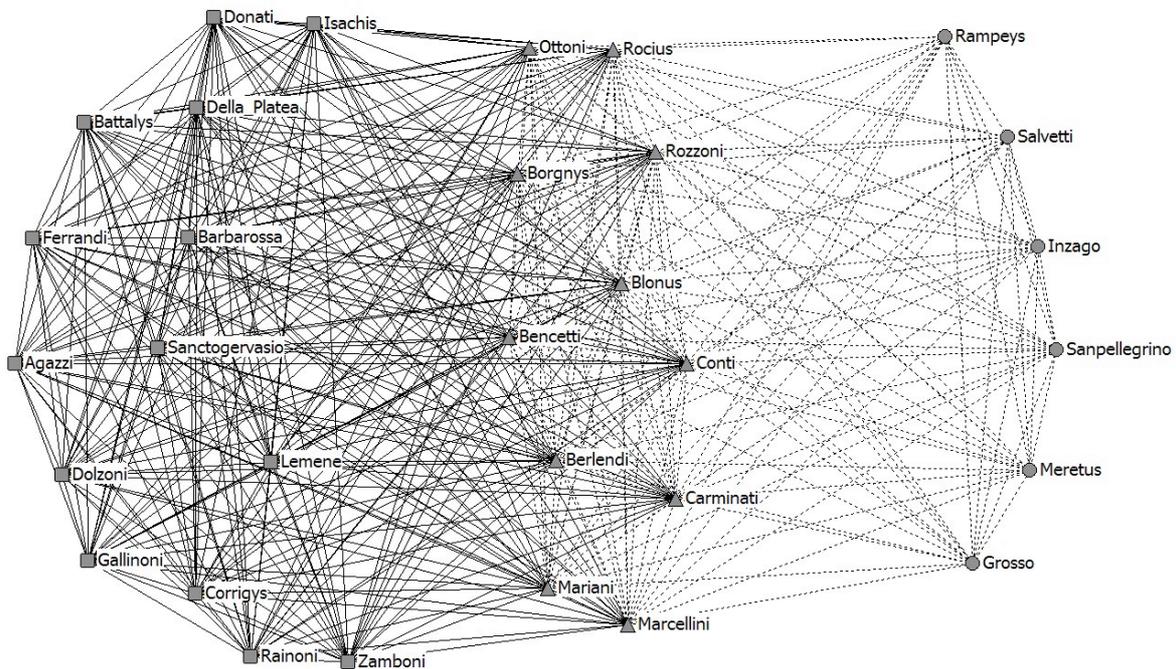
This coordinated action between the prominent local families and the confraternities in control of the commune was the result of the interrelated control of the same families over these institutions. In contrast to the scarcity of similar information in Caravaggio, we can reconstruct the different social networks controlling the commune and the local confraternity of St. Mary in Treviglio. During the sixteenth century, Treviglio was one of the most important communities in the territory, with approximately 6.000 inhabitants and an important wool manufacturing sector, as well as an advanced agricultural system. Unlike in Caravaggio and Vailate, Treviglio was dominated politically by an oligarchy of four or five families, but if we observe the social network at the base of the commune and the confraternity we find a very interrelated relationship. I reconstructed the social networks for the period just before the spread of the Italian Wars, from 1495 to 1499, considering all the kin groups that nominated a consul of the commune and/or a rector of the local St. Mary confraternity<sup>29</sup>. As mentioned above, we can see an oligarchy that dominated the communal institutions in Treviglio, with 13 kin groups that nominated at least one consul, 6 kin groups that nominated at least one rector, and 11 kin groups that had the capacity to nominate at least one consul and one rector. These kin groups represent only a small number of the inhabitants of Treviglio. We don't know the exact number of kin groups in Treviglio in that period, but we can get an idea of this if we consider two lists of the 'old *vicini*' of Treviglio (namely, the members of the original families with full political rights)<sup>30</sup>. On these two lists are inscribed approximately 80 kin groups, and we found that the inclusiveness of this social network is not very high (38%), considering in particular that these are the most ancient and probably influential families *in loco*, but at the same time not as limited as in other neighbouring localities (Di Tullio 2014).

This phenomenon is represented in the next figure, from which these interrelations clearly emerge as a social network comprised of three sets of kin groups. The set in the centre is comprised of 11 kin groups and it has a higher density of relations (for this analysis we assume that an actor—a kin group—has a relation with another—is part of the same social network—if they nominated a member in the same institution).

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<sup>29</sup> I build my database starting from the data collected from the notarial deeds of Sant'Ambrogio 2004-05, Table C.

Figure 3. Social network diagram of the kin groups that nominate consuls and/or rectors in Treviglio (1495-1499; ■ = consuls; ▲ = rectors ● = consuls and rectors)<sup>31</sup>



The relevance of the role played together by the commune and the institutions controlled emerges very clearly in the case of Vailate. This last area was a medium-size community of the Geradadda, politically dominated by two kin groups (the Grassi and the Rubei<sup>32</sup>) and characterized by the presence of different ‘social’ institutions, such as the ‘communal’ confraternity of St. Maria and the ‘private’ confraternity and hospital of St. Marta. The confraternity of St. Marta, the richest one, was governed by a council of twelve members and

<sup>30</sup> Sant’Ambrogio 2004-05, Table F. The old *vicini* were only a part, progressively a minority, of the inhabitants of Treviglio, as demonstrated from the greater and greater acute conflict between the old and the new *vicini* over the right of use of the local common lands. On this subject, see Di Tullio 2014, 42-8.

<sup>31</sup> The network diagram is made with “ucinet” by the construction of two affiliated datasets starting from two different networks for the consuls and for the rectors. The nodes are the kin groups related with a tie if they nominated at least one consul (or one rector) in the period 1495-1499. Starting from the affiliation list, we generate two matrixes (command: “affiliation convert 2-mode data to 1-mode data”) from which I draw the overlap with “netdraw”. Many thanks to Crisitina Munno for her help in drawing this diagram. I also conducted the same analysis with the program “R”, drawing a social network diagram matrix oriented (command “gplot (q1study, displaylabels=TRUE, gmode = "digraph", label.cex = 0.7, vertex.cex = 2”) obtaining the same results and a similar image. Many thanks to Agese Vitali, who taught me to use this program and gave me many helpful suggestions for drawing the diagram.

<sup>32</sup> These two kin groups were also inter-connected by marriage. By way of example, consider that Maffeo Rubei, the purchaser of the municipal mill mentioned below, was married to the noble *donna* Maria Grassi (ASMi, N, f. 11530, 23 May 1541, Luca Bosoni).

a rector, usually representative of the same kin groups that sat on the community council<sup>33</sup>. Despite this plurality, the community and the institutions of Vailate often acted collectively, for example founding the local pawnbroker's shop, probably because both the community and the institutions were dominated by the same families (Di Tullio 2014, 119-20, 136-45).

As for Caravaggio, I reconstruct the relationship among the wealth distribution, political power, and capacity to purchase communal properties in Vailate. For wealth distribution I used a general recognition of the land property compiled in 1558 as part of the fiscal reforms promoted in the state of Milan by the emperor Charles V (Di Tullio 2011). Moreover, from notarial records I reconstructed most of the set of consuls for the period from 1495 to 1547 and the purchasers of sold commons. In Vailate, during this period the communal properties sold definitively (i.e., excluding those sold and then repurchased by the municipality, a practice that hid complex lending transactions) amounted to 4.730 lire (around 44 kg of silver). These were purchased for the most part by the local families (82.7%) and only in small part by citizens (17.3%). No properties became part of the patrimonies of the local confraternities, but their money, as I show below, was used to reproduce the social-economic status quo and to limit the participation of foreigners.

The kin groups listed in the table represent 10% of the total kin groups and 35% of the households in Vailate. Also in this case, we can see a strong correlation between land property and the capacity to express consuls, and between wealth distribution and the purchase of communal properties (Table 4).

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<sup>33</sup> In 1531, for example, the council of the confraternity was comprised of the families: Oldradi, Gatti, Cohagini, Bermelli, Poschini, Molinari, Carioni, Garoli, Rotta, Loco, Cremona, and Rubei (ASMi, N, 10309, 16 May 1531, Vincenzo Bosoni).

**Table 4. Correlations among wealth, political power, and purchase of communal properties in Vailate**

kin groups	Land property 1558			Political power	Purchase communal properties		
	Group	Nr. Households	Per capita (hectares)	Consuls	Group	Nr. Purchases	Per capita (lire)
Bonsignori	2,1%	7	1,4	6,7%	4,3%	2	102
Bosoni	8,1%	7	5,4	4,9%	2,3%	1	110
Grassi	14,5%	12	5,6	28,7%	27,9%	6	220
Molinari	2,4%	1	11,3	0,6%	0,0%		0
Nazzari	4,9%	8	2,8	5,5%	0,0%		0
Oldradi	2,5%	2	5,7	3,0%	0,2%	1	10
Poschini	2,5%	4	2,9	0,0%	2,2%	1	104
Rivabene	2,0%	5	1,9	0,0%	0,0%		0
Rubei	19,7%	20	4,6	26,8%	24,4%	4	289
Others	41,3%	123	1,6	23,8%	38,6%	10	183
	100,0%	189					
Correlation Index (wealth/other variables)		0,93		0,77	0,92		-0,16

Source: Elaboration from the Statistical Appendixes in Di Tullio 2010 and 2014.

At first blush, the impression is that in Vailate there were no consequences for the consolidated political and social-economic power system, but if we examine this phenomenon from a diachronic perspective that impression proves incorrect. Particularly during the most acute phase of financial necessity for the community, a local family, the Oldradi, tried to use its money to obtain more political power and to purchase municipal properties. During the 1530s Antonio Oldradi, an animal trader, was very active in lending money to the community and more generally to different people in Vailate, purchasing many properties and houses<sup>34</sup>. I provide only an example, but a very peculiar one, of this change in the role of the Oldradi family and the parallel decrease in the financial and political power of the traditional leading kin group. In November 1532 the consuls of the community of Vailate (Giovanni Pietro Aiolfi and Pietro Paolo Grassi) decided to sell the Porta Sartirolo mill to Antonio Oldradi for 995 lire<sup>35</sup>, because they had to use the money to pay credit previously accrued on the same asset by Maffeo Rubei, who also obtained also a tax exemption. Thanks to this new contract, the community of Vailate had the ability to return the sum to Maffeo Rubei and limit his

<sup>34</sup> See, for example, ASMi, N, f. 10309, 5 February, 03 June, 17 September 1532, Vincenzo Bosoni.

power, also economically deleting his fiscal exemption<sup>36</sup>. In other words, the community had the ability to limit the power of a single kin group (the Rubei, who significantly increased their investment during the '20s), and meet their financial needs with the money of another (new) partner (the Oldradi). When this last family had gained too much power and essentially after the death of Antonio, the community, continuing the same strategy, once again changed their privileged financial partner. In fact, in the 1540s the community received almost all the money it needed from the confraternity of St. Marta, which provided the ability to pay all its debts to local families and to also re-obtain the best part of the assets that it had ceded to them—essentially, the mills. However, in some cases, the 'reproduction' of the status quo was itself a promoter of instability more than a consolidator of the local social peace. For example, an unofficial meeting took place under the arcades of the town hall among a group of households of Vailate, during which they asked the feudal lord, Aloisio Cagnola, to put an end to abuses committed every year during the election of the community councillors, especially by the Rubei and Grassi families<sup>37</sup>.

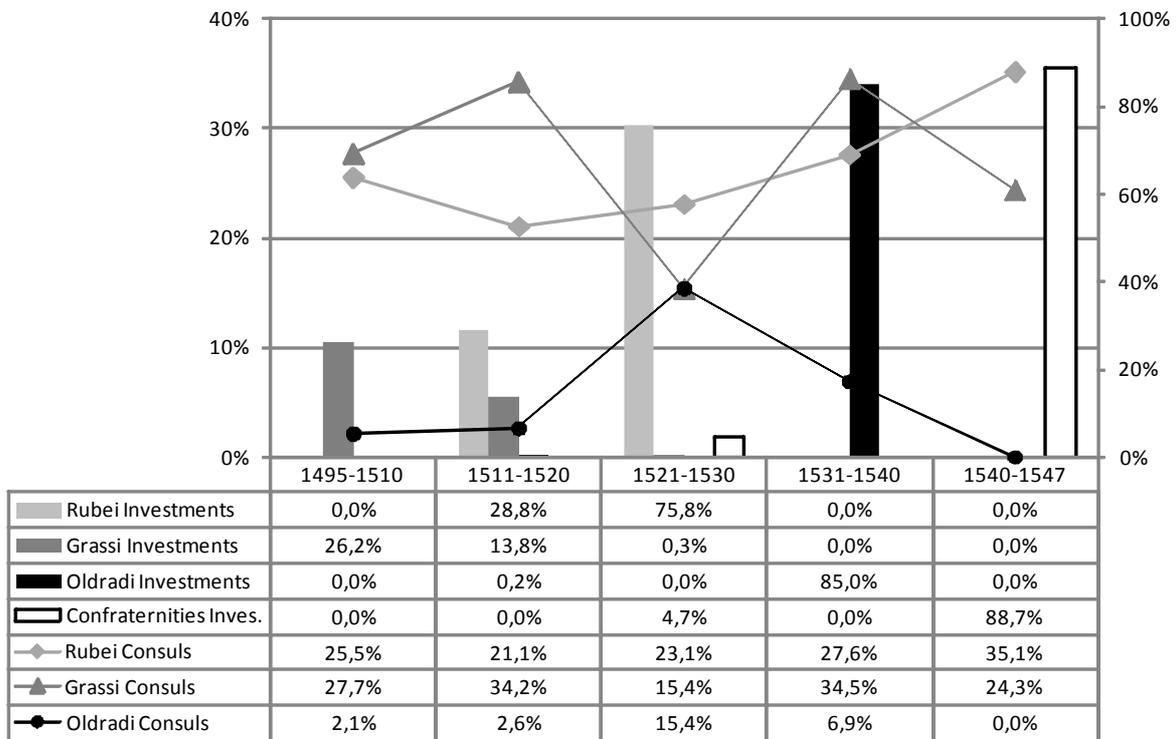
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<sup>35</sup> As often happened, this sale contract included a clause that obliges the purchaser to back-sale what has just bought in case the community returns the same sum within a certain timeframe.

<sup>36</sup> ASMi, N, f. 10309, 25 November 1532, Vincenzo Bosoni.

<sup>37</sup> ASMi, N, f. 11599, 31 December 1551, Giovanni Giacomo De Prata.

**Figure 4. The political and economic power of the Rubei family, the Grassi family, the Oldradi family, and the confraternity of St. Marta in Vailate (% of total consuls nominated and % of total capital invested in the community)**



Source: Elaboration from the Statistical Appendixes in Di Tullio 2010 and 2014.

## 5. Conclusions

The analysis of municipal properties and their ordinary and extraordinary management practices allows us to reach some conclusions. In the case of Geradadda, the municipal property was not only the land. These were managed by almost all communities as private assets, in the sense that land was leased on a long-term basis for money, and with the typical Lombard contract *ad meliorandum*, which was fundamental for increasing the arable land and irrigation network. The result was rather homogeneous agricultural landscapes and rural systems, independent from different forms of ownership. In this case, land was therefore a function in support of municipal finances and the social benefit was guaranteed by the political and economic strength of the communities, rather than the civic uses of common land. The economic and financial value of communal lands is, however, reduced if compared with other assets held by the communities of the Geradadda. Many communities controlled as monopolists the largest part of the local economy, providing water and access to mills. This

gave the communities considerable social, as well as economic, power because good management of the water networks—in this swampy region—was fundamental for maintaining ecological balance; the mills were also needed for the preparation of foodstuffs. The incomes from the latter, as well as the rights of collection of duties, guaranteed constant revenues and favoured an increase in the political power of these communities. This created a collective wealth, guaranteed only to the community members (*vicini*), which also had remarkable consequences for individuals in terms of building of social capital<sup>38</sup>. The character of these closed and multi-relational societies guaranteed, in fact, only to its members access to capital created by the community (physical and financial), which was a fundamental part of the municipal properties. The availability of these properties guaranteed political and economic strength to the communities, but it also assured them significant advantages, even in economic terms. In this sense, we could argue that these societies developed cooperative behaviours to prevent an increase in social and economic inequality, even though it reproduced the original privilege, which advantaged some and excluded many others.

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<sup>38</sup> Bourdieu, 1980; 1986; 2005; Ogilvie 2003; 2007.

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