

This file includes the Appendices to the article:

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APPENDIX A: REGIONAL HISTORICAL CONTEXT FOR THE FOUR REGIONS

The aim of this section is to briefly describe the main developments characterizing the four areas. We begin with the two Italian regions, and then proceed with both regions of the Low Countries.

Since the fall of the Roman Empire Italy had never been a politically unified country until the process of national unification in the second half of the nineteenth century. Even within the most advanced area (the North plus Tuscany) important differences existed in the level of development as well as in the trends and dynamics characterizing distinct regional states, whose main and foremost aim was to maintain their independence (Alfani 2013a, 114-5). Here we focus on two such states: the Sabaudian State, which by the early eighteenth century covered the whole of the current administrative region of Piedmont (and beyond), and the Florentine State which covered most of today's Tuscany.

Of all the Italian states, the Sabaudian State was the most successful during the early modern and modern periods - at least if we measure success as the ability to maintain substantial autonomy, to make sizeable territorial gains over time, and finally to spearhead the process of national unification which culminated in the proclamation of the Kingdom of Italy in 1861. The State progressively expanded from the West - the Alpine ancestral domains of the House of Savoy - to the East, towards the rich lowlands of the Po Plain. In the period covered by this article, Piedmont was already the heartland of the State, as also suggested by the decision of the Savoys to move their capital from Chambéry (nowadays in France) to Turin, in 1563. This decision followed the end of the Italian Wars (1494-1559), a very troubled period for the Italian states, many of which lost their independence or somehow fell under the Spanish sphere of influence (Alfani 2013a, 12-23; 112-24). As a matter of fact, by the middle of the sixteenth century only two Italian states were still capable of autonomous military action: the Republic of Venice and the Sabaudian State.

Given its expansionistic ambitions and success, the Sabaudian State is truly an exceptional case in the context of early modern Italy. Relatively neglected by international scholarship until recently, it is currently the object of much attention (see in particular Vester 2013). It is also the first region of Italy to be the object of a systematic study of long-term trends in economic inequality (Alfani 2009; 2010; 2015), which makes it the perfect case to include in this study. Economic historians have underlined the importance of the policies introduced by the Savoys during the sixteenth century, and in particular the fiscal reforms which went a long way towards allowing the Sabaudian State to pay for its many wars (Stumpo 1979; Alfani 2013c). However, not even this particularly successful State was characterized by sustained economic growth throughout the early modern period. In the first half of sixteenth century it paid a particularly high price for the repeated confrontations between France and Spain. The seventeenth century, too, was a difficult century for the Piedmontese population and

economy, due to the damage caused by the terrible plague of 1629-30, possibly the worst affecting northern Italy since the Black Death (Alfani 2013b), by the civil war in 1638-42, and by the crisis and decline of many cities (Barbero 2008; Alfani 2015). The situation changed only during the eighteenth century, when the region showed an impressive agrarian, commercial, and proto-industrial dynamism, coupled with a growing influence over the Italian peninsula.

If the Sabaudian State is exceptional in being the most dynamic Italian pre-unification state, the Florentine State is instead the typical example of medieval and Renaissance splendour followed by relative sluggishness during the early modern period. In about 1500, when our study starts, the process of progressive expansion of the territories subject to the capital city of Florence, which had started with the conquest of Fiesole in 1125, was basically completed, except for the annexation of the Republic of Siena in 1555 (Fasano Guarini 1973; La Roncière 2010; Alfani and Ammannati 2014). After that, the territory under Florentine control remained unchanged until the end of the eighteenth century. It was administratively divided into two parts: the *Contado*, corresponding to the areas earlier acquired by Florence and subject to the stricter control of the capital city, and the *Distretto*, acquired later and also incorporating large and important cities like Arezzo and Pisa which were allowed greater autonomy, including in fiscal matters (Alfani and Ammannati 2014).

Seemingly, territorial stagnation went hand in hand with economic stagnation. In fact, after a complex sixteenth century when Tuscany became one of the main battlefields of the Italian Wars and Florence suffered repeatedly from political unrest,¹ the Florentine state showed clear signs of decline from the first decades of the seventeenth century. Here the decline would continue until the end of the eighteenth century (Carmona 1976; Malanima 1982; Goldthwaite 2009; Ammannati 2009).

The general literature on the Little Divergence has pointed out many possible explanatory factors for the relative decline of the main economic powers of the Italian Renaissance, among which the Florentine State is to be counted: the opening of the Atlantic trade routes which ‘trapped’ the Italian States in the Mediterranean (Braudel 1992; Acemoglu, Johnson and Robinson 2005), the inability of the guild system to renew itself when confronted with stronger northern competition (Cipolla 1968) or, more recently, the particular severity of seventeenth-century plague epidemics which brought the Italian economies towards lower growth paths (Alfani 2013b; Alfani and Percoco 2014). Although historians have underlined that this process is mostly to be understood as one of ‘relative’ and not ‘absolute’ decline (Sella 1997) and it has been argued that as late as the early seventeenth century it had not yet started (Alfani 2013a), it is quite clear that by the end of that century central and northern Italy were no longer at the core of the European economy. Some areas of northern Europe had risen to preeminence instead - including the Low Countries.

‘Low Countries’ is the general denomination used for the region on the low-lying North Sea coasts with the deltas of the Rhine, Meuse, Scheldt and Ems rivers. Since the High Middle Ages its maritime orientation and large number of navigable waterways had already begun to turn the region into one of the most vibrant European economies North of the Alps. Despite a large and continuing degree of political fragmentation and widely diverging intra-regional developments, different parts of the Low Countries would continue to be among Europe’s frontrunners in economic

¹ The ruling Medicis were ousted from power twice, in 1494 and in 1527, and they only returned in 1531, when they managed to obtain the title of Dukes and consolidated their hold on the State.

development until the nineteenth century (Blockmans 2010; Van Bavel 2010; Gelderblom 2013).

Already at the end of the medieval period the Low Countries were among the most densely populated and highly urbanized areas in Europe, and they would continue to be so throughout the early modern era. Economic success was based on the region's involvement in an early commercialised and intensive agricultural sector, large-scale industrial activity in textile production destined for worldwide exports, and international trade – passive, active, and colonial. Despite many regional differences and pockets of divergence, all this generally combined to endow the region with high figures of aggregate economic output, relatively high real wages, and a deep penetration of the market into the economy. This was achieved within the context of large political fragmentation in the absence of a strong central state, a conspicuous lack of a large land-holding class, and an institutional dynamic generated by inter-urban and inter-regional competition (Gelderblom and Jonker 2014). Since the region's experience of economic success can be contrasted with the process of relative decline in the Mediterranean economies, the Low Countries constitute a suitable region for studying the opposite side of the 'Little Divergence' in Europe (Allen 2001; 2003).

However, considerable regional variation existed within the Low Countries. During the high Middle Ages the core of economic development was situated in the southern provinces, particularly in the centres of urban textile (woollens) production such as Ghent, and in the main commercial hub for long-distance trade: Bruges (Murray 2005; Blockmans 2010). Around the end of the fifteenth century, political strife and geographic vagaries relocated the dominant commercial (and to a lesser extent industrial) activities northwards to Antwerp and its surroundings (a recent interpretation of this relocation in Gelderblom 2013). During the first half of the sixteenth century Antwerp would become the principal hub for trade in North-Western Europe, serving as a staple market for English textiles and Portuguese spices, but also stimulating industrial production within its own walls and hinterland (Van Der Wee 1963; Puttevils 2015). In the Eighty-Years War the Antwerp seaport would be closed following the Spanish re-possession of the city in 1585, and so international trade routes would shift northwards again, this time to Amsterdam and the rest of the Maritime Dutch provinces in the Northern Low Countries. For the Southern Low Countries this would mark the end of a period of economic and urban growth, although a successful economic reconversion (towards regional trade in the case of Flanders; and high-quality luxury goods in the case of Brabant) postponed the onset of secular economic decline until the second half of the seventeenth century.

Nevertheless, from the end of the sixteenth century onwards, a pronounced contrast in the economic fortunes of the Northern and Southern Low Countries emerged. Whereas in the latter region the weight of rural proto-industry (linen) grew and urban production figures slowly dwindled, the towns in Holland were increasingly connected to new avenues of international trade or further expanded their industrial textile production (De Vries and Van Der Woude 1997, Emmer and Gommans 2012). Economic fortunes would reverse for both regions during the eighteenth century. In the Northern Low Countries the economy would stagnate at a high level of living standards, and remain relatively unchanged until its late industrialization around the end of the nineteenth century (Mokyr 1976). Yet in the Southern Low Countries, a new phase of rapid demographic growth from the middle of the eighteenth century went hand-in-hand with commercial expansion, retail growth, and modest forms of labour concentration in the form of (non-mechanised) workshops (*manufactures*) with at times hundreds of wage labourers (Dejongh and Segers 2001). Proper industrialization would

start only from the beginning of the nineteenth century in Ghent and Aalst, and approximately two or three decades later in Bruges and Kortrijk. As parts of the Southern Low Countries were among the earliest industrializing areas on the Continent, the contrast with the Northern Low Countries – which was among the last to industrialize – is again particularly clear.

Since we will study patterns and trends of inequality in Flanders and Brabant (Southern Low Countries) on the one hand, and Holland (Northern Low Countries) on the other hand, we will be able to look at the influence of differences in economic growth, international commerce, and political and fiscal institutions upon levels of pre-industrial inequality within the North Sea area.

APPENDIX B: DISCUSSION OF THE SOURCES

The availability of sources largely dictates the approach adopted, which has resulted in two slightly different methodologies. In the case of Italy, the archival sources best suited to a systematic study of economic inequality during the early modern period are the property tax records known as *estimi*. These sources record different components of wealth, but at the very least always include real estate (lands and buildings). The sources we use here for the Sabaudian State are all *estimi*, very homogeneous across space and time, and they include only real estate. A more detailed analysis of these sources is provided by Alfani (2015)². In the Florentine domains the *estimi* system was also used for a long time - but in the *Contado* it was abandoned in 1427, when the famous *catasto* system was introduced (Herlihy and Klapisch 1985). The *catasto*, however, proved too complex to be managed effectively, so that from 1495 a third system, the *decima*, was introduced and maintained up until the end of the eighteenth century. This *decima* pertained to an annual tax of 10% on the income from real estate. Under the assumption that such income was proportional to the value of the real estate, there would be no difference, in distributive terms, in measures of inequality of income or wealth based on the *decima*. All the sources used here to measure Tuscan rural inequality are *decime*. Of the Tuscan cities included in our analysis, we used the aforementioned sources for Prato, while for Arezzo, which belonged to the *Distretto* and was awarded greater fiscal autonomy, *estimi* were available whose information is entirely comparable with that of our other Tuscan sources (see Alfani and Ammannati 2014).

In the case of Italy the ownership of real estate is thus taken as a *pars pro toto* for wealth inequality – and this as a proxy for economic inequality. Given the scarcity of direct income or wealth taxes in the Low Countries (exceptions in Zoete 1994, Zuijderduijn and De Moor 2013), a different approach has been taken here. In this case we focus on (imputed) expenditures on the consumption of real estate (land or housing) as a proxy for economic inequality. From the later Middle Ages until the end of the nineteenth century, the estimated value of houses was used as a common basis for personal taxation in cities in the Low Countries - and was thus explicitly taken as an external reflection of status and income. Today, economists and economic historians agree that housing consumption is closely tied to some measure of permanent income. This rests on the assumption that the income elasticity of demand for housing is not only close to this, but is also fixed in time (the issue was discussed at length in Williamson 1985, and Feinstein 1988).³ Engel effects, independent developments determined by the supply-side of real estate on the housing market (both rental and sales), and socially-biased differentials in household size can at times disturb the direct reflection of (income) inequality through these sources, but such effects are unlikely to alter the direction of general trends and patterns.⁴ Therefore, the housing taxes available are perhaps not ideal, but they are by and large suitable for tracing changes in income inequality through time. For the Southern Low Countries the data used are newly collected from the archives, while for the Northern Low Countries, we have relied upon

² For a general discussion of the characteristics of the Italian *estimi*, also see Pini 1981; Alfani and Caracausi 2009; Alfani and Barbot 2009.

³ For cities in the Low Countries, Hanus 2010 and Hanus 2013 tested the relationship between taxed house rents and income in the sixteenth century (and arrived at some important qualifications, considered in the next paragraph), while Ryckbosch 2012 tested the association between housing value and wealth in the eighteenth century.

⁴ See Ryckbosch 2016 for a more extensive analysis of these potential biases.

the data on Holland gathered, analysed and published by Jan Luiten Van Zanden (Van Zanden 1995, Soltow and Van Zanden 1998).

Given the differences in the two approaches ('property' versus 'consumption'), it is to be expected that the inequality estimates produced for the Low Countries will be lower than those for Italy. This means that the analysis we present here is inherently limited to studying change over time, and comparing trends rather than absolute inequality levels between Italy and the Low Countries.

Moreover, some smaller shortcomings of the sources apply to both our analyses of Italy and the Low Countries. Firstly, property exempted from taxation is often invisible from our sources. This includes feudal land, which was very limited in the areas covered here, but also some specific parts of the property of religious institutions – for which the conditions of exemption varied across time and space. Yet even when exceptional sources provide us with information about property that was usually exempt, we removed it from our distributions in order to obtain time series of inequality measures as homogeneous as possible. The second and main shortcoming is that our distributions are truncated at the bottom - as many of the poor, i.e. the absolute property-less, were by definition not included in Italian property records, and most of them boarded with other people or sublet and shared housing so that they do not appear in the registers of rental values of houses in the Low Countries either. As a consequence, all our measures of inequality are distorted towards a level lower than was actually the case. This is not a major issue when comparing inequality *trends* rather than levels, since there is no indication that this truncation changed over time. For a more detailed analysis of the shortcomings of the sources used, we refer to the existing literature (Alfani 2015 and Alfani and Ammannati 2014 for Italy; Van Zanden 1995 and Ryckbosch 2016 for the Low Countries).

The data collection for this study has been organised on a meso-level: for a selection of rural and urban communities the complete distributions have been collected. We have collected inequality estimations for a total of 71 communities, for several points in time between 1500 and 1800 (table B1).

Table B1. An overview of the case studies and their respective sizes.

	Holland	Flanders & Brabant	Piedmont	Tuscany
Cities, Large (> 20.000)	1	3		
Cities, Medium (10-20.000)	7	2	2	1
Cities, Small (5-10.000)	3	3	4	1
<i>Tot. Cities</i>	<i>11</i>	<i>8</i>	<i>6</i>	<i>2</i>
Rural districts & villages	12	10	12	11
<i>Total</i>	<i>22</i>	<i>18</i>	<i>18</i>	<i>13</i>

Notes: a list of all case studies, the number of households included in the fiscal records, as well as average and median rents per household, is presented in appendix C.

Table B1 indicates that we have aimed for a representative selection of sample cases, although source limitations presented some difficulties. For instance, in Piedmont the

main city of Turin is missing due to the fact that when it acquired the status of capital in the sixteenth century, the medieval *estimi* were discontinued (Alfani 2015). The same is true for Florence in Tuscany, as from 1315 its citizens were spared direct taxation (Alfani and Ammannati 2014, 5). One effect of this is that (since both cities are likely to have been wealthier than the other communities) the Italian regional Ginis will be systematically distorted towards equality.

APPENDIX C: SOURCE REFERENCES

The sources used for the regional reconstruction of inequality in Tuscany and in the Southern Low Countries are detailed below. The regional reconstruction for Piedmont has been published by Alfani (2015) and the sources used are detailed there.

Tuscany

Arezzo State Archives

Libri della lira di città:

- 17 (1501, Arezzo)
- 33 (1602, Arezzo)
- 43 (1650, Arezzo)
- 52 (1710, Arezzo)
- 55 (1751, Arezzo)
- 60 (1792, Arezzo)

Catasto:

- 307 (1427, Santa Maria Impruneta)
- 842 (1458, Gambassi)
- 846 (1458, Santa Maria Impruneta)
- 847 (1458, San Martino alla Palma)
- 852 (1458, Castelfiorentino, Monterappoli)
- 856 (1458, Poggibonsi)
- 859 (1458, Antella)
- 871 (1458, Cerreto Guidi)
- 883 (1458, Borgo San Lorenzo)
- 886 (1458, San Godenzo)
- 947 (1469, Castel San Giovanni)

Decima repubblicana:

- 272 (1504, Castelfiorentino)
- 274 (1504, Gambassi)
- 277 (1504, Poggibonsi)
- 281 (1504, Santa Maria Impruneta)
- 283 (1504, San Martino alla Palma)
- 289 (1504, Monterappoli)
- 299 (1504, Castel San Giovanni)
- 307 (1504, Antella)
- 325 (1504, Cerreto Guidi)
- 373 (1504, Borgo San Lorenzo)
- 377 (1504, San Godenzo)

Decima granducale:

- 5165 (1536, Santa Maria Impruneta)
- 5166 (1570, Santa Maria Impruneta)
- 5167 (1621, Santa Maria Impruneta)
- 5168 (1715, Santa Maria Impruneta)
- 5169 (1536, San Martino alla Palma)
- 5170 (1570, San Martino alla Palma)
- 5171 (1621, San Martino alla Palma)
- 5172 (1715, San Martino alla Palma)
- 5181 (1536, Castelfiorentino, Monterappoli)
- 5182 (1570, Castelfiorentino, Monterappoli)
- 5183 (1621, Castelfiorentino, Monterappoli)
- 5184 (1715, Castelfiorentino, Monterappoli)
- 5185 (1536, Gambassi)
- 5186 (1570, Gambassi)
- 5187 (1621, Gambassi)
- 5188 (1715, Gambassi)
- 5194 (1570, Poggibonsi)
- 5195 (1622, Poggibonsi)
- 5196 (1715, Poggibonsi)
- 5197 (1536, Antella)
- 5198 (1570, Antella)
- 5199 (1621, Antella)

- 5200 (1715, Antella)
- 5209 (1536, Castel San Giovanni)
- 5210 (1570, Castel San Giovanni)
- 5211 (1621, Castel San Giovanni)
- 5212 (1715, Castel San Giovanni)
- 5253 (1536, Cerreto Guidi)
- 5254 (1570, Cerreto Guidi)
- 5255 (1621, Cerreto Guidi)
- 5256 (1715, Cerreto Guidi)
- 5289 (1536, Borgo San Lorenzo)
- 5290 (1570, Borgo San Lorenzo)
- 5291 (1621, Borgo San Lorenzo)
- 5292 (1715, Borgo San Lorenzo)
- 5309 (1536, San Godenzo)
- 5310 (1570, San Godenzo)
- 5311 (1621, San Godenzo)
- 5312 (1715, San Godenzo)
- 5361 (1546, Prato)
- 5364 (1621, Prato)
- 5365 (1671, Prato)
- 5366 (1763, Prato)
- 5641 (1536, Poggibonsi)
- 5741 (1779, Castelfiorentino)
- 5742 (1779, Castelfiorentino)
- 5772 (1779, San Godenzo)
- 5773 (1779, San Godenzo)
- 5796 (1779, Poggibonsi)
- 5797 (1779, Poggibonsi)

The Low Countries

The regional reconstruction for the Northern Low Countries is based on information published by Van Zanden (1995). For the Southern Low Countries they are listed below.

State Archives Brussels

Rekenkamer

- 45699 (1382, Brugge)

State Archives Antwerp

Oud Gemeentearchief Wuustwezel

- Sectie 2 (1581, Wuustwezel). Courtesy of E. Van Onacker.

Oud Gemeentearchief Gierle

- 344 (1554, Gierle). Courtesy of E. Van Onacker.

State Archives Kortrijk

Oud Stadsarchief Kortrijk

- 784 (1686, Kortrijk)

- 342 (1761, Kortrijk)

Municipal Archives Gent

Oud Archief Stad Gent

- reeks 20, 15 (1492, Gent). Courtesy of M. Boone.

- reeks 153, 2 (1672, Gent)

- reeks 28, 1 (1572, Aalst)

- reeks 28, 34 (1572, Kortrijk; 1571, Kortrijk Buiten)

- reeks 28, 14 (1572, Desteldonk)

- reeks 28, 58 (1571, Pittem)

- reeks 28, 11 (1572, Deerlijk)

- reeks 28, 4 (1571, Avelgem)

- reeks 28, 78 (1571, Wannegem)

- reeks 28, 47 (1571, Moen)

- reeks 28, 15 (1572, Egem)

- reeks 28, 19 (1571, Erpe; 1571, Mere)

- reeks 28, 3 (1572, Aspelare)
- reeks 28bis, 2 (1556, Uxem)

Municipal Archives Antwerp

Gemeentearchief Antwerpen

- 4833 (1584, Antwerp). Courtesy of Heidi Deneweth, Joeri Lersberghe, Marlene Gonzalez, based on Gil Degueldre, *Kadastrale ligger Antwerpen (1584-1585)*, 2013.

Municipal Archives Aalst

Oud Archief Stad Aalst

- 265 (1602, Aalst)
- 264 (1672, Aalst)
- 269 (1705, Aalst)
- 273 (1742, Aalst)
- 277 (1791, Aalst)

Municipal Archives Mechelen

Oud Archief

- serie K, 1 (1544, Mechelen). Courtesy of Maarten van Dijck / Jord Hanus.
- serie K, 3 (1579, Mechelen). Courtesy of Maarten van Dijck / Jord Hanus.
- serie K, 4 (1599, Mechelen). Courtesy of Maarten van Dijck / Jord Hanus.
- serie K, 6 (1643, Mechelen). Courtesy of Maarten van Dijck / Jord Hanus.
- serie K, n° 14 (1746, Mechelen). Courtesy of Maarten van Dijck / Jord Hanus.

Municipal Archives Nivelles

- 268 (1525, Nivelles)
- 1382 (1667, Nivelles)
- 1194 (1680, Nivelles)
- 2224 (1800, Nivelles)

Municipal Archives Hoogstraten

Kerkarchief Minderhout

- H9 and H10 (1569, Minderhout). Courtesy of E. Van Onacker.

Archives of the Abbey of Tongerlo

- Sectie II, n° 896 (1659, Tongerlo). Courtesy of E. Van Onacker.

Published sources

- Baetens R. (1976). *De nazomer van Antwerpens welvaart: De Diaspora en het handelshuis De Groote tijdens de eerste helft der 17de eeuw*, Brussels, Pro Civitate, pp. 271-280 (1667, Antwerp).
- De Belder, J. (1979), *Elementen van Sociale Identifikatie van de Antwerpse bevolking op het einde van de XVIIIde eeuw. Een kwantitatieve studie*, unpublished PhD thesis, Ghent, Ghent University, II (1797, Antwerp).
- Documents Parlementaires, Chambre des Représentants, session 1890-1891, n° 261, 135-369 (1890-1891). Courtesy of S. Vrieling (Lokstat).
- Hannes, J. & Vanhaute, E. (2007). 'Economische verandering en inkomensongelijkheid. De inkomensverdeling in de Oost-Vlaamse steden in de negentiende eeuw', *Tijdschrift voor Sociale en Economische Geschiedenis* 4(2), 86-109 (1834, Gent).
- Hanus, J. (2010). *Affluence and Inequality in the Low Countries*, unpublished PhD dissertation, Antwerp, University of Antwerp ('s Hertogenbosch).
- Jacob, W. (1970). *Grondgebruik, woningvoorraad en eigendomsverhoudingen*, Ma Thesis, Ghent, Ghent University (1834, 1860, Aalst).
- Popp, P.C. (s.d.). *Atlas Cadastral Parcellaire de la Belgique. Ville de Bruges*, (1860, Brugge).

APPENDIX D: DISCUSSION OF THE METHODOLOGY ON CONSTRUCTING REGIONAL ESTIMATES

In this paper, we focus on broad changes occurring in the long run and across entire regions. Consequently, we need to find a way to aggregate the local/communal data on inequality in order to obtain measures representative of larger spatial units. To do this, we use a method introduced by Alfani (2015) in his case study of Piedmont. To build regional measures of inequality it does not suffice to calculate averages of local Gini indexes or of other inequality measures⁵, as this would cause a loss of crucial information about between-community inequality. Instead, the methodology followed here constructs regional distributions starting from simplified, or 'fictitious' distributions modelled on information about deciles of income/wealth. The tenth decile - the rich - is modelled in greater detail, using information about the top 5% and top 1% wealthy, as it is usually found empirically that what happens to the top rich disproportionately influences the overall trend in terms of Gini values. Using these fictitious distributions it becomes easier to solve weighting problems and issues of comparability across sources. First we construct separate urban and rural inequality series, and then weigh both based on the urbanization rate in each region and time period, using a procedure similar in principle to that described by Milanovic (2006) for calculating 'weighted international inequality'.

In some cases a lack of appropriate data required additional assumptions to be made. For Piedmont it was impossible to convert the values in the property tax registers of one community to another, except for the Canavese area in 1628-1649 – so we had to make the assumption that the urban-rural differential in average household wealth across Piedmont was the same as in the seventeenth-century Canavese. In Tuscany no such assumptions were necessary, except for the case of Arezzo, which (because of its larger degree of fiscal autonomy) presented similar problems. In this case the famous Florentine *catasto* of 1427 allowed us to estimate the relative average wealth between Arezzo, Prato, and the rural part of the *contado*. More problematic is the case of the Southern Low Countries, for which we have a very detailed and highly representative collection of small, medium-sized, and large cities – but no rural series that allows for a comprehensive reconstruction through time. However, we also used the urban regional reconstruction together with guesstimates grounded in what information was available for rural areas, to produce a rough regional estimate also for the Southern Low Countries - a series which has to be considered highly hypothetical and not as reliable as those we use for the other European regions.

Below follows a more detailed exposition on how the required data was assembled for each of the regions studied, and how the resulting regional distributions were constructed.

Italy

The time series of economic inequality in Piedmont/Sabaudian State has been reconstructed by Alfani (2015). Here we will only briefly recapitulate how it has been obtained. The series is based on the weighted combination of two separate distributions, each representative of different environments/contexts: urban and rural. To weigh the

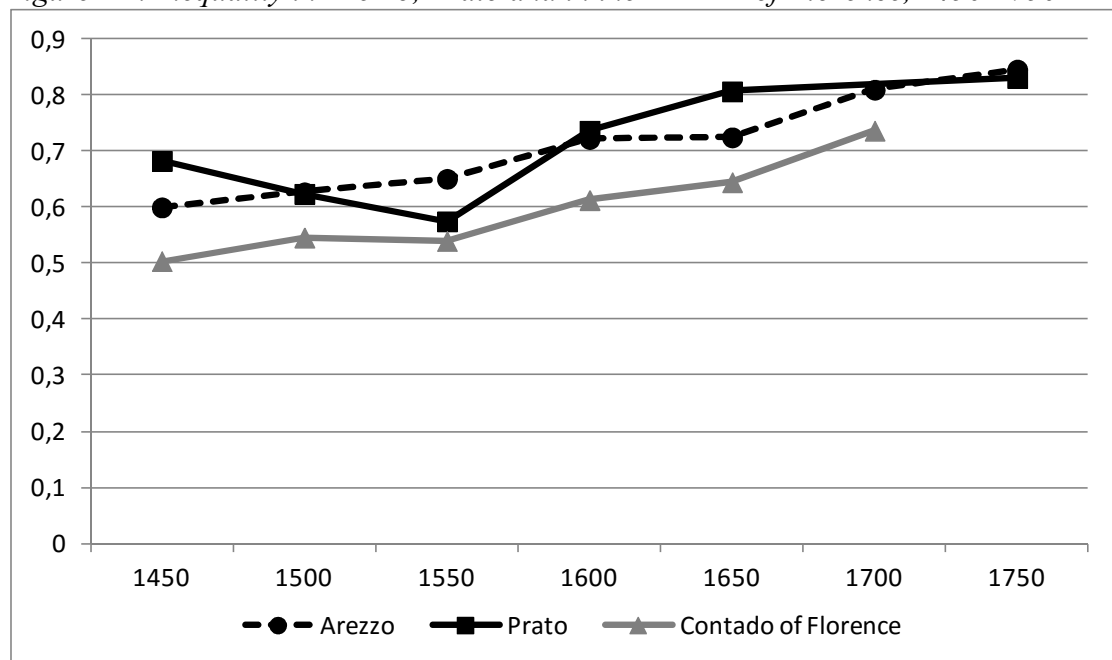
⁵ Because of its widespread use, its straightforward interpretability, and its sensitivity to changes around the distribution modus, the Gini index has been chosen as the main tool for inequality measurement here (Champernowne 1974; Allison 1978; Cowell 2000). Their indices and other inequality parameters are available from the authors upon request.

urban and rural distributions, a procedure similar to that described by Milanovic (2005) for calculating ‘weighted international inequality’ was used: on the grounds of estimates of the urbanization rates in Medieval and Early Modern Piedmont, the urban distribution was given a 25% weight until 1700, and 33% thereafter. This implied, for each year, building regional distributions in which urban entries corresponded exactly to the above shares of the total. Since it was impossible to convert the values recorded in the property tax registers from one community to another, except for the Canavese area in the period 1628-49, the assumption was made that the urban to rural differential in average household wealth across Piedmont was exactly the same as that to be found in the seventeenth-century Canavese. This is a strong assumption, but one that does not hinder the ability of the regional series to correctly reflect a common trend, visible from each single local series used to produce the regional series.

In the case of Tuscany, building a regional series is easier compared to the Sabaudian State, and requires us to make fewer assumptions. The Tuscan dataset comprises 11 rural communities and 2 cities (Prato and Arezzo). Prato and all the rural communities were part of the *contado* of Florence - i.e., the part of the Florentine state first conquered by the capital city. Thanks to this, throughout the period considered by this study the fiscal sources related to each of these communities were redacted according to homogeneous criteria, and using the same unity of measurement. Unfortunately this is not the case for Arezzo, as this important city was incorporated by the Florentine State only in 1384, and consequently was part of the so-called *distretto*, in which each city maintained a large degree of fiscal autonomy. As a result, Arezzo's fiscal sources are usually expressed in local units of measurement, which despite our efforts and additional research proved impossible to convert reliably into the unit of measurement used in the *contado*. The exception is the famous Florentine *catasto* of 1427, which covered both *contado* and *distretto*. Thanks mostly to the detailed study of the *catasto* conducted by Herlihy and Klapisch (1985), we had readily-available data allowing us to estimate, at least for one year, the relative average wealth between Arezzo, Prato and the rural part of the *contado*.

The information we used is summarized in figure D1, where the trends of our rural times series, of Prato and Arezzo are compared. No elaboration has been made at this stage (the rural time series is calculated from distributions which are the simple aggregation of the distributions of our 11 rural communities), save for clustering the data around 50-year breakpoints to ease comparison of the trends. As explained in the main text (section 1), all the sources we use for the period 1500-1750 are *decime*, however in the following we also reconstruct a regional inequality measure for 1450 (not used in the main text) based on the *catasto*. As mid-fifteenth century *catasti* only included real estate (differently from the famous 1427 one), the information they provide is entirely analogous to that coming from the *decime* (Alfani and Ammannati 2014).

Figure D1. Inequality in Arezzo, Prato and in the contado of Florence, 1450-1750



The first step to build our regional time series was to convert our actual distributions into fictitious distributions of 100 elements each. This procedure caused only a minimal loss of information, as can easily be seen comparing the time series for the *contado* of Florence in Figure D1 with the fictitious distribution derived from it and presented below. The second step was to build separate series representative of the rural and urban environments. The rural series was readily available, for the reasons described above, but in order to obtain the urban series we needed to find a way of making the distributions of Prato and Arezzo directly comparable. To do this, we used the information provided by the 1427 *catasto*, which allowed us to establish that on average, Arezzo households were 1,325 times as rich as those from Prato. Information about average household wealth in 1427 Tuscany is summarized in table D1.

Table D1. Average household wealth in the Florentine State (1427)

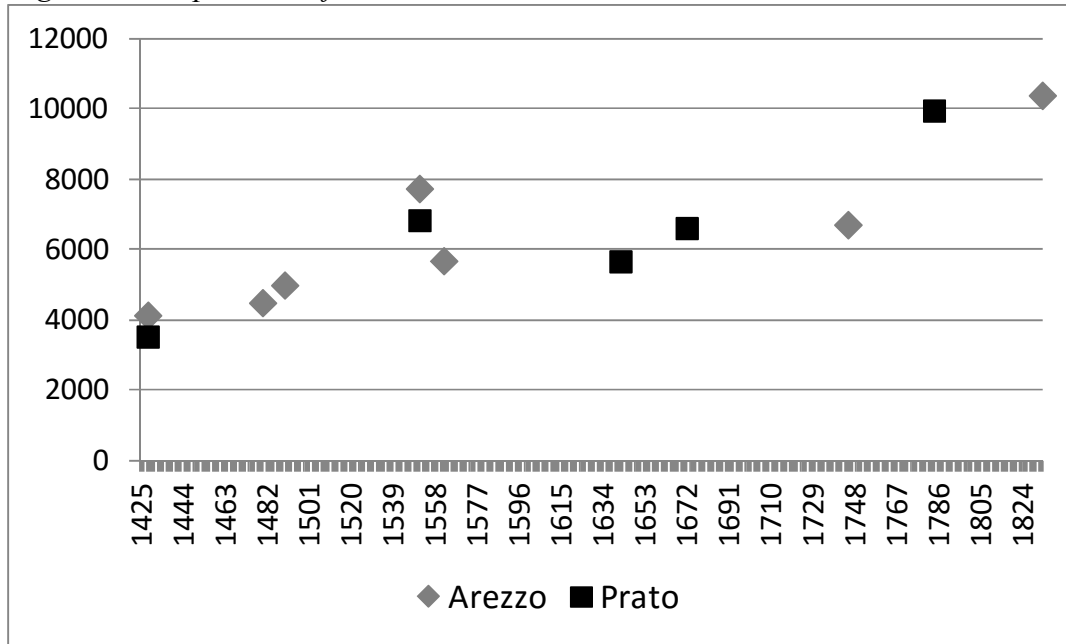
	Hearths	Average net taxable wealth per hearth
Florence	9,821	777
Arezzo	1,189	208.3
Prato	951	157.2
<i>contado</i> (excluding Prato)	25,615	52.6
Florentine State (overall)	59,770	197.3

Sources: our elaboration starting from data published by Herlihy and Klapisch (1985, 892) and by Fiumi (1968, 113).

In the absence of any other usable information, we had to assume that the relative average wealth of Arezzo and Prato remained constant over time. This is obviously a

strong assumption - however not an altogether unrealistic one, given that the two cities seem to have followed largely similar paths of development over time, as suggested by a key indicator like population size, which according to some studies (Herlihy 1978; Herlihy and Klapisch 1985) tends to be closely correlated to average household wealth, at least in relative terms. Interestingly, a similar conclusion was reached by Van Zanden (1995, 651) for the Northern Low Countries. Figure D2 charts the available information about the population of Prato and Arezzo in the period we consider. In particular, their relative size seems to have varied within a fairly tight band, with Arezzo being between 4 and 17% larger than Prato.

Figure D2. Population of Prato and Arezzo, 1393-1833



Sources: Alfani and Ammannati (2014, 8), with a few amendments and integrations

The third step was to build the overall distribution by weighting correctly the urban and rural distributions. This requires solving two separate issues: (i) estimating the average household wealth levels in urban and rural settings and (ii) defining the relative weight that the urban and rural distributions should have in the overall distribution. Regarding the first point, as will be remembered, the information concerning Prato is directly comparable to that of the rural communities as it was also part of the *contado*. The problem, then, arises due to the need to incorporate also Arezzo. The solution is fairly simple: as already explained, we devised a way to tie Arezzo to Prato thanks to data from the 1427 *catasto*. Subsequently, we compared average household wealth in our 11 rural communities to that of Prato. As all were part of the *contado*, we were able to estimate this at different points in time, and discovered that in the period we considered the rural/urban ratio did not vary much, presenting however an interesting tendency to decline over time - rural households moved from being 29% as wealthy as urban households around 1450, to just 21% as wealthy around 1750. Figure D3 shows the exact weights we used over time.

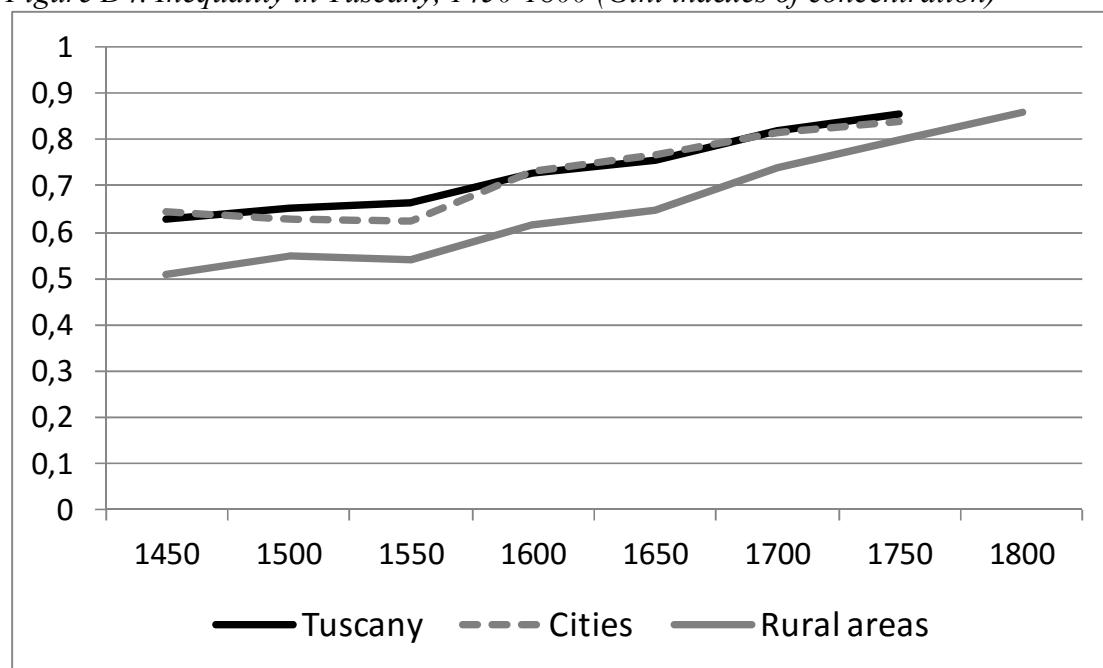
Figure D3. Rural/Urban average wealth ratio in the Florentine State, 1450-1750



Notes: rural average household wealth has been measured on the 11 rural communities in our sample. 'Urban' average household wealth has been measured on Prato only.

Regarding the relative weight to be given to the urban and rural components in the overall distribution, we used the urbanization rates estimated by Breschi and Malanima (2002) for cities > 5,000 inhabitants: 15% in 1400, 21% in 1500, 19% in 1600, 18.5% in 1700 and 17.8% in 1800. Given the limited impact that such small changes would have in the aggregate distribution and for the sake of simplicity, we assumed a 20% urbanization rate constant over time. Consequently, in our overall distributions representative of the whole of the Florentine State we had to maintain a 4:1 urban-to-rural ratio. As we had 100-elements fictitious rural distributions, and 200-elements urban distributions (resulting from the merger of the 100-elements fictitious distributions of Prato and Arezzo), we built 1000-elements distributions representative of the Florentine State by copying in 8 times the rural distribution and once the urban distribution. The results, in term of Gini indexes, are shown in Figure D4 (in the figure, the series related to 'rural areas' is the fictitious distribution modeled from the actual distribution for the Florentine *contado* shown in figure D1 - by comparing the two curves, it is clear that the process of reducing a larger distribution to a 100-elements one caused only a minimal loss of information, at least considering our purposes).

Figure D4. Inequality in Tuscany, 1450-1800 (Gini indexes of concentration)



The time series for Tuscany/Florentine State captures well the long-term trend which characterizes all its single components - from the urban and rural time series presented here, down to each single community-level time series as shown elsewhere (Alfani and Ammannati 2014). This is the main property that it had to show, as its purpose is simply to allow an adequate comparison of large areas. The trend, which is slowly growing or stagnating from 1450 to 1550 ca. and more clearly orientated towards growth thereafter, is discussed in detail in the main text. Here it will suffice to underline some aspects connected to the construction of the regional time series: (i) its trend follows more closely that of the rural series than that of the urban one, since the vast majority of the population lived in rural areas (which is reflected in the weights used); (ii) the level of the curve, in terms of Gini, is shifted upwards compared to the rural one due to the greater average household wealth of cities compared to rural communities. Both properties were to be expected and are entirely reasonable. These properties also characterize the time series available for Piedmont/Sabaudian State, for the same reasons (Alfani 2015).

Compared to the reconstruction accomplished for Piedmont, there is both an advantage and a disadvantage in that of Tuscany. The advantage is that we had to make fewer assumptions - in particular, we could measure across time the rural-to-urban average household wealth ratio, instead of keeping it constant as was done for Piedmont, thus losing part of the variance. The disadvantage, is that our urban sample consists of just two cities, compared to the six used for Piedmont. However, given the above discussion, there is no reason to think that adding extra cities would have changed significantly our regional reconstruction - with one possible exception: Florence, the capital city.

The absence of Florence from our reconstruction is undoubtedly a major limitation, one that it shares with that of Piedmont, in which Turin was absent. For the Sabaudian State, it was impossible to include Turin due to the fact that when it acquired the status of capital in the sixteenth century, it also gained exemption from many tributes and the medieval *estimi* were discontinued. The same is true for Florence, as from 1315 its citizens were spared direct taxation (Alfani and Ammannati 2014, 5) and

we have information about its wealth distribution only sporadically. In particular, Florence was comprised in the *catasto* of 1427, and it is possible to calculate that the average Florentine household was almost four times as wealthy as the Arezzo average household, and almost five times as wealthy as the one in Prato. The positive correlation between city size on the one side, household wealth and wealth concentration on the other side in 1427 Tuscany has already been analyzed in detail elsewhere (Herlihy 1978; Herlihy and Klapisch 1985; Alfani and Ammannati 2014). Here, it will suffice to discuss the consequences of the omission of the capital city from our reconstructions. A clear effect is that - under the reasonable hypothesis that capital cities are always wealthier than all other communities - the level of the regional series will be lower than real. In other words, our regional Ginis will be systematically distorted towards equality. If we make the assumption that (i) the relative average household wealth of capital cities, and (ii) their relative share of the urban population are constant over time, then the regional series will show exactly the same trend including or excluding the capital, the only difference being in their level.

This is, however, a strong assumption. In his study of Piedmont, Alfani discusses this point and suggests that including Turin in the reconstruction would presumably make even steeper the inequality growth characterizing, from ca. 1600, the urban series reconstructed for Piedmont and, to a lesser degree, the general aggregate series (Alfani 2015, Appendix). This is due to the fact that from the late sixteenth century, Turin was booming demographically (differently from most other Piedmontese cities) so that we can expect its potential impact on overall urban inequality to have grown over time. The case of Florence, though, is quite different - as (i) the population grew much more slowly than in Turin and even declined a little during the seventeenth century⁶, and (ii) its share of the overall urban population of Tuscany, although large, was fairly constant over time (about 42% in 1500, 44% in 1600 then back to 42% in 1700. Our calculations based on the database published by Malanima 2005). Consequently, it seems reasonable to hypothesize that in the case of the Florentine State, the inclusion of the capital city would have made the slope of the aggregate curve a little steeper - similarly to Piedmont, but with a much smaller overall effect.

A more serious limitation of both reconstructions, is that they are structurally truncated: as in both Piedmont and Tuscany, the part of the poor who were entirely destitute of property does not appear in the tax records and is *de facto* invisible. The problem is somewhat limited by the fact that even tiny properties were recorded, so that by defining the poor as those having no taxable property at all, in the rare instances when we can calculate their prevalence they seem to have been no more than 8.5-9.5% of the overall population in early modern Piedmont (both in cities and villages) (Alfani 2015). However, they were much more abundant in Tuscany. In 1500 for example, thanks to exceptionally detailed sources it is possible to calculate that they were overall 30.6% of the population in the rural communities we used for the reconstruction, and 32.2% in Prato - but unfortunately, we could not obtain similar measures systematically for all the period considered, due to the unavailability of archival sources which would allow us to do so (see for details Alfani and Ammannati 2014). The implications of the absence of the bottom of the distribution have already been detailed in the papers that introduced the Piedmontese and Tuscan databases, and for reasons of synthesis we will simply refer to them for further details. Something more should be said, however, about

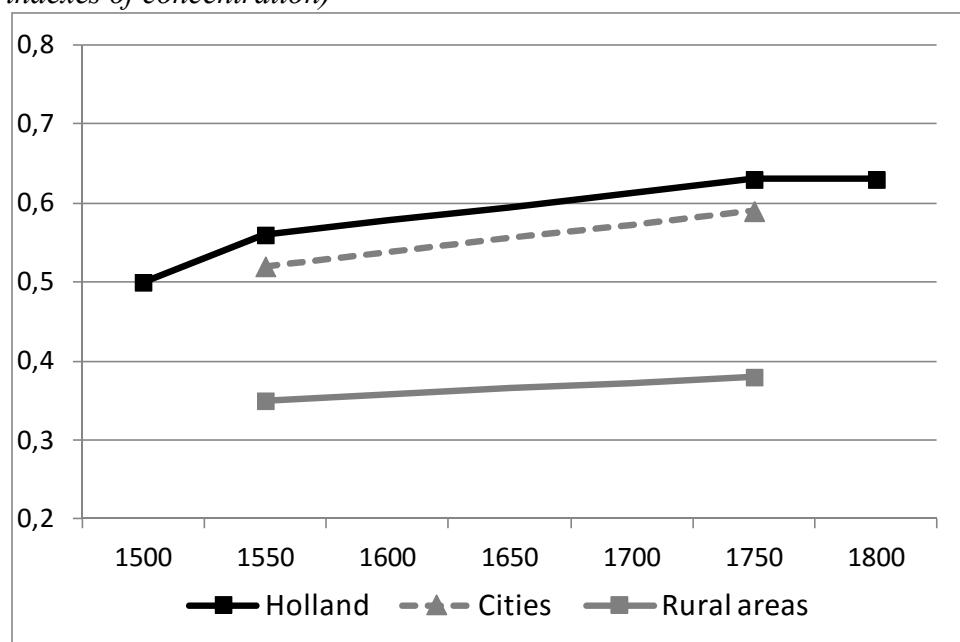
⁶ Florence had about 37,000 inhabitants in 1400, 50,000 in 1500, 75,000 in 1600, 72,000 in 1700 and 81,000 in 1800.

the implications for the shape of the trends. The issue is in fact similar to the absence of the capital city: also in the case of the absence of the propertyless, (i) the result is a systematic distortion of the inequality measure towards equality, and (ii) this is a secondary concern, the possible effect on the slope of the curves being much more important. For Piedmont, Alfani argued, on the grounds of the general literature on poverty in Italy (Pullan 1978; Woolf 1988) that, as the prevalence of the poor seems to have increased during the early modern period, the tendency for inequality to increase from 1450 ca. would be even steeper (Alfani 2015). We will make the tentative hypothesis that the same is true for Tuscany.

The Low Countries

In the case of the Northern Low Countries (Dutch Republic) we rely upon the data published by Van Zanden (1995, 651-3). As we do not possess the original distributions that he used to calculate his inequality measures representative of the region of Holland, we could not in this case apply the same reconstruction method used for the other areas included in this study. Yet the results can be presented in a way that makes them perfectly comparable to the new results, particularly because the sources and the inequality measurements are largely the same as those used for the other regions. Figure D5 shows the inequality trends characterizing the Northern Low Countries. For reasons of synthesis, we refer directly to Van Zanden (1995) for a discussion of the source material used. Here it will suffice to note that for 1561 and 1732 there are inequality measures (in Gini coefficients) available for the whole region, and also for rural and urban areas separately. For 1514 and 1808 there are only aggregate measures available for the whole region. The underlying sources are very similar to the ones described in the main text (section 2) for the Southern Low Countries.

Figure D5. Inequality in the Northern Low Countries (Holland), 1500-1800 (Gini indexes of concentration)

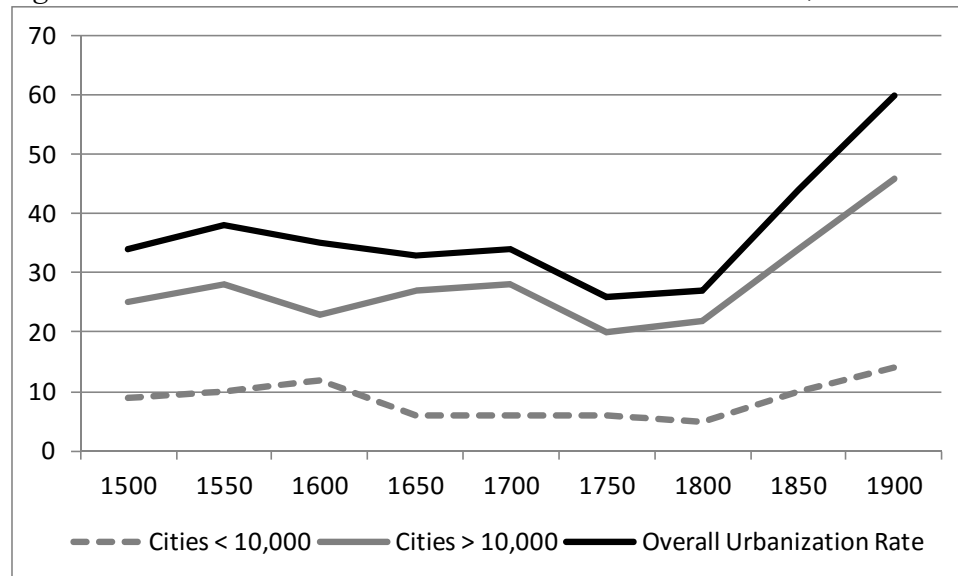


Sources: own elaboration from data published by Van Zanden (1995), 651-3

For the Southern Low Countries the data has been newly collected by the authors and others (and used here with kind permission), and is described in more detail by

Ryckbosch (2016). Because of the larger number of cities for which data was available, and given the higher degree of urbanization in the region, a more fine-grained modelling of the urban inequality distribution was deemed necessary. We settled on two partial distributions: one representative of large cities with at least 10,000 inhabitants (in our sample: Antwerp, Bruges, Kortrijk, Ghent and Mechelen), one related to small cities in-between 5,000 and 10,000 inhabitants (Aalst, Nijvel, and s' Hertogenbosch). The exact weighting of these two partial distributions was derived for each year taking into account the urbanization rates presented in figure D6 as well as the relative average housing value, according to the procedure described previously.

Figure D6. Urbanization rates in the Southern Low Countries, 1500-1800 (%).



Notes: Urbanization rates derived from Blockmans 2010, p. 541; Klep 1981, 1988; De Vries 1984; Bairoch 1988; LokStat (www.lokstat.ugent.be).

Once again, in order not to lose between-cities variance, we used the available information on the rental values of houses in different cities to weight the fictitious distributions so that the average ‘rent’ calculated from each of them matched precisely that of the original distributions (a procedure identical in principle to that applied earlier to Tuscany). For cities > 10,000 inhabitants, we estimated conversion factors for each city using data for the reference years for which we had comparable information about rental value of houses in all the cities we cover: 1650 and 1900⁷. For cities < 10,000 inhabitants, as information available was more fragmentary, we used estimates for Aalst 1550 and 1900 as representative of the entire group (which implies assuming the same average wealth in these cities; not an unreasonable assumption given their similar size and economic functions as provincial market towns). Linear extrapolation was used to fill in the gaps. Table D2 summarizes the weights used (expressed as proportions of the baseline, for which we took Mechelen, since we have good-quality and comparable information for all three dates: 1550, 1650 and 1900). For 1500, we assumed the same conversion factors as for 1550.

⁷ The actual year varies a little city per city. So for example, ‘1650’ is in fact 1667 for Antwerpen, 1670 for Brugge, 1672 for Ghent, 1643 for Mechelen. Only for Kortrijk had we to look for comparable values farther back in time (1571). For ‘1900’ instead we used data for the year 1890 for all cities.

Table D2. Urban average wealth ratios in the Southern Low Countries 1550-1900 (baseline= Mechelen).

	1500	1550	1600	1650	1700	1750	1800
Aalst (small cities)	0.600	0.600	0.629	0.657	0.686	0.715	0.743
Kortrijk	0.894	0.894	0.894	0.894	0.901	0.907	0.913
Mechelen	1	1	1	1	1	1	1
Ghent	1.734	1.734	1.734	1.734	1.667	1.600	1.533
Bruges	1.107	1.107	1.107	1.107	1.144	1.180	1.216
Antwerp	1.929	1.929	1.929	1.929	2.198	2.468	2.737

Using these weights, we can reconstruct distributions representative of the small cities and the large cities separately, as well combine them to have a reliable distribution for all cities of the Southern Low Countries. Having obtained a time series representative of cities, we now need to assess the rural areas. Unfortunately, in the case of the Southern Low Countries (i) data available about rural areas is limited; (ii) such data as is available does not correspond to rental values of houses, and is therefore not directly comparable with that used for cities.⁸ The best source type for approximating rural income distributions is that which informs us on the (rental) value of land cultivated per household – which, for obvious reasons, can be assumed to approximate the income distribution rather closely. For only one pre-industrial period is this information relatively widely and reliably retrievable: the 1570s, when the Duke of Alba controversially imposed a direct tax on the value of land on the provinces of the Low Countries (Craeybeckx 1950; Maddens 1972). Registers of this tax have been preserved for a large number of villages throughout Brabant, Flanders, and Holland, and are known as the *'penningkohieren'*. All in all, the *penningkohieren* offer a fairly reliable way of reconstructing inequality levels in the countryside.⁹ It is important to note that where the urban measures on rental housing values presented underestimations of inequality, the rural ones based on land value in use do not show the same degree of underestimation. In an agricultural society, the elasticity of total land value to income (since it is itself the prime source of household income) will have been much higher than the elasticity of housing values to income or consumption in towns. Hence the underestimation of inequality in the towns compared to the countryside, when working with these sources.

An analysis of 15 *penningkohieren* from for Flanders and Brabant has been undertaken – including villages in the ‘capitalist’ coastal area in the North West, the peasant-dominated sandy Inland part, the mixed agricultural region of Eastern Flanders,

⁸ To this date no single comprehensive study of economic inequality in the countryside of the pre-industrial Low Countries has been undertaken. Agricultural historians have been interested mainly in issues of farm size and property structures, as a result of which there exists a large body of (very informative) publications with empirical data on landholding sizes and ownership structures (such as percentages of leaseholds). Yet these findings are often hard to generalise, and even harder to relate to the measurement of economic inequality as has been common in economics and economic history (Curtis 2013). On the other hand economic historians of the Low Countries interested in issues of income or wealth inequality have paid attention to the countryside only in passing (there is no mention in Ryckbosch 2016 or Hannes & Vanhoute 2007. Van Zanden 1995 has a Gini coefficient for 12 villages in Holland, but does not deal with this in depth).

⁹ The total value of all land cultivated – both owned and leased – per household has been reconstructed for all case studies, and all households not occupying a homestead in the parish have been excluded, since these pertain to fragments of larger estates located outside of the parish boundaries.

and the relatively undeveloped Campine area in Brabant (table D3). In total this yields a sample of 2,416 households, and can be considered to be as representative as possible for the countryside in the Southern Low Countries in general.

Table D3. Economic inequality in the countryside: Flanders & Brabant, 1570-1580.

Province:	N. Villages	Households	Min. Gini	Max. Gini	Mean Gini
Brabant	4	604	0.502	0.548	0.521
West Flanders	7	1,289	0.531	0.658	0.590
East Flanders	4	523	0.516	0.754	0.639
Total	15	2,416			0.625

Sources: Municipal Archives Ghent, *Old Archives Town of Ghent*, series 28 and 28bis (Van Onacker 2014). Data has been gathered by Nick De Pauw, Wouter Ryckbosch, and Eline Van Onacker. The authors wish to express their gratitude to Tim Soens and Erik Thoen for their assistance in working with these sources.

As table D3 illustrates, there was a wide variety of local inequality levels across the countryside, ranging from 0.50 in the relatively uncommercialised Campine where large stretches of common land under cultivation persisted well into the early modern period, to 0.70 in the southern part of Inland Flanders, where highly commercialised smallholders coexisted with large-scale tenant farmers. Combined in a single rural distribution, representative of Flanders and Brabant at large, this results in a (relatively high) overall Gini coefficient of 0.625. In order to be able to compare this to the urban situation, one has to take the underestimation in the urban inequality data into account. Fragmentary data on the size of land holdings suggests a growing degree of rural polarisation in some parts of Flanders during the early modern period. Table D4 shows the distribution of estate sizes (i) according to a reconstruction for 1382 based on extensive confiscation records from the area of Kortrijk, (ii) the *penningkohieren* from of the 1570s for 115 parishes in East Flanders, and (iii) data from an agricultural census from 1895¹⁰ for those same parishes.

Table D4. Distribution of size of landholdings in Eastern Flanders

	1-3 ha	3-5 ha	5-10 ha	10-20 ha	> 20 ha	N
1382	34 %	27 %	25 %	7 %	7 %	734
1570	39 %	20 %	23 %	12 %	6 %	4,974
1895	49 %	20 %	19 %	10 %	3 %	6,984

Sources: New calculations based on Sabbe 1936; Van Den Abbeele 1985; Pée 1969; De Belder & Vanhaute 1993.

Notes: All landholdings smaller than 1 ha (or one *bonnier* in the case of 1382) have been excluded from the analysis for reasons of comparability, since some of the source publications used here deal differently with landholdings smaller than 1 ha. The 1382 figures pertain to the region of Courtrai only, and solely relate to ownership, whereas the other two dates relate to all forms of use (both lease and ownership). Leasehold was still relatively rare during this period (Thoen and Soens 2008).

The number of smallholding exploitations increased markedly between the fourteenth and the nineteenth centuries. This occurred mostly at the expense of exploitations of middling size (3-10 ha), but also at the expense of the very large landholdings (>20 ha). This tendency towards growing inequality is also evident when we look at land *ownership*, rather than land value or size *in use*. Here again we have the confiscation

¹⁰ Published in De Belder & Vanhaute 1993.

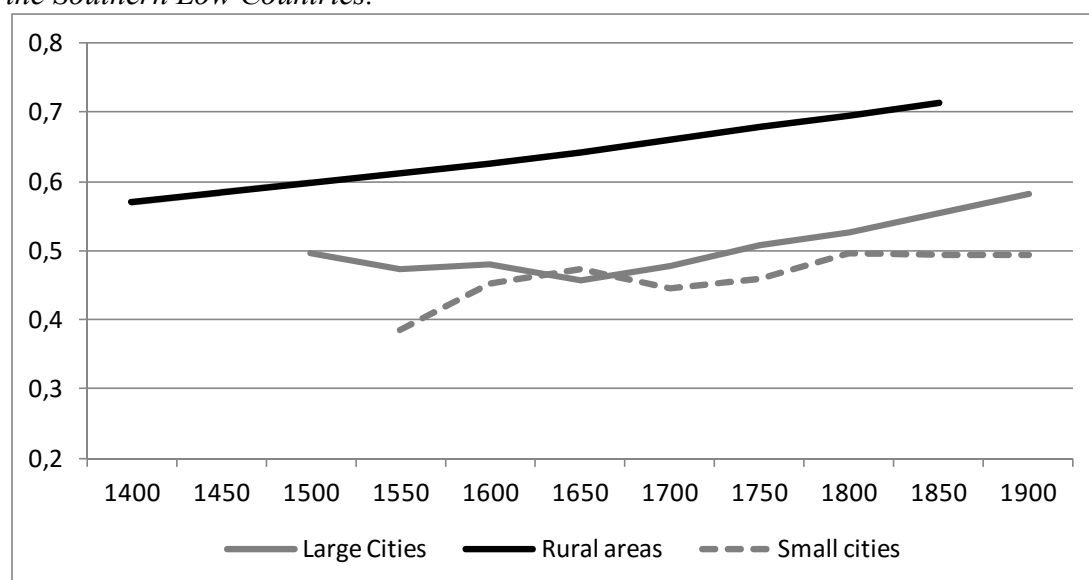
records from 1382 at our disposal, the *penningkohieren* from the 1570s, and a cadastral source from the 1860s (table D5).

Table D5. Gini coefficients of land ownership (in value) in Flanders.

	1383	1570	1860
Region of Kortrijk	0.630	0.692	
Desteldonk		0.589	0.772
Aspelare		0.659	0.652

This table, preliminary and inconclusive as it is, suggests that inequality in land ownership rose in Inland Flanders (the region of Kortrijk) from the 14th to the 16th century. In fact, if we use the changes in inequality of land ownership between 1383 and 1570, and between 1570 and 1860 as a rough indicator, we can guesstimate total rural levels of inequality (figure D7): 0.569 for the last quarter of the 14th century, 0.625 for the last quarter of the 16th century, and 0.713 for the middle of the 19th century. Linear interpolation is used to provide estimates at other dates.

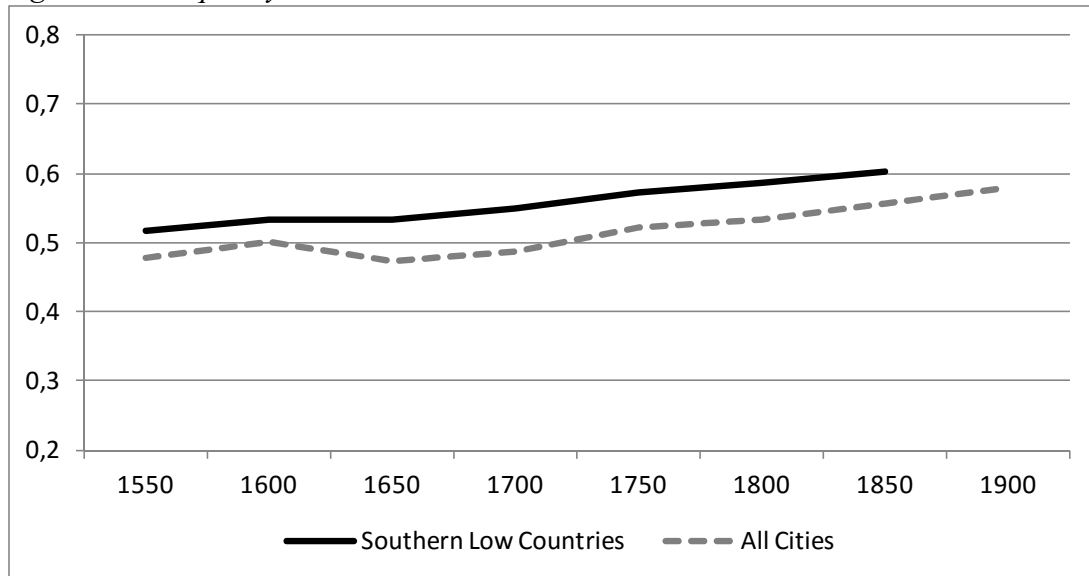
Figure D7. Estimates of inequality in large cities, small cities, and the countryside in the Southern Low Countries.



In a very tentative way, these glimpses throughout the late medieval and early modern period suggest that the rise in inequality experienced by rural communities was probably similar to that in the smaller cities of the region. The lack of detailed information on rural inequality between 1570 and 1800, and the inability to combine the rural distribution with the urban one (because of differences in the sources), prevents us from constructing a reliable regional distribution for the Southern Low Countries. Therefore, for most of the analyses involving the Southern Low Countries presented in this paper we will use only the urban distributions. Nevertheless, in some cases we will use a highly-hypothetical estimated regional series, which assumes (i) that the trends over time in the countryside are correctly represented by the aforementioned guesstimates, and (ii) that in year 1550, the difference in the Gini levels between the urban and regional series is the same as in the case of the Northern Low Countries, that is 0.04. Under these conditions, and taking into account the urbanization rates discussed above, we can weigh the Ginis for urban and rural areas to produce a

regional estimate. This is, however, a much rougher method compared to that used for Piedmont, Tuscany and the urban component of the Southern Low Countries, and it does not actually involve producing representative distributions. Consequently, it constrains the kind of analysis that can be performed (for example it does not allow calculating significant percentiles). Overall, the regional estimate for the Southern Low Countries has to be considered a highly hypothetical guestimate. Figure D8 presents the result, comparing it with the time series representative of all cities in the Southern Low Countries.

Figure D8. Inequality in the Southern Low Countries, 1550-1850



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