# Mattia Fochesato, Francesco Bettarini

A new method of expanding the reconstruction of the occupational structure in Renaissance Florence: A preliminary investigation with insights into the economic impact of political and economic changes

### 1. Introduction

In recent decades, several scholarly contributions from the social sciences, particularly history, have attempted to reconstruct the occupation structures of the regional and urban economies of Western Europe during preindustrial times. Some of these studies have provided overviews and estimates that attempted to determine the trends of occupations among the primary, secondary and tertiary sectors of preindustrial economies (Allen 2000; Malanima20 05; Malanima 2011; Wallis et al. 2018; Chilosi and Ciccarelli 2022). Others have focussed more precisely on urban centres, reconstructing the distribution of the labour force across the main professions, primarily those in the secondary and tertiary sectors (Zucca Micheletto 2013).

With the current paper, we contribute to the literature in this field by analysing the changes that occurred to the occupational structures in Florence from the second half of the fourteenth century until the mid-fifteenth century. We do so by exploring the demographic and economic information reported in the seven fiscal censuses redacted by the government of Florence during this period. These documents, some of which have never been previously analysed in detail, provide information on the occupations of some recorded household heads residing and living in Florence at the time of their realisation. We first explore this information and provide initial insights into the changes in the distribution of occupations in Florence among those who declared them during the fourteenth-fifteenth centuries. We do so by using the taxonomy for occupations in preindustrial times proposed by Whittle and Hailwood (2020), which follows the criterion of identifying a profession through the description of the main activity performed. Next, we explore a possible method of integrating this information and inferring the professions of some household heads who did not declare their occupations. In particular, by systematically analysing the demographic information of the households living in four of the sixteen neighbourhoods of Florence, one from each quarter of the city (the gonfalone della Scala, gonfalone Chiavi, gonfalone del Leon Nero and gonfalone della Vipera) recorded in the Catasto, the fiscal cadastre of 1427, we demonstrate how the additional information contained in the fiscal censuses might provide a valuable basis for extending the information on the occupational structure at that time. We anticipate that future analyses will extend this method to all the neighbourhoods included in the 1427 Catasto and the other fiscal censuses that constitute our dataset.

Mattia Fochesato, Bocconi University, Italy, mattia.fochesato@unibocconi.it, 0000-0002-9915-4696 Francesco Bettarini, University for Foreigners of Siena, Italy, frbetta@gmail.com, 0000-0002-1071-1709

Referee List (DOI 10.36253/fup\_referee\_list)

FUP Best Practice in Scholarly Publishing (DOI 10.36253/fup\_best\_practice)

Mattia Fochesato, Francesco Bettarini, A new method of expanding the reconstruction of the occupational structure in Renaissance Florence: A preliminary investigation with insights into the economic impact of political and economic changes, © Author(s), CC BY 4.0, DOI 10.36253/979-12-215-0667-9.22, in Angela Orlandi (edited by), La mobilità sociale nelle società preindustriali: tendenze, cause ed effetti (secc. XIII-XVIII) / Social mobility in pre-industrial societies: tendencies, causes and effects (13th-18th centuries), pp. 461-475, 2025, published by Firenze University Press, ISBN 979-12-215-0667-9, DOI 10.36253/979-12-215-0667-9

The remainder of the paper is structured as follows. Section 2 provides a brief overview of the demographic, economic and political changes that occurred in Florence after the Black Death in 1348 until the mid-fifteenth century. In Section 3, we describe the sources used for the analysis. Section 4 provides the preliminary descriptive results on the occupational structure of the subset of household heads who declared their occupations. Section 5 presents an example of the method used to integrate the declared information for four neighbourhoods of Florence in 1427. Finally, Section 6 provides some preliminary conclusions to the work.

# 2. Economic and occupational changes in Florence in the fourteenth-fifteenth centuries

The city of Florence, which emerged during the 12th-mid-fourteenth centuries as one of the liveliest, most vibrant demographic and economic urban centres of North and Central Italy (Fiumi 1958; de la Ronciere 1976), entered into a period of dramatic change during the second half of the fourteenth century. This phase of transformation, which lasted for at least one century, involved the city's demographic, economic and political structures (Cherubini 1974; Hay 1977; Caferro 2011).

The Black Death, a plague epidemic that hit most of the Western European regions during the years 1348-52, also affected the urban and rural areas of Florence. In particular, the urban centre experienced an estimated population reduction of 40%-60% of the preplague population (Goldthwaite 1982; Herlihy and Klapisch-Zuber 1985). During the subsequent decades, the city was recurrently hit by several waves of new plagues, at least four times before the end of the fourteenth century and eight times between 1400 and 1458, the year of the last census analysed in the present work (Cohn 2010; Morrison et al. 1985). The recurrence of these plague epidemics and other diseases and famines halted the population's ability to recover. From an urban population that ranged between 90,000 and 120,000 inhabitants before 1348, at the time of the 1457 fiscal census, Florence was likely the size of 41,500 inhabitants, a number not so far from the population figures of the years that immediately followed the Black Death (Herlihy and Klapisch-Zuber 1985).

The economic performance of the city's leading productive and service sectors was also hit by the transformation resulting from the dramatic demographic collapse of the second half of the fourteenth century. On the one hand, the supply of the urban manufacturing labour force dramatically decreased, a condition that induced a short-term improvement in the economic conditions attained by the surviving workers (Cohn 2021). On the other hand, the entrepreneurial side of the leading economic sectors entered a phase of transformation. During the century before the Black Death, high-quality wool clothes, particularly those produced in Florence, spread throughout the main markets and fairs of the Mediterranean basin and Western Europe.

After the mid-fourteenth century, two macroeconomic changes caused a crisis for this sector. First, the increased income per capita enjoyed by the middle and upper classes in Western Europe, consequent to population reduction, changed the consumption patterns and shifted the demand of these socioeconomic groups towards

higher-quality products, such as silk (Franceschi and Molá 2006; Franceschi 2019). Second, the emergence of competitors in wool clothes production, especially those from northern Europe specialising in the manufacture of lower quality products than Florentine ones, reduced the market shares of Florentine entrepreneurs (Hoshino 1980; Franceschi 1993). The Florentine manufacturing sector naturally reacted to the decline of wool, resulting in several entrepreneurs and investors entering the newly rising silk production. This transformation, which occurred in the first half of the fifteenth century, changed the demand for labour, which should have now been more qualified than the one employed in wool production. The market-driven change in labour qualification also interacted with an overall decline in the workers' economic conditions, which began in the second quarter of the fifteenth century (Tognetti 1995; Cohn 2021).

The political changes that occurred during the period – especially those that shaped the economic transformations in the same decades to some extent - were also considerable, marking the beginning of a long decline in the Florentine Republic's institutions. The first significant change was the short-lived but dramatic government of wage workers in the wool sector, the so-called Ciompi, which ruled Florence after their revolt in the summer of 1378. Notably, this short-lived government failed in its initiatives, most of which aimed at reforming political and fiscal institutions in favour of the less well-off. However, their short rule had a crucial impact on the city's subsequent political trajectory. After the fall of the Ciompi at the end of August 1378, the Florentine political system reorganised itself around the restored power of the major guilds of the city, now animated by the influential role played by one of the wealthiest Florentine clans, the Albizzi (Najemy 1982). The new oligarchic system, which coopted most of the political representatives from the families affiliated with the Albizzi, lasted until the 1430s, when a new network of economically rising clans emerged, now centred on the rapidly growing economic and political influence of the Medici (Kent 1978). Their government, which emerged through the sophisticated control of the Republican institutions of Florence implemented by the head of the family, Cosimo (1389-1464), lasted until the end of the fifteenth century when new dramatic changes accelerated the process of decline of the Florentine Republic (Rubinstein 1997).

In summary, a brief overview of the demographic, economic and political changes that occurred in Florence between the mid-fourteenth century and 1458, the date of the last census in our analysis, shows that several changes occurred to the city's socioeconomic structure. The considerable impact of these changes on the supply and demand of labour in the city motivated our investigation of the changes in the occupational structure in the period. We specifically analysed these changes from the information reported in a selected set of fiscal censuses of the city.

## 3. The sources of the reconstruction of the Florentine occupational structure

At the beginning of its communal history, the fiscal system of the city of Florence was based on the fodro, a direct tax implemented in previous centuries, which was derived from the impositions made by the feudal lords in rural areas. During the second half of the thirteenth century, the Commune introduced taxation mechanisms that considered the different payment capacities of individual households. These mechanisms implied the redaction of an estimo, an assessment reporting a fiscal index for each household proportionate to its wealth and relative to the wealth of the other households, assessed by the tax officials of the city (Ciappelli 2009, 15-17). Since the first half of the fourteenth century, Florence used these fiscal indexes to collect a new form of fiscal revenues, the so-called prestanze. The city requested these sums in the form of forced loans, which entitled its citizens to receive interest rate payments and the restitution of the sum lent to the polity. Later in the century, the unrepaid debts of the city were consolidated in public debt when the number of resources requested by the city increased and Florence proved unable to repay the forced loans collected; from then on, the newly imposed prestanze would have only entitled the creditorcitizen to receive the payment of the interest rate (Becker 1967, 156).

The distribution of the *prestanze* among the taxpayers was not made by census, but by the so-called *metodo induttivo*, which was made by the officials based on the assessed relative wealth among the households and reported in the *estimo*. For our analyses, we documented the distribution of occupations in Florence by selecting five series of documents reporting information about the repartition of forced loans. The first one is a new *estimo*, also called *Libro della Sega*, ordered by the Florentine government on June 3<sup>rd</sup> 1352. The document reported the following information for each household head: names and surnames, place of origin and, in some cases, the profession. This system included all the households residing in the city, 'cives et habitatores'. At the same time, those who were considered unable to pay taxes (*impotenti ad solvendum et mutuandum prestantias*) and the *miserabili* (miserables) were recorded in a separate list that was also included in the document. This source, used to impose the *prestanze*, represents an almost unique, near-to-complete description of the Florentine population for the period.

The second source is the new *estimo* ordered by the city in 1363. The assessment was used to repartition the *prestanze* collected in 1363 and 1364. A third source is the *estimo* redacted in 1379 and was used to collect four *prestanze* during the same year. We also included, among our sources, the assessment made in 1395, called the *Accatto* 1395. This document recorded all the citizens, including the *miserabili*, on a separate list and presented several characteristics that distinguished it from the previous records. For example, the *Accatto* was written in Italian rather than in Latin; it distinguished three classes of citizens based on the tax imposition, namely *maggiori* (major), *minori* (minor) and *miserabili*; and it differentiated the inhabitants of the city from those possessing the formal qualification of citizens. The final source among the records

used to collect the *prestanze* is the list redacted in 1403 for collecting forced loans in the same year.

In 1427, the town adopted a new assessment system of household wealth, based on which it imposed a new method of fiscal burden repartition. The system, called the *Catasto*, consisted of the redaction of a wealth assessment based on self-declarations made by each household residing in Florence's city and *contado* (the countryside). The self-declaration should report the values of the household head's assets, including credits, debts, shares of public debts and investments (Conti 1984; Herlihy and Klapisch-Zuber 1985). The sums of the wealth declared were then used as the basis for computing the amount due by the taxpayer obtained through the same coefficient imposed on all households (Molho 1971). Therefore, each declaration reported an unprecedentedly large amount of demographic and socioeconomic information. The demographic information included the names, ages and gender of all the household members, while the socioeconomic information included the *gonfalone* of residence, the household head's occupation and the complete list and values of his/her possessions, except for the house of residence.

The first redaction of the *Catasto* was completed in 1427, after which subsequent updates and new assessments were made in 1434, 1442 and 1457/58 (Conti 1984, 124; Ciappelli 2009, 84-87). Our analyses included two documents: the *Catasto* of 1427 and that of 1457/58. The *Catasto* of 1427 included three series of data: the *Portate*, the self-declarations for every *gonfalone*; the *Campioni*, the official transcription of the declarations in a standard layout with the examination of the fiscal assets, the *valsente* and the fiscal coefficient; and the *Repertori*, a summary list of household heads with their fiscal coefficients. We used the information reported in the *Campioni*. The *Catasto* of 1457/58 included two copies of self-declarations, reporting the officials' notes for the estimation of *valsente* and the tax coefficients. The information reported for each household was the same as that reported in the *Catasto* of 1427 (Conti 1984).

Table 1 summarises the availability of information on the occupations of the household heads during the period under analysis. As shown in the table, the percentages of declarations reporting information on the profession of the household heads changed over time, varying from low shares in 1363-1364 and 1458 to nearly half of the set of declarations in 1352, 1395 and 1403, with a peak of over 60% coverage in 1378.

Before proceeding with the preliminary analysis, we must acknowledge at least three intrinsic limitations of our sources, which inevitably reduce the potential for generalising our findings regarding the occupational structure in Florence.

First, the historical sources we analyse do not allow us to capture the nuanced labour conditions of the declarants who may have performed two or even more professions but declared only one of them. This limitation implies that all the evidence presented here concerns only the profession *declared* by the household head; it does not capture the multiple professions that the household heads might have performed in their working time. A second shortcoming of the fiscal sources analysed here is that they underreport females' occupations. The declarant household heads were

usually males, and in the few cases in which a female was the household head – usually a widow of a deceased male household head – her occupation was not reported. The only case in which it was reported was when she was employed in a care job. Therefore, future analyses of the late mediaeval and renaissance occupational structures throughout the urban centres of Western Europe should ideally consult different sources (e.g. records of labour litigation) to uncover the historical patterns of women's labour, which were almost totally neglected by the institutional sources analysed here. A third and final limitation concerns the underrepresentation of the professions typically performed within the house by other household members, such as females and young daughters and sons. Of these, the activities related to food processing were among those performed more frequently in the house. Our fiscal data do not include such information, and this limitation will likely result in the category being underrepresented in our analyses.

Notwithstanding such limitations, the massive and consistent fiscal data for Florence in the fourteenth and fifteenth centuries constitute a *unicum* that deserves further investigation. Although preliminary and partial, the results might still enhance the understanding of the occupational structure in the urban centre of Western Europe during the late Middle Ages.

Tab. 1. Summary of the sources for the Florentine demography and occupational
structures

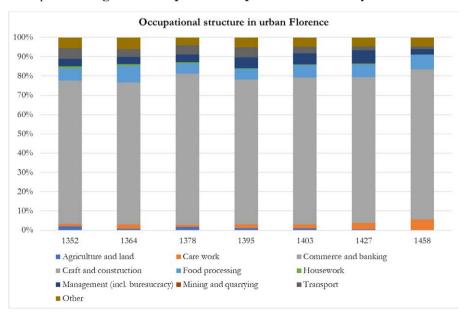
Name of the document	Year of redac- tion	Number of house- holds recorded	Numbers and percent- ages of households with reported occupa- tion
Libro della Sega	1352	10,145	4,221 (42%)
Prestanze	1363-64	8,393	2,097 (25%)
Estimo	1378	10,302	6,606 (64%)
Accatto	1395	11,660	5,670 (49%)
Prestanze	1403	7,530	3,173 (42%)
Catasto	1427	9,780	3,767 (39%)
Catasto	1457/58	7,718	1,930 (25%)

# 4. Preliminary evidence on the Florentine occupational structure

In this section, we provide a preliminary analysis of the occupational structure in urban Florence between 1352 and 1457 by looking at the household heads who declared their occupations in the registers analysed. Initially, we grouped the heterogeneous professions into ten categories, which we adopted from a recent contribution that analysed the distribution of urban professions in five counties of southwestern England between 1500 and 1700 (Whittle and Hailwood 2020). The categories, which were constructed following the information on the tasks reported by the analysed

historical sources, included workers who lived in the city but worked in jobs related to the rural areas (Agriculture and Land); those who provided care services, such as barbers (Care Work); all the workers employed in the trade and private credit sectors (Commerce and Banking), an overarching category encompassing all the manufacturing professions, including also the building sector (Crafts and Construction); the workers who performed jobs in the food production sectors, such as bakers and butchers (Food Processing); the house helpers (Housework); those who managed several decision processes, including the bureaucrats (Management); those in the mining sectors (Mining and Quarrying); those who provided transportation services (Transport); and a final residual category (Other), which in our case included other professions, such as artists.

The distributions of workers across categories and their changes over time show relevant insights (Graph 1). As expected, the largest share of those with declared occupations were employed in the crafts and construction sectors, with percentages ranging between 62% and 70%. Similarly, another category that maintained a constant trend throughout the century was that of merchants and bankers (*Commerce and Banking*), whose percentages ranged between 7% and 11% through the century. Interestingly, among the minor categories of jobs, a slight increase can be observed in the share of declarants employed in care work (from 1% in 1352 to 5% in 1458) and of those employed in the management and bureaucracy sectors (from 4% in 1352 to 7% in 1427, decreasing to 3% in 1458).



Graph 1. Changes in the reported occupational structure by macrosectors

A deeper investigation into the most significant occupational category among the ones declared by the Florentine taxpayers, Crafts and Construction, reveals additional insights into the distribution of jobs in Florence. Within the overarching manufacturing category, we identified six subgroups, each capturing the main productive sectors of late mediaeval and renaissance Florence. The groups included all the workers in the wool sector (Wool), those employed in silk production (Silk) and the ones employed in any other area of textile manufacturing (Other textile), including the shoemakers. We grouped all sector workers in each of the three groups, regardless of their hierarchical position or qualification. A fourth group included all the workers in the building sector (Building sector), whom we categorised to distinguish them from the other more proper artisans and manufacturers. A final category included workers in any manufacturing activity involving metals, such as smiths and goldsmiths, and those who produced swords and other weapons (Metal manufacturers). Meanwhile, a final residual category group consisted of other types of work for which we could not identify a substantially large stand-alone group (Other manufacturing). This group included, for example, glassmakers, whose number was relatively small in the fiscal records under analysis.

The evidence shows additional insights into the changes in the distribution of occupation among those employed in the manufacturing and building sector, who declared their professions between the 1350s and 1450s (Graph 2). The trends revealed that, among those employed in textile production, the share of workers in the wool sector first increased in the last quarter of the fourteenth century and then declined since the beginning of the fifteenth century. The observed increase corresponded to when wool workers, especially those at the bottom of the production process, acquired civic and political recognition (Brucker 1962). Improving their condition might have attracted workers to this sector, as well as pushed a more significant fraction of them to declare their profession to acquire recognition on the political scene. Their share then declined at the beginning of the fifteenth century, confirming the Florentine wool sector's downturn (Dini 1984; Franceschi 1993).

Interestingly, the share of workers employed in the other textile manufacturing sectors was somehow inverse to that of the wool labour force. In particular, the share of workers employed in the other minor textiles decreased during the last three decades of the fourteenth century, but increased since the beginning of the fifteenth century. These trends suggest that the rise and decline of jobs in the wool sector might have taken from or liberated the labour force for other minor textile productions. Similarly, the evidence shows that the silk sector might have substituted wool not only as a target of Florentine entrepreneurs' investments but also as an employment opportunity. From a tiny share of declarants employed in the small silk sector of the fourteenth century (2%), we observe an increase during the first half of the fifteenth century, with the share of manufacturing workers employed in the silk sector reaching 10%-11% in 1427-1458, thereby confirming the increased importance of silk production in Florence during the fifteenth century (Tognetti 2002). Finally, the building sector also shows an increasing share of the labour force during the

fifteenth century, thus confirming the increasing importance of construction works in the Tuscan city during the period (Goldthwaite 1982).

Distribution of occupations within the crafts and construction sector 100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% 1352 1364 1378 1395 1403 1427 1458 ■ Wool ■ Silk Other manufacturing ■ Other textile Metal manufacturers ■ Building sector

Graph 2. Changes in the reported occupational structure within the manufacturing sector

In summary, the preliminary descriptive analyses presented in this section reveal at least two exciting insights into the occupational distribution of those who declared their professions in the fiscal records in Florence between the 1350s and 1450s. First, the most significant part of this segment of the Florentine labour force was continuously employed in the manufacturing and building sectors, a tendency that remained the same despite the ever-changing demographic, economic and political events that occurred during the century under analysis. Second, deeper investigations into the building and manufacturing sectors reveal variations in the share of the labour force, which, in turn, are associated with economic and political changes.

# 5. An example of the integration of occupation-related information

During the period under analysis, household heads who had to declare their economic status were not obliged to report their profession. For this reason, our sources inform us about the occupation only for a portion of taxpayers. In particular, those who were more willing to declare their profession were citizens who wanted to leverage that declaration to identify themselves and acquire or increase their social, civic and political recognition. Such behaviour represents an additional bias in our dataset because those with an already identifiable surname, which allowed them to be recognised based on their family's aristocratic or high socioeconomic status, did not usually need to declare their occupation, and they might have more likely failed to do that. At the same time, the presence of a surname, combined with additional information provided by some of the sources used in this study, might be used to integrate

information on the occupations of the taxpayers. This is the case of the 1427 *Catasto*, in which the combination of the information about surnames, the attributes sometimes added to names and the information on the business partnerships often reported in the records can be matched to reconstruct a sizeable number of occupations for the taxpayers.

We illustrate the procedures used to integrate this information for four of the sixteen neighbourhoods of Florence, one from each quarter: the *gonfalone Scala* (the 'ladder') from the quarter of *Santo Spirito*, the *gonfalone Chiavi* ('keys') from the quarter of *Sant Giovanni*, the *gonfalone Vipera* ('viper') from the quarter of *Santa Maria Novella*, and the *gonfalone del Leone Nero* ('black lion') from the quarter of *Santa Croce*. Each neighbourhood is a good sample of the quarters they were part of. For example, the *gonfalone Scala* included both rich residential areas of the time (*via de'Bardi, Piazza dei Mozzi*) and areas inhabited by poorer economic groups (*San Niccolò, Costa San Giorgio*). As shown in Table 2, from a total of 2,118 households recorded in the 1427 *Catasto* for the four *gonfaloni*, in *Scala*, 38% (821) reported the occupation of the declarant. Notably, the proportion of household heads in the four *gonfaloni* with an identified profession is very close to that in the whole 1427 *Catasto* (Table 1), making the neighbourhoods a good case to start our investigation.

We implemented two separate methods to infer the occupation from additional information included in the tax declarations or from that provided by other declarants from the same *Catasto*. First, we investigated the information on the business partnerships as reported within the household heads' tax declarations. It was possible, in fact, that while certain taxpayers did not declare their professions, they might have nonetheless appeared as business partners in a joint venture with other tax declarants. In several cases, we cross-validated this information, adding it to those who had not declared their occupation. For example, Bardo di Francesco de' Bardi, residing in the *gonfalone Scala*, declared that he had no occupation, but we were able to identify him as the main shareholder in a company that produced and traded silk. Second, we used honorary titles, which were typically added to the name and unequivocally identified a profession, such as the use of 'ser' before the first name to indicate a notary.

Using the two methods above allowed us to reconstruct information on the occupations of 193 household heads without declared occupations in the four *gonfaloni*. This number represents 9% of the declarations without reported occupation, thus allowing us to increase the percentage of household heads with known occupation from 38% to 47% of the total number of declarants in the four neighbourhoods (Table 2).

<sup>&</sup>lt;sup>1</sup> This work was made possible by analysing all the economic activities reported in the 1427 *Catasto*. Dr. Bettarini completed the analysis during a project on the Florentine society that was funded and supervised by Prof. John Padgett, Chicago University.

Tab. 2. Summary of the declared and reconstructed occupations in the four se-					
lected <i>gonfaloni</i>					

Gonfalone (quarter)	Number of de- clarants households	Number of de- clarants with re- ported occupation	Number of re- constructed occupations	Total number of occupations (declared and reconstructed)	
<i>Scala</i> (Santo Spirito)	537	195 (36%)	66 (12%)	261 (49%)	
<i>Chiavi</i> (San Gio- vanni)	944	439 (47%)	51 (5%)	490 (53%)	
Leone Nero (Santa Croce)	423	124 (29%)	54 (13%)	178 (43%)	
Vipera (Santa Maria Novella)	214	40 (19%)	22 (10%)	62 (30%)	
Total	2118	798 (38%)	193 (9%)	991 (47%)	

Note: The numbers in parentheses are the percentages of the number of declarant households.

Upon analysing the distribution of the occupations reconstructed through our method, we observe at least two important results (Table 3).

First, the distribution of the occupations among the households who did not provide the information to the officials redacting the *Catasto* did not follow the same distribution of those who declared it. In particular, a large fraction of the reconstructed occupation fell within three main categories: Commerce and Banking (40.9%), Crafts and Construction (27.5%) and Management and Bureaucracy (18.1%). Two of these categories, Commerce and Banking and Management and Bureaucracy, were a minority of the occupations declared in the *Catasto* of the four sampled neighbourhoods, representing 6.3% and 10.0% of their totals, respectively. Therefore, our method provides a way to reconstruct the actual extent of the diffusion of the professional categories that are less represented in the *Catasto*.

This result, in turn, suggests a second important implication of the analysis: the integration of the declared information on occupation with the details derived from other information contained in the same historical sources is a promising method to expand and decisively change, in future analyses, prevailing knowledge about the Florentine occupational structure. In fact, aside from adding more cases to the set of households with a known occupation, our analysis also seems to be able to significantly change the perspective of the distribution of professions. For example, among the four sampled neighbourhoods, an analysis of the percentages of household heads employed in the Commerce and Banking and Crafts and Construction categories, based on the sole declared occupations, would return a possibly imprecise assessment of the two percentages. After adding the reconstructed occupations, the results showed that while the fraction of those employed in Crafts and Construction

dropped by over 8% (from 67.8% to 59.5%), the fraction of those employed in Commerce and Banking more than doubled (from 6.3% to 13.4%).

Tab. 3. List of reconstructed professions by macrosectors in the four selected *gonfaloni* in 1427

Macrosector	Scala	Chiavi	Vipera	Leone Nero	Sum of the 4 gonfaloni	Percentage among the re- constructed occupations in the four gonfaloni	Percentage among the de- clared profes- sions in the Catasto of the four gonfaloni	Percentage among the de- clared and re- constructed occupations in the four gonfa- loni
Agriculture and Land	0	0	0	0	0	0.0%	0.4%	0.4%
Care Work	1	0	0	0	1	0.5%	4.1%	3.2%
Commerce and Banking	24	15	15	25	79	40.9%	6.3%	13.4%
Craft and Construction	28	14	0	11	53	27.5%	67.8%	59.5%
Food Pro- cessing	0	4	0	4	8	4.1%	7.9%	6.7%
Housework	0	0	0	0	0	0.0%	1.0%	0.7%
Management and Bureau- cracy	10	18	7	0	35	18.1%	10.0%	13.7%
Mining	0	0	0	13	13	6.7%	0.0%	0.0%
Transport	0	0	0	1	1	0.5%	0.8%	0.6%
Other	3	0	0	0	3	1.6%	1.8%	1.8%
Sum	66	51	22	54	193	100%	100%	100%

#### 6. Conclusion

In this study, we conducted a preliminary investigation on the information about the occupations reported by a share of the Florentine taxpaying population in seven archival sources dating from 1352 up to 1458. To the best of our knowledge, information on the Florentine occupational structure, which can be derived from these fiscal sources, has never been systematically presented and analysed. Thus, for the first time, we demonstrate that even relying only on the group of taxpayers who declared their information might reveal important insights about the structure and trends of the labour force distribution across jobs in late mediaeval and renaissance Florence. In particular, over half of the labour force was consistently employed in the crafts and construction sectors throughout the century under analysis. Further investigation within this category showed that the distribution of manufacturing labourers followed the economic trends of the main productive sectors of the city. For example, the decline of the wool sector since the beginning of the fifteenth century

and the almost simultaneous rise of the silk sector were, in fact, associated with a decline and rise of the labour force within these sectors.

Finally, some of the additional information included in these fiscal sources can provide details regarding the occupations of those who did not declare them. In particular, a preliminary integration conducted on four of the sixteen neighbourhoods has allowed us to increase the percentage of declarants with a plausible occupation from 38% to 47%. In addition, we have shown that, using only data on the declared occupations, the proposed method can expand current knowledge about sections of the occupational structures that are likely underrepresented in analyses. We have also provided evidence of how the distribution of professions changes once the reconstructed occupations are considered. We suggest that further developments of this method will extend the reconstruction of the occupational structure to all other neighbourhoods in Florence in 1427, thus providing a more accurate picture of the distribution of professions across the urban male population of the time.

#### **BIBLIOGRAPHY**

ARCHIVAL SOURCES

#### Archivio di Stato di Firenze

Estimo, 306: "Libro della Sega", Estimo, anno 1352

Prestanze, Regg. 116-119: Prestanza, anno 1364, mese agosto

Prestanze, Regg. 366-369: Estimo, anni 1378

Miscellanea Republicana, 60: Lira, anno 1395

Prestanze, Regg. 1989-1995: Prestanze, anno 1403

Catasto, Regg. 64-81: Campioni del Catasto della città, anno 1427

#### SECONDARY SOURCES

Allen, Robert C. 2000. "Economic structure and agricultural productivity in Europe, 1300-1800." European Review of Economic History 4, 1: 1-25.

Becker, Marvin. 1967. Florence in transition, volume II. Baltimore: Johns Hopkins University Press.

Brucker, Gene A. 1962. Florentine politics and society, 1343-1378. Princeton: Princeton University Press.

Caferro, William. 2011. Contesting the Renaissance. Hoboken (NJ): Wiley-Blackwell.

Cherubini, Giovanni. 1974. "La 'crisi del Trecento'. Bilancio e prospettive di ricerca." *Studi Storici*. 15: 660-70.

Chilosi, David, and Carlo Ciccarelli. 2022. "Evolving gaps: occupational structure in southern and northern Italy, 1400-1861." *The Economic History Review* 75, 4: 1349-78.

- Ciappelli, Giovanni. 2009. Fisco e società a Firenze nel rinascimento. Roma: Istituto nazionale di Studi sul Rinascimento.
- Cohn, Samuel K. 2010. The Black Death transformed: disease and culture in Early Renaissance Europe. London, Bloomsbury Academic.
- Cohn, Samuel K. 2021. *Paradoxes of inequality in Renaissance Italy*. Elements in the Renaissance. Cambridge, Cambridge University Press.
- Conti, Elio. 1984. *L'imposta diretta a Firenze nel quattrocento (1427-1494)*. Roma: Istituto storico italiano per il Medio Evo.
- Dini, Bruno. 1984. "I lavoratori dell'Arte della Lana a Firenze nel XIV e XV secolo." In *Artigiani e salariati: Il mondo del lavoro nell'Italia dei secoli XII-XV*, Pistoia, Centro Italiano di Studi di Storia e d'Arte, 27-68. Roma: Viella Editrice.
- de La Roncière, Charles Marie. 1976. Florence, centre économique régional au XIVe siécle.
- Fiumi, Enrico. 1958. "Fioritura e decadenza dell'economia fiorentina." *Archivio Storico Italiano* 116: 465-66.
- Franceschi, Franco. 1993. Oltre il "Tumulto": i lavoratori fiorentini dell'Arte della lana fra Tre e Quattrocento. Firenze: Olschki.
- Franceschi, Franco. 2019. "Big business for firms and states: silk manufacturing in Renaissance Italy." *Business History Review* 94, 1: 95-123.
- Franceschi, Franco, and Luca Molá. 2006. "L'economia del Rinascimento: dalle teorie della crisi alla 'preistoria del consumismo." In *Il Rinascimento Italiano e l'Europa. I, Storia e storiografia*, 185-200. Costabissara (Vicenza): Angelo Colla Editore.
- Goldthwaite, Richard A., 1982. The building of Renaissance Florence. An Economic and Social History. Baltimore: Johns Hopkins University Press.
- Hay, Denys, 1977. *The Italian Renaissance in historical background*. Cambridge: Cambridge University Press.
- Herlihy, David, and Christiane Klapisch-Zuber. 1985. *Tuscans and their families. A study of the Florentine Catasto of 1427*. New Haven: Yale University Press.
- Hoshino, Hidetoshi. 1980. L'arte della Lana in Firenze nel Basso Medioevo. Il commercio della lana e il mercato dei panni fiorentini nei secoli XIII-XV. Firenze: Olschki.
- Kent, Dale V. 1978. *The rise of the Medici: faction in Florence, 1426-1434*. Oxford: Oxford University Press.
- Malanima, Paolo. 2005. "Urbanisation and the Italian economy during the last millennium." *European Review of Economic History* 9: 97-122.
- Malanima, Paolo. 2011. "The long decline of a leading economy: GDP in central and northern Italy, 1300-1913." *European Review of Economic History* 15, 2: 169-219.
- Molho, Anthony. 1971. Florentine public finance in the early renaissance (1400-1433). Cambridge: Harvard University Press.
- Najemy, John M. 1982. *Corporatism and consensus in Florentine electoral politics, 1280-1400.*Chapel Hill: The University of North Carolina Press.
- Morrison, Alan, Julius Kirshner, and Anthony Molho. 1985. "Epidemics in Renaissance Florence." *American Journal of Public Health* 75, 5: 528-35.

- Rubinstein, Nicolai. 1997. The government of Florence under the Medici (1434-1494). Oxford: Clarendon Press.
- Tognetti, Sergio, 1995. "Prezzi e salari nella Firenze tardomedioevale: un profilo." Archivio Storico Italiano 153, 2: 263-333.
- Tognetti, Sergio. 2002. Un'industria di lusso al servizio del grande commercio: il mercato dei drappi serici e della seta nella Firenze del Quattrocento. Firenze: Olschki.
- Wallis, Patrick, Justin Colson, and David Chilosi. 2018 "Structural change and economic growth in the British economy before the industrial revolution." *The Journal of Economic History* 78, 3: 862-903.
- Whittle, Jane, and Mark Hailwood. 2020. "The gender division of labour in early modern England." *The Economic History Review* 73, 1: 3-32.
- Zucca Micheletto, Beatrice. 2013. "Reconsidering women's labor force participation rates in eighteenth-century Turin." *Feminist Economics* 19, 4: 200-23.