Wealth Accumulation and Institutional Capture: the Rise of the Medici and the Fall of the Florentine Republic*

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Abstract

We study the rise of the Medici family and the fall of the Florentine Republic in the 15th century. In this period, political offices were assigned by a system which combined elections and selection by lot. During the 1420s, the Medici family increased its influence and de facto captured the system of office allocation while leaving the political institutions formally unchanged. We use data on the results of the drawings for the four main government offices of the city between 1395 and 1457 and match them with data on individual wealth at different points in time in the 15th century. Our analysis documents the systematic capture of system allocation of political offices favoring individuals from Medici's network. When we move to the analysis of the relationship between wealth and political office holders, we show that after the Medici's institutional soft-capture, holding a political office is strongly and directly associated with individual wealth accumulation, especially for office holders from the Medici's faction. By contrast, we find a very limited effect between the number of terms in office and individual wealth before the rise of the Medici to political power. By comparing results for the two periods, before and after the institutional capture, and using complementary data sources, we provide several pieces of evidence that explain our findings in terms of collusion and rent extraction.

Keywords: Wealth, Politics, Institutional Capture, Selection of Politicians, Political Institutions.

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1 Introduction

In the late Middle Ages, for a couple of centuries, Italian city-states represented a pioneering example of inclusive institutions in the pre-Modern world. In opposition to feudal rule, where the political power was managed in the absence of constraints and balances, these cities of merchants and entrepreneurs established constitutional limitations of power and political institutions that aimed at granting representativity and at limiting the possibilities to extract rents from the exercise of politics (Guidi, 1981; De Rosa, 1992).

The Republic of Florence constitutes a prominent example of this institutional setting. During the period between the second half of the 14th century and the end of the 15th century, the access to the government of the city was regulated by a system that mixed representativity and selection by lot. In this system, called *Tratte*, a pool of people eligible to access the government offices was selected by election (*squittino*) guaranteeing that all the city neighborhoods and guilds were represented. This pool of people did not have any legislative, judiciary, or executive power: being elected just granted the possibility (provided that some compatibility checks were satisfied) of having one's own name inserted in certain bags (*imborsazione*) and participating in the lottery (*tratta*) that allocated the holders of the main political offices of the city, forming the *Signoria*. The system was clearly oligarchic, as the pool of citizens eligible for offices in the bags was a limited part of the society, selected by the existing elites. However, its design, based on the short-term office tenure and the sortition of government seats, had the primary objective to limit the concentration of political power in the hands of few families (Brucker, 1962, p.70). In addition, the renewal of the bags through the 5-years elections did relatively opened and extended political participation in 14th-15th century Florence (Molho, 1968; Kent, 1975; Padgett, 2010).

The *Tratte* system guaranteed a substantial alternation of power in the government of Florence for about 100 years. Then, a new player emerged into the scene: the Medici family. At the end of the 14th century, this family of bankers rapidly accumulated an enormous wealth, gained growing political power and, starting from 1434 (the year in which Cosimo was back from the exile), consolidated its position in the government of the city (Kent, 1978, Rubinstein, 1966, Padgett and Ansell, 1993). The influence wielded by this family was such that even nowadays when we think about the Florence in the Renaissance and its political rulers, we think of Cosimo and Lorenzo de' Medici (the Magnificent). However, neither Cosimo nor Lorenzo held lasting political offices (Padgett and Ansell, 1993). Under their government, while the political institutions remained almost unchanged *de jure*, the Medici succeeded to control it *de facto* by means of soft-power. The

institutional capture established by the members of the family was made possible by two main factors. First, Cosimo, who consolidated the family's power, used his personal wealth to finance the city's public debt that was growing out of control after two wars in the 1420s (De Roover, 1966, Molho, 1971). Second, Cosimo built a social network machine around him through which he and his successors were able to distribute rents and maintain consent (Padgett and Ansell, 1993).

This historical pattern in which the institutional capture took place is not uncommon in history (see for example the history of Venice, Puga and Trefler (2014)). Several scholars have pointed out the critical relationship between individual wealth concentration and the health of political institutions (e.g., Acemoglu et al., 2015; Glaeser et al., 2003), but we still have little knowledge of how institutional capture develops and about the consequences of the capture on political office holders' wealth. In this paper, we revisit the history of Florence along the 15th century and use its emblematic experience to delve into the link between politics, wealth, and institutional capture.

Our analysis takes advantage of a unique dataset built from both bibliographic and original archival sources. The dataset merges measures of Florentine households' wealth in different points in time with information on individual participation in the political offices of the Republic between the 14th and the 15th centuries. Specifically, we use the data from a wealth assessment (*Catasto*) ordered by the Florentine Republic in 1427 (Herlihy and Klapisch-Zuber, 1985). This assessment had the goal to determine the fiscal contribution of each Florentine citizen and reports the households' values of movable and immovable assets. To have another wealth assessment after the rise of the Medici, from the Florentine archives we collected and digitized another wealth assessment in 1457, which was studied by others scholars (Molho, 1994) but was never digitalized before. The data on the individual participation in the political offices report the name and surname as well as the guild and the neighborhood of the individual drawn from each bag. Crucially, information on whether a drawn (*seen*) individual was appointed (*seated*) for the office or was rejected (seen but not seated) and the reason for rejection (for example, because he was outside the city or had not the required age for the office) is provided.[1] These data - digitized and made available by Herlihy et al. (2002) - represent an extraordinary source of information on political office over 150 years of the Florentine history.

In the empirical analysis, as a preliminary step, we document the institutional capture. First, in the data on political participation, we observe that the number of seated is constant in the entire period (with a number of seats of about 100 per year). At the same time we do observe a sharp

[1]Hence, each individual seated for an office is first seen and, upon approval, seated. If he is rejected he is just seen but not seated.

increase in the number of seen individuals after the rise of the Medici. It must be - as we see in the data - that individuals drawn from the bags were rejected for several reasons much more often after the rise of the Medici. Second, both the number of seen and seated from the Medici's faction increase after the capture, while the individuals from the Medici's opponents sharply decline. Third, unlike the period before the capture, we find evidence consistent with the idea that draws were not random and that individual characteristics (fixed effects) explain part of the variation between the transition from being drawn and being seated. Finally, we show evidence that the Medici selected political officers not on the basis of individual ability but rather on the family networks: the cross-sectional variation in the number of terms in office explained by family surnames is larger in the post-capture period with respect to the pre-Medici period. Put together, these pieces of evidence document in a systematic way that the Medici captured the allocation mechanism of political offices by favoring their network.

Then, we use data on individual wealth and political offices. We show that, in the pre-Medici period, the system of selection by election and lottery limited the correlation between wealth and access to the government. Specifically, individual wealth in 1427 is not predicted by the number of terms in office instrumented by the number of draws.[2] Given the random nature of the draws in the pre-capture period, we can give a causal interpretation to this finding. When we move to the analysis of the link between individual wealth and terms in office after the rise of the Medici's, we do find a strong positive correlation between wealth and office holdings: an additional term in office is associated with a ten percent increase in total wealth. We offer different interpretations (not necessarily mutually exclusive) to explain why, unlike the pre-capture period, we observe a positive correlation between wealth and terms in office. The first is that the time in office in the post-capture period was longer and this allowed the political office holders to gather information, acquire experience, and build a network that allowed them to accumulate more wealth. The second is that the Medici selected the best individuals into political office (selection mechanism). The last interpretation is that under the Medici's regime the system allowed individual appropriation of public resources (rent extraction), and this was not possible in the period before their advent.

We provide evidence not consistent with the first two interpretations (time in office and selection). The average time in office in the post-capture period is not higher than in the previous period. In addition, the results on the informational content of surnames in explaining the cross-sectional variation in the number of terms is not consistent with the idea that the Medici were selecting

[2]Similar results are obtained when we simply regress wealth on terms in office without using the number of draws as an exogenous source of variation for the number of terms.

political office holders on their ability. In our analysis, we offer direct evidence on the third explanation, namely rent extraction. In addition, if they were selecting the best individuals, we should observe an increase in the average time in office, which is not found in the data. Instead, we find evidence consistent with the last interpretation (rent extraction). Using data on individual public debt contracts, we observe that the implicit yearly interest rate paid by the Republic to individuals before the capture is roughly the same irrespective of their political affiliation. This is not true in the following period: after the rise of the Medici to power, we find that individuals from the Medici's faction are paid larger interest rates.

Our findings document the 'Medici's vicious circle' in which wealth and political power reinforce each other (Zingales, 2017) and provide evidence about the possible effects of the institutional capture in a system where wealth is highly concentrated (Glaeser et al., 2003).

This paper contributes to several strands of the literature. It, first, relates to the literature on the functioning of political systems and on the possible gap between *de jure* and *de facto* distribution of power (Acemoglu et al., 2015). Democracies are designed to extend political power to individuals who would be disenfranchised under more autocratic regimes and, hence, the access to political offices in democracy should be less correlated with individual wealth. However, whether or not it will be so depends not only on the *de jure* architecture of the political regime in place, but also on its *de facto* execution and on the interaction with the structure of the society where it operates (Acemoglu et al., 2015, for a review). In this respect, an important role is played by the elites that, under democratic regimes, may have the incentives and the means to capture the institutions and use them to foster private interests. Institutional captures and subversions would be particularly strong when inequality is high (Glaeser et al., 2003). A recent historical example in this sense is provided by Puga and Trefler (2014) showing that, in the medieval Venice, the increase in international trade enriched a group of merchant families who used the accumulated resources to grab the *de facto* power in their hands and to induce, in turn, a both *de facto* and *de jure* oligarchization of the political regime.

Similarly, our paper tells a story in which wealth concentration empowered a group (the Medici and their network) to take over the political offices. But an institutional capture does not necessarily have to subvert the *de jure* political architecture in an explicit way. In this paper, we show that the Medici family held the formal institutions (almost) unchanged and nonetheless, *de facto*, used them to satisfy their private interests and feed clientelism. The system was maintained for several decades

by means of an interconnected action of private use of the formal institutions, networking and favor exchange, and manipulation of the system for political office allocation (Padgett and Ansell, 1993).

The paper also relates to a literature on electoral manipulation and institutional capture. Cruz et al. (2017) study the role of family networks to affect electoral outcomes (over and above wealth and past electoral success) in the Philippines. Stokes (2017) illustrates the strategic interaction between clientelist parties and voters and tests how it worked in Argentina. Institutional capture is targeted to serve personal interest and seize public resources. Relatedly, our paper has to do with the literature on clientelism and rent extraction (Hicken, 2011, for a survey). Our paper also contributes to the recent literature studying rent extraction from political offices. Eggers and Hainmueller (2009) estimate financial returns to being members of Parliament in UK and find a positive effect of holding political offices on the probability to direct a publicly traded firm for Conservatives politicians but not for Labour Party members. Fisman et al. (2014) study returns to political offices of Indian politicians and find a significant positive effect on annual asset growth for the candidates that won the elections with respect to those that did not, an effect that is greater in more corrupt Indian states and when ministerial offices are considered. Similar results are found by Querubin and Snyder (2013) examining rents from a seat in the U.S. Congress for the first half of the 1860s, but not for other periods in the 19th century.

Finally, our work is related to the historical political literature about the Republic of Florence and the rise of the Medici. This literature is too vast to be summarized here. The references that are mostly related to this work are Padgett and Ansell (1993), who study the network of political relations of the Medici and their soft-power approach to government, De Roover (1966), who describes the rise and fall of the Medici's bank, and Molho (1968), who investigates the Florentine public finances in the early Renaissance. More general references about the political history of Florence in the period relevant for our paper are Kent (1978), Rubinstein (1963) and Guidi (1981).

Our paper is organized as follows. Section 2 describes the institutional background and Section 3 illustrates the data used in the paper. Section 4 documents the rise of the Medici and the capture of the system of allocation of political offices. Section 5 proceeds by exploring the relation between wealth and political power before and after the rise of the Medici. Section 6 draws concluding remarks.

2 Political institutions and the *Tratte* system

2.1 Historical background

Since the end of the 13th century, and throughout the all 14th century, the independent city-state of Florence had emerged as one of the leading economic urban centers of Europe (Davidsohn, 1909; Najemy, 2006). In 1330, few decades before the devastating 1348 epidemics known as the Black Death, with an urban population of about 95,000 inhabitants the city ranked as 4th in the Italian peninsula and 6th in the European continent (Bairoch et al., 1988; De Long and Shleifer, 1993).

With respect to its political settings, in the 12th century the city had succeeded to establish itself as an independent Commune, with effective political control over the city and the nearby countryside (Brucker, 1962, p.57-58). During the 13th-15th centuries, Florence rapidly expanded and its ocntrol, at the end of the period, included a territory that corresponded to almost all the contemporary Tuscany.

The rapid economic success of the city revolved around the wool industry (Brucker, 1962; Goldthwaite, 2009). In addition, the Florentine merchants soon expanded their trade networks throughout all Europe. During the 14th century, these activities were accompanied by the flourishing of the Florentine banking business. Some Florentine banking companies had the privileges to become the lenders of the European kings (Sapori, 1926) and of the Pope (De Roover, 1966).

During the 15th century, under the leadership of the Medici family, the city experienced the peak of its economic, political, and cultural expansion (Goldthwaite, 2009). Thanks to the exceptional personality of one of the most prominent members of the family, *Lorenzo* (1449-1492), the city became pivotal in the diplomatic issues of central Europe (Brucker, 2005), diversified its textile activities to the more profitable silk industry (De Roover, 1966), and attracted the most famous artists and intellectuals of that time, (Kent, 2006).

2.2 The consolidation of the *Tratte* and the emergence of the political elite

Since the end of the 13th century, the executive political power of the Republic Florence was exercised by three offices: the *Signoria*, formed by the *Gonfaloniere di Giustizia* (Standard-bearer of Justice) and the eight *Priori* (Priors), and two colleges, the 12 *Buonomini* (the Good Men) and the 16 *Gonfalonieri di Compagnia* (Standard-bearers of the Companies). These three offices, the *Signoria* and the two colleges, which were together also called the *Tre Maggiori*, had full control of the legislative initiative and executive functions of the city (Brucker, 1962). Among them, the

Priori together with the *Gonfaloniere di Giustizia* had the highest political executive power, while the other two offices, were supposed to have a supportive advisory role.

The legislative power was exercised by two assemblies: the Council of the *Popolo* and the Council of the Commune. The two councils were formed by, respectively, 300 and 200 citizens, elected by the officials of the *Tre Maggiori*. The councils had no power to initiate the legislative procedure, and their sole function was to vote the decisions of the members of the government (Brucker, 1962, p.61).

Since 1328, and with a more stable mechanism since 1345, the members of the three government offices were appointed through a process of random selection among a group of eligible citizens, the so-called system of *Tratte*. The *Tratte* system involved three main steps.

First, during the preliminary scrutinies, multiple lists of Florentine citizens were submitted by the different components of the Florentine society (e.g. the neighborhoods and the guilds), and they were examined by a commission of officials who approved, through majority vote, the eligibility of each listed citizen for the offices. The commission that voted on the names in the list was formed by the members of the *Tre Maggiori*, who also selected other 80 citizens to be part of the commission (Brucker, 1962, p.65). The names of the approved citizens were then put in special bags (*borse*) from which they were then randomly selected for the offices. A multiple number of bags was created, accounting for the office for which the citizens could be selected, the group of corporations they were part of (*Arti maggiori* or *Arti minori*), and the neighborhood in which they resided. For example, for the election of the eight *Priori*, eight bags were created, and these guaranteed that each of the two groups of corporations, in each of the four neighborhood, had one representative.[3] Since the mid-14th century, scrutinies were usually held every 5 years and the lists of eligible citizens were renewed accordingly.

Once the bags were made and when the composition of an office had to be renewed, a drawing was held by the Notary of the *Riformagioni* (an administrative official) under the supervision of the members of the *Tre Maggiori* in charge. The citizens who were drawn for the office were declared "seen" ("*veduti*"). Throughout the all 14th century, and in three first decades of the following century, the drawing process maintained the characteristic of randomness, and political representatives were elected by lottery (Brucker, 1977; Guidi, 1981; Najemy, 1982; Padgett, 2000).

After a citizen was declared as seen, the officials presiding the drawings judged his suitability for the office. For a drawn citizen to be actually appointed, "seated" ("*seduto*"), he should have not incurred in any violation (*divieto*), including objective obstacles to his appointment (e.g. he was

[3]See the Appendix for more details about the selection procedure.

dead or absent from the city), outstanding tax debts with the Republic, or very recent appointment for the same or a close governmental office. If any of these violations was present, the drawing was repeated until a suitable citizen was drawn (Guidi, 1981; De Rosa, 1992).

The length of the officials tenure varied with respect to the office for which they were appointed, ranging from a minimum of two months (*Gonfaloniere di Giustizia* and *Priori*), to a maximum of four months (*Gonfalonieri di Compagnia*). The overall short tenure of officials guaranteed a substantial turnover of the Florentine citizens at the government (see the Appendix).[4]

In 1387, a mechanism was appointed to partially manipulate the results of the election and to guarantee that part of the members of the government would come from a certain political faction. The mechanism implied the creation of a special purse, called *Borsellino*, from which a fraction of the members of the government had to be selected. Its use, however, was rare throughout the end of the 14th century and the first decades of the following century (Ninci, 1992).

How large was the pool of citizens eligible for the offices? According to the chronicles of Giovanni Villani, the number of citizens eligible for offices was around 300 in 1343. The number then increased across the following scrutinies reaching 500 in 1361 (Brucker, 1962, p.67). The system of scrutinies allowed for a constant increase in the number of citizens eligible for offices as we observe in our data. In 1433, one of the few years for which the complete list of scrutinized citizens is available, among a population of about 39,000 people (Herlihy and Klapisch-Zuber, 1985), a list of 6,354 male citizens was examined during the scrutinies and, among them, 2,084 obtained the majority of votes and were then eligible for the offices (Kent, 1975). This group of individuals, the so-called *Reggimento*, has usually been identified as the elite of the city, whose members represented different political factions and also different sectors of the Florentine economic system.

3 Data and sources

We have assembled a rich dataset from both primary and secondary sources reporting detailed information on office holders in the three major offices of the Florentine Republic and the wealth status of the Florentine families throughout the 15th century.

[4]During the 1340s several new procedural rules were enacted with the objective of making the electoral system stable. These new norms regulated and stabilized the distribution of offices among guilds, the number of members of each of the *Tre Maggiori* offices, and other minor characteristics as, for example, the dates of entry of the new elected members of each office. These rules were maintained in the following centuries, they became emblematic of the importance of the procedures of random political participation, and they survived to dramatic events, as for example the demographic shock following the 1348 Black Death, and the 1378 short-lasting but harsh popular revolt of the "Ciompi", the wool-workers of Florence that did not belong to a guild.

3.1 Political participation and affiliation

The information regarding the political participation of the Florentine citizens to the *Tre Maggiori* during the 14th-15th centuries have been digitalized and made available by Herlihy et al. (2002). These records are based on the original documents called the *Giornali* (registers) of the Tratte, held in the Florentine State Archive. There, for each year in the 1354-1532 period (with the exception of the phase of the *Governo Popolare*), were recorded the results of the drawings for the three main government offices of the city.[5] Each record reports: the complete list of names and surnames of the citizen drawn for a specific office, the date of drawing and eventual start of office tenure, the guild membership, the neighbourhood of the citizen (Florence was divided into 16 *gonfaloni*, that four-by-four composed four *quartieri*: Santo Spirito, Santa Croce, Santa Maria Novella, San Giovanni), and the result of the drawing, i.e. whether the individual was only drawn (*seen*) or he was also elected (*seated*).

The number of offices and the repeated renewal of the bags gives the picture of a large political participation in Florence. For example, in the period that goes from 1393 to 1457 (the year in which we have our wealth assessment), we have 917 bags, 23477 draws, 7361 office terms (seats), with 5752 individual involved (640 families). Conditional on being seated at least once, the mean of the seats at the individual level is 4.79 (sd=2.88), with a maximum of 18.

Finally, the list of families affiliated with the Medici political faction in the first decades of the 15th century has been compiled by Padgett and Ansell (1993), and based on the historical analysis in Kent (1978). The list is an attempt to reconstruct, on the basis of historical information regarding political, economic, and familial links, the families who supported the rise of the Medici, those who openly opposed it, and those families whose members split between the two main political factions. These data refer to 1426. [6]

3.2 Wealth assessment

The late medieval Florentine fiscal system century was very similar to the ones adopted in most of the other North and Central Italian city states (Stasavage, 2011). It relied mainly on forced and voluntary loans, mixed with an extensive use of indirect taxes on various consumption and economic

[5]The registers of the government officials of the city of Florence start in 1282, but the list before the 1345 is the result of selection procedures different than the *Tratte* system and largely incomplete, Herlihy et al. (2002).

[6]This definition of party affiliation covers only a subsample of the families holding political offices and its construction is based on Kent's (1978) reading of Medici's letters. However, it plausibly covers the main and most important families of the city and those having a stronger link with the Medicis' or their opponents

activities (Molho, 1971; Conti, 1984).[7] During the 1427, following a harsh debt crisis due to the Lombard wars (more historical details are provided in section **??**), the Florentine Republic decided to reorganize the fiscal system and set up a complete assessment of the wealth owned by citizens residing in its territories. The wealth assessment (used to determine household direct taxation) responded to the request of a large part of the Florentine society to redistribute the tax burden and eliminate injustices and imbalances associated to system of the forced loans.

This effort translated into a register, called *Catasto*, which reported information on the values of movable and immovable assets owned by the residents in the city of Florence and the countryside communities subject to the Republic (Herlihy and Klapisch-Zuber, 1985). Each Florentine household had to report his total wealth and its components. Ecclesiastical and citizens with no or temporary residence were exempted from the assessment. It was firstly compiled in 1427, and then renewed in the years 1435, 1451, 1457/58, 1469, and 1480 (Procacci, 1996).[8] This type of wealth assessment became the standard for the subsequent registrations, which since the 1495 took the name of *Decima*, they were regularly renewed, and they remained the only wealth register of the Florentine State until 1776 (Conti, 1984; Procacci, 1996).

To obtain information on wealth assessments in different points in time, we rely on three data sources: a quite detailed picture of the wealth status of the Florentine households before and after the rise of the Medici family, is obtained by the combination of the two most complete extant tax declarations, compiled respectively in 1427 and 1457/58; further (less complete) information on wealth is drawn from the 1403 registers of *Prestanze*, as we explain below.[9]

The wealth assessment of 1427, whose original documents are in the Florentine *Archivio di Stato*, has been made available in digital form thanks to the pioneering work of the historians David Herlihy and Christiane Klapisch-Zuber. In Herlihy and Klapisch-Zuber (1985), these authors used the extraordinarily rich demographic, social, and economic information contained in the registers, and provided a complete account of the economic and social conditions of Florentine and Tuscan households at the beginning of the 15th century. Their work has then been digitized and published online by Herlihy et al. (2002). We have used this version of the *catasto* in our analysis. As

[7] During the 14th century, the Commune had tried occasionally to impose direct taxes, called *estimo*. These were assessed on the basis of the number of single household units living in the same building, and their enforcement often encountered the resistance of the population (Conti, 1984).

[8] However, in the 1480 version, the wealth assessment only reported the value of the real estate, except the house of residence.

[9] Among the several tax declarations that were compiled throughout the 15th century, we have selected the *Catasto* compiled in 1427 and the subsequent one that was compiled in 1457/58, which maximize the completeness of the information on wealth, the coverage of households, and the degree of comparability across them.

aforementioned, the document represent an almost unique case of complete report of the social and economic conditions of a late medieval European city-state.

For each household in the city and countryside of Florence, the following demographic and social information are available: name, surname, patronymic, the number of household members, and the gender of the household head. In addition, the *Catasto* records for each household the complete self-reported list of real estates (excluding the first house), and the movable assets, including physical capital, credits, and shares of public debt. For the calculation of the taxable wealth, the registers also report information on the debts and charges, as well as the value of items alienated and the value of the deductions due to the number of dependents (*bocche*). In our matching procedure we have used the 9,780 records in the 1427 Catasto that identify the households living in the walled city of Florence.

Among the wealth assessments compiled in the subsequent decades, the *Catasto* of 1457/58 represents the most complete and comparable tax register for obtaining information on the wealth status of Florentine households after the 1427, (Conti, 1984, p.247). For the 7,037 households recorded for the walled city of Florence, the document reports the same demographic, social, and economic information of the 1427 record.[10] The document, which has been analyzed in Molho (1994), had never made available in a digitized readable form. We have drawn on the information reported in the original copies of the 48 volumes of the *Catasto del 1457 - Portate dei Cittadini*, located in the Florentine *Archivio di Stato* and edited a digital version of the 1457/58 wealth record. Also in this document the data were reported at the household level, and for each household were presented demographic information (name, surname, patronymic, paternal grandfather's name, number of household members and gender of the household head), information about the occupation of the household head and location of the household. Also in this case, for each household, the tax registers report a detailed record of the values of property items including real estates, investments in the public debt and other economics activities. Finally, for the calculation of the taxable wealth, and similarly to the *Catasto* of 1427, the registers also report information on the debts and charges, as well as the value of items alienated and the value of the deductions due to the number of dependents (*bocche*).

[10] According to Molho (1994), the different number of households in the wealth assessment of 1457 is due to the more restrictive rules in considering the resident population in Florence.

Figure 1 shows the distribution by deciles of real estate, total assets, and its components, respectively in the 1427 *Catasto* and in the 1457 *Catasto*.[11]

Figure 1 about here.

Finally, the wealth status of the citizens before the 1427 *Catasto* can be only partially assessed through the registers of *Prestanze*, which recorded the forced loans imposed to the most affluent Florentine households, (Martines, 1963, Conti, 1984). We have included in our analysis the information on on the forced loans paid in 1403 by the 150 wealthiest households in each Florentine neighborhood (600 households in total), provided in Martines (1963).

3.3 Merging datasets

To combine the aforementioned datasets, we needed to identify families and households. Because information on the occupation and the location of the household was often incomplete in the various datasets, individuals were identified by exploiting information on the surname, the first name, the patronymic, the name of the paternal grandfather (except for the 1427 *Catasto*), and the neighborhood.

Hence, we first drop observations with missing name, patronymic, or surname. Then, to make names and surnames comparable across sources, we ran a careful work to homogenize them and, in particular: we followed for all the datasets the same writing rules for names (for instance, *Ambrogio*, when found, was always changed in *Ambruogio*, *Gasparre* in *Gaspare*, etc) and for surnames (for instance, *Dellaccerr*, *Dellacerit* and *Dellaccerito* were all changed in *Acceriti*); we implemented always the same truncation (no more than 12 letters, so *Dellantell* became *Dellantella*, *Aldobrandini* became *Aldrobrandin*); since when a family had two surnames, individuals in that family could appear with either one, we associated individuals with two surnames always with the same single one (so, *Neri* and *Delnero* became *Aldobrandini*); finally, misspellings were carefully verified. Spelling rules were taken from Herlihy et al. (2002) and , and information on multiple surnames families were taken from Herlihy et al. (2002). This checking procedure was implemented for the dataset combined in our work (one for the *Tratte* system, two *Catasti*, and *Prestanze*).

[11]To make the wealth assessment comparable we proceeded in the following way. We first note that wealth from both sources was in gold florins but that most of the transactions were done in silver coins and the value ratio between gold and silver coins changed over the period by a factor of 1.3. Hence, we multiply 1457 wealth by 1.3 (that is the ratio between the value of 1 gold florin in silver coins respectively in 1457 and 1427; Spufford, 1986, Handbook of Medieval Exchange). Second, Wealth in original sources is at current prices, so we convert 1457 wealth to 1427 prices. We multiply 1457 wealth by 1.64 which is the ratio between CPI in 1457 and CPI in 1427; R. Allen, Consumer price indices, nominal/real wages and welfare ratios of building craftsmen and laborers, 1260-1913.

4 The capture of Florentine political institutions

4.1 The rise and consolidation of the Medici family

Between the end of the 14th century and the beginning of the 15th century, the house of the Medici, a family relatively new in the Florentine social context, rapidly emerged following the rise of its banking company. Their economic success was funded on the banking business, which originated in Florence in 1397 under the guidance of Giovanni di Bicci de' Medici. In the following decades, the leadership of his son, Cosimo de' Medici, succeeded in expanding the banking activities throughout all Europe and in diversifying the company business in other industrial sectors, such as the trading of alum and iron and the establishment of successful textile companies. (De Roover, 1966).

During the first decades of the 15th century, Cosimo emerged also as the leading actor of a political faction opposed to the influence of the traditionally wealthy families of Florence, at that time revolving around the powerful Albizzi family. At the beginning of his social ascendancy, Cosimo built strong economic and social networks with the objective of establishing ties with other families in the city, and to strengthen their centrality among those that were opposing the existing elites, Kent (1978). In particular, as shown in the works of John Padgett, credit and marriage networks were the main drivers of the Medici political ascendancy (Padgett and Ansell, 1993; Padgett and McLean, 2006; Padgett, 2010).

In addition, the relative novelty of the family in the Florentine political scene favored the rise of the Medici. Having not being part of the social and economic elites in the previous decades was perceived by the other newly rising Florentine families as important features to drive a credible change in the political address of the city (Brucker, 1957, 1962, Becker, 1962, Martines, 1963 and Cohn, 1980).

When, during the 1420s, the city faced a harsh debt crisis, the rise of Cosimo de' Medici became clear. In fact, in that period the government of the city decided to enter into expensive military enterprises. First, Florence was involved in the Lombard Wars, opposing the aggressive foreign policies of the rulers of Milan, the Visconti, then the city tried to conquer the neighboring city of Lucca (Molho, 1971). These decisions implied a sharp increase in military expenses due both to the increase in the number of mercenaries and the per capita salary.[12] This increase in public expenses was accompanied by a fiscal crisis: more resources were needed by the Republic and these

[12]Molho finds that in the years 1424, 1426 and 1427 the yearly sums spent by the Republic to hire mercenary soldiers were more than 4 times the average yearly figures in the previous decade. This increase was due to both the higher number of soldiers hired and the increase of salaries paid to the military force, whose nominal values in 1430 were 4 times those paid 20 years earlier, Molho, 1971, p.11-16.

could have been hardly provided through ordinary fiscal revenues. This situation had two main consequences. On one side, it lead to the modernization of the system and the establishment of wealth assessment in 1427 that allowed to keep track of individuals' taxable wealth. On the other, the Republic sought to finance these expenditures with voluntary loans, and Cosimo provided a large share of them, using the enormous personal liquidity that he accumulated as a banker, establishing himself as the savior of the city and the new political leader. Cosimo provided by far the largest amount of resources to the city, his contribution being at least about three times the second largest contribution. Table 1 shows the amount of individual loans and party affiliation. Not only him but also the other families associated with the Medici provided the largest share of resources to the city.

Table 1 about here.

As shown in Figure 1 , it stands out that, in the 1427-1434 period, those affiliated with the Medici provided much more loans to the Republic than the families that explicitly opposed the Medici's ascendancy ("Medici's opponents"), those families whose affiliation was split between the Medici and their rivals ("Split loyalty"), and the contributors for whom the political affiliation is unknown (Figure 1).

Figure 1 about here.

In 1433, the rising political power of the house of the Medici led the Florentine government, among whose randomly elected members were also citizens close to the Albizzi family, to exile Cosimo de' Medici, whose rise was perceived as a threat to the Republic.[13] This fact ushered a political crisis in the city. During the following year, the new extracted members of the government, including also members of the Medici faction, appointed a *Balìa*, a special temporary council to lead the city during the crisis. The *Balìa* recalled Cosimo back in the city and exiled the leader of the Albizzi, Rinaldo (Rubinstein, 1966). After these facts, the Medici took the political control of the city of Florence. They did not formally alter the institutional setting of the Republican system, but implemented a systematic manipulation of its fundamental institutions (Padgett and Ansell, 1993).[14]

The regime of the Medici lasted for sixty years. In 1494, two years after Piero de' Medici had succeeded to his father Lorenzo, a crisis in the foreign politics of the Republic of Florence

[13]Among other things, Cosimo was accused to favor the war against Lucca and to make large profit from lending money to the Republic (Molho, 1971).

[14]Occasionally, the *Signoria* of the Medici, formally interrupted the *Tratte* system, as for example during the 1452 war against Venice, when the members of the government were directly selected by the *accoppiatori* (Rubinstein, 1966). However, they more often exercised their power maintaining the traditional institutional system, and controlling it through both "institutional add-ons" (Padgett, 2000), and the actual manipulation of the outcomes of the drawings.

forced the members of the Medici to the exile.[15] During their regime, the Medici had not changed the institutional setting of the Republic. They had maintained all the government and legislative institutions, and they had controlled them through two institutional devices: the *balìe* and the *accoppiatori*. Ultimately, the Medici had no check on the activities of the officials, and the control over their decisions was guaranteed by the fact that their economic and political interests overlapped with those of the Medici. Therefore, when Piero de' Medici took a series of decisions that posed at serious risk the independence of the Republic and, therefore, the prosperity of the elite, it was relatively easy for the members of the *Tre Maggiori* to oppose the Medici and interrupt their regime. At the same time, Piero had no institutional power to oppose this decision (Rubinstein (1966, p.279-286)).

Under the influence of the anti-Medici preaching of the Dominican Friar Girolamo Savonarola, a new regime was established, the so-called *Governo Popolare*. Its functions were centered around a new large council, which mostly represented families who had previously shown hostility towards the Medici faction. During this period the functioning of the *Tre Maggiori* was interrupted and the *Tratte* system suspended in favor of the stable use of large and smaller councils (Rubinstein, 1963; Cooper, 1984). In 1512, the Medici restored their power under a different constitutional configuration.

4.2 Evidence of the capture

In this section, we provide empirical evidence to document how the *de facto* functioning of the *de jure* substantially unaltered institutions changed and how the selection mechanisms before and after the Medici operated. According to the historical narrative documented in the previous section, after the rise of the medici we should see an increase of the fraction between seen and seated and an increase of the draws and terms of individuals from the Medici's faction.

Figure 2 shows the number of *seen* and *seated* by year along the time horizon under consideration, 1343-1457. In contrast with the number of seated that remains relatively constant in the entire period, the number of seen individuals sharply increases after the rise of the Medici in the 1420s. In practice, it is the number of rejections (seen but not seated) that dramatically increases in the 1420s.

Figure 2 about here.

[15] During the war between the Kingdom of Naples and Charles XVII King of France (allied with the city of Milan), Piero had strongly opposed the King of France, who, in October 1494, entered with his army in the city of Florence. The members of the elites and the other prominent families of the city blamed Piero for the political failure and, as a consequence, the majority of the *Tre Maggiori* decide to exile him (Bartlett, 2018).

This pattern favored a particular group of individuals. Figures 3 and 4 show, respectively, the cumulated frequency of seen and seated individuals by group of families between 1343 and 1455. The number of inddividuals only seen or seen and seated is roughly the same number for the Medici and their opponents before 1427. Yet, these numbers lessen by one third for the Medici after 1427 and to one third for the opponents. This suggests that the alternation of power in the government was guaranteed, in practice, before the rise of the Medici, whereas, after that moment, the opponents' participation in the government was substantially reduced.

Figures 3 and 4 about here.

If we look at the number of new families entering in the *Tratte* system (see Figure 5), it is apparent that the history of Florence saw periods of turmoil in which the number of new families having access to political power dramatically increases. In the case of the Medici takeover, we observe a modest but significant increase of the number of new families in the political area followed by a decrease after the consolidation of the power, consistently with the idea of their soft-power approach that left political institutions substantially unchanged.

Figure 5 about here.

In conclusion, the sortition mechanism seems to be manipulated with the advent of the Medici. Importantly for our analysis we also show that system was not manipulated before the rise of the Medici. The data suggest that sortition was key in selecting political office holders, as several historians suggest (Brucker (1977); Guidi (1981); Najemy (1982); Padgett (2000)). In the Appendix we show that draws are time independent before the rise of the Medici but not after the capture (we take as the year dividing the two periods the 1427 which is the year of the first wealth assessment). In addition, we document that the transition from being seen to being seated is explained by the individual characteristics (individual fixed effects) after the rise of the medici but not before.

4.3 Informational content of surnames for political outcomes

Given the systematic manipulation of office allocation by the Medici, a natural question is whether they selected individuals on the basis of their network or on the basis of their individual characteristics such as ability. We borrow from the literature on intergenerational mobility (Guell et al., 2015, 2018) and we compute the *informational content of surnames* (ICS) for political outcomes. In the first step, for each year in our period, we measure the extent to which the distribution of

surnames informs about the result of drawing. We proceed as follows. First, we run the regression:

$$Terms_{is} = \beta' D_s + \epsilon_{is},$$

where $Terms_{is}$ is a variable equal to the number of terms individual i with surname s has been in office, conditioning on the population of individuals that have been in office at least once over the entire period considered in this paper and D is a vector of surname dummy variables D_s, such as $d_s = 1$ if individual i has surname s and $d_s = 0$ otherwise. After estimation, we compute the $R2$ from this regression and call it $R2_s$.

In the second step, we randomly assign to individuals surnames, while maintaining the same distribution of surnames of the entire population in each sub-periods considered. For each year in our period of interest, we then run a set of (10) regressions, such as:

$$Terms_{is} = \beta' D_{fs_k} + \epsilon_{is},$$

where D_{fs_k} is the fake surname dummy matrix in iteration k, compute the $R2_{fs_k}$ for each k and take the average: $\overline{R2}_{fs}$. Finally, we define the informational content of surnames index as: ICS=$R2_s$-$\overline{R2}_{fs}$.

Figure 6 plots the yearly ICS computed after splitting the sample period in two sub-periods: 1393-1426 and 1427-1457. As one can see, the average of the index in the period before the rise of the Medici (0.1230) is lower than that after 1427 (0.1357) and, more interesting, the slope of the fitted line is negative in the first period (the role of surnames in driving results of drawings was weakening) and positive in the second (the role of surnames is becoming more important). This analysis suggests that if anything, with the Medici, the surname (family) became more important in predicting the access to political power than individual characteristics.

Figure 6 about here.

Figure 7 about here.

5 Wealth accumulation and political office holders

5.1 The pre-Medici period

In this section, we estimate the relationship between the number of terms in office and individual wealth using the data on the *Tratte* and the wealth assessment in 1427. Since being seated

is conditional on being seen and since draws were random, we exploit the number of draws to instrument the number of terms in office (we provide evidence consistent with the historical narrative that draws were random until the 1420s below).

We have only one record (in 1427) on individual wealth before the consolidation of the Medici's power. Hence, we exploit individual cross-sectional variation in the number of draws and terms in office before 1427. Specifically our model is:

$$Wealth_i = \beta_1 Terms_i + \delta_{q(i)} + \phi_{g(i)} + \gamma_{n(i)} + \alpha_{o(i)} + \epsilon_i, \tag{1}$$

where *Wealth* is the log of total wealth in 1427, *Terms* is the number of terms in office between 1393 and 1427 and it is instrumented with the number of draws in the same period. and $\delta_{q(i)}$, $\phi_{g(i)}$, $\alpha_{o(i)}$, and $\gamma_{n(i)}$ are neighborhood, corporation, most frequent office, and number of bags FE. The latter set of fixed effects $\gamma_{n(i)}$ is particularly important because the number of terms in office is mechanically correlated with the number of bags the individual i's name is in, over the period. Thus, the estimated coefficient β_{pre27} is identified by exploiting variation in the number of terms in office *within* the group of individuals whose names appear in an equal number of bags, who live in the same neighborhood, belong to the same guild, and run for the same office. To exploit the experimental variation of the *Tratte* system and avoid any potential bias related to comparison of those drawn and seated at least once and those drawn but never seated, we condition our regressions on individuals that were seated at least once.[16] Hence, in our analysis the minimum number of terms in office is one and we exploit the *intensive* margin of holding an office, and precisely the variation in how many times an individual was seated.

Table 2 about here.

Table 2 shows related estimation output. In the first panel we report the reduced form regression, namely the regression of the total wealth on the instrumental variable (the number of draws). In the second panel we display the first stage regression (the relationship between terms and draws) and in the third panel the second stage. In column (1), we control for neighborhood fixed effects only, in the following columns we also add number of bags fixed effects (column (2)), corporation fixed effects (column (3)), and most frequent office fixed effects (column (4)). In the reduced form regression, in column (1), the correlation between the number of draws before 1427 (irrespective of whether they led to a seat or not) and total assets in 1427 is positive and statistically significant.

[16] In fact, individuals who were drawn but never seated may be different from individuals seated at least once. We provide estimates including also individuals never appointed in the Appendix.

However, when we also condition for the number of bags fixed effects, the office fixed effects, and the guild fixed effects, the positive correlation disappears: the coefficients turn out close to zero and not statistically significant. These results suggest that, in the period before the advent of the Medici family, being in office in the period between 1393 and 1427 does not correlate with individual wealth as measured in 1427. In the Appendix, we show that the results of Table 2 are robust (namely, no correlation between wealth and terms instrumented by the number of draws), should we take into account only the most important offices, (*Gonfaloniere di Giustizia* and *Priori*), repeat results using single components of total assets (public investments, private investments, real estate) as dependent variable, and split the sample between Medici and Medici's opponents.

The causal interpretation of these results is based on the hypothesis that conditional on the neighborhood, the guild, the type of office, and the number of bags fixed effects, the number of times an individual is appointed is random. The historical literature (Brucker (1977); Guidi (1981); Najemy (1982); Padgett (2000)) supports this hypothesis. To provide, in addition, some further evidence consistent with it, we exploit information from the registers of *Prestanze*, which recorded the amounts of forced loans (that were proportional to individual wealth) paid in 1403 by the 150 wealthiest households in each Florentine neighborhood. This source does not give us a precise account of wealth status but allows us to assess the position of a household in the wealth ranking before 1427. We then estimate the following regression:

$$Loan_i = \gamma Draws_i + \delta_{q(i)} + \phi_{g(i)} + \gamma_{n(i)} + \alpha_{o(i)} + \zeta_i, \tag{2}$$

where $Loan_i$ is the log of the forced loan of individual i in1403, $Draws_i$ is the number of draws individual i had between 1403 and 1427 (the remaining symbols are already known). Results are in Table 3 and confirm that individual wealth in 1403 does not correlate with frequency of times individual names were drawn from bags in the subsequent period, again controlling for the neighborhood, the number of bags, the office, and the corporation. Unfortunately, the number of observations is small because forced loans were imposed only on the wealthiest households. However, it is reassuring that on the same sub-sample used for obtaining Table 3, we confirm the results reported in Table 2 for the full sample: the number of terms in office before 1427 is not correlated with the wealth in 1427.

Table 3 about here.

Table 4 present the OLS results of model 1. Keeping in mind that, unlike the one presented in Table 2, the coefficient presented include any return to office plus a selection effect,[17] they suggest a modest and imprecisely estimated correlation between wealth and terms in office.

Table 4 about here.

5.2 The Medici period

To assess the relationship between wealth and number of terms in office, we use the data on the wealth assessment in 1457 and we replicate the regression model 1 but using as a dependent variable the log of total wealth in 1457 and as the independent variable the number of terms between 1427 and 1457. In this case, however, since we know that the number of draws is not as good as random, we estimate the model only with OLS. In doing this, we should keep in mind that the coefficient on the number of terms includes the "true" effect of holding a political office and a selection effect (being seen and seated can be associated to other characteristics directly correlated with wealth).

Table 5 presents the results. As we can see, after the rise of the Medici, the positive correlation between the number of terms in office and total wealth is robust to the inclusion of the number of bags, neighborhood, corporation, most frequent office fixed effects. In particular, an additional term in office is associated to an increases the total wealth of 10 percent. The results are comparable to Table 4 (reporting the results between wealth and terms in office before the rise of the Medici) in which the OLS coefficient show a low and imprecisely estimated correlation between wealth and terms in office.

The results are still positive and precisely estimated if we consider only the period in which the political power of the Medici consolidate, namely after the 1434, year in which Cosimo is back from the temporary exile and takes the full control of the city (Table 6). Finally, when we split the sample between families affiliated to the Medici and families not affiliated (following the classification of (Padgett and Ansell, 1993)), we find that the correlation between wealth and political offices is stronger for the families from the Medici's network. Interestingly the correlation is positive for the other families too. While it is difficult to understand whether, the other families (not classified as part of the Medici's network in 1426) subsequently joined the Medici's network, this result indicates how pervasive the correlation between wealth and political office holders was in the Florentine Republic under the Medici.

Table 5 about here.

[17] For example, even if draws are random, if seated individuals have better occupations and in turn a larger wealth, this effect will be captured by the OLS coefficient.

Table 6 about here.

Table 7 about here.

5.3 Channels

In this section, we explore the possible explanations of the fact that a positive correlation between individual wealth and number of terms office is observed after but not before the advent of the Medici. We discuss three potential channels (not necessarily mutually exclusive). The first is that in the period that followed the institutional capture, average time in office was longer with respect to the pre-capture period. Hence, individuals had the opportunity to gather more and better information and develop a network of friends that allowed them to accumulate more wealth. As a second potential channel, it could be that the Medici selected political officers on the basis of their ability: hence, better able individuals, that presumably were reacher in 1457, were appointed more frequently to office, thereby the positive correlation between individual wealth and the number of terms. A reason could be that the Medici, having high stakes on the public debt, wanted skilled individuals to take care of the public affairs. The third and last explanation is that individuals in office in the period after 1427 were allowed to extract rents by seizing public resources, while in the previous period this was somehow impeded.

The first explanation (longer time in office) can be excluded because, as we can see from Figure 8, average time in office did not increased between the pre- to the post-Medici period.

Figure 8 about here.

The second explanation cannot be totally ruled out, but is not consistent with the results shown in Figure 6 and 7. If Medici were selecting on the basis of ability, individuals and not surnames should matter more. Hence, we should have observed a decrease in the informational content of surnames after the rise of the Medici. Instead, Figure 6 and 7 document the opposite outcome.

The third explanation, instead, is consistent with the idea that public officers appointed by the Medici had the opportunity, while carrying out their political mandates, to extract rents by seizing public resources. A possible channel of enrichment is generating extra-profits their own activity of money lending. In the period under consideration, the Florentine government had to finance large military expenses, due to frequent conflicts against other cities. To sustain such heavy burden, the government often relied on voluntary loans by the wealthiest citizens of Florence. These loans were associated to a strong guarantee of principal restitution because of earmarking revenues from

indirect taxation. In 1424, *Ufficiali del Banco* managing the resources collection were also asked of anticipating at least part of the resources needed and finding voluntary lenders.

To explore whether public officials did, in fact, manipulate the profit rates from money lending, we collected data from all the available yearly registers of the *Ufficiali del Banco* (1427-1455). These registers include names of the *Ufficiali del Banco*, the amount of money they anticipated, the amount of the voluntary loans by the citizens (and correspondent interest rates), the payments to soldiers and mercenary troops. Formally, the *Ufficiali* had to abide by the usury legislation that was in force in the private credit market, that implied interest rates not higher than 5-10%. However, they often bypassed these restrictions through the "dry exchange" practice (*cambium secum*). The mechanism was as follows. The original loan was paid in Florentine gold florins, but it was denominated in a foreign currency (e.g. the Venetian lire); at the time of the restitution, the foreign currency was claimed to be appreciated against the Florentine florin. The currency appreciation resulted from a manipulation of the exchange rate such that it was made equal to the interest rate agreed between the *Ufficiali* and the voluntary lenders. Thus, formally, no interest was paid (dry exchange) but *de facto* an interest was disguised through the variation in the exchange rate.

Figure 9 shows the average interest rate by party before and after the institutional capture. As one will observe, the average interest rate increased

Figure 9 about here.

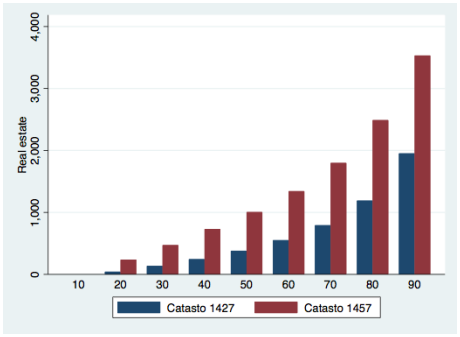
6 Conclusions

From the foundation of the Commune in the 11th century to the 15th century, the city of Florence was governed by broad based political institutions characterized by a large franchise and checks and balances on political power. In particular, in the period between the early 14th century and the end of the 15th century the city government (*Signoria*) was selected by the means of a system granting representativity to all citizens belonging to the major guilds and to the territorial neighborhood of the city. The Florentine government was also characterized by short term limits and by a selection by lot of the political officers. Using original primary sources about political officers and their wealth assessments, we show that under this system an increase in the frequency in the access to political offices is not positively associated with larger personal wealth until the late 1420s. But, the association between political participation and wealth becomes positive and statistically significant after the rise and the consolidation of the political influence of the Medici family (in the 1430s). Consistently with historical narratives suggesting that the Medici tended to reward their network's

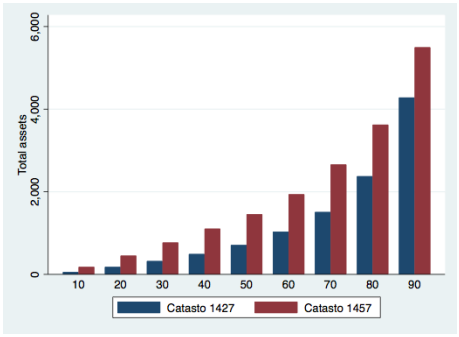
members also with the access to political offices, we also find that this association is stronger for the Medici's friends. This occurred in a formally unchanged political system: the Medici neither modified *de jure* institutions nor disproportionately accessed political offices. This case study shades some light on the mechanisms of rent extraction from political offices and provides evidence about the mechanisms and the consequences of a unique example of soft-power institutional capture.

TO BE COMPLETED

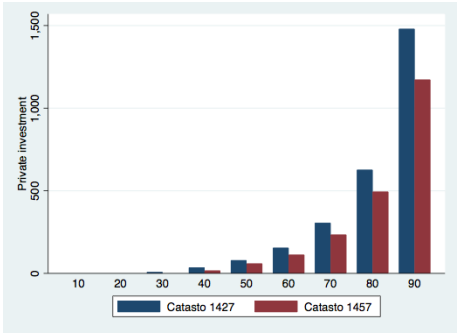
Figures and Tables



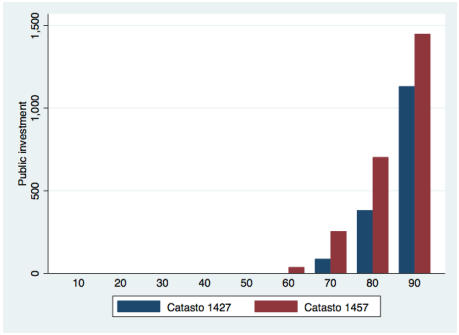
Real estate



Total assets



Private investment



Public investment

Figure 1: Distribution of wealth in 1427 and 1457/58

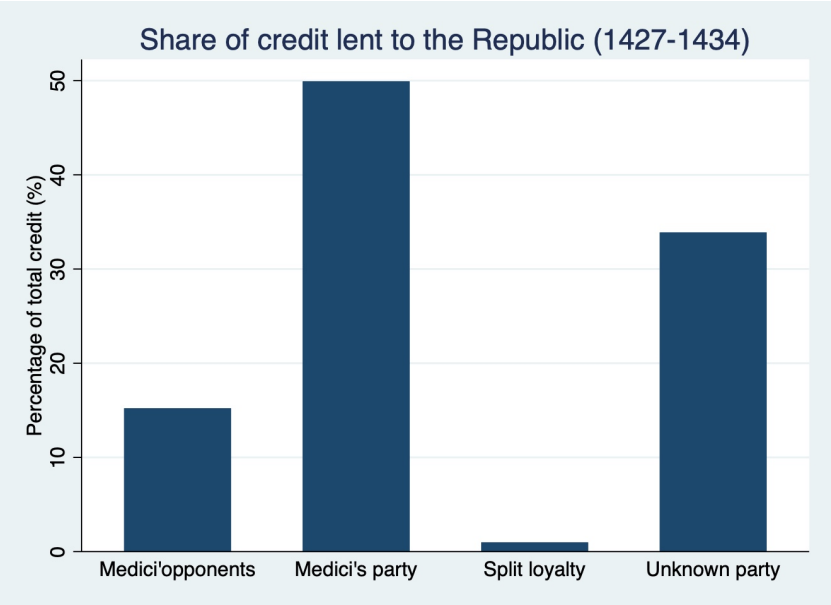


Figure 2: Loans to the Florentine Republic (1427-1434)

Notes. The bars show the loans provided by the political groups to the city of Florence as a share of the total credit provided in the 1427-1434 period. Source: Molho (1971), Padgett and Ansell (1993).

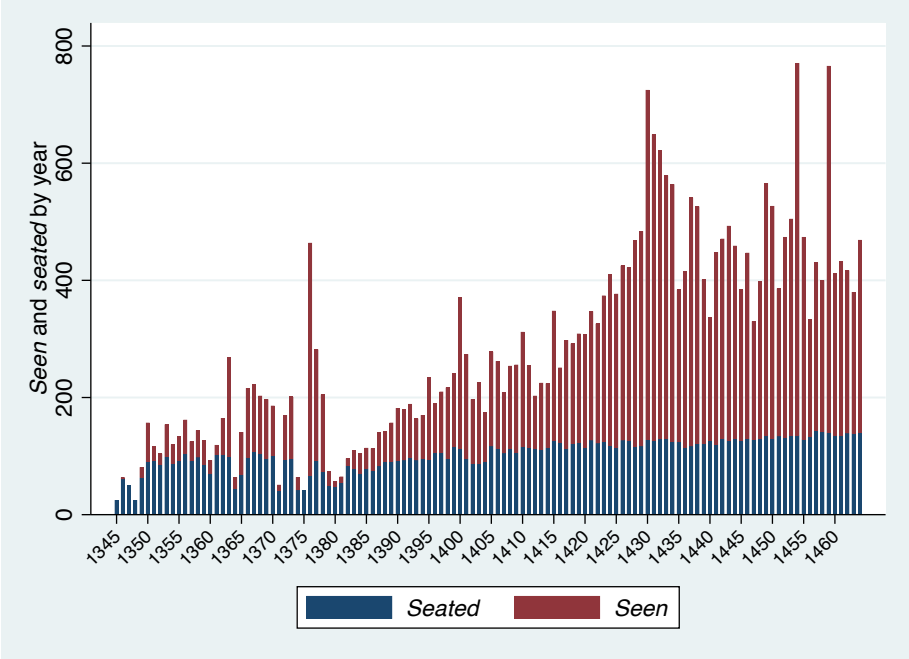


Figure 3: Number of *seen* and *seated* individuals by year

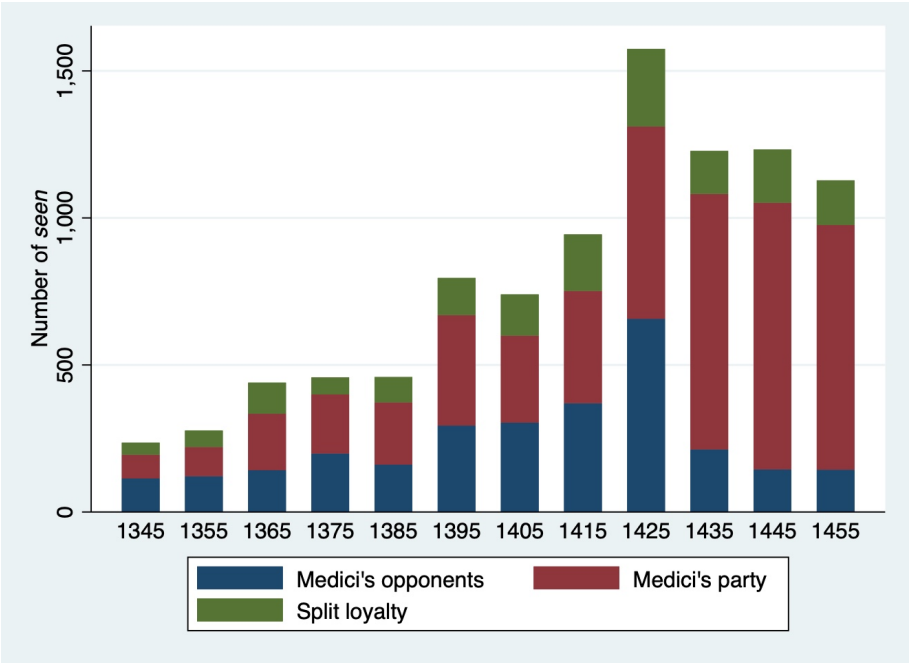


Figure 4: Number of *seen* individuals by 10-year and by party.

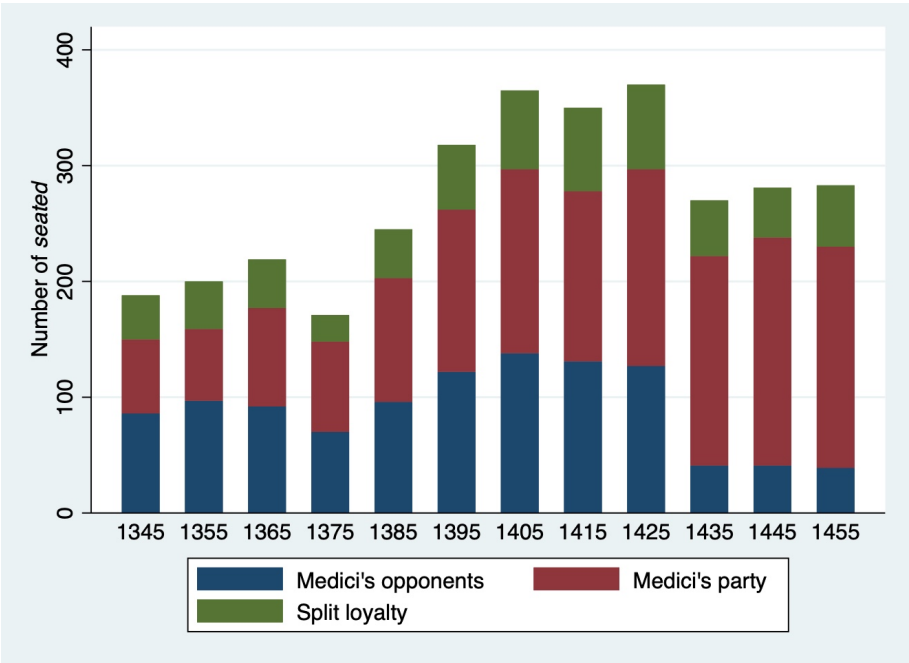


Figure 5: Number of *seated* individuals by 10-year and by party.

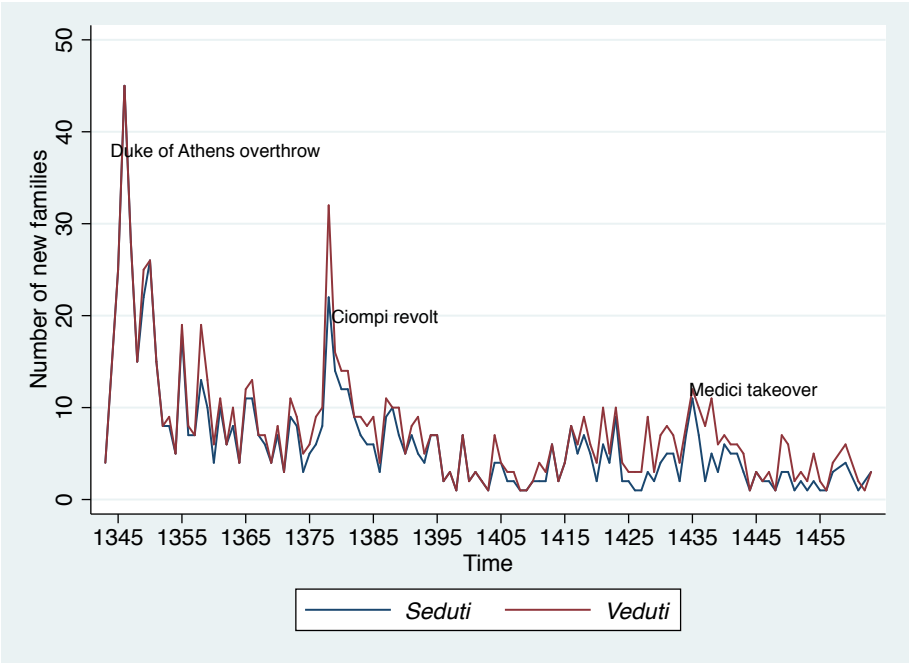


Figure 6: Number of *seen* and *seated* individuals from new families.

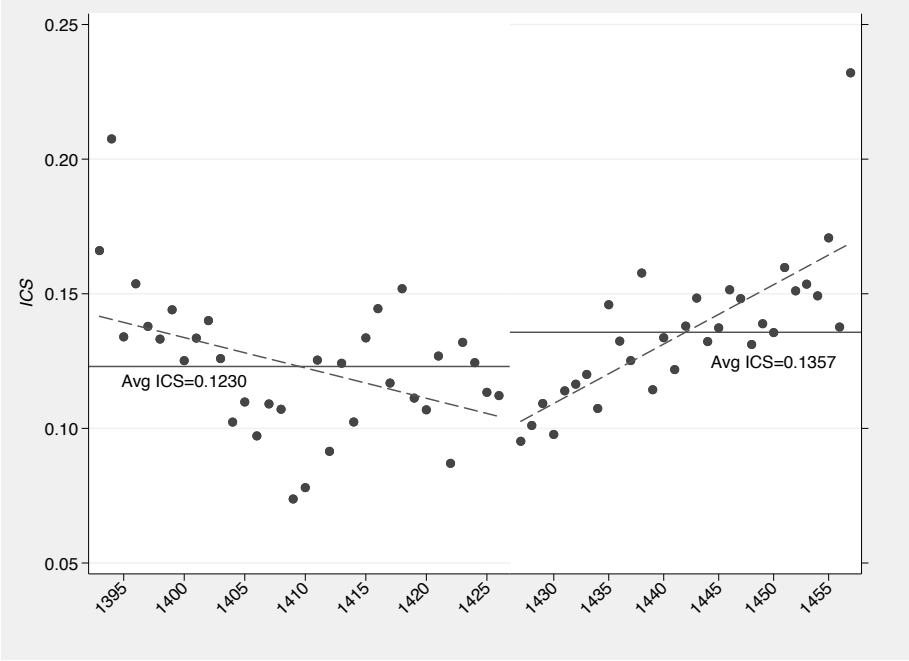


Figure 7: Institutional content of surnames before and after 1427.

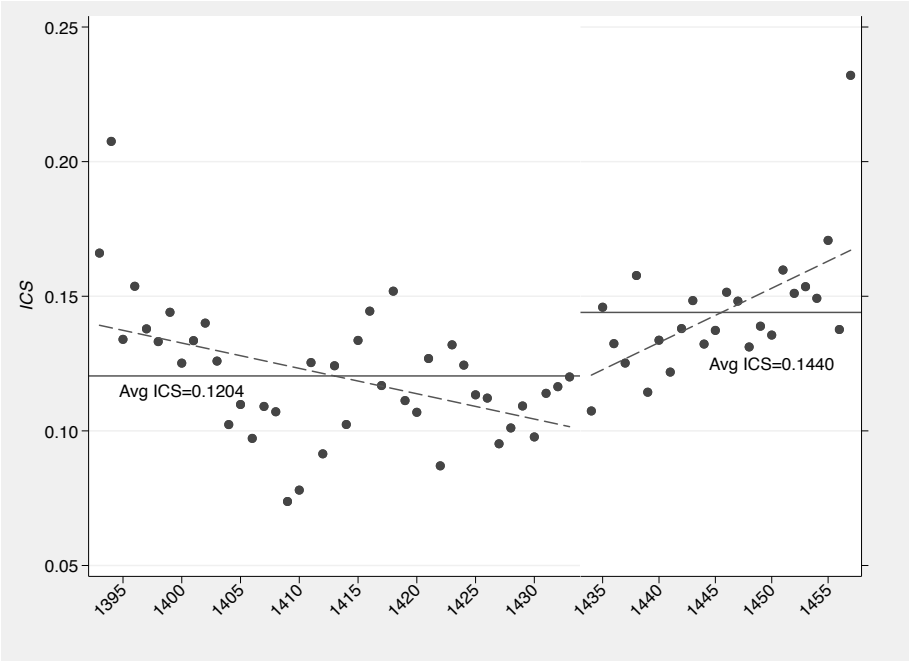


Figure 8: Institutional content of surnames before and after 1434.

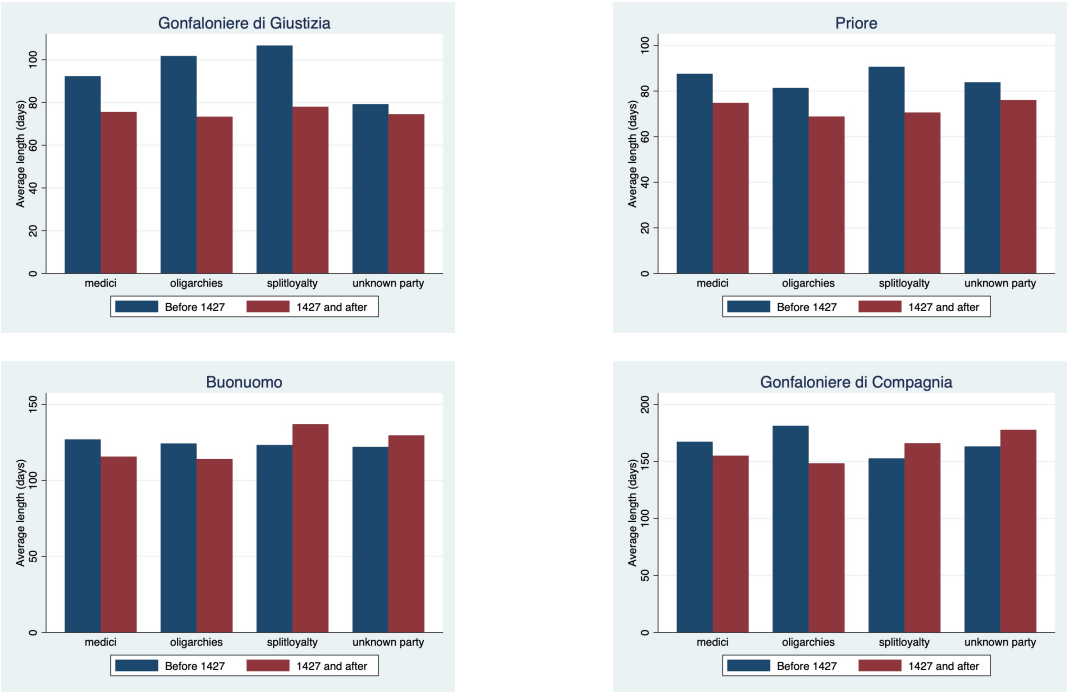


Figure 9: Time in office before and after the institutional capture.

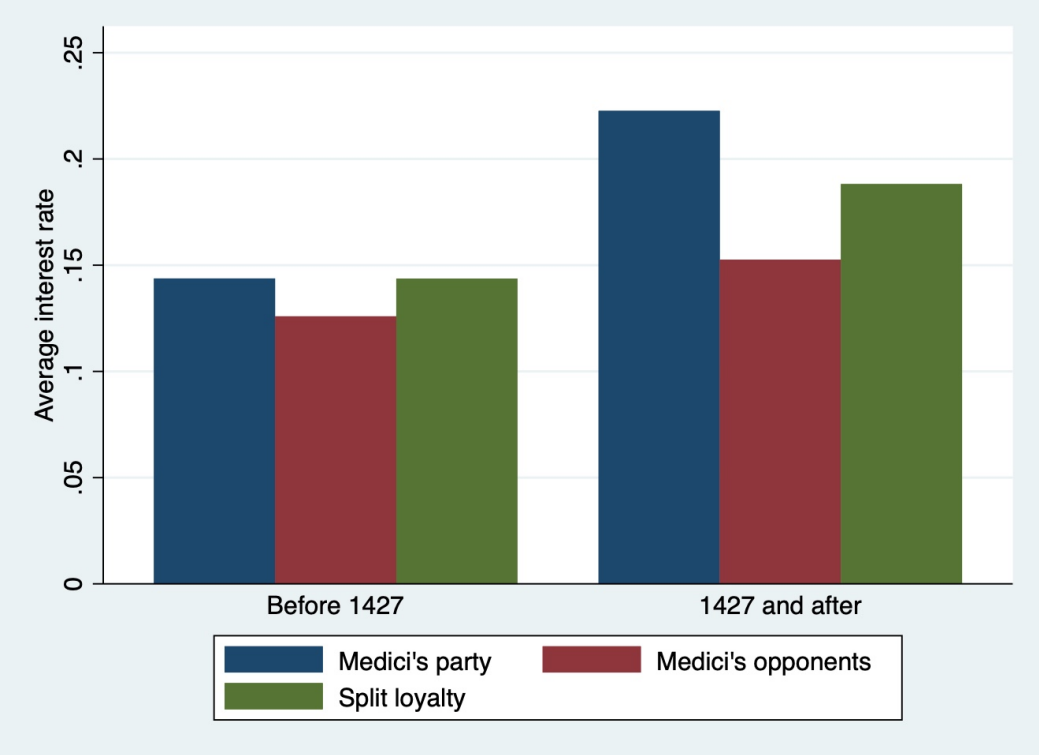


Figure 10: Average interest rate by party before and after the institutional capture.

Table 1: Individual loans to Florentine government by party

Individual	Loan (florins)	Faction
Cosimo Medici	155887	Medici
Andrea Ugolino Pazzi	58524	Medici
Bernardo Lamberto Lamberteschi	34825	Medici's opponents
Lorenzo messer Palla Strozzi	33951	Medici's opponents
Pierozzo Francesco Dellaluna	27156	No affiliation
Antonio Salvestro Serristori	26527	Medici
Donato Ugolino Bonsi	26405	No affiliation
Antonio Jacopo Pitti	26106	Medici
Jacopo Piero Baroncelli	18362	No affilation
Gianozzo and Filippo Manetti	15345	No affiliation
Bernardo Antonio Uzzano	13854	No affiliation

Notes.

Table 2: Wealth in 1427 and terms in office.

	Reduced form			
	Dependent variable: Log total assets in 1427			
Draws between 1393 and 1426	0.0412***	0.0156	0.0111	0.0031
	(0.0113)	(0.0164)	(0.0156)	(0.0155)
R-squared	0.0671	0.0965	0.1018	0.1295
Observations	396	396	396	396
Neighborhood FE	YES	YES	YES	YES
Number of bags FE	NO	YES	YES	YES
Office FE	NO	NO	YES	YES
Corporation FE	NO	NO	NO	YES
	First stage			
	Dependent variable: Terms between 1393 and 1426			
Draws between 1393 and 1426	0.4967***	0.0770**	0.0714**	0.0697**
	(0.0498)	(0.0332)	(0.0315)	(0.0314)
R-squared	0.6195	0.8229	0.8254	0.8260
	IV estimates			
	Dependent variable: Log total assets in 1427			
Terms between 1393 and 1426	0.0830***	0.2033	0.1557	0.0444
	(0.0232)	(0.2401)	(0.2397)	(0.2198)

Notes. Dependent variable is the log of total wealth in 1427. Standard errors clustered by *gonfalone* (16 districts of Florence). *** significant at 1%, ** significant at 5%, * significant at 10%.

Table 3: Wealth and number of draws before 1403 (Prestanze).

	Dependent variable: Log Prestanza in 1403			
Draws between 1404 and 1426	0.0319	0.0242	0.0165	0.0141
	(0.0266)	(0.0448)	(0.0383)	(0.0392)
R-squared	0.2572	0.2993	0.3659	0.3745
Observations	119	119	119	119
Neighborhood FE	YES	YES	YES	YES
Number of bags FE	NO	YES	YES	YES
Office FE	NO	NO	YES	YES
Corporation FE	NO	NO	NO	YES

Notes. Dependent variable is the log of forced loan in 1403. Standard errors clustered by *gonfalone* (16 districts of Florence). *** significant at 1%, ** significant at 5%, * significant at 10%.

Table 4: Wealth in 1427 and terms in office.

	OLS results			
	Total assets in 1427			
Terms between 1393 and 1426	0.0778***	0.0590	0.0496	0.0347
	(0.0268)	(0.0703)	(0.0717)	(0.0737)
R-squared	0.0780	0.0979	0.1028	0.1301
Observations	396	396	396	396
Neighborhood FE	YES	YES	YES	YES
Number of bags FE	NO	YES	YES	YES
Office FE	NO	NO	YES	YES
Corporation FE	NO	NO	NO	YES

Notes. Dependent variable is the log of total wealth in 1427. Standard errors clustered by *gonfalone* (16 districts of Florence). *** significant at 1%, ** significant at 5%, * significant at 10%.

Table 5: Wealth in 1457 and terms in office.

	OLS results			
	Dependent variable: Log total assets in 1457			
Terms between 1427 and 1457	0.0968***	0.1035***	0.0952***	0.1058***
	(0.0201)	(0.0309)	(0.0320)	(0.0322)
R-squared	0.0784	0.0837	0.0960	0.1320
Observations	577	577	577	577
Neighborhood FE	YES	YES	YES	YES
Number of bags FE	NO	YES	YES	YES
Office FE	NO	NO	YES	YES
Corporation FE	NO	NO	NO	YES

Notes. Dependent variable is the log of total wealth in 1457. Standard errors clustered by *gonfalone* (16 districts of Florence). *** significant at 1%, ** significant at 5%, * significant at 10%.

Table 6: Wealth in 1457 and terms in office after the Medici's consolidation (1434).

	OLS results			
	Total assets in 1457			
Terms between 1434 and 1457	0.0956***	0.1281***	0.1189***	0.1287***
	(0.0331)	(0.0382)	(0.0374)	(0.0384)
R-squared	0.0933	0.1067	0.1184	0.1437
Observations	522	522	522	522
Neighborhood FE	YES	YES	YES	YES
Number of bags FE	NO	YES	YES	YES
Office FE	NO	NO	YES	YES
Corporation FE	NO	NO	NO	YES

Notes. Dependent variable is the log of total wealth in 1457. Standard errors clustered by *gonfalone* (16 districts of Florence). *** significant at 1%, ** significant at 5%, * significant at 10%.

Table 7: Wealth in 1457 and terms in office: Medici vs other families.

	OLS - Total assets in 1457			
	1427-		**1434-**	
	Other families	*Medici's faction*	*Other families*	*Medici's faction*
Terms between 27(34) and 57	0.1176***	0.1741*	0.1208***	0.2430***
	(0.0322)	(0.1013)	(0.0494)	(0.0982)
R-squared	0.1479	0.1544	0.1595	0.4223
Observations	473	104	422	100
Neighborhood YES	YES	YES	YES	YES
Number of bags YES	YES	YES	YES	YES
Office FE	YES	YES	YES	YES
Corporation	YES	YES	YES	YES

Notes. Dependent variable is the log of total wealth in 1457. Standard errors clustered by *gonfalone* (16 districts of Florence). *** significant at 1%, ** significant at 5%, * significant at 10%.

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7 Appendix

TO BE COMPLETED

7.1 Appendix A.1: Time (in)dependence of individual draws

We use the panel structure of the data on the *Tratte* and test for time independence of effective draws:

$$Ndraws_{i_p,t} = \eta_1 Ndraws_{i_p,t-1} + ... + \eta_4 Ndraws_{i_p,t-4} + \alpha_p + \tau_t + \epsilon_{i_p,t},$$

where $Ndraws_{i_p,t}$ is the number of times the name of individual i in purse p was drawn in year $t \leq 1427$ ($Ndraws_{i_p,t} = 0$ if individual i in purse p has never been drawn in year t); α_p are pursue fixed effects τ_t are year effects; $\epsilon_{i_p,t}$ residuals are clustered at the individual level.

Table A1: Time dependence of individual draws.

	Number of draws in t (≤ 1427)			
Number of draws in t-1	0.0089	0.0161	0.0201	0.0210
	(0.0203)	(0.0221)	(0.0234)	(0.0247)
Number of draws in t-2		-0.0060	-0.0007	0.0033
		(0.0163)	(0.0174)	(0.0187)
Number of draws in t-3			-0.0125	-0.0097
			(0.0157)	(0.0164)
Number of draws in t-4				-0.0162
				(0.0125)
R-squared	0.0225	0.0235	0.0232	0.0237
Observations	131,866	124,182	116,535	108,949
Pursue FE	YES	YES	YES	YES
Year effects	YES	YES	YES	YES

Notes. *** significant at 1%, ** significant at 5%, * significant at 10%.

7.2 Appendix A.2: Individual fixed effects

We estimate the following equation in panel structure:

$$Terms_{i,t} = \delta_1 Draws_{i,t} + \alpha_i + \tau_t + \epsilon_{i,t},$$

where $Terms_{i,t}$ ($Draws_{i,t}$) is the number of times individual i was seated (seen) in year t; α_i are individual fixed effects; τ_t are year effects; $\epsilon_{i,t}$ residuals are clustered at the individual level.

Table A2: Panel results.

	Dependent variable: Terms in the period			
	1393-1427		**1428-1434**	
Draws in the period	0.2647	0.2581	0.1667	0.2437
	(0.0656)	(0.0977)	(0.0353)	(0.0440)
R-squared	0.1616	0.4305	0.1129	0.4758
Observations	1,051	1,051	1,827	1,827
Time FE	YES	YES	YES	YES
Individual FE	NO	YES	NO	YES

Notes. *** significant at 1%, ** significant at 5%, * significant at 10%.