



The scale and scope of citizenship in Early Modern Europe: preliminary estimates

Document Identifier

D3.1 Working paper on 'numbers of masters and apprentices relative to various other groups'

Version

1.0

Date Due

31.10.2014

Submission date

30.10.2014

WorkPackage

3 Historical Citizenship - guilds and apprentices

Lead Beneficiary

24 LSE

Dissemination Level

PU



Grant Agreement Number 320294
SSH.2012.1-1



Change log

Version	Date	amended by	changes
1.0	30.10.2014	Chris Minns	Delivered final paper to coordinator

Partners involved

number	partner name	People involved
1	UU	Marcel Hoogenboom, Maarten Prak
2	UA	Raoul de Kerf, Bert de Munck
24	LSE	Chris Minns (lead author), Christopher Kissane, Patrick Wallis
	Not a partner	Clare Crowston (Illinois)

Special thanks to

Erika Kuijpers, and Ronald Rommes for sharing data. Comments from participants in meetings at LSE, Vienna (ESSHC) and Istanbul (bEUCitizen Annual Conference), as well as from Robert Csehi, and David Levi-Faur have improved this paper. Josep Capdeferro (Pompeu Fabra) participated in workpackage meetings where preliminary work was conducted. We have benefited from the generosity of the London Metropolitan Archive, Ancestry.com, and the Lincolnshire Family History Society, who shared source materials with us.



Table of Contents

EXECUTIVE SUMMARY	2
1. INTRODUCTION	3
2. DEFINING EARLY MODERN CITIZENSHIP.....	6
3. COUNTING CITIZENS, MASTERS AND APPRENTICES.....	12
DISCUSSION AND CONCLUSIONS	21
REFERENCES	24
TABLE 1: MUNICIPAL CORPORATIONS, 1835: FREEDOM METHODS.....	30
TABLE 2: CITIZENSHIP AND MASTERSHIP IN EUROPEAN CITIES – POPULATION RATES.....	31
TABLE 3: CITIZENSHIP AND MASTERSHIP IN EUROPEAN CITIES – HOUSEHOLD RATES.....	34
TABLE 4: ENFRANCHISED POPULATION AS PERCENTAGE OF THE ADULT POPULATION, 1800-1910	37
FIGURE 1: BRISTOL CITIZEN INFLOWS AND STOCK PROJECTIONS.....	38
FIGURE 2: CITIZENSHIP RATES (INDIVIDUAL) OVER TIME.....	39
FIGURE 3: CITIZENSHIP RATES (INDIVIDUAL) AND POPULATION	40
APPENDIX: CITIZEN STOCK AND CITIZEN SHARE CALCULATIONS.....	41
APPENDIX TABLE A1: MODES OF ENTRY IN SAMPLE CITIE	56



EXECUTIVE SUMMARY

This paper develops a simple methodology to estimate the stock of citizens and citizenship rates for over 30 European towns and cities between 1550 and 1800. We find substantial variation in individual urban citizenship rates, from less than five percent to over twenty percent, even within the borders of present-day Western European nations. Estimates of the share of households with citizens suggest that many early modern cities were relatively inclusive, when compared to the extent of the franchise in mid to late 19th century European nation states. We also find compelling evidence that population growth and urban expansion was associated with a decline in the importance of urban citizenship.



1. INTRODUCTION

Recent scholarship has identified inclusive institutions as one of the underpinnings of successful long-run development (North, Wallis, and Weingast, 2009; Acemoglu and Robinson, 2012). Citizenship is a potentially important component of this set of inclusive institutions. It is a vehicle through which states and other public authorities can, if desired, provide residents with political voice, as well as access to a range of economic and political rights. The historical record, however, shows that citizenship regulations can also be used to exclude groups from full civic and economic participation, with migrants, women, and those without assets or economic means often suffering from limited access to citizenship in the past (e.g. Walker 1971; Boone and Prak 1996). Following this line of thinking, contemporary states can use citizenship to vary inclusiveness on two important dimensions: first, the availability of the status of citizen, which today is primarily a question for immigrant residents, and second, the set of economic and political rights available to citizens. National differences in such individual rights and access affect historical development. Engerman and Sokoloff (2005), for example, show a strong correlation between the extent of the franchise and the development of relatively inclusive educational systems in the 19th century. A similar relationship has been identified between political voice and the provisioning of public goods more generally (Lindert, 2004).

Most of the current academic literature on citizenship takes for granted that citizenship is a national institution. For example, Fahrmeir's widely-used textbook on citizenship refers to the stage "before citizenship", with the French Revolution portrayed as "the invention of citizenship" (Fahrmeir, 2007, 9, 27). This perspective, however, ignores the complex, well-developed, and highly diverse urban citizenship regimes that existed across Europe in previous centuries. Urban citizenship was a key condition for economic and political enfranchisement, through its association with rights, privileges, and the ability to participate in a wide array of institutions present in European towns and cities. While the French Revolution may well have proved a turning point in terms of how states viewed their residents, the form of national citizenship it launched was in large part a response to the corporate institutions present in pre-industrial Europe. These older forms of urban citizenship, therefore, should be seen as the historical antecedents of the national citizenship systems that emerge in the late 18th and early 19th centuries, and which we observe in the present day (Marshall, 1950; Tilly, 1995; Prak, 1997).

One of the distinctive features of urban citizenship prior to 1800 is that most of the associated economic and political rights reflect the relatively local nature of the institution. Local, city-based citizenship is an idea that is of renewed interest to many social scientists. Engin Isin (ed. 1999, 2002, 2007, 2008) and Saskia Sassen (2006, ch 2) have proposed a revaluation of cities as the prime location for citizenship, and explicitly pointed out the historical roots of such a vantage point. At first glance, several of the world's most dynamic labour markets today bear a passing resemblance to the



city-states of the past, and a common feature of these cities is that citizenship regimes do not appear to be particularly inclusive, as this status is not widely shared amongst the local population. Approximately 40 percent of the population of Singapore were non-citizens in 2011, while in Qatar and the United Arab Emirates over 90 percent of the local population are migrants without citizenship. (Thompson, 2014; Sater, 2014) In China, urban citizenship is restricted by the *hukou* system of residency certification, and many city residents (almost 30 percent in Shanghai) lack the social and economic rights associated with urban citizenship (Zhang and Wang, 2010).

Urban citizenship in the pre-industrial world gave access to political rights. While political entitlements varied widely around Europe, citizenship permitted those with the status to be politically active to different degrees, either as voters or as actors who were elected or selected into leadership roles. However, urban citizenship was also an arrangement in large part connected to corporate activity related to trade and production; guilds and other urban entities licensed the rights to produce goods and trade them in markets over which they had jurisdiction. These rights were reinforced by urban authorities who monitored production and trade in their market. The monitoring of the corporate economy by guilds and urban authorities extended to the training of apprentices. While guild membership (and indeed, citizenship) could also be acquired through patrimony (inheritance from a citizen father) or purchase, apprenticeship was for many the primary route of access to full economic rights (Farr, 2000).

How, then, was citizenship connected more broadly to economic development in the pre-industrial world? Max Weber (1958), in his influential study of the European city, argued that it was communities based on 'oath-bound' citizenship which distinguished cities of the west from those in Asia. In his footsteps, many an historian has examined medieval and early modern urban citizenship from a political perspective, stressing the constraints and limits of entry as well as the liberties and rights attached to it. (See e.g., Dilcher, 1996; Isenmann, 2002) Economic historians have also recently stressed the importance of citizenship. For the Dutch Republic, Van Zanden and Prak (2006) argue that early modern citizenship was vital in establishing the basis for the formation of an integrated state, contributing to remarkable economic success from 1572 to 1700. It has likewise been debated whether such entry requirements as apprenticeship and entrance fees in guilds may have benefitted technological development (Epstein, 1998; cf. Ogilvie 2004). This depends, however, on how citizenship requirements were enforced; in markets where barriers to citizenship were low, where constraints on non-citizens were weaker, or where alternative statuses such as "inhabitant" allowed engagement in a range of economic activities, citizenship restrictions should have been less able to limit access to trade and production.

Although histories of citizenship identify the shift from local, urban citizenship to national citizenship as a crucial watershed, few have examined what this implied for the extent of citizen status in different countries. Inclusivity may vary both in the share of population able to participate,



and the ability of eligible actors to influence economic outcomes and shape institutional change. Openness, whether through the extension of citizenship to a greater population, or the limits imposed on non-citizens, has further implications for market structure and the ability of guilds to successfully operate local urban monopolies. Market structure could also have implications for development through the labour market. In economies where guild membership was exclusive to citizens, the training of apprentices was reserved to the citizenry, with apprentices in turn often seeking training in part to join the citizenry for the various benefits of membership. The value of engaging in formal apprenticeship through training with a citizen was affected by the extent to which rights in urban markets were attached to citizenship (and enforced by guilds and other local authorities).

Economic arguments related to the importance of early modern citizenship are mainly based on developments in the Dutch Republic (Van Zanden and Prak, 2006). Historians have shown, however, that the degree of inclusivity or exclusivity of urban citizenship varied between and within countries and regions, as did the rights and entitlements associated with citizenship and membership in other corporate institutions. In some European environments, there was no obvious parallel to citizenship as experienced in the model cases in England and the Netherlands. For example, guilds were an important part of the urban economy in pre-revolutionary France, but any additional rights associated with early modern citizenship elsewhere were largely absent.¹ These “national” differences in how citizenship operated pose a significant challenge for historical cross-country comparative work that is at the heart of this project. Our knowledge of this variation, both in terms of what it meant to be a citizen, and the extent of citizenship within urban societies is limited by the currently available evidence base, which consists mainly of detailed local (or in some cases, national) studies of particular urban communities.

The objective of this paper is to deliver a comparative assessment of the quantitative extent of citizenship in early modern Europe. How many citizens were there, and how prevalent were citizens as a share of urban population? How did citizenship frequency compare to guild-based access to economic rights, through apprenticeship and eventual master-ship? The characteristics of the system itself, where could one become a citizen, and how did one become a citizen, are addressed in other papers. We develop a simple methodology to estimate the stock of citizens and/or guild members from more frequently available data on inflows into citizenship, and use this method in conjunction with available population data to generate estimates of citizenship rates for over 30 towns and cities in Europe between about 1550 and 1800. In what follows, we begin with a brief discussion of what citizenship meant in five different urban and national contexts: England, the Netherlands/Dutch Republic, Belgium/Southern Netherlands, the German-speaking world, and

¹ See Farr (2008, p. 10-11) for a notable absence of discussion of citizenship privileges.



France.² This is followed by a detailed presentation of our methodological approach, leading to a detailed quantitative exercise where we compare the number and frequency of citizenship (and alternatively, guild membership) between cities in the five regions from the seventeenth to nineteenth centuries. We conclude by using these data to present a pan-European comparative perspective on the quantitative importance of citizenship before industrialisation.

2. DEFINING EARLY MODERN CITIZENSHIP

Definitions

The concept of pre-industrial citizenship has often been defined by reference to its characteristics in particular towns. While notions of citizenship are understood within each environment, comparing the institution around Europe provides a significant challenge to this project. To make effective comparisons around Europe, we begin by briefly considering the characteristics of early modern citizenship. In some environments, such as England, citizenship was strongly associated with economic rights, like access to the right to trade and train in local product and labour markets.³ In cities with guilds, citizenship may have been a necessary condition to access economic rights in many instances (e.g., Dilcher, 1996, 153-4; Isenmann, 2002, 237-9; Boone and Stabel, 2002, 322), but was usually not a sufficient condition for guild membership and the ability to produce: fees were paid on reception to the guild, entrance could be conditional on the presentation of a masterpiece, or having trained in the guild (see Farr 1988, p. 21-22; Friedrichs 1995, p. 156). In communities without citizenship, guild membership was the vehicle through which masters acquired economic rights, even if further political and social rights outside the guild were not necessarily attached to this status.⁴ Citizenship and/or guild membership were not, however, always the only pathways to economic rights. As we will see below, statuses such as “inhabitant” might sometimes confer partial rights, while in German Europe gradations within the citizenry appear to be important. Depending on how tightly the city enforced its rules, those too poor or unable to meet one of the requirements for citizenship found settling and working difficult.

² Understanding differences between citizenship regimes is developed in more extensive detail in later deliverables in this project.

³ Our analysis here does not pay explicit attention to civil rights (as emphasized by Marshall (1950)), although much of our discussion of economic rights refers to what were in effect a form of civil entitlement.

⁴ If entry to a guild was not conditional upon burghership, non-burghers sometimes faced a higher entrance fee for the guild. (Boone and Stabel, 2002, p. 322).



Citizenship generally carried with it certain political rights and duties, though these varied considerably between cities and regions. These might include some form of political franchise, such as voting in English parliamentary elections, the ability to participate in urban decision making, or hold civic office. It also carried entitlements to various forms of social welfare, as in Antwerp, Ghent, and elsewhere. In German towns and cities with their own council, and especially in the free imperial cities, citizenship was (theoretically) legal membership of the community: it generally conferred the right to vote and be represented, to use the courts, to join a guild, and to live as a full and respectable member of the community. (See e.g., Dilcher, 1996; Isenmann, 2002) In the words of Mack Walker (1971, 140), ‘the community was a *Bürgergemeinde* of citizens, not an *Einwohnergemeinde* of inhabitants. Simply living in the town space did not confer membership rights’. Where political and social rights were on offer, citizenship could have considerable value also for those who were not directly engaged in trade or artisanal production. In environments with political and social rights, citizenship was of particular value to migrants, as it would provide access to many of the benefits of urban residence that were on offer to native residents through birth or inheritance (Cerutti, Descimon and Prak, 1995; Boone and Prak, 1996).

Multiple modes of entry into citizenship (or where citizenship was absent, guild membership) existed and the precise combination varied greatly between different places. Many authorities permitted entrance to citizenship through qualification. Qualification typically consisted of having served an apprenticeship in a local guild, with the completion of the apprenticeship being a pre-requisite for entering citizenship for those without other modes of access. An alternative route to citizenship was purchase, with those able to pay a fee acquiring the rights associated with entry. Another common mode of entry to citizenship was through birth, with those locally born automatically entitled to citizenship. As we outline in more detail below, some communities offered “droit du sol”, with those born locally entitled to citizenship, while other operated a “droit du sang” regime, with the children and descendants of citizens entitled to claim the status. In many locations those who were not born into citizenship could instead marry someone with citizenship rights. Such a pattern is also in evidence for guild membership in 17th century Dijon; here journeymen were more likely to marry the daughters of masters than were the sons of fellow masters (Farr, 1988, 139-140). In other places, such as 16th-century Augsburg, marriage was seen as a “moral requirement” attached to guild membership (Farr, 2000, 245) Finally, local urban authorities often had the right to elect citizens, or to provide citizen status as a gift to chosen individuals (e.g., De Meester, 2011, 320-338). As well as having the prerequisite skills, connections or luck to fulfil the requirements of one of these modes of entry, prospective citizens might also have to meet other criteria, such as legitimate birth, following a specific religion, or lacking disease or disability.



Citizenship Regulations around Europe

How did citizenship conditions and citizenship entry vary around early modern Europe? The operation of citizenship is fairly well understood in England, the Low Countries and Germany.⁵

In larger cities in England, citizenship was in many instances closely tied to membership in urban guilds, and both often derived from completing a local apprenticeship. There was, however, a wide range of entry modalities into citizenship. The scale of this variation can be seen in table 1, drawing on data from an 1835 Parliamentary Report. The report summarizes the avenues of entry to citizenship in 271 towns and cities. Although compiled on the eve of reform in the early 19th century, the systems the Report described had mainly been established in the sixteenth and seventeenth centuries (Withington, 2005, ch. 2).⁶ The methods are classified into nine categories: freedom by birth or descent⁷; by service (apprenticeship); by gift from the corporation; by purchase; by election; by appointment; by marriage; and by residence. Some towns had “no freedom” method – usually when the town was governed by a select body of “citizens” who selected their own recruits directly. Summary statistics are presented both in raw form (as a share of corporations) and weighted by corporation population.

The statistics in Table 1 emphasize the variety of ways in which citizenship could be accessed across England and Wales. Many corporations offered apprenticeship (service) as a route in, such that the majority of the population in these towns could access citizenship through service, but birth-right was just as important. The national means conceal a lot of local variation; for example, birth-right was rare in Southern England (only about 10 percent of corporations), but was a legitimate way to become a citizen in three-quarters of northern corporations. Gift, purchase, and election are also seen in about 20 to 30 percent of corporations, while appointment, marriage, and residence remain just under ten percent. Note, though, that in practice each mode accounted for very different shares of new citizens in each town. Note also that in England, there few towns which offered an ‘intermediate’ status giving partial economic rights below those of full citizen.⁸ Women were rarely

⁵ See Appendix Table A1 for a summary of modes of entry for the towns and cities in our study.

⁶ We have also calculated these figures by regional circuit, and they are available on request.

⁷ Some English corporations allowed those descended from burgesses (freemen) to claim the status; one example is Shrewsbury (Forrest, 1924, p. xi-xix).

⁸ Only limited examples are apparent, such as the post-1750 scheme to license non-citizen Journeymen to work in London if sponsored and employed by a citizen, or Leicester’s temporary licenses to non-citizen butchers (Kellet 1957-8, 389-90; Hartopp 1927).



capable of acquiring citizenship independently in English cities, although this appeared to derive mainly from practice and the nature of the qualifications rather than a formal rule barring access.⁹ Marriage to a citizen gave women similar economic and social (though not political) rights to their husband, which would often survive into widowhood – although they might be expunged on remarriage to a non-citizen.

In cities and towns in the Northern Netherlands, entry into citizenship was dominated by inheritance, with those born to existing citizens entitled to the status. It appears, however, that few born citizens bothered to register their status in order to receive a certificate of citizenship (Kuijpers and Prak 2001; see also Rommes 1998 for Utrecht). Immigrants who wished to become citizens had to purchase the status and register with the city authorities. Registration dues were modest in most towns in the west of the country, more expensive as one moved east (Lourens and Lucassen, 2000). In Amsterdam, however, dues rose rapidly during the first half of the 17th century, when the city was overwhelmed by immigrants. The extra income was mainly spent on care for orphans and other welfare programmes. After 1650, when immigration started to level out, the city decided to create the intermediate status of “inhabitant”, which provided guild admission free of charge, but no other rights available to the citizens of Amsterdam.

Similar institutional arrangements were present in the Southern Netherlands. While *ius sanguinis* (inheritance) was applied in most cities, full citizenship was acquired through local birth rather than inheritance in Antwerp and ‘s-Hertogenbosch among other cities. (Kint 1996; Prak 1999, ch. 2; Thijs, 1995). In addition, purchase was possible in Antwerp, Bruges, Brussels, and elsewhere without a long waiting period being required. The purchase of citizen status was mostly possible for non-citizens who had resided in the city continuously for a year and a day, although this could sometimes amount to three years too. The status of inhabitant was acquired after one year and one day of residence automatically, but this did not yield access to political and economic rights. (Boone and Stabel, 2002, 319-21) Moreover, contrary to the situation in Amsterdam, full citizenship did not provide access to guilds automatically. While guilds prescribed citizenship as a condition to guild membership, they had separate mechanisms of entry – including fees and apprenticeship requirements.

In addition to patrimony, birth or a fee, citizenship implied loyalty to the Catholic religion. Sometimes a certificate of good conduct was also required, but this was not a standard practice. (Lourens and Lucassen, 2000, 25; Boone and Stabel, 2002, 319) More important in a quantitative sense, was the position of women. In all towns of the Low Countries, women could acquire citizenship

⁹ In London a very small number of women acquired citizen and master status through apprenticeship or purchase.



through marriage to a current citizen. Yet there were differences with regard to the question whether women could also pass citizenship to others. Contrary to Ghent, Bruges and most other cities where citizenship could also be acquired by men by marrying a female citizen, immigrant males marrying a women in Antwerp still needed to buy citizenship there before being able to become master.¹⁰ Nor did women have equal rights as a citizen. Access to political office was barred, and even access to guilds was often prohibited. Save for retailing and a few other typically female professions, female guild-members were mostly widows which could only run their late husband's workshop until they remarried. (Howell, 1986a, 1986b, 2, 164-7, 178-9; Deceulaer, 2001, 294)

A complex patchwork of principalities, territorial states, and independent city states, early modern German Europe had a wide variety of urban citizenship regimes. Gaining citizenship generally required a fee, an oath to the city, a minimum level of wealth or property, and a variety of social requirements (such as the 'right' local religion, proof of legitimate birth, a clean criminal record). The financial requirements could be lowered or waived for the sons of local citizens (who were almost always entitled to citizenship) or those the city wished to attract. Marriage was an important route to citizenship for migrants (in Frankfurt 1600-1735, 66% of migrant citizens married into a citizen family; Soliday 1974: 42) but it generally did not exempt one from the other requirements (Wiesner 1986: 21). Sons of citizens were generally required to become citizens in their own right once they got married. Legally citizenship was not restricted solely to men, but in practical and social terms citizenship was often a male dominated institution. Becoming a citizen was expected and often technically legally required, and those too poor or unable to meet the varying requirements (often including proof of legitimacy, the 'correct' local religion, wealth, and so on), found settling and working difficult.

As in the Netherlands, there were also other legal categories outside of citizenship, which could confer specific economic and residence rights, as well as populations outside these structures. (See e.g., De Munck and Winter, 2012, 12-7) For example, while eighteenth century Hamburg was often seen as almost 'republican' for its citizenship-based constitution, the city had considerable numbers of residents purchasing the *Schutzbrief*, a legal document giving the right to work, as well as many foreigners and Jews possessing the *Fremdenkontrakt* ('foreigners' contract'). (Lindemann, 1990, 63-73).

Citizens – or those living within citizen households – were often far from equal in Germany. Even within the ranks of citizens, there was considerable division in status. In many of the imperial cities, groups of elite families dominated the local council, setting an elite apart from the rest of the

¹⁰ For an overview, see Godding, 1987, 58. For Antwerp: De Meester, 2011, 38. For Ghent: Boone and Stabel, 2002, 319-322. For Bruges: Deneweth, 2010b, 28-39.



citizenry (see Hirschmann and others in Rössler 1968; Soliday 1974; Batori 1969). In Augsburg different social ranks of the citizenry were legally defined, all the way down to their rights to wear different types of clothing (Stuart, 1999).

In German Europe, the biggest division of all within the citizenry was between men and women. As Merry Wiesner-Hanks has noted, individual female entries in German citizen books became much less common during the early modern period than it had been in medieval times, with more women implicitly considered part of citizen households headed by their fathers or husbands. While female citizenship continued in German cities after the Reformation, the rights practically enjoyed by citizen women were much less than those of men.¹¹ Some scholars have characterised the citizenship of such women as 'passive' (Friedrichs, 1979: 39 n8), or 'latent' (Soliday, 1974: 41).

Widows made up an important group of female citizens, as many headed households and practiced trades (some of which were reserved for widows). Some cities required that migrant women marrying into the citizenry purchase citizenship for themselves and meet a minimum wealth requirement, like migrant men (see Wiesner 1986: 21; Friedrichs 1979: 55; Soliday 1974: 41). Migrant citizen admissions, therefore, could often include many women. Citizenry overall, however, was predominantly male. Figures from Nördlingen indicate that the registered citizenry was generally 80-85% male in sample years from 1579-1724 (calculated from numbers in Friedrichs 1979, Appendix 3)

In France the concept of "citizenship" as understood elsewhere on the continent does not apply particularly well. Guild membership provided considerable economic rights to members, as it did elsewhere, but the political rights enjoyed by citizens in London, Antwerp, Augsburg and many other European towns and cities appear to have been universally absent (Tingle, 2000, 101). For France, we therefore focus on guild membership, as the best equivalent to the economic component of citizenship elsewhere. As in other cases there was quite a lot of inter-urban variation in access to economic rights and other forms of privilege. The normative path to guild membership consisted of completing a set period of apprenticeship, followed by several years of experience as a journeyman, payment of entrance fees and preparation of a masterpiece. Masters' sons were guaranteed eased conditions for entry and many guilds also permitted the husbands of masters' widows and, occasionally, daughters to join the guild on similar terms as masters' sons. During the early seventeenth century, financial pressures induced the royal government to permit artisans and merchants to purchase membership outright, a practice despised by the guilds. The relative weight of each of these paths varied enormously within the guilds of any city and within the same trade across cities.

¹¹ See Wiesner, 1986, esp.13-35; Wiesner, 1998; Roper, 1987; Howell, 1988. A similar pattern is present in the Southern Netherlands, with few women buying citizenship in the centuries under consideration here.



3. COUNTING CITIZENS, MASTERS AND APPRENTICES

Estimating Citizen Stocks and Citizen Shares

In an ideal world, we would be able to draw on archival evidence of counts of the stock of citizens for selected years for a range of towns and cities around Europe. These counts could then be divided by urban population estimates to calculate citizenship rates. Alternatively, where we have better information about guilds than citizens, counts of masters could be divided by population to estimate master-ship rates.¹² In practice, we only have a very limited number of “snapshots” of master or citizen populations at any one point in time. Guilds and urban authorities were, however, quite diligent in counting flows of new members. For most of the estimates of citizenship rates that follow, we use a simple procedure to estimate citizen stocks from flow data for our sample of European towns and cities. These estimates combine two pieces of information: a) annual flows into citizenship from about 1500 (or as early as possible) and b) estimates of the rate of attrition from citizenship, due to death or departure. The following equation describes the process we use to model citizen stock in cities with a sufficiently long run of flow data:

$$C_t = (1 - d)C_{t-1} + F_t \quad (1).$$

In equation (1), C_t refers to the estimated stock of citizens at time t , F_t to the number of new freedoms in the register at time t , and d the departure rate from the stock of citizens in any given year. For each location, we execute these calculations with an initial F value in the first period of zero. While this is not technically correct, it does not affect calculated stocks over the long run, as the initial undercounting of citizens is washed out by mortality and replacement. More critical is establishing a reasonable estimate of the rate of attrition d . One starting point is Wrigley and Schofield’s age-adjusted death rate of about 30 per 1000 for the 18th century (Wrigley and Schofield, 1981), though this will underestimate attrition when and where mortality was higher, and to the extent that citizens left urban corporations for reasons other than death. Preliminary testing used data for Bristol, where we have a terminal estimate of the number of citizens in 1832 ($F_{1832} = 5318$) from the Report of the Commissioners Appointed to Inquire into the Municipal Corporations of England and Wales (1835). Using this terminal F in conjunction with annual data on flows into citizenship (C) yields a fitted value of d of about .04, which we use in all our estimates below. We are also able to compare stock predictions and corporator counts for Boston, Ipswich, and Lincoln. A d of .04 provides a good fit for both Boston and Ipswich. Lincoln was reported to have many more corporators than our method

¹² James Farr found ratios of guild-based artisans relative the taxpaying male household heads between 21.3 % and 83.3 %. Farr, 2000, 96-7.



would predict, with the total in 1832 exceeding the sum of all inflows observed over the previous 75 years.¹³

A similar approach can be used to simulate the stock of masters. When records of inflows of masters exist, equation (1) can be used with masters substituting for citizens. Alternatively, it is also possible to derive stock simulations from apprenticeship records. To do this, equation (1) is modified to account for attrition between apprenticeship and master-ship:

$$M_t = (1 - d)M_{t-1} + rA_{t-i} \quad (2).$$

M denotes the stock of masters, d is the departure rate from master-ship, A is the number of “graduate” apprentices at time t: it consists of those individuals who signed indentures at time t-i for an indenture length equal to i. Finally, r is the “graduation rate” from apprenticeship to master-ship, which accounts for mortality, early departure, lack of capital to start an enterprise, and so forth. Clearly any calculation based on equation (2) is even more approximate than equation (1). It embeds assumptions about the apprentice attrition rate, which may vary between towns and within towns over time in a way that we cannot observe. It also assumes constant indenture length and a uniform interval between indenture and master-ship, neither of which was strictly true in the setting of early modern apprenticeship. Masters who did not serve local apprenticeships are excluded, which results in a serious underestimation when sons of masters enter the guild without have completed a service period. Nevertheless, it provides us with a further avenue to characterise the growth of urban communities over time.

We transform estimates of the stock of citizens into citizenship rates by dividing stock estimates by population estimates for target dates from the 16th to 19th centuries, depending on data availability. We draw urban population estimates mainly from Bairoch et al (1988) and de Vries (1984). This calculation provides an estimate of the share of the population who are in direct possession of the rights associated with citizenship. Alternative calculations of citizenship rates are also of interest, however. One alternative of particular historical relevance is to calculate the share of households containing a citizen resident. Members of “citizen households” could expect to share (and inherit) the local rights associated with citizenship, even if all members were not currently (and formally) citizens. Individuals in households without the presence of a citizen were much more likely

¹³ We also find that our stock prediction for Hamburg is almost identical to an independent estimate by Lindemann (1990). Friedrichs (1985, Appendix 6) reports that for Nordlingen, 53-62 percent of admitted citizens were still alive after 25 years for samples of entrants from 1580-1585, 1598-1603, 1647-1652, and 1695-1700. For 1622-1627 cohorts affected by war and plague, survival rates were 25 percent. A d of .04 in equation (1) implies a 36 percent survival rate. Our methodology may lead to a moderate underestimate of citizen stocks in the long run, particularly for smaller locations with better sanitary conditions.



to be fully excluded from the economic, political, and social entitlements of citizenship. Calculating citizen household shares presents additional challenges, however. We do not know detailed population demographics for most of the towns and cities for which we have citizen flows and widely accepted population estimates. There are numerous studies of household size between 1600 and 1800 for many European locales (see Laslett and Wall, 1972), but very few of the locales are also places for which we know about entry into citizenship. As a result, we use the simple approximation of an average household size of 4.5 members to convert population estimates to household counts. This figure is close to the medians reported for 18th century England by Wall (1978, 192, Table 5.2), and broadly in line with larger urban areas in continental Europe (Laslett and Wall, 1972).¹⁴ We do not possess sufficient information to adjust this figure for trends over time of differences between parts of Europe, and remind the reader to bear this in mind when considering the preliminary calculations that follow.

A final point in estimating citizenship rates pertains to how we deal with cities (such as in the Northern and Southern Netherlands) where born residents were automatically entitled to citizenship. Access by birth implies high citizenship rates and wide access to political rights, which we wish to document. But much of the evidence for the Low Countries indicates that few with citizenship entitlement by birth bothered to formally claim their status. This could reflect the perception that some rights were of little value, but it is also possible that citizens only registered if they thought to exercise their rights or expected their rights to be challenged in the future. Economic rights, which had significant value for those with the right skills and connections, were often bound to guild membership rather than citizenship. There is one group in the population of these cities, however, that would have a strong interest in registering their citizenship claims: migrants. If we view citizenship rates as an indicator of openness, the share of migrants who were citizens is a useful indicator, and can be compared directly to overall citizenship rates in towns and cities where birth did not provide access.¹⁵ We calculate migrant citizen shares for the Low Countries, and include this in comparison to overall (individual) citizenship rates in other locations in Table 2.

¹⁴ The household size literature suggests that London typically had larger households than elsewhere in England, if not Europe. If this was indeed the case, dividing population by 4.5 is likely to lead to a slight overestimate in the number of households in London, and a downward bias in the estimated share of citizen households.

¹⁵ One further problem is experienced in transforming citizenship as a share of population to citizenship as a share of the economically active population, in that migrants are disproportionately likely to be economically active. We do not have any evidence to hand to adjust for this.



England

We have used the methodology outlined through equation (1) to construct estimates of citizen stocks for London and nine additional English towns and cities: Bristol, Boston, Canterbury, Chester, Doncaster, Ipswich, Leicester, Lincoln, and York. These cities were chosen because complete freedom records exist, and have been published in such a way to make the costs of constructing a data series relatively modest. We use annual counts in all cases other than York, where we used Galley's (1998) tabulations of citizen inflows over 25 year windows, smoothing out the inflows due to electoral cycles that we see elsewhere.

Details of calculations for English cities are presented in the Appendix. As a visual example of how the procedure works, Figure 1 shows citizen inflows and imputed stock counts for Bristol, a city for which it is possible to compare stock simulations to the number of corporators present in 1835. The impact of elections on citizen inflows are strongly evident in Bristol. These pre-election peaks in enfranchisement were a reflection of the price a voter could obtain for their vote, spurring those who were qualified to obtain their citizenship. City authorities certified new citizens to shore up the vote share of their favoured party (O'Gorman 1989). This pattern begs the question of what the implications of the electoral cycle might have been for the economic importance of citizenship in England. One clear possibility is that elections generated groups of new citizens who otherwise would not have found it worthwhile to finance a freedom on their own initiative. Table 2 provides estimates of citizen propensity for the ten towns and cities. The data suggest that 10 to 15 percent of the total population of Bristol were citizens in the 17th and 18th centuries, with this share declining to 5 percent by 1835. For Leicester and York, estimates yield citizen shares that are in line with Bristol – somewhat higher for York, somewhat lower for Leicester prior to 1700. Citizenship appears more numerically important in these cities than in Bristol in 1835. Citizenship rates vary a little more among the smaller towns and cities. Only 5 to 7 percent of individuals in Canterbury and Ipswich are estimate to have been citizens, while in Boston, Chester, and Doncaster citizenship rates were over ten percent prior to 1750. Lincoln appears somewhat of an outlier, though this reflects the seemingly implausible number of corporators reported in 1832. In London, perhaps unsurprisingly, citizen shares are considerable lower than in the smaller cities, and had fallen markedly from the much higher levels reported for the mid sixteenth century (Rappaport 1989, p. 53), before we have a useable run of flow data.

We also use evidence from the London Livery Company Records to derive estimates of the stock of masters for London using equation (2). We assume that the “graduation rate” r is 40 percent, which falls well in line with what Ben-Amos (1991) and Minns and Wallis (2012) report in terms of the share of apprentices who eventually become guild masters. We make three further assumptions to use this data. First, we assume that the Livery Company Records cover about 2/3 of all of London's formal apprentices at that time (Leunig, Minns, and Wallis 2011). Second, we assume that apprentices who survive become masters seven years after beginning their indenture. Third, we adjust the stocks



for masters who did not enter through service. Here we assume that 70 percent of new masters arrived via apprenticeship. This rate is somewhat lower than the apprenticeship rate for 1660-1669 (83%), but well above similar figures for the late 18th century (55 percent, 1780-1799).¹⁶ This process yields peak estimates of the stock of masters of just over 29,000. Reassuringly, this estimate is of a similar order of magnitude to the peak citizen stock estimate (31,000), which gives us further confidence in the methodological approach chosen. The main differences between the approaches are in timing of the growth of the stocks, which reflects assumptions about the share of masters who were apprentices, and the lack of complete data on citizen inflows for the earlier part of the 17th century.

Northern Netherlands

In the Northern Netherlands, citizen inflows over time are well-documented for Amsterdam, Deventer, Kampen, Utrecht, and Zwolle. For Amsterdam flow numbers (indicating guesstimates where that is what the information seems to be) and estimates of stocks at various junctures.¹⁷ Inflows are based on data provided by Erika Kuijpers from 1636-51 and 1690, and estimates provided by Maarten Prak for other years. We use data provided by Kuijpers on origins to reduce the stock estimate to migrant individuals who could only acquire citizenship by marriage or purchase. The migrant share appears to be 66 percent in 1649, and 55 percent in 1690, so we assume a constant 60 percent rate to make this reduction. What do these migrant stock number tell in terms of citizenship rates? Van Zanden and Prak (2006) state that about two-thirds of the population of Amsterdam were immigrants. A total population of 54,000 in 1600 and 200,000 in 1700 (from Bairoch et. al, 1988) implies an immigrant population of 36,000 and 132,000. The simulations therefore suggest that about 5 percent of the immigrant population were citizens in 1600 and 1700 (Table 2). As noted earlier, the descendents of citizens of Amsterdam were entitled to citizenship, even if not claimed. This implies that most, but not all, of the Amsterdam-born population had an entitlement to citizenship, as intermarriage between the children of citizens and non-citizens would spread access in successive generations.¹⁸ Our calculations for migrants suggest that the “claimed” citizenship share among the

¹⁶ See Prak et. al. (2014, 21, Table 9) for more details.

¹⁷ See the Appendix for more details regarding Amsterdam and other cities in the Northern Netherlands.

¹⁸ From a starting population of households where 25 percent carried citizenship, one would expect that over 90 percent would inherit that status within 4 generations in the absence of immigration, differential population growth between citizens and non-citizens, and no endogamous marriage amongst citizens. In reality it is likely that convergence to full citizenship among the locally born was somewhat slower than this calculation implies.



Amsterdam-born was somewhat higher than for migrants, but more importantly, the citizenship rate as a share of the city's households is much higher if one assigns the status of citizen to the third of city population who were born locally. Table 3 shows that in Amsterdam, about half of all households had citizens, consistent with the findings of Van Zanden and Prak (2006). As a fraction of the locally-born population would be unable to inherit citizenship, we anticipate that this is a slight overestimate of the true citizenship rate, perhaps in the order of ten percent.

For the medium-sized city of Utrecht, the work of Rommes (1998) provides considerable detail on inflows into citizenship prior to 1800, and we apply the approach developed in equation (1) to simulate the stock of citizens. We find a citizenship rate among migrants (again, considering only individuals for the moment) that is fairly well in line with what held in Amsterdam. As in the Dutch metropolis, Rommes (1998) estimates that about half of all households in Utrecht were headed by citizens. Deventer, Kampen, and Zwolle were significantly smaller than Utrecht, and had citizenship rates for individual migrants and for all households that were much higher than the two larger cities. As inheritance through marriage did not operate in Utrecht, Deventer, Kampen, and Zwolle, we are unable to use estimates of the locally born share to estimate the total citizenship rate. For Utrecht we use Rommes (1998) estimates. For the other three towns we present the share of migrant households predicted to have a citizen present (Table 3).

Finally, the town of 's-Hertogenbosch provides a useful snapshot of citizenship in 1775. The civilian population of the town was approximately 10,500 at this time. The number of citizens by birth appears to be a little over 2,300 (Prak, 1999, table at p. 41), which is derived from the share of birth-right citizens who bothered to register their status.¹⁹ Immigrants could acquire citizenship through marriage and purchase, as in Amsterdam. From a total population of just over 2,500 migrants, 440 appear to be citizens, which gives a citizenship rate for migrants of about 18 percent, and a total "entitled citizen" rate of 80 percent if those of both sexes and all ages are included.

Southern Netherlands

Using the method outlined in equation (1), it is possible to reconstruct estimates of the stock of "new citizens" in Antwerp over time – that is, the accumulated number of migrants who received this status, net of death and departure (using the rate of 4% as in earlier estimates). This uses information on immigrant flows into citizenship for Antwerp between 1530 and 1792.²⁰ Calculations based on the population census of 1796 (the end of the period for which we have data), about 22 percent of the

¹⁹ Unlike the other towns and cities of the Northern Netherlands, using birth as a proxy for citizenship does not carry the small (but unmeasurable) upward bias we discuss earlier.

²⁰ See details for Antwerp and other urban areas in the Southern Netherlands in the Appendix.



Antwerp population were migrants.²¹ Making the rough assumption that migrants were normally accounted for 25% of the population of the city, it is possible to use point estimates of population to work out the share of immigrants who became citizens. We estimate that in the mid 17th century, about 11 percent of the city's immigrant population were citizens (Table 2).²² The immigrant citizenship rate falls to five to eight percent by the beginning of the eighteenth century. These numbers are subject to some potential short-run errors due to population dynamics in Antwerp – population fell rapidly between 1700 and 1750, a process that is likely to have reduced the number of immigrant citizens further than the model in equation (1) predicts with a constant departure rate of d . Household citizenship rates, however, are much higher, given the lower immigrant population shares than in the Northern Netherlands (Table 3).

We use the same approach to calculate citizen shares for Bruges and Ghent, and included calculations of citizenship rates for key years in Tables 2 and 3. These cities have much lower inflows into citizenship than Antwerp, and as a result much lower citizenship rates among migrants, which are five percent or below until 1750. For Ghent migrant citizenship rates rise significantly due to large numbers of entrants in the last half of the eighteenth century – although some of these may have become citizen for fiscal reasons only (without actually living in Ghent). As in other cities in Northern and Southern Netherlands, the citizen household rate was much higher.²³

Finally, it is possible for Antwerp and Ghent to take an additional snapshot of the number and share of masters from the 1738 survey of guilds in in the Southern Netherlands. As shown above, an immigrant who wanted to become master first needed to become a citizen of that city. That is why it often occurred that immigrants who had already worked for several years in Antwerp, became citizen, master and husband in the same month.²⁴ In theory, numbers of masters thus give a rough indication of the share of burghers at least in that part of the population active in crafts and industry. Our calculations show that 5 percent of the population of Antwerp and 10 percent of Ghent were masters. At that time, the ratios had probably already declined substantially. Earlier estimates for the Southern Netherlands point in the direction of a long term decline from the late middle ages on. For Ghent, Johan Dambruyne has estimated that the ratio (relative to the total active population,

²¹ Or 11,299 migrants on 50,700 people: see De Belder, 1977, 11; A. Winter, 2009, 17 (the share of immigrants quickly rose to 29% in 1815 and to 32% in 1829).

²² Preliminary estimates suggest an even higher immigrant citizenship rate earlier, but we do not present these given the large degree of uncertainty regarding immigrant population shares up to about 1600.

²³ Note that in Ghent and Bruges, those entitled to citizenship through continuous residence were required to pay for this privilege

²⁴ See De Kerf database on master gold- and silversmiths.



estimated at 55%) declined from 42.9% in the 1570s and early 1580s to about 25% around 1738. (Dambruyne, 2002, 38-41) For Brussels estimates point to a decline from 38% (relative to the total active population) to 22-24% in 1738. (Van Honacker, 1994, 184-5)

German Europe

We apply the methodology described through equation (1) to simulate citizen stocks for fourteen German towns and cities: Berlin, Bozen, Danzig, Detmold, Flensburg, Frankfurt, Hamburg Husum, Köln (Cologne), Königsberg, Münster, Tondern, Tønning, and Werle.²⁵ We also have direct stock estimates for the number of *burghers* in the free imperial cities of Nördlingen and Strasbourg (after its annexation by France). These towns and cities range across what are now Germany, Denmark, Poland, Italy, and Russia.

We find that the range of citizenship rates in German Europe may have been somewhat larger than the literature to date has suggested (Hochstadt, 1983). In general, free imperial cities such as Hamburg, Frankfurt-am-Main, Köln, and Nördlingen, along with the urban prince-bishopric of Münster, had relatively high shares of citizen households, reflecting the importance of citizenship to the political and social structures of autonomous cities. However many of these cities, such as Hamburg, had considerable non-citizen populations. In Berlin, Danzig, and Königsberg (which by the late eighteenth century were all in Prussia), we observe relatively lower citizenship rates. Some of the smaller towns in territorial states (such as those in Schleswig) had relatively high citizenship rates, but others (such as Bozen in Tyrol) had lower shares.

Overall, however, there was considerable variation, much of which cut across geography, time, and city type, indicating wide localized differences in the operation of citizenship structures, and their change over time. Different citizenship shares could mean different things. The citizen share fell in Köln from 1750 to the 1790s, during a period in which very few of the city's migrants gained citizenship (see Küntzel, 2008, esp. 21-22). Higher rates, however, did not necessarily mean more open cities: Berlin's low citizenship rate in the eighteenth century was accompanied by a very large population of non-citizen French Huguenots (invited by the 1685 Edict of Potsdam), whereas higher citizenship shares in other cities accompanied tight control of migration (for example, for Nördlingen, see Friedrichs, 1979, 55-57; for Berlin, Schultz, 1987).

²⁵ Our calculations for Berlin include Cölln, which was merged with its larger sister in 1710.



France

One city for which there is some relevant published evidence is Dijon (Farr, 1988). Tax rolls for the city record the “*qualité*” of household heads, which corresponds fairly well to occupation and/or economic status. From these it is possible to construct numbers of artisans, lawyers, *vignerons*, and tax-exempt laity (mainly officials in royal courts). Assuming that about 75 percent of artisans were masters with corporate rights (Farr, 1988, 273), the derived number of master can be used to come up with two estimates of the stock of masters.²⁶ Table 6 presents the results of this calculation, and divides these both by Farr’s (274) estimate of population. This suggests that 3 to 5 percent of Dijon’s residents enjoyed some of the economic rights similar to what citizens enjoyed in England (Table 2), and to migrant citizens in other European towns and cities where birth-right was an entitlement to citizenship.²⁷

Further evidence for France comes from the cities of Rouen and Lyon. For Rouen we use evidence from master lists drawn up by guilds in response to the capitation tax levied by the French administration. The paper currently uses counts from 72 active guilds in 1757, and 29 of the 92 active guilds in 1770. The count yields 4,195 masters (and mistresses) in 1757, and 2,204 in 1770. Extrapolating the second number to cover 92 guilds under the assumption that average size of guild membership was the same for the other 63 unobserved guilds, yields an estimate of 6,992 masters and mistresses in 1770. The estimated population of Rouen was 67,000 in 1750, and 81,000 in 1800 (de Vries, 1984, 275). Under the simplifying assumption that the first number is a good approximation of the city’s population in 1757, and that the mid-point between the 1750 and 1800 estimates (74,000) is a good approximation of the population in 1770, the estimated share of population who are masters is 6 percent in 1757, and 9 percent in 1774 (Table 2). It seems likely that these represent lower and higher bound estimates due to the way population has been estimated and the assumption regarding unobserved guild size in 1770, but both numbers are towards the lower end for a medium-size 18th century European city.

For Lyon, we use evidence from the *Grande fabrique de soie*, a collection of Lyonnais silk weaving guilds. These records can now be consulted on-line through the website of the *archives municipales de Lyon*. We apply the flows-to-stock methodology in equation (2) to annual records of the reception of masters to the Grande fabrique between 1724-1760 and 1768-1776, yielding an annual stock estimate than can be compared to 18th century urban population. The methodology

²⁶ Entrance to Dijon’s guilds by trained journeymen involved considerable expense and the preparation of a masterpiece (also an expensive process, Farr, 1988, 46). Some journeymen accessed the corporate community through marriage (p. 141).

²⁷ Details of calculations for Lyons and other French cities are in the Appendix.



yields a stock prediction of 2,638 in 1750 and 3,587 in 1776;²⁸ compared to population estimates of 114,000 in 1750 and 100,000 of 1800 (De Vries, 1984, 274) it suggests that two to three percent of the population were guild members in the Grande fabrique. If these guilds accounted for roughly half of Lyon's economic activity, it indicates that 5 to 6 percent of the population were guild members.

DISCUSSION AND CONCLUSIONS

Our estimates of the size of the citizenry in a range of European towns provide some preliminary comparative evidence on how economic, social, and political rights varied during the early modern period. What are the main patterns we observe? If we begin with individual citizenship rates (Table 2), we find that in European towns and cities where citizenship was not inherited, these were in the order of 10 to 20 percent from about 1600 to 1750, with a slight decline towards the end of the 18th century (Figure 2). Most English and German towns and cities fall comfortably in this range, though a small number had citizenship rates closer to five percent. When we consider citizenship rates at the household level, we find that in most of the same locations about half of households had a citizen member, with several dominated by citizen households (over 75 percent).

Some exception to this pattern is found in the largest European cities. London, Amsterdam, and after agglomeration and rapid population expansion, Berlin, had lower citizenship rates (and in the case of London, also master-ship rates) than provincial towns and cities. Figure 3 plots citizenship shares against the natural logarithm of population, and a statistically significant, negative trend is in evidence.²⁹ One explanation for this pattern is that demand for citizenship may have been lower in the largest cities, where economic activity was more diverse, and many profitable activities lay outside of the notionally regulated sector, in suburban locations outside of the traditional urban core. Urban population growth implied the expansion of groups for whom urban citizenship could be a far-off or irrelevant luxury. In addition to growing suburbia around the largest cities, the spread of free trades and proto-industrial activity, higher rates of rural-urban migration, particularly among poorer and less "qualified" migrants (due to religion or other characteristics) increased the share of urban populations unlikely to seek or be granted citizenship.

Migrant citizenship rates were, perhaps unsurprisingly, a little lower, and varied from about 5 to 20 percent in both Northern and Southern Netherlands. But where citizenship was available by local birth or through inheritance, the share of the population entitled to citizenship was much higher,

²⁸ We had to make a few additional assumptions to fill in some gaps; 1760 data only extends to October, so we multiplied the number of observations by 12/10. For 1768 we only have two months of data (November and December), so multiply by 12/2. There are no records between 1761 and 1767, so the best approximation here was to assume that stock remained constant.

²⁹ A regression of citizenship share against the log of population yields a coefficient of -2.1, with a t-statistics of 4.9.



with the vast majority of households sharing in the rights associated with citizenship in these cases. The fact that few with entitlement through birth or blood bothered to confirm their status indicates that the value of citizenship, or at least the value of having established one's citizenship *ex ante*, was modest to many when compared to the obligations of formalizing citizenship. Those who did not possess the economic means to also enter the guilds and fully take advantage of the economic inclusion that citizenship allowed, may not have found it worthwhile to formalize their status; alternatively, it may be that citizenship was not formally inspected among those who were known to be "local" through some other means. In either case, it would seem that where basic citizenship was in theory most widespread, the majority did not find an investment in formally acquiring the status passed an implicit cost-benefit analysis.

Where citizenship was unavailable, master-ship, which did allow access to a range of economic rights, was obtained in similar frequency to similarly sized cities elsewhere in Europe. Thus, while the Ancien Regime curtailed the civil and political rights of residents in French cities, access to guild-sheltered markets was enjoyed by ten to twenty percent of the population, as in similarly sized cities in the Southern Netherlands.

What does this suggest about the long-run evolution of citizenship rates across Europe? It is difficult to make direct comparisons between citizenship rates in pre-industrial Europe and similar measures in the 19th to 21st centuries. In particular, it is important to remember that the package of rights on offer to citizens varied widely around Europe within and between both the pre- and post-industrial worlds. The rights of citizens differed between England and German-speaking cities in 1700, as well as between Hamburg in 1710 and Hamburg in 1800 or 1848.³⁰

With these caveats in mind, we note that Flora (1983, ch. 3) reports that 35-45 percent of adult population in France and Germany were enfranchised by the late 19th century, with figures of the Netherlands and the United Kingdom of 10-30 percent (Table 4). Assuming that about 60 percent of the population of early modern European cities were above the age of 20 (consistent with demographic data for 1696 in Wrigley and Schofield, 1981, 218, Table 7.10), we can derive adult citizenship rates for the cities listed in Table 2. It is interesting to note that these would often fall well in line with the middling to higher enfranchisement rates reported by Flora for the 1870s and 1880s. While London would have a low adult citizenship rate of about 7 per cent in 1700, cities such as Bristol and Frankfurt would lie between 25 and 30 per cent. It is only over the twentieth century that the shares of citizens increased substantially beyond levels observed in the seventeenth and eighteenth centuries. Moreover, it is not clear that that the 'quality' of citizenship had improved

³⁰ This project will focus in much more detail on the differences in citizenship regimes in forthcoming deliverables.



much during the nineteenth century. Evidence that citizenship had taken a hit during the revolutionary turmoil of the decades around 1800 can be found in welfare spending. Aggregate numbers are difficult to come by, but a recent paper by Bavel and Rijpma (forthcoming) suggests that per capita spending on social security decreased markedly in Northern and Central Italy, in the western provinces of the Netherlands and in England between the middle of the eighteenth century and the first half of the nineteenth (also Lindert, 2004, 46). If Lindert's (2004) thesis is correct that public spending follows democratic rule, this trend also reinforces a view that in all likelihood urban populations did not experience greater access to the rights associated with citizenship until the decades after the revolutions of 1848

As alluded to at the beginning of this piece, many small nation states today have strikingly low citizenship rates. While Gulf States may offer the most extreme examples, even within Europe there are states with large non-citizen constituencies; almost 30 percent of the labour force in Switzerland and 70 percent of the labour force in Luxembourg are non-citizens. These labour force shares likely imply household citizenship rates similar if not lower to our findings for the Low Countries prior to 1800.

Finally, are there any implications that can be drawn regarding the connection between the extent of citizenship and economic development in pre-industrial Europe? It is tempting to read our estimates of citizenship rates, particularly when presented as the percentage of households with citizens, as evidence of inclusiveness across much of urban Europe well before the French Revolution. Whether such a conclusion is sound or spurious depends, of course, on the rights possessed by citizens, the barriers to obtaining citizenship, and the restrictions imposed on outsiders. We investigate precisely these issues in a future deliverable in this project. We also wish to remind the reader one more time that urban citizenship was not homogenous in pre-industrial Europe. In the Low Countries, many migrants sought alternative residential statuses, something we also see more generally for the city of Hamburg. Elsewhere in German Europe, gradations within the citizenry separated "preferred" members of the urban polity from the masses. The data do show, however, that citizenship rates (and most notably individual citizenship rates) were in decline as the 19th century approached. This may suggest that the urban regimes that served Europe effectively for several centuries, were no longer as relevant with the beginnings of steady population growth, increasing migration, and emergent new technological forms.³¹ They also imply that the creation of national citizenship followed the decline of urban citizenship, rather than displacing a system in full strength.

³¹ Our conclusions thus diverge from those reached by Stasavage 2014.



REFERENCES

(1835). Report of the Commissioners Appointed to Inquire into the Municipal Corporations of England and Wales.

Acemoglu, D., and J. Robinson (2012). *Why nations fail: the origins of power, prosperity, and poverty*. London, Profile.

Bairoch, P., J. Batou, J., and C. Pierre (1988). *Population des villes européennes de 800 à 1850: banque de données et analyse sommaire des résultats (la)*. Geneva: Droz.

Batori, I. (1969). *Die Reichsstadt Augsburg im 18. Jahrhundert. Verfassung, Finanzen, und Reformversuche*. Göttingen: Vandenhoeck & Ruprecht.

Bavel, B. van, and A. Rijpma (forthcoming). 'How important were formalized charity and social spending before the rise of the welfare state? A long-run analysis of selected European cases, 1400-1850', *Economic History Review*.

Ben-Amos, I. K. (1991). 'Failure to Become Freeman: Urban Apprentices in Early Modern England'. *Social History* 16: 155-72.

Blondé, B. (1999). *Een economie met verschillende snelheden: ongelijkheden in de opbouw en de ontwikkeling van het Brabantse stedelijke netwerk (ca. 1750-ca. 1790)*, Brussels: Paleis der Academiën.

Boone, M., and M. Prak (eds.) (1996). *Statuts individuels, statuts corporatifs et statuts judiciaires dans les villes européennes (moyen âge et temps modernes) / Individual, corporate, and judicial status in European cities (late middle ages and early modern period)*. Louvain/Apeldoorn: Garant

Boone, M. and P. Stabel (2002). 'New Burghers in the Late Medieval Towns of Flanders and Brabant: Conditions of Entry, Rules and Reality', in: R.Ch. Schwinges, (ed.), *Neubürger im späten Mittelalter. Migration und Austausch in der Städtelandschaft des alten Reiches (1250-1550)*. Berlin: Duncker & Humblot, 317-32.

Cerutti, S., R. Descimon, and M. Prak (eds.) (1995). 'Cittadinanze', special issue of *Quaderni Storici*, 30 (89), 281-513.

Dambruyne, J. (2001). *Mensen en centen. Het 16de-eeuwse Gent in demografisch en economisch perspectief*, Gent: Verhandeligen der maatschappij voor geschiedenis en oudheidkunde te Gent deel XXVI.

Dambruyne, J. (2002). *Corporatieve middengroepen. Aspiraties, relaties en transformaties in de 16de-eeuwse Gentse ambachtswereld*. Ghent: Academia Press, (Verhandeligen der Maatschappij voor Geschiedenis en Oudheidkunde te Gent)

De Belder, J. (1977). 'De gehiërarchiseerde statistische doorsnede als vertrekpunt voor de studie van de demografische gedragpatronen', in *Demografische evoluties en gedragpatronen van de 9^{de} tot de 20^{ste} eeuw in de Nederlanden*. Ghent: Studia Historica Gandensia 200, 1-81.

Deceulaer, H. (2001). *Pluriforme patronen en een verschillende snit. Sociaal-economische, institutionele en culturele transformaties in de kledingsector in Antwerpen, Brussel en Gent, 1585-1800*. Amsterdam: IISG.



Deprez, P and C. Vandenbroeke (1989). 'Population growth and distribution, and urbanization in Belgium during the demographic transition', in R. Lawton and R. Lee (eds), *Urban population development in Western Europe from the late 18th to the early 20th century*. Liverpool: Liverpool University Press, 220-257.

De Meester, J. (2011). *Gastvrij Antwerpen? Arbeidsmigratie naar het zestiende-eeuwse Antwerpen*, PhD-dissertation University of Antwerp.

De Munck, B. and A. Winter (2012). 'Regulating Migration in Early Modern Cities: An Introduction.' in De Munck, B. and A. Winter, eds. *Gated communities? Regulating Migration in Early Modern Cities*. Aldershot: Ashgate, 1-24.

Deneweth, H. (2010a). 'Een demografische knoop ontward? Brugse bevolkingscijfers voor de vroegmoderne tijd', *Handelingen van het genootschap voor geschiedenis te Brugge*, 147/1, 3-48

Deneweth, H. (2010b). 'Migraties tussen Brugge en het ommeland in de 16^{de} eeuw', *Brugs Ommeland*, 50/1, 28-40

De Vries, J. (1984). *European Urbanization, 1500-1800*. London: Methuen.

Dilcher, G. (1996). *Bürgerrecht und Stadtverfassung im europäischen Mittelalter*. Cologne etc.: Böhlau.

Engerman, S.L. and K.L. Sokoloff (2005). 'The evolution of suffrage institutions in the new world'. *Journal of Economic History* 65: 891-921.

Epstein, S.R. (1998). 'Craft guilds, apprenticeship, and technical change in preindustrial Europe'. *Journal of Economic History* 58: 684-713.

Fahrmeir, A. (2007). *Citizenship: The Rise and Fall of a Modern Concept*. New Haven: Yale University Press.

Farr, J. R. (1988). *Hands of Honor. Artisans and Their World in Dijon, 1550-1650*. Ithaca: Cornell University Press.

Farr, J. R. (2000). *Artisans in Europe, 1300-1914*. Cambridge: Cambridge University Press.

Farr, J. R. (2008). *The Work of France: Labor and Culture in Early Modern Times, 1350-1800*. Rowman & Littlefield Publishers.

Flora, P., J. Alber, R. Eichenberg, J. Kohl, F. Kraus, W. Pfenning, and K. Seebolm (1983). *State, Economy, and Society in Western Europe*. Frankfurt: Campus Verlag.

Forrest, H. E. (ed.) (1924). *Shrewsbury Burgess Roll*. WB Walker.

Friedrichs, Christopher (1979). *Urban Society in an Age of War*. Princeton: Princeton University Press.

Friedrichs, C. R. (1985). *The Early Modern City 1450-1750*. London: Longman.

Galley, C. (1998). *The demography of early modern towns: York in the sixteenth and seventeenth centuries* (Vol. 6). Liverpool: Liverpool University Press.

Godding, P. (1987). *Le droit privé dans les pays-bas méridonaux du 12e au 18e siècle*. Brussels: Académie royale de Belgique.

Hartopp, H. (1927). *Register of the Freeman of Leicester, 1196-1770*. Leicester: Edgar Backus.



Hauser, H. (1905). 'Des divers modes d'organisation du travail dans l'ancienne France'. *Revue d'Histoire Moderne et Contemporaine*, 7 : 357-87.

Hochstadt, S. (1983). 'Migration in preindustrial Germany'. *Central European History*, 16: 195-224.

Howell, M. C. (1986a). 'Women, the Family Economy, and the Structures of Market Production', in: B.A. Hanawalt (ed.), *Women and Work in Preindustrial Europe*. Bloomington, Ind: Indiana University Press, 198-222.

Howell, M. C. (1986b). *Women, Production and Patriarchy in late Medieval Cities*. Chicago and London: University of Chicago Press.

Howell, M. C. (1988). 'Citizenship and Gender: Women's Political Status in Northern Medieval Cities', in: Mary Erler and Maryanne Kowaleski (eds.), *Women and Power in the Middle Ages*. Athens, Ga: University of Georgia Press, 37-61.

Isenmann, E. (2002). 'Bürgerrecht und Bürgeraufnahme in der spätmittelalterlichen und frühneuzeitlichen Stadt', in: Rainer Christophe Schwinges (ed.). *Neubürger im späten Mittelalter. Migration und Austausch in der Städtelandschaft des alten Reiches (1250-1550)*. Berlin: Duncker & Humblot, 203-49.

Isin, E. F. (2008). 'Theorizing acts of citizenship' in: Engin Isin and Greg M. Nielsen (eds.), *Acts of citizenship*. London: Zedbooks, 15-43.

Isin, E. F., and B.S. Turner (eds.). (2002). *Handbook of citizenship studies*. New York: Sage.

Isin, E. F., and B.S. Turner (2007). Investigating citizenship: an agenda for citizenship studies. *Citizenship studies*, 11: 5-17.

Isin, E. F., and P.K. Wood (1999). *Citizenship and identity*. New York: Sage.

Kellett, J. R. (1957-8). 'The Breakdown of Gild and Corporation Control over the Handicraft and Retail Trade in London'. *Economic History Review*, 10: 381-94

Kint, A. (1996). 'Becoming Civic Community: Citizenship in Sixteenth-Century Antwerp', in: M. Boone and M. Prak (eds.), *Statuts individuels, statuts corporatifs et statuts judiciaires dans les villes européennes (moyen âge et temps modernes) / Individual, corporate, and judicial status in European cities (late middle ages and early modern period)*. Louvain/Apeldoorn: Garant, 157-69.

Klep, P. M.M. (1981). *Bevolking en arbeid in transformatie. Een onderzoek naar de ontwikkelingen in Brabant, 1700-1900*, Nijmegen: Socialistische uitgeverij.

Klep, P.M.M. (1991). 'Population estimates of Belgium, by province (1375-1831)', in: *Historiens et populations. Liber amicorum Etienne Hélin*, Louvain-la-Neuve: Academia, 485-507.

Kuijpers, E., and M. Prak (2001). 'Burger, ingezetene, vreemdeling: burgerschap in Amsterdam in de 17e en 18e eeuw', in: J. Kloek and K. Tilmans (eds.), *Burger: Een geschiedenis van het begrip 'burger' in de Nederlanden van de Middeleeuwen tot de 21ste eeuw*. Amsterdam: Amsterdam University Press, 113-32.

Küntzel, A. (2008). *Fremde in Köln: Integration und Ausgrenzung zwischen 1750 und 1814*. Köln: Böhlau.

Laslett, P., and R. Wall (eds.) (1972). *Household and Family in Past Times*. Cambridge: Cambridge University Press.



Leunig, T., C. Minns, and P. Wallis (2011). 'Networks in the premodern economy: the market for London apprenticeships, 1600–1749', *Journal of Economic History*, 71: 413-43.

Lindemann, M. (1990). *Patriots and Paupers: Hamburg 1712-1830*. Oxford: Oxford University Press.

Lindert, P. H. (2004). *Growing public: Social spending and economic growth since the eighteenth century* vol. 1: *The story*. Cambridge: Cambridge University Press.

Lourens, P, and J. Lucassen (2000). "'Zunftlandschaften" in den Niederlanden und im benachbarten Deutschland', in: Wilfried Reininghaus (ed.), *Zunftlandschaften in Deutschland und Niederlanden im Vergleich* (Schriften der Historischen Kommission für Westfalen, vol. 17). Münster: Aschendorf, 11-43.

Marshall, T.H. (1950). *Citizenship and Social Class, and Other Essays*. Cambridge: Cambridge University Press.

Minns, C., and P. Wallis (2012). 'Rules and reality: quantifying the practice of apprenticeship in early modern England¹'. *Economic History Review*, 65: 556-79.

North, D. C., J. J. Wallis, and B. R. Weingast (2009). *Violence and Social Orders: A Conceptual Framework for Interpreting Recorded Human History*. Cambridge: Cambridge University Press.

Ogilvie, S. (2004). 'Guilds, Efficiency, and Social Capital: Evidence from German Proto-Industry'. *Economic History Review*, 57: 286–333

O'Gorman, F. (1989). *Voters, Patrons and Parties : The Unreformed Electoral System of Hanoverian England 1734-1832*. Oxford: Clarendon Press.

Prak, M. (1997). 'Burghers into citizens: Urban and national citizenship in the Netherlands during the revolutionary era'. *Theory and Society* 26: 403-20.

Prak, M. (1999). *Republikeinse veelheid, democratische enkelvoud. Sociale verandering in het Revolutietijdvak: 's-Hertogenbosch 1770-1820*. Nijmegen: SUN.

Prak, M. (2002). 'The politics of intolerance: citizenship and religion in the Dutch Republic (17th-18th C.)', in: Ronnie Po-chia Hsia and Henk van Nierop (eds.) *Calvinism and Religious Toleration in the Dutch Golden Age*. Cambridge: Cambridge University Press, 159-75.

Prak, M., C. Crowston, C. Kissane, C. Minns, and P. Wallis (2014). 'Access to the trade: Citizens, craft guilds, and social and geographical mobility in early modern Europe – a survey of the literature, with additional data', bEUCitizen Work Package 3, Working Paper 1.

Rappaport, S. (1989). *Worlds within Worlds: Structures of Life in Sixteenth-Century London*. Cambridge: Cambridge University Press.

Rommès, R. (1998). Oost west, Utrecht best? Driehonderd jaar migratie en migranten in de stad Utrecht (begin 16e – begin 19e eeuw). PhD-dissertation Universiteit van Amsterdam.

Roper, L. (1987). "'The Common Man", "The Common Good", "Common Women": Gender and Meaning in the German Reformation Commune'. *Social History*, 12: 1-21.

Rössler, H. (ed.) (1968). *Deutsches Patriziat 1430-1740*. Limburg an der Lahn: C. A. Starke Verlag.

Sassen, S. (2006). *Territory, authority, rights: From medieval to global assemblages*. Princeton: Princeton University Press.



- Sater, J. (2014). 'Citizenship and migration in Arab Gulf monarchies'. *Citizenship Studies*, 18: 292-302.
- Schultz, H. (1987). *Berlin 1650-1800: Sozialgeschichte einer Residenz*. Berlin: Akademie Verlag.
- Scott, T. (2001). 'Town and Country in Germany, 1350-1600', in: S.R. Epstein (ed.) *Town and Country in Europe, 1300-1800*. Cambridge: Cambridge University Press, 202-28.
- Soliday, G. (1974). *A Community in conflict: Frankfurt society in the seventeenth and early eighteenth century*. Hanover, NH: University Press of New England.
- Stasavage, D. (2014), 'Was Weber right? The role of urban autonomy in Europe's rise'. *American Political Science Review* 108: 337-54.
- Stuart, K. (1999). *Defiled Trades and Social Outcasts: Honour and Ritual Pollution in Early Modern Germany*. Cambridge: Cambridge University Press.
- Thijs, A. (1995). 'Minderheden te Antwerpen (16^{de} / 20^{ste} eeuw)', in: H. Soly and A. Thijs (eds.), *Minderheden in Westeuropese steden, 16^{de} / 20^{ste} eeuw*. Brussels/Rome: Institut historique Belge de Rome, 17-42.
- Thompson, E. C. (2014). 'Immigration, society and modalities of citizenship in Singapore'. *Citizenship Studies*, 18: 315-31.
- Tilly, C. (1995). 'The Emergence of Citizenship in France and Elsewhere'. *International Review of Social History*, supplement 4: 223-36.
- Tingle, E. (2000). 'A City at War: Changing Definitions of Citizenship in Nantes during the Later Wars of Religion 1580-89'. *European Review of History* 7: 99-108.
- Van Honacker, K. (1994). 'De politieke cultuur van de Brusselse ambachten in de achttiende eeuw: conservatisme, corporatisme of opportunisme?', in: C. Lis, and H. Soly, eds. *Werken volgens de regels. Ambachten in Brabant en Vlaanderen, 1500-1800*. Brussels: VUB-Press, 179-228
- Van Roey, J. (1975). 'De bevolking', in Genootschap voor Antwerpse Geschiedenis, *Antwerpen in de XVIe eeuw*. Antwerp: Mercurius, 95-108.
- Van Werveke, H (1948). *De curve van de Gentse bevolking in de 17de en de 18de eeuw*. Brussels: Paleis der Academiën.
- Van Zanden, J. L., and M. Prak. (2006). 'Towards an economic interpretation of citizenship: the Dutch Republic between medieval communes and modern nation-states'. *European Review of Economic History*, 10: 111-45.
- Walker, M. (1971). *German Home Towns: Community, State, and General Estate, 1648-1871*. Ithaca, NY: Cornell University Press.
- Wall, R. (1972). 'Mean Household Size in England from Printed Sources', in: P. Laslett and R. Wall (eds.), *Household and Family in Past Times*. Cambridge: Cambridge University Press, 159-204.
- Weber, M. (1958). *The City* (tr. and ed. Don Martindale and Gertrud Neuwirth). New York: Free Press.
- Wiesner, M. (1986). *Working Women in Renaissance Germany*. Rutgers: Rutgers University Press.



Wiesner, M. (1998). 'War, Work, & Wealth: The Bases of Citizenship in Early Modern German Cities', in: Wiesner, *Gender, Church & State in Early Modern Germany: Essays by Merry E. Wiesner*. London, 1988), 114-26.

Winter, A. (2009). *Migrants and urban change: newcomers to Antwerp, 1760-1860* (Vol. 1). London: Pickering & Chatto.

Withington, P. (2005). *The politics of commonwealth: Citizens and freemen in early modern England*. Cambridge: Cambridge University Press.

Wrigley, E.A., and R.S. Schofield (1981). *The Population History of England 1541-1871: A Reconstruction*. Cambridge: Cambridge University Press.

Zhang, L., and G.Wang (2010). 'Urban Citizenship of Rural Migrants in Reform-Era China', *Citizenship Studies* 14: 145-66.



TABLE 1: MUNICIPAL CORPORATIONS, 1835: FREEDOM METHODS

	Unweighted	Weighted
Birth	.38	.60
Service	.31	.57
Gift	.21	.41
Purchase	.21	.40
Election	.31	.24
Appointed	.09	.05
Marriage	.09	.12
Resident	.08	.06
Other	.01	.004
No Freedom	.14	.13

Notes: Data is drawn from *Report of the Commissioners Appointed to Inquire into the Municipal Corporations of England and Wales*. Unweighted refers to the share of corporations permitting each freedom method. Weighted shares refer to similar calculations where the contribution of each corporation is weighted by population See text for further details on each available freedom method.



TABLE 2: CITIZENSHIP AND MASTERSHIP IN EUROPEAN CITIES – POPULATION RATES

	Citizenship shares					
	1550-1599	1600-1649	1650-1699	1700-1749	1750-1799	1800-1849
Bristol	11		12	15	12	5-7
Boston		11	11	11	6-9	4-7
Canterbury	6		7			14
Chester			10	11	13	7
Doncaster			13			2-3
Ipswich				5	5	6
Leicester		9	10	9	15	11
Lincoln						5-11
York	15	13	14	17		14
London	21			4	4	1-2
London (city only)						7-13
Amsterdam (migrants)	4			7		
Deventer (migrants)		28	27	15-30	13	
Kampen (migrants)		13-16	29	24	20	
's-Hertogenbosch (migrants)					18	
Utrecht (migrants)	6		7			
Zwolle (migrants)		17-21	23	14	12-	
Antwerp (migrants)			11	5	10-12	
Bruges (migrants)	3	3	4	3	3	
Ghent (migrants)	1	4	3	6	13	
Berlin (inc. Cölln)		6		4	5	
Bozen						22
Danzig			7			



Detmold					19	
Flensburg					10	
Frankfurt			18	14-17		
Hamburg			9	7	12	
Husum					12	
Köln			15	18	11	
Königsberg						5
Münster					17	
Nördlingen	17		20	19		
Strasbourg		12	12	9		
Tondern					12	
Tonning					27	
Werle			4	5		



Master shares						
	1550-1599	1600-1649	1650-1699	1700-1749	1750-1799	1800-1849
London			4	5	4	2
London (city only)						17-20
Antwerp				5		
Ghent				10		
Dijon	5	3				
Lyon					5-7	
Rouen					6-9	

Notes: Rates in this table are calculated by dividing the estimated master or citizen stock by the nearest available population estimate. See Appendix for sources, data details, and the exact years used for each town or city.



TABLE 3: CITIZENSHIP AND MASTERSHIP IN EUROPEAN CITIES – HOUSEHOLD RATES

	Citizenship shares					
	1550-1599	1600-1649	1650-1699	1700-1749	1750-1799	1800-1849
Bristol	50		53	66	52	23-31
Boston		51	48	48	28-41	32
Canterbury	27		33			65
Chester			46	52	57	33-34
Doncaster			60			9-13
Ipswich				20	21	25-26
Leicester		42	47	42	66	50
Lincoln						21-49
York	68	58	65	78		62
London	~100			19	18	8-11
London (city only)						74-92
Amsterdam (all)	46			47		
Deventer (migrants)		~100	~100	67	58	
Kampen (migrants)		60-70	~100	~100	90	
's-Hertogenbosch (all)					80	
Utrecht (all)	38-50		48-58			
Zwolle (migrants)		76-92	~100	65	54	
Antwerp (all)			88	81	86-88	
Bruges (all)	76	76	78	77	77	
Ghent (all)	74-77	77-78	76-77	76-79	80-88	
Berlin (inc. Cölln)		27		16	21	
Bozen						98
Danzig			31			



Detmold					86	
Flensburg					46	
Frankfurt			83	62-78		
Hamburg			42	31	56	
Husum					54	
Köln			69	85	50	
Königsberg						24
Münster					75	
Nördlingen	77		89	86		
Strasbourg			53	56	42	
Tondern					54	
Tonning					99	
Werle			17	24		



Master shares						
	1550-1599	1600-1649	1650-1699	1700-1749	1750-1799	1800-1849
London		17	21	16	9	
London (city only)						58
Antwerp				23		
Ghent				43		
Dijon	21	14				
Lyon					21-30	
Rouen					28-43	

Notes: Rates in this table are calculated by dividing the estimated master or citizen stock by the nearest available estimate of the number of households. This is assumed to be urban population divided by 4.5. See Appendix for sources, data details, and the exact years used for each town or city. Figures for Amsterdam are likely to be slight overestimates.



TABLE 4: ENFRANCHISED POPULATION AS PERCENTAGE OF THE ADULT POPULATION, 1800-1910

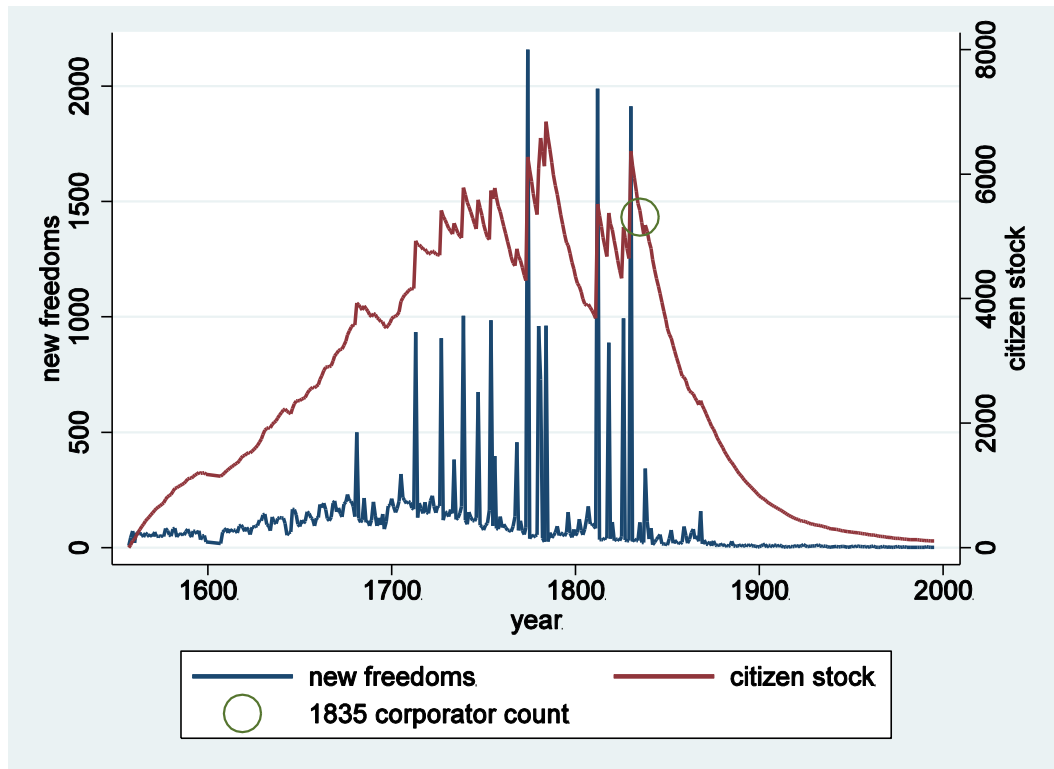
	1810s	1820s	1830s	1840s	1850s	1860s	1870s	1880s	1890s	1900s
Austria							10.6	13.0	35.7	35.7
Belgium			1.9	3.1	3.3	3.6	3.7	3.9	37.3	37.7
Denmark				25.7	25.8	25.8	26.7	28.3	30.0	29.8
France	0.4	0.5	0.9	36.3	42.0	42.0	43.7	41.6	42.0	43.7
Germany							37.4	37.3	37.8	38.3
Ireland			2.1	2.7		7.4	7.7	28.9		
Italy						3.4	3.8	14.1	16.6	15.0
Netherlands					4.6		5.0	11.8	20.9	25.7
Norway	11.4	11.1	10.0	9.7	9.3	8.8	8.5	11.8	16.6	58.5
United Kingdom			6.0	6.8		14.5	14.9	29.3	29.3	28.5

Notes: Highest recorded values per decade are included in table. Adults consist of those aged 20 and above.

Source: Flora et al., *State, Economy, and Society* (1983), ch. 3



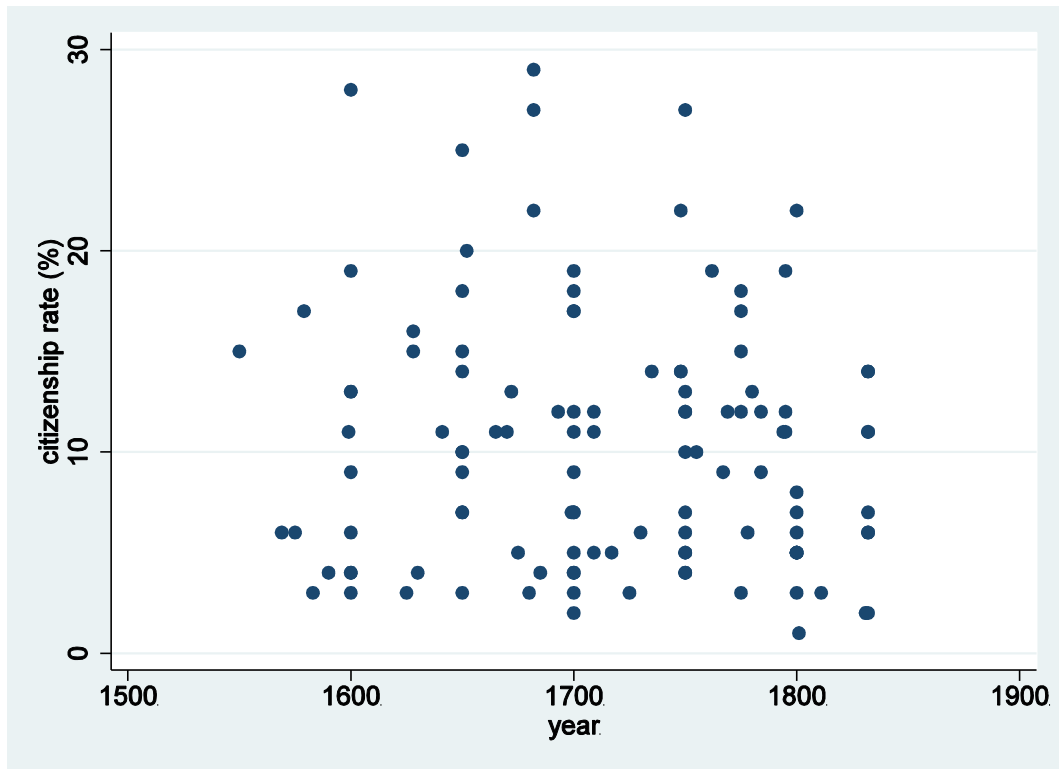
FIGURE 1: BRISTOL CITIZEN INFLOWS AND STOCK PROJECTIONS



Notes: Citizen stock calculations assume a constant 4% attrition rate. See the appendix for source details for Bristol citizen flows. The 1835 corporator count is from *Report of the Commissioners Appointed to Inquire into the Municipal Corporations of England and Wales*.



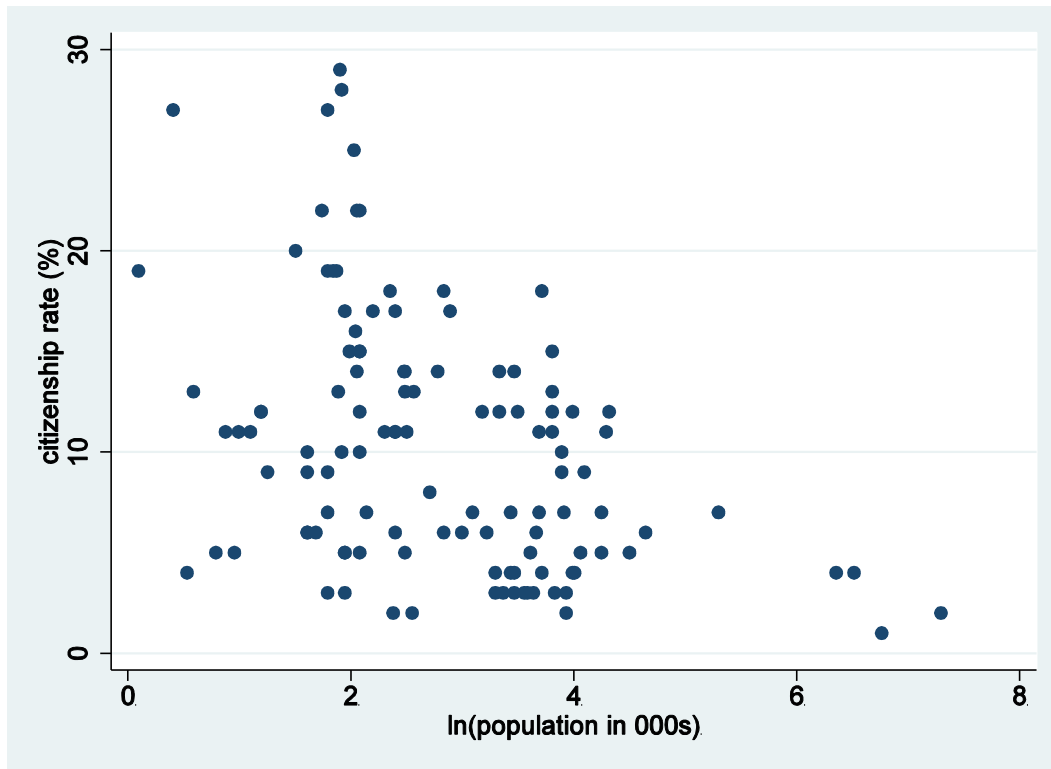
FIGURE 2: CITIZENSHIP RATES (INDIVIDUAL) OVER TIME



Note: Citizenship rates from Table 2 are used in this figure. See the Appendix for details on the calculation of the citizenship rate for each city/year observation.



FIGURE 3: CITIZENSHIP RATES (INDIVIDUAL) AND POPULATION



Notes: Citizenship rates from Table 2 are used in this figure. See the Appendix for details on the calculation of the citizenship rate for each city/year observation. The horizontal axis is the natural logarithm of population corresponding to each citizenship rate estimate.



APPENDIX: CITIZEN STOCK AND CITIZEN SHARE CALCULATIONS

This appendix summarizes source materials, stock simulations (or when they exist, citizen counts) and population estimates for key years for each town and city studied in this paper. Coverage indicates data we have currently digitised; for some cities there exists further data that we have not yet accessed, or alternative sources that can be explored.

A1: England

Bristol

Source for citizen inflows: Bristol & Avon Family History Society (2004). *Bristol Burgess Books Volumes 1 to 21. Index & Transcripts 1557-1995*. Corporator stock in 1832 from Report of the Commissioners Appointed to Inquire into the Municipal Corporations of England and Wales (1835).

Coverage: 1557-1599; 1607-1835. We treat absent years between 1600 and 1606 as “missing” data rather than true zero values, and assume inflows were equal to outflows over the period.

Predicted citizen stocks: 1,180 (1599 – flow data missing for 1600), 3679 (1700), 5196 (1750), 5309 (1832)

Population: 11,000 (1600), 24,000 (1700), 45,000 (1750), 104,000 (1832 – county population). (de Vries 1984, Census of 1831).

Boston

Source for citizen inflows: Lincolnshire Family History Society (n.d.). *Boston Borough Council Apprenticeship Registers 1663-1812; Register of Freeman 1545-1903*. Corporator stock in 1832 from Report of the Commissioners Appointed to Inquire into the Municipal Corporations of England and Wales (1835).

Coverage: 1590-1642; 1644-1651; 1653-1663; 1665-1853. We treat absent yearly observations as true zero values.

Predicted citizen stocks: 275 (1641), 288 (1670), 322 (1709), 313 (1767), 336 (1778), 424 (1800), 551 (1832).



Population: 2410 (1641), 2680 (1670), 3010 (1709), 3470 (1767), 5480 (1778), 6000 (1800), 12818 (1832). (Clark and Hosking 1993, Report of the Commissioners Appointed to Inquire into the Municipal Corporations of England and Wales (1835))

Canterbury

Source for citizen inflows: Cowper, J. M. (1903). *The Roll of the Freemen of the City of Canterbury from A.D. 1392 to 1800*. Canterbury: Cross & Jackman.

Coverage: 1400-1800. Corporator stock in 1832 from Report of the Commissioners Appointed to Inquire into the Municipal Corporations of England and Wales (1835).

Predicted citizen stocks: 304 (1500), 618 (1650), 2335 (1832)

Population: 5000 (1600), 8500 (1650), 16112 (1832) (De Vries 1984; 1600 estimated from rankings in DeVries 1984)

Chester

Source for citizen inflows: Bennett, J. H. E (1906a, LI). *Rolls of the Freemen of the City of Chester, Part 1, 1392-1700*. Record Society of Lancashire and Cheshire; Bennett, J. H. E (1906b, LV). *Rolls of the Freemen of the City of Chester, Part 2, 1700-1805*. Record Society of Lancashire and Cheshire. Corporator stock in 1832 from Report of the Commissioners Appointed to Inquire into the Municipal Corporations of England and Wales (1835).

Coverage: 1500-1501; 1504-1507; 1510; 1520; 1522; 1526-1527; 1530-1533; 1536-1628; 1634-1644; 1646-1671; 1673-1804. We treat absent yearly observations as true zero values.

Predicted citizen stocks: 818 (1650), 1147 (1700), 1648 (1750), 1136 (1800), 1550 (1832)

Population: 8000 (1650), 10000, (1700), 13000 (1750), 15000 (1800), 22263 (1832). (de Vries 1984)

Doncaster

Source for citizen inflows: Lindley, P. (1998). *Freemen of the Borough of Doncaster, 1558-1974*. Doncaster: Doncaster & District Family History Society.

Coverage: 1558; 1569; 1582; 1584-1587; 1589-90; 1592-1594; 1598-99; 1601-1611; 1613-14; 1617-1622; 1624-1647; 1649; 1651-1652; 1654-1733; 1735-1776; 1778-779; 1782-1786; 1788; 1790-92; 1794-1840. We treat absent yearly observations as true zero values. Corporator stock in 1832 from



Report of the Commissioners Appointed to Inquire into the Municipal Corporations of England and Wales (1835).

Predicted citizen stocks: 233 (1672), 170 (1800), 183 (1811), 228 (1832).

Population: 1760 (1672), 6000 (1800), 6935 (1811) (Clark and Hosking 1993, Census of 1811)

Ipswich

Source for citizen inflows: McCurrach, M. (1997). *Freemen of the Borough of Ipswich, 1320-1996*, 2 vols. Ipswich: Suffolk Family History Society. Corporator stock in 1832 from Report of the Commissioners Appointed to Inquire into the Municipal Corporations of England and Wales (1835).

Coverage: 1571-1835

Predicted citizen stocks: 361 (1700), 570 (1750), 647 (1800), 1130 (1832).

Population: 8000 (1700), 12000 (1750), 11000 (1800), 20454 (1832) (De Vries, 1984)

Leicester

Source for citizen inflows: Hartopp, H. (1927). *Register of the Freemen of Leicester, 1196-1770 (1770-1930), Including the Apprentices Sworn before Successive Mayors for Certain Periods, 1646-1770 (1770-1926). Abstracted from the Borough Records and Edited by Henry Hartopp. [With Facsimiles.]*. Leicester, 188217030X. Corporator stock in 1832 from Report of the Commissioners Appointed to Inquire into the Municipal Corporations of England and Wales (1835).

Coverage: 1550-1769

Predicted citizen stocks: 472 (1600), 518 (1650), 565 (1700), 1165 (1750), 4500 (1831)

Population: 5000 (1600), 5000 (1650), 6000 (1700), 8000 (1750), 40512 (1831). (De Vries 1984, Census of 1831)

Lincoln

Source for citizen inflows: Cole, A. (n.s.). *Index to the Lincoln City Apprenticeship Registers*. Lincolnshire Family History Society. Corporator stock in 1832 from Report of the Commissioners Appointed to Inquire into the Municipal Corporations of England and Wales (1835).



Coverage: 1646-7; 1662-1849

Predicted citizen stocks: 333 (1800), 1200 (1832).

Population: 7000 (1800), 11116 (1832) (Clark and Hosking 1993, Census of 1831)

London

Source for citizen inflows: 'Citizens of London' Ancestry.com and London Metropolitan Archive, 2013. 1550 citizen stocks from Rappaport, S. (1989). *Worlds within Worlds: Structures of Life in Sixteenth-Century London*. Cambridge: Cambridge University Press.

Coverage: 1550; 1600-1609; 1615-22; 1624-1625; 1627-1640; 1642-1925. We assume data for 1610-1614, 1623, 1626, and 1641 is "missing" rather than "zero" values.

Source for apprenticeship inflows: Webb, C. (various). *London Livery Company Apprenticeship Registers*.

Coverage: 1396-1928 (accounts for about 2/3 of all Livery Company apprentices).

Predicted citizen stocks: 14800 (1550), 23703 (1700), 27595 (1750), 21095 (1800), 24902 (1831).

Predicted master stocks (from apprenticeship inflows): 14786 (1650), 27110 (1700), 23876 (1750), 16569 (1800), 8477 (1831).

Population: 70300 (1552), 400000 (1650), 575000 (1700), 675000 (1750), 865000 (1801), 127621 (1801 city only), 1471941 (1831), 122412 (1831 city only). (deVries 1984, Census of 1801, Census of 1831).

York

Source for citizen inflows: Galley, C. (1998). *The Demography of Early Modern Towns: York in the Sixteenth and Seventeenth Centuries*. Liverpool: Liverpool University Press. Corporator stock in 1832 from Report of the Commissioners Appointed to Inquire into the Municipal Corporations of England and Wales (1835).

Coverage: 1500-1699

Predicted citizen stocks: 1215 (1550), 1539 (1600), 1735 (1650), 1895 (1700), 3800 (1832).



Population: 8000 (1550), 12000 (1600), 12000 (1650), 11000 (1700), 27760 (1832) (de Vries 1984, Census of 1831)

A2: Northern Netherlands

Amsterdam

Source for citizen inflows: Data provided by Erika Kuijpers, University of Leiden.

Coverage: 1550-1699

Predicted citizen stocks: 1571 migrants (1600), 5594 migrants (1699). We assume that 60 percent of citizen inflows were migrants. For total citizen shares we assume that 33 percent of the population are locally born, and that all locally born are entitled to citizenship.

Population: 54000 (1600), 200000 (1700) (De Vries 1984).

Deventer

Source for citizen inflows: Berkenvelder, F.C. (2005). *Stedelijk burgerrecht en burgerschap in Deventer, Kampen en Zwolle, 1302-1811* (Werken van de Vereeniging tot Beoefening van Overijsselsch Regt en Geschiedenis, vol. 45). Zwolle, pp. 508-513

Coverage: 1500-1799

Predicted citizen stocks: 616 migrants (1600), 666 migrants (1650), 669 migrants (1682), 385 migrants (1748), 344 migrants (1795). We use Lucassen's (2002) estimates for the "local" share in three smaller towns (Alkmaar, Enkhuizen, and Hoorn) of about 65 percent in the 17th and 18th centuries to compute total citizen shares. (Lucassen, J. (2002), "Immigranten in Holland 1600-1800. Een kwantitatieve benadering." Centrum voor de Geschiedenis van Migranten, Working Paper 3.)

Population: 6780 (1600), 7600 (1650), 6700 (1682), 7818 (1748), 8047 (1795). (Lourens, P., J. Lucassen (1997). *Inwonertallen van Nederlandse steden, ca. 1300-1800*. Amsterdam: NEHA, p.71-72)

Kampen

Source for citizen inflows: Berkenvelder, F.C. (2005). *Stedelijk burgerrecht en burgerschap in Deventer, Kampen en Zwolle, 1302-1811* (Werken van de Vereeniging tot Beoefening van Overijsselsch Regt en Geschiedenis, vol. 45). Zwolle, pp. 508-513



Coverage: 1540-1799

Predicted citizen stocks: 291 migrants (1600), 375 migrants (1628), 575 migrants (1682), 443 migrants (1748), 410 migrants (1795). We use Lucassen's (2002) estimates for the "local" share in three smaller towns (Alkmaar, Enkhuizen, and Hoorn) of about 65 percent in the 17th and 18th centuries to compute total citizen shares. (Lucassen, J. (2002), "Immigranten in Holland 1600-1800. Een kwantitatieve benadering." Centrum voor de Geschiedenis van Migranten, Working Paper 3.)

Population: 6600 (1600), 7300 (1628), 6000 (1682), 5652 (1748), 6214 (1795). (Lourens, P., J. Lucassen (1997). *Inwonertallen van Nederlandse steden, ca. 1300-1800*. Amsterdam: NEHA, p.76-77)

's-Hertogenbosch

Source for citizen inflows: Prak, M. (1999). *Republikeinse veelheid, democratische enkelvoud. Sociale verandering in het Revolutietijdvak: 's-Hertogenbosch 1770-1820*. Nijmegen: SUN.

Coverage: 1775

Citizen stock: 440 migrants.

Population: 2500 (migrant) 10500 (total). (Prak, 1999)

Utrecht

Source for citizen inflows: Rommes, R. (1998). *Oost west, Utrecht best? Driehonderd jaar migratie en migranten in de stad Utrecht (begin 16e – begin 19e eeuw)*. PhD-dissertation Universiteit van Amsterdam.

Coverage: 1381-1799

Predicted citizen stocks: 686 migrants (1572), 1027 migrants (1650). Based on Romnes (1998, Table 8) we assume that 70 percent of citizen inflows prior to 1700 were migrants. We also use Romnes (1998) to devise a rough estimate of the share of total population who were migrants; 62.5 percent in 1569, 50 percent in 1650. Population: 17000 (1569), 31000 (1650). (Romnes 1998)



Zwolle

Source for citizen inflows: Berkenvelder, F.C. (2005). *Stedelijk burgerrecht en burgerschap in Deventer, Kampen en Zwolle, 1302-1811* (Werken van de Vereeniging tot Beoefening van Overijsselsch Regt en Geschiedenis, vol. 45). Zwolle, pp. 508-513

Coverage: 1500-1799

Predicted citizen stocks: 440 (1600), 431 (1628), 597 (1682), 567 (1748), 488 (1795). We use Lucassen's (2002) estimates for the "local" share in three smaller towns (Alkmaar, Enkhuizen, and Hoorn) of about 65 percent in the 17th and 18th centuries to compute total citizen shares. (Lucassen, J. (2002), "Immigranten in Holland 1600-1800. Een kwantitatieve benadering." Centrum voor de Geschiedenis van Migranten, Working Paper 3.)

Population: 6500 (1600), 7700 (1628), 7800 (1682), 11931 (1748), 12220 (1795). (Lourens, P., J. Lucassen (1997). *Inwonertallen van Nederlandse steden, ca. 1300-1800*. Amsterdam: NEHA, p.83-84)

A3: Southern Netherlands

Antwerp

Source for citizen inflows: Antwerp Citizens Database, Centre for Urban History, University of Antwerp.

Coverage: 1530-1792

Source for stock of masters: De Munck database from the 1738 enquête.

Coverage: 1738

Predicted citizen stocks: 2065 migrants (1665), 879 migrants (1709), 1204 migrants (1755), 1571 migrants (1784). For total citizen shares we assume that 75 percent of the population are locally born, and that all locally born are entitled to citizenship. Due to uncertainty surrounding migrant population shares prior to 1600, we begin our analysis in the mid 1660s.

Stock of masters: 4150 (1738)

Population: 73000 (1665), 70000 (1709), 60469 (1738), 48600 (1755), 54000 (1784). (Van Roey, J. (1975), *De bevolking. Antwerpen in de XVIe eeuw*, Antwerpen: Mercurius, 95-108; Klep, P.M.M. (1991). 'Population estimates of Belgium, by province (1375-1831)', in: *Historiens et populations. Liber amicorum Etienne Hélin*, Louvain-la-Neuve, Academia, 485-507; Klep, P. M.M. (1981). *Bevolking en arbeid in transformatie. Een onderzoek naar de ontwikkelingen in Brabant, 1700-1900*, Nijmegen,



Socialistische uitgeverij, p. 349. Blondé, B. (1999). *Een economie met verschillende snelheden: ongelijkheden in de opbouw en de ontwikkeling van het Brabantse stedelijke netwerk (ca. 1750-ca. 1790)*, Brussel : Paleis der Academiën, p.

277; Winter, 'Patterns of migration', 17; De Belder, J. (1977), 'De gehiërarchiseerde statistische doorsnede als vertrekpunt voor de studie van de demografische gedragspatronen', in *Demografische evoluties en gedragspatronen van de 9^{de} tot de 20^{ste} eeuw in de Nederlanden*, Ghent: Studia Historica Gandensia 200, p. 11. For the nineteenth century: Deprez, P and C. Vandenbroeke (1989), 'Population growth and distribution', in R. Lawton and R. Lee (eds), *Urban population development in Western Europe from the late 18th to the early 20th century*, Liverpool, Liverpool: Liverpool University Press, p. 226.

Bruges

Source for citizen inflows: For the new citizens in the 16th century, see the database citizens 16th century from Heidi Deneweth. For the 17th and 18th century, see the database made up by the municipal archives of Bruges under coordination from Jan D'Hondt.

Coverage: 1500-1794

Predicted citizen stocks: 286 migrants (1583), 223 migrants (1600), 195 migrants (1625), 461 migrants (1675), 324 migrants (1700), 325 migrants (1725), 336 migrants (1750), 257 migrants (1775),

Population: 38000 (1583), 32000 (1600), 27278 (1625), 36813 (1675), 36000 (1700), 35367 (1725), 32000 (1750), 28878 (1775). (H. Deneweth, (2010a), "Een demografische knoop ontward? Brugse bevolkingscijfers voor de vroegmoderne tijd." *Handelingen van het genootschap voor geschiedenis te Brugge*, 147/1, p. 3-48. See also: Deneweth, H. (2010b), "Migraties tussen Brugge en het ommeland in de 16^{de} eeuw." *Brugs Ommeland*, 50/1, p. 29-40.

Ghent

Source for citizen inflows: For the period 1600-1796: City Archives Ghent series 122. For the sixteenth century: Boone, M., & Stabel, P. (2002). New burghers in the late medieval towns of Flanders and Brabant: conditions of entry, rules and reality. *ZEITSCHRIFT FÜR HISTORISCHE FORSCHUNG: BEIHEFT*, 30, p. 317-332.

Coverage: 1542-1796



Source for stock of masters: De Munck database from the 1738 enquête.

Coverage: 1738

Predicted citizen stocks: 289 migrants (1590), 318 migrants (1600), 502 migrants (1630), 412 migrants (1650), 410 migrants (1680), 323 migrants (1700), 591 migrants (1730), 745 migrants (1750), 1598 migrants (1780)

Stock of masters: 3744 (1738)

Population: 27000 (1590), 31000 (1600), 40797 (1630), 46059 (1650), 51030 (1680), 51285 (1700), 39384 (1730), 39000 (1738), 39608 (1750), 45454 (1780). (Van Werveke, H. (1948). "De curve van de Gentse bevolking in de 17de en de 18de eeuw." Brussel: Verhandelingen van de Koninklijke Vlaamse Academie, p. 52; Dambruyne J. (2001). *Mensen en centen. Het 16de-eeuwse Gent in demografisch en economisch perspectief*. Gent: Verhandelingen der maatschappij voor geschiedenis en oudheidkunde te Gent deel XXVI, p. 53-54, p. 73; Stabel, P. (1997) *Dwarfs among giants. The flemish urban network in the late middle ages*. Leuven: Garant, p.31; Deprez, P. and C. Vandenbroeke (1989). "Population, growth and distribution," in R. Lawton and R. Lee (eds.), *Urban population development in Western Europe from the late 18th to the early 20th century*. Liverpool: Liverpool University Press, p. 222.)

A4: German Europe

Berlin (including Cölln)

Source for citizen inflows: Berlin: von Gebhardt, P. (ed.) (1927). *Das älteste Berliner Bürgerbuch*. Berlin; Kaeber, E. (ed.) (1934). *Die Bürgerbücher und die Bürgerprotokollbücher Berlins von 1701-50*. Berlin. Cölln: von Gebhardt, P. (ed.) (1930). *Die Bürgerbücher von Cölln an der Spree, 1508-1611 und 1689-1709, und die chronikalischen Nachrichten des ältesten Cöllner Bürgerbuches, 1542-1610*. Berlin.

Coverage: 1500-1750 for Berlin; 1508-1608 and 1689-1709 for Cölln. The cities are merged in 1710, we treat Cölln data for 1609-1688 as missing and interpolate these years based on trends for Berlin.

Predicted citizen stocks: 1473 (1600), 2003 (1700), 4123 (1750).

Population: 25000 (1600), 55000 (1700), 90000 (1750).

Bozen

Source for citizen inflows: Mayr, K. M. (ed.) (1956). *Bozner Bürgerbuch 1551-1806*, Innsbruck.



Coverage: 1551-1809

Predicted citizen stocks: 1739 (1800)

Population: 8000 (1800). (Mayr, 1956)

Danzig

Source for citizen inflows: Penners-Ellwart, H. (1954). *Die Danziger Bürgerschaft nach Herkunft und Beruf 1537-1709*. PhD Dissertation, Marburg. Compiled from appendices.

Coverage: 1640-1709

Predicted citizen stocks: 3491 (1700)

Population: 50000 (1700). (de Vries 1984)

Detmold

Source for citizen inflows: Verdenhalven, F. and Stöwer, H. (eds.) (1977). *Bürgerbuch der Stadt Detmold von 1635 bis 1885*, eds. Detmold.

Coverage: 1640-1799

Predicted citizen stocks: 214 (1762)

Population: 1116 (1762). (Verdenhalven and Stöwer, 1977)

Flensburg

Source for citizen inflows: Hoffmann, E. (ed.) (1953). *Herkunft des Bürgertums in den Städten des Herzogtums Schleswig*. Neumünster. Compiled from appendices.

Coverage: 1600-1750

Predicted citizen stocks: 696 (1750)

Population: 6842 (1769). (Hoffman 1954)



Frankfurt-am-Main

Source for citizen inflows: Soliday, G. L. (1974). *A Community in Conflict: Frankfurt Society in the Seventeenth Century and Early Eighteenth Century*. Hanover, NH. Compiled from Tables 3-4, p 45.

Coverage: 1600-1735.

Predicted citizen stocks: 3124 (1650), 4825 (1700), 4391 (1735)

Population: 17000 (1650), 28000 (1700), 32000 (1750). (De Vries 1984)

Hamburg

Source for citizen inflows:

Coverage: 1596-1598; 1600; 1605; 1608-1610; 1612; 1616-1620; 1624; 1628; 1630-1634; 1636-1638; 1640; 1644; 1648; 1650; 1652; 1656; 1660; 1664; 1668-1669; 1672; 1676; 1680; 1684; 1688; 1682; 1695-1696; 1700; 1704; 1710; 1715; 1720; 1725; 1730; 1735; 1737; 1740; 1745; 1750; 1755

Predicted citizen stocks: 5650 (1650), 4795 (1700), 9334 (1750).

Population: 60000 (1650), 70000 (1700), 75000 (1750). (Mauersberg, H. (1960). *Wirtschafts-und Sozialgeschichte zentraleuropäischer Städte in neuerer Zeit: dargestellt an den Beispielen von Basel, Frankfurt aM, Hamburg, Hannover und München*. Vandenhoeck & Ruprecht., de Vries 1984)

Husum

Source for citizen inflows: Hoffmann, E. (ed.) (1953). *Herkunft des Bürgertums in den Städten des Herzogtums Schleswig*. Neumünster. Compiled from appendices.

Coverage: 1609-1750

Predicted citizen stocks: 402 (1750)

Population: 3342 (1750). (Hoffman 1953)

Köln

Source for citizen inflows: Stehkämper, H. (ed.) (1975-1983). *Kölner Neubürger 1356-1798*.

Coverage: 1600-1798.



Predicted citizen stocks: 6907 (1650), 7703 (1700). 4852 (1794)

Population: 45000 (1650), 42000 (1700), 44522 (1794) (de Vries, 1984, Stehkämper, 1974-1983).

Königsberg

Source for citizen inflows: Schulz, C. and K. Tiesler (eds.) (1939). *Das älteste Bürgerbuch der Stadt Königsberg*. Königsberg.

Coverage: 1746-1809

Predicted citizen stocks: 3100 (1800)

Population: 57500 (1800) (Schulz and Tiesler, 1939).

Münster

Source for citizen inflows: Hovel, E. (ed.) (1936). *Das Bürgerbuch der Stadt Münster, 1538 bis 1660*. Münster.

Coverage: 1574-1660

Predicted citizen stocks: 1159 (1660)

Population: 7000 (1700) (de Vries 1984).

Nördlingen

Source for citizen stocks: Friedrichs, Christopher (1979). *Urban Society in an Age of War*. Princeton: Princeton University Press, Appendix 6.

Coverage: 1579; 1585; 1591; 1597; 1603; 1609; 1615; 1621; 1627; 1633; 1636; 1640; 1646; 1652; 1658; 1664; 1670; 1676; 1682; 1688; 1694; 1700; 1712; 1724.

Citizen stocks: 154 (1579), 887 (1652), 1147 (1700)

Population: 8900 (1579), 4500 (1652), 6000 (1700). Friedrichs (1979, p. 38) estimates the population in 1579 as being around 8900. He is reticent about making total population estimates after 1600, due to the city's catastrophic experience of the Thirty Years War and the uncertainty of the size of non-citizen groups, though he argues that there is 'no strong reason to assume [the citizen share] changed



very substantially' between 1580-1720 (p. 43). From his text and appendices, we estimate the population down by half in 1650 after the war (4500), and somewhat recovered to 6000 in 1700.

Strassburg

Source for citizen inflows: Dreyer-Roos, S. (1969). *La population strasbourgeoise sous l'ancien régime*. Strasbourg.

Coverage: 1693, 1709, and 1784

Predicted citizen stocks: 14538 (1693), 18199 (1709), 20489 (1784). These numbers include all members (women and children) of households with *burger* heads.

Population: 27618(1693), 32500 (1709), 48500 (1784). (Dreter-Roos, 1969)

Tondern

Source for citizen inflows: Hoffmann, E. (ed.) (1953). *Herkunft des Bürgertums in den Städten des Herzogtums Schleswig*. Neumünster. Compiled from appendices.

Coverage: 1609-1750

Predicted citizen stocks: 402 (1750)

Population: 3342 (1769). (Hoffman 1953)

Tonning

Source for citizen inflows: Hoffmann, E. (ed.) (1953). *Herkunft des Bürgertums in den Städten des Herzogtums Schleswig*. Neumünster. Compiled from appendices.

Coverage: 1594-1622; 1649-1750

Predicted citizen stocks: 398 (1750)

Population: 1467 (1769). (Hoffman 1953)



Werle

Source for citizen inflows: Deistin, H. J. (ed.) (1979). *Werler Bürgerbuch 1551-1877*. Münster.

Coverage: 1551-1576; 1608-1647; 1650-1699; 1701-1802

Predicted citizen stocks: 65 (1685), 116 (1717), 138 (1800)

Population: 1739 (1685), 2191 (1717), 2600 (1800). Populations for 1685 and 1717 are estimated assuming that data for population over age 12 consist of 2/3 of the actual total population. (Deistin 1979).

A5: France

Dijon

Source for master stocks: Farr, J. R. (1988). *Hands of Honor. Artisans and Their World in Dijon, 1550-1650*. Ithaca: Cornell University Press.

Coverage: 1556; 1643

Estimated master stocks: 683 (1556), 658 (1643). We calculate these by multiplying the number of artisans reported by Farr (1988, Table 2.1) by .75.

Population: 14500 (1556), 21000 (1643). (Farr, 1988, p. 274).

Lyon

Source for master inflows: Archives municipales de Lyon, HH577-HH580 (les maîtres ouvriers en soie). Consulted on-line at http://www.archives-lyon.fr/archives/sections/fr/archives_en_ligne/la_vie_economique/la_grande_fabrique_d/

Coverage: 1724-1776.

Predicted master stocks: 2638 (1750), 3587 (1776)

Population: 114000 (1750), 107000 (1776). (De Vries, 1775 estimate is midpoint between 1750 and 1800 (100000)).



Rouen

Source for master stocks: Capitation de Rouen, C344 (1757), C355 (1770). Data provided by Claire Crowston.

Coverage: 1757; 1770

Master stocks: 4195 (1757), 6992 (1770). Figure for 1770 was calculated by extrapolating a count of 2204 for 29 guilds to the full population of 92 guilds.

Population: 67000 (1750), 74000 (1775). (De Vries, 1775 estimate is midpoint between 1750 and 1800 (81000)).



APPENDIX TABLE A1: MODES OF ENTRY IN SAMPLE CITIES

<i>City</i>	<i>Apprenticeship</i>	<i>Son of Citizen</i>	<i>Purchase</i>	<i>Marrying a Male Citizen</i>	<i>Marrying a Citizen's daughter</i>	<i>Marrying a Citizen's widow</i>	<i>Service to City (gift)</i>	<i>Birth in the town</i>	<i>Residence in town</i>
Canterbury	•	•	•		•		•		
Chester	•	•					•		
Ipswich	•	•	•				•		
Leicester	•	•	•				•		
Boston	•	○	•						
Doncaster	•	○	•				•		
Bristol	•	•	•		•		•		
Lincoln	•	•	•				•		
London	•	•	•				•		
York	•	•	•				•		
Antwerp	○	•	•	•			•	•	
Ghent		•	•		•	•	?		•
Bruges		•	•		•	•	•		•
Amsterdam		•	•	•	•		•		
Utrecht		•	•				•		
Deventer		•	•				•		
Kampen		•	•				•		
Zwolle		•	•				•		
Frankfurt		•	•	•	•	•	•		
Hamburg		•	•	•	•	•	•		
Nördlingen		•	•	•	•	•	•		

Köln		•	•	•	•	•	•		
Berlin		•	•	•	•	•	•		
Danzig		•	•	•	•	•	•		
Königsberg		•	•	•	•	•	•		
Münster		•	•	•	•	•	•		

Notes: o indicates a qualification to that mode

Notes on qualifications: Guildford & Doncaster, patrimony limited to eldest son; Boston, patrimony limited to sons of aldermen & common councilmen; Antwerp, apprenticeship did not automatically lead to citizenship in Antwerp, but between 1586 and ca. 1670 it was often granted to those migrants who had been apprenticed in Antwerp.